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**IMPLEMENTATION COMPLETION REPORT
(TF-28308)**

ON A

GRANT

IN THE AMOUNT OF SDRs 0.8 MILLION (US\$1.2 MILLION EQUIVALENT)

TO THE

MAURITIUS

FOR A

BIODIVERSITY RESTORATION PROJECT

02/03/2003

**Environment and Social Development Unit /AFC08
Africa Region**

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CURRENCY EQUIVALENTS

(Exchange Rate Effective)

Currency Unit = Mauritius Rupee (Mau. Rs.)
Mau. Rs 17.8 (February 1995) = US\$ 1
US\$ 1 = Mau. Rs 30.3 (April 2002)

FISCAL YEAR

July 1 June 30

ABBREVIATIONS AND ACRONYMS

AHRIM:	Association of Hotels and Restaurants of Mauritius Island
AQ:	Anse Quitor Nature Reserve
CBO:	Community-Based Organisations
GEF:	Global Environment Facility
GoM:	Government of Mauritius
GMO:	Grande Montagne Nature Reserve
IAA:	Ile Aux Aigrettes
ICR:	Implementation Completion Report
IPGRI:	International Plant Genetic Resources Institute
IUCN:	International Union for the Conservation of Nature
MoU:	Memorandum of Understanding
HSBC:	Hong Kong and Shanghai Banking Corporation Limited
MSP:	Medium Size Project
MWF:	Mauritius Wildlife Foundation
NEAP:	National Environmental Action Plan
NHT:	National Heritage Trust
NGOs:	Non-governmental Organizations
NPCS:	National Parks and Conservation Service
QAG:	Quality Assurance Group
RGB Kew:	Royal Botanical Gardens kew
SGP:	Small Grants Program

Vice President:	Callisto E. Madavo
Country Manager/Director:	Hafez M. H. Ghanem
Sector Manager/Director:	Richard G. Scobey
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**MAURITIUS
BIODIVERSITY RESTORATION**

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MAP NO. IBRD 26793

<i>Project ID:</i> P036030	<i>Project Name:</i> BIODIVERSITY RESTORA
<i>Team Leader:</i> Michel Simeon	<i>TL Unit:</i> AFTES
<i>ICR Type:</i> Core ICR	<i>Report Date:</i> February 3, 2003

1. Project Data

Name: BIODIVERSITY RESTORA *L/C/TF Number:* TF-28308
Country/Department: MAURITIUS *Region:* Africa Regional Office
Sector/subsector: General agriculture, fishing and forestry sector
(48%); Central government administration (25%);
Other social services (25%); Forestry (2%)

KEY DATES

	<i>Original</i>	<i>Revised/Actual</i>
<i>PCD:</i> 05/28/1993	<i>Effective:</i> 02/21/1996	02/21/1996
<i>Appraisal:</i> 01/16/1995	<i>MTR:</i> 07/04/1999	07/04/1999
<i>Approval:</i> 11/09/1995	<i>Closing:</i> 12/31/2001	12/31/2001

Borrower/Implementing Agency: GOVT OF MAURITIUS/MAURITIUS MARINE AUTHORITY (MMA); DIR. OF SHIPPING (MDA)

Other Partners:

STAFF	Current	At Appraisal
<i>Vice President:</i>	Callisto E. Madavo	Edward V. K. Jaycox
<i>Country Manager:</i>	Hafez M. H. Ghanem	Andrew P. Rogerson
<i>Sector Manager:</i>	Richard G. Scobey	Maryvonne Plessis-Fraissard
<i>Team Leader at ICR:</i>	Michel Simeon	Aubert Zohore
<i>ICR Primary Author:</i>	J. Mauremotoo; M. Simeon	

2. Principal Performance Ratings

(HS=Highly Satisfactory, S=Satisfactory, U=Unsatisfactory, HL=Highly Likely, L=Likely, UN=Unlikely, HUN=Highly Unlikely, HU=Highly Unsatisfactory, H=High, SU=Substantial, M=Modest, N=Negligible)

Outcome: S

Sustainability: HL

Institutional Development Impact: SU

Bank Performance: S

Borrower Performance: S

	QAG (if available)	ICR
<i>Quality at Entry:</i>		S
<i>Project at Risk at Any Time:</i>	No	

3. Assessment of Development Objective and Design, and of Quality at Entry

3.1 Original Objective:

The project intends to help GOM to meet some of its outstanding global obligations, identified in domestic environmental strategies and plans, and specified under the Biodiversity

Convention, for which full domestic funding is not forthcoming. Specifically, it would (i) protect critically endangered biodiversity of international importance by restoring degraded small island habitats and propagating and reintroducing endemic species to these habitats; and (ii) strengthen capacity for the management and monitoring of biodiversity restoration.

3.2 Revised Objective:

The objectives of the project were never formally revised. However, there were some project objectives that could not have been carried out as planned. In Rodrigues it was not possible to undertake restoration work in the Mourouk valley as, unlike Anse Quito and Grande Montagne it had not been declared a nature reserve. In addition the work in Anse Quito was hampered by the plans (only formally rescinded in July 2001) to extend the runway of Plaine Corail Airport into the nature reserve.

3.3 Original Components:

The project total cost was estimated at US\$1.6 million and consisted of four components:

- A survey for :
 - (a) The identification of original habitat/community types for determining species recovery and habitat restoration targets at the three sites, Rodrigues Island, Ile aux Aigrettes and Round Island, and
 - (b) The eradication of control of undesired exotic species (US\$110,000).
- Investment in required infrastructure (nurseries, buildings) for the ex-situ propagation and cultivation of threatened plants (US\$125,000);
- Supplies and equipment for propagation, replanting and reseedling of endemic plants, and reintroduction of endemic animals from captive-bred populations (US\$685,000); and
- Technical assistance to strengthen the governmental and non-governmental institutions involved, based on a skills audit and training needs analyses (US\$670,000). This would develop:
 - (a) Skills in project planning administration
 - (b) Horticultural expertise and facilities to ensure the viability of support propagation services and the long term of plant populations,
 - (c) Expertise in applied conservation biology including the genetic/demographic management of endangered plant populations, and
 - (d) Skills in habitat monitoring.

For implementation purpose, the above was structured as follows:

i. Rodrigues Forest restoration	\$401,000
ii. Round Island restoration	\$017,000

iii. Ile aux Aigrettes restoration	\$175,000
iv. Institutional strengthening and capacity building	\$606,000

3.4 Revised Components:

Components	Cost	Rating
Rodrigues Forest restoration	\$251,600.00	S
Infrastructure Improvement	\$014,300.00	HS
Supplies and Equipment	\$351,000.00	S
Technical assistance	\$475,400.00	S

3.5 Quality at Entry:

The quality at entry was satisfactory, in spite of a few shortcomings:

- Institutional problems and the difficulties of logistics to work on Round Island were underestimated at the time of preparation and appraisal.
- Budget categories were too general in the initial formulation of the document and therefore cost estimates were not accurate. The consultant who wrote the grant proposal did not use local sources to estimate cost.

The situation on Ile aux Aigrettes allowed work to proceed relatively smoothly with MWF being granted a long-term lease (due to end in 2034) to manage the island for ecological restoration. Round Island has been managed as a joint undertaking between the Government of Mauritius (through its National Parks and Conservation Service – NPCS) and MWF. Collaboration has been generally good but occasionally there have been problems such as access to helicopter facilities being limited by complex procedures. The work in Rodrigues is in theory managed jointly by MWF and the Rodrigues Forestry Service. In practice almost all the work was done by MWF and volunteers.

4. Achievement of Objective and Outputs

4.1 Outcome/achievement of objective:

Ile aux Aigrettes

The last significant remnant of Mauritian coastal ebony forest is now well on its way to restoration with 90% of the island having been cleared of alien weeds and planted where necessary. A secure funding base for the sustainable financing of the Ile aux Aigrettes restoration programme has been established.

Round Island

Weed control and native planting techniques and capacity have been developed that will allow large-scale restoration to proceed. This is now being implemented as a World Bank/GEF funded medium size project.

Rodrigues

All except one of a target list of 54 species have been successfully propagated. Many of these species have been brought back from the brink of extinction. Ninety per cent of the reserve area of Grande Montagne and about over half the area of Anse Quitor nature reserve have been weeded of alien plants and planted with natives.

Institutional strengthening and capacity building

The project has contributed significantly to a large increase of the level of public awareness - both nationally and internationally - about biodiversity value and conservation efforts in Mauritius and Rodrigues and the efforts being made for its conservation. This has resulted in a sharp increase in the number of Mauritian volunteers to carry out conservation work, in addition to the historically steady flow of international volunteers. Careful monitoring of restoration work and experimental trials have resulted in improved knowledge in restoration techniques. Mauritian conservation capacity has vastly increased in both the Governmental and non-governmental sectors.

4.2 Outputs by components:

Ile aux Aigrettes

Construction of a nursery capable of growing sufficient numbers of native plants to speed up the restoration of Ile aux Aigrettes. Construction of the Ile aux Aigrettes nursery was successfully completed in 1997 and the first large scale plant production was ready for the 1998 planting season. The nursery has consistently functioned well with low plant mortality and no intractable pest or disease problems. In most cases plant production has been sufficient for annual planting requirements. Nearly 55,000 plants of 55 species have been produced during the project period.

Complete restoration of the islet. Weeding of all weed-infested areas and replanting as necessary with native species. Although never formally revised it became clear in late 1999 that this objective would not be met by the end of the project. However, about 90 % of the island has been weeded and planted to date and it is confidently projected that the restoration weeding and planting will be completed in 2003. Areas weeded in 1997 were high but that year labour donations from Sugar Estates were withdrawn. This labour was replaced by a permanent Ile aux Aigrettes labour force but this was insufficient for the amount of weeding work required. Only from 2000 was enough labour hired to replace the loss of donated labour. From 2000 areas weeded increased reaching with 8.5 ha. in 2001.

Development of a monitoring scheme to assess the success of the Ile aux Aigrettes restoration programme. A reliable monitoring scheme was supposed to have been developed early in the restoration programme. However, the scheme initially developed was not robust and was replaced by a more thorough survey in 1999. A repeat vegetation survey conducted in 2001

indicated a decrease in weed levels, e.g. *Leucaena leucocephala*, possibly the island's most invasive weed species, decreased in cover by 50% between 1999 and 2001. In the meantime, planted pioneers such as *Dodonaea viscosa* and *Hibiscus tiliaceus* increased in height by 100 cm and 70 cm respectively in the year immediately following planting.

Eradication of all exotics within the project period. This aim was never realistic and is almost certainly never to be achieved for all plant species on Ile aux Aigrettes. However, the levels of exotic plants have been considerably reduced on the island and many species are now at densities that do not pose substantial problems for native plants as long as regular weed management is continued. An effort to eradicate Indian house shrews from the island in 1999 was unsuccessful. However, the experience enhanced knowledge of the requirements for a future successful eradication. In 1999 the world's first successful shrew eradication was carried out on Ile de la Passe, one of the smaller islets in the Mahebourg Bay.

Research to increase the efficiency of species propagation. Huge increases in knowledge on the propagation of native plants have been achieved during the project. These have led to an increase in the Ile aux Aigrettes nursery production from 7,000 plants of 12 species in 1998 – 16,500 individuals of 35 species in 2001.

Research to optimize planting performance. Initially it was unclear which species mix and planting densities would produce the fastest native regeneration and best suppression of weeds. Experimental plantings resulted in much higher than expected survival rates (up to 90% for some species) and so planting densities could be lowered as the project proceeded. It was unknown which species would be the most effective pioneers in the Ile aux Aigrettes environment. Some that were expected to perform well (e.g. *Ehretia petiolaris* and *Sophora tomentosa*) did not while others (e.g. *Dodonaea viscosa* and *Hibiscus tiliaceus*) proved extremely effective.

Recovery for endangered species of plants. Of the 55 plant species propagated on Ile aux Aigrettes from 1997-2001 28 are endangered according to IUCN criteria. Due to the restoration programme on Ile aux Aigrettes five of these species are well on the way to being down-listed (over 1,000 plants produced and successfully planted) and over 100 individuals have been produced and planted of a further six of these species.

Development of ecotourism. In 1997 MWF launched its ecotourism programme. A visitor's center was built on Ile aux Aigrettes with funds donated by the Japan World Exposition Commemorative Fund and the island opened to visitors for paid guided tours. White Sand Tours, a main Tour Operator in Mauritius, offered to act as our general sales agent until we were ready to operate more independently. Progressively new trails have been opened, better information provided, new guides recruited, a gift shop opened on the island, and an ecotourism strategy and marketing plan developed which are now being implemented. Eco-Tours are now available on a daily basis. Guides offer insight into the unique plant and animal life of this islet and a firsthand glimpse at the conservation work. They identify a range of endangered plants and explain the significance of these species to Mauritius' biodiversity. Ile aux Aigrettes is the only place in the world where visitors can see the unique and very rare Mauritian Pink Pigeon completely in the wild. Giant Aldabran Tortoises can also be seen roaming free on the islet. Recently, the unique

Round Island Telfair's skink, and once an inhabitant of Ile aux Aigrettes, was re-introduced in semi-captivity and may now be seen by visitors. The tour is being developed on the strictest principles of ecotourism, the purpose being to inform the public about our conservation work and to finance MWF on a sustainable basis in the future. 1998 was the first full year of operation with 800 visitors. This progressed to 1200 in 1999, 1650 in 2000 and 3960 in 2001. MWF are planning to level off at about 25 000 to 30 000 within the next 4 to 5 years.

Round Island

Monitoring changes in plant communities. The monitoring regime of permanent quadrats established in 1975 were monitored through the GEF project. The dominant native palm *Latania loddigesii* is regenerating well as is *Pandanus vandermeerschii* and the bottle palm *Hyphorbe lagenicaulis* is beginning to show signs of recruitment. Total vegetation cover continues to increase but this is dominated by introduced herbaceous weeds. However, these weeds are protecting the newly forming soil and can provide favorable micro-conditions for the establishment of native woody species. This monitoring regime will be expanded under the World Bank GEF MSP Restoration of Round Island project in order to obtain a more detailed picture of the changes in plant communities as the restoration work proceeds.

Monitoring changes in vertebrate communities. Regular monitoring trips were carried out but it became increasingly obvious that with the changes in vegetation structure on the island the results did not give a true picture of changing numbers on Round Island. With the longer-term presence on Round Island facilitated by the World Bank GEF MSP, it is now possible to establish a more robust monitoring scheme for reptiles. Intensive ringing studies of the Round Island race of the herald petrel continued during the project. No major changes were noted. Under the new Round Island project these studies are being expanded as an Mphil/PhD project for Vikash Tatayah, a MWF staff member.

Control of individual weeds. The attempts to eradicate *Desmanthus virgatus* begun in 1982, were stopped in 1997 when it was decided that eradication of the plant was not feasible as management trips too short and infrequent. In addition the plant itself was deemed not to be as great a risk to the ecology of Round Island as had been previously thought. Another new weed, the grass *Heteropogon contortus* was controlled with a view to eradication but this aim has not yet been achieved.

Trials of reseeded areas with native plants. Approximately 140,000 seeds of 16 species were sown during the project. Success rate was almost zero. This was due to the overwhelming domination of weed seeds in the seedbank and because any germinating native seedlings could not be given individual management at this critical stage.

Trials of replanting areas with native seedlings. Approximately 5,500 plants of 17 species were planted on Round Island. Mortality rates were very high varying between 75 % and 100 %. This depended on species and the weather conditions around the time of planting as no after-care could be provided due to the short duration of management trips. These trials provided useful information about which species are the most suitable pioneers to use for the long-term re-establishment of the Round Island hardwood forest. Native seedlings found on the island were

also transplanted into suitable locations. The success of these transplants varied with the factors outlined above and once again provided useful information on which species could be used in this way to headstart the restoration process in degraded areas.

Formation of soil by construction and maintenance of soil traps. Soil traps are lines of rocks running parallel to the slope in such a way as to catch and accumulate eroding rock in order to speed up soil formation. They have been found to be very effective on Round Island. Numerous soil traps were constructed and maintained on Round Island management trips. The success of these traps in building soil was not quantified but they were generally perceived to be effective.

Formulation of a management plan. The objective of producing a management plan for Round Island has been met only in part (there is a draft management plan). This is due to the fact that it took longer than expected to develop the techniques that are now applied on the on-going follow-up project. The management plan will be reviewed, adjusted and formalized in due course under that project.

Rodrigues

The restoration of Cascade Mourouk. No restoration work was carried out in this location as it was not declared a nature reserve during the project period. This change was never translated into a formal project revision.

Construction of a nursery capable of growing sufficient numbers of native plants for the restoration of GMO and AQ Nature Reserves. Construction of the Rodrigues nursery was completed in 1997 and the first large scale plant production was ready for the 1998 planting season. The nursery has consistently functioned well and in most cases plant production has been sufficient for annual planting requirements. A total of 85,000 plants of 53 species have been produced during the project period.

Restoration of Grande Montagne nature reserve i.e. weeding of all weed-infested areas and replanting areas weeded with native species. Work on Grande Montagne has progressed steadily with about 2 ha. weeded and planted each year from 1988. About 90 % of the Grande Montagne reserve area of 10 ha. has been weeded and planted to date. It is confidently projected that the restoration of the reserve area will be completed in 2003.

Restoration of Anse Quito nature reserve i.e. weeding of all weed-infested areas and replanting areas weeded with native species. The restoration programme in Anse Quito has been challenging. Droughts hit the area in 1999 and 2000 resulting in a lack of appropriate weather for planting and poor survival (sometime 100 % mortality) of those plants that were planted. From 2000 there was a proposal to extend the runway of Plaine Corail airport into Anse Quito nature reserve and major planting was postponed pending a firm decision. In July 2001 it was decided to route the runway away from the reserve and major planting was resumed. In spite of difficulties 50 % of the reserve area has been weeded and planted to date.

Establishment of native habitat for remaining Rodriguan endemic vertebrates. Habitat is being established and native birds are starting to use the growing native forest at Grande

Montagne as nesting habitat. However, it will take several more years of native tree growth until the habitat optimal for native vertebrates.

Development of a monitoring scheme to assess the success of the Rodrigues restoration programme. A reliable monitoring scheme was supposed to have been developed early in the restoration programme. However, the scheme initially developed was not robust and was replaced by a more thorough survey in 2000. Monitoring indicates that native species can achieve reasonable rates of growth with several species of relatively fast growing natives such as *Pittosporum balfouriana*, *Gastonia rodriguesiana* and *Dracaena reflexa* putting on between 70 and 90 cm of growth in the year immediately following planting in Grande Montagne. Due to the dry conditions pioneers grew slower in Anse Quitor with increases in height of about 40 cm per year immediately following planting for the faster growing species such as *Thespesia populnea* and *Dodonaea viscosa*.

Research to increase the efficiency of species propagation. Huge increases in knowledge on the propagation of native plants have been achieved during the project. These have led to an increase in the Rodrigues nursery production levels from 2,200 plants of 14 species in 1998 to a peak of 39,500 individuals of 27 species in 2000.

Research to optimize planting performance. Initially it was unclear which species mix and planting densities would produce the fastest native regeneration and best suppression of weeds. Experimental plantings resulted in much higher than expected survival rates (up to 90% for some species) in the relatively cool and humid Grande Montagne although survivorship was much more variable in the warmer and drier Anse Quitor (between 90% and 20% depending on species and the duration of rainy periods after planting). Nevertheless planting densities could be lowered in most instances as the project proceeded. It was unknown which species would be the most effective pioneers in the two very different locations. A large number of species including those mentioned above proved effective as pioneers in the Grande Montagne environment while a smaller number were effective in Anse Quitor (e.g. *Dodonaea viscosa* and *Thespesia populnea*).

Recovery for endangered species of plants. Of the 53 plant species propagated in the Rodrigues nursery from 1998-2001, 39 are endangered according to IUCN criteria. A total of 69,000 individuals of these species were propagated during the project period. Due to the restoration programme in Rodrigues thirteen of these species are well on the way to being downlisted (over 1,000 plants produced and successfully planted) and over 100 individuals have been produced and planted of a further nine of these species. Of a target list for propagation of 45 endemic species 44 have been successfully propagated during the project period.

Institutional Strengthening and Capacity Building

National and International Public Awareness Benefits

The sub-projects funded under the GEF grant have been used to increase awareness about the biodiversity value of Mauritius and Rodrigues and the efforts being made for its conservation. An average of one article a month has appeared in the Mauritian media about one or more of the three sub-projects. The project has also been featured regularly on Mauritian television news and

documentary slots and on the Mauritius College of the Air. The project has also been featured several times in international documentaries. In addition scientific findings of the project have been featured in peer-reviewed journals and in conference proceedings and several scientific works are in preparation.

The work in Rodrigues has been used by the MWF Community Educator (project established in 1998) as material for presentation to Rodriguan children and community groups and for field excursions allowing direct experience of the process of ecological restoration. Project work has also been used as material for the Mauritian NPCS educator.

Increasing efficiency in ecosystem restoration techniques

Practical restoration work has proceeded alongside experimental trials and careful monitoring throughout the project. Training of project personnel has also continued throughout the project. These processes have resulted in an increasing efficiency in restoration techniques as the project has proceeded. Specific measures that have led to increasing efficiency in restoration include the use of physical on-site grid markers for the mapping of restoration areas on Ile aux Aigrettes and Rodrigues. These have allowed the precise timing of restoration operations that has helped planning, burning of weeded biomass that has reduced reinfestation of weeds from under woodpiles, the judicious use of herbicides and mulching based on the results of trials and the choice of pioneer species to use for planting of areas cleared of weeds.

The value of volunteer participation

Conservation work in Mauritius over the last twenty years has made very effective use of international volunteers. For most of this time only a few Mauritian have volunteered to work in conservation. In the course of the Biodiversity Restoration Project the numbers of Mauritian and Rodriguan volunteers has expanded hugely. In Rodrigues 25 volunteers (17 from Rodrigues and 8 from overseas) have participated full time in the restoration project. In addition 10 community groups, with an estimated average of 10 people per group, have participated in the restoration. On Ile aux Aigrettes 10 full time volunteers (6 Mauritians and 4 expatriates) and 5 community groups, also with an estimated average of 10 people per group, have worked on the restoration project. Three of these groups have worked for a day each month for the first six months. After this period the work has been done as and when required. In addition to the above people and groups who have contributed substantially to the restoration projects there have also been groups and individuals who have worked from time to time on the restoration projects on Ile aux Aigrettes and Rodrigues. These efforts have been very useful as awareness-raising exercises.

No major volunteer efforts were carried out on Round Island during the project as stays were for short periods only and transport was limited.

Increasing Mauritian expertise in conservation

During the course of the GEF project MWF grew from being a small, largely fauna-focussed, expatriate-dominated NGO to being a large NGO focussing on whole ecosystems

and with the majority of its staff (particularly in its flora programmes) being Mauritian. Training opportunities detailed in 4.5 have increased the capacity of Mauritian nationals in areas such as quantitative ecology, plant propagation, conservation of plant genetic resources and weed management. Developments within MWF have been paralleled by increases in the capacity of Government agencies to carry out conservation of native biodiversity. The Rodrigues Forestry Service is now mainly planting native species. The Mauritius Forestry Service has established a Biodiversity Unit to carry out conservation in areas not currently conserved by MWF and the NPCS. The NPCS have expanded the area they are managing for conservation on the Mauritian mainland and have recruited additional staff.

4.3 Net Present Value/Economic rate of return:

Not applicable.

4.4 Financial rate of return:

Financial Rate of return Not Applicable.

Financial sustainability: The use of Ile aux Aigrettes as an ecotourism destination is one of the main avenues for sustainable funding of ecological restoration work on Ile aux Aigrettes and possibly on Round Island (which may well be too fragile to ever accept visitors on a large scale). The Ile aux Aigrettes ecotour has been developed throughout the project period. The tour attracted 3,960 visitors in 2001 (above the estimate made in 2000 of 2,500 visitors). In 2002 it is estimated that 9,000 visitors will come to the island. This will cover all ecotour costs. In 2003 ecotour income is projected to fund the management of Ile aux Aigrettes and in 2004 it is projected to cover the maintenance of both Ile aux Aigrettes and Round Island.

Leveraging of other funds. The project has helped to attract the following project funds

Project	Donor	Value (US)
<i>Ile aux Aigrettes</i>		
Building of the visitors centre	Japan World Expo Fund	67,000
Building of bunkhouse to house resident project personnel	J&B circle	7,000
Development of ecotourism facilities	Mauritian National Environment Fund	48,300
Building of display and release aviaries	British High Commission and Ambassade de France	7,670
Production of education and awareness-raising publications	HSBC Mauritius	4,000
Management of pink pigeons on IAA	Durrell Wildlife Conservation Trust	64,500
<i>Round Island</i>		
Restoration of Round Island	World Bank/GEF	750,000
<i>Rodrigues</i>		
Rodrigues community education project	Philadelphia Zoo	49,000
Sustainable use of Rodriguan Endemic Plants	UNDP/GEF SGP	50,000
Rodriguan conservation programme 2001	UK trusts	18,600
Coastal restoration project	European Union	4,000
Whitley Award for International Nature Conservation	Whitley-Laing Foundation	33,000
<i>General projects</i>		
An information system for biodiversity and conservation monitoring in Mauritius	Darwin Initiative – UK	200,000
Staff exchange programme between MWF and the Conservatoire Botanique National de Mascarin	Le Fondation de France	8,000
The pilot Mauritius rare plant species recovery project	Royal Botanical Gardens Kew – UK	8,600

4.5 Institutional development impact:

The project has had a strong impact on the institutional capacity of the implementing NGO (MWF). It also contributed to the training of staff from the Forestry Department and from the National Parcs Conservation Service. Details are given below.

Also, using Ile aux Aigrettes and Round Island as models of successful islets management the Government of Mauritius through the Ministry of Environment launched an Islets Taskforce to investigate the state of the islets of Mauritius and to propose remedies for those judged to be in need of improved management.

Institutional and Personal Capacity Development

Within MWF 20 persons (18 Mauritian and 2 expatriates) have been employed directly on the project. Approximately 50 other MWF staff have been involved with the project from time to time. In addition another 50 people from other Mauritian organizations have worked directly on the project. All of these have benefited from on the job training.

Eshan Dulloo, who as Plant Conservation Manager for MWF from 1996 to the end of 1998, was responsible for the management of the GEF project moved to IPGRI as Germplasm Conservation Scientist. Eshan Dulloo also gained his PhD at the end of 1998.

Shadila Venkatasamy, MWF Ile aux Aigrettes horticulturalist from 1998 – 2000 is currently studying for an MPhil/PhD on the genetics of Mauritian ebony at the University of Mauritius.

Ashok Khadun, Ile aux Aigrettes restoration coordinator is studying for an MPhil/PhD on the restoration of Ile aux Aigrettes at the University of Mauritius.

Ten undergraduates from the University of Mauritius have completed their BSc project on topics related to the GEF project.

Specific training courses funded as part of the project are listed below:

Course	Beneficiaries
Placement in New Zealand to study islet restoration work	Eshan Dulloo (MWF)
Placement in RBG Kew to gain hands on propagation experience	Shadila Venkatasamy (MWF)
Plant propagation course in Mauritius and Rodrigues	MWF, NPCS & Forestry staff

Other training courses catalyzed by the project

Course	Funder	Beneficiaries
Biodiversity training courses - 1996, 98 & 99	UNDP/GEF	University of Mauritius students, staff of relevant NGOs, CBOs and Government agencies
Biodiversity training course – 2001	UNDP/GEF SGP	As above
Kew Conservation Course	Mauritian Government	Richard Payendee (then of Forestry)
Horticulture training from RBG Kew	RBG Kew	MWF, NPCS & Forestry staff

Communities in Rodrigues and Mauritius

Details of the numbers of community groups that have gained capacity through the GEF project in Rodrigues and Ile aux Aigrettes are outlined above. In addition 230 families are participating in the UNDP/GEF Sustainable use of Rodriguan Endemic Plants project.

5. Major Factors Affecting Implementation and Outcome

5.1 Factors outside the control of government or implementing agency:

There were unanticipated difficulties in finding appropriate times for planting for Anse Quitor because of the sporadic rainfall throughout the project.

5.2 Factors generally subject to government control:

Coordination between MWF and Government of Mauritius institutions

- The proposed extension of Plaine Corail Airport made planning of work for Anse Quitor very difficult.
- The sporadic cooperation of the Rodrigues Forestry Service made planning very difficult, slowing down project implementation.
- Complex procedures and lack of coordination meant that Round Island trips were often difficult to plan and they did not always take place at the most appropriate time.
- The need to pay for food for GoM staff on Round Island expedition has lead to difficulties in financing operations.

5.3 Factors generally subject to implementing agency control:

A MoU was signed with the Ministry of Agriculture but not with the Ministry for Rodrigues who are responsible for the Rodrigues Forestry Department. This lack of agreement made it difficult to plan operations in Rodrigues.

The MWF Plant Conservation Manager, responsible for the technical management of the project from 1996-1999 was also studying for a PhD and this slowed down the pace of restoration work during this period. The recruitment of a new Plant Conservation Manager at the beginning of 1999 resulted in increased project productivity.

Budget categories were too general in the initial document and therefore cost estimates were not accurate. This created start-up difficulties.

Disbursement procedures were not well understood by MWF staff for much of the project but these have now been clarified and capacity has been built within the organization so that such procedures will be well understood in the future.

Interpretation of budget categories by the World Bank changed during implementation, which caused some confusion and delays in disbursement.

5.4 Costs and financing:

The cost of working on Round island had been under-estimated. A solution was found through Government contributions to helicopter trips, but as stated above this entailed complex procedures.

6. Sustainability

6.1 Rationale for sustainability rating:

Ile aux Aigrettes

The last significant remnant of Mauritian coastal ebony forest is now well on its way to restoration with 90% of the island having been cleared of alien weeds and planted as necessary. The site will be self-sustainable through eco-tourism. Ile aux Aigrettes is the only place in the world where visitors can see the unique and very rare Mauritian Pink Pigeon completely in the wild and the unique Round Island Telfair's skink, once an inhabitant of Ile aux Aigrettes, was re-introduced in semi-captivity. 1998 was the first full year of operation with 800 visitors. This progressed to 1200 in 1999, 1650 in 2000 and 3960 in 2001, with plans to level off at about 25 000 to 30 000 within the next 4 to 5 years. Conservation and eco-tourism activities are to be extended to several other islets in the same area, as part of the implementation of Government's Islets Action Plan, and this new development will potentially improve further the long-term viability of Ile aux Aigrettes.

Round Island

Weed control and native planting techniques have been developed that will allow large-scale restoration to proceed. This is now being implemented as a World Bank/GEF funded medium size project. After considerable effort and indeed solidarity between the diverse groups involved in the project, a field station has been successfully built on the Southern Plateau of the island, and the process of restoring the native vegetation of the island has been intensified. A new nursery has been constructed in one of the gullies. This will act as a holding area for plants being brought over from Ile Aux Aigrettes, before they are planted out. Cuttings and seedlings are also being cultivated in there, and in the future seed trials will be carried out. Approximately 100,000 litres of water have been collected in 2002 for use around the island, and 1750 plants of mixed species have been planted in two restoration areas. Without these water collection systems, restoration of the island at this early stage would not be possible.

Rodrigues

The project has been very successful in developing the proper nursery techniques for all but one of a target list of 54 critically endangered endemic plant species that have now been planted in significant numbers and successfully propagated. Many of these species have been brought back from the brink of extinction. This paves the way for scaling up operations. Almost the entire reserve area of Grande Montagne and about over half the area of Anse Quitor nature reserve have been weeded of alien plants and planted with natives, thus re-creating native habitat

for remaining Rodriguan endemic vertebrates.

Lack of water is widely perceived as Rodrigues' major problem. Water-thirsty non-native trees that have been planted or have invaded water catchment areas have exacerbated the effects of the lack of rain. A program of rehabilitation of watersheds using native trees would considerably help the situation. Using slightly modified techniques based on those developed by the project such a program is highly feasible.

6.2 Transition arrangement to regular operations:

The income from eco-tourism on Ile aux Aigrettes is expected to raise progressively to a level that will be sufficient to sustain long term costs of Ile aux Aigrettes and Round island.

Government has decided to involve NGOs in the management of some of the islets. In the Mahébourg area in particular, where Ile aux Aigrettes is located, the National Heritage Trust (NHT) would be mandated to restore and manage Ile de la Passe, and MWF would take responsibility for Fouquet, Vacoa, Marianne and Roche aux Oiseaux. In addition, MWF has developed initial proposals to put under proper management the area under mangrove near Point d'Esny. The project would restore the mangrove by re-establishing proper circulation of water, now disrupted by a road. It would also include the construction of a visitor center and landing facility that would help develop eco-tourism on the islets (including Ile aux Aigrettes) and thus make restoration and conservation efforts self-sustainable in the medium run.

In the North, as part of the group of islets that includes Round Island, Government has decided to mandate management of Flat Island and Ile Gabrielle, two popular picnic destinations, to AHRIM (the association of hotels and restaurants of Mauritius Island). Flat Island (about 250 ha) is the largest of Mauritius Islets, and to restore the ecosystem would require a different approach than in the case of Round Island or Ile aux Aigrettes, but it would be of great ecological interest. Because those two islets have great potential for restoration, MWF should get in touch with AHRIM and explore their potential interest for a partnership. This could potentially become a second component of the Mahébourg area proposal.

The continuation of project activities in Rodrigues is expected to continue through the regular program of the Forestry Service as well as through continuing fund raising by MWF, volunteer participation and community groups. Also, given the decentralization policy of the country and recent elections to establish a regional Assembly in Rodrigues, new developments can be expected. Lack of water is widely perceived as Rodrigues' major problem. Water-thirsty non-native trees that have been planted or have invaded water catchment areas have exacerbated the effects of the lack of rain. A program of rehabilitation of watersheds using native trees would considerably help the situation. Using slightly modified techniques based on those developed by MWF during the recently completed Biodiversity Restoration project such a program is highly feasible.

7. Bank and Borrower Performance

Bank

7.1 Lending:

Overall performance was satisfactory.

The Bank's performance in project **identification** was satisfactory. Government prepared a National Environmental Action Plan (NEAP) in 1990 and was the first country in the world to ratify the Biodiversity Convention. Government policy for biodiversity management was - and still is - to extend protection to key habitats and restore some of its most unique ecosystems. The resulted in the establishment of the Black River Gorges National Park, and in the decision to reserve two uninhabited offshore islands, Ile aux Aigrettes and Round island, for species and habitat restoration, and to expand on-going conservation work in a number of reserve areas on the island of Rodrigues, as recommended in the NEAP. The project was designed to support Government policy and priorities in biodiversity management.

The Bank's performance in project **preparation and appraisal** was satisfactory, to the extent that project design was technically sound and the decision to commission an NGO to implement the project demonstrated its merits. There nevertheless were some shortcomings in the quality of the project at entry, as explained in section 3.5. Most significant was the underestimation of the difficulties of the logistics to work on Round island.

7.2 Supervision:

The Bank's performance in project **supervision** was satisfactory. Although initial supervision missions focused more on technical aspects and not enough on project management, this was eventually corrected.

7.3 Overall Bank performance:

Overall performance was satisfactory.

Borrower

7.4 Preparation:

Government's performance in project preparation was satisfactory. Priorities were clearly established, in line with Government's work on the NEAP. Detailed project preparation was nevertheless left too much to consultants, resulting in some shortcomings in the quality of the project at entry, as explained in section 3.5 and in 7.1 above.

7.5 Government implementation performance:

Government's implementation performance was satisfactory. Collaboration has been very good between Government and the implementing NGO, in particular to help solve the logistics problems of working on Round Island by developing regular arrangements for using the helicopters of the Police. On the negative side, complex procedures and local susceptibilities have

sometimes made working on the ground more difficult than necessary.

7.6 Implementing Agency:

The implementing agency (MWF) performance was satisfactory. Financial management was initially too casual, but this was eventually corrected. MWF was very proactive in seeking additional resources (see 4.4) by establishing a staff position for that purpose. The successful eco-tourism program developed for Ile aux Aigrettes was not part of the initial project design but now it paves the way towards financial sustainability.

7.7 Overall Borrower performance:

Overall performance was satisfactory.

8. Lessons Learned

- The logistics of working on small islands is very heavy. This was clearly under-estimated for Round Island, but also applies to Rodrigues and to a lesser extent to Ile aux Aigrettes. Partnerships are essential to overcome such difficulties.
- Collaboration with partners, and in particular collaboration between an NGO and public entities such as Government Departments, benefits from being clearly spelled out and is best organized through the use of formal memoranda of understanding. Such an MOU would have been most helpful for example in the case of Rodrigues.
- There is as much to learn from failure than from success, as illustrated by the learning process at Round Island, where trials and errors have eventually led to a full understanding of how the island can be restored. This has led to the development of a follow-up project, now on-going.

9. Partner Comments

(a) Borrower/implementing agency:

The Ministry of Economy and GEF focal point has liaised with the relevant institutions and sent the following comments on the Implementation Completion Report:

● **Round Island Restoration**

Page 3 of the report makes reference to the following statement 'occasionally there have been problems such as access to helicopter facilities being limited by complex procedures'. It is to be noted that all requests received from MWF to use police helicopter have been processed diligently and sent to the Commissioner of Police and Prime Minister's Office to obtain permission for using helicopter as per usual procedures. We are not aware of any flight which has been postponed or cancelled.

As per the project document, one of the outcomes was a management plan for Round Island after five years of the project (1995-2000). However, we note that up to now only a draft management plan has been produced.

- **Ile aux Aigrettes Restoration Plan**

We are satisfied with the progress achieved and comments made in the report.

- **Rodrigues Forest Restoration Project**

We are awaiting reply from the Rodrigues Regional Assembly.

(b) Cofinanciers:

N.A.

(c) Other partners (NGOs/private sector):

N.A.

10. Additional Information

No additional information is available.

Annex 1. Key Performance Indicators/Log Frame Matrix

Ile aux Aigrettes	
Construction of a nursery capable of growing sufficient numbers of native plants to speed up the restoration of Ile aux Aigrettes.	Nursery successfully constructed in 1997. Consistent production of sufficient plants for Ile aux Aigrettes restoration.
Complete restoration of the islet.	Island 90% (23 ha.) restored and restoration will be completed in 2003.
Development of a monitoring scheme to assess the success of the Ile aux Aigrettes restoration programme.	Monitoring scheme developed and indicating success. Major weed infestations reduced by 50% in two years.
Eradication of all exotics within the project period.	An unrealistic goal. However the impact of many exotics has been reduced substantially.
Research to increase the efficiency of species propagation.	Huge increases in efficiency of plant propagation resulting in yearly increases in production.
Research to optimize planting performance.	Planting performance improved allowing better use of nursery efforts resulting in increased areas restored each year as project progressed.
Recovery for endangered species of plants.	28 endangered species propagated and 5-11 of these are likely to be downlisted by the IUCN once plants propagated on Ile aux Aigrettes reach maturity.
Round Island	
Monitoring changes in plant communities.	Increasing populations of main tree species but greater levels of many weeds.
Monitoring of changes in vertebrate communities.	Reptile monitoring not very useful but can be improved with a long term presence made possible by the World Bank GEF MSP project. Seabird populations stable.
Control of individual weeds.	Efforts to eradicate <i>Desmanthus</i> abandoned for logistical and conservation reasons. Efforts still being made to eradicate two potentially destructive weeds.
Trials of reseeding areas with native plants.	Many seeds were sown but success rates were very low.
Trials of replanting areas with native seedlings.	Success rates greater than above but still very variable. Trials provided useful information on species and techniques to use in the new project.
Formation of soil by construction and maintenance of soil traps.	No quantitative monitoring but were effective in many cases.
Rodrigues	
The restoration of Cascade Mourouk.	No restoration work was carried out in this location as it was not declared a nature reserve during the project period.

Construction of a nursery capable of growing sufficient numbers of native plants for the restoration of GMO and AQ Nature Reserves .	Nursery successfully constructed in 1997. Consistent production of sufficient plants for Rodrigues restoration.
Restoration of Grande Montagne nature reserve.	About 90 % of the 10 ha. reserve has been weeded and planted.
Restoration of Anse Quitor nature reserve.	About 50 % of the 10 ha. reserve has been weeded and planted in spite of drought and landuse conflicts.
Establishment of native habitat for remaining Rodriguan endemic vertebrates.	Native birds starting to nest in restored areas of Grande Montagne.
Development of a monitoring scheme to assess the success of the Rodrigues restoration programme.	Reliable monitoring scheme has been developed helping to quantify the success of the restoration work.
Research to increase the efficiency of species propagation.	Huge increases in efficiency of plant propagation resulting in increases in production.
Research to optimize planting performance.	Planting performance improved allowing better use of nursery efforts resulting in increased areas restored as project progressed.
Recovery for endangered species of plants.	39 endangered species propagated and 13-22 of these are likely to be downlisted by the IUCN once plants propagated in Rodrigues reach maturity. 44 of 45 endemic plant species propagated.
Institutional Strengthening and capacity building	
National and international public awareness benefits.	Frequent national and international media coverage and scientific publications.
Increasing efficiency in ecosystem restoration techniques.	Improved practices resulting in greater capacity for ecological restoration in Mauritius.
The value of volunteer participation.	35 full time volunteers, mostly from Mauritius and Rodrigues, as well as community groups have participated in restoration.
Increasing Mauritian expertise in conservation.	Change in focus of MWF towards whole ecosystems and increased levels of Mauritian staff. Greater resources for conservation in Government bodies.

Annex 2. Project Costs and Financing

Project Cost by Component (in US\$ million equivalent)

Component	Appraisal Estimate US\$ million	Actual/Latest Estimate US\$ million	Percentage of Appraisal
Rodrigues Forest Restoration	0.37	0.25	68.74
Round Island Restoration	0.02	0.01	95.33
Ile Aux Aigrettes Restoration	0.15	0.35	234
Institutional Strengthening & Technical Assistance	0.95	0.88	87.8
Total Baseline Cost	1.49	1.49	
Physical Contingencies	0.03		
Price Contingencies	0.09		
Total Project Costs	1.61	1.49	
Total Financing Required	1.61	1.49	

Project Costs by Procurement Arrangements (Appraisal Estimate) (US\$ million equivalent)

Expenditure Category	Procurement Method ¹			N.B.F.	Total Cost
	ICB	NCB	Other ²		
1. Works	0.00 (0.00)	0.13 (0.13)	0.00 (0.00)	0.00 (0.00)	0.13 (0.13)
2. Goods	0.00 (0.00)	0.00 (0.00)	0.29 (0.29)	0.00 (0.00)	0.29 (0.29)
3. Services	0.00 (0.00)	0.00 (0.00)	0.71 (0.71)	0.00 (0.00)	0.71 (0.71)
4. Training	0.00 (0.00)	0.00 (0.00)	0.09 (0.09)	0.00 (0.00)	0.09 (0.09)
5. Support Services	0.00 (0.00)	0.00 (0.00)	0.40 (0.00)	0.00 (0.00)	0.40 (0.00)
Total	0.00 (0.00)	0.13 (0.13)	1.49 (1.09)	0.00 (0.00)	1.62 (1.22)

Project Costs by Procurement Arrangements (Actual/Latest Estimate) (US\$ million equivalent)

Expenditure Category	Procurement Method			N.B.F.	Total Cost
	ICB	NCB	Other ²		
1. Works	0.00 (0.00)	0.11 (0.11)	0.00 (0.00)	0.00 (0.00)	0.11 (0.11)
2. Goods	0.00 (0.00)	0.00 (0.00)	0.26 (0.26)	0.00 (0.00)	0.26 (0.26)
3. Services	0.00 (0.00)	0.00 (0.00)	0.62 (0.62)	0.00 (0.00)	0.62 (0.62)
4. Training	0.00 (0.00)	0.00 (0.00)	0.10 (0.10)	0.00 (0.00)	0.10 (0.10)
5. Support Services	0.00 (0.00)	0.00 (0.00)	0.40 (0.00)	0.00 (0.00)	0.40 (0.00)
Total	0.00 (0.00)	0.11 (0.11)	1.38 (0.98)	0.00 (0.00)	1.49 (1.09)

^{1/} Figures in parenthesis are the amounts to be financed by the Bank Loan. All costs include contingencies.

^{2/} Includes civil works and goods to be procured through national shopping, consulting services, services of contracted staff of the project management office, training, technical assistance services, and incremental operating costs related to (i) managing the project, and (ii) re-lending project funds to local government units.

Project Financing by Component (in US\$ million equivalent)

Component	Appraisal Estimate			Actual/Latest Estimate			Percentage of Appraisal		
	Bank	Govt.	CoF.	Bank	Govt.	CoF.	Bank	Govt.	CoF.
Rodrigues Forest Restoration	0.40	0.00	0.00	0.25	0.00	0.00	62.5	0.0	0.0
Round Island Restoration	0.02	0.00	0.00	0.01	0.00	0.00	50.0	0.0	0.0
Ile aux Aigrettes Restoration	0.18	0.00	0.00	0.35	0.00	0.00	194.4	0.0	0.0
Institutional Strengthening & Tech. Assistance	0.61	0.20	0.20	0.48	0.20	0.20	78.7	100.0	100.0

Annex 3. Economic Costs and Benefits

Economic and financial rate of return analysis are not applicable. The main objective of the project was to protect and restore globally significant biodiversity resources.

It should be pointed out, nevertheless, that the on-going eco-tourism development at Ile aux Aigrettes will contribute to the economy of Mauritius. The prospects for restoring more sites (Mahebourg Bay islets and mangrove, Flat Island and Ile Gabrielle in the North) outlined in section 6.2 of the main text would increase further the contribution of eco-tourism to the national economy while enhancing the financial sustainability of conservation efforts.

Annex 4. Bank Inputs

(a) Missions:

Stage of Project Cycle Month/Year	No. of Persons and Specialty (e.g. 2 Economists, 1 FMS, etc.)		Performance Rating	
	Count	Specialty	Implementation Progress	Development Objective
Identification/Preparation 1995	1	TASK MANAGER	S	S
Supervision				
03/20/1996	2	FINANCIAL ANALYST (1); ENVIRONMENTAL SPEC. (1)	S	S
12/20/1996	2	TASK MANAGER	S	S
07/1997	1	TASK MANAGER	S	S
11/18/1998	2	TASK MANAGER (1);	S	S
Mid-Term Review 07/04/1999	2	TASK MANAGER (1), ECONOMIST (1)	S	S
11/1999	1	TASK MANAGER	S	S
06/2000	1	TASK MANAGER (1)	S	S
12/24/2000	2	TTL (1); GEF REF. COORDINATOR	S	S
ICR 12/31/2001	1	TTL (1)	S	S

(b) Staff:

Stage of Project Cycle	Actual/Latest Estimate	
	No. Staff weeks	US\$ ('000)
Identification/Preparation	85	93.20
Supervision	79.61	130.0
ICR	3.67	16.50
Total	168.28	239.70

Annex 5. Ratings for Achievement of Objectives/Outputs of Components

(H=High, SU=Substantial, M=Modest, N=Negligible, NA=Not Applicable)

	Rating				
<input type="checkbox"/> <i>Macro policies</i>	<input type="radio"/> H	<input type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input checked="" type="radio"/> NA
<input type="checkbox"/> <i>Sector Policies</i>	<input type="radio"/> H	<input type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input checked="" type="radio"/> NA
<input checked="" type="checkbox"/> <i>Physical</i>	<input checked="" type="radio"/> H	<input type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> NA
<input checked="" type="checkbox"/> <i>Financial</i>	<input type="radio"/> H	<input checked="" type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> NA
<input checked="" type="checkbox"/> <i>Institutional Development</i>	<input type="radio"/> H	<input checked="" type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> NA
<input checked="" type="checkbox"/> <i>Environmental</i>	<input checked="" type="radio"/> H	<input type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> NA

Social

<input type="checkbox"/> <i>Poverty Reduction</i>	<input type="radio"/> H	<input type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input checked="" type="radio"/> NA
<input type="checkbox"/> <i>Gender</i>	<input type="radio"/> H	<input type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input checked="" type="radio"/> NA
<input type="checkbox"/> <i>Other (Please specify)</i>	<input type="radio"/> H	<input type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input checked="" type="radio"/> NA
<input type="checkbox"/> <i>Private sector development</i>	<input type="radio"/> H	<input checked="" type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> NA
<input type="checkbox"/> <i>Public sector management</i>	<input type="radio"/> H	<input checked="" type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> NA
<input checked="" type="checkbox"/> <i>Other (Please specify)</i>	<input checked="" type="radio"/> H	<input type="radio"/> SU	<input type="radio"/> M	<input type="radio"/> N	<input type="radio"/> NA

Biodiversity conservation of globally significant ecosystems

Annex 6. Ratings of Bank and Borrower Performance

(HS=Highly Satisfactory, S=Satisfactory, U=Unsatisfactory, HU=Highly Unsatisfactory)

6.1 Bank performance

Rating

- ☐ *Lending*
- ☐ *Supervision*
- ☐ *Overall*

☐ *HS* ☒ *S* ☐ *U* ☐ *HU*
☐ *HS* ☒ *S* ☐ *U* ☐ *HU*
☐ *HS* ☒ *S* ☐ *U* ☐ *HU*

6.2 Borrower performance

Rating

- ☐ *Preparation*
- ☐ *Government implementation performance*
- ☐ *Implementation agency performance*
- ☐ *Overall*

☐ *HS* ☒ *S* ☐ *U* ☐ *HU*
☐ *HS* ☒ *S* ☐ *U* ☐ *HU*
☐ *HS* ☒ *S* ☐ *U* ☐ *HU*
☐ *HS* ☒ *S* ☐ *U* ☐ *HU*

Annex 7. List of Supporting Documents

- **Project Document.**
- **Aide-memoirs of Bank supervision missions.**

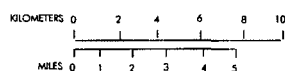
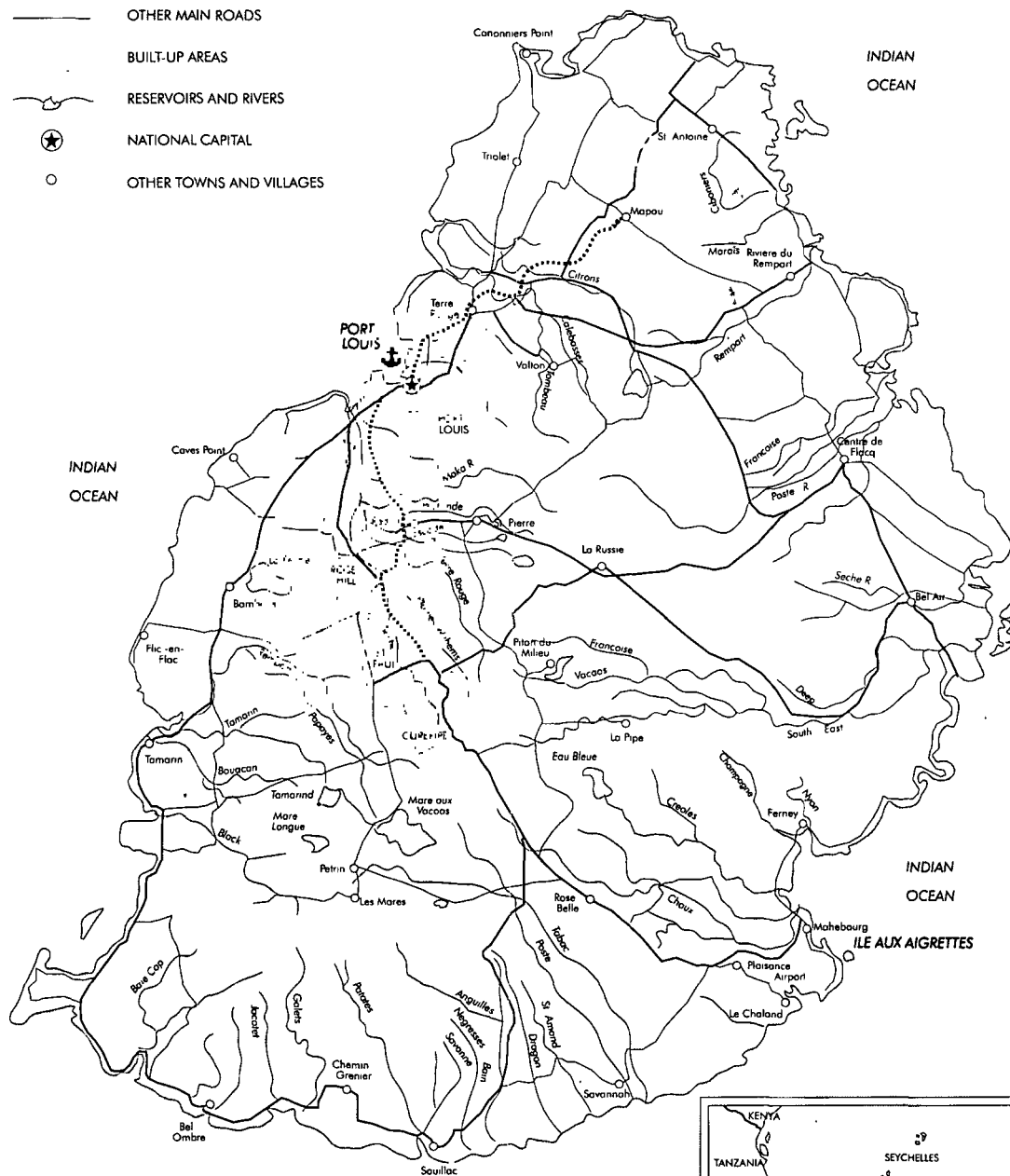
MAURITIUS

PORT DEVELOPMENT AND ENVIRONMENT PROTECTION PROJECT

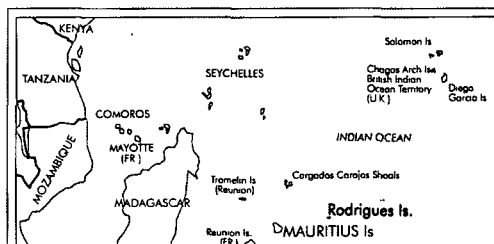
PROJECT LOCATION

ENVIRONMENTAL COMPONENTS INCLUDE THE ISLANDS OF
RODRIGUES, AUX AIGRETTES, AND ROUND ISLAND.

- ARTERIAL ROADS
- MOTORWAY
- OTHER MAIN ROADS
- BUILT-UP AREAS
- ~~~~~ RESERVOIRS AND RIVERS
- ★ NATIONAL CAPITAL
- OTHER TOWNS AND VILLAGES



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IMAGING

Report No.: 25047
Type: ICR