

GEF/ME/C.36/2 October 9, 2009

GEF Council November 10-13, 2009

Agenda Item 8

GEF ANNUAL REPORT ON IMPACT – 2009

(Prepared by the GEF Evaluation Office)

# **Recommended Council Decision**

The Council, having reviewed document GEF/ME/C.36/2, "GEF Annual Report on Impact – 2009," and document GEF/ME/C.36/3, "Management Response to the GEF Annual Report on Impact 2009," takes note of the Annual Report's findings and decides that:

- 1. GEF-5 strategy proposals, prepared by the Secretariat, should include further investment and capacity development to assist countries with economies in transition to address the remaining threats to the ozone layer.
- 2. The Secretariat should incorporate lessons from the positive private sector engagement in the Ozone Layer Depletion focal area into its efforts to engage the private sector in other focal areas.

### **EXECUTIVE SUMMARY**

- 1. Since the Annual Report on Impact 2008 a number of discreet studies, impact analysis played a fundamental role in the delivery of the results sections of the Fourth Overall Performance Study (OPS4). Central to the approach was the implementation of a new methodology, the Review of Outcomes to Impacts (ROtI) at desk and field level.
- 2. The major product of the year was the impact evaluation of GEF-assistance for the phase-out of Ozone Depleting Substances in Economies in Transition. A study was also undertaken to assess the effectiveness of a project designed to permit experimental impact evaluation, a methodology which has strong support in parts of the donor and evaluation communities, but which has been rare in the GEF portfolio. In collaboration with the Independent Evaluation Group of the World Bank, work has also begun on an impact evaluation of a set of GEF biodiversity projects in Peru.
- 3. The impact evaluation of GEF-assistance for the phase-out of Ozone Depleting Substances in Economies in Transition drew the following conclusions:
  - 1) GEF support for the phase out of consumption and production of ozone-depleting substances in countries with economies in transition has made a contribution to global environmental benefits
  - 2) Legislative and policy changes supporting ODS phase-out provided a foundation for success and ensured sustainability
  - 3) The private sector commitment to ODS phase-out was a critical driver for the success of the GEF investments in countries with economies in transition
  - 4) Illegal trade threatens to undermine gains in ODS reduction in the non-European Union countries with economies in transition
  - 5) Halon recovery and banking has been neglected in the non-European Union countries with economies in transition
  - 6) In some countries the National Ozone Units ceased to function after GEF support ended and this may prevent measures being put in place to address the remaining threats to the ozone layer.
- 4. The evaluation makes the following recommendations to the GEF Council:
  - 1) The GEF should consider further investment and capacity development to assist countries with economies in transition to address the remaining threats to the ozone layer
  - 2) The GEF should learn from the positive private sector engagement in the reduction of Ozone Layer Depletion focal area and incorporate similar approaches into its efforts to engage the private sector in other focal areas.

### SECTION ONE: OVERVIEW OF IMPACT EVALUATION WORK IN 2009

- 5. In 2009, the GEF Evaluation Office continued to be very active in the field of Impact Evaluation. In addition to a number of discreet studies, impact analysis played a fundamental role in the delivery of the results sections of the Fourth Overall Performance Study (OPS4). The year's impact work built on and further developed the methodological approaches, which commenced with the Impact Evaluations of three Protected Areas in East Africa, reported on in the 2007 Annual Impact Report. Central to the innovative methodological approach was the implementation of a Review of Outcomes to Impacts (ROtI) at desk and field level (see Section Five). The ROtI methodology continued to be widely disseminated, in order to subject it to a broad range of assessment and criticism within the evaluation and environmental communities. A methodology handbook was produced by the ROtI team and widely used during the impact analysis work of OPS4.
- 6. The major product of the year was the impact evaluation of GEF-assistance for the phase-out of Ozone Depleting Substances in Economies in Transition (see Section Two). A study was also undertaken to assess the effectiveness of a project designed to permit experimental impact evaluation, a methodology which has strong support in parts of the donor and evaluation communities (see Section Three), but which has been relatively rare in the GEF portfolio. In collaboration with the Independent Evaluation Group of the World Bank, work has also begun on an impact evaluation of a set of GEF biodiversity projects, where there is a strong role for local communities, particularly indigenous peoples (see Section Four).
- A senior evaluation officer continued to serve on the Steering Committee of the Network of Networks on Impact Evaluation (NONIE) and also acted as a member of the advisory panel for the production of the NONIE Guidelines on Impact Evaluation, which were published under the auspices of the Independent Evaluation Group of the World Bank (IEG) in September 2009. Three papers on the Evaluation Office impact work were presented at the International Conference on Impact Evaluation in Cairo in January 2009. The same senior evaluation officer also acted as Co-Chair of the United Nations Evaluation Group (UNEG) Impact Evaluation Task Force and as a member of the overall UNEG Coordinating Committee. At the annual Evaluation Practice Exchange of UNEG in Nairobi, a paper was presented on the ROtI methodology. The ROtI was also presented as a training module at the International Programme of Development Evaluation Training (IPDET) jointly held by the World Bank IEG and Carleton University in Ottawa, Canada. Lectures on the approach were also presented on the Masters in Development Management Course at the University of Antwerp in Belgium.
- 8. A number of new activities are in their start-up phase. The Evaluation Office will shortly begin to develop an Approach Paper for the impact evaluation of GEF-supported activities in the International Waters focal area, building on the analysis undertaken as part of OPS4. Discussions continue with the STAP to consider possible areas of collaboration concerning experimental and/or quasi-experimental impact evaluation, drawing on the approaches presented in previous Annual Reports on Impact. The data

gathered as part of OPS4 also presents opportunities for further analysis and development of impact analysis, which will be pursued during the coming year.

# SECTION TWO: IMPACT EVALUATION OF GEF ASSISTANCE TO THE PHASE OUT OF OZONE DEPLETING SUBSTANCES IN COUNTRIES WITH ECONOMIES IN TRANSITION

# **BACKGROUND**

- 9. The ozone layer is part of the earth's atmosphere and contains high concentrations of ozone  $(O_3)$ . This layer absorbs approximately 93 to 99 per cent of the sun's high frequency ultraviolet radiation which, if allowed to pass through, would end life on earth. The ozone layer is mainly located in the lower stratosphere approximately 10 to 50km above the surface of the earth.
- 10. The ozone layer can be destroyed by free radical catalysts such as nitric oxide (NO), hydroxyl (OH), atomic chlorine (Cl) and atomic bromine (Br). While there are natural sources for these ozone depleting substances (ODS)<sup>1</sup>, the concentrations of chlorine and bromine have increased over the last decades due to the release of large quantities of manmade organohalogen compounds, especially chlorofluorocarbons (CFCs) and bromofluorocarbons which have been used mainly in refrigeration, air conditioning and agricultural treatment products. These are highly stable compounds and are capable of surviving in the stratosphere, where chlorine and bromine radicals are liberated by the action of ultraviolet light. Each radical is then free to catalyze a chain reaction breaking down ozone. A single chlorine atom is able to react with up to 100,000 ozone molecules. The breakdown results in insufficient ozone molecules being available to absorb ultraviolet radiation.
- 11. The environmental effect of ODS was first observed in the mid-1980s over the Antarctic stratosphere where ozone levels dropped by up to 60 70 per cent of their pre-1975 levels. In the mid-latitudes ozone levels have dropped by approximately three to six per cent. The consequences of ozone depletion are increases in ultraviolet-B (UV-B) radiation reaching the earth's surface, which in turn leads to increases in health and environmental problems; such as skin cancers<sup>2</sup>, immune system suppression and cortical cataracts; damage to plants, including crop production caused by the reduction in photosynthesis; reduction in diversity of important marine species such as Plankton and Phytoplankton. Reduction in Phytoplankton also contributes to global warming as they play a significant role in oceanic carbon storage.
- 12. It was primarily the impact on human health and crop production of a damaged ozone layer which led to inter-governmental action, culminating in the development of the Vienna Convention for the Protection of the Ozone Layer in 1985 and subsequently

Such as volcanic aerosols.

A study of people living in Punta Arenas at the southern tip of Chile showed a 56% increase in malignant melanoma and 46% increase in non-melanoma skin cancers over a period of seven years, along with decreased ozone and increased UV-B levels. See Abarca, J.F., Casiccia, C. (2002) Skin cancer and ultraviolet-B radiation under the Antarctic ozone hole: Southern Chile, 1987 – 2000. Photodermatology & Photomedicine. 18, 294 – 302.

the Montreal Protocol on Substances that Deplete the Ozone Layer in 1987; both of which aimed to gradually phase-out production and consumption<sup>3</sup> of ODS.

- 13. Although the GEF is not linked formally to the Montreal Protocol, its' Ozone Layer Depletion Focal Area and the subsequent strategic revisions are an operational response to the Montreal Protocol and its Adjustment and Amendments. The strategic objective of the Focal Area is to protect human health and the environment by assisting countries in phasing out the consumption and production, and in preventing releases, of ODS while enabling alternative technologies and practices according to countries' commitments under the Montreal Protocol. The expected long-term impact of the GEF interventions is to contribute to the return of the ozone layer to pre-1980 ozone levels, which is expected by 2065.
- 14. GEF focuses on providing support to developed countries of the Montreal Protocol, specifically CEITs that are not eligible for funding under the Multilateral Fund (MLF) of the Montreal Protocol, which targets only developing countries. Since the early 1990s, the GEF has allocated nearly US\$183 million to 18 countries, through 21 national and five regional projects.
- 15. The overall objective of this Impact Evaluation is to evaluate the impact of the GEF finance in the Ozone portfolio of projects on the phase out of ODS in CEITs. It has five sub-objectives:
  - To evaluate the impact of GEF Ozone portfolio investments in CEITs to reduce **ODS production**;
  - To evaluate the impact of GEF Ozone portfolio investments in CEITs to reduce **ODS consumption**;
  - To assess the **sustainability** of GEF investments in terms of maintaining ODS phase-out in CEITs;
  - To assess the extent to which the GEF investments **catalyzed** further changes in behaviour and decisions of stakeholders, in particular the private sector;
  - To compare these parameters with a limited number of projects on the phase out of ODS in MLF-funded countries.
- 16. The Ozone Layer Depletion Focal Area was selected for an Impact Evaluation report based on the maturity of the projects; relatively homogeneous objectives in projects implemented separately by the World Bank, and the United Nations Development Programme (UNDP) United National Environment Programme (UNEP); and the availability of quantitative and qualitative data. This made it possible to adopt a portfolio-wide Impact Evaluation approach as opposed to focusing on discrete projects.

5

<sup>&</sup>quot;Consumption" in this report follows the terminology of the Montreal Protocol Article 1: Definitions, which defines Consumption as "production plus imports minus exports of controlled substances"

#### DESIGN AND METHODOLOGY

- 17. This ODS phase out Impact Evaluation was developed and implemented by staff from the GEF Evaluation Office and from Touchdown Consulting, Brussels.
- 18. The evaluation combined three approaches to investigate impact from several perspectives, using a mix of quantitative and qualitative methods of data collection and analysis: an overall Theory of Change approach; in-depth field case studies to assess the whether the Theory of Change approach had accurately described the process; and before and after measures of ODS consumption and production in CEITs for a comparison among the countries supported internal comparison, as well as an external comparison with a matched sample of MLF-supported countries.
- 19. The Theory of Change approach was applied early in the evaluation development. It was based on an initial meta-analysis of GEF ODS strategies, project documentation and available evaluations. The majority of the projects lacked a log-frame as they were developed between 10 and 15 years ago, when log-frame analysis was not a GEF requirement at that time. Consultations were then held with the GEF Secretariat, Implementing Agency staff, Evaluation Offices, national government stakeholders and enterprises. The function of the consultation was to provide an opportunity for stakeholders to give inputs at an early stage prior to the Theory of Change being applied and tested in the field case study approach.
- 20. In-depth case studies were conducted in four CEITs: the Russian Federation, Ukraine, Kazakhstan and Uzbekistan. A further 10 field case studies were conducted as part of the parallel UNDP-UNEP terminal evaluations, which addressed similar issues in the other Eastern European, Baltic and Central Asian countries. Four countries were examined through desk review alone.
- 21. In the absence of available control groups for an experimental or quasi-experimental design, before and after measures of CEIT's consumption and production were undertaken. In addition, four MLF countries were examined to compare ODS Consumption and production<sup>4</sup> and cost-effectiveness with a matched set of CEIT countries.
- 22. The evaluation team conducted in-depth interviews using standardized, semi-structured guides and questionnaire surveys with government, research institutes and private sector enterprises. Quantitative assessment was also conducted to substantiate the internal and external comparisons of ODS Consumption phase-out, compared with a Business-As-Usual (BAU) approach where ODS Consumption and Gross Domestic Product (GDP) increased together. A cost-effectiveness analysis was undertaken to compare World Bank and UNDP -UNEP project performance.
- 23. A number of limitations constrained the Impact Evaluation of the phase out of ODS:

<sup>&</sup>lt;sup>4</sup> Sourced from the UNEP Ozone Secretariat

- Incomplete annual data relating to the Consumption of ODS by CEITs and the MLF comparison group countries. Although countries were required in the Montreal Protocol to submit data on Consumption of classes of ODS annually, many did not do so every year. Data gaps forced the evaluation to assess only CFC and halon across CEITs and MLF countries, since these substances showed more consistency in annual reporting. This limitation was not serious because CFC and halon are amongst the most important of the ODS in terms of being among the most ozone depleting and have been the most commonly produced and consumed.
- A time-series regression analysis would have been a useful tool to explore the impact over time of the GEF funding on ODS phase-out. Two main obstacles prevented such an analysis. Firstly, the consumption data were incomplete, as mentioned above and secondly, only the World Bank could provide information on disbursement of funds on an annual basis. As a result, a time-series regression analysis was not conducted. Correlation analysis of ODS Consumption, GDP and GEF funding was used as a broad measure of the relationship between funding and change in ODS consumption in CEITs assisted by the GEF.
- Data on GEF funding across CEITs and co-financing available in the GEF database are not always consistent with data obtained from implementation completion reports (ICR) of the World Bank and UNDP-UNEP projects documents. Where possible, the actual disbursements have been used for external and internal comparison of ODS phase-out activities in the ODS consumption sector.

#### **CONCLUSIONS**

# Conclusion 1: GEF support for the phase out of consumption and production of ozone-depleting substances in countries with economies in transition has made a contribution to global environmental benefits

- 24. The CEITs had a baseline consumption of about 304,000 ODP-tonnes in 1986, amounting to 17% of the global total. However, much of this consumption was reduced significantly by the early 1990s because of the poor economic conditions following the collapse of communism. GEF funding was provided at the time CEIT economies were recovering in the mid-1990s and aimed to prevent a return to 'business as usual' with regard to use of ODS. The assessment of the relationship between GDP and ODS consumption indicated for the CEITs that GEF financing contributed to a decoupling of the relationship between GDP growth and ODS consumption growth. This was achieved by project interventions that provide the foundation for the following key 'impact drivers' (see also Conclusions 2-5):
- 25. *Impact Driver 1: Government commitment to ODS phase-out* as indicated by development and implementation of policy and legislation to phase out consumption and

promote ODS free alternatives; government institutional capacity to manage ODS phaseout; government customs and border security measures to curtail illegal trade in ODS; and recycle, reclamation and re-use programmes.

- EU-CEITs have, in general, performed better with regard to ex-post project government commitment due to EU accession which has contributed to regular updates of legislation and policy to phase-out ODS, and *inter alia* activities to reduce illegal trade in ODS;
- In the Non-EU CEITs government commitment was weaker in several governments, such as the Russian Federation and Ukraine which lacked National Ozone Units. Hence, ex-post policy and legislative updates have not occurred in many countries. Illegal trade in ODS was indicated by many Non-EU CEITs to be a significant challenge to phase-out.
- 26. Impact Driver 2: Private enterprise sustainability and commitment to phase out ODS: As indicated by enterprise financial and economic status ("going concern status") in refrigeration production, foam, aerosol, solvent industries and refrigeration and air conditioning servicing industry; and ex-post private enterprise investments in non-ODS technologies and processes:
  - GEF financing provided for important technological and production changes which enabled firms to comply with the Montreal Protocol and maintain and / or gain market share and thus make profits; and
  - Of the 71 firms visited and surveyed, 54 of them were still 'going concerns' (i.e., actively in business) as of 2009.
- 27. Internal and external comparative analyses revealed the following performance findings:
  - Internal Comparison: The GEF-World Bank projects were more efficient and cost-effective in phasing-out ODS consumption than UNDP UNEP. This result was not unexpected given that the World Bank focus was on CEITs which exhibited the highest ODS consumption and focused on industrial sectors such as refrigeration, aerosol and foam production. In contrast, UNDP UNEP operated in countries where the main ODS consumption was in the refrigeration and air conditioning servicing sectors. Phase-out in the service sectors is more diffused and challenging given the plethora of small private enterprises that require technical assistance and investment. Hence UNDP UNEP operations were more costly per ODP ton (\$37) than the World Bank (\$12).

- External Comparison: The GEF operations in Russian, Ukraine, Kazakhstan and Uzbekistan were compared to those of the Multilateral Fund in 4 'matched countries' Brazil, Egypt, Romania and Cameroon on the basis of GDP and ODS consumption. In general the GEF operations (\$14) were less cost-effective than the Multilateral Fund (\$8) because GEF projects did not always adhere to incremental financing. However, the GEF operations (35 ODP-gram per year / per dollar) were more 3 4 time more efficient than the Multilateral Fund (9.5 ODP-gram per year / per dollar). Differences here are attributed to project approach mostly single project for the GEF and multiple projects for the Multilateral Fund.
- 28. The CEITs consumption changed from about 21,000 ODP-tonnes in 1996 (1.2% of global baseline) to 1,665 ODP-tonnes in 2007 (0.1% of global baseline). The GEF portfolio contributed to the elimination of about 19,260 ODP-tonnes of annual consumption, and contributed to 1.1% of the global benefit to the ozone layer. The Russian Federation was the only CEIT still producing ODS at the time the funding commenced and under a special initiative within the project investment, the GEF contributed to a phase-out of nearly 29,000 ODP-tonnes of production capacity.
- 29. The ODS consumed by the CEITs in 1996 also produced approximately 147 million tonnes  $CO_2$ -eq per year, falling to 42 million tonnes  $CO_2$ -eq per year in 2007. The GEF portfolio contributed to avoided GHG emissions equivalent to approximately 105 million tonnes  $CO_2$ -eq per year, or 1.155 Giga-tonnes of  $CO_2$ . This was equivalent to approximately 10-25% of the total  $CO_2$  phase out commitments under the present Kyoto Protocol.

# Conclusion 2: Legislative and policy changes supporting ODS phase-out provided a foundation for success and ensured sustainability

- 30. The evaluation found that legislative and policy changes to restrict import and export of ODS; ban; mandate recovery and recycling of ODS; and ensure training of technicians in the refrigeration sector played a critical role in providing relevant signals to the private sector and individual consumers to move into more environmentally friendly alternative chemicals and technologies. Legislative and policy changes were observed to be most successful in those CEITs that are now part of the European Union (EU). These countries tended to have legislation in place before or soon after the beginning of the GEF project intervention and all of them continued to update their legislation after joining the EU, which has led to further reductions in ODS and more restrictive measures than those required by the Montreal Protocol.
- 31. In contrast, in the non-EU CEITs many of the projects were slow to develop and implement legislative and policy changes because the institutional infrastructure necessary to carry out such changes was not in place. The lack of legislation and policy led to problems in controlling ODS, particularly in relation to trade and customs controls. This resulted in consumption of ODS exceeding Montreal Protocol limits for many years. Since projects have been completed in the non-EU-CEITs institutional capacities have been reduced, with insufficient focus on updating of legislation to address emerging

issues such as the HCFC phase-out which was recently accelerated in developed countries in 2007 by the Parties to the Montreal Protocol.

# Conclusion 3: The private sector commitment to ODS phase-out was a critical driver for the success of the GEF investments in countries with economies in transition

- 32. The GEF ODS portfolio has been characterized by strong private sector involvement from the early stages of project design through implementation. The umbrella structure of the projects developed by the Implementing Agencies based on targeted sub-project investments with the private sector, which provided co-finance, were efficiently executed and contributed to the rapid phase-out of ODS and implementation of alternative technologies and chemicals. This approach was necessary, given the difference in industrial processes and uses of ODS. Key highlights of the results achieved by industrial sector were as follows:
  - Refrigeration industry: the evaluation surveyed 22 companies that receiving investment from the GEF and found that 13 were still 'going concerns' (i.e., in business) in 2009. The companies reported GEF finance was relevant and assisted in providing new technologies that enabled conversion to non-ODS production and achievement of phase-out targets. The GEF financing had been provided at a time (in the late 1990s and early 2000s) when the market was changing quickly and it contributed to companies remaining competitive and profitable, as well as phasing out CFC use. Hence, the investment was good for profit and good for the environment.
  - Several companies, such as NORD (Ukraine), Snaige (Lithuania) and Atlant (Belarus), expanded their operations through internal and acquisitive based growth after the GEF investment. They believed the initial GEF investments allowed them to capture market share which enabled growth therefore demonstrating a catalytic effect.
  - Foam, aerosol and solvent industries: the evaluation surveyed 33 companies (11 in each industry sector). Thirty-two of them reached their individual ODS phase-out targets with 26 of the surveyed companies still 'going concerns' in 2009. Some reported the GEF investment contributed to a quick and timely conversion to non-ODS production technologies which in turn contributed to improved profitability.
  - Refrigeration and air conditioning servicing industry: the evaluation surveyed 16 companies of which 15 were still 'going concerns' in 2009. These companies received ODS recycling and recovery equipment through the project and the majority of this equipment was still in use (after nearly 10 years of use). The companies reported that quantity of ODS recycled and re-used was falling as old ODS based equipment had been replaced with non-ODS alternatives, indicating positive changes in market and consumption patterns. However, one outstanding threat observed was the stocks of unwanted and decommissioned ODS (CFCs) held by private companies in drums or other containers, which was at risk of

leaking. Over time, this would diminish the global environmental benefit that had accrued as a result of the GEF investment.

33. Macro-analysis of the results (see Chapter 6) in some of the CEITs showed that financing the phase out of environmentally-damaging technology can be undertaken without damage to the economy of the country. In effect, GDP continued to rise annually as the economies improved, while at the same time ODS Consumption declined as ODS technology was replaced with non-ODS technology. The commercial performance of many of the businesses improved as a result, which demonstrated that the conversion to non-ODS technology had been good for business as well as the environment.

# Conclusion 4: Illegal trade threatens to undermine gains in ODS reduction in the non-European Union countries with economies in transition

- 34. Efforts to combat illegal trade are not yet fully effective and many of the non-EU-CEITs exhibit a lack of technical and legal capacity to curtail such trade, particularly in Kazakhstan, Tajikistan, the Russian Federation, Turkmenistan and Ukraine.
- 35. Illegal trade threatens to undermine gains in ODS phase out. The existence of old CFC-based equipment has created an ongoing demand for illegal imports of CFCs for refrigeration and air conditioning. Interceptions of illegal trade in ODS, most of which is reported to originate in China have become frequent in countries such as Kazakhstan and Uzbekistan. Illegal trade in ODS was frequently reported by representatives of companies and government customs officials interviewed, which supports similar findings by specialist bodies such as the World Customs Organization.
- 36. ODS-containing products such as refrigerators and air-conditioning equipment can be imported unknowingly which increases the demand for ODS that has already been restricted or banned in the importing country. This is a particular problem when ODS has been used in a part of the exported equipment, such as the insulation foam. The specifications usually do not provide information on the use of ODS during the manufacture of the entire product.
- 37. The Parties to the Montreal Protocol have agreed three times as many Decisions in the last eight years on ways to combat illegal trade as they had in the previous twelve years of the Protocol's existence, which is a measure of the growing concern that countries have for illegal trade. ODS trade that is transhipped through one country to another is particularly problematical as procedures and responsibility for monitoring such shipments are less well-defined than for single country destinations.

# Conclusion 5: Halon recovery and banking has been neglected in the non-European Union countries with economies in transition

38. Halon is an ODS used in fire fighting agents. Its production has ceased globally because of its severe ozone-depleting properties which destroys about six-times more ozone than CFC chemicals. Globally, halon has been decommissioned from many installations where a suitable alternative exists, and the 'used' halon has been stored for

fire fighting applications where an alternative has yet to be developed. Halon is therefore a global resource that has been managed and conserved in well-sealed storage facilities or banks in many countries.

39. The EU-CEITs had management plans in place for halon for many years, and have been actively decommissioning halon and replacing it with alternatives, according Quantities decommissioned and banked are reported to legislative requirements. annually. In the non-EU-CEITs, however, there was little evidence of any active management of halon, or policies and measures that required action to replace halon with alternatives. For example, halon is still used to protect the majority of the pumping stations on the gas pipeline from Russian to Europe through Ukraine, despite the availability of a non-ODS alternative for this purpose. Funding had been provided by the GEF for equipment, training of technicians and management plans in most Non-EU-CEITs. In many countries the equipment provided was not being used. In the Russian Federation, the halon programme was not implemented because the proposed purchase of recovery and banking equipment did not comply with the procurement procedures of the World Bank. Halon use is not currently monitored in most of the non-EU CEITs and existing databases were reported to be out of date.

# Conclusion 6: In some countries the National Ozone Units ceased to function after GEF support ended and this may prevent measures being put in place to address the remaining threats to the ozone layer

- 40. The EU-CEITs in the early and mid-1990s depended on international aid to finance ODS reduction and phase out programmes. This is not the case today with the improvement of their economies and links to financial programmes in the EU, that provide sustainable support to address the remaining challenges of ODS phase-out, such as HCFCs, banking and safe destruction of ODS.
- 41. The non-EU-CEITs, however, are not in this position. Many of them have continually faced funding shortages that threaten the existence of the National Ozone Units (NOUs) that were established to manage, reduce and phase out ODS. Kazakhstan had an NOU that was funded by external contracts rather than the central budget, Ukraine and the Russian Federation had no identifiable Ministry staff that were actively managing policies and measures on ODS, and Turkmenistan was also dependent on external funding. The GEF approved additional finance for some of these CEITs in 2007, but administrative barriers to disbursement have resulted so far in only one being funded. As a result, the NOUs in the non-EU-CEITs reported difficulties in completing the tasks assigned by the Implementing Agencies.
- 42. Delays in funding, communication difficulties and administrative burdens have hampered the development and implementation of new programmes. This is leading to increased threats or risks to the successful phase out of the remaining ODS and in particular HCFCs, and to actions to address destruction of banks of unwanted ODS stockpiles.

43. Unwanted CFC stockpiles were reported as a serious problem by many enterprises in the Non-EU-CEITs, as there were no facilities available to destroy it. Prolonged storage in decentralised facilities increased the risk of 'disappearing benefits' as ODS leaks out of storage containers or is dumped by private sector stakeholders. Over time, this will undermine the work that has been undertaken by servicing companies.

#### RECOMMENDATIONS TO THE GEF COUNCIL

Recommendation 1: The GEF should consider further investment and capacity development to assist countries with economies in transition to address the remaining threats to the ozone layer

- 44. Three threats remain to be mitigated: illegal trade in ODS; phase-out of HCFCs and halon; and lack of destruction facilities for banks of unused CFCs and other ODS.
- 45. The GEF could consider the following actions, particularly in the non-EU CEITs:
  - Investment projects to assist the government and private sector to recover and recycle HCFCs and increase the market penetration of non-ODS, low or zero Global Warming Potential (GWP) alternatives in the refrigeration and foam sectors:
  - Investment in destruction facilities to provide government and the private sector with appropriate options for safe and cost-effective disposal of obsolete ODS;
  - Capacity development for NOUs and customs authorities to function more effectively. This may include *inter alia* further support to update legislation and policy, ODS and non-ODS refrigerant detection equipment, training and technical assistance to improve enforcement to reduce illegal trade in ODS.
- 46. These actions would present opportunities for the GEF to attain double global environmental benefits not only for the ozone layer, but also for the climate. This is because ODS is both ozone depleting and global warming. Furthermore, destruction of ODS would create synergies with the ongoing efforts to safely destroy stockpiles of persistent organic pollutants (POPs) in many of the CEITs. Hence, there may be opportunities for the GEF to finance development of joint ODS POPs destruction facilities.

Recommendation 2: The GEF should learn from the positive private sector engagement in the reduction of Ozone Layer Depletion focal area and incorporate similar approaches into its efforts to engage the private sector in other focal areas

47. The portfolio of projects assessed as part of the impact evaluation exhibited strong engagement with the private sector, which contributed to the attainment of global environmental benefits and financial benefits to the enterprises involved. Such strong performance is not observed in other GEF focal areas. As the GEF is now placing greater emphasis on private sector partnerships going forward into GEF-5, it is important that

experiences and lessons from the ODS projects are examined and where possible incorporated into other focal area operations.

- 48. Some lessons for consideration identified by the evaluation include:
  - Undertaking a viability test directed at measuring organizational, economic and financial sustainability, which provides the foundation for targeted and informed green business investments;
  - Focusing on a wide range of firms small, medium and large enterprises from start-ups to established firms with a track-record for product innovation and profitability;
  - Targeting a few specific sectors for green business investments which best align environmental goals of the GEF and financial (profit) growth possibilities;
  - Keeping bureaucratic procedures to a minimum, bearing in mind that firms often require quick decisions on investment;
  - Identifying champions who have innovative product ideas, technical and political skills, as the work in the ODS portfolio demonstrated that private enterprise 'champions' were critical for producing good business and environmental results;
  - Investing in countries that have government policies and procedures which actively support green business and the 'ease of doing business' in these countries.

# RECOMMENDATIONS TO NON-EUROPEAN UNION COUNTRIES WITH ECONOMIES IN TRANSITION

Recommendation 1: Countries should consider making improvements in the implementation of legislation, policies and standards on all aspects of ozone layer protection

- 49. Legislation and policy implementation is essential for phase out of ODS consumption and for providing the basis for market transformation through the introduction of alternative technologies and chemicals. This is particularly important in non-EU-CEITs which face greater challenges than the EU-CEITs in phasing out HCFCs and reducing illegal trade in ODS.
- 50. Countries could consider drafting new or updating existing legislation and policies on the following aspects of ODS phase out:
  - Recovery, recycling and reporting on ODS;
  - Establishing private enterprise standards and requirements, particularly in sectors such as refrigeration and air conditioning servicing sector;
  - Import bans for ODS and ODS-containing equipment, and / or licensing and quotas for ODS imports and exports;

- Setting appropriate penalties or deterrents for illegal trade;
- Establishing and promoting the activities of professional refrigeration associations.
- 51. A critical ingredient for effective implementation of legislation and policy is baseline government funding for NOUs. Experience from the EU-CEITs indicates that post-completion government funding is resulting in continued phase-out of ODS and lowered threats and risks to the ozone layer.

# Recommendation 2: Countries' existing efforts to prevent illegal trade need to be further strengthened

- 52. Many approaches could be implemented to combat illegal trade. The most important is to reduce the national demand for ODS by encouraging the installation of equipment that is ODS-free, which removes the servicing demand for ODS by using economic and financial instruments and promoting voluntary commitments in the enduser sector. Many countries encouraged enterprises to substitute their CFC-based equipment for non-ODS alternatives, thereby reducing the demand for CFCs.
- 53. Other approaches to reduce illegal supply of ODS and ODS-containing equipment could include:
  - Training and workshops for customs officers and inspectorates on a regular basis to maintain and improve detection capacities;
  - Implementation of customs codes for all of the common ODS and blends to enable customs to differentiate legal from illegal trade
  - Establishment of 'send-and-receive' communications between countries to monitor all shipments of ODS, including details of any ODS contained in the equipment;
  - Use of specialised equipment to differentiate legal from illegal ODS;
  - Certified laboratory methods for confirming the nature of the ODS intercepted;
  - Participation in regional meetings and networks to collate, evaluate and share intelligence on illegal trade as a basis for agreement on further action;
  - Awareness-raising of illegal trade in ODS among private enterprises and the general public.
- 54. These activities need to be supported by legislation that empowers customs officers to take appropriate actions against smugglers and suppliers of illegal ODS.

# Recommendation 3: Countries need to take further action to manage and bank halon

55. Experiences from countries that have successfully banked and managed halon indicated that the following approaches could be adopted:

- Development of a halon management plan that includes identification of the quantities of halon installed for different purposes by location, the quantities that can be replaced by alternatives, and a timetable for decommissioning the installed halon;
- Equipment and facilities for recovery and reclamation of halon, with appropriate training for technicians to ensure safe management;
- Accounting and reporting procedures showing quantities decommissioned, reclaimed, stored and recycled;
- Promoting market mechanisms that enable responsible management of the available stock of halon.
- 56. Non-EU-CEIT countries could also considering making more use of UNEP's <u>halon trader</u> website which offers the potential to use funds derived from sales of halon to support national halon recovery and banking operations.
- 57. Further emphasis on development of appropriate legislation and policy is important to provide a stable foundation for halon management plan development and implementation.

# SECTION THREE: REVIEW OF AN EXPERIMENTAL EVALUATION OF A GEF PROJECT: RISEMP

- 58. The Evaluation Office conducted a review of a GEF project, which was designed to enable experimental impact evaluation, on the basis of a project design which featured participant and control groups of farmers. The Regional Integrated Silvopastoral Approaches to Ecosystem Management Project (RISEMP) was selected as a case study because it is one of the few recently completed conservation projects based on an experimental impact design, allowing (in theory) for an assessment of the net effects of an intervention. This evaluation analyzes the strengths and weaknesses of the project's underlying experimental design, as implemented in one of its three sites (Nicaragua), where fieldwork was undertaken specifically to explore how this design worked in practice. The full report from the Evaluation Office study is available on the Office's website.
- 59. RISEMP was initiated in 2002. It was a full-sized GEF/World Bank project, designed as an innovative pilot initiative, which would promote silvopastoral practices through technical assistance and payments for environmental services (generated by these practices). The project was implemented in three countries: Nicaragua, Costa Rica and Colombia. It was managed by the World Bank and coordinated by CATIE, an international research institute in Costa Rica. Country pilot sites were managed by national non-governmental organizations (Nitlapán, CATIE, and CIPAV). The intended total cost of the project was US\$8.72 million; of which US\$4.77 million was financed by

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<sup>&</sup>lt;sup>5</sup> With respect to PES it might be the only completed PES project based on an experimental design (Wunder et al., 2008).

a GEF grant and US\$3.95 million through co-financing (from FAO-LEAD, Nitlapán, CATIE and CIPAV and other local donors). The project closed in January, 2008.

- 60. The main development objectives of RISEMP were to demonstrate and measure; a) the effects of the introduction of payment incentives for environmental services (PES) to farmers, based on their adoption of integrated silvopastoral farming systems in degraded pasture lands; and b) the resulting improvements in ecosystems functioning, global environmental benefits, and local socio-economic gains resulting from the provision of these services (see also the summary logical framework in Annex 1).
- 61. There were *four project components*. The *first component* aimed at strengthening local development organizations (especially the managing NGOs: CATIE, CIPAV and Nitlapán) to assist farmers in establishing and maintaining improved silvopastoral systems, and in the technical and institutional aspects of silvopastoral systems. The *second component* concerned developing and implementing an improved monitoring system to provide accurate information and understanding on the potential of intensified silvopastoral systems in providing global environmental services and local socioeconomic benefits. The *third component* was about creating and implementing a payment mechanism to provide incentives for establishing and maintaining improved silvopastoral systems on farms. The *fourth component* aimed to support policy formulation and dissemination, specifically developing a replication strategy, including exploration of potential sustainable financing mechanisms, to ensure the long-term sustainability of the project.
- 62. The RISEMP project was in essence a research and innovation project. Apart from providing incentives to farmers to adopt silvopastoral practices in function of generating multiple environmental services, the project was designed to investigate:
  - the effects of different types of incentives on land use changes and the sustainability of these changes
  - the effects of land use changes in terms of (global and local) environmental services and (local) socio-economic benefits.
- 63. Thus, to some extent the project in itself was *about* outcome and impact assessment. As part of the project's objectives, the project teams (in the three countries) in collaboration with World Bank staff developed their own system of research and monitoring. The project was based on the experimental mechanism of targeting groups of farmers with different incentives. In principle, this would offer a solution to the attribution problem in impact assessment, as differences between otherwise similar groups could then be attributed to the differences in incentives received from the project.
- 64. Targeted fieldwork was undertaken to explore the Nicaraguan case in detail. The fieldwork shows how an experimental design that is implemented without the necessary

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<sup>&</sup>lt;sup>6</sup> A fifth component is project management activities, see also Annex 1.

knowledge and institutional support at field level can lose its utility. It should be emphasized that the problems with the experimental design are essentially strategic and planning failures and not implementation failures as such. Project staff were not trained or in any way prepared to manage an experimental design and could not be expected to deal with the various problems that threaten the validity of the design. The analysis shows that the utility of the experimental design in terms of resolving the attribution problem is heavily compromised by several threats to validity.

- 65. In all, the experimental framework failed on two of the three group comparisons that were to support rigorous claims on the effects of PES and technical assistance on land use change and corresponding environmental effects. The 'PES only' versus CG comparison is rendered invalid due to severe problems of selection bias and unintended behavioral responses (especially in the CG). The 'PES only' versus 'PES TA' comparison is rendered invalid due to problems of treatment diffusion. The 'PES 2 years' versus 'PES 4 years' comparison is quite valid. The data and their subsequent interpretation illustrate the utility of the experimental design in terms of providing reliable evidence on land use behavior under different types of incentives.
- 66. The fundamental question of the cost-benefit ratio of using an experimental design should be raised. Implementing such a design involves substantial costs:
  - implementation costs: designing the experiment, selecting the farmers, managing and controlling the quality of the experiment, etc.
  - costs in terms of facing ethical dilemmas or possible resistance from farmers or other stakeholders;
  - foregone benefits to farmers (withholding benefits to certain groups of farmers, less outreach than without an experimental approach).
- 67. These costs can only be justified if the experiment is done carefully, thereby delivering its analytical potential. In the Nicaraguan case (and possibly the other two sites), the costs of implementing the experiment, without the necessary quality control and supervision clearly outweighed the analytical benefits of doing an experiment.
- 68. Despite the limited utility of the experimental design in Nicaragua and potential unidentified problems of the design in the other two countries, the logic of experimentation potentially provides a powerful tool to test the effectiveness of particular incentives on outcomes and impacts, controlling for other factors. Experiments can be especially useful in the following cases:
  - when knowledge on attribution (and effectiveness) is important; for example in the case of innovative instruments when little is known about their effectiveness; in case there is a lot of existing evidence about the effectiveness of a particular approach or instrument then the benefits of an experimental design might not outweigh the costs;

- when there is an interest in the magnitude of effects (caused by the project).
- 69. However, they should only be applied:
  - if sufficient attention and resources are dedicated to training and quality control of the experimental design in practice;
  - if attention is paid to possible combinations of experimental approaches with other methods, which would reinforce each other and together would allow for a more comprehensive coverage of the outcome and impact dimensions of an intervention (as well as address more adequately questions of both average effects attributable to the intervention as well as heterogeneity in effects).

# SECTION FOUR: IMPACT EVALUATION OF BIODIVERSITY PROJECTS IN PERU ON THE GLOBAL ENVIRONMENT AND ON THE LOCAL COMMUNITIES' SOCIO-ECONOMIC CONDITIONS

#### BACKGROUND

- 70. As presented to Council in the past, the Office has explored opportunities in which impact evaluations can be supported within the context of already on-going activities in other institutions. In July of this year, the Independent Evaluation Group (IEG) of the World Bank approached the Office for parallel work. IEG is presently piloting an integrated country level evaluation in Peru which includes an assessment of the World Bank Group's program outcomes during the period FY03-FY09. The evaluation aims to assess program outcomes of each institution of the World Bank Group as well as an integrated assessment of the Group's contribution to the country's development. The evaluation includes projects co-funded by the GEF and implemented through the World Bank Group.
- 71. This overall assessment provides an opportunity and the context in which projects are prepared and implemented and necessary to conduct impact evaluations. A group of 5 completed projects were selected to conduct the impact evaluation. There are additional reasons for conducting this particular impact evaluation:
  - This evaluation is an opportunity to further develop the ROtI methodology so far implemented at the project level, and move into exploring the use of this methodology to a cluster of projects. This will be useful for the next impact evaluation proposed for the Office's work program on international waters projects.
  - The Evaluation Office has recognized that more evaluations of the role of local communities and in particular indigenous peoples (all 5 projects selected have a local community component) would be useful.
  - The Evaluation Office continues to explore the impact of the GEF on long-term improvements in the socioeconomic condition of local communities and

- indigenous groups and where such changes are essential to ensure lasting improvements on global environmental benefits.
- Peru has been one of the largest recipients of GEF support, historically and in particular in the biodiversity focal area. GEF has funded a total of 55 projects (completed, under implementation, and approved) in Peru, of which 33 have been nationally implemented (GEF funding total US\$90 million and US\$402 million in co-financing), 14 regional and 8 global.
- 72. Since August, the Evaluation Office has joined the IEG evaluation and began to conduct an impact evaluation of 5 completed biodiversity projects in Peru. As with previously completed impact evaluations on Protected Areas in East Africa and on Ozone Depleting Substances in Countries with Economies in Transition, the Peru Impact Evaluation is adopting a "Theory of Change" approach, and has been aimed at tracing contributions of cause and effect linkages from biodiversity conservation interventions to outcomes, impacts, and global environmental benefits, to determine the extent to which projects achieved impact.

#### STUDY OBJECTIVES

- 73. The objective of the Peru Impact Evaluation is to assess the impact of a selected group of completed GEF biodiversity projects on the global environment and on the local communities' socio-economic conditions. Specifically, the impact study will:
  - analyze the impacts in biodiversity conservation and sustainable use given local communities and indigenous groups approaches and the impact on the socioeconomic development (improved livelihoods and poverty alleviation) of local communities and indigenous groups;
  - assess the sustainability of GEF biodiversity investments in Peru, including any replication and scaling-up opportunities that took place;
  - compile general lessons learned of GEF biodiversity funding in Peru; and
  - test and develop a ROtI methodology application to a cluster of projects.
- 74. The two key questions being explored by this impact study are:
  - How relevant has GEF support to Peru been in changes in the socio-economic conditions of local communities, particularly indigenous peoples, and their dependence on biological resources?
  - What have been the results, at the impact level (i.e., changes in biodiversity), and their sustainability, of GEF support in Peru?

#### METHODOLOGY OVERVIEW

75. The Evaluation focuses on completed or mostly completed GEF funded projects, which have been implemented through the World Bank, as a GEF Agency, and within the context of the IEG country-wide evaluation. The selected projects are being assessed through the ROtI analysis individually and as a cluster for which portfolio and literature reviews, stakeholders' interviews, as well as other approaches are being used.

#### PROGRESS TO DATE AND FURTHER WORK

- 76. The evaluation started with a literature review on the selected projects, identification of key stakeholders and full discussions with IEG to establish a common work program. The next step was to visit Peru for extensive interviews with stakeholders and visits to a selected number of project sites. Currently, several other activities are under way: (i) refinement of impact evaluation questions and framework, (ii) further review of relevant literature (project documents, terminal evaluations, Evaluation Office studies, and other information required -- specifically on socioeconomic aspects -- to increase understanding of cluster of project's context and results, and identification and contact with relevant stakeholders to obtain further information; and (iii) preparation of desk ROtI studies of selected projects (individually and as a cluster).
- 77. A report on the impact evaluation of these projects is expected by the end of 2009. This report will become an input to the IEG evaluation. The methodological piece will be provided at the same time but will require additional discussions internally in the Office and among other evaluation stakeholders.

# SECTION FIVE: REVIEW OF THE PROGRESS TOWARDS IMPACTS OF THE GEF OPS4 COHORT OF PROJECTS

#### INTRODUCTION

78. An important part of the work of the Fourth Overall Performance Study was an assessment of the results achieved by the cohort of projects covered by the study. This review covered the outcomes and impacts achieved, as well as progress towards long term environmental change, which had been the ultimate objective of the projects, but which had not been achieved by project completion. Section 3 of the OPS4 report provides details of the ROtI methodology and its results for the OPS4 cohort of projects and these are not repeated here.

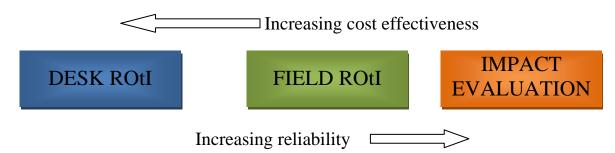
# **METHODOLOGY**

79. The elements of a project's progress towards impacts can be assessed, either on the basis of project terminal evaluations conducted by the Implementing Agencies (Desk ROtI) or, in smaller numbers, through a field work study (Field ROtI). More than 200 projects, the entire cohort of projects formally completed in the OPS4 period plus a set of projects examined by the Impact Evaluation of ODS Phase Out, were included in Desk ROtI exercise, which was supplemented by ten Field ROtIs.

# FIELD AND DESK ROTIS

80. Two different methodologies for implementing the ROtI – the **desk ROtI** and the **field ROtI** were designed and implemented. The desk ROtI was the main methodology used in the OPS4 results evaluation process, and has generated the bulk of the findings. It is a rapid method which enables an understanding of project impacts quickly and cheaply. As a means of confirming the validity of the overall approach, the GEF EO has also undertaken a number of field ROtI exercises that are more costly and time consuming, but produce a more nuanced and in-depth understanding of project impacts than is possible with the desk ROtIs. The relationship between the three types of impact evaluation used by the GEF EO is illustrated in Figure Three.

Figure Three. Comparison between the three GEF EO impact evaluation methods



# THE FIELD ROTI

81. With the field ROtI, the evaluator employs a variety of information collection methods, including documentation review, interviews and working sessions with project stakeholders, as well as visits to project field sites to verify findings. Because the field-based technique relies on the collection of new post-completion information about the project, it is possible to gather relatively conclusive evidence about the status of achievement of the outcomes-impact pathways, including the achievement of intermediate states, and the realization of impact drivers and assumptions, which in turn enables in-depth analyses of the project's Theory of Change, and the reasons why the project has succeeded or failed in its progress towards delivering impacts. However, because the field ROtI is time and cost intensive, it is not easy to replicate in large numbers, and is therefore not suitable for developing broader findings about specific programme areas or types of projects within a limited timeframe. However, it could be used for this purpose if employed systematically over a number of years.

# The Field ROtI

- Employs interviews and working sessions with project informants, as well as visits to project field sites
- ✓ Allows collection of postproject data about status of intermediate states, impact drivers and assumption
- Enables in-depth analysis of the project's theory of change
- ✓ Time and cost intensive not easy to replicate in large numbers

# THE DESK ROTI

82. In the desk ROtI, the evaluator chiefly relies on existing project documentation such as the project brief and the terminal evaluation. The desk ROtI method is therefore a rapid assessment approach with cost and time efficiency, but as a result, it sacrifices some of the quality and quantity of information on the project's outcomes-impacts pathways that can be achieved with the field-based ROtI. However, it has the major advantage of enabling a large number of projects to be assessed relatively quickly, and as such it provides a good foundation for making summary and comparative conclusions about particular programme areas or project types.

# The Desk ROtI

- ✓ Relies on existing documents such as the project brief and the terminal evaluation
- Rapid assessment approach with cost and time efficiency
- Enables a large number of projects to be assessed relatively quickly

# COMPARISON BETWEEN ROTI TYPES

83. Compared with the desk ROtI, the field ROtI presents several advantages: fieldwork enables more nuanced scoring system; can explore whether theories on which project designed proved correct and were delivered as intended: it is also possible to collect local data on actual impacts achieved and can gain basic information relevant to attribution and indirect effects. Over time the field ROtIs could be developed as a means of calibrating Desk ROtI scores. In summary, the **desk ROtI** enables a rapid scaling up of proxy information on impacts, the **field ROtI** provides moderate scaling up possibilities, with higher data quality, while the **Impact Evaluation** provides detailed and reliable data on a relatively small number of projects. The **three levels** together can provide a much richer knowledge base on impacts than is currently available.

### PROGRESS TOWARD IMPACT OF THE GEF PORTFOLIO OF FINISHED PROJECTS

- 84. Ratings were applied to identify projects whose outcomes were making solid progress towards the intended Global Environment Benefit, versus projects that currently have little or no progress towards that objective. Projects between these two extremes of the scale have ratings that are promising, but also show that additional action needs to be taken to ensure that their outcomes will proceed toward impact.
- 85. Of the 205 rated projects (including those added into the total set from the Impact Evaluation of Ozone Depleting Substances), 80 intermediate states show solid progress toward impact, whereas 64 need further action, and 61 currently show little or no progress (See OPS4, Section 3.1, Paragraph 19 23). In terms of funding, relatively large projects seem to make better progress toward impact and have a higher rate of demonstrating early impact. This is illustrative not only of availability of resources to execute project activities, but also a typically longer time-frame of execution, and larger scale of potential impact. The reverse is observed among projects with lower ratings; the smaller projects tend to be more likely to demonstrate impact. The reasons for these differences are both general and particular, and are drawn out in subsequent focal area chapters. Based on these findings, several hypotheses could be tested by the Evaluation Office in future impact work.

86. The nature of the impact of GEF-supported projects and interventions needs to be understood in line with the GEF's catalytic nature. The GEF does not intervene on its own, but together with international, national, and local partners. These partners are "catalyzed" through GEF support and continue working toward global environmental benefits after this support has ended. Thus, the GEF *contributes* to the success of a project, but the impact of the project needs to be *attributed* to the partners that continue to work on the issues addressed by the project.. These issues are fully discussed in Chapter 3.1 of OPS4.

#### REVIEW AND DESK ROTI RATINGS

- 87. A check was performed to see how the ROtI ratings on outcomes complemented the Annual Performance Report's ratings for terminal evaluations on outcomes. The ratings proved consistent, although they measure different aspects of outcomes. The APR ratings focus on achievement of intended outcomes, whereas the ROtI rate for achievement of outcomes and their design elements that would enable progress toward impact. Furthermore, the ratings use different scales. This lead to a slightly lower overall rating score for outcomes in ROtIs versus outcomes in the APR. Further methodological development should lead to a fuller understanding of the complementarities of the two sets of ratings.
- 88. A second check was performed on the "intermediate states" ratings of ROtI versus the ratings for sustainability of the APR. This check showed more significant differences than the outcomes comparison, because the perspectives of the ratings are fundamentally different: "intermediate states" rate the degree to which conditions have been met in order to progress towards global environmental benefits, whereas "sustainability" is concerned with maintaining gains achieved at the outcome level during the project lifetime. A comparison of the ratings shows this difference is consistent across both successful and less successful projects. The ROtI ratings offer a diagnostic on what is needed get intermediate states moving forward to achieve impact.
- 89. Lastly, the ROtI desk reviews were also used to find independent evaluative evidence of having achieved impact by project closing. This rating, which cannot be compared with any APR rating and is new and additional, identifies whether the mechanisms enable the delivery of impact actually "works". What is measured in this rating? In many projects there is evidence of global environmental benefits at project end. If so these projects receive a "plus" rating on impact evidence. These benefits are often relatively small and not yet sustainable; they are often a tiny part of what the project aimed to deliver and they may disappear or remain small if no follow-up is taking place. However, they demonstrate that the mechanisms to achieve the global benefits at least theoretically "work" in a particular project and have been documented by project closing.
- 90. The OPS4 report and the Comments of its Senior Independent Evaluation Advisers have brought attention to several aspects of the new methodology, which will be further developed in the GEF partnership. Already, a set of evaluative studies are being conducted in Peru (see Section Four of this report), which will explore the applicability of the ROtI method to an inter-related set of projects at national level. The

Evaluation Office will also discuss the findings of the OPS4 ROtI exercise with the Secretariat and the Agencies to see how lessons learned could be incorporated into focal area strategies, into project proposals, and also how to include ROtI aspects in mid-term evaluations and supervision. Most importantly, GEF operational focal points could mobilize support from their own and other ministries to enable intermediate states to progress toward impact, and redress situations where intermediate states did not materialize or have not been envisaged.

#### INITIAL COMPARISON OF RESULTS BETWEEN DESK AND FIELD ROTIS

- 91. As part of OPS4 desk ROtIs were undertaken for more than 200 projects. Field ROtIs of ten projects were also undertaken. These were of projects completed some years previously, so that the progress towards long term Global Environment Benefits could be assessed. This meant that there was no overlap between the desk and field ROtI cohorts, since the latter consisted of projects completed before the OPS4 cohort period. In principle, desk ROtIs could be completed before undertaking field ROtIs, to develop a database for comparison of the result given by the two methods. Although this was not undertaken as part of the OPS4 process, it is possible to make a simple comparison between the ratings from the project terminal evaluations and those of the field ROtIs. In the further development of the ROtI methodology this will be done for all ten field ROtIs. An initial comparison was done for seven projects.
- 92. It should be noted that Field ROtIs (usually) occur some years after a project's Terminal Evaluation. They therefore reveal to what extent the promise of progress towards Global Environment Benefits noted by that evaluation or, where applicable, by a Desk ROtI has actually occurred. Although the set of projects for which Field ROtIs were undertaken cannot be seen in any sense as a formal or representative sample, they already suggest a tendency which could indeed by tested for reliability by a formal sample of Field ROtIs over time. Only one of the seven stayed on track, fully delivering against its satisfactory TE and Desk ROtI ratings. All of the other projects showed a declining level of progress towards long term impacts (Global Environment Benefits) when examined through field level evaluation some years after their TE. The reasons for this decline are provided in detail by the Field ROtIs, with a very strong emphasis on the inability of Governments (in particular) to continue to support and resource necessary activities on a long-term basis, which further underscores the importance attached to continued governmental ownership and support as highlighted in OPS4.