

Biological Diversity

N°03: BD-3722; Brazil: Improving Brazilian Capacity to Conserve and Use Biodiversity through Information Management and Use; (UNDP); GEF cost: 9.1 million USD; total project cost: 28.1 million USD

General Comments

The risks associated with the proposed project appear to be much higher than indicated by the PIF. Although it would be very desirable to have one consolidated data base for the entire country the overall project goal will be extremely difficult to achieve. Would it not be more appropriate to test the feasibility of such a mammoth undertaking on a one-state basis instead (to serve as a trial)? The requested GEF grant of \$ 8 million appears much too high for such a risky project.

Questions, Concerns, Challenges and Suggestions Related to Project Preparation

- No timeline is provided for the project.
- Where does the “indicative” co-financing of \$20 million come from, and what would it be used for?
- It is well known that Brazil’s States work rather independently; what would motivate States to feed data into a centralized agency?

Conclusions and Recommendations

Key questions have to be answered prior to a tentative approval of such an ambitious but very risky project.

N°13: BD-3745; Russia: Improving the coverage and management efficiency of protected areas in the steppe biome of Russia; (UNDP); GEF cost: 6 million USD; total project cost: 21.3 million USD

General Comments

The protection of Russia's diversified but highly endangered and fragmented grassland communities (steppe and forest steppe) is of extreme urgency constituting one of the highest national and international conservation priorities. The proposed project approach with focus on (a) expanding the existing protected area system, (b) ecological connectivity, and (c) rehabilitating degraded steppe lands, is logical from a conservation perspective and meets GEF's Strategic and Operational Program requirements. If successful the project will result in global benefits.

Questions, Concerns, Challenges and Suggestions Related to Project Preparation

- The timeline for the project has not been identified. Considering time requirements for the proposed establishment of new protected areas, their being decreed, and the anticipated elaboration and implementation of corresponding management plans, a minimum project duration eight years is suggested.
- Expected outputs iii) (Component 1.) and iii) (Component 3.) indicate stakeholder "consultation" instead of stakeholder "participation" needed to achieve stakeholder ownership in newly created PAs. "Cooperative Governance" (see point i), Component 3) may only be achieved through a truly participatory planning and decision-making process.
- Project Component 2, reference fire management: please explain fire-ecology of targeted steppe areas; are fires a natural occurrence? Are targeted steppe areas fire climax systems? Define "wild fire" and causes. Increase in numbers as a result of changing climate and weather pattern?
- Output iv) of Component 3: how will database be established and how can it be socialized in Russia?
- With reference to co-financing: the \$ 10,5 million Government contribution in cash is pledged or committed? What is the cash going to be used for?
- Page 5, first paragraph indicates "...lack of involvement of local stakeholders in PA activities and project". Participation cannot be achieved through "consultative process" as suggested by project. Empowerment of local stakeholders will be key to success.
- Risks and Mitigation: The need for participatory multi-disciplinary inter-institutional (= integrated) spatial land-use planning is essential for project success and should be central to the project. Government commitment on all levels and willingness to empower rural stakeholders and communities will be the key to success. How will this be addressed by the project?

Conclusions and Recommendations

The project should be endorsed if identified barriers are addressed satisfactorily.

Climate Change

N°16: CC-3700: China: Promoting Energy Efficient Room Air Conditioners (PEERAC) Project; GEF cost: 6.26 million USD; total project cost: 25.29 million USD

Overall Commentaries

The project addresses energy efficiency of room air conditioners and with this covers a highly relevant area of energy consumption in China. The project is well defined and can build on existing experience from the domestic refrigerator market. Some elements and barriers however are not adequately addressed in the PIF and need to be elaborated for the full project brief as outlined below.

Questions, Concerns and Challenges for the further Project Preparation

- Under component 1 efficiency improvement of RAC compressors is included. The PIF does not address how access to efficient compressor designs can be ensured (e.g. through technology cooperation with other compressor manufacturers). Highly efficient compressor designs may involve proprietary know-how and may only be accessible through industry licensing schemes, etc. No reference is made in the PIF to supporting/establishing a sustainable domestic development and research infrastructure. How can continuous compressor efficiency improvement be sustained after the project end?
- The PIF also does not explain how the barrier of incremental cost for the manufacturer can be overcome effectively. Production of energy efficient compressors will require upgrading of production equipment and hence involves significant investment costs. To a lesser extent this also applies to Component 2 (energy efficient AC units) as some technical measures to improve efficiency also lead to higher production costs, e.g. for larger size condensing units. In order to address investment barriers to manufacturers CDM opportunities should be explored, e.g. for application of CDM Methodology AM0071. For work on CDM related issues also additional financing from China CDM Fund may be explored.
- Under component 3 (Promotion of energy efficient room air conditioners) the issue of incremental cost for the buyers of efficient RAC units is not yet adequately addressed (willingness to pay). How can this barrier be effectively worked on?

How does the project contribute to linking Montreal Protocol and Kyoto protocol activities? The project should effectively be linked with the HCFC Management Phase-out plan to promote low GWP refrigerants as replacement to HCFC.

Conclusions and Recommendations

On basis of above considerations we recommend going ahead with further developing the project and taking into account the various points raised in this project review and in the STAP review. The issues raised should be adequately addressed in the final document which will be submitted for CEO endorsement.

N°17: CC-3551: India: Financing Energy Efficiency at Small and Medium Enterprises; (World Bank); GEF cost: 11.3 million USD; total project c.: 68.8 million USD

Overall Commentaries

The proposed project addresses a very important issue. The diagnosis is correct as it is true that small scales industries have not been so far in general successful in reducing on a large scale their specific energy consumption.

Experience over the last 10 years in India in this sector shows that projects have been successful only in a few niches like foundries (energy efficient cupola now becoming exponentially reproduced), glass industries (bangle industry in Firozabad with over 60% of energy efficient furnaces equipped with heat recovery) and brick industries. The cluster approach has proven successful, even though the development across national industrial body like the IIF (Indian Institute for Foundrymen) may allow national level dissemination of energy efficient systems.

Over the last 10 years, due to the globalization and the exposure of many of the SMEs sectors, one could see a shift from a very short-sighted reasoning in SMEs to a more professional approach toward modernisation and preparation for international competition. Environmental pressure has also played a major role. Therefore this project comes at the right time, when SMEs are ready for investments for the future.

Questions, Concerns and Challenges for the further Project Preparation

If one wants to attain significant energy savings in the SMEs, one has to go much beyond what regular energy auditors who do not consider the system as a whole usually perform, but the different components and their individual performances (e.g. boilers, pumps, blowers, etc..).

The main challenges, as we understand them, are of different natures and are mentioned at different levels in the proposed project document. We stress here which are the main challenges beyond purely financial aspects:

- (1) For many SMEs still using centuries' old technologies, and not large enough to adopt OECD countries' technologies, there is usually no off-the-shelf solution. Identification and development of technology packages, which do not address the energy efficiency alone, must also integrate production quality. It is in nature more complex than usual to gain energy efficiency by simply substituting blower, pumps, etc ... by more efficient equipment. The design of the system itself must be questioned, including the technology of the process.
- (2) Confidence in developed solutions SME: industrialists need to see the demonstration of the solutions that are proposed in similar units with numbers obtained in real operation. Here the main issue is to get early adopting industrialists ready and willing to share their experience with competitors.
- (3) Generally energy auditors do not have a sufficient grasp of the global issues in the sector. There is a need to train the auditors to be able to analyse and propose solutions which go beyond the simple change of blowers.
- (4) Supply chain for technology support, quality control and delivery: once a technology package has been developed and is well defined by tight specifications for a cluster of similar SMEs, the manufacturers must have assistance/support for quality control during fabrication and installation. The units must also get support while testing the new equipment.
- (5) Time scale: bankers are usually not used to realising and understanding the duration of the development process (no off-the-shelf solution) and the need for a long maturation until actual projects can be replicated on a large scale in clusters. The proposed time scale may be too short for the cycle of such a project.

Conclusions and Recommendations

This project addresses very important issues for the SMEs in India. It should be supported.

The questions, concerns, and challenges shown above should be taken into consideration while designing the project in detail.

Multi-Focal Area / Corporate Programs

N°34: MFA-3635; Cambodia: Strengthening sustainable forest management and bio-energy markets to promote environmental sustainability and to reduce greenhouse gas emissions in Cambodia; (UNDP); GEF cost: 2.36 million USD; total project cost: 7.76 million USD

Overall Commentaries

The project aims at sustainable forestry management (SFM) by means of political work, demonstration, and certification of wood and wood products. At the same time, it aims at an increase of the economic benefit of forestry management by implementation of bio-energy chains with increased efficiencies. Due to the high ecological value of natural forests, SFM is regarded as an important issue and the combination of SFM with economic benefits and implementation of improved technologies is regarded as a valuable approach to contribute to a better protection of the biodiversity of existing forests.

Questions, Concerns and Challenges for further Project Preparation

Both measures for SFM and technologies for ecological bio-energy are only described in a very generic way in the project proposal.

It remains unclear which standard of technologies for cooking with wood and for charcoal production is used nowadays and which technologies are planned to be implemented and how they shall be introduced in the market. Hence a clarification is needed before project start, since efficient and low polluting cooking with wood is a huge challenge. Different concepts for small cooking devices for wood have been developed and might be considered. However, some of these technologies need adaptations in the wood preparation and in the operation and hence it needs to be evaluated which type of cooking device is most promising for use in Cambodia. In any case, a transfer of knowledge on the production and utilisation of efficient cooking stoves will be needed and prior to this, technology adaptations might be necessary in case the existing technologies do not fit the specific needs. For this purpose, tests and developments prior to the implementation might be necessary, which is not considered in the project proposal.

Furthermore the reason and needs for charcoal production remain unclear. Traditional charcoal production is related to high pollution and low efficiency. However, if charcoal is used for cooking and/or heating applications, the production of charcoal is questionable even if it is replaced by improved technologies, since direct utilisation of wood may achieve higher efficiency and hence it might be favourable to fully replace charcoal production by other applications of wood. On the other hand, an implementation of efficient and hence industrial size technologies for charcoal production might lead to a high local demand for wood, which might lead to an excessive local wood utilisation and result in contradiction with the target of SFM.

Conclusions and Recommendations

The chance of a successful implementation of SFM may certainly be increased if SFM is linked to the introduction of improved chains for regional utilisation of wood and wood products and thus also result in local economic benefit. This approach of the project sounds very promising and hence the project is basically supported. However, it remains unclear what type of technologies and how they shall be implemented. It is assumed that relevant initial work will be needed to prepare the technology implementation either by development or by adaptation of efficient and environmentally-friendly wood cooking devices. Further, regional resources in craft and industry might be necessary for the production of respective cooking devices. In addition, the implementation of more efficient technologies for the conversion of natural wood into charcoal is a potential risk of an increased local wood utilisation, which needs to be considered. Beside, the purpose of charcoal needs to be reflected generally, since direct utilisation of wood for other purposes might be more efficient.

N°36: MFA-3717: Ecuador: Sustainable Management of Biodiversity and Water Resources in the Ibarra-San Lorenzo Corridor; (IFAD); GEF cost: 2.8 million USD; total project cost: 13.8 million USD

General Comments

The targeted corridor area of Ecuador's northern region encompasses some of the country's most threatened ecosystems and most marginalized ethnic communities, especially in the coastal part of the corridor; a very appropriate choice for both reasons. The project meets GEF's Strategic and Operational Program requirements.

Questions, Concerns, Challenges and Suggestions Related to Project Preparation

- The 6-year timeline for this 11 million USD highly ambitious project is too short. Suggested timeline minimum 8 years, preferably 10 years.
- Please explain "soft loan" of 8.6 million USD. How much GEF Grant and how much IFAD? Co-financing of \$ 2 million appears to be very low compared to total project cost of 11 million USD.
- Mainstreaming biodiversity conservation at the project level: will this component build on experience by GTZ trying to achieve the same within coastal communities (Synergies) ?.
- Component 3: "...Payment / Reward for Environmental Services mechanism...". How will financial sustainability be achieved of payments to be made? Also see E.2. ii): would this not be voluntary participation by stakeholders and/or good-will?

Conclusions and Recommendations

The project should be endorsed if identified barriers are addressed satisfactorily.

N°37: MFA-3471: India: Sustainable Land, Water and Biodiversity Conservation and Management for Improved Livelihoods in Uttarakhand Watershed Sector, (WB); GEF cost: 7.7 million USD; total project cost: 90.7 million USD

Overall Commentaries

The objective of the project is to restore and sustain ecosystem functions and biodiversity while enhancing income and livelihood functions. The project operates at a watershed level and is organised according to seven components i) participatory watershed planning, ii) sustainable land management, iii) fostering markets for NTFPs, iv) biodiversity conservation, v) climate change adaptation, vi) description and dissemination of best/worst practices and vii) project management.

The project fits the GEF Focal Areas Land Degradation, Biodiversity and Climate Change by addressing the Strategic Programs LD-FA SP1, BD-FA SP4 and SP5 and Climate Change SPA.

We welcome the application of the ecosystem approach. The ambitious project identifies many activities to be implemented, with each of them being justified *per se* (with exception of the Chir pine needle briquettes, see STAP review). The main challenge for the further development of the project will be to refine the planning of activities to secure their mutual supportiveness. Special attention should also be given to address all local participants and existing initiatives.

Questions, Concerns and Challenges for the further Project Preparation

Our concerns for the further project preparation are identified as follows:

First: The project foresees the elaboration of a study on the impact of climate change on mountain ecosystems and, at the end of the project, the implementation of a strategy for the management of the impacts of climate change. However, the success of sustainable watershed and land management as well as afforestation and reforestation, alternative agricultural technologies and other planned activities depends on taking into account climate change at a very early stage of project planning and implementation. We therefore recommend giving the climate change component a high priority, to focus the study on project areas and to redefine the whole project and implement the activities as a part of an adaptation strategy.

Second: We consider the introduction of improved crop varieties of high value in parallel with the conservation of traditional crops and general crop diversification and intensification to be a high challenge. How will the farmers be persuaded to cultivate traditional crops when high value (= high yield) varieties become available? Special attention should also be given to avoid drawbacks on biodiversity from agricultural intensification.

Conclusions and Recommendations

On the basis of the above considerations we recommend going ahead with further developing the project, taking into account the various points raised in this project review and in the STAP review. The issues raised should be adequately addressed in the final document which will be submitted for CEO endorsement.

Programmatic Approaches

GEF-4 Strategic Programme SP-1; ID 3787: Framework for Promoting Low Greenhouse Gas Emission Buildings; GEF: Total project amount submitted in Nov 08 for work programme inclusion: 19.384 million USD, total programme 35.334 million USD

Overall Comments

The programme targets at improvements in building design, performance of equipment and human behaviour with a view to reducing GHG emissions from both new buildings and existing stock on a global scale. Apart from being a major source of greenhouse gas emissions, buildings offer both an immense potential to reduce greenhouse gas emission and measures which are considered to be among the most cost-effective options for emission reductions.

The programme framework aims at providing the necessary tools and distributing widely the most efficient and effective policies, legal and financial mechanisms, technologies and construction practises. The programme will consist of national projects that are expected to harmonise tools and approaches to facilitate a broader market expansion.

The programme design is basically well defined but seems too ambitious and lacks a clear focus and priority: the programme virtually covers all types of buildings in all regions but also a very broad range of thematic issues. There is concern that the wide scope leads to dilution of all efforts and resources and will take a long time to produce tangible results. It is therefore suggested that the further programme refinement targets a better focus, taking in particular the aspects outlined below into account.

Questions, Concerns and Challenges for the further Programme Refinement

- Focus on instruments and approaches to overcome barriers rather than technologies: The programme rightly addresses the point that despite the economic and technical potential to significantly reduce GHG emissions from buildings very little is happening. It is appreciated that high importance is hence given to the barriers that hinder the application and dissemination of energy efficient building concepts and constructions. Consequently, technologies should not be given highest priority. However, the programme includes a large number of technical options, independent of the true needs that will most likely vary significantly from region to region. It is suggested to give a stronger focus and select a package of technologies that also takes into account the specific climate conditions, the level of economic development and infrastructure availability of/in the various regions.
- Defined target regions: Similarly, it might be wise to group regions and countries for which a certain technology package is considered to fit.
- Existing experience: It is questioned whether the programme design provides sufficient scope to effectively benefit from earlier or ongoing experience in the building sector, much of which was implemented with GEF's support. The final programme should include a strategy how to tap this experience, mainly from such in developing countries.
- Risks: The current programme claims that most risks appear at the project level. We consider risks at programme level (such as high initial costs, lack of access to finance and of adequate financing instruments, and infrastructure/supply chain deficits (mainly in developing countries)) to be of equal importance. These risks also need to be addressed.

Conclusions and Recommendations

Based on the above recommendations we recommend integrating the above comments in the further formulation and refinement process of the programme taking into account explicitly the various points raised in the STAP review.