THE WORLD BANK/IFC/M.I.G.A.

OFFICE MEMORANDUM

DATE: September 20, 2001

TO: Mr. Ken King, Assistant CEO, GEF Secretariat
Att: GEF PROGRAM COORDINATION

FROM: Lars Vidaeus, GEF Executive Coordinator

EXTENSION: 3-4188

SUBJECT: **Mali: Arid Rangeland Biodiversity Conservation**
Submission for Work Program Inclusion

Please find enclosed the electronic attachment of the above mentioned project brief for work program inclusion. We would appreciate receiving any comments by October 9, 2001.

The proposal is consistent with the *Criteria for Review of GEF Projects* as presented in the following sections of the project brief:

- Country Drivenness: *D4 Indication of borrower commitment and ownership (Page 14); A1 Project Development Objective (Page 1); B1. CAS (Page 2); B2 Main Government strategy (Government strategy) (Page 3); F1. Sustainability (Page 20)*
- Endorsement: *Endorsement letter from the Ministry of Environment is attached. (Page 49)*
- Program Designation & Conformity: *B1.a Global Operational Strategy (Page 3)*
- Project Design: *A1 Project Development Objective (Page 1); B3 Sector Issues to be addressed by the project and strategic choice (Page 5); C.1 Project Components (Page 8); C4. Institutional and implementation arrangement (Page 10); Annex 1 (Log frame) (Page 26)*
- Sustainability: *F1. Sustainability (Page 20)*
- Replicability: *D3. Lessons learned (Page 13); F1. sustainability (Page 20)*
- Stakeholder Involvement: *A1 Project Development Objective (Page 1); B3 Sector Issues to be addressed by the project and strategic choice (Page 5); D3. Lessons learned (Page 13); E5.5. Stakeholder consultation (Page 17); E6. Social (Page 17); E7. Safeguard policies (Page 18);*
- Monitoring & Evaluation: *A2. Key performance indicator (Page 1); C1. Project components (in all components) (Page 8); Annex 1 (Page 26)*
- Financing Plan: *C1. Project components (Page 8); Annex 2 Incremental costs analysis (Page 33) ; Costab is available upon request.*
- Cost-effectiveness: *F1. Sustainability (Page 20)*
- Core Commitments and Linkages: *A1 Project Development Objective (Page 1); B3 Sector Issues to be addressed by the project and strategic choice(Page 5); D2. Major*

related projects financed by the Bank or other development agencies (Page 12); Annex 4 Incremental cost analysis (Page 33)

- Consultation, Coordination and Collaboration between IAs:*G2. Advise/consultation outside country department (Page 24)*
- Response to Reviews: At time of pipeline entry the GEFSEC formulated the following comment " *Prior to WP inclusion; A root causes analysis will be undertaken at the project sites for intervention and a clear indication will be provided of how ongoing and proposed projects would assist in addressing these in a coordinated way to ensure that these activities are consistent with the conservation activities of the project*". During preparation the team organized extensive consultation with the communities to assess their perception of current trends and willingness to work on solutions (Boubacar Hassane, 1999); this culminated with a workshop where communities actually built the proposed log frame (Oct., 2000). A consultant analysis of the dynamics of development indicated that degradation originated mostly from overgrazing and over hunting (BICD, 1999). The root causes are well known (see B2 on conservation history & capacity; B3 on biodiversity potential & threat as well as Annex 5 STAP review & Annex 6 – Biodiversity loss and proposed action.). The solution will come from within communities through internal planning, building on traditional knowledge as well as from sharing external experiences that can help (e.g. Pastoral Perimeters). Hence the project's adoption of a holistic approach and strong emphasis on decentralization.

Please let me know if you require any additional information to complete your review prior to inclusion in the work program. Many thanks.

Distribution:

Messrs.: E. Torres, UNDP
A. Djoghlaf, UNEP (Nairobi)
K. Elliott, UNEP (Washington, DC)
M. Gadgil, STAP
M. Griffith, STAP (Nairobi)
Y. Xiang, CBD Secretariat
C. Parker/M. Perdomo, FCCC Secretariat

cc: Messrs./Mmes. A.Kiss, C. Crepin, J. Pavy (AFTES); G. Castro, R. Khanna, D. Aryal (ENV); ENVGC ISC, Relevant Regional Files

PROJECT BRIEF

1. IDENTIFIERS:

PROGRAM NUMBER:	P052402
PROGRAM NAME:	**MALI: ARID RANGELAND BIODIVERSITY CONSERVATION**
DURATION:	6 years
IMPLEMENTING AGENCY:	World Bank
EXECUTING AGENCIES:	National Directorate for Nature Conservation (Ministry of Environment)
REQUESTING COUNTRY	Mali
ELIGIBILITY:	Ratified Convention on Biodiversity, 1992
GEF FOCAL AREA:	Biodiversity
GEF PROGRAMMING FRAMEWORK:	OP 1: Arid & Semi-arid Ecosystems

2. SUMMARY:

Within the framework of country decentralization and natural ecosystem management program, at the scale of the Gourma, the GEF & FFEM provide incremental financing with the 6-year Development Objective to ensure that Communes of the Gourma have successfully mainstreamed conservation of biological diversity in communal and inter-communal development. The project Global Objective is that Biodiversity and range degradation trends are reversed in selected conservation areas and stabilized elsewhere in the Gourma.

The global and development objectives are sought via three operational outputs:
(1) Improvement of awareness, knowledge & capacity of communes and institutions for management of biodiversity,
(2) Establishment and management by inter-commune associations of seven new conservation areas ,
(3) Adoption of natural resources/biodiversity management in communal planning and development of eighteen municipalities.

The proposed project has opted for the following strategic options: (i) Focus on conservation while coordinating and leveraging development, (ii) build on the decentralization process and instrument to empower communities, (iii) invest in local human resources and institutions, (iv) identify and address the root causes of degradation by using an holistic approach, (v) set-up sanctuaries, called conservation areas, to secure a representative sample of the Gourma natural biodiversity, (vi) provide small-scale support to improve biological resources management off sanctuaries, (vii) coordinate and cooperate with conservation efforts in Burkina Faso, (viii) prepare the post-project era through fund raising and organization of a reward-based budget-support mechanisms.

The Project will be implemented through four components: (1) Capacity building of populations and institutions; (2) Support to inter-communal management of conservation areas; (3) Support to commune-based initiatives; (4) Project administration and monitoring

3. COSTS AND FINANCING (MILLION US$):

GEF:	- Project:	5.500
	- PDF:	0.175
	Subtotal GEF:	**5.675**
Co-financing:	- French GEF	1.310
	- Government	1.300
	- Communities	0.100

4. ASSOCIATED FINANCING (MILLION US$)

- IDA, UNCDF, AFD	3.500
- Communities	0.350

Total Project Cost: **12.235 (including PDF)**
12.060 (without PDF)

5. OPERATIONAL FOCAL POINT ENDORSEMENT:

Name: Mohamed Lamme Kalle
Personal Secretary
Ministry of Environment
Bamako, Mali

Date: 09/17/01

6. IA CONTACT:

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Regional Coordinator
Africa Region
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A. Project Development Objective

1. Project development objective: (see Annex 1)

Biodiversity loss has taken extreme proportion throughout West Africa. While this loss is addressed in the Guinean Forest and Sudanian Savanna, the Sahel ecosystem located in the 600 mm - 200 mm isohyets across the West Africa landscape has not benefited from significant attention of decision makers or donors. Mali, a landlocked Sahelian Country with extreme poverty and vulnerability, has requested Bank assistance to implement its environmental & biodiversity strategies in a priority Sahelian site, the Gourma. The Gourma spans 3 million hectares between the Niger River bend and the Burkina border. It possesses diverse landscape features -- lakes, dunes, lowland forests and inselbergs -- and unique biological features such as the world northernmost 700-strong elephant population. Like all other Sahelian areas, the Gourma is experiencing high degradation including local extinction of animal and plant populations and overall desertification.

Moving away from centralized top-down management, the Government has launched an ambitious decentralization and administrative deconcentration reform. This reform, which is widely recognized as genuine, participatory and democratic, provides the framework upon which the proposed Project can be designed and implemented. It is registered, together with projects of other donors, in a decentralization program whose development objective is to ensure that "*The rural populations have better access to public services, to socio-economic infrastructures and to productive natural resources*".

Within the framework of the above-mentioned program, at the scale of the Gourma, the GEF & FFEM provide incremental financing with the 6-year Development Objective to ensure that *Communes of the Gourma have successfully mainstreamed conservation of biological diversity in communal and inter-communal development.* The project targets the GEF Operational Program 1 (Arid and semi-arid ecosystem) with the Global Objective that *Biodiversity and range degradation trends are reversed in selected conservation areas and stabilized elsewhere in the Gourma*.

Mainstreaming is defined here as the process whereby municipalities account for the concerns and knowledge of their constituency and the nation to register into municipal regulations, development planning, budget and actions provision for biodiversity conservation and natural resources management in such a way that results demonstrate lasting commitments and capacity.

The global and development objectives are sought via three operational outputs: (1) *Improvement of awareness, knowledge & capacity of communes and institutions for management of biodiversity*, (2) *Establishment and management by inter-commune associations of seven new conservation areas*, (3) *Adoption of natural resources/biodiversity management in communal planning and development of eighteen municipalities.*

2. Key performance indicators: (see Annex 1)

Preliminary performance indicators have been selected. These will be further discussed and refined at preappraisal and appraisal and with the preparation of a monitoring & evaluation manual.

Success in achievement of outcomes set by the Global Development Objectives will be verified by: (i) the overall improvement of a set of bioindicators (indicators mammals/birds such as "abundance of red-fronted gazelle, warthog and/or red-neck ostrich" in terrestrial areas and birds such as "abundance and nesting of the crown crane and/or brown pelican" in wetlands) in conservation areas whose data would be collected through technical (aerial surveys) and participatory ("grap" and line transects) ecological monitoring; (ii) the reduction of livestock encroachment in conservation areas (as measured by aerial surveys); and (iii) the percentage improvement of range quality indicators (e.g. incidence of perennial

grass as measured by participatory and scientific monitoring ... scientific suitability of indicator to be verified).

Success in achievement of outcomes set by the Project Development Objectives will be verified by: (i) the number of conservation areas where management by inter-communal association has lead to improvement of bioindicators, (ii) the number of communes where more than 20% of the budget is allocated for improvement of natural resources management.

Success in improvement of output related to national and local capacity building will be verified by: (i) the degree to which improved knowledge about pastoral systems and users is being used to organize communal & inter-communal conservation planning, (ii) percentage of people who have benefited from training or awareness modules who are engaged in conservation activities, (ii) the percentage of livestock owners who are voluntarily following communal rules for range utilization, (vi) the degree of DNCN & SCG mainstreaming of communal assistance in its work program, (v) the organization of, and donor commitment to, an incentive and result-oriented system for sustainable financing of commune-based conservation.

Success in improvement of output related to the establishment of inter-communal conservation areas will be measured by: (i) the number of conservation areas which have acquired a legal status, (ii) the percentage decrease in number of human-elephant conflictual events, (iii) the percentage achievement of activities registered in conservation area management plans for the project period.

Success in improvement of output related to the inclusion of biodiversity management in off-reserve communal planning will be measured by: (i) the number of communes equipped with a Commune Development Plan with rigorous new rules & planning for biodiversity conservation, (ii) the number of local initiatives/micro-projects implemented that are evaluated to be successful at sustainable improvement of biodiversity.

B. Strategic Context

1. Sector-related Country Assistance Strategy (CAS) goal supported by the project: (see Annex 1)
Click here to get to the CAS Document

Document number: Report No. 17775 MLI **Date of latest CAS discussion:** April 24, 1998

A new CAS is being prepared to replace the current 1998-2000 CAS. The current CAS was to support the 1997-2010 Government Strategy for Accelerated Development by focusing on (i) sustainable human development and (ii) stable economic growth. Environment management is treated as a crosscutting issue to be addressed with natural resources management projects, GEF projects and components of rural development operations. The Arid Rangeland & Biodiversity is proposed in the baseline program in "Support to competitive broad-based growth in the rural sector". The CAS recognizes that variable climatic conditions, which are an impediment to stable growth, are compounded by the degradation of natural resources including vegetation cover and biodiversity. The July 2000 Interim PRSP ranks natural disaster as the primary cause of poverty in rural area and relates it to the fragility of the Malian ecosystems. The IPRSP supports the Rural Development strategy whose specific goal is *(i) to seek food security in a manner that integrate the expansion, diversification, and optimum development of production in agriculture, livestock, fisheries and forestry, (ii) increase the productivity and protection of the environment, within a sustainable natural resources management framework*. The IPRSP also support the Environment strategy whose basic challenge is to "*protect the ecosystem from harm and manage natural resources in such a way as to ensure the survival of populations and boost output*". It specifically states that the Government will continue implementing projects in the field of biodiversity. Finally, the IPRSP is clear that all sector strategies are to be implemented against the backdrop of decentralization and administrative deconcentration.

1a. Global Operational strategy/Program objective addressed by the project:

Mali has ratified the Biodiversity Convention (1992), the Convention on Migratory Species (1990) and the Desertification Convention (1996). The Project is consistent with the GEF Operational Strategy for biodiversity, particularly OP1 (Arid/Semi-arid ecosystems) through support for activities in savanna grassland habitats of the Sahelian ecosystem. It is also consistent with the Objectives (Art. 2) and Principles (Art. 3) of the Desertification Convention.

The Project is also consistent with COP guidance as it focuses on the conservation of critical ecosystems and threatened species and supports the active involvement of local communities in management decisions and as beneficiaries of protected area management. It responds to COP3 guidance through promoting capacity building for conservation and sustainable use by improving management of natural resources. In line with COP4 guidance, the Project takes an ecosystem approach to maximize biodiversity conservation in a range of ecosystems under different management regimes, involving a range of stakeholders including local communities as well as the private sector, NGOs and government agencies.

GEF financing would be implemented in eighteen communes of the Gourma and target the establishment of seven new conservation areas as well as improvement of natural resources and range quality off conservation areas. The conservation of the Gourma biodiversity is registered into the main international strategies (e.g. Ecologically sensitive sites in Africa, WB -- Conservation Strategy in the Afrotropical Realm, UICN -- Strategy for Sahelo/Saharan Antelopes -- Bonn Convention for Migratory Species - Birdlife's Important Areas for Bird Conservation) and they are registered among first and foremost priorities in the Mali NEAP and in the biodiversity strategy.

The Gourma lies between 200-400 mm isohyets. It appears early in the bibliography (e.g. IFAN 1955) as an area rich in wildlife and plant species. Such richness spawns from unusual landscape features: The Gourma represents a concentration of Sahel habitat diversity. It lies at the edge of the Niger delta and possesses numerous lakes, some permanents, that harbors a rich bird variety including many paleartic migrants. Because, the watershed is "inclusive" there is little drainage out of the Gourma; water retention in lowland areas maintains rich acacia forests with species often threatened elsewhere in the Sahel. Permanent wetland and acacia forests provide water, forage and shelter for the survival, and actual development, of an estimated 700-rich elephant herd. The presence of this genetically isolated elephant herd, which is also the world northernmost population, adds to the uniqueness of the area. Inselbergs, scattered in the Gourma have acted as isolated islands where rodent speciation has been documented. Many small carnivores or birds of prey find suitable shelter or nesting in their rocky formations or cliffs. The Gourma use to harbor the widely distributed fauna of the Sahel including the dama, dorcas gazelle, the oryx and the redneck ostrich; many of these species are near extinction today. ILCA reports the existence of 824 plant species.

2. Main sector issues and Government strategy:

Main Sector Issue

Wildlife & natural habitat - After Mali acquired its independence in 1959, it faced many development challenges and underwent periods of political turmoil. In such context, management of wildlife or conservation of protected areas rapidly became a law priority. Conservation was entrusted to the Forestry Department with command and control instructions. With the appropriation of land and wild resource by the colonial power, and then by the independent Government, ancestral rules for conservation practically vanished and a conflictual relationship settled between forestry guards and communities. The situation worsened with the 1977-1992 national hunting ban. Past strategies were abandoned in 1995, but the

country had to face its 35-year outcome: Wildlife and natural habitat had nearly disappeared while protected areas were poached out and to a large extent invaded by farmers or herders. Remnant wildlife and patches of natural habitat only remained in the most inaccessible areas.

Law national capacity - 35 years of top-down enforcement-based policy -- to implement a mission considered by the then-Government to be a low-priority -- had also dire consequences on human resources. Forestry staff did not acquire professional skills for wildlife management, were not made aware of alternative approaches or were weakly committed to conservation. In addition, and until recently, unlike most countries of the region, the Government was not ready to explore alternatives for its biodiversity management system and institutions. This also has changed, but a lot of efforts are now required to accompany the country in making its institutions more efficient, better adapted to the current country context as well as to invest in its human resources. Conversely, empowerment of communes and communities present the opportunity to build the capacity of a new group that is not influenced by conservation history, can actually provide sensitive and widely accepted solutions and has the legal and traditional authority to enforce them.

High poverty & low awareness implies little incentive for alternative behavior - Policy changes in Mali are encouraging, but the basic forces against conservation of biodiversity remain. Poverty is high and awareness of the national or global value of biodiversity is low both locally and nationally. The country's development is strongly dependent on cotton and livestock; the expansion of both (at the expense of natural habitat) is the main pillars of economic grow. In such context, it is understandable that Government or communities' incentives for conservation are limited. All conservation projects must therefore accept such context and propose alternatives that are locally applicable as well as provide solutions and benefits rather than new constraints to much needed development.

Government Strategy

The Project supports implementation of the Biodiversity Strategy. However, within the strategy, the approach selected for natural ecosystem conservation is enabled by the legal framework of decentralization and deconcentration of administrative services.

Decentralization - The adoption of the 1993 Decentralization Law and the subsequently institutional structures put in place with the establishment of local and regional authorities following local elections in 1999 are the culmination of a political process that started in 1990 and is considered as the center-piece of the reform of a highly centralized and inefficient public administration. Following the enactment of the new Law, a series of regulations for its implementation were drafted and approved. Not only the territorial structure has been impacted but also the structure of power and hence the way resources and local development will be managed. For example, elected Tuareg municipal leaders in the Gourma indicated that they felt they had gained political power, which helped them deal with the aftermath of the rebellion.

The Malian decentralization has genuinely emphasized local empowerment with a concern for building a participatory decentralization from the bottom up. Mali took concrete steps demonstrated by the participatory process by which the communes were delimited, the provision in the law to improve the accountability of local elected officials to the people and the recognition of nomad people through the "Fraction".

A specialized ministry was created in early 2000, the Ministère de l'Administration Territoriale et des Collectivites Locales (MATCL) to lead and coordinate the implementation of the decentralization policy and address the needs of the decentralized institutional levels more effectively. Given the above, for the first time in its recent post-colonial history, Mali has now the foundations for a more effective local government system and a more efficient territorial administration. But while these significant progresses

have profoundly reshaped the country's territorial structures they are not without difficult challenges, which explains why the implementation of the 1993 Law has been so slow. The current clarification efforts of the regulatory framework will help remove some of the constraints faced by the implementation of the Decentralization Law.

Mali has set-up a two prong mechanisms to provide support to municipalities: (i) a financial support mechanisms the Fund for Investment in Territorial Collectivity (French acronym FICT) which is managed by a parastatal the Agency for National Investment in Territorial Collectivity (French acronym ANICT) and (ii) a technical support mechanisms which is a network of Center of Communal Councils (CCC) which is charged to provide technical advise to commune who want to mobilize funds from the FICT.

The law establishes that communes have a public and a private domain. Communes are responsible for managing and maintaining their domain that may comprise forests, waters, wildlife, etc. Implementation is not fully effective yet, but the government is in the process of (i) identifying the existing infrastructure and domains to be transferred to each commune; (ii) identifying transferable responsibilities for natural resource management; and, (iii) identifying the modalities of such transfer. Currently, the Decentralization Mission is working with the Ministry of Environment according to a specific canvas: (1) study of the attributions and functions of the ministry; (2) discussion with a working group of the roles and functions that can be transferred to local governments; (3) identification of related resources to be transferred; (4) validation. Principles of subsidiarity and simultaneous transfer of resources are guiding the process. Obviously, the situation is in flux and consecutive laws have created areas of confusion and even contradiction. The recent law on land management (Loi fonciere et domaniale) and the draft law on livestock management (Charte Pastorale) indicate, however, that local governments are being given increasing powers for organizing and managing local development either directly or through delegation to a variety of local associations and institutions.

Biodiversity - Following the 1993 Decentralization law, in 1995 Mali adopted several orientation laws including the Law 95-004 on Management of forest resources and the law 95-031 on Management of wildlife and its habitat. These laws were designed in such a way that their regulations could be coherent with the decentralization process. With the adoption in 1999 of the National Environmental Action Plan, the Government strengthened its "policy for the environment" with seven strategic axes including strengthening of national capacity, restoration of degraded areas, organization of a permanent system of control and monitoring of the environment. The NEAP proposes nine programs including a Programme for the conservation natural ecosystems in eight priority areas, parks and reserves including the Gourma. In 2000, the environment was attached to a prominent ministry with the creation of the Ministry of Equipment, Territorial Planning, Environment and Urbanism (MEATEU). The 2001 Biodiversity Strategy & Action Plan now confirms the country commitment for the protection of the priority eight ecosystems. In coherence with the decentralization context, it states that the management of natural ecosystems must include (i) sustainable use of resources, (ii) empowerment of communities and local Government, (iii) ensure equitable distribution of conservation benefits. The line ministry is currently preparing a Letter of Policy for Management of Biological Diversity. It is expected that several new regulations will be required including an institutional reform of the National Nature Protection Directorate.

3. Sector issues to be addressed by the project and strategic choices:

Sector issues - biodiversity potential and threat (See matrix analysis in Annex 4)

Low (400 to 200 mm per year) and variable rainfall are normal but constraining dimensions to natural ecosystem management in the Sahel. These last decades have known the paroxysms of dryness with

unusual water deficits in 1968-70 and again in 1984. Consequences on the ecosystem were everywhere dramatic: the vegetation cover regressed, "dead" forests and sand dunes appeared, soil erosion developed and livestock and fauna withdrew on competitive spaces.

Until the seventies, the Gourma was relatively buffered from such occurrence. Because of the relative absence of permanent surface water and scarcity or difficulty of access to groundwater, permanent human settlement was limited to its fringes. Pastoral activities and hunting were, because of their mobility, the only traditional forms of human occupation. As a consequence, and contrarily to most of the Sahel, in the early seventies, the Gourma remained biodiversity rich with a functioning ecosystem resisting well the effect of climatic variations and low-intensity use. It is worth noting, that over the years, the elephant herd actually increased from about 50 animals in the fifties to nearly 700 today. Meanwhile all other populations of elephants in Mali went extinct.

Over the eighties and nineties, biodiversity loss increased with a temporary easement in the late eighties; the Tuareg "Rebellion" prevented vehicle poaching and lead to some reconstitution of wildlife and several good years of rainfall lead to substantial recovery of vegetation (mostly tree species). Nowadays, the Gourma ecosystem is threatened as a consequence of the increase of the human populations and livestock combined with inadequate land-use practices imported by new comers (e.g. tree looping for goat feeding), favored by developers (e.g. multiplication of water holes, farming of marginal land) and adopted by many. With the return of peace and the rush to grab land and with the arrival of outsiders and outsiders' herds (with no historical commitment to sustainable use of resources) the situation worsened. The number of human/elephant incidents also demonstrates the increase in human pressure over water; deaths of herders are signaled every year.

So the root causes natural habitat and grassland degradation and quasi disappearance of wildlife are linked to the significant increase in livestock numbers, the inappropriate use of the grazing potential, the drive for cultivation of marginal land (often good natural habitat) and unregulated hunting practices. Losses of mammals and birds are attributed not only to habitat loss but also to increase in poaching, particularly vehicle poaching by outsiders. This situation originates and continues because of lack of incentive for alternative behavior or practices, lack of awareness or knowledge of alternatives both at the Government and local level. As long-term trends indicate, a serious drought is bound to occur again. This will further worsen the current condition for both the people and biodiversity. The Project can help plan for, and hopefully buffer, its next occurrence.

Strategic choice

The proposed project has opted for the following strategic options: (i) Focus on conservation while coordinating and leveraging development, (ii) build on the decentralization process and instrument to empower communities, (iii) invest in local human resources and institutions, (iv) identify and address the root causes of degradation by using an holistic approach, (v) set-up sanctuaries, called conservation areas, to secure a representative sample of the Gourma natural biodiversity, (vi) provide small-scale support to improve biological resources management off sanctuaries, (vii) coordinate and cooperate with conservation efforts in Burkina Faso, (viii) prepare the post-project era through fund raising and organization of a reward-based budget-support mechanisms.

Cooperation and coordination - The GEF and FFEM Project intends to focus on conservation of biodiversity on and off reserves. However, it is not implemented in a vacuum. It has already established strong operational ties with three Communal Development Projects more able to take development concerns of the population (see Annex 2). The Project also intends to take advantage of the expertise and commitment of existing Government services, local NGOs and local groups (e.g. cooperatives) to implement activities for which they have a comparative advantage. By selecting the Communal

Development Plan as the basis for all planning, activities and investments, the Project hopes to avoid duplication and to establish a trustworthy and transparent relationship with all other development partners (donors, NGOs, Government services, etc.) as well as leverage additional commitment from other donors and from IDA operations not specifically committed to the Gourma such as the PNIR, PASAOP, PGRN2 and SDSDP.

Decentralization for community empowerment - The Project plans to take full advantage of the 1993 decentralization reform, laws and subsequent regulations which calls for empowerment of communities, through commune, for the management of land resources. The Project is organized around Municipalities and Municipal Council, investment in natural resources is based on Communal Development Plan and financing is to be channeled through the existing FICT (Communal Investment Fund). If necessary, the Project will help the Government improve national regulations. New regulations enable communes to set-up associations for the management of specific venture or resources. The project will take full-advantage of this opportunity to assist in the creation of commune or inter-commune associations for the management of Conservation areas.

Investing in human resources - Awareness raising and capacity building at all level will be a center strategy of the Project. Specially tailored training will be provided to staff of central Government service, of deconcentrated Government services of the Gourma, to members of the Project teams, to members of Commune councils and to communities. Post literacy training will also be a center trust to ensure that the populations involved in the project can benefit from simple reading material and carry out simple accounting. The Project will also attempt to identify and build on traditional knowledge and holders of such knowledge.

Holistic approach to diagnostic and planning - With the objective of mainstreaming biodiversity management in communal and inter-communal development, an adapted variation of the holistic approach will be used. The objective is to ensure (i) that the partic ipatory diagnostic focuses on the causes of biodiversity degradation rather than the symptoms and draws on traditional knowledge of alternative practices and (ii) that solution to address the "causes" are discussed at the inter-communal level and registered in the Communal Development Plans as well as Conservation area management plans. The communities will identify these “solutions” with assistance from technical and traditional experts. Because the area covers a huge pastoral space and works with mobile resources (livestock, wildlife), the diagnostic will also be carried out at the landscape level over a territory that reaches far out the boundaries of the project into Burkina and into the Niger delta.

Establishment of wildlife and habitat sanctuaries - To minimize the probability of human - elephant conflicts, and preserve wildlife and natural habitat in sanctuaries, the Project will help communes identify and set-up new conservation areas. The rules for management of these areas will be set and enforced by new communes and/or inter-communes associations with assistance from the relevant Government deconcentrated service. These rules will be registered in Management Plans. Seven conservation areas are identified: three will target the dunal & inter-dunal system (Séno Mango, Tessit and In Adiatefene of each about 100 000 ha), three will target inselbergs and immediate areas (Gandamia, Boni & Fatma Hand each about 5 000 ha) and one will target part of the Gossi lake and adjacent wetland and terrestrial area (about 5 000 ha).

Small-scale support to improve biological resources management off sanctuaries - Following the holistic diagnostic and preparation of Communal Development Plan the project will provide small-scale support to implement micro-projects and micro-ventures for conservation of biodiversity off sanctuaries. The scope of such ventures may actually cover huge pastoral land and involve several municipalities. To convince the pastoral communities that there exist alternatives to current grazing practices that works and favor grass diversity, the project will pilot a demonstration site where the "pastoral perimeter" approach

will be implemented. A test was initiated in a nearby area, which caught the attention of the Boni community. That community has already requested assistance for the organization of a pastoral perimeter. Similarly, a new approach to organize the holistic management of impoundment or natural wetlands has been tested in north Burkina; this approach will be proposed to communities and implemented where/if the demand emerges.

Transboundary coordination - Wildlife, and in particular elephants, as well as livestock are roaming on each side of the border between Mali and Burkina. In Burkina, the GEF National Natural Ecosystem Management Project (PRONAGEN) is designed along the same principles as the proposed project in Mali. Two proposed conservation areas in Burkina (Séno Mango and Beli) are adjacent to two proposed conservation areas in Mali (Séno Mango and Tessit). Both projects are allocating funds for transborder coordination and intend to implement together activities such as studies (e.g. elephant migration or pastoral tenure and users system), negotiation of conservation area limits and joint law enforcement.

Evolution toward non-project project - Communes will need additional and regular fiscal resources for their development. On this basis, the Project will work on the design and set-up of a mechanism that provides budget support to communes as a reward for success in conservation area management as demonstrated by a set of agreed bioindicators. If possible, such system will be tested during the Project (to be discussed at preappraisal.)

C. Project Description Summary

1. Project components (see Annex 1):

The Project will be implemented through four components:

Component 1: Capacity building of populations and institutions
Component 2: Support to inter-communal management of conservation areas
Component 3: Support to commune-based initiatives
Component 4: Project administration and monitoring

Component 1: Capacity building of populations and institutions - This component is divided into two sub-components: (1.1) National capacity building and (1.2) Local capacity building.

Sub-component 1.1: National capacity building - This sub-component will provide support for (i) international coordination with GEF PRONAGEN in Burkina Faso by an NGO or consulting firm, (ii) training and awareness building to national staff of the National Directorate for Nature Protection in protected area planning, management, monitoring, etc., (iii) national studies and workshops geared at improving the national policies, legislation and institutions in the framework of decentralized management of biodiversity, (iv) specific studies on (a) setting up a result and incentive-based system for sustainable financing of national and communal protected areas, (b) hunting & ecotourism concessions and related economics and fiscality, (c) survey of wildlife in priority protected areas and preparation of management plans for submission to other donors, (v) the design and establishment of a national web portail and conservation database, (vi) the design and establishment a small documentation center at the National Directorate for Nature Protection.

Sub-component 2.2: Local capacity building - This subcomponent will provide support for (i) national technical assistance to commune councils for conservation planning and conservation area management, (ii) training for project staff and partners services in various themes such as participatory & ecological diagnostics, techniques of negotiations, gender approach, holistic management, wildlife survey, habitat management, operation of GPS, etc., (iii) training to communities in functional post literacy, (iv)

training to commune councils, village leaders and community members in planning and techniques for accountable management of biodiversity micro-projects and conservation areas, (v) conservation awareness activities in schools, using rural radios, plays, etc., (vi) the creation and legal recognition of inter-commune associations for management of conservation areas, (vii) organization and moderation of local workshops and committees to foster local discussions on improvement of resource management practices, (viii) a Malian-Gourma/Burkina-Sahel wide study on pastoral tenure, traditional and current range management practices and rules, users rights and constraints.

Component 2: Support to inter-communal management of conservation areas - This component will provide support for (i) ecological diagnostics and basic studies in each of the targeted conservation areas, (ii) negotiation and delineation of seven conservation areas, (iii) design, write-up and adoption of management plans for each conservation areas, (iv) initiating implementation of the management plans by financing activities such as surveillance, fire and habitat management, building of trails, watch towers, small water infrastructures, materializing limits, installing sign posts, small tourism infrastructures, etc. (v) conducting participatory ecological monitoring, (vi) conducting aerial surveys of wildlife and livestock, (vii) monitoring land use and producing local maps using satellite images.

Component 3: Support to commune and inter-commune initiatives off conservation areas - This component will provide support for (i) carrying out participatory diagnostics at the inter-commune level complementary to existing communal diagnostics, (ii) carrying out additional studies to identify constraints and solutions to local conservation, (iii) assisting commune council in discussing biodiversity issues at the inter-commune level and integrate biodiversity conservation and range management in the Commune Development Plans, (iv) providing advise for, or cofinancing, biodiversity-related micro-projects or micro-services registered in the Communes Development plans, (v) piloting holistic management of pastoral resources in at least one demonstration site adjacent to a conservation area, (vi) carrying out participatory ecological monitoring of micro-ventures' impacts and sustainability.

Component 4: Project administration and monitoring - This component will provide support for (i) coordination of project activities from planning to implementation and supervision, (ii) ensuring availability of funds at the field level, (iii) procurement of good, work and services in a timely manner, (iv) ensuring adequate management of project funds, (v) monitoring implementation performance, (vi) coordinating activities with other projects in the region and in the sector, (vii) enabling meetings of the national steering committee.

Component	Indicative Costs (US$M)	% of Total	Bank financing (US$M)	% of Bank financing	financing (US$M)	% of financing
	0.00	0.0	0.00	0.0	0.00	0.0
1. Capacity building of populations and institutions	3.05	25.3	0.00	0.0	2.64	48.0
2. Support to inter-communal management of conservation areas	2.06	17.1	0.00	0.0	1.29	23.5
3. Support to commune-based initiatives	5.93	49.2	0.00	0.0	0.77	14.0
4. Project administration and monitoring	1.02	8.5	0.00	0.0	0.80	14.5
Total Project Costs	12.06	100.0	0.00	0.0	5.50	100.0
Total Financing Required	12.06	100.0	0.00	0.0	5.50	100.0

2. Key policy and institutional reforms to be sought:

The most important policy reforms for decentralized management of natural resources have already been enacted and are implemented. To improve efficiency and further adapt to the decentralization context, the Project will help the central Government implement existing policies as well as examine alternative set-up for its biodiversity, wildlife and forestry legislation and institution. This is not expected to lead to substantial reforms, but to improvement of regulations governing allocation of resources, devolution of management rights, institutional status, internal organization and human resource management of the National Directorate for Nature Protection (DNCN) and sustainable financing of conservation.

3. Benefits and target population:

Target population

The Project will focus implementation on 9 priority communes of the Gourma. Nine additional communes will also benefit from project support for conservation activities registered in their Commune Development Plans. These 18 communes span three Cercles: Douentza (Region of Mopti), Rharous (Region of Timbuktu) and N'Tillit (Region of Gao). Because of the population mobility, it is difficult to provide accurate figures on the Gourma demography. By cross-referencing several documents, it is estimated that the 18-commune population is in the order of 200,000 inhabitants. These are a sub-set of the total population of the Cercles in which the communes are located which is estimated to be 150,000 for the Cercle of Douentza; 95 000 in the Cercle of Gourma-Rharous and less than 50,000 in the Cercle of N'Tillit. The population is divided between Tuaregs, Peuls, Songhais and Dogons. Each commune covers a very large territory and encompasses several villages or fractions. Except for the Dogons and Songhais who are mostly farmers, the bulk of the population is engaged in extensive pastoralism. Depending of the quality of the range in the Gourma and elsewhere, the area also receives seasonal herders from Burkina, Niger and from other regions of Mali.

Benefits

The Project seeks to provide a range of local benefits from marginal but sustainable improvement of living conditions to decreased vulnerability to climatic variations. These benefits originates from (i) better natural resources and grassland management and associated increase in productivity, (ii) better local knowledge, awareness, capacity and empowerment of communes for management of fragile land resources, and (iii) better national capacity, legislation and institutions for decentralized management of natural resources.

Global benefits will be generated through (i) increased ecological security of flora and fauna rare or threatened on a regional and global scale including the northernmost populations of African elephants; (ii) preservation of a representative area of the West Africa Sahelian natural ecosystems which are exceptional on a national, regional and global scale; and (iii) preserving genetic diversity within ecologically, economically and culturally important species in natural population within their historical range.

4. Institutional and implementation arrangements:

The set-up proposed below is a preliminary attempt at organizing Project implementation. It will be reviewed at preappraisal to ensure cost efficiency, adequacy with national institutions and municipalities, and availability of human resources.

Steering - A small Steering Committee will be established. It will be presided by the Director of DNCN but all of its other members will be from the Gourma area (the list is to be determined but it will comprise at least representative of the Mayors, of the Government to the three Cercles that contain the Gourma, of the civil society, etc.).

Oversight (maitrise d'ouvrage) - The Project would be under the overall responsibility of the National Directorate for Nature Protection (DNPN) within the Ministry in charge of biodiversity (currently it is the Ministry of Equipment, Territorial Planning, Environment and Urbanism - MEATEU).

Coordination (maitrise d'oeuvre) - The Project will be headed by the Conservator of the Gourma Conservation Service (SCG is a new deconcentrated service of DNCN). He/she will lead a small team of national experts (including at least a women), support staff located in Douentza as well as forestry agents scattered in the communes. Expertise sought include (i) wildlife management, (ii) socio-pastoralism, (iii) socio-anthropology, (iv) environmental awareness, (v) monitoring & evaluation. The SCG will be equipped with three vehicles to enable access to remote areas where TSU teams are stationed. Their role is to provide advise and supervision to TSU teams in terms of strategic planning, training, technical advise, coordination of activities, validation of proposals and management plans, coherence with safeguards and good practices, contact with the international community, etc. The SCG is fully responsible for component 1 and 4 of the Project as well as the parts of Component 2 and 3 that cannot be delegated (e.g. wildlife law enforcement).

Field implementation (maitrise d'oeuvre déléguée) - The 9 priority communes are regrouped into 4 clusters: Douentza, In Adiatefene, Mondoro/Gossi & N'Tillit. The Project will recruit NGOs or Consulting firms to provide technical assistance to each of these clusters. A standard team of technical assistant will be called a Technical Support Unit (TSU). A TSU will comprise one conservation specialist (called Communal Counselor), one accountant as well as several animators (the number will depend on the size of the cluster). The Counselor will be recruited in the subregion. Animators will be recruited in the Gourma. They will have high school degrees and will receive additional training in skills relevant to their task. Each cluster will possess one vehicles (mostly for group mission and security) and a motorbike (for the Counselor's work). The animators will be spread out in villages and fractions and equipped with camels. TSUs are to help the commune implement component 2 and 3 of the project (specific arrangement and role of CCC tbd at preappraisal).

Partner Government services - The SCG (or the TSU or the Communes - this is tbd at preappraisal) will sign protocols with relevant Government deconcentrated services such as (i) livestock, (ii) agriculture, (iii) education. These protocols will be result-based and drafted on a need-basis during implementation.

D. Project Rationale

1. Project alternatives considered and reasons for rejection:

Mali has identified eight priority ecosystems and related-sites for conservation. The Bank and GEF could have elected to cover several sites. It was decided that this project would focus solely on one site, albeit a very large one, and therefore one ecosystem. In addition to the biodiversity value of the Gourma, one of the compelling reasons to select this site is the transnational dimension that initially justified the joint request by Burkina and Mali. Another is the emergency for action, and need for land planning, with the rapid influx of population following the end of the Tuareg rebellion. Other important sites are not targeted because other donors are involved and because the Nature conservation agency of Mali does not have yet the capacity to handle the additional degree of complexity of multiple sites.

In the Gourma, under a "do no GEF project alternative", strengthening of commune capacity and local development implemented by other operations is likely to improve living conditions in the Gourma in the short term. Natural resources management is planned under these projects. However, the proposed scale

of intervention is not commensurate with the magnitude of the overall problem. As a consequence, it is likely that current degradation trends would continue. This would include degradation of natural habitat, rangeland and further extinction of species. The human/elephant cohabitation is likely to worsen perhaps leading to drastic actions to eliminate elephants.

Alternatives approaches were considered at Project identification. Usual alternatives run from top-down planning and law enforcement to hand-off approach based on awareness building. Mali does not currently have the capacity to implement the first alternative, nor would the population accept it and respect its rules. Conversely, awareness building would have little chances to bear significant results given the extreme poverty of the population, its low level of literacy and the long-standing perception that all spotted wildlife is to be harvested and all vegetation grazed. These alternatives were considered and rejected in favor of a participatory incentive-based approach based on negotiation, technical assistance, demonstration of results and commune empowerment for conservation. Decentralization makes this approach legally feasible. Commune council and community members consulted are favorable to the approach.

2. Major related projects financed by the Bank and/or other development agencies (completed, ongoing and planned).

Sector Issue	Project	Latest Supervision (PSR) Ratings (Bank-financed projects only)	
Bank-financed		Implementation Progress (IP)	Development Objective (DO)
Natural resources management	PGRN (completed)	HS	HS
Rural infrastructures	PNIR (ongoing)	S	S
Grassroots support to rural communities initiatives	PAIB (ongoing)	S	S
Agriculture services, research and farmers organization	PASAOP (planned: negotiation stage)		
Natural resources management	PGRN2 (planned)		
Capacity building & equipment of decentralized administration	Strengthen Decentralization & Service Delivery Project (planned)		
Other development agencies			
UNCDF - Capacity building & equipment of decentralized administration and	PACR - Mopti		
UNCDF - Capacity building & equipment of decentralized administration	PACR - Timbuktu		
AFD - Capacity building & equipment of decentralized administration	PADL - Gao		
IFAD/GEF - Biodiversity conservation	Mopti Area Biodiversity		

IP/DO Ratings: HS (Highly Satisfactory), S (Satisfactory), U (Unsatisfactory), HU (Highly Unsatisfactory)

3. Lessons learned and reflected in proposed project design:

Sector & Themes KM

ENV & QAG Review of GEF-supported biodiversity projects in Africa

Several reviews were consulted: 1998 QAG review of the Natural Resources Management Portfolio; 1997 QAG review of biodiversity projects in Africa; 1998 ENV bank-wide review of biodiversity projects. As a general rule, these review call for better upstream design, strong commitment & capacity by Government and other stake holders, mainstreaming in the country portfolio, setting up realistic and consensual development objectives, coordination with NGOs and other as well as more intense than normal Bank supervision. An apparently more recent QAG diagnostic of a sample of GEF-supported projects is " *that future projects must [...]: (i) integrate the biodiversity conservation agenda into the broader national development agenda, (ii) biodiversity projects need to focus more on methods for dealing with socio-economic pressure in perimeter zones where populations may be dependent on forest exploitation, (iii) project design should take into account technical and stakeholders review of the final design, and (iv) clearly defined goals and objectives are essential to focus on project efforts, monitor progress, and demonstrate impact.*" The project accounts for the QAG recommendations as demonstrated by some of its strategic choices (i) Focus on conservation while coordinating and leveraging development (i.e. mobilize resources to foster development in perimeter zones to deal with socio-economic pressure), (ii) build on the national decentralization process and instrument to empower communities, (iii) identify and address the root causes of degradation by using an holistic approach (i.e. account for local stakeholders knowledge), (iv) provide small-scale support to improve biological resources management off sanctuaries (i.e. further deal with socio-economic pressure.) As recommended, special efforts are developed to set clear, realistic and measurable goals.

Community-Driven Development

In many countries, limited government success in managing natural resources, providing basic infrastructure, and ensuring primary social services has led to the search for alternative options. One of these options is participatory community-driven development. The substantial experience of what works and does not work which has been accumulated to date has been drawn upon in designing the Project. In particular, for the government and outsiders to induce community-driven development on a large scale requires agencies to invest in local organizational capacity and support community control in decision-making. Also, experience shows that community-driven development does not automatically include marginalized groups, the poor, women and ethnic minorities unless their inclusion is especially highlighted as a goal. Finally successful community-driven development is characterized by five main factors: (i) local organizational capacity or the existence of viable community groups, (ii) the appropriate fit of technology to community capacity, (iii) effective outreach strategies, (iv) client responsive agencies, and (v) enabling higher government policies and commitment. All these factors are built into the design of the Project.

Pilot Pastoral Perimeter Program

The interface with the livestock sector is one of the most important dimensions of the Project. The experience of Pilot Pastoral Perimeters Program (PPPP), in particular in Chad and Senegal shows that proper utilization of rangeland, with rules set up by the community on a spatial and temporal basis, can lead to range improvement and improve the relationship among pastoralists and others (farmers and traders). The holistic approach adopted in PPPP will be taught to project teams to ensure that their analysis of the production and conservation system focuses on the causes of degradation rather than the symptoms.

Arid land ecology

Lessons from northern Africa (e.g. Tunisia, Morocco) indicate that, within an arid ecosystem, a 100,000 ha protected area can be adequate for proper conservation of most large arid land mammals. Northern Africa projects also show that significant habitat restoration, even with rainfall less than 150 mm/year, can be spectacular and lead not only to habitat recovery but also to the reappearance of locally extinct species.

Lessons from the Burkina GEF Pilot (GEPRENAF)

Since May 1996, community-driven development has been tested with its full biodiversity conservation dimension. The Diéfoula-Logoniégué area has received financial assistance from the GEF/Belgium through the Pilot Community-based Natural Resources & Wildlife Management Project (GEPRENAF). An independent evaluation of GEPRENAF was carried out which recognized the important achievement of GEPRENAF in term of local development & empowerment of local communities as well as building the foundations for adequate community-based conservation. The evaluation considers ecological achievement as limited (in term of wildlife recovery) but stressed that such recovery can only be the result of long-term commitment. It recommends (i) to pursue and expend the scope of GEPRENAF but maintain a similar level of national technical assistance; (ii) to focus future financing on management of the "conservation area"; (iii) to limit the institutional responsibility of the AGEREF to "concessionaire" of the gazetted forest but clarify the role of the local forestry department; (iv) to diversify sources of revenues by tackling the full range of wildland potential benefits. The recommendations of the independent evaluation are worked in the design of the Project.

4. Indications of borrower and recipient commitment and ownership:

In the past forty years, one must recognize that the successive Governments have paid little attention to conservation. As a consequence, wildlife and protected areas have been subjected to high degradation and little capacity was built in-country to reverse negative trends. Today, with the prominence of environment in the international debate as well as with the improved national understanding that the Malian economic growth is highly dependent to its resource base, the Government has began to place the preservation of the environment among its important priorities. A NEAP and biodiversity strategy was prepared, the forestry service was reorganized to become more service oriented, and the new decentralization law and decree enables commune empowerment for management of wildlife and natural habitat outside parks and reserves.

Conservation of biodiversity in the proposed sites is a priority registered in national plans (NEAP, draft Biodiversity Strategy, etc.). Mali has ratified all the relevant conservation conventions: Biodiversity, Desertification, Migratory Species (Bonn Convention), Wetland (Ramsar Convention) and CITES. The focal point for the biodiversity convention has endorsed the Project (see Annex 4).

5. Value added of Bank and Global support in this project:

GEF assistance would supplement other donors' efforts in support to the Government Program for Conservation of Natural Ecosystem registered in the Biodiversity Strategy & Action Plan (French GEF in Baoulé & Adrar, EU in Bafing area, UNDP/GEF in Baoulé, IFAd/GEF and Holland in the Niger Delta) and complement operations geared at strengthening communes and their development financed by the Government, IDA & other donors (AFD, UNCDF). The Project would not only finance biodiversity conservation activities above and beyond activities targeted by other projects. It would also help improve livestock, agriculture, and natural resources management activities in relation with conservation area management.

By financing the incremental costs of improved biodiversity conservation, GEF participation in the Project will help fulfill its mission with respect to the Convention on Biological Diversity. It is expected to enhance the security of global biodiversity assets by (i) broadening participation of communes in stewardship of wildland, (ii) ensuring that communities share in the economic and environmental benefits of improved biodiversity management, and (iii) leveraging additional financing from other donors for assistance after the Project. In the absence of GEF financing, the Government could not shoulder the incremental cost of improving management of biodiversity or providing incentives to communities and rural residents for adopting better stewardship practices.

The Bank has acquired developed significant experience in preparation and implementation of participatory natural resources management operations, with CBNRM, CBRDP and the new generation of Community Action Programs (CAP). The regional Bank team is at the forefront of the approach and has been piloting it with a strong biodiversity and wildlife dimension in Burkina, Cote d'Ivoire and Benin.

E. Issues Requiring Special Attention

1. Economic

Summarize issues below

Economic evaluation methodology:
Incremental Cost
GEF operations require an incremental cost analysis, which is attached in Annex 2. The total project costs is estimated at $12.13 million with a baseline of US$ 5.34 million cofinanced by the Government of Mali, the 18 communes and associated-communities of the Gourma, IDA (through implementation of other operations), AFD and UNCDF. Incremental cost to achieved global conservation goal are shared between the French GEF for US$1.3 million and GEF for US$5.5 million.

2. Financial

To be defined

3. Technical

To be defined - Implementation will benefit from experience elsewhere in Africa, notably on Pilot Pastoral Perimeters Program (PPPP), and particularly of the experience of GEPRENAF on which design the proposed Program is based. However, there is no specific technical issue other than those related to ecosystem monitoring and information management. The conservation techniques that may be introduced will be simple and easy to master by the community members.

4. Institutional

4.1 Executing agencies:

The National Directorate for Nature Protection (DNCN) and its deconcentrated services in the field have very low project implementation and technical capacity in conservation. They are organized as an administrative service with human resources having little incentive for improvement of behavior or for results. Taking advantage of the decentralization and administrative deconcentration reforms, the Project will need to help Mali rethink its nature protection administration in order to create an environment for result-based behavior.

4.2 Project management:

To be improved at preappraisal. Project management is entrusted to the newly created Gourma Conservation Service newly under the tutelage of DNCN and stationed in Douentza at the edge of the Gourma. Management at municipal level is to be entrusted to Communes councils assisted by national technical assistance teams (Technical Support Units). This set-up is expected to create poles of expertise, which the Project will seek to sustainably integrate in the municipalities. The Project will be the opportunity to reflect on commune staffing for conservation and financing of such staff.

4.3 Procurement issues:
TBD at pre-appraisal. A Manual of procedures is being prepared.

4.4 Financial management issues:
TBD at pre-appraisal. A Manual of procedures is being prepared.

5. Environmental

5.1 Summarize significant environmental issues and objectives and identify key stakeholders. If the issues are still to be determined, describe current or planned efforts to do so.

The Project seeks to conserve and restore biodiversity, which is highly threatened by over hunting and overgrazing. Expected positive environmental benefits are: (i) increased surface area maintained as natural habitat with associated increase in wildlife populations, including the Gourma elephants, and vegetation cover, (ii) improved management of grazing areas with consequential decrease in soil erosion, stabilization of dunes, reappearance of perennial grass-species, etc. Little negative environmental impact is foreseen. Still, it is possible that an improvement of the range's grazing quality conduct communities to increase further the number of livestock or attract herders from other areas. Both of these consequences may reverse the positive trends that the project seeks to establish. In addition, there are minor risks of local erosion or local degradation of vegetation is associated with the small water infrastructure that may prove necessary to build. Finally, the project seeks to stabilize the erratic motion of elephants along their ancestral migration route to decrease the potential of human-elephant conflicts; it is possible that longer sojourn of elephants in some areas increases local degradation of vegetation in lowland acacia forests.

The primary stakeholders of the project are the Commune Councils and the estimated 200 000 populations of the 18 communes of the Gourma who are mostly involved in pastoralism. They are to be assisted by national technical assistance as well as by the deconcentrated services for nature protection.

5.2 Environmental category and justification/rationale for category rating: **B - Partial Assessment**

Because there are a few potential negative environmental but possibly significant social externalities, it was decided that these issues would be addressed with the special focus of an Environmental Analysis including a social assessment. Still, because the project's outcome is expected to be positive socially and environmentally, a full-fledged EA is deemed unnecessary. Consequently the project is classified as B - Partial assessment.

5.3 For Category A and B projects, timeline and status of EA

EA start-up date:	August 2001
Date of first EA draft:	November 2001
Expected date of final draft:	January 2002

ASPEN has reviewed the TORs. A non-objection was given in May 2001. The preparation team has launched recruitment of a two-member team to conduct the EA.

5.4 Determine whether an environmental management plan (EMP) will be required and its overall scope, relationship to the legal documents, and implementation responsibilities. For Category B projects for IDA funding, determine whether a separate EA report is required. What institutional arrangements are proposed for developing and handling the EMP?

Consultants have been instructed to build the EMP within the logframe as part of normal project implementation. External control of EMP implementation will be provided by the national agency in charge of EA. It is being identified as part of the EA process. If necessary, training and operating costs will be provided to that agency.

5.5 How will stakeholders be consulted at the stage of (a) environmental screening and (b) draft EA report on the environmental impacts and proposed EMP?

The Communes & communities have already been extensively consulted and informed by the project preparation team, and by consultants (See also Local Population & Partners Consultation Mission, B. Hassane June 1999 & Project Partners Information Mission, BICD December 1999). Commune mayors and counsels have participated in the project-planning workshop (November 2000). The consultants in charge of the EA are to travel extensively into the project area to interview the local communities and commune councils. Once the EA draft is ready, it will be made available to Government services in Bamako, Mopti, Timbuktu & Gao and will be sent to each of the 18 communes for consultation.

5.6 Are mechanisms being considered to monitor and measure the impact of the project on the environment? Will the indicators reflect the objectives and results of the EMP section of the EA?

Since the project's objective is to conserve biodiversity, the entire monitoring system is geared at measuring environmental indicators. These will be measured through satellite images (vegetation cover), through aerial survey (wildlife and livestock abundance & distribution), and with local participatory monitoring techniques, which will be developed as part of implementation.

6. Social

6.1 Summarize key social issues arising out of project objectives, and the project's planned social development outcomes. If the issues are still to be determined, describe current or planned efforts to do so.

The project targets community development outcome through benefits derived from improved management of rangeland and establishment of conservation areas. Communes, which are the main program beneficiaries, regroup all villages and fractions of the Gourma. As such they are representative of the entire community and will be helped to ensure that financial benefits are equitably shared. Still, little financial benefit is expected during the first six years of implementation. Peripheral outcomes are related to the restoration of grassland quality for grazing, traditional rights over land areas, maintenance of a natural patrimony, preservation of hunting grounds and of natural areas to collect medicinal plants, honey, firewood as well as numerous wild resources that enter the traditional diet or economy (baobab leaves, cram cram, etc.). The ability to continue the above practices is an important social dimension of these mainly pastoral communities.

A number of social risk are linked to the fact these traditional societies are very hierarchical and that both decentralization and the project could empower an already all-powerful elite and less powerful tribes can be displaced by "royal" tribes. Belas for example are quite marginalized and so may be ethnic minorities such as the Dogons, Fulanis and Songhais in areas where Tuaregs are the majority. Women are an issue in all groups. Mitigation measures would include the participatory diagnosis so that vulnerable groups

are identified. As part of the EA, a Social Assessment will look at the potential impacts of the project and of decentralization on these groups and look at the social feasibility of what the Project is proposing. The SA will also provide guidance for the diagnostics and guidelines to be registered in the manual of procedures.

6.2 Participatory Approach: How will key stakeholders participate in the project?

At the field level, Commune Council through national technical assistant, will implements some of the project activities. Implementation will follow a participatory process, which will begin by updating existing participatory diagnostics and Communal Development Plans. These plans mainly list priority communal investments. This exercise will be carried out at the communal and inter-communal level to ensure homogeneity and coherence between each communal territory plan and associated development plan. Its output is a Communal Development Plan that positions each commune within a greater landscape and plans for activities to organize the protection and use of grassland and for investments to restore biological resources. In addition, the limits of inter-communal conservation areas will be negotiated and the rules for their protection and use will be elaborated through a participatory process between communes and their communities. At each steps of the process, there will be possibility to reopen issues to ensure that rules are agreeable, accepted and understood by the communities. This exercise will be feed by an in-depth transnational study of the pastoral system and its users in order to ensure that the solutions that emerge from the participatory process are compatible with current traditions and practices. Ecological studies will also be used as in input to the negotiation process.

6.3 How does the project involve consultations or collaboration with NGOs or other civil society organizations?

At all stages of the process NGOs have been associated. Both IUCN & WWF participated to the formal identification mission. IUCN is a member of the Steering Committee created to monitor project preparation. The Government team and the Bank have regularly met with other NGOs active in Mali such as AMCFE (Association Malienne pour la Conservation de la Faune et de L'Environnement). In the Gourma, several NGOs who are active in the region were invited to contribute to the planning workshop. These are the NEF (North East Foundation), Wetland International, Elwan, IUCN, AFVP, Association des Amis des Elephants, etc. The preparation team carried out a short study to identify all local NGOs that are active in the Gourma and assess their strength and weaknesses.

6.4 What institutional arrangements are planned to ensure the project achieves its social development outcomes?

Institutional arrangements for project implementation are not entirely defined. At this stage it is envisioned that the PCU will recruit a sociologist (probably a women) and a socio-pastoralist. All animators and team members will be trained in participatory techniques.

6.5 What mechanisms are proposed to monitor and measure project performance in terms of social development outcomes? If unknown at this stage, please indicate TBD.

TBD. The preparation team will recruit a consultant to prepare a Monitoring & Evaluation Manual that will propose one or two social indicator to monitor. Since baseline operations are specifically targeting poverty reduction outcomes, it is possible that the GEF Project will rely of these operations to monitor such outcome.

7. Safeguard Policies

7.1 Do any of the following safeguard policies apply to the project?

Policy	Applicability
Environmental Assessment (OP 4.01, BP 4.01, GP 4.01)	Yes
Natural habitats (OP 4.04, BP 4.04, GP 4.04)	No
Forestry (OP 4.36, GP 4.36)	No
Pest Management (OP 4.09)	No
Cultural Property (OPN 11.03)	No
Indigenous Peoples (OD 4.20)	No
Involuntary Resettlement (OD 4.30)	Yes
Safety of Dams (OP 4.37, BP 4.37)	No
Projects in International Waters (OP 7.50, BP 7.50, GP 7.50)	No
Projects in Disputed Areas (OP 7.60, BP 7.60, GP 7.60)	No

7.2 Project Compliance

(a) Describe provisions made by the project to ensure compliance with safeguard policies which are applicable.

OP4.04 on natural habitat is relevant not in term of threat mitigation but in term of conformity with the program global objective which is to improved the long term standing of biodiversity within a natural ecosystems. OP4.30 is relevant even though involuntary resettlement of settlement is an option excluded by the approach itself. The limit of conservation areas will be negotiated with all communities to ensure that no involuntary resettlement occurs. However, collective management of communal resources, even if the communities define rules, could end up restricting resources access from certain users.

(b) If application is still to be determined, describe current or planned efforts to make a determination.

As warranted by OP4.01, and in accordance with OP4.30, an Environment Assessment is being been carried out. The Bank safeguard unit reviewed TORs. Compliance with OP4.01 & OP4.30 will be built within the project design and logframe. Since most investments will depend on the participatory process, the EMP will propose an upstream negotiation process whereby all members of a community are consulted for the delineation of new conservation areas and for the design of the rules governing their conservation. The EMP will be limited to providing guidelines (process framework) for preparation of management plans, for potential work therein, for an inclusive participatory process and for monitoring and evaluation. Site specific, EAs and mitigation plans will be financed as part of the design of conservation area management plans. Efforts will be made to ensure that communes & inter-communal associations, who are to manage conservation areas, are representative of all the communities that surround conservation areas. This should minimize the likelihood of a group excluding another from ripping biodiversity benefits.

8. Business Policies

8.1 Check applicable items:

_ Financing of recurrent costs **(OMS 10.02)**

Cost sharing above country 3-yr average **(OP 6.30, BP 6.30, GP 6.30)**

Retroactive financing above normal limit **(OP 12.10, BP 12.10, GP 12.10)**

Financial management **(OP 10.02, BP 10.02)**

_ Involvement of NGOs **(GP 14.70)**

8.2 For business policies checked above, describe issue(s) involved.

The Government of Mali has little financing capacity to cover the recurrent expenditure for environmental protection. While, the Government has committed to significant cofinancing, it is expected that the GEF

will provide funds to operate and maintain the equipment necessary to implement the Project. At Project end, the Commune and their associations will carry out most activities. Government involvement will be minimal. Still, the Project will finance a study to design & set-up a mechanisms whereby communes are provided resources to deliver conservation results. These resources may be used to purchase services from the deconcentrated forestry entity.

The Project has involved NGOs for consultation at identification and during preparation (see 6.3). The French GEF, who cofinanced preparation, has delegated the management of its preparation funds to a French NGO: AFVP. In turn AFVP has subcontracted some work to a local NGO of the Gourma Area. NGO involvement during implementation is yet to be determined.

F. Sustainability and Risks

1. Sustainability:

Sustainability is linked to the ability of the Project to provide incentives and capacities at all levels to improve (i) long term commune, communities and Government commitment to conservation, (ii) short and long term benefits, financial or otherwise, that balance conservation costs; and (iii) cost-effectiveness, quality and realism of proposed activities and investments. These depends first on the initial commitment of the Government, on the project approach and ability to stimulate local interests and draw on the human resources and biological potential as well as on a plan for a realistic exit strategy.

Government Commitment

The success of the Project for restoration of degraded habitat and policy changes to improve range, water, and wildlife resources management is inextricably linked to the national legal and institutional environment for conservation and to the Government willingness to improve it. The Governments commitment to sustainable natural resources use -- enabling revenue capture by the rural communes and improving both the knowledge base and field capacity for effective stewardship of biodiversity resources -- is encouraging and should contribute significantly to the sustainability of the Project results. Still, to improve further the national capacity, the GEF and other donors will help the Ministry of Environment improve the national legal and institutional framework for protected area management as well as improve its human resources capacity.

Financial sustainability of conservation areas

The project focuses on capacity building and not on physical investments. As a consequence, it does not intend to create an infrastructure expensive to maintain or a system expensive to run. Except for biomonitoring and minor surveillance, the maintenance of the conservation areas is mostly a non-activity (no hunting, no farming, no grazing). Community rules, and willingness to respect these, are the essence of the proposed design. Still, by the end of its proposed implementation period, it is not expected that financial benefit will fully balance the small financial costs of managing conservation areas, the opportunity cost of non-activity and provide sufficient incentive for long term commitment of Communes.

Some tourism and small game hunting will be organized during implementation. However, it is likely to remain marginal for several years and until wildlife restoration is high. Such financial benefits originating from improved resource management, tourism or hunting are likely to directly profit individuals (livestock owners, tourism guides, etc.).

Additional sources of long-term financing (estimated to be in the order of $ 200,000 per year) are therefore needed for subsequent phases. The Project will therefore finance fund raising activities (using for example the elephant as a flagship species). The Project will also finance the design of a system whereby funds can be channeled to communes in the form of budget support in reward for successful achievement in biodiversity conservation. This system may take the form of a trust (either national or at the level of the Gourma) or a foundation. It is to be accompanied by an independent method to measure conservation successes.

Financing of Government services recurrent costs

By empowering municipalities, the Project also minimizes the traditional role of Government services. Still, the Project will co-finance part of four Government Services recurrent costs (2.3% of total costs) for activities carried out toward Project objectives. This practice is common in Mali because Government revenues are not sufficient to allocate adequate budget to conservation. Nonetheless, the level is below the Government "after-tax" counterpart funding of 5.7%. In addition, counterpart funding for operation costs is initially set at 35% to provide adequate incentive for rational use of operation funds. In Year 4 to 6 this proportion will increase to 70%. This level (estimated at $ 75,000 per year), if maintained after project end, will set the national budget allocation to a sufficient level for the Gourma Conservation Service to continue assistance to Communes. This is commensurate with the country commitment to maintain biodiversity in the Gourma.

Technical assistance

The GEPRENAF independent evaluation pointed out the success of the technical assistance component and recommended pursuing it for an additional phase. The main culprit of participatory conservation in the region is the low initial capacity of inter-village associations to take over the complex management of a conservation area. To palliate this, small teams of national experts will provide technical assistance for project implementation, innovation, community-approach and transfer of skills. Also, because, the success of the Project depends on such innovation and on the effective adoption by communities of alternative behaviors, it is important that such assistance be available until all fundamental evolution occurs and until the Communes and Inter-communes associations have the capacity to fully assume their role. Technical assistance to the Commune will continue until project end. However, technical assistance to the Gourma Conservation Service will be gradually phased out in years 4 to 6.

Other incentives

Financial sustainability is only one aspect of sustainability and may not always be the most relevant to the local communities. A 2001 review by the International Institute Economic Development of community-based wildlife management indicated that "*there are a few cases where financial benefits unequivocally exceed financial costs but communities themselves appear in some cases to have decided that the other benefits (livelihood security, biomass, employment etc) are worth the costs (labor, time, resource use restrictions and so on)*." This appears to be the case in Burkina where GEPRENAF communities are even more appreciating externalities such as inter-community relationship, restoration of traditional land use rights and values, communities reach out, maintenance of a natural "patrimony", etc.

Sustainability depends finally on the perception, of the communities at large, of the Project benefits to their daily life, social comfort and capacity to produce. All operations implemented in the Gourma aim to alleviate these concerns and decentralized much decision-making and financing of community priorities. In addition, improved awareness of natural resources degradation and adoption of alternative behaviors, rules and technologies, may prove sufficient to sustainably diminish pressure on the natural ecosystem.

2.Critical Risks (reflecting the failure of critical assumptions found in the fourth column of Annex 1):

Risk	Risk Rating	Risk Mitigation Measure
From Outputs to Objective		
Early benefits are not sufficient incentive for communities to improve behavior toward conservation and actively engage in conservation activities.	S	The Project will work with other operations to ensure that the most basic needs of the communes (capacity building & social investments) are addressed as part of the baseline activities. Awareness building and study tours will be permanent to help the communities perceive the potential benefits of improved range management. Most work will be contracted out locally and, if necessary, training will be provided to set-up micro-enterprises.
Project results and commune commitments are not sufficient incentive for donors to commit funds to sustainable financing after the end of the project.	S	The project will make a special effort to draw lessons from implementation, to publicize its successes and link other donors with commune council and to witness results & approaches. The project will also work on setting a transparent result-based financial mechanism that enables direct budget support to communes based achievement of conservation indicators.
The Burkina Faso PRONAGEN is not successfully implemented with good field collaboration between countries.	M	PRONAGEN has been preappraised by the Bank. It is scheduled for negotiation in early FY02. Transborder studies and activities are built in PRONAGEN. Two conservation areas identified are on the Malian border and are connected to the Seno-Mango and Tessit conservation areas of Mali. The Burkina site where the elephant herd stations in summer is also selected as a conservation area in Burkina.
Early results do not demonstrate to livestock owners & herders that range use can be improved for the benefit of livestock & of grassland.	S	A special and early emphasis will be on setting-up a pilot site where new rules and techniques are tested. This site will serve as a demonstration that, range improvement and biodiversity conservation, are possible without decreasing the number of livestock. The Project will establish links with the PASAOP to support, draw lessons and expand on this experience.

From Components to Outputs

Sufficiently skilled national technical assistance is not available for recruitment to provide professional advise to commune council on wildlife and habitat conservation and management.	S	Mali has developed very little human resource in the wildlife & conservation sectors. The project will define profiles for Commune Counselor & Animators more on commitment and capacity to learn than academic skills. If necessary, the Project will recruit a wildlife specialist in other countries of the region. Study tours and training will be organized for all staff.
Inter communal feuds or traditional conflicts over land and access to resources emerge as an impediment to the management of inter-communal conservation areas.	M	The mayors of all communes participated to the Project planning workshop. In essence they perceive it as their project and suggested that inter-communal management was required for transhumant pastoralists and to conserve large areas. The Project approach is to foster dialog between all partners. This would include conflict resolution mechanisms should it become necessary.
Communities do not evolve out of an apparently prevalent passive and "attentist" behavior acquired following years of charitable assistance by well-meaning projects & NGOs	S	Commune Councils have demonstrated energy in early participation in project design. The project will develop mechanisms whereby the population needs to demonstrate commitment (e.g. adoption and respect of new rules) prior to receiving assistance. As early as feasible, the project will evolved from activity-based to result-based financing.
Distance between the central capital (Banking system) & the field unit in Douentza & the remote communes is not an impediment to resource mobilization and procurement of goods.	M	The PCU will be stationed in Douentza (200 km from a commercial Bank). Phone communication is available. During the final stage of preparation we will discuss communication arrangement that enables adequate disbursement & procurement while keeping the units as close as possible to the communes. We will also adapt the system to that of partners projects particularly for provision of the Communal development funds (FICT)

Overall Risk Rating	S	Biodiversity is in a downward spiral in the entire Sahel. Already many wildlife and perennial grass species have disappeared from the Gourma. Taking advantage of real decentralization, participatory conservation approach (e.g. GEPRENAF) and techniques (PPPP) piloted elsewhere has a good chance to succeed in the Malian context. Still, the management process is complex and behavior changes in the fragile and precarious pastoral environment is difficult. Because of this the project risk is rated as Substantial. Nonetheless, it is the only venture in the Sahel where conservation is attempted at the required scale (landscape) and is worthwhile piloting.

Risk Rating - H (High Risk), S (Substantial Risk), M (Modest Risk), N (Negligible or Low Risk)

G. Project Preparation and Processing

1. Has a project preparation plan been agreed with the borrower ?

Yes - date submitted: 03/10/1998
A Project Preparation Program was agreed with the borrower in early 1998. The Letter of Agreement was signed in September 1998 for a joint project with Burkina called Transborder Arid Rangeland and Biodiversity. Subsequent inter-ministerial difficulty in Mali prevented active preparation from starting in that country until the year 2000. In order not to affect Burkina, this international project was separated into two national projects. With France volunteering as a new cofinancing partner in mid-2000, the preparation plan was adjusted.

2. Advice/consultation outside country department:

Within the Bank: Peer Reviewers: Nicole Glineur (MNSRE), Noel Chabeuf (AFTR1)
Other development agencies: M. Laurent Bedu & M. Alain Gerbe (French SCAC Bamako), Mme Ba & M. Bonfigliori (UNCDF Bamako & New York); Mme Aida Dembélé (UNDP Bamako)
External Review Dr. Chardonnet (STAP)

3. Composition of Task Team:

Jean-Michel Pavy (TTL, AFTES), Agadiou Dama (Agriculture services, AFTR2), Suzanne Piriou-Sall (Decentralization, AFTR2), Francois Le Gall (Livestock, AFTR2), Luc Lecuit (M&E, AFTES), Abdoulaye Coulibaly (Disbursement, AFMML), Cheick Traoré (Procurement, AFMML), Sydness Mons (Natural resources management & local capacity building, AFTR2)

4. Quality Assurance Arrangements:

In addition to the regular Bank team and partners in Mali (e.g. members of the Government, NGOs, cofinanciers), the project was submitted to an external review by Dr. Chardonnet from the GEF Scientific and Technical Advisory Panel (STAP). The review is attached in Annex 3. It was also submitted to the internal peer scrutiny of Nicole Glineur (MNSRE) and Noel Chabeuf (AFTR1). Within our region, Irene Xenakis (AFTQK) and Mohammed Alhouseyni Toure (AFMML) provide regular assistance for quality enhancement. Christine Ivarsdotter and Robert Robelus (ASPEN) are charged to review EA compliance

with Bank safeguards. Cheik Traoré and Mamadou Coulibaly (AFTQK, Bamako resident mission) are to review procurement, disbursement and financial management. Close coordination with the Mali Rural Development cluster lead by Patrick Labaste ensures that the project is well inserted into overall rural development efforts in Mali.

5. Management Decisions:

Issue	Action/Decision	Responsibility
Coordination with other Bank operations	Coordination mechanisms need to be proposed, including harmonization of some procedures, and registered in Implementation manuals.	RD Cluster leader, TTLs & CD operation team
Log frame	PDO indicators need to define better how successes in "mainstreaming" of biodiversity management and capacity building will be measured.	Project team, Government team & cofinanciers team (FFEM)
Capacity building	Recognizing the intrinsic complexity of conservation in the Sahel and the low initial capacity of communes, a phased approach with transitional benchmarks is proposed within the 6-year time frame.	Project team, Government team & cofinanciers team (FFEM)
Financing in a decentralized context	Alternative ways to channels resources and devolve responsibilities to communes and inter-commune associations are explored. An alternative will be adopted at preappraisal.	Project team, Government team & cofinanciers team (FFEM)
Social issues	Mechanisms for inclusive decision-making, conflict resolution, complaint and grievance are built in the project approach and registered in the implementation manual	Project team, Government team, EA Consultants & cofinanciers team (FFEM)
Sustainability	Revenue generating ventures such as tourisms need to be explored. The exit strategy needs to be improved.	Project team, Government team & cofinanciers team (FFEM)
Cultural heritage	To the extent that some of their dimensions are eligible for GEF funds, cultural heritage needs to be explored at preappraisal.	Project team, Government team & cofinanciers team (FFEM)

Total Preparation Budget: (US$000) GEF-PDF-B 175.00 (30.00 undisbursed on 9/20/01)
Bank Budget: BB 7.65 + BBGEF 141.00 (up to end of FY01) **Trust Fund:** 12.25
Cost to Date: (US$000) 305.90
GO **Further Review** [Expected Date] PAD review in March 2002

Jean-Michel G. Pavy	Agi Kiss	A. David Craig
Team Leader	**Sector Manager**	**Country Director**

Annex 1: Project Design Summary

MALI: Arid Rangeland Biodiversity Conservation

Link to good practice examples

Hierarchy of Objectives	Key Performance Indicators	Monitoring & Evaluation	Critical Assumptions
Sector-related CAS Goal:	**Sector Indicators:**	**Sector/ country reports:**	**(from Goal to Bank Mission)**
Support competitive or broad-based growth in the rural sector	Incidence of rural poverty decrease by 5% in rural areas	PRSP Monitoring System	
Sustainably improve the well being of rural population of the Gourma communes through better management of biological resources.	Human development indicator	Annual UNDP Report	
Operational Program:			
OP1 -Arid & Semi Arid Ecosystems			
Global Objective:	10% improvement of bioindicators in: Seno Mango In Adiatefene N'Tillit Gossi Lake Gandamia Inselberg Hombori Inselberg Boni Inselberg	Aerial survey report	No long lasting drought occurs before conservation systems are seasoned.
Biodiversity and range degradation trends are reversed in selected conservation areas and stabilized elsewhere in the Gourma	50% decrease in livestock encroachment indicators in: Seno Mango In Adiatefene N'Tillit	Aerial survey report, Participatory monitoring reports	
	10% improvement of range quality indicators (tbd) in nine out of 18 communes.	Participatory & scientific monitoring reports Satellite images analysis	

Global Objective	**Outcome / Impact Indicators:**	**Project reports:**	**(from Objective to Goal)**
Project Development Objective: Communes of the Gourma have successfully mainstreamed conservation of biodiversity in communal and inter-communal development	Four out of seven commune or inter-commune associations have successfully improved biodiversity indicator in the conservation area they manage. Seven out of eighteen communes are allocating more than 20% of their internal budget for improvement of natural resources management in Y4 to Y6.	Annual reports of commune & inter-commune associations, Commune councils, DRCN & Project teams Ecological monitoring reports (aerial, participatory)	Other planned operations to support decentralization and to strengthen commune capacity and investments are successfully implemented. These operations include the PACR-Timbuctu & PACR-Mopti (UNEF), PADL-Gao (AFD) as well as PGRN2 & PDSD (IDA) Decentralization produces competent local Governments representative of their communities, sensitive to their social needs and committed to communes' development.

Output from each Component:	Output Indicators:	Project reports:	(from Outputs to Objective)
1. Improvement of awareness, knowledge & capacity of communes and institutions for management of biodiversity	1.1. 50% of the 1000 villagers who have participated in training or awareness modules are involved in conservation area management in Y6.	Report on training follow-up (method tbd)	Early benefits are sufficient incentive for communities to improve behavior toward conservation and actively engage in conservation activities.
	1.2. Results from the study on traditional & current rules for use of the Gourma range by livestock were successfully exploited to set-up a consensual commune-based sustainable system of range utilization compatible with biodiversity conservation.	Commune and Inter-Commune Development Plans (PDC & PDIC)	Project results and commune commitments are sufficient incentive for donors to commit funds to sustainable financing after the end of the project.
	1.3. DNCN & SGC has mainstreamed communal assistance for conservation in Y3 (50% staff time spent on municipal support)	Cross reference of DRCN & Commune reports	
	1.4. 50% of livestock owners are convincingly following new communal rules for range utilization	DRCN & Community patrol reports on number of herds caught violating communal rules	
	1.5. An incentive-based & result-oriented system for sustainable financing of conservation areas through commune is set-up to secure regular flow of funds	Consultant report; Legal document establishing such system; Donor commitment documents	

2. Establishment and management by inter-commune associations of seven new conservation areas	2.1. The following conservation areas have acquired legal status: (i) Seno Mango, (ii) In Adiatefene, (iii) N'Tillit, (iv) Gandamia Inselberg, (v) part of Gossi Lake, (vi) Boni Inselberg, (vii) Hombori Inselberg.	Legal document (Arrêté communal, or national decree)	The Burkina Faso PRONAGEN is successfully implemented with good field collaboration between countries
	2.2. 50% decrease in human-elephant conflict by Y6	Conflict ledger and annual report of DRCN	
	2.3. % Achievement of work or level of organization in conservation area: Limits: 100% Access: 50% Surveillance: 50% Monitoring: 50% Exploitation: 10%	Management plans Annual report Supervision aide memoire	
3. Adoption of natural resources/biodiversity management in planning and development of eighteen municipalities	3.1. The PDCs of all 18 communes include rigorous rules and planning for sustainable range management compatible with biodiversity conservation.	Commune Development Plans (PDC) Participatory monitoring reports	Early results demonstrate to livestock owners & herders that range use can be improved for the benefit of livestock & of grassland.
	3.2. 75% Project-supported initiatives are evaluated to be successful at improving the biological make-up of the range and are sustainable.	Aerial survey & satellite images Activity reports Supervision Aide memoire	
4. Effective project administration & monitoring & coordination has enabled timely and efficient implementation of project activities	4.1. Funds are timely made available to project teams	Consolidated Annual Reports	
	4.2. Good and work are timely procured	Annual Work Program Bank statements	
	4.3. Financial accounting and budget control is adequate	Audits	
	4.4. Annual report and annual work program meet agreed standard by Y3	Supervision Aide memoire	

Project Components / Sub-components:	Inputs: (budget for each component)	Project reports:	(from Components to Outputs)
1. Capacity building of population and institutions			
1.1. National capacity building 1.1.1. Provide support to international coordination 1.1.2. Provide training & build awareness of DNCN staff 1.1.3. Contribute to studies & workshops for national reforms of biodiversity management 1.1.4. Conduct studies on: (i) possibility to set-up a trust for incentive-based financing of communal conservation areas, (ii) economics of wildlife & ecotourism, (iii) standard monitoring of wildlife, (iv) other studies tbd. 1.1.5. Contribute to the design and organization of a national web portail & conservation database. 1.1.6. Contribute to the design of a documentation center on biodiversity & conservation at DNCN	$ 0.51 million (GEF $ 0.47 million)	Project Annual report Annual report of DNCN Study reports Training & training follow-up reports Supervision Aide memoire Proceedings of workshops International protocols	
1.2. Local capacity building 1.2.1. Provide technical assistance to communes 1.2.2. Train project staff & staff of partner services (DRCN, etc.) 1.2.3. Provide training to communities in functional literacy 1.2.4. Provide training to communities, to commune council & inter-commune associations in conservation-related planning and techniques 1.2.5. Conduct conservation awareness campaign 1.2.6. Induce creation & legal recognition of inter-commune	$ 2.54 million (GEF 2.17million)	Technical assistance Annual report Annual report of DRCN Study reports Training & training follow-up reports Supervision Aide memoire Proceedings of local workshops TORs	Sufficiently skilled national technical assistance is available for recruitment to provide professional advise to commune council on wildlife and habitat conservation and management

associations 1.2.7. Organize regional & local workshops on conservation and range use.			
2. Support to inter-commune management of conservation areas 2.1. Conduct ecological diagnostic & basic studies for each targeted conservation areas 2.2. Negotiate & delineate conservation areas 2.3. Prepare management plans for each conservation areas 2.4. Initiate implementation of management plans (surveillance; habitat management; fire control; set-up signs; etc.) 2.5. Conduct participatory ecological monitoring 2.6. Conduct aerial wildlife & livestock survey 2.7. Set-up and manage a local SIG at DRCN for monitoring habitat	$ 2.06 million (GEF $ 1.27 million)	Project Annual report TA Annual report PV of negotiation Report of studies Management plans Field visits Monitoring reports Maps PV of reception of work	Inter communal feuds or traditional conflicts over land and access to resources do not emerge as an impediment to the management of inter-communal conservation areas.
3. Support to commune and inter-commune initiatives 2.1. Carry-out complementary commune development diagnostics 2.2. Carry-out specific studies for local solutions to biological degradation. 2.3. Assist commune in integration of biodiversity conservation and range management in PDC 2.4. Co-finance biodiversity-related micro-projects registered in the PDC	$ 5.93 million (GEF 0.74 million)	Project Annual report Commune Annual report PDC & PDIC Report of studies Field visits Monitoring reports Maps PV of reception of work	Communities can evolve out of a passive and attentist behavior acquired following years of charitable assistance by well-meaning projects & NGOs

4. Project administration and monitoring 4.1 Coordinate project activities (planning, advising, supervision) 4.2. Ensure availability of funds at the field level 4.3. Procure timely good, work & services 4.4. Ensure adequate management of project funds 4.5. Carry out performance monitoring and evaluation 4.6. Coordinate activities with other projects in the region 4.7. Provide incremental support to Steering Committee	$ 1.02 million (GEF 0.80 million)	Project Annual report Project Annual work program Consolidated Budget & Financial management reports Bank statements Audits Procurement files TORs & Contracts	Distance between the central capital (Banking system) & the field unit in Douentza & the remote communes is not an impediment to resource mobilization and procurement of goods.

Annex 2: Incremental Cost Analysis
MALI: Arid Rangeland Biodiversity Conservation

The GEF/FFEM "Gourma Project" implements a component of the National Natural Ecosystem Management Program. This Program, as registered in the NEAP and Biodiversity Action Plan, targets the conservation of biodiversity in eight priority sites of Mali. The Gourma is one of these eight priority sites.

Other sites are targeted by other donors: The European Union and Germany for the Bafing area, the France SCAC and UNDP & UNDP/GEF for the Baoulé National Park, France AFD, SCAC & FFEM for the Adrar des Ifoghas; Holland & IFAD/GEF for the Ramsar sites in the Niger Delta. These operations are estimated to amount to more than US$ 10 million and are only indicated here for information. They are **not** tallied as baseline to the proposed GEF/FFEM Project.

Numerous donors are committed or intend to support the country decentralization process. These projects range from institution and capacity building to support to design and implementation of Municipal Development Plans. Some project focus on grassroots or social infrastructures and others on natural resources management. The list is too complex to compute. The number of operation and donor committed as well as the amounts planned serves as demonstration that the decentralization process is likely to continue, to improve and to remain under the scrutiny and assistance of the international community. In turn, the above provides a level of confidence that the proposed GEF/FFEM project has adopted an approach solidly anchored in the country development.

At the Gourma-specific level, the GEF/FFEM Project is fully integrated within a series of other projects. Because the Gourma encompasses a portion of three regions in has developed privileged relationships with three projects that directly support decentralization and local investment in the 18 Communes of the Gourma targeted by the GEF/FFEM Project. These projects are the AFD PADL-Gao (Gao Region Local Development Project); the UNCDF PACR-Timbuctu (Timbuktu Region Rural Commune Support Project) and the UNCDF PACR-Mopti (Mopti Region Rural Commune Support Project). These three projects are tallied as baseline, because (i) the will have daily field operation ties with the GEF/FFEM Project, (ii) they provide the necessary foundation in term of commune capacity and communal planning on which to build new awareness, commitment, capacity, technology for wildland management & conservation.

Also in the Gourma, regular Government efforts as well as other projects will contribute to strengthening the commune capacity, or deconcentrated Government services capacity and/or improve livestock or farming practices for better land resources management or help finance local infrastructures: the PAIB (Grassroots Initiatives Support Project), PASAOP (Agriculture services & farmers organizations), PNIR (Rural equipment), etc. Because, these operations are functioning independently of the proposed GEF/FFEM Project, they are **not** tallied within the baseline.

Baseline

The Project is registered, together with the three above-mentioned projects, in a decentralization cluster whose development objective is to ensure that '*The rural populations have better access to public services, to socio-economic infrastructures and to productive natural resources*". The three baseline projects seek four main outputs: (i) to set-up and operationalize new transparent and participatory mechanisms and procedures for planning and programming local development, (ii) to ensure that communes have access to internal and external financial resources and manage them according to good governance principles, (iii) to strengthen local capacity for implementation and

monitoring of development actions, (iv) to ensure that local initiatives for protection and utilization of natural resources are planned by local Government and managed by village communities.

Costs

For the purpose of the Incremental cost matrix, the baseline costs includes "direct" cofinancing (Government & communities) and "associated" financing (AFD, UNCDF, IDA & Communities). This amounts to $ 5.30 million or 41% of total project costs. It should be noted that "associated financing" is mobilized whether or not the GEF/FFEM Project is implemented. On the contrary, direct cofinancing is not mobilized unless the GEF/FFEM Project is implemented.

Associated financing - The PACR-Mopti, PACR-Timbuctu and PADL-Gao are expected to mobilize $ 2.5 million for the 18 Gourma communes targeted by the GEF/FFEM Project. In addition, it is expected that IDA either through the PGRN2 or the SDSDP (Strengthening Decentralization and Service Delivery Project) will provision the FICT (or other instruments) in support of implementation of these 18 commune's development plans. The amount is estimated at $ 1.0 million (calculated for about $ 1.0 per habitant per year). The community is expected to contribute $ 388,000 or about $ 3,600 per commune per year.

Direct cofinancing - Government cofinancing for the GEF/FFEM Project would be in the order of $ 1.30 million including $ 0.80 in custom and taxes. This contribution does not include the salary of civil servants who will be working toward the Project objective or the facilities/equipment that the Government will provide to its staff for operation. As calculated, this is a 14.9% contribution to the GEF/FFEM Project (or 5.7% direct cash contribution), which is significant for Mali (one of the poorest country in the world). The community is expected to contribute $ 133,000 or about $ 1,200 per commune per year.

Benefits

In the absence of GEF/FFEM funding, the three baseline projects are expected to deliver benefits in the form of improved well being, improved productivity of land resources, improved capacity of Commune council and populations for the mobilization and management of financing.

(i) Improved *well-being of population*. Increased income can be expected from a broad range of activities (small-scale irrigation, gardening, cattle and sheep fattening, processing of food products, fuelwood, seedling production, fishing etc.). Less direct income impact would come from yield increases resulting from soil fertility interventions. Clean water would lessen the impact of water borne diseases. Communal health centers built in response to pubic demand would improve access to basic health. Village schools also built in response to public demand would lead to increased children enrollment. Contracting local artisans and small-scale entrepreneurs would generate local employment opportunities.

(ii) Impact *on Local Capacities.* The three baseline projects aim to strengthen the capacity of elected commune officials, commune staff, local stakeholders of development (teachers, health agents, veterinarians, etc.) in planning and running communal affairs. Well governed and organized municipalities with sound budget allocation, can have far reaching impact on the community well-being. Capacity built includes ability to prepare Communal Development Plans, to contract out the construction of infrastructure or the delivery of services, to interact with the ANICT and CCC for mobilization of financing, to organize and collect local taxes, etc. Alphabetization programs would be an essential ingredient in the capacity-building effort. Technical and organizational skills will be

provided to ensure the maintenance of project-funded investments (e.g. maintenance of pumps and mills).

(iii) Impact *on Natural Resources.* Better management for long-term sustainable use of the natural resources is an objective of the baseline projects. Eligible activities include improvement the productivity of agriculture and livestock (e.g. through soil conservation), support to agro-forestry initiatives, assistance to fishermen for better management of fish stock, and prevention of conflicts over land tenure and grazing rights. These initiatives are triggered only on demand. Consequently, because the population is likely to focus on immediate needs such as water, health and schools, the impact of the baseline projects on natural resources is expected to be marginal.

Global Environment objective

Beyond the baseline activities described above, at the scale of the Gourma, the GEF & FFEM provide incremental financing with the 6-year Development Objective to ensure that *Communes of the Gourma have successfully mainstreamed conservation of biological diversity in communal and inter-communal development.* The project targets the GEF Operational Program 1 (Arid and semi-arid ecosystem) with the Global Objective that *Biodiversity and range degradation trends are reversed in selected conservation areas and stabilized elsewhere in the Gourma*.

The global and development objectives are sought via three operational outputs: (1) *Improvement of awareness, knowledge & capacity of communes and institutions for management of biodiversity*, (2) *Establishment and management by inter-commune associations of seven new conservation areas,* (3) *Adoption of natural resources/biodiversity management in communal planning and development of eighteen municipalities.*

The value of the Gourma biodiversity for the global environment is well documented. Its conservation is registered into the main international strategies (e.g. Ecologically sensitive sites in Africa, WB -- Conservation Strategy in the Afrotropical Realm, UICN -- Strategy for Sahelo/Saharan Antelopes -- Bonn Convention for Migratory Species) and they are registered among first and foremost priorities in the Mali NEAP and in the biodiversity strategy. The Gourma lies between 250-550 mm isohyets. It appears early in the bibliography (e.g. IFAN 1955) as an area rich in wildlife and plant species. Such richness spawns from unusual landscape features. It lies at the edge of the Niger delta and possesses numerous lakes, some permanents, that harbors a rich bird variety including many paleartic migrants. Because, the watershed is "inclusive" there is little drainage out of the Gourma; water retention in lowland areas maintains rich acacia forests with species often threatened elsewhere in the Sahel. Permanent wetland and acacia forests provide water, forage and shelter for the survival, and actual development, of an estimated 500-rich elephant herd. Inselbergs, scattered in the Gourma have acted as isolated islands where rodent speciation has been documented. Many small carnivores or birds of prey find suitable shelter or nesting in their rocky formations or cliffs. The Gourma use to harbor the widely distributed fauna of the Sahel including the dama, dorcas gazelle, the oryx and the redneck ostrich; many of these species are near extinction today. ILCA reports the existence of 824 plant species.

GEF Alternative

Without GEF or FFEM, the baseline projects are likely to focus solely on capacity building of the newly established communes and investments for their priority need. Such needs are likely to be social in nature or productive with immediate return. Land planning and use or natural resources management may receive attention, but not to a significant degree. The GEF/FFEM project presents a suitable alternative because it enables Communal planning to include land use planning and

conservation of biodiversity from the early stage of municipal development. By also working at the inter-communal dimension, the Project will also attempt to register communal planning within the greater ecosystem or landscape and "pastoral space" level. The Project will be implemented through four components:

Component 1: Capacity building of populations and institutions
Component 2: Support to inter-communal management of conservation areas
Component 3: Support to commune-based initiatives
Component 4: Project administration and monitoring

Component 1: Capacity building of populations and institutions - This component is divided into two sub-components: (1.1) National capacity building and (1.2) local capacity building.

Sub-component 1.1: National capacity building - This sub-component will provide support for (i) international coordination by an NGO or consulting firm, (ii) training and awareness building to national staff of the National Directorate for Nature Protection in protected area planning, management, monitoring, etc., (iii) national studies and workshops geared at improving the national policies, legislation and institutions in the framework of decentralized management of biodiversity, (iv) specific studies on (a) setting up a result and incentive-based system for sustainable financing of national and communal protected areas, (b) hunting & ecotourism concessions and related economics and fiscality, (c) survey of wildlife in priority protected areas and preparation of management plans for submission to other donors, (v) the design and establishment of a national web portail and conservation database, (vi) the design and establishment a documentation center at the National Directorate for Nature Protection.

Sub-component 2.2: Local capacity building - This subcomponent will provide support for (i) national technical assistance to commune councils for conservation planning and conservation area management, (ii) training for project staff and partners services in various themes such as participatory & ecological diagnostics, techniques of negotiations, gender approach, holistic management, wildlife survey, habitat management, operation of GPS, etc., (iii) training to communities in functional literacy, (iv) training to commune council, communities in conservation planning and techniques for management of conservation areas, (v) conservation awareness activities in schools, using rural radios, plays, etc., (vi) the creation and legal recognition of inter-commune associations for management of conservation areas, (vii) organization and moderation of local workshops and committees to foster local discussions on improvement of resource management practices, (viii) a Gourma-wide study on pastoral tenure, traditional and current range management practices and rules, users rights and constraints.

Component 2: Support to inter-communal management of conservation areas - This component will provide support for (i) ecological diagnostics and basic studies in each of the targeted conservation areas, (ii) negotiation and delineation of seven conservation areas, (iii) design, write-up and adoption of management plans for each conservation areas, (iv) initiating implementation of the management plans by financing activities such as surveillance, fire and habitat management, building of trails, watch towers, small water infrastructures, materializing limits, installing sign posts, etc. (v) conducting participatory ecological monitoring, (vi) conducting aerial surveys of wildlife and livestock, (vii) monitoring land use and producing local maps using satellite images.

Component 3: Support to commune-based initiatives - This component will provide support for (i) carrying out participatory diagnostics complementary to existing incomplete diagnostics, (ii) carrying out commune specific additional studies to identify constraints and solutions to local conservation, (iii) assisting commune council in integration of biodiversity conservation and range

management in the Commune Development Plans, (iv) cofinancing biodiversity-related micro-projects registered in the Communes Development plans, (v) piloting holistic management of pastoral resources in a demonstration site, (vi) carrying out participatory ecological monitoring of micro-projects impacts and sustainability..

Component 4: Project administration and monitoring - This component will provide support for (i) coordination of project activities from planning to implementation and supervision, (ii) ensuring availability of funds at the field level, (iii) procurement of good, work and services in a timely manner, (iv) ensuring adequate management of project funds, (v) monitoring implementation performance, (vi) coordinating activities with other projects in the region and in the sector, (vii) enabling meetings of the national steering committee.

Costs

The GEF/FFEM Alternative estimated to costs $ 12.06 millions divided as follow:

GEF	$ 5.50 million
FFEM	$ 1.31 million
AFD/UNCDF/IDA	$ 3.50 million
Communes	$ 0.45 million
Government of Mali	$ 1.30 million (custom/taxes $ 0.80 million & counterpart financing $ 0.50 million)

Benefits

Additional improvement of well-beings. A marginal increase in community members' income is expected from new or alternative activities (tourism, waterfowl hunting, pharmacopoeia, better natural resources use, etc.). Overall, the GEF additional impact on living condition will not be direct, but related to the lesser vulnerability of a healthy ecosystem that enables sustainable access to grass land throughout the year, use of conservation areas as forage-insurance in dry years, diminished conflicts over grazing areas and access to water, etc. Additional benefit includes diversification of income to the communities during the project (work generated by project implementation) and after (work generated to handle tourists, to monitor wildlife, to protect conservation areas, etc.).

Additional Impact on national and local capacities and awareness. At the national level, the GEF/FFEM Project will improve the institutional framework and human resource capacity for better nature protection. Better coordination of conservation efforts by the Government and other donors at the international, national and local will contribute to improving the overall capacity of the Government institution & communes. In the Gourma, staff of Government services, elected commune officials, members of inter-communes associations, municipal staff and members of the community at large will acquire skills in conservation planning, surveillance, management as well as technical skills such as fire management, wildlife protection, animal census, etc. Organized when necessary, alphabetization will enable otherwise illiterate community members to better participate in the management of inter-village associations or present conservation proposals of their own. Conservation education campaigns, because they are coupled with actions and demonstrations, will have contributed to improving the environmental awareness and behavior of the populations and elected officials.

Additional Impact on natural resources. Communal and intercommunal planning for the management of land resources and subsequent adoption of new user access rules and implementation of micro-projects or micro-services are expected to have positive impact on the ecosystem resources.

Expected natural resources outcomes would include improvement of rangeland quality (with long term effects on livestock production and plant restoration), increased wildlife populations (with long term effect of food security and tourism income), regeneration of woodland cover (with long term effect on woodfuel security and access to potable water through aquifer replenishment), healthier wetland (with long term effect on surface water, supplemental bourgou forage, fishing potential, bird resting and nesting security, etc.)

Additional Impact on biodiversity conservation. Expected benefits for global biodiversity include: (i) increasing the ecological security of Sahelian flora and fauna including the northernmost population of African elephants; (ii) restoration and preservation of a representative area of the West Africa Sahelian ecosystem and habitats which is exceptional on a national and global scale; (iii) preservation of genetic diversity within ecologically, economically and culturally important species in natural population within their historical range; and (iv) integration of sound ecological management practices of water resources, livestock and agriculture in the framework of communal land management and wildland conservation. It is expected that, over its initial five year, GEF support to the Project will help secure natural habitat and wildlife in about 300 000 hectares divided into seven conservation areas including several hundreds hectares of wetlands and inselbergs. The Project will also rip global benefit linked to lesser desertification.

Incremental Costs

The direct cost of the baseline scenario is calculated to be $ 5.25 million. The GEF alternative is estimated to cost $ 12.06 million, resulting in an incremental cost of $ 6.81 million. The GEF is therefore asked to fund $ 5.50 million of the incremental cost while the FFEM is asked to finance $ 1.31 million.

Component	**Cost category**	**m US$**	**Domestic Benefit**	**Global Benefit**
Sector				
National dimensions	Baseline: Gov: 0.03	**0.03**	Day to day continuation of DNCN's activities at national level. They may have positive impact on wildlife & ecosystem conservation locally.	None or marginal. Note: Other donors are supporting conservation efforts in Mali. These are not tallied but will have significant impact on biodiversity and on the country capacity to manage biodiversity.
	With GEF Alternative GEF: 0.48	**0.51**	Improvement of the country capacity for conservation through an institutional reform, new regulations, provision of minor equipment and training of staff.	Global benefits are ripped when (a) legal and institutional reform; and (b) forester's vision, incentive & capacity lead to improvement of protected area management with global biodiversity value.
			International coordination & experience sharing, improves decision making, with attendant conservation of more habitat and wildlife.	Global benefits are also generated when the proposed mechanisms for sustainable result-based financing of conservation through communes is implemented in other areas important for global biodiversity.
	Incremental	**0.48**		

Gourma	baseline: Gov: 1.27 IDA: 1.01 AFD: 0.49 UNCDF: 2.00 Com: 0.45	**5.22**	Municipalities benefit from having a participatory diagnostics, Commune Development Plan and some of their most pressing priorities financed. Commune council have improved their capacity for democratic and efficient management of municipal affairs Conservation law enforcement in the Reserve carried out with very low intensity on a low-budget basis with marginal impact on the Gourma resources.	Baseline Programs are environmentally friendly. They are likely to have local positive impact on biodiversity. However, unless there is a strong public demand for biodiversity management, the negative trend is unlikely to be reversed.
	With GEF alternative GEF: 5.02 FFEM: 1.31	**11.60**	Commune and Inter-commune Development Plans include land use planning as well as natural resources & rangeland management. Implementation of such plans improves the sustainability of the production system and decreases the vulnerability of the population. Pastoralists have gained new technology for conflict resolution but also for rangeland and water resources management. DRCN units are better aware of the potential of community conservation and have the capacity to deliver services & law enforcement throughout the Gourma. Communes are organized and their capacity for management of natural resources or biodiversity is created.	The Gourma management is approached at the ecosystem/landscape level for issues like conservation and pastoralism. Biodiversity conservation becomes a more important dimension of the region's development. Several conservation areas are created by Communes in globally important sites (Séno Mango; In Adiatefene; N'Tillit; Gossi; Boni; Hombori) Communes have set-up user rules and Management Plans for the management of globally important conservation areas. Initial implementation of new user rules and management plans has initiated habitat restoration, wildlife recovery, and improved security for the elephant herd.
	Incremental	**6.38**		
TOTAL	**Baseline**	**5.25**		
	With GEF Alternative	**12.06**		
	Incremental Costs	**6.81**		

Annex 3: STAP Roster Technical Review
MALI: Arid Rangeland Biodiversity Conservation

Reviewer: Dr Philippe Chardonnet, DVM, Wildlife Manager

Date: 15 August 2001

Terms of reference / Biodiversity

This independent review has been commissioned by the World Bank (contact person: Jean-Michel Pavy). The standard terms of reference for Independent Technical Review of GEF Investment Projects have been followed.

Key Issues

Scientific and technical soundness of the project

The Project Concept Document reviewed demonstrates a good scientific knowledge of the region's arid rangelands' biodiversity and a fair understanding of the conservation problems to which Sahelian rangelands have been confronted in recent decades. The historical root causes of this biodiversity degradation are of course due to overgrazing by increasing livestock numbers, changing grazing patterns caused by severe recurrent droughts, overuse of the wildlife resource, etc.

The approach of the project demonstrates not only a sufficient awareness of the scientific situation as to the biodiversity issues addressed, but also an adequate apprehension of the underlying socio-economic environment. As a result, the technical solutions proposed appear to be feasible and to have a good chance of reaching the long-term rehabilitation and conservation objectives desired. The project takes advantage of a situation which is favorable to set up new itineraries for conservation: during the last decade, the country has put in place an extensive and modernized legal baseline for decentralization and natural resources management.

It is rewarding to see that the new concepts of communal and inter-communal participation in decision-making and profit sharing, local incentive, etc are fully integrated in the project. It is suggested to verify that the existing non-institutional but traditional decision-makers such as village headmen and elders, local chiefs, sorcerers, traditional hunters societies, etc, be fully associated with the project, together with the institutional, i.e. communal and intercommunal, administrative structures. One important point at this stage: in pastoral areas, the customary rules have to reckon with traditional rulers who often live outside and sometimes far away from a given project site.

Zoning the whole region in different entities of fully protected, partly protected and unprotected areas is an academic concept nowadays. Establishing a new generation of protected areas grounded upon (i) secured traditional rights and land tenure, (ii) partnership of all relevant stakeholders, is already under experimentation in a number of countries in the region (*Unités de Conservation* in Burkina Faso, Communal Conservancies in Namibia, Commercial Conservancies in Zimbabwe, *Zones de Chasse villageoise* in CAR, etc). The interesting innovation of the project lies in setting up a network of several conservation areas based on inter-communal management schemes, a network which is particularly relevant in such areas dealing with highly mobile and sometimes unpredictable (i) stakeholders (transhumant pastoralists) and (ii) natural resources (migratory birds, nomadic elephants, erratic water, vegetation under fire hazard, etc).

At first glance, establishing more and more, bigger and bigger protected areas may appear as an abrupt solution for conserving biodiversity, in line with a drastic philosophy of "sanctuarization" of the world partitioning off man and nature. However, the traditional and customary nature of the status planed for these protected areas make them more than acceptable. Now, the selection process of the areas to be conserved is critical and should make use of social, political, economical and biological criteria. The PCD is right in planning to conduct this process during the course of the project and, in order to guarantee the benefits of a participatory approach, in no case the conservation areas should be defined before the project starts. These conservation areas will need to be properly gazetted which maybe implies to create a new category of protected areas within the 1995 Law on Management of Wildlife and its Habitats.

It is also rewarding to see the awareness of communication and collaboration with other funding agencies appreciated from the start, as a need and as a great way to leverage the project for a wider impact and save costs. Taking account of the neighboring projects in the Gourma gives the geographical coverage needed to follow seasonal movements of people, livestock and wildlife in the whole region.

The indicators proposed sound realistic and should prove to be adequate. As a start, the whole device of indicators needs to be properly zeroed: while avoiding a prolonged and expensive phase of preliminary studies, baseline surveys must be carried out to review the situation, including food security, wildlife depletion, traditional rules for accessing the resources, etc. Also, the way these indicators are monitored is not trivial: while nothing can replace aerial surveys, the participation of local persons in simple ground methods allows them not only to become aware of what is done with the project but also to realize by themselves how the situation progresses. The use of bicycles, camels, horses by bare foot biologists recruited among local hunters is worth testing.

The short-term drops in revenue resulting from local restrictions in livestock numbers proposed by the project in some areas so as to allow the rangeland biodiversity to recover pose of course the greatest challenge for the desired maintenance of the motivation of the local communities. Many wildlife projects try to convince local stakeholders of the pride to conserve a given unique biodiversity, by making use of workshops and extension officers to promote this feeling. Once they are completed, these projects often experience setbacks when no money is available anymore to entertain the 'good feelings'. One of the reasons explaining the failure is the neglect to provide local stakeholders with tangible benefits in compensation to the renunciation of former uses. In other words, the trigger of the pride is not strong enough for the project to be sustainable, therefore a more powerful trigger is needed which must address socio-economic and political issues of prime importance.

As a consequence, long-term self-financing of compensation for this loss is essential. Added income from the development of tourism and small game hunting are important even though not easy in view of the geographical location of the Gourma (difficult and expensive access). Despite a limited scope, the development of the tourism industry is relevant here and can take one's stand on the existing Dogon tourism for example (extension of current circuits to observe elephants and/or to visit Fulani and Tuaregs encampments for instance). As local stakeholders are not used to deal with a service industry of the tertiary sector, they need both external support and capacity building.

Local communities are used to work with the primary sector, eventually with the secondary sector also. Investigating the possibilities of giving added value to livestock products (local abattoir, salting of skins, drying of meat, camel cheese, etc), gathering of rangeland wild plants, for medicinal and other purposes, and improving fishing opportunities, etc might be closer to local people's preoccupations, and be discussed with the communal and intercommunal structures, as well as with

the other projects in the region. Experience in other countries show that decentralization becomes fully effective when the civil society takes over major economic issues from administrations and projects. One way to make things durable is to help local communities start trading companies to encourage legal markets of goods and services without relying on systematic foreign input. The legal grounding of such ventures already exists in some countries like Zimbabwe where the status of 'Campfire Company' permits initiatives in communal land to run their own businesses.

The idea, put forward in the project, of setting up a trust, is an excellent one, as would be the study of financial mechanisms for savings to come into play when drought threatens food security for instance.

Identification of global environmental benefits

The project addresses in the Gourma region of Mali a problem which is of global actuality: the continuing trend of biodiversity loss in the immense arid and semi-arid steppes and prairies of this planet, the grazing of which has historically fed humanity over most continents.

The success of the Gourma project in rehabilitating perennial grasses, wildlife and ecosystems, as well as enhancing living conditions and food security of human societies, from a development based on conservation, sustainable use and added value can be demonstrated and adapted to other societies around the world who are living under comparable climatic and social conditions. Sustainable use of renewable natural resources is one of the main objectives of the CBD to attain the goal of biodiversity conservation. Many of the numerous wild products, which enable people to survive in times of drought, have not been formally identified or indeed been the object of enhancement measures in natural habitats. The gathering of other products such as non-timber forests products (NTFP), if indigenous, can be developed in the conservation areas established by the project, and the involvement of the local people will either ensure new or improved income to compensate the individual or community. The project will enable such knowledge to be acquired and conservation and development measures tested and applied.

In line with the 1994 International Convention on Desertification (ICD), which has been ratified by Mali as mentioned in the PCD, the project is well designed to bring a useful contribution to the battle against desertification. One could even say that a main output of the project would be to alleviate the effects of desertification, to slow down its trend or even reverse it. This makes a relevant justification to the project, because the desertification process is generally accompanied by a global erosion of biodiversity. This is perhaps not enough emphasized in the PCD.

The project can be said to fit very well with the goals of the GEF.

Regional context

As mentioned above, this project is directly relevant to the entire Sahel region, although it is felt that the main thrust of the first phase of the project should be to cover the project area, together with those of the neighboring projects in Mali. If one covers the zone from the Niger River in the north to the border of Burkina Faso in the south, a variety of conditions are already present, both as to biodiversity and as to land-use and human settlement.

Although the biological importance of the region is described in the PCD, the relevance of addressing the elephant problem may be emphasized. The African elephant herd of Gourma (i) is not only the northernmost population of the taxon remaining since the disappearance of the southeastern Mauritanian population few years ago, (ii) it is also a viable population (above the critical size of a minimum viable population, suitable habitats, etc), (iii) and due to the severe fragmentation of the

West African global elephant population, it is now genetically isolated, making worth while and relevant to spend efforts and money for the conservation of these particular animals.

In terms of tourism, the area is already internationally known for a number of reasons, either cultural (Dogon civilization, etc) or biological ("desert elephants", etc). Other assets of the region are not yet recognized, even though they are worth being discovered by the world community and request some energy to be incorporated in tourism products.

Replicability of the project

Replicability of the project must, of course, be one of its objectives, so that the experience gained can be retained. There is no reason why, on a case-by-case basis, this project cannot be adapted to other environments, if conditions for success are present. Ensuring local support and long-term self-financing are, no doubt, essential components, acquired through capacity building and patience. The problems of communication and language must not be ignored if "technology" and experience are to be adequately transferred.

It must be recalled that many projects around the world have comparable socio-economic objectives and methodology of community-based sustainable management of natural resources. When the strategy, such as is apparent in this project, coincides with concerns for biodiversity conservation, then it might be considered, from those building blocks, to build up a network of the new generation of biodiversity conservation areas (see above) among which south-south, north-north and east-west technology transfer would be facilitated and encourage replication and adaptation.

Secondary issues

Linkage to other focal areas

The information listed in the PCD gives ample evidence that the project is in complete accord with the GEF Operational Strategy but also regional and subregional activities. It follows CBD/COP guidance, and gives a clear picture of how the GEF funding will dovetail not only with other donors but also with government at all levels and community involvement as well as contribution of local effort.

Other beneficial or damaging environmental effects

There are many beneficial environmental effects which can result from the successful implementation of this project, such as forest and perennial grasses regeneration, which in turn will lead to increase of presently scarce wildlife, to improvement of nitrogen fixing in the soil and to stopping the extension of desertification by stabilizing soils, replenishing underground aquifers, recreating ground level microclimates, increasing fuelwood production, etc.

On one hand, there can be damaging effects if the project fails, mainly because the locals, at the end of the project, think that they have lost more from this venture than they have gained and decide to go back to their old ways. On the other hand, if the project succeeds a risk lies in the possible encroachment of the area by migrants attracted by the potential advantages brought by the project. But, these two scenarii are true of any project.

Direct detrimental effects of the project are most unlikely. Eventual negative impacts on natural resources are expected to be (i) most probably marginal as far as baseline projects are concerned, according to the PCD (ii) certainly even less from the project itself anyway. Furthermore, the cotton-

livestock based economy, certainly more profitable on a short-term basis as it stands, still has to prove being so in the long run than a complementary or alternative environment friendly economy based on guidelines promoted by the project.

Degree of involvement of stakeholders in the project

The involvement of stakeholders is obviously crucial to the success and perennity of the project. The mechanisms described in the program appear to have all the ingredients necessary. However, it must be remembered that these mechanisms, although they have been conceived with best available knowledge, will most probably have to be specifically adapted not only in each area covered by the project, but in time, as people gain confidence and start to express, from the ground up, how they envisage their own future and priorities. It is to be expected, and should be planned, that, as years go by, the benefits to them (not to humanity) deriving from sustainable use of rangelands and conservation of biodiversity, are real.

Participatory schemes, as outlined in the project, are well conceived, and appear realistic in the context of the Gourma. But, once operations are under way, additional or modified mechanisms may very well have to be put in place due to an unexpected constraint in the stakeholders' traditional decision-making process. It is therefore essential that the project be adaptable to such eventualities. It is essential that this adaptation be initiated from the ground up, rather than be imposed top-down. Rural societies in this part of Mali, for instance, consider agents of the Forestry Department as enforcement personnel. The project, with the other donors and the help of government, must get together to transform the nature of this relationship into one of trust and cooperation.

The involvement in the project of local hunters is of crucial importance to secure sustainable mechanisms of consumptive wildlife uses. Given that the more accomplished hunters probably have a strong affinity toward hunting, possibly because of its social status in the community, hunter skills could be reprogrammed through new forms of livelihood linked to tourism or wildlife management. As far as I know, there are two important traditional hunter societies at the national level in Mali and there are certainly some at the local one. Theses societies are key partners in the debate on conservation of biodiversity. Working with these hunters, may provide the project with not only interesting outputs in terms of conservation (due to their skills) but also enthusiasm of the community. (due to their prestige). Some of these hunters can become rangers, bare-foot biologists (to conduct wildlife counts, to monitor indicators, etc), tourist guides or may even receive in-depth training in bee-keeping and poultry production, both of which provide significant income at the household level. The other hunters may work with wildlife experts, extensionists and facilitators to design sustainable hunting practices matching the local situation, taking into account a proper attitude to develop towards outsiders making use of local natural resources.

Conflicts will, in the same way, have to be resolved on a case-by-case basis and solutions adapted as time goes along. For instance, the human/wildlife conflicts, such as occur with elephants and maybe even lions, are quite different in acacia-bush savanna than they are in agricultural perimeters, and the issue has to be addressed differently. In fact, if elephants were to find sufficient graze/browse and water in the non-settled parts of the Gourma, and if their numbers do not become so important as to compete too much (in the eyes of the local herders) with livestock, there would be no conflict. The present method of bringing water for the elephant in tank trucks in times of drought might some day be considered a luxury, when bore holes, solar panels or windmills could make water available to wildlife in the more inaccessible parts of the Gourma (in the north for instance).

The amounts of funds allocated to components 2 and 3 are of crucial importance for the local stakeholders to be involved and for the project to succeed, and it looks especially appropriate to

allocate 45% (US$M 5.88 out of 13.13) of the budget to component 3. It might be proper for the GEF to increase its contribution to the latter component, which is so far restricted to the relatively low percentage of 11.7%. As a matter of fact, a higher contribution of the GEF to this particular component, and maybe its lower contribution for component 1, would guarantee better road-holding qualities to the GEF input.

No particular comments as far as setting up a PCU and a TSU or TSU's is concerned. Nevertheless, the functioning of the two, or more, entities is questionable as one does not see well the connection between PCU and TSU('s). An eventual lack of close articulation may possibly lead to (i) PCU driving components 1 and 4, (ii) and TSU ('s) managing components 2 and 3. A little explanation would certainly enlighten this point.

Capacity-building aspects

Capacity building is essential for the success and perennity of the project. The co-management of natural resources implies adequate capacity of management and negotiation at all levels, especially local level, and the decentralization process can hardly be implemented if all levels do not have the understanding capacity. The challenge lies in a difficult equation: the more local is the decision-making the better is the decentralization success while the lower is the capacity of human resources.

Systematic local participation in monitoring indicators and discussing of results will help to refine, on an ongoing basis, the capacity-building needs. It is important again, to use existing knowledge of the local people about their land; it is usually considerable, and working with them will enable to adapt capacity building to the domains, which they need to ensure their commitment to the long-term sustainability of the project.

It is important to fully involve women in this process, since they control and will hold the key to success in many of the consumptive use of natural resources, value-adding and marketing activities which are vital to the socio-economic development opportunities which the project will identify and will consolidate its sustainability.

The problem of transforming forestry agents into extension personnel is addressed above, and should represent a typical example at all levels. Under a number of similar situations, wildlife users are kept under foresters thumb. One of the challenges will be to convince the forestry agents (i) to consider local communities as full partners in establishing the rules of the game, (ii) of the relevance of the decentralization mechanism, (iii) that benefits from conservation must be shared. Only capacity building of the foresters and other stakeholders will lead all to adopt adequate behavior in negotiations. The same applies often to political leaders who hardly accept to release part of their power in the framework of a given decentralization process.

Innovativeness of the project

Biodiversity conservation in arid and semi-arid rangelands has, in the past, been a failure for the majority of attempts made in this domain. Reasons for these failures are well-known: nomadic or semi-nomadic character of the herders, poverty level, tribal conflicts over water rights, lack of formal land tenure or ownership, absentee ownership of the livestock, dependence of livestock prices on outside market-driven forces, image of wealth corresponding to livestock numbers, identification of animals as savings on the hoof which can be traded for food, cash or goods, impossibility of optimizing rangeland use due to restriction of borders or fences, etc.

The Mali and the Gourma in particular furnish an opportunity to succeed in this venture of biodiversity rehabilitation and conservation over a large enough area, while conciliating this GEF goal with poverty alleviation, improvement of food security and sustainable socio-economic development based upon renewable natural resources. The project is indeed innovative.

Annex 3 Bis: Indication that the STAP Reviewers comments have been taken in consideration

More editing is being carried out. Several paragraphs have been edited to ensure that (i) rational and specificity of the Gourma elephants and their conservation is more prominent, (ii) that the project also draws on traditional knowledge and experts both in the planning for alternative practices and development of training modules but also in the implementation of strategies such as surveillance, biomonitoring, etc., (iii) the ratio of GEF funding to off-reserve operations has been increased to 14%.

The team has also noted that the reviewers suggestion that the proposed long term financing mechanisms (to be designed during implementation) also attempts to provide for a safety net in term of food security in difficult years. This issue will be discussed at preappraisal.

Annex 4: Matrix of Biodiversity Loss and Proposed Actions
MALI: Arid Rangeland Biodiversity Conservation

	Situation	Root cause of existing situation	Solution proposed by the Project
Gourma	✓ Range degradation (disappearance of perennial species) ✓ Wildlife depletion and extinction of several species ✓ Migratory birds do not finds suitable traditional rest areas along flyways ✓ Permanent & irreversible modification of the ecosystem (p.e. glacis & extinct species that would be too risky to reintroduce)	✓ Lack of awareness of alternative approaches to range and water utilization ✓ Pastoral practices non appropriate anymore given the increase in the number of herds and herd size ✓ Non existence of water-holes access & utilization rules that account for the need of wildlife ✓ Regular, and almost permanent, use of the entire space which provides no refuge for wildlife and wild plants. ✓ Apparently traditional practice that all wildlife is to be harvested (even by outsiders). ✓ Local communities had no official stewardship right over land resources and wildlife ✓ Lack of willingness and capacity of Government services for law enforcement particularly against motorized poaching by outsiders ✓ Climate change (isohyets are shifting south)	✓ Awareness building and training of Government services, Commune councils & communities ✓ Diagnostic by communities of the current situation and its root causes prior to establishment of Communal Development Plans ✓ Two-year study by University students for diagnostic of the current pastoral practices & rules ✓ Definition of communal rules for land & resource access & exploitation in Communal Development Plans ✓ Creation by commune of wildlife refuges called Conservation areas with management entrusted to inter-communes associations ✓ Demonstration of alternative range and water use at pilot sites ✓ Assistance to Communes, and associations, in implementation of the conservation dimension of the Communal Development Plans ✓ Decrease antipoaching of outsiders through information campaign in nearby cities and better law enforcement

	Situation	Root cause of existing situation	Solution proposed by the Project
Specific issues that need to be addressed at the national level	✓ Same as above (wildlife & natural habitat are threatened on the entire territory)	✓ Wide spread poverty with limited perspective for short-term improvement ✓ Cotton & livestock based economic growth is at the expense of natural habitat ✓ Low national knowledge & awareness about biodiversity benefits and issues translate into low Government commitment ✓ Low Government commitment is compounded with budget limitation to lead to marginal allocation of conservation budget ✓ Low capacity of institutions and human resources for conservation planning and actions leads to inefficient use of limited budget ✓ Low wages, pour training, marginal institutional support leads to marginal commitment of Nature Protection Agents. ✓ Little community empowerment for management of wild resource has contributed to disenfranchise the population.	✓ Other Bank operations in the Mali pipeline to target poverty alleviation. ✓ Other donors to finance national awareness building (Holland, EU, IUCN) ✓ PASAOP tackles the sustainable-cotton and livestock issues. ✓ The project contributes to improvement of interface livestock/environment by piloting pastoral perimeters in Gourma and dissemination of results ✓ Study and design a mechanisms for channeling perennial funds to Communes after the Project end (study geared at the Gourma but national impact is expected) ✓ Prepare new regulations and provide DNCN with a status more adapted to decentralization and more conducive to efficiency. ✓ Identify ways and means to improve incentive for better performance of DNCN staff ✓ Provide awareness building and training to DNCN staff (other than Gourma staff) ✓ Nation-wide effort to entrust communes for the management of wild resources (not financed by Project elsewhere than Gourma)

Annex 5: Letter of Endorsement GEF Focal Point
MALI: Arid Rangeland Biodiversity Conservation

(Attached Separately)

Annex 6: List of Acronyms
MALI: Arid Rangeland Biodiversity Conservation

AFD	French Acronym for French Agency for Development
AFVP	French acronym for French Volunteer Association for Development
ANICT	French acronym for Agency for National Investment in Territorial Collectivities
CAS	Country Assistance Strategy
CCC	French acronym for Center of Commune Councils
COP	Conference of Party (of the Convention for Biological Diversity)
DNCN	French acronym for National Directorate for Nature Protection
DRCN	French acronym for Regional Directorate for Nature Protection
EA	Environment Assessment
EMP	Environment Management Plan
EU	European Union
FFEM	French acronym for French GEF
GEF	Global Environment Facility
FICT	French acronym for Fund for Investment in Territorial Collectivities
GEPRENAF	French acronym for West-Africa Pilot Community-based Natural Resources & Wildlife Management Project
IDA	International Development Agency
IFAD	International Fund for Agriculture Development
ILCA	International Livestock Center for Africa (now ILRI International Livestock Research Institute)
IPRSP	Interim Poverty Reduction Strategy Paper
MATCL	French acronym for Ministry of Territorial Administration & Local Collectivities
MEATEU	French acronym for Ministry of Equipment, Territorial Planning, Environment & Urbanism
NEAP	National Environmental Action Plan
NGO	Non Governmental Organizations
OD	Operational Directive (World Bank)
OP	Operational Program (GEF)
PACR	French acronym for Rural Municipalities Support Project
PADL	French acronym for Local Development Support Project
PAIB	French acronym for Grassroots Organizations Support Project
PASAOP	French acronym for Agriculture Services & Farmers Organization Support Project
PCU	Project Coordination Unit
PGRN	French acronym for Natural Resources Management Project
PNIR	French acronym for National Rural Infrastructure Project
PPPP	Pilot Pastoral Perimeter Project
PRONAGEN	French acronym for the Burkina National Natural Ecosystem Management Program
QAG	Quality Assurance Group
SCAC	French acronym for French Service for Cooperation and Cultural Support
SCG	French acronym for Gourma Biodiversity Conservation Service
SDSDP	Strengthening Decentralization and Service Delivery Project
TOR	Terms of Reference
TSU	Technical Support Unit
UICN	World Nature Union
UNCDF	United Nation Capital Development Fund
WWF	World Wide Fund for Nature