United Nations Environment Programme

Terminal Evaluation of the GEF Project

ECORA: An Integrated Ecosystem Management Approach to Conserve Biodiversity and Minimize Habitat Fragmentation in Three Selected Model Areas in the Russian Arctic

Evaluation Office

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Abbreviations used in the text

AMAP - Arctic Monitoring and Assessment Programme

CAFF – Conservation of Arctic Flora and Fauna

CBMP – Circumpolar Biodiversity Monitoring Program

ChAO – Chukotka Autonomous Okrug

ECORA - An Integrated Ecosystem Management Approach to Conserve Biodiversity and Minimize Habitat Fragmentation in Three Selected Model Areas in the Russian Arctic

ETT – Expert Task Team

GEF – Global Environment Facility

HYR – Half Year Report

IEM – Integrated Ecosystem Management

MA – Model Area

MAIU – Model Area Implementation Unit

MEDT – Ministry of Economic Development and Trade of the Russian Federation

MEP – Monitoring and Evaluation Plan

MNR – Ministry of Natural Resources of the Russian Federation

MOF – Ministry of Finance of the Russian federation

MTR – Mid-term review

NAO – Nenets Autonomous Okrug

PIR – Project Implementation Report

PIU – Project Implementation Unit

RAC – Regional Advisory Committee

RAIPON – Russian Association for Indigenous Peoples of the North

RF – the Russian Federation

RS – Sakha Republic (Yakutia)

SAP – Strategic Action Programme

SC – Steering Committee

TOR – Terms of Reference

UN – United Nations

UNEP – United Nations Environment Programme

WWF – World Wide Fund for Nature

Executive Summary

1. The objective of the terminal evaluation was to establish project progress towards impact and review and evaluate the implementation of planned project activities, outputs and outcomes against actual results. The evaluation encompassed personal interviews with project staff and key regional stakeholders, Russian and foreign experts and other personnel involved in the project. The evaluation method applied by the evaluator also included a comprehensive desk review of project documents, outputs, monitoring reports (such as progress and financial reports to UNEP and GEF annual Project Implementation Review reports), reports from the Steering Group meetings, reports from meetings in regions, reports produced by project consultants, interviews and telephone interviews with intended users for the project outputs and other stakeholders involved with this project, including in the participating countries and international bodies, websites, expenditure reports, minutes and presentations of meetings, annual reports, field visits to project staff and target audiences.

2. The main development objective of the GEF project "ECORA: An Integrated Ecosystem Management Approach to Conserve Biodiversity and Minimize Habitat Fragmentation in Three Selected Model Areas in the Russian Arctic" is the conservation and sustainable use of globally significant biodiversity in the Russian Arctic. The immediate objective of the project was the adoption and initial implementation of integrated ecosystem management (IEM) strategies and action plans in three Model Areas (MA) representing different ecosystems and anthropogenic pressures: Kolguev Island (NAO, Nenets Autonomous Okrug), Kolyma River Basin (SR, Republic of Sakha (Yakutia) , and Beringovsky District (ChAO, Chukotka Autonomous Okrug). These MAs were thoroughly selected at the planning phase of the ECORA project.

3. Project activities are structured around four main interventions:

   (i) Strengthening the enabling environment for IEM;

   (ii) Strengthening the knowledge base for planning, implementing, and evaluating IEM plans;

   (iii) Development of IEM strategies and action plans in the Model Areas; and

   (iv) Pilot projects to test IEM implementation strategies.

4. Implementation of the ECORA project started on June 1st, 2004 and lasted until the end of 2009 with the limited follow up activities in 2010. The planning phase for ECORA also took several years.

5. The project was well designed and used an innovative methodology to demonstrate how IEM can be used to achieve ecological, economic, and social goals for local and global benefits. The project was the first attempt of securing the integrity of some of the world's last remaining pristine areas and support livelihoods of indigenous and local peoples. In spite of the overall quality of project design there were some flaws that affected project performance and outcome. Stakeholder consultation was poor at the project design phase and critical stakeholder consultations tended to be lacking at this stage. A lot of small activities within four components did not allow concentration on major project objectives. Dissemination was also not considered as an important part of the project in the design and as a result was not prioritized in the budget so that at the end of the project there were insufficient funds to disseminate all the results and outputs. During project design, the nature of the project that covers western, central

and eastern arctic regions of Russia was not fully taken into account and insufficient funds were allocated to travel for the project participants to the MAs.

6. The project activities implementation can be formally divided in the following 'phases'. The first phase focused on identification and assessment of main environmental and socio-economic issues, identifying stakeholders and their interests, and defining goals for the IEM initiative. The second phase was focused on preparation of an IEM plan including documenting baseline conditions, conducting public education, holding public consultations, creating individual and institutional capacity, and testing implementation strategies through pilot projects. The third phase included formal adoption of an IEM plan including obtaining an official mandate for IEM, endorsement of policies and plans by relevant authorities, and obtaining funding to implement IEM plans. The fourth phase consisted of implementation of the IEM plan including promoting compliance with program policies, strengthening legal, institutional, and administrative capacity, implementing mechanisms for inter-agency co-operation, implementing conflict resolution measures, sustaining stakeholder participation, and monitoring progress and ecosystem and societal trends. Finally, the last phase comprises evaluation, including assessing impact on management issues, adapting program based on experience gained and changing environmental and social conditions, and conducting external evaluations.

7. The project was very participatory, involving good consultants from different institutions across the whole of Russia as well as well qualified foreign advisers. Training programs were delivered to local administrative staff, decision-makers in each MAs and to local communities enhancing their involvement in the project. Environmental programs developed by the project have been incorporated in the study programmes for many schools in the MAs. Training processes within ECORA helped create an environment of trust among participants and increased their involvement in the project. The training workshops were not only theoretical but gave participants the opportunity to apply what was learned in their work. Whilst the participatory approach used by the project worked well among the organizations, there was little involvement of federal government representatives in discussions. During consultations in regions and MAs the absence of a functioning network for sharing information among regional experts was noted.

8. In terms of overall project management, the evaluator considers that the performance of the executing and implementing agencies has been very effective. Some administrative and financial management issues occurred, which were, to some extent, resolved during implementation.

9. Raising awareness and creating an enabling environment for conservation action was achieved successfully at local and community levels. A series of thematic maps was produced for each MA identifying features such as habitat types and land use. These maps will also assist in the identification of areas requiring special conservation and protection measures, and indicate areas where future research may be required. Some maps (e.g., the value of bioresources, reindeer rangeland grazing capacity, important fishing areas) can be used directly for planning traditional economic activities (e.g., hunting, fishing, reindeer herding) and for assessing the damage from industrial development.

10. The evaluator noted substantial progress in collecting unique biodiversity and other related information in support of an enabling environment for IEM. IEM Action Plans have been adopted by regional authorities in NAO and RS and have been officially

endorsed. Substantial progress has been achieved on all training activities, including environmental management and policy, traditional nature use, and environmental education. The evaluation noted efforts in securing support for IEM from a broad range of stakeholders using a bottom-up approach. Since 2007, major efforts were made by the ECORA team to strengthen top-down linkages to implement IEM in the MAs.

11. The Project outcomes have potential for replication both, nationally and regionally, to ensure sustainability of the project outcomes. The achievement of the long-term project goal and objectives is satisfactory. However the assessment indicates that there is a risk that not all project-generated knowledge will be properly published and delivered to corresponding stakeholders. From a global environmental benefit point of view, however, the project is contributing through the detailed assessments of the current environmental problems of Russian Arctic, promoting and developing the capacity of local and national stakeholders.

12. The potential for the long-term sustainability of the project achievements is closely related to the potential for long-term impact of the project; this was assessed as Moderately Likely. The project received full support and technical backstopping by the regions and Russian Ministry of Natural Resources and Environment. However there are no clear indications that assure that project recommendations will be taken at the highest level possible and future interventions will be sustainable. As a way forward and a means to ensure wider use, application and hence greater sustainability of project outcomes, it is recommended that ECORA synthesizes project outcomes into a single, concise report for wide dissemination. Further, a shorter summary for policy and decision makers with key messages and policy implications should be produced and disseminated.

13. The evaluator noted two major directions that need improvement: ECORA outreach activities and mainstreaming IEM into economic sectors through work with businesses and local administrations. ECORA did not invest substantial efforts into publicizing project results and highlighting its achievements through different vehicles (e.g., international, regional, and local media; web; publications; meetings), and implementing specific actions aimed at engaging business in the IEM process (round-table discussions, Letters of Intent for environmentally sound development, fundraising, etc.)

14. The ECORA project was the first project of this magnitude focusing on IEM attempted in Russia. As such, there are a number of valuable lessons to be gained from it for the benefit of future projects. The following issues should be taken into account for future projects:

    - A lot of technical and scientific reports were produced by ECORA some of which contain unique information for remote areas in the Russian Arctic in the area of biodiversity and other related information. These results were not adequately publicized and disseminated. The intention to prepare a single, concise report for wide dissemination by means of publication in Springer failed.
    - Project sustainability has been promoted by collected high-quality scientific and technical environmental data and building strong local ownership of ECORA as well as by a successful training component. Regionally, project ownership differed between the MAs from very good in the SR to moderate (ChAO).
    - Not all stakeholders were involved in the ECORA implementation: business representatives were absent so far and no tangible participation at the federal level was apparent. Also RAIPON was not involved in the project to the extent needed

and as result RAIPON's network capacities were not appropriately harnessed by the project. As result the indigenous peoples' knowledge was not used by ECORA to full extent.

- ECORA had no tangible support at the federal level and failed in attracting money from federal level funds/budgets. Insufficient project management effort was afforded to assuring financial sustainability of ECORA outcomes and impacts, including through fundraising.
- ECORA had insufficient cooperation with other projects active in areas of project implementation. There was a lack of accessible outreach material on ECORA's results for broader audiences outside of the Model Areas and Russian Arctic
- Development goal "Conservation and sustainable use of globally significant biodiversity in the Russian Arctic" was not achieved as there were no indications of a recognition of IEM as a preferred management tool in government policy and planning, in natural resource use by industry were found. Evidence of replication of IEM in other areas of the Russian Arctic are also lacking.
- No improved policy, legislative, and regulatory framework facilitating implementation of IEMs was adopted or accepted for adoption by authorities in the three administrative regions hosting model areas (NAO; SR; ChAO) by project closure.
- Codes of conduct for relevant industries were, however, established and conditions created for their implementation, including a monitoring process
- Training programs to restore and support traditional nature use and management (e.g., traditional reindeer herding) were not developed and implemented to their full extent.
- Environmental education packages were prepared for schools, including teacher-training component however no evidences were found for replication of these activities in other regions of the Russian Federation.
- Analyses of project expenditures clearly showed that more than 40 % of total project budget was spent on project management, administrative support and related issues. Another 16 % were used for training component.
- The project website requires attention as it does not include essential material from the project, and does not contain the most recent reports. The site needs upgrading to: ensure that titles of reports include dates, include the addition of links within the website to reports to make them more easily accessible. Surprisingly, the GRID Arendal web contains information only for the beginning of the project and does not include essential information. The project did not ensure that links between the websites and the homepages of relevant organisations were set up.

1. Terminal Evaluation

15. The objective of the terminal evaluation was to establish project impact and review and evaluate the implementation of planned project activities, outputs and outcomes against actual results. The evaluation was concentrated on an examination of the extent and magnitude of any project impacts achieved and on determination of the likelihood of future impacts. The evaluation assessed project performance and the implementation of planned project activities and planned outputs against actual results. The evaluation focused on the following main questions related to 1) “operations”, 2) “biodiversity”, and 3) “socio-economy”:

    - Have IEM strategies and plans been operationalized in the three Model Areas (i.e. signed agreements, established funding mechanism, operational MAIUs and advisory bodies)?
    - Has biodiversity in the three Model Areas noticeably benefited from the project (i.e. low % of changes in areas of unfragmented habitats, positive trends in population sizes of threatened species, at least 30% reduction in illegal and unsustainable nature use)?
    - Are socio-economic benefits of IEMs evident in the three Model Areas? (e.g. Are there positive changes in basic economic indicators showing revival of traditional nature use activities?)

1.1. Evaluation Scope, Objective and Methods

16. The evaluation encompassed personal interviews with project staff and key regional stakeholders, Russian and foreign experts and other personnel involved in the project. The evaluation methodology applied by the evaluator also included a comprehensive desk review of project documents, outputs, monitoring reports (such as progress and financial reports to UNEP and GEF annual Project Implementation Review reports), reports from the Steering Group meetings, reports from meetings in regions, reports produced by project consultants, interviews and telephone interviews with intended users for the project outputs and other stakeholders involved with this project, including in the participating countries and international bodies, websites, expenditure reports, minutes and presentations of meetings, annual reports, field visits to project staff and target audiences.

17. During this time the consultant reviewed project documents, held meetings with key individuals involved in the project and visited project sites. Meetings included the Deputy Prime Minister of Government of Republic Sakha (Yakutiya), the Minister of Nature Protection of Republic Sakha (Yakutiya) and several top level officers in this Ministry as well as representatives of different scientific institutions, representatives of model territories and experts that worked on the ECORA project. Interviews were held in Naryan-Mar, Yakytsk and Anadyr with extensive communication also by email. Project partners were also asked to comment on the technical validity and sustainability of the project’s activities.

18. Full details of the scope and focus of the evaluation are given in the Evaluation Terms of Reference in Annex 1.

2. Introduction and background

2.1. Context

19. The geographical focus of the project is the Russian Arctic land mass which covers 6.349.780 km2 and constitutes approximately 43% of the circumpolar terrestrial Arctic as defined by Conservation of Arctic Flora and Fauna (CAFF). The Russian terrestrial Arctic area consists of the following broadly defined ecosystems or ecozones: Polar or Arctic Deserts (102.600 km2), Lowland Tundra (2.021.320 km2), Mountain tundra (1.843.650 km2), Forest Tundra and Northern Taiga including Northern Pinus pumila and Northern Larix sibirica and L. dahurica (2.382.210 km2).

20. The Russian Arctic, including its marine and terrestrial parts, is among the world's last remaining wilderness areas, but its ongoing rapid and accelerating change is stressing fragile polar ecosystems and severely affecting the well-being of its residents. Russia covers nearly half of the total terrestrial Arctic and hosts a significant portion of the total remaining natural habitats for Arctic Fauna and Flora. In addition to hosting endemic biodiversity of global importance, the Russian Arctic also provides the critical feeding and breeding grounds for a large number of species and populations of migratory birds and mammals that periodically gather there in large numbers (e.g. over 100 million birds gather in the arctic during the summer season). These species are, in fact, a shared resource with many other countries from all the continents of the world. For example, almost all birds found in the Arctic region are migratory, undertaking long annual migrations that connect the Russian Arctic with virtually every place on Earth apart from the Inner Antarctic Ice shield. Over 280 bird species breed in the Russian Arctic including migratory water-birds that depend on Arctic tundra habitats, such as waders, geese and swans, eiders, gulls, divers and cliff nesting seabirds. Many species are unique to the Russian Arctic.

21. The Russian Arctic marine environment is also home to a wide range of unique species with the best known being polar bear, narwhal, walrus, and white whale (beluga). Over 150 species of fish inhabit Arctic and sub-Arctic waters; some of them, such as cod and American plaice, are economically very important. A number of seabirds are unique to the Arctic including several species of auks and gulls. Although they may undertake seasonal migrations they maintain close contact with ice-covered areas throughout their lives. Twenty Arctic mammal species and subspecies, most of them marine, have been identified as rare, vulnerable or endangered.

22. The Russian Arctic represents one of the least impacted areas by human activities on the globe. There are, however, serious pressures threatening to disturb habitats, fragment ecosystems, and disrupt the ecological balance, especially in lowland tundra, forest tundra, and coastal and near-shore marine areas. The ultimate result may be irreversible habitat destruction and fragmentation that reduces the total area of Arctic wilderness from 75% today to less than 50% in 50 years.

23. Some effects from human activities are already in evidence in the Russian Arctic: habitat fragmentation and destruction by roads, off-road tracks, surface pipelines, mining activities, and logging; unsustainable reindeer herding and grazing, with up to 20% of the tundra zone severely affected and severe damage observed in the forest tundra zones; illegal hunting, fishing, and harvesting of wildlife and other natural resources; die-off of forest and other vegetation types; and local pollution connected with prospecting, extraction, processing and transportation of oil, gas, and mineral

resources. Thawing of the permafrost, which underlies the thin biologically active layer in the Arctic regions, augments disturbances and makes restoration efforts extremely difficult.

24. Subsistence harvesting of wildlife resources plays an important role in supporting the survival of local communities and is an important component of the traditional way of life for 16 small nations of indigenous peoples of the Russian Arctic. Existing legal regulations and practices aiming to support the livelihoods of indigenous peoples and biodiversity conservation are often contradictory or lacking coherence and need to be harmonised. There is an urgent need to develop mechanisms for increased dialogue at all levels of society on the subject of conservation and sustainable use of wildlife resource. This should be complemented by the improvement of legislation and implementation of new regulations, as some of the most urgent and important tasks on the path towards the sustainability of wildlife resource use in the Russian Arctic. This challenging issue was addressed only to a limited extent by recent large conservation projects in the area. The ECORA project was designed to play a pioneering role in addressing this issue, that is equally important for both biodiversity conservation as well as to sustain the traditional livelihoods of the people living in the Arctic.

25. To address the challenges facing this region, CAFF, UNEP/GRID-Arendal, and the Russian Federation initiated a GEF project in the Russian Arctic, ECORA: An integrated ecosystem management approach to conserve biodiversity and minimise habitat fragmentation in three selected Model Areas of the Russian Arctic. The project aimed to secure the integrity of some of the world's last remaining pristine areas and support the livelihoods of indigenous and local peoples. The immediate objective was the adoption and initial implementation of integrated ecosystem management strategies and action plans in three MAs representing different ecosystems and anthropogenic pressures: Kolguev Island in the NAO, Kolyma River Basin in the SR, and Beringovsky District in the ChAO. By building on national policies and priorities, the project aimed to demonstrate how IEM can be used to achieve ecological, economic, and social goals for local and global benefits. It was also important to develop processes that allow stakeholders to participate in an open and meaningful way. The abbreviation ECORA stands for "An Integrated Ecosystem Management Approach to Conserve Biodiversity and Minimise Habitat Fragmentation in three selected Model Areas in the Russian Arctic". Later the title was shortened to "Integrated Ecosystem Approach to Conserve Biodiversity and Minimize Habitat Fragmentation in the Russian Arctic"

2.2. Project Background

GENERAL PROJECT INFORMATION

GEF project ID:	1163	**IMIS number*[1]:**	GFL-2328-2740-4773
Focal Area(s):	Multi-focal areas	**GEF OP #:**	12: Integrated Ecosystems
GEF Strategic Priority/Objective:	Mainstreaming biodiversity	**GEF approval date*:**	27 April 2004

[1] Fields with an * sign (in yellow) should be filled by the Fund Management Officer

	conservation		
UNEP approval date:	26 May 2004	**First Disbursement:**	4 June 2004
Actual start date:	1 June 2004	**Planned duration:**	67 months
Intended completion date*:	30 May 2009	**Actual or Expected completion date:**	31 December 2009
Project Type:	Full size	**GEF Allocation:**	US$ 3,000,000
PDF GEF cost*:	US$ 375,000	**PDF co-financing:**	US$ 505,000
Expected MSP/FSP Co-financing*:	US$ 3,880,000	**Total Cost:**	US$ 7,760,000
Mid-term review/eval. (planned date):	Sept-Nov 2007	**Terminal Evaluation (actual date):**	April-July 2010
Mid-term review/eval. (actual date):	Oct-Dec 2007	**No. of revisions:**	5
Date of last Steering Committee meeting:	November 2009	**Date of last Revision:**	6 July 2009
Disbursement as of 30 June 2010*:	US$ 2,954,643	**Date of financial closure:**	n/a
Date of Completion:	n/a	**Actual expenditures reported as of 30 June 2010:**	US$ 2, 961,601[2]
Total co-financing realized as of 30 June 2010:	US$ 1,237,085 (cash & in-kind)	**Actual expenditures entered in IMIS as of 30 June 2010:**	US$ 2,531,924

26. The fundamentals of the ecosystem approach were set forth at a Convention of Biological Diversity (CBD) workshop in Malawi in January 1998 with a set of twelve principles. The CBD Convention of the Parties (COP) 5 in December 2005 adopted the ecosystem approach as the primary framework for action. CBD COP 9 in 2009 noted that "The ecosystem approach remains a useful normative framework for bringing together social, economic, cultural and environmental values," and that "Wider adoption of the ecosystem approach can contribute to the achievement of the Millennium Development Goals." The United Nations Framework Convention on Climate Change (UNFCCC) COP 15 in 2009 noted the importance of the ecosystem approach "to tackling not just climate change mitigation and adaptation, but also poverty alleviation, disaster risk reduction, biodiversity loss and many other environmental issues."

[2] Minor discrepancy due to over-expenditure or over-reporting by EA. This being assessed and is to be rectified within final budget revision. Any excess expenditure will be borne by the EA.

27. The project was well designed and used an innovative methodology to demonstrate how IEM can be used to achieve ecological, economic, and social goals for local and global benefits. The project was the first in Russia to attempt securing of the integrity of some of the world's last remaining pristine areas and support livelihoods of indigenous and local peoples.

2.3. Project goals and objectives

28. The main development objective of the GEF project "ECORA: An Integrated Ecosystem Management Approach to Conserve Biodiversity and Minimize Habitat Fragmentation in Three Selected Model Areas in the Russian Arctic" is the conservation and sustainable use of globally significant biodiversity in the Russian Arctic. The immediate objective of the project was the adoption and initial implementation of integrated ecosystem management (IEM) strategies and action plans in three Model Areas (MA) representing different ecosystems and anthropogenic pressures: Kolguev Island (NAO, Nenets Autonomous Okrug), Kolyma River Basin (SR, Republic of Sakha (Yakutia) , and Beringovsky District (ChAO, Chukotka Autonomous Okrug). These MAs were thoroughly selected at the planning phase of the ECORA project.

29. Project activities are structured around four main interventions:

    (i) Strengthening the enabling environment for IEM;

    (ii) Strengthening the knowledge base for planning, implementing, and evaluating IEM plans;

    (iii) Development of IEM strategies and action plans in the Model Areas; and

    (iv) Pilot projects to test IEM implementation strategies.

30. Project Component's objectives are as follows:

- Component 1. - Strengthening the enabling environment for integrated ecosystem management (IEM) including enhanced legislative framework, enhanced capability and capacity, financial sustainability, and increased public awareness
- Component 2. - Strengthening the knowledge base for planning, implementing and evaluating IEM plans
- Component 3. - Development of IEM plans and strategies in the Model Areas (MA)
- Component 4. - Pilot projects to test IEM implementation strategies

2.4 Project Activities

31. Implementation of the ECORA project started on June 1st, 2004 and lasted until the end of 2009 with the limited follow up activities in 2010. The planning phase for ECORA also took several years.

32. The project activities implementation can be formally divided in the following 'phases'. The first phase focused on identification and assessment of main environmental and socio-economic issues, identifying stakeholders and their interests, and defining goals for the IEM initiative. The second phase was focused on preparation of an IEM plan

including documenting baseline conditions, conducting public education, holding public consultations, creating individual and institutional capacity, and testing implementation strategies through pilot projects. The third phase included formal adoption of an IEM plan including obtaining an official mandate for IEM, endorsement of policies and plans by relevant authorities, and obtaining funding to implement IEM plans. The fourth phase consisted of implementation of the IEM plan including promoting compliance with program policies, strengthening legal, institutional, and administrative capacity, implementing mechanisms for inter-agency co-operation, implementing conflict resolution measures, sustaining stakeholder participation, and monitoring progress and ecosystem and societal trends. The final phase focused on evaluation, including assessing impact on management issues, adapting the program in response to experience gained and changing environmental and social conditions.

33. The project comprised of activities grouped into the four components.

Component 1: Strengthening the enabling environment for integrated ecosystem management

Enhanced policy, legal, and regulatory framework

- Determine reforms required for IEM and prepare package of proposals.
- Develop recommended conservation measures and codes of conduct for relevant industries (e.g., oil and gas).
- Identify and establish territories of traditional nature use and develop regulatory and management framework and apply it.

Enhanced capability and capacity of individuals and institutions

- Develop appropriate training programs in environmental policy and management
- Assessment of training needs for restoring and supporting traditional nature use and management and development of workshops to encourage new small-scale economic activities supportive of biodiversity conservation.
- Arrange for training in biogeographic mapping and associated software for institutions developing thematic maps and analyses and secure necessary hardware and software therefore.

Financial sustainability

- Negotiations with regional and federal authorities to secure financial resources, establishment of revolving fund and investigation of other funding opportunities for specific activities.

Enhanced Public Awareness in Model Areas and Nationally

- Develop and implement environmental education programs for local schools in the Model Areas.
- Develop and implement community monitoring program, including any associated training.
- Disseminate information relating to ECORA via appropriate local, national, and global vehicles.

Component 2: Strengthening the Knowledge Base for Planning, Implementing, and Evaluating IEM Plans

- Confirm research institutions to participate in development of knowledge base for IEM and identify key experts for each Model Area.
- Compile and update baseline information on environmental and socio-economic conditions, and systematise new and existing information, and develop thematic maps and analyses.
- Develop basic indicators for long-term monitoring and evaluation of environmental and socio-economic conditions and a community component to monitoring program.

Component 3: Development of IEM Plans and Strategies in the Model Areas

- Establish inter-sectoral Model Area Implementation Units (MAIU).
- Develop a communication/public participation strategy.
- Establish mechanism for stakeholder consultations and conflict resolution.
- Conduct stakeholder consultations, including seminars and thematic workshops and develop agreements between stakeholder groups, as necessary, to implement IEM.

• Develop governance structure for implementing IEM and the M&E component of IEM plan. • Publicise the final IEM throughout all Model Areas, Russia, and the circumpolar community.
Component 4: Pilot Projects to Test IEM Implementation Strategies • Development of pilot project plans and implementation. • Assessment of pilot projects and incorporation of pilot project results into IEM plans.

34. Initially, the major efforts of project stakeholders were directed towards creating an enabling environment for the implementation of IEM on the ground. During the first 3 years of implementation the following aspects were investigated:

    a) important cultural and traditional aspects for indigenous peoples of the North;

    b) potential to use a number of environmental services in local economies (i.e., refuge or nursery areas, recreation or appreciation by tourists, subsistence by local inhabitants);

    c) high social, political, and community support resources;

    d) existence of considerable knowledge base upon which to build IEM plans;

    e) social and educational infrastructure in place;

    f) private sector actors with demonstrated interest and willingness to participate; and

    g) technical capacity in the MA.

35. Field work conducted in 2005-2007 focused mainly on the collection of data relating to the state of biodiversity. In the project framework, this was bounded by a pre-defined set of indicator species/groups (waterfowl and reindeer – Kolguev; waterfowl, wild and domestic reindeer, fishes – Kolyma; terrestrial and marine birds and marine mammals – Beringovsky) These studies formed the basis for preparing:

    - a proposal for a protected natural area on the Kolguev Island for the protection of nested white-fronted goose and bean goose;
    - a proposal on the sustainable use and management of waterfowl populations in Kolyma;
    - a proposal for the establishment of “cluster-type” protected areas in Beringovsky.

36. Significant efforts were aimed at evaluating the genetic potential of the Kolguev Island population of reindeer which differ morphologically and in terms of meat quality from continental reindeer. The work on evaluating genetic potential corresponds to provisions of the Convention on Biological Diversity. Data obtained are of particular importance for improving the continental domestic reindeer population.

37. Draft IEM strategies and action plans were developed in all three Model Areas. Although pilot project proposals are not finalized, their scope has been extensively discussed. The IEM strategy and action plan for Beringovsky has been discussed once with the administration in Chukotka. In Sakha Republic (Yakutia), a series of consultations on the IEM action plan were held and the action plan was to be considered for endorsement by the Government and then used as an example for other administrative units in the Republic, to complete similar plans. In the Nenets Autonomous Okrug, the IEM action plan was discussed with the administration.

38. The evaluation noted efforts in securing support for IEM from a broad range of stakeholders using a bottom-up approach. From 2007 onwards, major efforts were made by the ECORA team to strengthen top-down linkages to implement IEM in the MAs.

3. Achievement of Project Objectives Outcomes and Outputs

3.1. Overall project objectives

39. This section provides a general assessment of ECORA outcomes as judged against the project's development objectives as defined in the log-frame matrix within the context of the previously assessed overall project objectives. It should be noted that the log-frame matrix also designates these as the Key Performance Indicators, as described there in terms of specific outputs.

40. An assessment of ECORA objectives was undertaken in the context of the nature and scope of Russia's environmental problems, the level of political and public policy commitment to addressing them and the institutional framework that was operative at the beginning of the project as well as how it changes since then. The period leading up to and following the break-up of the Soviet Union was marked by the emergence of strong public and political commitment to improving environmental management and performance. A reasonably well established institutional structure for environmental management created in the Soviet Union in 1988, continued to evolve in line with policy directives and legal improvements related to the transition to a market economy. This upward institutional and public policy development trajectory was considered as a natural baseline for the future developments. At that point, the formulation of the primary development issue – the conservation and sustainable use of biodiversity in the Russian Arctic – did not properly take into account potential development challenges and setbacks. Political and economic motivation for environmentally sustainable development was largely overestimated.

41. In hindsight, the belief that a transfer of western IEM experience in the practice of environmental management in Russia would readily and effectively occur was clearly optimistic. While the assumption of strong and receptive intellectual capacity in the country was and remains valid, a complex set of factors and changing circumstances occurred that undermined this project concept. The first and perhaps predominate one was the decline, from the mid 1990's onward, of government commitment to environmental management and the dominance of economic and fiscal considerations in public policy making. These considerations also included measures to reduce the overall government structure, to decentralize some activities and to privatize and make self-sufficient many services once provided by the government at little or no cost to the public. The existing environmental management system was victim to these changes. Instead of modernizing the established institutional structure for environmental management, government chose to reorganize and downscale the environmental management system. The State Committee for Environment who was major supporter of ECORA project was abolished in 2000 and its functions combined with the Ministry of Natural Resources. Within this Ministry, the public policy emphasis has been on setting the conditions for exploitation of existing resources and assets with the less emphasis and resource allocation on improving environmental performance. Finally, the assumption that western ideas and experience would be either readily transferable or directly useable as the basic rationale for the promotion of IEM was flawed to varying

degrees, both in terms of the capacity to fully understand, adjust and apply it, and in quality and appropriateness of what was acquired.

42. With that background, the project's overall objective of having a serious and immediate impact of IEM approaches on national environmental management capacity and performance was unrealistic, particularly given the change in circumstances and poor understanding of the complexity and challenges related to the overall economic situation. This is generally consistent to a greater or lesser degree with parallel experience throughout the region. In retrospect, it is also arguable that the country was ready to accept new IEM approaches beyond a relatively narrow cadre of environmental experts within the national bureaucracy that itself was coping with more fundamental structural change in terms of its place and influence within the country. At the regional (i.e. subnational) level, however, the project's objectives were more realistic and, to varying degrees, were achievable.

43. Project objectives related to MAs were also more reasonable and, to considerable degree, successful.

44. No formal revision of project objectives occurred during the project. However by way of comment, the project's scope evolved during implementation as circumstances changed, to some degree revising the objectives. The activities ultimately financed reflected a significant shift of effort and emphasis away from national to more focused regional and local activities. Similarly, there was a shift away from policy oriented tasks to more practical ways to address regional and local problems.

45. As previously stated, the objective of ECORA was the development, adoption, and initial implementation of an integrated ecosystem management strategy and action plan for each selected Model Area that would support the conservation and sustainable use of biodiversity in the Russian Arctic. All activities undertaken in the project were in support of these strategies and action plans. Each plan describes activities related to the conservation and management objectives for the Model Area, major tasks and expected results, executors for each action, and indicators for evaluation.

46. The development goal "Conservation and sustainable use of globally significant biodiversity in the Russian Arctic" was not achieved in full or to a partial extent as no indications of recognition of the IEM as a preferred management tool in government policy and planning, in natural resource use by industry were found. As a result the overall achievement of project outcomes as analysed in detail in Annex 1 is evaluated as moderately satisfactory.

3.2. Achievement of Outcomes and Outputs

Component 1. Strengthening the Enabling Environment for Integrated Ecosystem Management.

47. The development and successful implementation of integrated ecosystem management requires a legislative, administrative, and institutional framework, and the associated human competence and capacity, capable of supporting it. With this aim in mind, activities were undertaken to:

- Enhance the regulatory, administrative, and institutional framework in the Model Areas;

- Enhance the capability and capacity of institutions and individuals to participate in IEM; and;
- Enhance public awareness of biodiversity and other environmental issues, and integrated ecosystem management.

48. The following results were achieved under Activity 1 Analysis of the policy, legal, and regulatory frameworks for IEM in the Model Areas, including assessments of habitat protection mechanisms and species conservation activities and the requirements for establishing territories of traditional nature use under this Component:

- All relevant regional and federal legislation, policies, strategies, and practices relating to environmental protection and the status and rights of indigenous peoples in the Russian Arctic have been examined. Overall, the legislation of the Russian Federation is believed to be sufficiently developed so that its proper application should allow for the successful implementation of IEM.
- The basic difference between legislation of the Russian Federation and that of other Arctic countries is the absence of the concept of special land rights for aboriginal peoples in Russia, especially where indigenous peoples are concerned. This makes it difficult to directly carry over the experience of Western countries to Russia. Instead, it demands an elaboration of its own approaches to better meet the ideology of the IEM.
- Although there is a federal law regarding the creation of territories of traditional nature use, it lacks a regulatory framework. The analysis, however, also showed that it is possible to develop such areas using other legislation of the Russian Federation.

49. The following results were achieved under Activity 2 Environmental policy and management for administrative personnel and decision-makers in the Model Areas of this Component:

- Training programs were delivered to local administrative staff and decision-makers in each Model Area. The programs focused on:
- Environmental legislation, including a review of Russian legislation, and international laws and conventions;
- Economic and financial mechanisms, including environmental impacts of economic activities, sustainable development, and environmental costs and risks; and
- Environmental management, including natural resource management, and environmental protection in Russia and abroad; and
- Creating markets based on environmental goods and services.
- The accompanying course manual includes all changes in federal legislation relating to natural resources and environmental protection, and is based on the analyses conducted in ECORA.

50. The following results were achieved under Activity 3 Training to restore and support traditional nature use and management, including the development of small-scale economic activities that can support biodiversity conservation:

- To address the inefficient use of the products of reindeer husbandry on Kolguev Island, training courses were held for local people on smoking and drying reindeer meat, and the processing of reindeer skins. Special equipment for smoking and

drying meat was brought to the island and left with the community after completion of the training sessions.

- Training in the Kolyma River Basin Model Area focused on assisting reindeer brigades to assess and accurately report on the condition of their herds to the regional Ministry of Agriculture. Accurate monitoring and reporting is vital as the ministry bases the subsidies and equipment it provides to the herders on this information.
- To improve the physical condition of reindeer, ECORA purchased and provided training in the use of the veterinary device “ZooDENS” in Kolyma. ZooDENS are portable devices for treating a wide variety of medical conditions associated with nervous, endocrine, cardiovascular, urinary, and other systems.
- A program on the economic and legal challenges of organizing and operating a small-scaled business was developed in the Kolyma River Basin Model Area. A series of workshops were held in the settlements of the Model Area.
- In Beringovsky, intensive training sessions were held on the renewal of seal hunting skills, butchering of whale and walrus meat, preparation and preservation of meat from marine mammals, uses of traditional food and herbs, and the manufacturing of traditional Chukchi watercraft (baydar canoes) and their adaptations for marine mammal hunting. Additional training was given on the renewal of skills for creating traditional fur clothes and footwear, and the production of souvenirs.

51. The main results of the activities for training of conservation officers are as follows:

- The distance of most communities in the Model Areas from regional and national administrative centres makes it prohibitively expensive to train conservation officers in newly emerging fields of sustainable use and IEM. Through ECORA, training was provided locally to conservation officers on the principles of IEM, establishing community monitoring programs, relevant conservation legislation, and codes of conduct.
- The training manual developed for this course provided the legal basis of regulations for environmental protection and the conservation of biological resources, as well as detailing the penalties for violations.

52. Major results of Activity 5: Environmental education for schools are briefly summarised below:

- Three textbooks on environmental education have been produced for the primary (8-10 year olds), secondary (12-14 year olds), and college levels (16-17 year olds). The primary school text provides a description of the tundra and seas, biodiversity, the influence of human activities, etc., and is illustrated with children’s drawings. The secondary school text focuses on ecosystem characteristics, ecological processes, climate change, etc., as well as a simplified description of the activities in the ECORA project. The college version provides a broader view of the Arctic and includes descriptions of major environmental issues affecting the Arctic (e.g., climate change, pollution, etc.), as well as information about international environmental agreements.
- The environmental programs have been incorporated in the study programmes for many schools in the Model Areas.

53. As an overall assessment, the outputs of this Component generally met the project's results framework to the degree that was institutionally practical and are assessed as **Moderately Satisfactory** as no improved policy, legislative, and regulatory framework facilitating implementation of IEMs was adopted or accepted for adoption by authorities in the three administrative regions hosting model areas (NAO; SR; ChAO) by project closure.

Component 2. Strengthening the Knowledge Base for the IEM

54. Major results of Activity 1: Thematic maps and analyses for IEM planning are as follows:

- A series of thematic maps was produced for each Model Area identifying features such as habitat types and land use. These maps will also assist in the identification of areas requiring special conservation and protection measures, and indicate areas where future research may be required.
- Some maps (e.g., the value of bio-resources, reindeer rangeland grazing capacity, important fishing areas) can be used directly for planning traditional economic activities (e.g., hunting, fishing, reindeer herding) and for assessing the damage from industrial development.
- Additionally, electronic atlases were created of the fish, birds, and medicinal plants of the Kolyma River Basin Model Area. The atlases include features such as species descriptions with photos, species range maps, and bird calls.

55. Compile and update baseline information on environmental and socio-economic conditions, and systematise new and existing information, and develop thematic maps and analyses

56. A large number of technical and scientific reports were produced by ECORA some of which contains unique information for remote areas in the Russian Arctic on biodiversity and other related information. These results were not adequately publicized and disseminated. The intention to prepare a single, concise report for wide dissemination by means of publication in Springer failed. Despite some notable achievements, the assessment of overall outcomes in this area is only **Moderately Satisfactory**.

Component 3. **Development of IEM Strategies and Action Plans**

57. The IEM plans for each Model Area are built upon information collected under project activities, information from other relevant research and studies, and input from stakeholder consultations. Each IEM plan includes information on:

- The principal ecological systems and the overall environmental status in the MA;
- The principal social, economic, and institutional issues in the MA and their implications for the IEM plan;
- Local concerns and development priorities;
- The current use, constraints, and opportunities of ecosystem services obtained from ecosystems and natural resources;
- Legislation and regulations that support IEM plans, major stakeholders, and their interests;
- How local communities and other stakeholders will be involved in the planning and implementation process;

- The current institutional capacity for implementing IEM plans, and any plans for improvement; and
- Mechanisms for interagency coordination.
- Each IEM strategy and action plan describe priorities for actions and will also contain plans for financial sustainability, monitoring and evaluating, conflict resolution approaches, and public participation and consultation.

58. The administrations of both the NAO and the SR formally approved the IEM strategies and action plans for Kolguev Island and the Kolyma River Basin Model Areas, respectively, in 2009. The administration of ChAO did not formally approved the IEM strategy and action plan for Beringovsky District. ChAO proved to be a difficult region to work in for both technical and administrative reasons. The region lacked local expertise requiring experts to be brought in from other regions, at increased cost to the project. The remoteness of the region also meant that some of the originally planned activities had to be modified for budgetary reasons. On the administrative side, from the beginning of project implementation, the local administration was reluctant to support ECORA, even though they had signed a letter of support in the project proposal, and establishing a Model Area Implementation Unit (MAIU) was significantly delayed in this region. When the ChAO administration changed mid-way through the project, costly and time consuming negotiations were once again required to maintain their support for the project. In addition, there were three different MA Coordinators for Beringovsky District and two different Western Advisors during the project. This lack of continuity in the core team for the MA contributed to delays within this MA.

59. Although the IEM strategy and action plan for Beringovsky District were not formally approved by the ChAO administration, many of the activities initiated under ECORA were implemented. In particular, environmental education programs have been established in the schools and continued; efforts to restore traditional nature use were continuing; the Beringovsky portion of Beringia National Park was established based on work undertaken in ECORA; thematic maps developed in ECORA are being used by the administration; and some field work initiated in the region continued. Although this was not the outcome that the project aimed for, under the difficult conditions experienced in this region, this is, perhaps, the best result that could be expected.

60. As an overall assessment, the outcomes of this Component generally met the project's objectives to the degree that was institutionally practical and are assessed as **satisfactory**.

35. Component 4. Pilot Projects

61. The purpose of conducting pilot projects was two-fold. First, it provides an opportunity to test the strategies for implementing IEM plans and modify them accordingly. Secondly, it allows stakeholders to see some early results from the IEM. This, in turn, helps build support for their continued participation in the implementation of IEM.

62. An attempt was made to select pilot projects that would:

- Be of a short duration so that the demonstration activities can deliver early results and build confidence amongst stakeholders;
- Produce tangible and measurable results

- Involve diverse groups to test management techniques that require collaboration between different groups;
- Model desired behaviours for resource use and management;
- Provide positive publicity for the program.

63. The following pilot projects were successfully implemented:
    - Clean water and waste management on Kolguev Island
    - Waterfowl harvest regime in the Kolyma River Basin
    - Sustainable reindeer breeding in the Kolyma River Basin
    - Cluster-type protected areas in the Beringovsky District
64. As an overall assessment, the outcomes of this Component generally met the project's objectives to the degree that was institutionally practical and are assessed as **Satisfactory**.

3.3. Project Ratings

65. This part of the evaluation examines the extent to which the project's major relevant objectives were effectively and efficiently achieved and their relevance.

3.3.1. Project Effectiveness

66. In order to assess the effectiveness of the Project, we have used the ROtI method to identify its outcomes, intermediate states and emerging impacts. This includes two main outputs, (i) an impact pathway analysis and (ii) a quantitative rating of the achievement towards the outcomes and progress towards intermediate states'. In this particular case, we are also able to comment upon the progress in achieving the anticipated impacts (Annex 4).
67. The level of effectiveness of the project is variable depending upon the level being considered. On the one hand there is no doubt that the specific outcomes planned for delivery of the project were put in place and were generally achieved. There is also no question that the project outputs were successful at sub-national and local levels However, evidence of forward linkage to higher results levels beyond immediate outcomes is limited. Moderately Satisfactory.

3.3.2. Relevance

68. The evaluation examined whether the project's outcomes were consistent with wider GEF program objectives. These are listed below, with a brief evaluation commentary:
69. The project responds to priorities highlighted in Operational Programs No. 2 (Coastal, Marine and Freshwater Ecosystems) and No. 3 (Forest Ecosystems). These Operational Programs note that conservation can be ensured by ecosystem functioning through the establishment and strengthening of systems of conservation areas including (a) in coastal, marine and freshwater areas at risk, and (b) in old growth and ecologically mature secondary forest ecosystems. Sustainable use can be ensured by systems that combine biodiversity conservation, production, and socio-economic goals.
70. The project also fully supports objectives of GEF Operational Program Integrated Ecosystem Management (OP#12). (Note: At the time of pipeline entry of the project,

OP#12 did not exist as an operational programme and thus the project entered the pipeline under OP 2 and 3.) The project aims to manage natural systems across sectors and administrative boundaries and facilitates inter-sectoral and participatory approaches to natural resource management planning and implementation on an ecosystem scale.

71. The project contributed to meeting of international commitments of the RF under Convention on Biodiversity Conservation, Ramsar Convention, East Asian-Australasian Flyway Partnership, bilateral agreements on migratory birds with Japan, USA and Korea and other relevant agreements. Russia actively participated in the work of Arctic Council's working group Conservation Arctic Flora and Fauna (CAFF) and "Arctic Climate Impact Assessment" (ACIA) and supports the recommendations made in the ACIA Policy document. ECORA proposed and tested a number of approaches and methods, including trend assessment based on CAFF criteria and the Circumpolar Biodiversity Monitoring Program (CBMP) indicators.

72. The project builds on substantial experience of the GEF in supporting biodiversity conservation projects in the Russian Federation, in particular, Taimyr Peninsula: Maintaining connectivity across the landscape and others. It would complement the ongoing GEF projects: "Strengthening the Marine and Coastal Protected Areas of Russia" and "Mainstreaming biodiversity conservation into Russia's energy sector policies and operations", whose objective is to address to barriers to effective mainstreaming of biodiversity conservation in three major energy sectors in the Russian Federation: oil and gas, coal and hydropower.

73. The relevance and appropriateness of the project design was, however, somewhat limited. The project design in relation to the primary development issue – the conservation and sustainable use of biodiversity in the Russian Arctic assumed that a transfer of western IEM experience in the practice of environmental management in Russia would readily and effectively occur. In hindsight the project design did not properly take into account the decline, from the mid 1990's onward, of government commitment to environmental management and the dominance of economic and fiscal considerations in public policy making. The State Committee for Environment who was major supporter of ECORA project was abolished in 2000 and its functions combined with the Ministry of Natural Resources. Within this Ministry, the public policy emphasis has been on setting the conditions for exploitation of existing resources and assets with the less emphasis and resource allocation on improving environmental performance. Political and economic motivation for environmentally sustainable development was largely overestimated (see section 3.1)

74. In summary, ECORA is consistent with GEF Operational Program's goals and objectives, as well as those of other UNEP and UN programmes and initiatives. However, the relevance of the project design to the actual context of the Russian Arctic had limitations. As such, it has been rated as "**Highly Satisfactory**" in terms of its continuing relevance.

3.3.3. Efficiency

75. The efficiency of the project was probably the most challenging element to evaluate. In total, the Project cost was US$ 3 million from the GEF Trust Fund. There were also substantial 'in-kind' contributions by NEFCO, Canada, Norway, Sweden, Finland, the USA and GRID-Arendal.

76. ECORA had no tangible support at the federal level and failed to attract money from federal level funds/budget. Insufficient efforts of project management to assuring financial sustainability of ECORA outcomes and impacts, including fundraising. Therefore the project has been rated as **Moderately Unsatisfactory** in terms of its overall efficiency.

3.4. Sustainability

3.4.1 Financial Sustainability

77. Financial sustainability is the greatest concern of the stakeholders consulted. Many expressed concern that finances would not be forthcoming to follow through activities that the project has started, in particular, the implementation of the IEM Action Plans. Deputy Prime Minister of the SR and Minister of Environment of the SR confirmed that financing of the IEM Action Plans will be partially financed by the republic's budget. Until January 1st, 2008, the Kolguev Model Area belonged to the territory of the NAO, an independent constituent entity of the Russian Federation. Now, according to federal legislation, federal taxes and the execution of 28 authoritative powers are shifted from the NAO to the Arkhangelsk Oblast. Practically, this means delegation of decision-making powers in such sectors as agriculture, education, health protection, and regional protected areas from the NAO to the Arkhangelsk Administration. The municipal entity (Zapolyarny district) was fully subsidized from the NAO budget. It is not clear whether the IEM Action Plan for Kolguev MA will be financed by Arkhangelsk administration.

78. The Russian practice of financing of environment activities has been analyzed. According to Russian Legislation, it is not possible to propose mechanisms for establishing A long-term funding mechanism for Project activities and results. Ecological funds, which could have served as a funding mechanism, were discontinued. There were, however, discussions within the Russian Government to re-establish such funds. The only evident way to provide long-term funding mechanism for the project results is to use existing regional or federal programmes. This principle was used during development of IEM Action Plans. Instead of a long-term funding mechanism, per se, a number of activities were adopted to sustain project activities, including the adoption of the IEM Action Plan by the Government of Sakha Republic and the inclusion of Beringovsky Nature Protected Areas (NPAs) into the Federal National Park. Introduction of environment education to schools (mechanism for funding this and/or sustainability by introducing this in curricula) and revival of traditional nature use in MAs will also serve as long-term funding mechanisms.

79. Realization of Russian co-funding (federal, regional, and industry) was weak. Co-funding that had been pledged at the federal level was not realized during implementation representing a considerable loss to the project, while some regional co-funding was in-kind rather than cash. This necessitated adjustments to the project budget and activities. Therefore the project has been rated as Moderately Unlikely in terms of its overall financial sustainability.

3.4.2. Socio-Political Sustainability

80. No specific socio-political risks were identified as part of the evaluation. Strong support from local administrations was vital to the ultimate success of ECORA project. The project enjoyed good political support in both the regions and federally.

3.4.3. Institutional framework and governance

81. A favourable institutional framework and governance climate is particularly important to the sustainability of the project outcomes. ECORA created or supported special institutions in the region and considerably increased their capacities and potential. In general, therefore, ECORA has been rated as 'moderately likely' in terms of the sustainability of institutional and governance frameworks.

3.4.5. Environmental

82. There are no major environmental risks or threats to the sustainability of project outcomes. Indeed the ECORA products constitute a very important tool for improving environmental and sustainability management. The environmental benefits of this project are potentially highly positive, as it should provide planners, managers and developers to make their decisions with better information gained by project and thus reduce the potential for resource or user conflicts. In general, therefore, ECORA has been rated as 'likely' in terms of achieving environmental sustainability.

3.5. Catalytic Role

83. The lessons learned during the project implementation have been well received at a local level and continued to be implemented. The lessons learned have also been integrated into future projects, in particular the large National Program "Arctic Agenda 2020", which is currently under development, and have played a catalytic role in improved management practices as a result.

84. The Project outcomes have great potential for replication both, nationally and regionally, to ensure sustainability of the project outcomes. However the assessment indicates that there is a risk that not all project-generated knowledge will be properly published and delivered to corresponding stakeholders. From a global environmental benefit point of view, however, the project is contributing through the detailed assessments of the current environmental problems of Russian Arctic, and by promoting and developing the capacity of local and national stakeholders.

85. Although the full extent of catalytic and replication actions remains unknown, a number of effective outcomes were demonstrated and, accordingly, a **Moderately Satisfactory** rating was awarded.

3.6. Stakeholder participation / public awareness

86. ECORA aimed to support the livelihoods of indigenous and local peoples. Because the National Biodiversity Conservation Strategy (2001) proposes to adopt integrated approaches to nature management with full involvement of indigenous peoples, local and indigenous peoples contributed to the development of ECORA in the developmental phases, mainly via the main NGO for indigenous peoples' issues in the region, the Russian Association of Indigenous Peoples of the North (RAIPON.) Their involvement included participation in workshops and meetings, consultations during the fact-finding missions, and they were invited to participate on ECORA's Expert Task Team. Representatives from indigenous peoples groups were also invited as observers or advisors to ECORA's Steering Committee.

87. ECORA's design phase demonstrated that indigenous peoples can provide important advice and support on how alternative sources of livelihood could be developed and

some of their ideas were incorporated into the project design. During the project's main phase, local and indigenous peoples actively participated in project activities in the MAs, particularly in training activities and the development and implementation of the pilot projects.

88. Measures were taken to adequately engage the local population throughout the life of the project, from design phase through implementation. In ECORA, active on-the-ground involvement in the MA tended to occur intermittently for a variety of reasons. During the implementation of the project local competence and capacity have been considerably increased.

89. The experience of establishing an information centre on Kolguev Island demonstrated the benefits of using modern communication facilities and information exchange for wide involvement of local population/public in IEM issues.

90. Special efforts have been made to engage the private sector in IEM, e.g.to engage industry in the project, particularly the oil and gas sector, but these were not as successful as anticipated. The development of a code of conduct for industry proved problematic, likely as a result of different understandings of what this entails (i.e., voluntary vs. regulatory). Similarly, representatives of the oil and gas sector in Russia were invited to a workshop on IEM but there was better representation and participation from international companies.

91. Engaging youth is critical to the long-term success of IEM. Environmental education for schools was a very important aspect of ECORA. The lifestyle in the local areas may be a very difficult barrier to achieving sustainable development goals. Youth are, therefore, a very important group to support with relevant initiatives in education. Environmental education programs in ECORA were very successful in engaging the interest of students in the goals of ECORA.

92. The project was very participatory, involving best consultants from different institutions in the whole Russia as well as best foreign advisers. Training programs were delivered to local administrative staff, decision-makers in each MAs and to local communities enhancing their involvement into the project. Environmental programs developed by the project have been incorporated in the study programmes for many schools in the MAs. Training process within ECORA helped create an environment of trust among participants and increased their involvement in the project. The training workshops were not only theoretical but gave participants the opportunity to apply what was learned in their work. Whilst the participatory approach used by the project worked well among the organizations there was little involvement of federal government representatives in discussions. During consultations in regions and MAs the absence of a functioning network sharing information among regional experts was noted. Overall this parameter was rated "Satisfactory"

3.7. Country Ownership / Drivenness

93. ECORA has had no tangible support at the federal level other than an exchange of information between ECORA and MNR thematic divisions, and the provision of agreed in-kind co-financing in the form of office premises, computers, communication costs, etc. The latter was in accordance with the signed MoU between GRID-Arendal and FCGS "Ekologia". As a result of coming parliamentary elections and possible changes in environmental governance at the federal level, this situation may change.

94. Regionally, project ownership differed between the MAs. In general, ECORA has succeeded in establishing working relationships with regional authorities. Difficulties in the process, however, were caused by frequent changes in regional governance structures. During project implementation, for example, authorities of the NAO changed four times.

95. Regional subdivisions of the MNR (the Committees of Natural Resources in NAO and ChAO, and the Ministry of Nature Protection in SR) were responsible for ensuring ecological safety through environmental regulations and stimulation of appropriate environmental actions in the regions before January 1, 2008. Now they are responsible only for biological (excluding fish), mineral, forest, and federal water resources. All regulations on environmental and natural resource use are under the control of regional authorities. Initially, it was planned that ECORA would be based on federal competence and resources, and be supported by the regions. Now the regions have received a number of responsibilities in the field of environmental protection from Moscow, but lack the financial and administrative resources for implementation.

96. Raising awareness and creating an enabling environment for conservation action was achieved successfully at local and community levels. A series of thematic maps was produced for each MA identifying features such as habitat types and land use. These maps will also assist in the identification of areas requiring special conservation and protection measures, and indicate areas where future research may be required. Some maps (e.g., the value of bioresources, reindeer rangeland grazing capacity, important fishing areas) can be used directly for planning traditional economic activities (e.g., hunting, fishing, reindeer herding) and for assessing the damage from industrial development.

97. The success achieved in the implementation of the project is directly related to (1) sustained political commitment at regional level, ensuring the adequate level of project ownership, (2) to the broad-based public support, including support of local indigenous communities it has received. The maintenance of this support requires effective dissemination of accurate information about the objectives, achievements and challenges of the project. The broad support is critical for mobilization of domestic resources and obtaining commitments from municipalities, local NGOs and companies of all forms of ownership.

98. Overall, the project facilitated stable contacts between representatives of various groups of society and with a number of state governmental and non-governmental institutions. It is important that these contacts grow from official “on-paper” approval to practical decisions on the ground. Interested parties have received an opportunity to listen to each other, though have not found yet common acceptable solutions on many issues, for example, on the support of the traditional use of natural resources. Overall the project was rated as “Moderately Satisfactory” for this parameter.

3.8. Preparation and Readiness

99. From the evidence presented during the course of the evaluation the conclusion can be drawn that the project was generally conceived and implemented against a background of readiness and sound preparation. The project was well designed and used an innovative methodology to demonstrate how IEM can be used to achieve ecological, economic, and social goals for local and global benefits. The project was the first attempt of securing the integrity of some of the world’s last remaining pristine areas and

support livelihoods of indigenous and local peoples. In spite of the overall quality of project design there were some flaws that affected project performance and outcome. Stakeholder consultation was poor at the project design phase and critical stakeholder consultations tended to be lacking at this stage. A lot of small activities within four components did not allow concentrating on major project objectives. Dissemination was also not considered as an important part of the project in the design and as a result was not prioritized in the budget so that at the end of the project there were insufficient funds to disseminate all the results and outputs. During project design, the nature of the project that covers western, central and eastern arctic regions of Russia was not fully taken into account and insufficient funds were allocated to travel for the project participants to the MAs. More direct and early involvement of federal economic and financial ministries (MOED, MOF) as well as national legislative bodies (i.e. Duma) in the project design and its implementation activities could strengthen sustainability of the project and help to reach its policy objectives.

100. Overall the rating applied to this criteria is "**Satisfactory**".

3.9. Implementation Approach

101. Implementation approach following sequence of actions from assessment to action proved to be successful. Good team of qualified experts was built; timing was appropriate.

102. The efficiency of project management, in which there was PIU in Moscow and three Model Area Implementing Units (MAIUs) in the regions, differed between regions. The PIU coordinated project activities and was responsible for financial management, hiring of consultants/experts, liaison with relevant stakeholders, and donor countries and agencies. The PIU was also responsible for overall management and project decision-making, and fund allocation decisions.

103. The remoteness of PIU from MAs had little impact on project performance and no communication problems with the PIU were identified. Emerging questions were discussed and resolved, as a rule, either via e-mail or telephone.

104. The MAIUs provided coordination with the local implementation institutions, local stakeholders, Western Advisors, and relevant experts. The MAIUs liaised with regional environmental authorities and administrative structures, regional and federal government authorities, academic institutions, non-governmental organisations, including indigenous people, and the private sector. Both the Kolguev Island and Beringovsky Model Areas have changed Model Area Coordinators since project implementation. This proved to be most problematic in Beringovsky where it was difficult to find a replacement MA Coordinator with the requisite skills locally. This had an effect on the implementation of project activities in this region.

105. Participation of the Western Advisors differed between MAs. Overall, it was felt that the participation of international advisors in ECORA could have been greater. Participation of western experts could help equip local specialists with international expertise and establish necessary international connections. A significant barrier to greater international participation was language and the lack of translated documents. Western Advisors often noted that they could provide more assistance and make greater connections for the MAs internationally if reports generated from the project were translated into English. English summaries of activity reports were of varying quality and were insufficient to generate meaningful input from abroad. A second significant

barrier to greater international participation has been the cost of travel, particularly for the two Western Advisors based in Alaska. With the rising cost of oil and increased exchange rate between the Russian rouble and U.S. dollar, travel costs increased significantly affecting the ability to hold more face-to-face meetings. This parameter was rated as '**Moderately Satisfactory**".

3.10. Financial Planning and Management

106. The cumulative data for ECORA financial performance in terms of GEF funds and co-financing indicates a slow start-up process. In the mid of the project ECORA has reached the targeted level of expenditures and has secured substantial amounts of co-financing including leveraged resources although some financial/budgetary problems remain. The Russian co-financing of the project was based on the receipt of contribution letters from constituent units of the RF, letters which were not subsequently re-approved by the MEDT. Approximately $US 1 million was initially pledged to the project. This funding was supposed to come from the Federal Targeted Programme "World Ocean, Sub-program - Arctic" budget, a program that subsequently did not receive appropriate financing. The Ministry of Natural Resources did not and does not participate in co-financing any aspect of the project, including office space and equipment. The latter are covered out of the project funds within the MoU with the administrative body FCGS "Ekologia".

107. An important factor affecting the financial performance of the project is the annual inflation rate of over 11 %. A simultaneous increase of costs for services by approximately 25 % and a decrease in the dollar exchange rate caused real losses to the project estimated of about 40 % of the overall budget over the evaluation period (2004-2007). This resulted in fewer visits to the Model Areas and further reduced the possibility of attracting additional experts.

108. The financing situation did not change and so it was necessary to adjust the project budget accordingly for final 2 years, to compensate for inflation. The situation was made particularly difficult because the $1 million co-funding pledged by the MEDT was not available to the project.

109. This terminal evaluation has not been able to make a detailed assessment of the quality and effectiveness of financial planning and control over the project's lifetime. This is due to the financial data, in particular, on project co-financing, were not readily available for evaluation. This lack of information leads to a **'Moderately Unsatisfactory'** rating.

3.10. Assessment of the Monitoring and Evaluation Systems

110. Monitoring of ECORA was an on-going process that used the systematic collection of data on specified indicators to provide information on the extent of progress towards project objectives and on the use of allocated funds. Evaluation was the systematic and objective assessment of an on-going or completed project, its design, implementation, and results. Evaluation involved the definition of appropriate indicators, the examination of performance against those indicators, and an assessment of actual and expected results.

111. The logframe matrix and UNEP's monitoring and evaluation principles provided the basis for the ECORA Monitoring and Evaluation Plan (MEP). The MEP covers three

areas - project administration; project achievements (outputs relative to milestones); and project outcomes (longer-term impacts on ecological, social, and economic components). Deliverables included: annual project budgets; quarterly financial reports; yearly financial reports, including an explanation of any discrepancies from budget or changes in budget; and half-yearly reports (HYRs) on project administration, including any problems and recommended changes. Although the project initially experienced serious problems in both financial and progress reporting, these issues have been resolved. Since the inception of the project, UNEP has changed format for the HYR twice from the original one proposed in the project document. The proposed format, although somewhat excessive in its volume (more than 50 pages) and coverage, provided an objective snapshot of project achievements for the reporting period. There is some overlap between the content of the HYR and the UNEP-administered Project Implementation Reviews (PIRs). The similar formats, however, saved some time on reporting.

112. The annual project evaluation included two components: a financial audit as per UNEP standard procedures, including a review of financial reporting and accounting procedures; and a technical review using the format of the HYR. When HYRs were completed on a calendar year basis (1st Jan to 31st Dec), three completed PIRs (2006 - 2009) were completed on a project calendar basis (after second, third and fifth years of project implementation). HYRs were circulated among SC members and project participants for comments. PIRs were considered by SC members and proposed response actions plans were thoroughly discussed. Progress on recommended remedial actions was reported in the next PIR.

113. It was originally planned that the MAIUs provide the HYRs, while the PIU in Moscow would be responsible for annual reporting. In reality, all HYRs were produced by PIU in Moscow in consultation with the MAIUs. This arrangement is satisfactory as it allows for consistency in reporting and adherence to GEF reporting standards. Unlike technical reports, all financial reports were produced by MAIUs and compiled by the PIU.

114. The Steering Committee was responsible for the annual evaluation of project achievements. During the intervening periods, the SC communicated via e-mail. In general, all ECORA substantive and technical reports were produced in a timely manner with delays not exceeding 3-4 months.

115. The project website require some attention as it does not include essential material from the project, does not contain enough information, e.g. uploading of most recent reports, ensuring that titles of reports include date, provision of additional links within the website to reports to make them more easily accessible, etc. Surprisingly GRID Arendal web contains information only for the beginning of the project and does not include essential information. Project did not ensure that links between the website and the homepages of relevant organisations are set up. The overall rating for M&E was '**Satisfactory'**.

3.10. UNEP Supervision and Backstopping

116. In terms of overall project management, the evaluator considers that the performance of the executing and implementing agencies has been very effective. Some administrative and financial management issues occurred, which were to some extent resolved during implementation.

4. Conclusions and Ratings of Evaluation

Criteria	Remarks / justification	Rating
A. Achievement of Objectives and Results		**MS**
1. Effectiveness		**MS**
2. Relevance		HS
3. Efficiency		MU
B. Sustainability of the Results		**ML**
1. Financial Sustainability		MU
2. Socio-political Sustainability		L
3. Institutional Sustainability		ML
. Environmental Sustainability		L
C. Catalytic Role and Replication		**MS**
D. Stakeholder Participation and Public Awareness		**S**
E. Country Ownership and Driven-ness		**MS**
F. Achievement of Outputs and Activities		**MS**
G. Preparation and Readiness		**S**
H. Implementation Approach and Adaptive Management		**MS**
I. Financial Planning and Management		
J. Monitoring and Evaluation (M&E)		**S**
1. M&E Design		S
2. Implementation of the M&E Plan		S
3. Budget and Financing of M&E Activities		S
K. UNEP Supervision and Support		**S**
OVERALL RATING		**S**

117. Overall the project is rated as satisfactory. It had several shortcomings but largely achieved its major objectives.

4. Lessons Learned

118. Broader stakeholder support at the high level is required for introduction of IEM approaches to environmental policy changes and ensuring their sustainability: While a number of government stakeholders were participating in the project design and implementation, project activities did not reach those echelons of power where policy decisions are being made. More direct and early involvement of economic and financial ministries (MOEDT, MOF) as well as national legislative bodies (i.e. Duma) in the project design and its implementation activities could strengthen sustainability of the project and help to reach its policy objectives.

119. Application of IEM on a Regional (i.e. Sub-national) rather than National Basis: A clear lesson from ECORA is that in such country as Russia IEM can be effective at a regional level even in the absence of stable national counterpart arrangements and commitment. Following from the above, the application of future IEM projects in Russia may benefit from a “bottom up” rather than “top down” approach until there is a significant change in the level of interest and capacity committed by the national government for environmental management.

120. Ensure Objectives and Outcomes/Outputs Are Realistic and Focused: ECORA illustrates the importance of the project’s overall design in setting realistic objectives and outcomes based on well documented and comparable experience elsewhere. Where the objectives and scope were best defined, undertaken on a reasonable scale, and were linked to specific tasks better outputs were obtained.

121. Adequate publication and dissemination of project results. A lot of technical and scientific reports were produced by ECORA some of which contains unique information for remote areas in the Russian Arctic in an area of biodiversity and other related information. These results were not adequately publicized and disseminated. Intention to prepare a single, concise report for wide dissemination by means of publication in Springler is failed.

122. Broader Stakeholder Involvement. Not all stakeholders were involved in the ECORA implementation: business representatives were absent so far and no tangible participation at the federal level was indicated. Also RAIPON was not involved in the project to the extent needed and as result RAIPON's network capacities were not appropriately used by the project. As result the indigenous peoples knowledge was not used by ECORA in full extent.

123. Financial Sustainability. ECORA had no tangible support at the federal level and failed to attract money from federal level funds/budget. Insufficient efforts of project management to assuring financial sustainability of ECORA outcomes and impacts, including fundraising. In addition, analyses of project expenditures clear evidenced that more than 40 % of total project budget is spent for project management, administrative support and related issues. Another 16 % were used for training component.

124. Cooperation with other projects. ECORA has insufficient cooperation with other projects implemented in an area of project implementation. Lack of accessible outreach material on ECORA results for broader audience outside of the Model Areas and Russian Arctic.

125. Project web-site. The project websites requires some attention as it does not include essential material from the project, does not contain enough information, e.g. uploading of most recent reports, ensuring that titles of reports include date, provision of additional links within the website to reports to make them more easily accessible, etc. Surprisingly GRID Arendal web contains information only for the beginning of the project and does not include essential information. Project did not ensure that links between the website and the homepages of relevant organisations are set up.

Annex 1. Summary of Project performance by results levels.

Results levels and Indicators	Status at project completion	Rating
Development Objective Conservation and sustainable use of globally significant biodiversity in the Russian Arctic Indicator: Recognition of integrated ecosystem management as a preferred management tool in government policy and planning End of project Target Recognition of integrated ecosystem management as a preferred management tool in government policy and planning.	IEM Strategy and Action Plan as well as a Code of Conduct, have been developed and discussed with major stakeholders in each MA. The revised IEM Action Plans for the the Kolguev MA and Kolyma MA were signed by NAO and Kolguev Administrations and the Sakha Republic Government, respectively, as separate documents. The new administration of the joint Anadyrsky district (former Anadyrsky District plus Beringovsky district) has been briefed about ECORA and the IEM plan for the Beringovsky MA, however, it appears unlikely that they will sign the document at this time. Although good results have been achieved in project activities in this region, numerous administrative changes in ChAO have made it difficult to sustain the support of regional authorities for ECORA.	S
Immediate Objective . Indicator 1.1 Signed agreements among major stakeholders and appropriate legislative authorities in MAs	See above narrative	S
Indicator 1.2 Inter-sectoral MA Implementation Units (MAIU) established in each MA	MAIUs established in each MA	S
Indicator 1.3 Inter-sectoral regional advisory bodies established	Regional Advisory Committees established in each region where MAs arelocated	S
Indicator 1.4 Long-term funding Mechanism established by end of Year 5	No long term funding mechanism established.	MU
Indicator 2.1.1 Changes in area (%) of unfragmented habitats at the closure of the project compared to baseline will be = +2% to 0 for Kolguev MA Baseline 2,620,162 ha of unfragmented habitats, or approx. 75% of Kolguev Model Area.	Maps were completed in 2007 and indicate more than 85% unfragmented habitats. The decrease of disturbed and fragmented lands is connected to the involvement of local people in new activities (community monitoring, restoration of traditional nature use),training of conservation officers, public awareness activities, and presence of project field teams in wild habitats and settlements, a cessation in oil exploration, and a decrease in the number of off-road cars and tractors in the village of Bugrino.	Unable to assess 2007 was the last information reported
Indicator 2.1.2 Changes in area (%) of unfragmentedhabitats at the closure of the project compared to baseline will be = 0% for Kolyma MA Baseline 7,405,000 ha of unfragmented habitats, or approx. 85% of Kolyma Model Area to be confirmed during 2005 field season	Maps completed after the 2007 field season have confirmed the area of unfragmented habitats to be greater than 90%. The low level of fragmentation is due to a very low population density, very small number of off-road cars, and a lack of big industrial companies	Unable to assess 2007 was the last information reported
Indicator 2.1.3 Changes in area (%) of unfragmented habitats at the closure of the project compared to baseline will be = <10% for Beringovsky MA Baseline 3,251,250 ha of unfragmented habitats, or approx. 85% of Beringovsky Model Area, to be confirmed during 2005 field season	Maps were completed in 2007 and indicate more than 95% unfragmented habitats. Data was confirmed after map development. About 75% of the Model Areas is covered by the Koryak highland, an area that has experienced no fragmentation.	Unable to assess 2007 was the last information reported
Indicator 2.2 Positive trends in population sizes of threatened bird species in Kolyma and Beringovsky MAs will remain stable compared to baseline (to be established during early project phase) at project end **Baseline** There are 23 threatened bird species of the Red Data Book in the Beringovsky MA (2004): Spoon-billed sandpiper (150 pairs); Emperor goose (5,000 birds); Golden Eagle (10 pairs); Peregrine falcon (50 birds); Gyrfalcon (300 birds); White-tailed Sea eagle (200 birds); Steller's Sea-eagle (10 birds); White-billed loon (100 birds); Lesser White-fronted goose (50 birds).	Threatened bird species in Kolyma MA were excluded from indicators at the request of MA authorities and changed to waterfowl and reindeer as important for traditional nature use of aboriginal peoples. Information for threatened birds in Beringovsky MA cannot be checked. All project field work was conducted along the sea coast where all communities are situated, as well seabirds colonies, marine mammal rookeries and proposed clasters for National Park Beringia. The remaining 75% of the MA is represented by Koryak highland where many rare birds species nest (e.g., Golden Eagle; Peregrine falcon; Gyrfalcon; White-tailed	Unable to assess. Causal linkage between project activities and indicator is uncertain

	Sea eagle; White-billed loon; Lesser White-fronted goose). It was not possible to arrange field work in this region due to the very high cost of helicopter rent. The numbers of Spoon-billed sandpiper are decreasing but reasons for this lie outside Russian territory along flyways and in wintering grounds in South-East Asia.	
Indicator 2.3. Positive trends in population sizes important waterfowl species (e.g., bean and white fronted goose) on Kolguev MA and Kolyma MA at project end will remain stable compared to baseline **Baseline** Kolguev waterfowl species (2004): approx. 200,000 nests (White-fronted goose - 120,000 nests; Barnacle goose - 60,000 nests; Bean goose - 20,000 nests.) Kolyma waterfowl species: 145,000 nests (data of 1994 aerial survey)	Kolguev waterfowl species (2007): approx. 335,000 nests (White-fronted goose - 200,000 nests; Barnacle goose - 70,000 nests; Bean goose - 65,000 nests.) The populations of three species of waterfowl in Kolguev MA have increased since 2004. Kolyma waterfowl species: 145,000 nests (data of 1994 aerial survey). Plans to conduct an aerial survey to determine the total size of the waterfowl population in the Kolyma MA were cancelled due to reconstruction of the local airstrip. Instead, the aerial survey was replaced with boat surveys in areas of intensive waterfowl hunting. The data have been used for development Waterfowl Management Plan but cannot provide an accurate number of waterfowl in the Kolyma MA. Accounts of hunting bags and waterfowl population in hunting areas indicate that exploitation of game waterfowl is currently sustainable and could possibly tolerate some increase.	Unable to assess.
Indicator 2.4 Domesticated reindeer populations on Kolguev Island and in the Kolyma MA will be secured and kept at carrying capacity by project end **Baseline** Estimated number of domesticated Kolguev Island Reindeer: 5,070 by end of 2002; In Kolyma: 13,429 by November 2002	Kolguev: 6500 reindeer (1 Jan 2005), 8300 (1 Jan 2007). Kolyma: 15200 reindeer (1 Jan 2006), 12000 (2007). Number of domestic reindeer in Kolyma decreased because of increased slaughtering of reindeer for meat. Lack of a commercial market for reindeer meat in the Kolyma MA allows reductions to be made in the reindeer stock. The reports indicate that the number of domestic reindeer in the Kolguev MA is within the carrying capacity of the pasture, while in the Kolyma MA they are below the carrying capacity.	MS
Indicator 2.5 Use of white fish species in Kolyma MA will be sustainable by project end (catch limits to be determined during early project phase) **Baseline** Catch of white fish (nelma) is prohibited in Kolyma. Kolyma Whitefish population is included into the Red Data Book of the Far-Eastern North of Russia. Other white fish species are commercial resource (catch annual limit is 300 tons).	Baseline established from secondary sources. Annual limit was increased up to 350 tons. By-catch of whitefish (2.6 tons) cannot be decreased because of similar size and ecology of nelma and commercial white fish species.	MS
Indicator 2.6 Use of marine mammals (e.g., Grey whale) and seabirds (e.g., eiders) in Beringovsky MA will be sustainable by project end (quotas to be determined during early project phase) **Baseline** Total number of Grey whales (eastern, i.e., USA-Russia population) was 11,000- 3,000 (1974); 19,200- 22,700 (1993). Current quota for grey whale in Beringovsky is 10 (135 for the whole Chukotka); harvesting seabirds is prohibited in Beringovsky. Official annual catch figures in Beringovsky MA (2005) for traditional use (quota/used): ringed seal – 35/30, Common seal – 193/63, Walrus – 5/0, Grey whale – 2/1	Baseline established from secondary sources and was re-confirmed after the first and second field seasons. Project studies show that aboriginal people in Beringovsky MA do not use their quota of marine mammals because these traditions have been lost in their communities. Special training courses to restore traditional use of marine mammal resources were conducted in all communities by marine mammal hunters from Northern Chukotka. Additional training in meat storage and preparation was also arranged.	S Use appears to lower than anticipated and hence sustainable.
Indicator 2.7 No less than 30% reduction in illegal and unsustainable nature use (e.g., poaching, unsustainable egg gathering, off-road driving) **Baseline** No baseline established	Due to the illegal nature of poaching, including egg gathering, identifying the level of poaching is possibleonly based on official data. Unfortunately the work of hunting inspectors was destroyed during perestroika and the current economic crisis will exacerbate this as there is less money available for inspectors, fuel for vehicles, etc. Work in ECORA shows that the level of poaching is very small because of cost of	Unable to assess.

	cartridges, gas for motor boats and snowmobiles, high price for boat engines, etc. This leads to poaching being concentrated around settlements where there are generally only small numbers of waterfowl and other animals, thus limiting the impact of poaching on wildlife. Egg gathering is prohibited in Russia but it is necessary to acknowledge that it is a traditional nature use of aboriginal peoples. Studies in ECORA indicate that it does not have any serious impacts on the bird populations in the MAs.	
Indicator 3.Positive changes in basic economic indicators showing revival of traditional nature use activities (e.g., reestablishment of reindeer herding; increase in amount of meat available from reindeer husbandry over baseline) **Baseline** Unemployment rate: Kolyma MA - 3.2% (2001) (1.7% official data) (8.2% average in Sakha Republic, 2005): Kolguev MA - 25% (8.2% average in NAO, 2005): Beringovsky MA - 5.4% (2.5% average in Chukotka, 2005) Reindeer live stocks: Kolyma MA - 13,000 (1999); 13,003 (2000); 15,315 (2001); 15,417 (2002) (domestic): Kolguev MA (domestic) – 5070 (2002). Beringovsky MA – 2,000 (2004)	Current unemployment levels in NAO are 13.7%, in ChAO –4.5%, in Yakutia – 9.5% (ILO data). Kolguev: 6500 reindeer (1 Jan 2005); 8300 (1 Jan 2007); 7800 (1 Jan 2010). Kolyma: 15200 reindeer (1 January 2006), 12000 (2007); 12150 (2009). Number of domestic reindeer in Kolyma decreased because of slaughtering reindeer for meat that was allowed only in 2007. Beringovsky: 12000 (1 Jan 2006); 12750 (1 Jan 2010)	The causal link between unemployment statistics and the project intervention are unclear and probably very indirect. Reindeer stocks show some increases but do not measure increased amount of meat available.
Outcome 1 Strengthening the enabling environment for integrated ecosystem management (IEM) including enhanced legislative framework, enhanced capability and capacity,financial sustainability, and increased public awareness	Financial sustainability has been highlighted as an issue.	MS
Indicator 1.1 Improved policy, legislative, and regulatory framework facilitating implementation of IEMs adopted or accepted for adoption by authorities in the three administrative regions hosting model areas (Nenets AO;Sakha Republic; Chukotka AO) by project closure **Baseline** Current legislative framework not supportive of IEM plan implementation	All three review reports were completed. ECORA experts participated in the amendment of the law on aboriginal people of Russia (May 2009), reviewing and commenting on the Action Plan for the Concept on Sustainable Development of Aboriginal People of the Russian North (approved February 2009), and in the development and preparation to ratification of the Agreement on International Standards for Humane Trapping (May 2009). The local populations in the Model Areas and regional governments are well aware about IEM and ECORA itself. In total, more than 150 publications have been published about ECORA on the internet and in newspapers. A press-conference on ECORA results has been arranged by one of the biggest Russia Information Agency *Novosti*.	MS
Indicator 1.2. Codes of conduct for relevant industries established and conditions created for their implementation, including a monitoring process **Baseline** No existing agreements	Draft code of conduct developed in 2006. Most codes deal with social and economic aspects of their activities. Current codes do not apply to environmental conservation and protection. Some companies have environmental protection Codes of conduct have been developed in close consultation with fisheries and reindeer breeding industry. The economic crisis made it difficult to hold discussions with oil, coal, and gold mining firms. A code of conduct in the Sakha Republic and NAO were approved by Sakha Government and NAO Administration as part of the IEM Action Plans in 2009 .	MS
Indicator 2.1 Training programs for administrative and executive personnel involved in IEM implementation, and managers from local industry, established	Introductory training in IEM was provided to all relevant staff of the PIU and the MAIUs, as well as to some related NGOs (ETT meeting, Feb. 2005, Nov 2006 with participation of oil companies from other than MAs); however, no industry personnel from MAs were involved.	MS

	Trainings with participation of fishery and/or reindeer herding enterprises were arranged in all MAs. Training manual in environmental policy and management has been published and distributed	
Indicator 2.2. Training programs to restore and support traditional nature use and management (e.g., traditional reindeer husbandry) developed and implemented .	A total of 8 experts from the federal level and the MAs conducted 12 training sessions. A federal programme and handbook were developed. Training in reindeer meat and skin processing in Kolguev MA and in marine mammal hunting and meat processing in Beringovsky MA were implemented in 2007-2010. Training in Kolyma MA was well received according to the post evaluation. In Kolguev and Kolyma MAs recommendations for improving reindeer husbandry have been developed and promoted.	MS
Indicator 2.3 Workshops to assist in the identification and establishment of new small-scale businesses focused on biodiversity conservation (e.g., marketing of traditional nature products, ecotourism operations) developed and implemented Target by project end. Two workshops to assist in the identification and establishment of new small-scale businesses focused on biodiversity conservation (e.g., marketing of traditional nature products, ecotourism operations) developed and implemented. Post-evaluation of participant is Favourable	Experts in Kolyma and Beringovsky were hired and a programme for a workshop in Sakha was developed. Two training sessions were held in Kolyma MA in Nov 2007 and April 2008. The workshops were of great interest of local people. Post-evaluation of participants on Kolguev Island was favourable. Several letters were received from participating organizations indicating their appreciation for the training, including a letter in April 2008 from two aboriginal communities, the administration of Kolymskoye village, Nizhnekolymsky college of northern people, and the Cultural centre 'Ethnos'. In June 2009, an expert from the Sakha Republic visited NAO to conduct a training programme. Besides traditional nature use, ECORA experts provided information and trained local peoples in using portable veterinary and medical equipment for treating animals and people in field conditions.	S
Indicator 2.4. Annual increase in number of individuals or businesses successfully securing loans for activities related to integrated ecosystem management	Analysis of legislation indicates that a revolving fund cannot be established under Russian legislation. Instead, efforts are being made to ensure the sustainability of specific project activities under ECORA, and to build financial sustainability into the IEM Action Plans using regional budgets to the extent possible. Additionally, a portfolio of investment projects will be developed on Kolguev Island with support from NEFCO. (See point 1.4 above)	MS
Indicator 2.5. Training foronservation officers (e.g., game wardens).	Three trainings were held for all relevant staff in all three MAs. The training programme and a manual have been published and distributed among rangers, hunting and fishing inspectors, and officials of federal committees in the regions (NAO, Sakha Republic and ChAO) and regional committees responsible for protecting of biodiversity.	S
Indicator 3.1 Financial resources secured by the regions and the Russian Federation to maintain long-term institutional capacity to support ecosystem management in each MA End of Project Target Financial resources secured by the regions and the Russian Federation to maintain long-term institutional capacity to support ecosystem management in each MA	Maintaining of long-term institutional capacity to support ecosystem management will be reached through different mechanisms. Implementation of pilot project in Kolguev MA and Beringovsky MA after completion will be financed from regional and federal budgets. NEFCO provided €60k for the first stage of a waste management program in Kolguev and will provide a further €200K toward its implementation. Other IEM activities will be financed through IEM Action Plans in Kolguev and Kolyma MA.	MU/MS
3.2. Fund managers are able to process funding applications for revolving fund	Analysis of legislation indicated that a revolving fund cannot be established under Russian legislation.	N/A
Indicator 3.2.1. The resources of the revolving fund are fully deployed for projects and repayments are received so as to make at least one full recycling of the funds possible	Analysis of legislation indicated that a revolving fund cannot be established under Russian legislation.	N/A
Indicator 3.3. Cost-recovery mechanisms established in each MA (e.g., user fees for fishing/hunting, oil exploration fees) to 0-25% of annual budget by year 5 by a variety of	At the beginning of the ECORA project it may have been possible to establish cost-recovery mechanisms because of existing federal and regional ecological funds. These	N/A

mechanisms to be established early in the project	funds, however, have since been cancelled under the current financial situation. The possibility of establishing some kind of a cost-recovery mechanism in MAs was analyzed but according to current legislation, there is no way to establish such a mechanism.	
Indicator 4.1. Environmental education package prepared for schools, including teacher training component	Contents of handbook developed and agreed to with regional educational departments. Special elective course for pupils on regional biodiversity was implemented in Beringovsky MA. Teacher trainings were held Sakha Republic. Regional handbooks on NAO environment were published. Federal handbook "A Journey with Little Tundra Child" (in Russian and English), Birds of Chukotka:Practical Manual", Life within the Polar Circle, and "2000 Droplets" Learning pack have been published.	S

Annex 2. . The Evaluation Terms of Reference,

TERMS OF REFERENCE

Terminal Evaluation of the UNEP GEF project "ECORA: An Integrated Ecosystem Management Approach to Conserve Biodiversity and Minimise Habitat Fragmentation in Three Selected Model Areas in the Russian Arctic"

1. PROJECT BACKGROUND AND OVERVIEW

Project rationale

The project helped to secure the integrity of some of the world's last remaining pristine areas and support livelihoods of indigenous and local peoples. The development objective of this project was the converstation and sustainable use of biodiversity in the Russian Arctic. By building on national policies and priorities, the project demonstrated how Integrated Ecosystem Management (IEM) can be used to achieve ecological, economic, and social goals for local and global benefits. The project implemented a number of activities including biodiversity and socio-economic inventories and assessments; targeted training programs; legislative, administrative and institutional capacity building; specific conservation measures; and pilot activities to test IEM approaches for conserving and the sustainable use of natural resources.

The objective was stated as:

"The adoption and initial implementation of integrated ecosystem management strategies and action plans in three Model Areas representing different ecosystems and anthropogenic pressures: Kolguev Island, Kolyma River Basin, and Beringovsky."

The indicators given in the project document for this stated objective were:

- IEM strategies and plans operationalized in the three Model Areas.
- Biodiversity benefits of IEMs established in the three Model Areas.
- Socio-economic benefits of IEMs evident in the three Model Areas.

Relevance to GEF Programmes

The project also fully supports objectives of GEF Operational Program Integrated Ecosystem Management (OP#12). The project aims to manage natural systems across sectors and administrative boundaries and facilitates inter-sectoral and participatory approaches to natural resource management planning and implementation on an ecosystem scale.

Executing Arrangements

The project was executed by UNEP GRID (Global Resources Information Data Base-Arendal, Norway) and overseen by a Steering Committee comprising representatives from the Russian Federation Ministry of Natural Resources and representatives from co-executing agencies. A Project Implementation Unit (PIU) was established to execute the project. Implementation of the project in each Model Area was coordinated by a local Model Area Implementation Unit (MAIU) reporting directly to the PIU. The MAIUs are directly affiliated within Regional environmental authorities and administrative structures, namely: the "Inspectorate of Nature Protection of Niznekolymsky Ulus" for the Kolyma MA, the "Regional

Committee for Environment Protection" for the Beringovsky MA and the "Administration of Kolguev Island for the Kolguev MA.

Project Activities

The project comprised of activities grouped in four components.

Component 1: Strengthening the enabling environment for integrated ecosystem management

1. Enhanced policy, legal, and regulatory framework

- Determine reforms required for IEM and prepare package of proposals.
- Develop recommended conservation measures and codes of conduct for relevant industries (e.g., oil and gas).
- Identify and establish territories of traditional nature use and develop regulatory and management framework and apply it.

2. Enhanced capability and capacity of individuals and institutions

- Develop appropriate training programs in environmental policy and management
- Assessment of training needs for restoring and supporting traditional nature use and management and development of workshops to encourage new small-scale economic activities supportive of biodiversity conservation.
- Arrange for training in biogeographic mapping and associated software for institutions developing thematic maps and analyses and secure necessary hardware and software therefore.

3. Financial sustainability

- Negotiations with regional and federal authorities to secure financial resources, establishment of revolving fund and investigation of other funding opportunities for specific activities.

4. Enhanced Public Awareness in Model Areas and Nationally

- Develop and implement environmental education programs for local schools in the Model Areas.
- Develop and implement community monitoring program, including any associated training.
- Disseminate information relating to ECORA via appropriate local, national, and global vehicles.

Component 2: Strengthening the Knowledge Base for Planning, Implementing, and Evaluating IEM Plans

2.1 Confirm research institutions to participate in development of knowledge base for IEM and identify key experts for each Model Area.
2.2 Compile and update baseline information on environmental and socio-economic conditions, and systematise new and existing information, and develop thematic maps and analyses.
2.3 Develop basic indicators for long-term monitoring and evaluation of environmental and socio-economic conditions and a community component to monitoring program.

Component 3: Development of IEM Plans and Strategies in the Model Areas

3.1 Establish inter-sectoral Model Area Implementation Units (MAIU).
3.2 Develop a communication/public participation strategy.
3.3 Establish mechanism for stakeholder consultations and conflict resolution.
3.4 Conduct stakeholder consultations, including seminars and thematic workshops and develop agreements between stakeholder groups, as necessary, to implement IEM.
3.5 Develop governance structure for implementing IEM and the M&E component of IEM plan.
3.6 Publicise the final IEM throughout all Model Areas, Russia, and the circumpolar community.

Component 4: Pilot Projects to Test IEM Implementation Strategies

4.1 Development of pilot project plans and implementation.
4.2 Assessment of pilot projects and incorporation of pilot project results into IEM plans.

Budget

At project inception the following budget was prepared:

Cost of the Project:	**US$**	**%**
Cost to the GEF Trust Fund	3,000,000	43.60
Co-financing (in cash)		
Russian Federation	1,000,000	14.60
Regional Authorities Chukotka	130,000	1.88
Regional Authorities Nenets	300,000	4.36
Regional Authorities Yakutia	750,000	10.90
Industry Lukoil	250,000	3.63
NEFCO	200,000	2.90
Co-financing (in-kind)		
NEFCO	50,000	0.72
Canada	420,000	6.10
Norway	280,000	4.06
Sweden	100,000	1.45
Finland	50,000	0.72
USA	300,000	4.36
GRID-Arendal	50,000	0.72
Total Cost of the Project:	**6,880,000**	**100.00**

TERMS OF REFERENCE FOR THE EVALUATION

1. Objective and Scope of the Evaluation

The objective of this terminal evaluation is to examine the extent and magnitude of any project impacts to date and determine the likelihood of future impacts. The evaluation will also assess project performance and the implementation of planned project activities and planned outputs against actual results. The evaluation will focus on the following main questions related to 1) "operations", 2) "biodiversity", and 3) "socio-economy":

1. Have IEM strategies and plans been operationalized in the three Model Areas (i.e. signed agreements, established funding mechanism, operational MAIUs and advisory bodies)?
2. Has biodiversity in the three Model Areas noticeably benefited from the project (i.e. low % of changes in areas of unfragmented habitats, positive trends in population sizes of threatened species, at least 30% reduction in illegal and unsustainable nature use)?
3. Are socio-economic benefits of IEMs evident in the three Model Areas? (E.g. Are there positive changes in basic economic indicators showing revival of traditional nature use activities?)

2. Methods

This terminal evaluation will be conducted as an in-depth evaluation using a participatory mixed-methods approach, during which the UNEP/DGEF Task Manager, key representatives of the executing agencies and other relevant staff are kept informed and consulted throughout the evaluation. The consultant will liaise with the UNEP/EOU and the UNEP/DGEF on any logistic and/or methodological issues to properly conduct the review in as independent a way as possible, given the circumstances and resources offered. The draft report will be circulated to UNEP/DGEF Task Manager, key representatives of the executing agencies and the UNEP/EOU. Any comments or responses to the draft report will be sent to UNEP / EOU for collation and the consultant will be advised of any necessary or suggested revisions.

The findings of the evaluation will be based on multiple approaches:

1. A desk review of project documents including, but not limited to:
   (a) The project documents, outputs, monitoring reports (such as progress and financial reports to UNEP and GEF annual Project Implementation Review reports) and relevant correspondence.
   (b) Notes from the Steering Group meetings.
   (c) Other project-related material produced by the project staff or partners.
   (d) Relevant material published on the project web-site: http://www.grida.no/ecora

2. Interviews with project management and technical support. Input from TM needed

3. Interviews and telephone interviews with intended users for the project outputs and other stakeholders involved with this project, including in the participating countries and international bodies. The Consultant shall determine whether to seek additional

information and opinions from representatives of donor agencies and other organisations. As appropriate, these interviews could be combined with an email questionnaire, online survey, or other electronic communication.

4. Interviews with the UNEP/DGEF project task manager and Fund Management Officer, and other relevant staff in UNEP dealing with Biodiversity and links with Integrated Ecosystem Management and habitat protection-related activities as necessary. The Consultant shall also gain broader perspectives from discussions with relevant GEF Secretariat staff.

5. Field visits[3] to project staff and target audiences. The evaluator will make field visits to Nenets Autonomous Okrug, to the Sakha Republic and to one or more of the Model Areas of the project and to key project personnel and collaborators in Russia.

Key Evaluation principles.
In attempting to evaluate any outcomes and impacts that the project may have achieved, evaluators should remember that the project's performance should be assessed by considering the difference between the answers to two simple questions ***"what happened?***" and ***"what would have happened anyway?"***. These questions imply that there should be consideration of the baseline conditions and trends in relation to the intended project outcomes and impacts. In addition it implies that there should be plausible evidence to **attribute** such outcomes and impacts **to the actions of the project**.

Sometimes, adequate information on baseline conditions and trends is lacking. In such cases this should be clearly highlighted by the evaluator, along with any simplifying assumptions that were taken to enable the evaluator to make informed judgements about project performance.

3. Project Ratings

The success of project implementation will be rated on a scale from 'highly unsatisfactory' to 'highly satisfactory'. In particular the evaluation shall **assess and rate** the project with respect to the eleven categories defined below[4].

It should be noted that many of the evaluation parameters are interrelated. For example, the 'achievement of objectives and planned results' is closely linked to the issue of 'sustainability'. Sustainability is understood as the probability of continued long-term project-derived outcomes and impacts and is, in turn, linked to the issues of 'catalytic effects / replication' and, often, 'country ownership' and 'stakeholder participation'.

A. Attainment of objectives and planned results:

[3] Evaluators should make a brief courtesy call to GEF Country Focal points during field visits if at all possible.
[4] However, the views and comments expressed by the evaluator need not be restricted to these items.

The evaluation should assess the extent to which the project's major relevant objectives were effectively and efficiently achieved or are expected to be achieved and their relevance.

- *Effectiveness*: Evaluate the overall likelihood of impact achievement, taking into account the "achievement indicators", the achievement of outcomes and the progress made towards impacts. UNEP's Evaluation Office advocates the use of the Review of Outcomes to Impacts (ROtI) method (described in Annex 7) to establish this rating.
- *Relevance*: In retrospect, were the project's outcomes consistent with the focal areas/operational program strategies? Ascertain the nature and significance of the contribution of the project outcomes to the Convention of Biological Diversity (that adopted the Integrated Ecosystem Management approach as the primary framework for action under the Convention) and the wider portfolio of the GEF.
- *Efficiency*: Was the project cost effective? Was the project the least cost option? Was the project implementation delayed and if it was, then did that affect cost-effectiveness? Assess the contribution of cash and in-kind co-financing, and any additional resources leveraged by the project, to the project's achievements. Did the project build on earlier initiatives; did it make effective use of available scientific and / or technical information? Wherever possible, the evaluator should also compare the cost-time vs. outcomes relationship of the project with that of other similar projects.

B. Sustainability:

Sustainability is understood as the probability of continued long-term project-derived outcomes and impacts after the GEF project funding ends. The evaluation will identify and assess the key conditions or factors that are likely to contribute or undermine the persistence of benefits after the project ends. Some of these factors might be outcomes of the project, e.g. stronger institutional capacities or better informed decision-making. Other factors will include contextual circumstances or developments that are not outcomes of the project but that are relevant to the sustainability of outcomes. The evaluation should ascertain to what extent follow-up work has been initiated and how project outcomes will be sustained and enhanced over time. **Application of the ROtI method** described in Annex 7 will also assist in the evaluation of sustainability.

Five aspects of sustainability should be addressed: financial, socio-political, institutional frameworks and governance, environmental (if applicable). The following questions provide guidance on the assessment of these aspects:

- *Financial resources.* Are there any financial risks that may jeopardize sustenance of project outcomes and onward progress towards impact? What is the likelihood that financial and economic resources will not be 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)? To what extent are the outcomes and eventual impact of the project dependent on continued financial support?

- *Socio-political:* Are there any social or political risks that may jeopardize sustenance of project outcomes and onward progress towards impacts? What is the risk that the level of stakeholder ownership will be insufficient to allow for the project outcomes 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.* To what extent is the sustenance of the outcomes and onward progress towards impacts dependent on issues relating to institutional frameworks and governance? What is the likelihood that institutional and technical achievements, legal frameworks, policies and governance structures and processes will allow for, the project outcomes/benefits to be sustained? While responding to these questions 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 can undermine the future flow of project environmental benefits? The TE should assess whether certain activities in the project area will pose a threat to the sustainability of the project outcomes. For example; construction of dam in a protected area could inundate a sizable area and thereby neutralize the biodiversity-related gains made by the project; or, a newly established pulp mill might jeopardise the viability of nearby protected forest areas by increasing logging pressures; or a vector control intervention may be made less effective by changes in climate and consequent alterations to the incidence and distribution of malarial mosquitoes. Would these risks apply in other contexts where the project may be replicated?

C. Catalytic Role and Replication

The catalytic role of the GEF is embodied in its approach of supporting the creation an enabling environment, investing in activities which are innovative and show how new approaches and market changes can work, and supporting activities that upscale new approaches to a national (or regional) level to sustainably achieve global environmental benefits.

In general this catalytic approach can be separated into are three broad categories of GEF activities: (1) "**foundational**" and enabling activities, focusing on policy, regulatory frameworks, and national priority setting and relevant capacity (2) **demonstration** activities, which focus on demonstration, capacity development, innovation, and market barrier removal; and (3) **investment** activities, full-size projects with high

The three categories approach combines all the elements that have been shown to catalyze results in international cooperation. Evaluations in the bilateral and multilateral aid community have shown time and again that activities at the micro level of skills transfer—piloting new technologies and demonstrating new approaches—will fail if these activities are not supported at the institutional or market level as well. Evaluations have also consistently shown that institutional capacity development or market interventions on a larger scale will fail if governmental laws, regulatory frameworks, and policies are not in place to support and sustain these improvements. And they show that demonstration, innovation and market barrier removal do not work if there is no

rates of cofunding, catalyzing investments or implementing a new strategic approach at the national level.

In this context the evaluation should assess the catalytic role played by this project by consideration of the following questions:

- INCENTIVES: To what extent have the project activities provided incentives (socio-economic / market based) to contribute to catalyzing changes in stakeholder behaviours?
- INSTITUTIONAL CHANGE: To what extent have the project activities contributed to changing institutional behaviors?
- POLICY CHANGE: To what extent have project activities contributed to policy changes (and implementation of policy)?
- CATALYTIC FINANCING: To what extent did the project contribute to sustained follow-on financing from Government and / or other donors? (this is different from co-financing)
- PROJECT CHAMPIONS: To what extent have changes (listed above) been catalyzed by particular individuals or institutions (without which the project would not have achieved results)?

(Note: the ROtI analysis should contribute useful information to address these questions)

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).

Is the project suitable for replication? If so, has the project approach been replicated? If no effects are identified, the evaluation will describe the strategy / approach adopted by the projected to promote replication effects.

D. Stakeholder participation / public awareness:

This consists 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. The evaluation will specifically:

- Assess the mechanisms put in place by the project for identification and engagement of stakeholders in each Model Area and establish, in consultation with the stakeholders, whether this mechanism was successful, and identify its strengths and weaknesses.
- Assess the degree and effectiveness of collaboration/interactions between the various project partners and institutions during the course of implementation of the project.
- Assess the degree and effectiveness of any various public awareness activities that were undertaken during the course of implementation of the project.

E. Country ownership / driven-ness:

This is the relevance of the project to national development and environmental agendas, recipient country commitment, and regional and international agreements.

- Assess the level of ownership in the Model Areas and whether the project was effective in providing and communicating information on IEM that catalyzed action to conserve biodiversity and to minimise habitat fragmentation in the Russian Artic.
- Assess the level of country ownership. Specifically, the evaluator should assess whether the local and national governments recognize IEM as a preferred management tool in policy and planning.
- Assess the level of country commitment to replicate IEM in other areas of Artic Russia.

F. Achievement of outputs and activities:

- Delivered outputs: Assessment of the project's success in producing each of the programmed outputs, both in quantity and quality as well as usefulness and timeliness.
- Assess the soundness and effectiveness of the developed IEM strategies and plans and the pilot projects implemented to test these IEM strategies.
- Assess to what extent the training programmes were successfully conducted, and the monitoring information, the maps, analyses and scientific reports produced have the weight of scientific authority/ credibility, were shared, used and have thus strengthened the knowledge base for planning, implementing and evaluating IEMs.

G. Preparation and Readiness

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

H. Assessment monitoring and evaluation systems.

The evaluation shall include an assessment of the quality, application and effectiveness of project monitoring and evaluation plans and tools, including an assessment of risk management based on the assumptions and risks identified in the project document. The Terminal Evaluation will assess whether the project met the minimum requirements for 'project design of M&E' and 'the application of the Project M&E plan' (see minimum requirements 1&2 in Annex 4). GEF projects must budget adequately for execution of the M&E plan, and provide adequate resources during implementation of the M&E plan. Project managers are also expected to use the information generated by the M&E system during project implementation to adapt and improve the project.

I. Implementation approach:

This includes an analysis of the project's management framework, adaptation to changing conditions (adaptive management), partnerships in implementation arrangements, changes in project design, and overall project management. The evaluation will:

- Ascertain to what extent the project implementation mechanisms outlined in the project document have been closely followed. In particular, assess the role of the various committees established and whether the project document was clear and realistic to enable effective and efficient implementation, whether the project was executed according to the plan and how well the management was able to adapt to changes during the life of the project to enable the implementation of the project.
- Assess the extent to which the project responded the mid term review / evaluation (if any).
- Evaluate the effectiveness and efficiency and adaptability of project management and the supervision of project activities / project execution arrangements at all levels (1) policy decisions: Steering Group; (2) overall project management in the PIU, and (3) project implementation in the MAIUs in all three regions.
- Identify administrative, operational and/or technical problems and constraints that influenced the effective implementation of the project.

M&E during project implementation

- *M&E design.* Projects should have sound M&E plans to monitor results and track progress towards achieving project objectives. An M&E plan should include a baseline (including data, methodology, etc.), SMART indicators (see Annex 4) and data analysis systems, and evaluation studies at specific times to assess results. The time frame for various M&E activities and standards for outputs should have been specified.

  The evaluator should use the following questions to help assess the M&E design aspects:

  SMART-ness of Indicators

  - Are there specific indicators in the log frame for each of the project objectives and outcomes?
  - Are the indicators relevant to the objectives and outcomes?
  - Are the indicators for the objectives and outcomes sufficient?
  - Are the indicators quantifiable?

  Adequacy of Baseline Information

  - Is there baseline information?
  - Has the methodology for the baseline data collection been explained?
  - Is desired level of achievement for indicators based on a reasoned estimate of baseline?

  Arrangements for Monitoring of Implementation

  - Has a budget been allocated for M&E activities?
  - Have the responsibility centers for M&E activities been clearly defined?
  - Has the time frame for M&E activities been specified?

Arrangements for Evaluation

  - Have specific targets been specified for project outputs?
  - Has the desired level of achievement been specified for all Indicators of Objectives and Outcomes?

- *M&E plan implementation.* A Terminal Evaluation should verify that:
  - an M&E system was in place and facilitated timely tracking of results and progress towards projects objectives throughout the project implementation period (perhaps through use of a logframe or similar);
  - annual project reports and Progress Implementation Review (PIR) reports were complete, accurate and with well justified ratings;
  - that the information provided by the M&E system was used during the project to improve project performance and to adapt to changing needs;
  - and that projects had an M&E system in place with proper training for parties responsible for M&E activities.
- *Budgeting and Funding for M&E activities.* The terminal evaluation should determine whether support for M&E was budgeted adequately and was funded in a timely fashion during implementation.

J. Financial Planning

Evaluation of financial planning requires assessment of the quality and effectiveness of financial planning and control of financial resources throughout the project's lifetime. Evaluation includes actual project costs by activities compared to budget (variances), financial management (including disbursement issues), and co- financing. The evaluation should:

- Assess the strength and utility of financial controls, including reporting, and planning to allow the project management to make informed decisions regarding the budget and allow for a proper and timely flow of funds for the payment of satisfactory project deliverables.
- Present the major findings from the financial audit if one has been conducted.
- Identify and verify the sources of co- financing as well as leveraged and associated financing (in co-operation with the IA and EA).
- Assess whether the project has applied appropriate standards of due diligence in the management of funds and financial audits.
- The evaluation should also include a breakdown of final actual costs and co-financing for the project prepared in consultation with the relevant UNEP Fund Management Officer of the project (table attached in Annex 1 Co-financing and leveraged resources).

K. UNEP Supervision and Backstopping

The purpose of supervision is to work with the executing agency in identifying and dealing with problems which arise during implementation of the project itself. Such problems may be related to project management but may also involve technical/substantive issues in which UNEP has a major contribution to make. The evaluator should assess the effectiveness of supervision and administrative and financial support provided by UNEP/DGEF including:

(i) the adequacy of project supervision plans, inputs and processes;

(ii) the emphasis given to outcome monitoring (results-based project management);
(iii) the realism / candor of project reporting and rating (i.e. are PIR ratings an accurate reflection of the project realities and risks);
(iv) the quality of documentation of project supervision activities; and
(v) financial, administrative and other fiduciary aspects of project implementation supervision.

In summary, accountability and implementation support through technical assistance and problem solving are the main elements of project supervision (Annex 6).

The ***ratings will be presented in the form of a table***. Each of the eleven categories should be rated separately with **brief justifications** based on the findings of the main analysis. An overall rating for the project should also be given. The following rating system is to be applied:

HS = Highly Satisfactory
S = Satisfactory
MS = Moderately Satisfactory
MU = Moderately Unsatisfactory
U = Unsatisfactory
HU = Highly Unsatisfactory

4. Evaluation Report Format and Review Procedures

The report should be brief, to the point and easy to understand. It must explain; the purpose of the evaluation, exactly what was evaluated and the methods used. The report must highlight any methodological limitations, identify key concerns and present evidence-based findings, consequent conclusions, recommendations and lessons. The report should be presented in a way that makes the information accessible and comprehensible and include an executive summary that encapsulates the essence of the information contained in the report to facilitate dissemination and distillation of lessons.

The evaluation will rate the overall implementation success of the project and provide individual ratings of the eleven implementation aspects as described in Section 1 of this TOR. *The ratings will be presented in the format of a table* **with brief justifications based on the findings of the main analysis.**

Evidence, findings, conclusions and recommendations should be presented in a complete and balanced manner. Any dissident views in response to evaluation findings will be appended in an annex. The evaluation report shall be written in English, be of no more than 50 pages (excluding annexes), use numbered paragraphs and include:

i) An **executive summary** (no more than 3 pages) providing a brief overview of the main conclusions and recommendations of the evaluation;

ii) **Introduction and background** giving a brief overview of the evaluated project, for example, the objective and status of activities; The GEF Monitoring and Evaluation Policy, 2006, requires that a TE report will provide summary information on when the evaluation took place; places visited; who was involved; the key questions; and, the methodology.

iii) **Scope, objective and methods** presenting the evaluation's purpose, the evaluation criteria used and questions to be addressed;

iv) **Project Performance and Impact** providing *factual evidence* relevant to the questions asked by the evaluator and interpretations of such evidence. This is the main substantive section of the report. The evaluator should provide a commentary and anlaysis on all eleven evaluation aspects (A − K above).

v) **Conclusions and rating** of project implementation success giving the evaluator's concluding assessments and ratings of the project against given evaluation criteria and standards of performance. The conclusions should provide answers to questions about whether the project is considered good or bad, and whether the results are considered positive or negative. The ratings should be provided with a brief narrative comment in a table (see Annex 1);

vi) **Lessons (to be) learned** presenting general conclusions from the standpoint of the design and implementation of the project, based on good practices and successes or problems and mistakes. Lessons should have the potential for wider application and use. All lessons should 'stand alone' and should:

- Briefly describe the context from which they are derived
- State or imply some prescriptive action;
- Specify the contexts in which they may be applied (if possible, who when and where)

vii) **Recommendations** suggesting *actionable* proposals for improvement of the current project. In general, Terminal Evaluations are likely to have very few (perhaps two or three) actionable recommendations.

Prior to each recommendation, the issue(s) or problem(s) to be addressed by the recommendation should be clearly stated.

A high quality recommendation is an actionable proposal that is:

1. Feasible to implement within the timeframe and resources available

2. Commensurate with the available capacities of project team and partners

3. Specific in terms of who would do what and when

4. Contains results-based language (i.e. a measurable performance target)

5. Includes a trade-off analysis, when its implementation may require utilizing significant resources that would otherwise be used for other project purposes.

viii) **Annexes** may include additional material deemed relevant by the evaluator but must include:

1. The Evaluation Terms of Reference,

2. A list of interviewees, and evaluation timeline

3. A list of documents reviewed / consulted

4. Summary co-finance information and a statement of project expenditure by activity

5. Details of the project's 'impact pathways' and the 'ROtI' analysis

6. The expertise of the evaluation team. (brief CV).

TE reports will also include any formal response / comments from the project management team and/or the country focal point regarding the evaluation findings or conclusions as an annex to the report, however, such will be appended to the report by UNEP Evaluation Office.

Examples of UNEP GEF Terminal Evaluation Reports are available at www.unep.org/eou

Review of the Draft Evaluation Report

Draft reports submitted to UNEP Evaluation Office are shared with the corresponding Programme or Project Officer and his or her supervisor for initial review and consultation. The DGEF staff and senior Executing Agency staff are allowed to comment on the draft evaluation report. They may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions. Where, possible, a consultation is held between the evaluator, Evaluation Office Staff, the Task Manager and key members of the project execution team. The consultation seeks feedback on the proposed recommendations and lessons. UNEP Evaluation Office collates all review comments and provides them to the evaluator(s) for their consideration in preparing the final version of the report.

5. Submission of Final Terminal Evaluation Reports.

The final report shall be submitted in electronic form in MS Word format and should be sent to the following persons:

Segbedzi Norgbey, Chief,

UNEP Evaluation Office

P.O. Box 30552-00100

Nairobi, Kenya

Tel.: (254-20) 762 4181

Fax: (254-20) 762 3158

Email: segbedzi.norgbey@unep.org

With a copy to:

Maryam Niamir-Fuller, Director

UNEP/Division of GEF Coordination

P.O. Box 30552-00100

Nairobi, Kenya

Tel: (+254-20)-762 4686

Fax: (+254-20)-623 158/4042

Email:

Edoardo Zandri

Task Manager

United Nations Environment Programme (UNEP)

Division of GEF Coordination (DGEF)

Tel: (+254-20) 762 4380

Fax:

Email: edoardo.zandri@unep.org

The Final evaluation will also be copied to the following GEF Operational Focal Points:

Evgeny Kuznetsov

Project Manager
+7 499 619 0068
Eak1955@list.ru

The final evaluation report will be published on the Evaluation Office's web-site www.unep.org/eou and may be printed in hard copy. Subsequently, the report will be sent to the GEF Office of Evaluation for their review, appraisal and inclusion on the GEF website.

6. Resources and Schedule of the Evaluation

This final evaluation will be undertaken by an international evaluator contracted by the Evaluation Office, UNEP. The contract for the evaluator will begin on 09 April 2010 and end on 08 June 2010 (2 months). The evaluator will submit a draft report on 10 May 2010 to UNEP/Evaluation Office, the UNEP/DGEF Task Manager, and key representatives of the executing agencies. Any comments or responses to the draft report will be sent to UNEP/ Evaluation Office for collation and the consultant will be advised of any necessary revisions. Comments to the final draft report will be sent to the consultant by 25 May 2010 after which, the consultant will submit the final report no later than 08 June 2010.

The evaluator will after an initial telephone briefing with Evaluation Office and UNEP/GEF conduct initial desk review work in Moscow and later travel to the Nenets Autonomous Okrug, to the Sakha Republic and to Nizhnekolymsky ulus if conditions permit to meet with project staff.

In accordance with UNEP/GEF policy, all GEF projects are evaluated by independent evaluators contracted as consultants by the Evaluation Office. The evaluator should have the following qualifications:

The evaluator should not have been associated with the design and implementation of the project in a paid capacity. The evaluator will work under the overall supervision of the Chief, Evaluation Office, UNEP. The evaluator should be an international expert in biodiversity management or conservation with a sound understanding of biodiversity and climate change issues. The consultant should have the following minimum qualifications: (i) experience in biodiversity with links to Integrated Ecosystem Management (IEM); (ii) experience with island, river basin and coastal ecosystems in particular with habitat protection and sustainable nature use; (iii) experience with project evaluation. Knowledge of UNEP programmes and GEF activities is desirable. Fluency in oral and written English and Russian is a must.

7. Schedule Of Payment

Lump-Sum Option

The evaluator will receive an initial payment equivalent to lumpsum travel and miscellaneous cost upon signature of the contract. Forty percent (40%) of the SSA fee will be paid upon submission of the draft report. A final payment of 60% of the SSA fee will be made upon satisfactory completion of work. The fee is payable under the individual Special Service Agreement (SSA) of the evaluator and **is inclusive** of all expenses such as travel, accommodation and incidental expenses.

In case, the evaluator cannot provide the products in accordance with the TORs, the timeframe agreed, or his products are substandard, the payment to the evaluator could be withheld, until such a time the products are modified to meet UNEP's standard. In case the evaluator fails to submit a satisfactory final product to UNEP, the product prepared by the evaluator may not constitute the evaluation report.

Annex 2. A list of interviewees, and evaluation timeline

Project Management

- Evgeny Kuznetsov, Project Manager
- Tiina Kurvits, Deputy Project Manager, UNEP/ GRID-Arendal
- Thor S. Larsen, Expert Task Team Chair, UNEP/ GRID-Arendal
- Ilya Shabrin, Project Assistant
- Igor Ryzhov, Training and Education Task Manager
- Arkady Tishkov, IEM Task Manager

Kolguev Island Model Area Implementation Unit

Nenets Information and Analytical Centre, Naryan–Mar, Nenets Autonomous Okrug

- Ruslan Bolshakov, Model Area Coordinator
- Sune Sohlberg, Swedish Environmental Protection Agency Western Advisor
- Andrey Vokuev, Model Area Assistant
- Ljubov Tkachuk, Bookkeeper

Kolyma River Basin Model Area Implementation Unit

Northern Forum Academy, Yakutsk, Sakha Republic/Yakutia

- Vladimir Vasiliev, Model Area Coordinator
- Nadezhda Vashchenko, Bookkeeper

Beringovsky Model Area Implementation Unit

Environmental Safety of Chukotka

- Tatyana Demchenko, Model Area Coordinator
- Ludmila Romenskaya, Model Area Assistant
- Dmitry Zakharchenko, Bookkeeper

Experts

- Nurguyana Alexandrova, Codes of conduct expert (Kolyma), Northern Forum Academy

- Vladimir Anufriev, Waterfowl and reindeer breeding expert (Kolguev), Institute of Environmental Problems of the North

- Roman Desyatkin, Habitats mapping expert (Kolyma), Institute of Biological Problems of Cryolithozone, Siberian Division, Russian Academy of Sciences

- Andrey Degtyarev, Waterfowl expert (Kolyma), Department of Biological Resources, Sakha Ministry on Nature Protection

- Svetlana Golubeva, Mid-term Review team, ICF ECO Ltd.Vladimir Inchuvien, Traditional nature use (Beringovsky), Municipal Agricultural Enterprise “Zapolyarie”, Lorino village, ChAO

- Alexander Isaev, Environmental policy expert (Kolyma), Environmental education expert (Kolyma), Institute of Biological Problems of Cryolithozone, Siberian Division, Russian Academy of Sciences

- Denis Litovka, Marine mammal (Beringovsky), Traditional nature use (Beringovsky), Pacifc Research Fishery Centre

- Andrey Popov, Wild reindeer (Kolyma), Department of Biological Resources, Sakha Ministry on Nature Protection

- Tatyana Romanenko, Reindeer breeding expert (Kolguev), Naryan-Mar agricultural research station

- Mikhail Samsonov, Environmental policy expert (Kolyma), Publishing House “News of Yakutia”

- Vyacheslav Shadrin, IEM expert (Kolyma), Institute of Humanitarian Research and Northern Indigenous Peoples’ Problems, Siberian Division, Russian Academy of Sciences

- Lyudmila Shmatkova, Legal expert (Kolyma), Federal Authority on Subsurface Resources Management on Sakha Republic

- Anatoliy Sleptsov, Traditional nature use expert (Kolyma), Department on Peoples’ Affairs and Federative Relations, Sakha Republic

- Dmitry Syrovatsky, Reindeer breeding expert (Kolyma), Yakutsk Research Institute of Agriculture

- Nikolay Tikhonov, Social and economic expert (Kolyma), Yakut State Agricultural Academy

- Matvey Tyaptyrgyanov, Whitefsh expert (Kolyma), Department of Biological Resources, Sakha Ministry on Nature Protection

- Lena Volkova, Mapping expert (Kolyma), Republican Informational-Analytical Centre of Ecological Monitoring, Sakha Ministry on Nature Protection

- Nadezhda Vostrikova, Environmental education expert (Kolguev), Nenets Boarding School

Annex 3. A list of documents reviewed / consulted

List of reports produced by ECORA reviewed during the evaluation

Federal Level

V.Kryazhkov (Fed) “Federal legislative base for promoting the development of IEM (in the context of harmonization of interests of the industry, indigenous people of the North and environmental protection) (2005) (Act. 1.1.1) 2005

V.Pererva (Fed) “Assessment of habitat protection mechanisms and species conservation activities” (Act. 1.1.2) 2006

V.Bocharnikov, V.Vronsky (Fed) “Capability of traditonal nature use on ECORA MTs: Review of international eperience, analisys of situation in Russia, conceptual proposals“ (Act. 1.1.3) 2007

M.Zhukov (Fed) “The necessity of institutional reorganization to create conditions for the development of economic activity at the territories of indigenous northern minorities” (Act. 1.1.3) 2007

A.Martynov (Fed) Review of Russian and international experience on the development of environmental codes of conduct (Act. 1.1.4) 2007

A.Martynov (Fed) “Codes of conduct for industries” (Act. 1.1.4)2006

A.Smurov, I.Rhyzhov (Fed) “Training programs in environmental policy and management: Environment Policy and Management (Report and Educational manual)” (Act. 1.2.1)2006-2007

V.Bocharnikov, (Fed) “Traditional knowledge, experience and innovation of aboriginal peoples in economic market conditions (Act. 1.2.2)2007

V.Stepanitsky (Fed) “Activity of state bodies for biodiversity and landscape protection in the Russian Arctic (Report and Educational manual for conservation offcers)” (Act. 1.2.4)2006

K. Klokov (Fed) “Socio-economic indicators” (Act. 2.3)2006

E.Syroechkovsky (Fed) “Approaches to the elaboration of community monitoring programs in the framework of the ECORA Project” (Act.2.4)2006

K.Klokov, T.Krasovskaya (Fed) “IEM plans and strategies (communications / public participation plan, stakeholder participation mechanism, conflict resolution mechanism)” (Act. 3.1)2006

Kolguev Island MT (NAO)

O.Petunina (NAO) “Legal analysis and assessment of administrative reforms having an infuence on the integrated ecosystem management of MA “Kolguev Island”. Legal assessment of mechanism of habitats protection of fora and fauna in connection with reforms passed” (Act.1.1.1-1.1.2)2005

U.Berghdal (NAO) “Training in high quality processing of reindeer meat and skins” (Act. 1.1.3)2008

I.Lavrinenko, O.Lavrinenko (NAO) “Monitoring of key indicators for integrated ecosystem management” (Act.2.1)2005

V.Anufriev (NAO) “Assessment of key indicator species: waterfowl, willow grouse and Arctic fox (in the creek of Peschanka River and Bugrino village) in the Kolguev Model Area” (Act. 2.1)2005

T.Romanenko (NAO) “Assessment of domesticated reindeer: Conservation and development of reindeer breeding in isolated population on Kolguev Island” (Act. 2.1)2006&2008

A.Kondratyev (NAO) “Monitoring of waterfowl population of Kolguev Island aiming at development of recommendations on sustainable nature use” (Act. 2.1)2006-2007

V.Anufriev (NAO) “Investigations into spring migrations and commercial use of wildfowl (geese, ducks, swans), breeding ecology of Arctic Fox and Willow Grouse” (Act. 2.1)2006

Ch.Labba (NAO) “Report on reindeer in Kolguev island” (Act.2.1)2006

A.Kondratyev (NAO) Waterfowl population monitoring in Kolguev island for the development of recommendations to establishing of sustainable nature use (Act.2.1)2009

A.Pustyntseva (NAO) “Financial dignosis and prognosis of activity of agriculture enterprise “Kolguev” (Act. 2.1)2008

O. Mikhalev (NAO) “Creation of thematic maps of the territory of Kolguev Island, Nenets Autonomous Okrug” (Act. 2.2)2007

M.Kokorin (NAO) “Sociological expertise of Bugrino village (Kolguev Island)” (Act.2.3)2006

K.Klokov (NAO) Organization and implementation of community based monitoring in Kolguev island (Act.2.4)2009

G.Mikhailova (NAO) “Development of confict resolution mechanism” (Act.3.1)2006

Lower Kolyma River MT (Yakutia)

L.Shmatkova (Yakutia) Analysis of modern social and economic conditions in Republic of Sakha (Yakutia) and MA “Kolyma River Basin” (Act. 1.1.1-1.1.2)2006

A.Sleptsov (Yakutia) “Legal basis for establishing territories of traditional nature use for indigenous people of the North and in Republic of Sakha (Yakutia)” (Act. 1.1.3) 2006

N.Alexandrova (Yakutia) “Review of the Codes of conduct and social responsibilities of international enterprises (for Kolyma MT)” (Act. 1.4.1)2006

A.Isaev, M.Samsonov (Yakutia) “Training in environment management (Act. 1.2.2) and Environment Bodies’ staff (Act. 1.2.4) 2006

A.Isaev (Yakutia) “Environment education in local schools” (Act.1.4.1)2008

A.Degtyarev (Yakutia) “Waterfowl: Bird Species of resource preserve “Chaigurgino” (Act. 2.1)

D.Syrovatsky (Yakutia) “Domesticated reindeer” (Act. 2.1)2006

A.Popov “Status of wild reindeer population in Lower Kolyma” (Act. 2.1)2005

R.Desyatkin (Yakutia) “Assessment of habitat fragmentation in the Kolyma River Basin Model Area” (Act. 2.1)2006

D.Syrovatsky (Yakutia) “Development of plans on domesticated reindeer breeding (interim report of 2006) (Act. 2.1)2007

R.Tyaptirgyanov (Yakutia) “Assessment of fsh resources of the Kolyma River Basin” (Act. 2.1)2005

R.Tyaptirgyanov “Development of work plans for commercial fsh resources of the Lower Kolyma River ” (Act. 2.1)2007

D.Syrovatsky (Yakutia) “Development of plans on domesticated reindeer breeding (interim report of 2006) (Act. 2.1)2006

A.Degtyarev (Yakutia) “Improvement of database for planning, implementation and assessment of IEM plans” (Act. 2.1)2008

A.Isaev, A.Egorova (Yakutia) Status of biological resources in Kolyma Lower river (Nizhnekolymskyi district) (Act. 2.1)2009

L.Volkova (Yakutia) “Thematic maps and analysis for IEM planning” (Act. 2.2)2006-2008

N.Tikhonov (Yakutia) «Social and economic indicators» (Act. 2.3)2005

A.Degtyarev (Yakutia) “Bird harvest regime in Kolyma river basin” (Act. 2.4)2006

A.Degtyarev (Yakutia) “Community monitoring programmes: Development of bird harvest management” (Act. 2.4)2006&2007

A.Degtyarev (Yakutia) Development of bird harvest management plan in the framework of community monitoring programme (Act.2.4)2009

V.Shadrin (Yakutia) “Development of IEM Plans and Strategies: Development of communication/public participation strategy and Development of mechanism for stakeholder consultations” (Act. 3.1)2006

T.Mustonen (Yakutia) “Review of confict situations and methods of its resolution in Kolyma MA” (Act.3.1)2006

A.Degtyarev (Yakutia) “Outline of implementation of the pilot project’’ Development of management plan of harvest of birds in 2007-2008” (Act. 3.1)2006

D.Syrovatsky (Yakutia) “Plan and schedule of implementation of the pilot project ‘‘Sustainable domesticated reindeer in Nizknekolymskiy Ulus in 2007-2008’’ (Act. 3.1)2007

Beringovsky MT (Chukitka)

V.Scherbanosov (ChAO) “Analysis of regulatory and administrative reforms” (Act. 1.1.1) 2006

V.Scherbanosov (ChAO) “Assessment of habitat and species conservation mechanisms” (Act. 1.1.2) 2006

D.Litovka “Traditional nature use” (Act. 1.2.2) 2008

E.Lappo “Assessment of levels of unfragmented habitats of the Beringovsky Model Area” (Act. 2.1) 2005

E.Syroechkovsky (ChAO) “Assessment of globally threatened species and wide spread species which are economically important for indigenous people of the region” (Act. 2.1) 2005

E.Syroechkovsky (ChAO) “Assessment of seabirds population and development of plans on seabirds for the central part of the “Beringovsky” Model Area” (Act. 2.1) 2005

D.Litovka (Beringovsky) “Evaluation of the population status and development of the work plan on key indicators from amongst globally threatened species” (Act. 2.1) 2006

E.Syroechkovsky (ChAO) “Assessment of statement of population and development of work plans on key indicators related to global threatened species in Beringovsky region” (Act. 2.1) 2007

E.Syroechkovsky (ChAO) “Assessment of key indicator threatened and common birds” (Act. 2.1) 2008

E.Syroechkovsky (ChAO) “Assessment of population and recommendations on optimization of preservation of sea birds in Chukotka” (Act. 2.1) 2008

K.Klokov (ChAO) “ Tematic maps and analysis for IEM planning” (Act. 2.2) 2005

K.Klokov (ChAO) “ Tematic maps and analysis for IEM planning” (Act. 2.2) 2007

K.Klokov (ChAO) “Assessment of indigenous people interest to different types of traditional nature use” (Act. 2.3) 2005

K.Klokov (ChAO) “Social and Economic indicators for MT Beringovsky” (Act. 2.3) 2005

K.Klokov, E. Syroechkovsky, O.Anisimova (ChAO) “Community monitoring:

Sub-component 1: Assessment of the interest and possibility for the participation of indigenous people in the monitoring of bioresources in the Beringovsky Model Area.

Sub-component 2: Survey on the use of game birds by different segments of the population" (Act. 2.4) 2006

E.Syroechkovsky (ChAO) "Community monitoring" (Act. 2.4) 2007

D.Litovka (ChAO) "Community monitoring and socio-economic study of marine mammals harvest and whaling for indigenous people's life" (Act. 2.4) 2007

K.Klokov, E. Syroechkovsky (ChAO) "Development of methods of community monitoring: Start of community monitoring programme" (Act. 2.4) 2008

E.Syroechkovsky (ChAO) Ecological and economical background for establishing of National Park "Beringia" in Chukotka Autonomous okrug (Act.3.1) 2009

List of ECORAs Thematic Maps for the Model Areas

For Kolguev Model Area:

Landscape map. Scale 1:100 000;

- Geobotanical map. Scale 1:100 000;
- Map of reindeer rangeland grazing capacity. Scale 1:100 000;
- Map of hunting areas Scale 1:100 000;
- Map of disturbed lands and industry. Scale 1:100 000;
- Map of fshing zones. Scale 1:300 000;
- Map of the values of biological resources. Scale 1:100 000.

For Beringovskiy Model Area:

- Landscape map. Scale 1:300 000;
- Geobotanical map. Scale 1:300 000;
- Map of reindeer rangeland grazing capacity Scale 1:300 000;
- Map of hunting areas. Scale 1:300 000;
- Map of fshing areas and wetlands. Scale 1:500 000;
- Map of the values of biological resources. Scale 1:300 000.

For Kolyma Model Area:

- The database was prepared with the use of ArcGIS/ ArcInfo 9.2 format
- The database includes the following information:

- Populated towns, villages and settlements
- Rivers, brooks and lakes
- Topographic map
- Regional (republican) resource reserves
- Boundaries of state farms
- Boundaries between SLR and SFF (state land reserve and state forestry fund lands)
- Breeding pastures for horse herds
- Burned areas
- Areas with little or no fodder or destroyed by trampling.
- Reindeer rangelands on SFF (state forestry fund) lands
- Reindeer rangelands on SLR (state land reserve) lands

  Reindeer rangelands of state farm

Data on Bird Species Distribution

- Hooded crane (irregular observations)
- Sandhill crane
- Range boundaries in 1980-1985
- Range boundaries in 1996-2000
- Irregular observations
- Core area with increased number
- Duck populations abundance
- Siberian crane
- Nesting areas
- Main seasonal migratory fyways
- Areas with increased abundance
- Observations of Siberian crane pairs in the taiga zone
- Bewick's Swan population abundance
- Whooping swan

- Boundary of common distribution
- Summer observations of single birds Population density map
- White-fronted goose and bean goose (population density)
- Brent goose population density
- Capercaillie population density

Data on Animal Species Distribution

- Moose
- Wild tundra reindeer populations
- Population boundaries
- Wintering areas and migratory routes of the reindeer population in the “Sundurun” area
- Wintering areas and migratory routes of the reindeer population in the “Yano-Indigirka” area.

Data on Plant Species Distribution

- Plants included in the Sakha (Yakutia) Red Data book
- Endangered species of plants
- Medical and food plants, animal fodder, and endangered plant species

Annex 4. Summary co-finance information and a statement of project expenditure by activity

A. CO-FINANCING

Co financing (Type/ Source)	IA own Financing (US$)		Multi-lateral Agencies (Non-GEF) (US$)		Bi-laterals Donors (mill US$)		Central Government (US$)		Local Government (US$)		Private Sector (US$)		NGOs (mill US$)		Other Sources* (US$)		Total Financing (US$)		Total Disbursement (US$)	
	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual
Grant				5200		85,720														90,920
Credits																				
Loans																				
Equity																				
In-kind		20,000				162,680				36,080				35,900						254,660
Non-grant Instruments																				
Other Types																				
TOTAL		20,000		5200		248,400				36,080				35,900						345,580

Annex 5. Details of the project's 'ROtI' analysis

Results rating of project entitled:	ECORA: An Integrated Ecosystem Management Approach to Conserve Biodiversity and Minimise Habitat Fragmentation in Three Selected Model Areas in the Russian Arctic						
Outputs	**Outcomes**	**Rating (D – A)**	**Intermediary**	**Rating (D – A)**	**Impact (GEBs)**	**Rating (+)**	**Overall**
Training programs for administrative and executive personnel involved in IEM implementation, and managers from local industry Workshops to assist in the identification and establishment of new small-scale businesses focused on biodiversity conservation	Strengthening the enabling environment for integrated ecosystem management (IEM) including enhanced legislative framework, enhanced capability and capacity,financial sustainability, and increased public awareness	B/C	1. Integrated Ecosystem Management (IEM) strategies and action plans adopted and under implementation in Kolguev Island Model Area, Kolyma River Basin Model Area, and Beringovsky District ModelArea	C	1. Changes in area (%) of unfragmented habitats at the closure of the project compared to Positive trends in population sizes of threatened bird species in Kolyma and Beringovsky MAs will remain stable compared to baseline baseline		
2.	2.		2.		2.		
3.	3.		3.		3.		
	Rating justification:		**Rating justification:**		**Rating justification:**		

Annex 6. The expertise of the evaluation team. (brief CV).

Ivan Senchenya

Environmental consultant

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senchenya@npaf.ru

Ivan Senchenya has a successful track record of environmental audits and assessments in the CIS countries for a variety of sectors as well as in evaluation and assessment of overall project performance against project objectives, including assessment of large-scale projects. He has solid theoretical background and practical experience in project design and project cycle management as well as in identification of new projects. He has participated in numerous projects dealing with environmental aspects of different stages of project development, sustainable development, energy efficiency and environmental management in Russia and CIS countries. He also contributed to several international studies and to several international projects, including projects related to indigenous people, IPPC and benchmarking of Russian and European industries.

Dr. Senchenya is principal author of more than 100 publications in referred international and Russian journals.

Mother tongue is Russian and Byelorussian, fluent in English, Ukrainian and German with a working knowledge of Japanese, Polish and some other languages.

EXPERTISE

Environmental Management Systems

Corporate Environmental Strategy

Assessment of Projects

Compliance Auditing

Environmental Due Diligence

Environmental Impact Assessment

Safety Auditing

CREDENTIALS

PhD, Chemistry, Zelinsky Institute of Organic Chemistry of Russian Academy of Sciences

MS, Chemistry, Byelorussian State University, Minsk

Environmental Management Lead Assessor, Swiss Accreditation Service (SAS), SGS Societe Generale de Surveillance SA, Branch Zurich, Switzerland

Det Norske Veritas, certificate in development and implementation of EMS

Brunel University and Dames and Moore Group company, Proeco Ltd., certificates in development and implementation of EMS

Environmental Auditor, Certificate of Russian Ministry of Natural Resources

US EPA - certificates in H&S (2009)

EXPERIENCE HIGHLIGHTS

- UNEP/GEF project - Russian Federation: Support to the National Programme of Action for the Protection of the Arctic Marine Environment, Project Manager (2005-2009)
- Oil and Gas Assessment in Arctic. Arctic Monitoring Assessment Program (2006-2008), Expert on behalf of the Russian Federation (contributed to 3 chapters of the assessment)
- Implementation Completion Report for the Environmental Management Project (Client – World Bank) Dr. Senchenya was consultant in international team responsible for preparation of the ICR for Environmental Management Project for the Russian Federation as a part of World Bank knowledge Management System. He was responsible for assessment of overall performance against project

objectives and for preparation of several chapters of the ICR, preparation of World Bank missions to the regions, writing mission reports, etc., (2003);

- Development of methodology of Strategic Environmental Assessment for the Russian Federation (Client – British Council, DEFRA, Ministry of Economic Development and Trade) – project manager (2005 – 2006)
- Environmental, Health, Social and Safety Regulatory Review for Executing Oil and Gas Projects in the Russian Federation, lead expert in AATA International Inc. team, responsible for several chapters of the report prepared for Chevron Business Development Inc. (London) (2007).
- Overview of economic and environmental performance of Russian chlorine and chlorinated products sub-sectors and formulation of proposals for chemical sector restructuring (Client – World Bank) – project manager - (2005)
- World Bank study "Addressing Past Environmental Liabilities in the Russian Federation" (2005-2007) – consultant;
- Sectoral Environmental Action Plans for basic industries (ferrous metals, non-ferrous metals, basic chemicals, oil refining and petrochemicals). Dr Senchenya was manager of this project responsible for day-to day monitoring, management and development of recommendations for sector development. (1996-1998);

Guidelines on Preparation of Environmentally Sound Investment Projects (Ministry of Economic Development and Trade of the Russian Federation) (1999-2001

other key experience

Dr. Senchenya worked closely with international agencies and institutions, including World Bank, EBRD, IFC, UNECE, UNDP, UNEP in the framework of different projects. He has an extensive experience in environmental and health & safety training including aspects of permitting system in the Russian Federation - permit application, link to the investment project approval procedures, permit conditions, EIA, SEA, evaluation of energy efficiency programs for enterprises, cleaner production, cultural and natural heritage, biodiversity, indigenous people problems, EMS and H&S training course delivery as well as in development and implemenetation of managemenet systems in agreement with ISO 14001 and OHSAS 18001 international standards. He is a certified environmental auditor and conducted more than 350 audits in different countries

selected publications

- Arctic Oil and Gas 2007 – contributed to 3 Chapters of AMAP assessment
- Environmental co-management of extracting companies, authorities and indigenous people of the North (2009), Editor.
- Past Environmental Liabilities in the Russian Federation. World Bank, 2007 (contributor to legal and sectoral assessment as well as questionnaire).
- Guidelines for conducting strategic environmental assessment. Moscow, 2006, ISBN 5-7396-0097-9 (Editors: Gorkina I.D., Maksimenko Yu.L., Senchenya I.N.)
- Guidelines for preparation of environmentally sound investment projects, Moscow: CPPI, NUMC, 2001, 320p. (Editors: Gorkina I.D., Maksimenko Yu.L., Senchenya I.N.)
- Environmentally sound management and elimination of PCBs in Russia. Executive summary of the second phase AMAP report (Treger Yu., Senchenya I., Poltoraus V., Kartashov L., Kryshtal N., Rozanov V., Yaskova V., Smekalov V), 2003.
- Assessment of relevant regulation and requirements on PCBs management. AMAP Technical report 2002:3 ISBN 82-7971-022-1 (principal author).
- A «Least Cost» Overall Russian PCB Phase-Out Strategy. AMAP Report 2002:5. ISBN 82-7971-025-6 (principal author)
- Past environmental liabilities (legal and economic aspects of the problem) (edited by Senchenya I.N., Kostin V.F.) / Moscow: CPPI, NUMC, 2001, 136p. ISBN 5-89414-022-6
- Compensation of environmental damage (legal and economic aspects of past environmental liability problem) (edited by Senchenya I.N., Bogolyubov S.A) / Moscow: CPPI, NUMC, 2001, 145p. ISBN 5-89414-023-4
- Senchenya, "Environmental Performance of Russian Iron and Steel Sector" *Eurasia Metals,* 2001, N 3 p.94-97.
- Senchenya "Best available techniques for iron and steel industry" *Bulletin*

"Ferrous metallurgy", 2001-2002, annexes 5 (2001), 1(2002), 3(2002) & 5(2002)
- Senchenya "Past environmental damage" *Russian environmental newspaper "Rescuing",* 2001, N41(237), p.1,4.
- Senchenya, E.Konygin "Environmental problems of non-ferrous metallurgy" *Eurasia Metals,* 2000, N 5 p.76-78.
- I.N.Senchenya "The fertilizers industry in the Russian Federation - economic and environmental performance" - in *Current environmental issues of fertilizers production*, Prague, Czech Republic, June 1999, IFA, 2000, p.26-51.
- I.N.Senchenya "Economic and environmental performance of basic organic and inorganic synthesis sector: problems and prospects" in "*Catalysis bulletin ",* Novosibirsk, 1999, N 12.
- I.N.Senchenya "Economic and environmental performance of basic organic and inorganic synthesis sector: problems and prospects" in "*Chemical industry on the border of millennium: results and prospects",* Moscow, 1999, P.24-27
- I.N.Senchenya "Environmental problems of basic organic and inorganic chemicals sector" in "*Proc. of XVI Mendeleev congress on general and applied chemistry*", S.-Petersburg, 1998, P.204-206
- Safety and environmental protection in marine oil and gas operations / Moscow: CPPI, Dialog MSU, 1999, 150p.
- I.N.Senchenya "Sectoral environmental action plans" - *CPPI Inf. Bull*, N7, 1998
- I.N.Senchenya "Sectoral environmental action plan for basic chemicals industry" *Chemistry in Russia*, 1998, N 11.
- I.N.Senchenya "Production of basic chemicals: current state and prospects" *Chemistry in Russia*, 1998, N 7-8