



Biodiversity Management Plan for the King's Hill Forest Reserve St. Vincent and the Grenadines

**Prepared for the
OECS Protecting the Eastern Caribbean
Region's Biodiversity (PERB) Project**

July 2009

203.08.03 - KHFR

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This activity is funded by the United States Agency for International Development (USAID). The views expressed herein are those of the author(s) and do not necessarily reflect the views of the donor agencies supporting the activity or of the OECS Secretariat.



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2. PROJECT SUMMARY

Project Feature	Summary Description
Name of Project	Development of a Biodiversity Management Plan for the King's Hill Forest Reserve (KHFR), St. Vincent and the Grenadines.
Location	St. Vincent and the Grenadines
Client	Environmental Sustainable Development Unit (ESDU) of the Organisation of Eastern Caribbean States (OECS)
Implementing Agency	Environmental Unit, Ministry of Health and Environment, and the Forestry Department, Ministry of Agriculture, Forestry and Fisheries St. Vincent and the Grenadines
Purpose	To develop a management plan for the King's Hill Forest Reserve
Anticipated Outputs	<ol style="list-style-type: none"> 1. An Inception Report, inclusive of a work plan at the start of the contract period. 2. A biodiversity management plan for the KHFR, St. Vincent and the Grenadines. 3. A final project report including a component identifying and discussing lessons learnt.

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5. ABBREVIATIONS AND ACRONYMS

CBOs	-	Community-based Organisations
CDB	-	Caribbean Development Bank
EDF	-	European Development Fund
ESDU	-	Environmental Sustainable Development Unit
GEF	-	Global Environment Facility
FAO	-	Food and Agricultural Organisation
IDB	-	Inter-American Development Bank
IICA	-	Inter-American Institute for Cooperation in Agriculture
JEMS	-	Junction, Enhams, McCarthy and Stubbs
KHFR	-	King's Hill Forest Reserve
M&E	-	Monitoring and Evaluation
NGOs	-	Non-Government Organisation
NISP	-	National Implementation Support Partnership
NRCS	-	Natural Resource Conservation Service
OECS	-	Organisation of Eastern Caribbean States
PERB	-	Protecting the Eastern Caribbean Region's Biodiversity
PMS	-	Participating Member States
SWOT	-	Strengths, Weaknesses, Opportunities and Threats
TNC	-	The Nature Conservancy
TQM	-	Total Quality Management
UNCBD	-	United Nations Convention on Biological Diversity
UNDP	-	United Nations Development Programme
USAID	-	United States Agency for International Development

6. ACKNOWLEDGEMENTS

ESP Consultants (Caribbean) Inc. would like to thank the following agencies for their guidance, assistance and contributions to the preparation of this management plan:

- Environment Services Unit, particularly Mr. Edmund Jackson
- Forestry Department, particularly Mr. FitzGerald Providence
- All the members of the NISP Committee
- Andrew Wilson and Consultant Dr. Lee from the National Parks, Rivers and Beaches Authority
- The JEMS Progressive Community Organisation, particularly Mr. Andrew Simmons
- Members of the communities that participated in meetings and consultations
- OECS-ESDU, particularly Ms Susanna De Beauville-Scott

In addition, we would like to acknowledge the GeoOrbis International Inc. team for their collaborative spirit during this assignment.

7. EXECUTIVE SUMMARY

Like other OECS member states, St. Vincent and the Grenadines has undertaken several initiatives to ensure the sustainable management of its natural resources and rich biodiversity. The activities undertaken thus far, have contributed to building a foundation on which effective management, and protection of biological diversity will be able to proceed.

Further to this, the Government of St. Vincent and the Grenadines has articulated its policy for rural development in its Strategic Plan for Rural Development dated January 2008. The stated intention is to achieve this through the social, cultural and economic development of rural people, through projects and programmes designed to support the development of human and social capital and by creating the enabling environment for the improvement of rural communities by assisting with the creation of an environment that will facilitate investment in service and infrastructure in rural areas.

The subject of this management plan, the King's Hill Forest Reserve (KHFR), is a national icon located in rural St. Vincent. Given that the KHFR is exposed to a number of impacts that threaten the integrity of its ecosystems as well as given perceived weaknesses in the management of this resource, ESP Consultants (Caribbean) Inc. was contracted for the Government of St. Vincent and the Grenadines through the Environmental Sustainable Development Unit (ESDU) of the Organisation of Eastern Caribbean States (OECS) to develop a biodiversity management plan for the reserve. It is envisaged that the implementation of this plan will be the primary responsibility of the Government's Forestry Department. This notwithstanding, and in recognition of the prevailing constraints within which this department functions, it is anticipated that assistance will be provided by a number of other government agencies as the need arises.

This forest reserve, which is by far the oldest forest reserve in Saint Vincent and the Grenadines and the second oldest in the Western Hemisphere after the forest reserve in Tobago, protects a climax

semi-deciduous coastal forest and serves as habitat for a number of the island's endemic vegetative species, endemic reptiles and meso-faunal species such as spiders and scorpions. The reserve is located on the south-eastern part of St. Vincent and occupies a total area of approximately 20 hectares (52 acres) on a sugarloaf hill. Characterised by generally light and sandy soils, it reaches a maximum elevation of 600 ft. It was established in 1791 with the specific objective to improve watershed management in the surrounding dry and windswept area.

The KHFR is situated west of the Windward Highway and in fact, the highway demarks the south-eastern and eastern most boundary of the reserve around the hillside village of Stubbs and the Stubbs Playing Field which lies directly eastwards of KHFR between the reserve and the Atlantic coast. The villages surrounding the reserve are generally small pockets of residences that initially developed as a result of subsistence agriculture. These areas include Junction, Enhams, Diamond, Stubbs and McCarthy. With the exception of Diamond, which lies to the south of KHFR, the other areas can be described as moderately sloping lands spotted with clusters of trees throughout which some agricultural activity is still interspersed.

The Goal of this management plan is to provide strategic direction and guidelines that will assist with the conservation of the biological diversity, and to some extent the environmental integrity, of the KHFR consistent with Government's stated vision for rural development and by extension for overall national development.

The objective of this management plan is to provide recommendations for the management of the KHFR through the promotion of the:

- sustainable use of natural resources within the KHFR
- participatory management of resources, particularly by surrounding communities
- development of sustainable livelihood opportunities to contribute to the economic viability of surrounding communities and the wider population of St. Vincent and the Grenadines

- integration of the conservation of the integrity of the KHFR into the national development planning process
- education and research in the KHFR and immediate environs
- the historic uniqueness and iconic character of the KHFR
- establishment of a legal and institutional framework to support the good governance of the KHFR

This biodiversity management plan is developed to foster sustainable economic and social development within the framework of conserving the forest reserve and reducing poverty in the surrounding communities. It was developed based on some basic stated assumptions and in the spirit of community and general stakeholder participatory management. It was also prepared, conscious of the draft vision statement that was reported from the consultation held with members of the surrounding communities during the execution of these PERB projects:

Vision: “to establish the King’s Hill Forest Reserve as a national icon that has recognition as an international site of significance.”

In addition, the management plan encourages the development of relationships and partnerships among stakeholders as well as with development agencies and other potential funding organizations and assumes the full cooperation of all involved.

It is noted too, that the successful management of the KHFR depends on the timely, effective and efficient organisation and utilisation of a number of natural, human, and technological resources and project tasks to accomplish the goal and objectives of the management plan within the context of available financial resources. This management plan therefore suggests an order or sequencing of activities and tasks (summarised in the table below) that would promote efficient project implementation. Recognising the scarcity of human and financial resources in St. Vincent and the Grenadines and the presence of poverty in surrounding communities, it also promotes volunteerism, community service and environmental stewardship while suggesting ways of providing livelihood opportunities for community members.

These, together with other relevant project results, would ensure the effectiveness of the management plan and produce the desired impacts in the surrounding communities and in the country as a whole.

THE MANAGEMENT PLAN FOR KHFR: ACTION PLAN	
Phase	Tasks
Programme Initiation	
	1: Prepare national policy for KHFR
	2: Appoint a management team
	3: Review and revise list of stakeholder and update stakeholder analyses
	4: Appoint and convene a coordinating committee
	5: Revise organisational structure
	6: Confirm scope of management plan
	7: Confirm guiding principles for management plan (vision, goal, objectives etc.)
	8: Launch management plan
Programme Planning	
	9: Agree on priorities and sequence of activities
	10: Procure and manage programme resources
Programme Execution	
Boundaries and Zones	11: Confirm boundary
	12: Establish Zones
	(i) Buffer zone
	(ii) Internal zones
	(iii) External zones
	13: Control access to the Reserve
Ecological Corridor	14: Re-establish connectivity to coastal area
	15: Establish inland corridors
	16: Develop and Implement tree planting schemes
	(i) Demarcate boundary
	(ii) Plant buffer zone
	(iii) Undertake enrichment planting of corridors
	(iv) Involve community in planting activities
Resource Management	17: Monitor forest resources
	(i) Define boundary and buffer zone
	(ii) Maintain boundary and buffer zone
	(iii) Compile resource inventory
	(iv) Conduct diagnostic sampling
	(v) Secure and protect forest
	(vi) Manage Environment
	(vii) Monitor community activities and development
	(viii) Conduct manpower and skills assessment
	(ix) Staff forest reserve
	18: Conduct and facilitate research activities
	19: Install education and social amenities
	(i) Interpretation centre
	(ii) Amphitheatre / cultural centre
	(iii) Medicinal germplasm bank
	20: Design and implement social and cultural activities
	21: Organise and support new farming thrust
	(i) Animal husbandry
	(ii) Organic / green farming or greenhouse technologies
Surveillance and enforcement	22: Develop surveillance programme
	23: Enforce rules and regulations
Public outreach	24: Coordinate the participation and contribution of government and statutory agencies
	25: Coordinate the participation and contribution of NGOs and CBOs
	26: Develop and implement public education and awareness programmes
	27: Communicate and dialogue with Stakeholders
	28: Develop iconic brand for and market the KHFR
	29: Conduct training

THE MANAGEMENT PLAN FOR KHFR: ACTION PLAN	
Phase	Tasks
Legislation	30: Revise / Amend / Repeal the Kings Hill Enclosure Act
	31: Develop Physical Development plan Land-use Planning Legislation
Monitoring and Evaluation	32: Monitor implementation of management plan
	(i) Track Project Progress
	(ii) Obtain feedback from the public
	33: Evaluate implementation of management plan
	(i) Assess policy context of management plan
	(ii) Assess stakeholder participation
	(iii) Assess knowledge, attitudes and perceptions of stakeholders
(iv) Assess impact of management plan	
	(v) Conduct financial audit
	34: Review and revise management plan
Administration / Management	35: Determine the legal status of the lead agency
Financing	36: Settle on preferred management options
	37: Prepare programme budget and business plan
	38: Develop financing plan and mobilize resources
Institutional Arrangements	39: Confirm institutional structure
Continuity Strategy	40: Mainstream programme
	41: Identify sources for further funding
	42: Develop sustainable income earning initiatives
	43: Complete handover to long-term implementation agencies
Emergency Response	44: Prepare and implement emergency response plan

The estimated cost to implement the management plan is US\$3,686,000 as summarised below:

RESOURCE	Estimated costs (\$US)					
	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Infrastructure and Equipment	51,000	543,500	505,500	255,000		1,355,000
Training		105,000	55,000	10,000		170,000
Management	411,000	450,000	440,000	430,000	430,000	2,161,000
Total	462,000	1,098,500	1,000,500	695,000	430,000	3,686,000

A focused approach is being proposed in order to drive the management plan in the first instance. This approach was chosen because of the nature and magnitude of the things that need to be done in order to achieve the timely delivery of the desired outcomes and impacts of this initiative. It is however envisaged that once the major activities and tasks are undertaken and achieved in this context, the intense focused approach can be discontinued and that the resulting more long-term and sustainable programme would be serviced by way of a continuity strategy that would be administered through the relevant agencies or organisation(s). Towards this end,

comprehensive record keeping is highly recommended and it is advised that management planning documentation be done electronically and backed up in print.

8. BACKGROUND

Recognizing the importance of the sustainable management of its natural resources and rich biodiversity, the Governments of the OECS Participating Member States (PMS), as signatories to international conventions and in particular the United Nations Convention on Biological Diversity (UNCBD), have made significant commitments to protecting their countries' resources.

In this regard, several initiatives have been undertaken by the Government of St. Vincent and the Grenadines, some in collaboration with The Nature Conservancy (TNC), in order to achieve the country's 2010 targets including, *inter alia*, the development of a Draft Sustainable Finance Plan for Protected Areas System, an ecological gap analysis and a capacity plan for protected areas. The activities undertaken thus far, have contributed to building a foundation on which effective management, and protection of biological diversity will be able to proceed. The process to mainstream the protection and conservation of biological resources is on going, and recently, there was the enactment of the National Parks Act, the establishment of the National Parks Authority and the implementation of the Tourism Development Project which will develop, *inter alia*, a system of protected areas for St. Vincent and the Grenadines.

Further to this, the Government of St. Vincent and the Grenadines has articulated its policy for rural development in its Strategic Plan for Rural Development dated January 2008. In this strategic plan, the Government states that its goal is to achieve poverty eradication in the medium to long term. In so doing, the aim is to create economically viable and self-sufficient rural communities in St. Vincent and the Grenadines in which people are empowered to contribute to the development of their own communities and to national growth, whilst ensuring the sustainable use and management of natural resources. According to this strategic plan, the Government is also aiming to maximise the economic potential of the country in an effort to deliver higher and sustainable economic growth and reduce unemployment and improve the general welfare of the population, within a framework of enhancing good governance.

The stated intention is to achieve this through the social, cultural and economic development of rural people, through projects and programmes designed to support the development of human and social capital and by creating the enabling environment for the improvement of rural communities by assisting with the creation of an environment that will facilitate investment in service and infrastructure in rural areas.

The subject of this management plan, the King's Hill Forest Reserve (KHFR), is a national icon located in rural St. Vincent. Given its location, social, cultural and historical significance, this reserve falls within the ambit of both the policies that relate to the development of protected areas in the country as well as to those related to rural development. Against this backdrop, and being exposed to a number of impacts that threaten the integrity of the ecosystems within the KHFR as well as given perceived weaknesses in the management of this resource, ESP Consultants (Caribbean) Inc. was contracted for the Government of St. Vincent and the Grenadines through the Environmental Sustainable Development Unit (ESDU) of the Organisation of Eastern Caribbean States (OECS) to develop a biodiversity management plan for the reserve. This management plan would not only allow for the conservation of the reserve but it would also allow for connectivity between the reserve and other ecosystems to be re-established among other rehabilitation and developmental initiatives in order to enhance the biological health and biodiversity of the reserve.

It is envisaged that the implementation of this plan will be the primary responsibility of the Government's Forestry Department. This notwithstanding, and in recognition of the prevailing constraints within which this department functions, it is anticipated that assistance will be provided by a number of other government agencies as the need arises.

9. ESP CONSULTANTS (CARIBBEAN) INC.

ESP Consultants (Caribbean) Inc. is an independent, privately-owned, limited liability company which offers a multidisciplinary consulting service to its clientele throughout the Caribbean. ESP consists of a group of highly qualified professionals that work together to provide a wide range of quality services and support to its clients with a view to assisting them to achieve greater success and impact in their operations.

ESP specialises in the provision of an extensive spectrum of environmental services and for this assignment ESP Consultants utilised the services of its associates with expertise in the areas of forestry management, physical planning, environmental legislation, policy and regulation as well as project management. In addition the firm selected associates who had extensive experience with natural resources project management in St. Vincent and the Grenadines. More information about this company can be obtained from www.espconsultantsinc.com.

Funding for the preparation of this management plan was provided by the OECS Protecting the Eastern Caribbean Region's Biodiversity (PERB) Project of the United States Agency for International Development (USAID).

10. THE KING'S HILL FOREST RESERVE

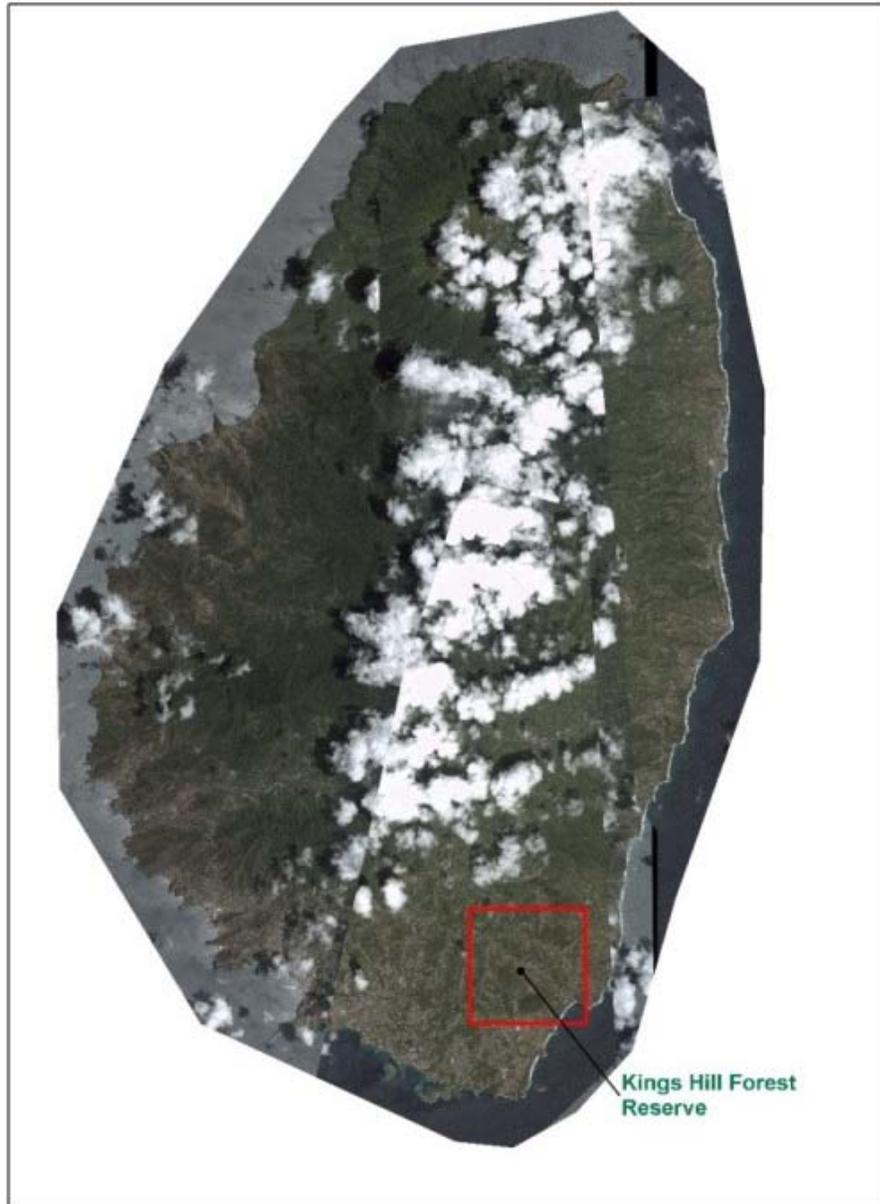
This biodiversity management plan was developed to guide the management of the Kings Hill Forest Reserve (KHFR) located in rural, mainland Saint Vincent and the Grenadines. This forest reserve, which is by far the oldest forest reserve in Saint Vincent and the Grenadines and the second oldest in the Western Hemisphere after the forest reserve in Tobago, protects a climax semi-deciduous coastal forest and serves as habitat for a number of the island's endemic vegetative species, endemic reptiles and meso-faunal species such as spiders and scorpions.

The reserve is located on the south-eastern part of St. Vincent (Figure 1) and occupies a total area of approximately 20 hectares (52 acres) on a sugarloaf hill. Characterised by generally light and sandy soils, it reaches a maximum elevation of 600 ft. It was established in 1791 with the specific objective to improve watershed management in the surrounding dry and windswept area. The site contains a sample plot established by J. S. Beard in 1949 (Ivor Jackson and Associates, 2004) and due to its age and historical significance, it is often used by the Forestry Department for research, school tours and dendrology training. Public access to the site is restricted by law and legally requires the permission of the Director of the Forestry Department.

Despite its global recognition, particularly amongst international scholars and academics, for its historic significance and pioneering role in identifying the relationship between deforestation and climate change in its early influence on environmental legislation, this understated icon has not been officially received public recognition in St. Vincent and the Grenadines. In spite of the importance placed on the KHFR in the legislation since the late 1800s, there is no significant national policy or programme that speaks specifically to this reserve and there appears to be little planned to commemorate its significant historical and global significance. Even the signage around the area is quite understated.

This notwithstanding, KHFR is located near to a frequently used highway and is easily accessible to residents and tourists. The communities around the reserve demonstrate some superficial knowledge of its historic significance and have over the years perpetuated the folklore that is associated with the reserve. However, human pressure on the reserve continues to be a concern. Illegal hunting of the iguana (*Iguana iguana*), agouti (*Dasyprocta antillensis*) and opossum (*Didelphis marsupialis*) is known to take place in the reserve and although both animal and plant species are protected year-round within this site, wild yams and other plant material are also harvested and their removal threatens the integrity of the ecosystem. Domesticated and feral animals are also known to frequent the reserve and there is usually an accumulation of forest debris during the dry season which creates a possible fire hazard.

Figure 1: Approximate location of Kings Hill Forest Reserve, St. Vincent and the Grenadines (Compliments GeoOrbis International Inc.)



11. THE SURROUNDING COMMUNITIES

The KHFR is situated west of the Windward Highway which demarks the south-eastern and eastern most boundary of the reserve around the hillside village of Stubbs and the Stubbs playing field which lies directly eastwards of KHFR between the reserve and the Atlantic coast. The villages surrounding the reserve are generally small pockets of residences that initially developed as a result of subsistence agriculture (Figure 2). These areas include Junction, Enhams, Diamond, Stubbs and McCarthy. With the exception of Diamond, which lies to the south of KHFR, the other areas can be described as moderately sloping lands spotted with clusters of trees throughout which some agricultural activity is still interspersed.

The village of Diamond is approximately 18 miles north-east of Kingstown. The area of Diamond is relatively flat and has a population of approximately 600 persons. There is a primary school in the village, Diamond Government School, a district clinic and post office. Diamond is also an emerging industrial area. The area adjacent to Diamond where the land slopes toward the KHFR is being rapidly transformed into a residential area by developers and also by illegal squatter settlements.

The village of Carapan is located directly north of the boundary of the KHFR. Carapan is the location of the St. Clair Dacon Secondary School. The areas to the west and North West of the reserve are very sparsely populated and are currently mostly fallow agricultural lands and non-climax vegetation seemingly going through the stages of succession. However to the northwest of this is the Mesopotamia Valley. In all, the areas from Brighton and Calliaqua south of KHFR to Carapan, Mesopotamia and Argyle to the north of the reserve and the surrounding villages have a population of approximately 22,000 residents. In the 2001 Census Report the total population of St. Vincent and the Grenadines was 109,022 persons.

The villages surrounding the KHFR are known for their hearty community spirit. As such, they have given birth to a number of

community groups and community based organizations (CBOs) that often come together, either within their individual groups or collectively among various groups, around various sports, social and cultural issues, activities and events. In so doing, there is a strong emphasis on the youth, who are engaged in music, drama and football among other activities. There is also a prominence given to outdoor recreational activities and there appears to be a growing awareness of the surrounding natural environment among the members of the community.

In this regard, the KHFR is viewed with deference by many persons in the surrounding communities. However, although the community members are acutely aware of the presence of the reserve and that for some reason it is historically significant, they appear not to know much about it, where its boundaries are or why it is being conserved. Much of their knowledge is derived from oral history from elders in the communities and from folklore. This notwithstanding, some persons in the community recognize the reserve as a resource, particularly as it relates to the harvesting of wood from the reserve, hunting in the reserve and harvesting of wild yam known to be grown there. Others, on the other hand, especially the unemployed, have expressed an interest in knowing how they can personally benefit from the reserve, specifically as it relates to finding livelihood opportunities particularly in the current economic crisis. Despite this, when asked about their role in the management of the reserve, community members articulate the desire to be included in any management initiative that is developed for the KHFR.

Figure 2: Map of communities surrounding the Kings Hill Forest Reserve, St, Vincent and the Grenadines
(Compliments GeoOrbis International Inc.)



IMPORTANT AREAS FOR THE COMMUNITIES SURROUNDING KING'S HILL AND THE FORESTRY DEPARTMENT
ST. VINCENT AND THE GRENADINES



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12. SCOPE

Geographically, this management plan focuses on the KHFR which occupies 20 hectares (52 acres) of land on the south-eastern part of St. Vincent at coordinates 61° 10' West 13° 9' North at its highest point of 183m (600 ft). For completeness however, the management plan will also give prudence to the interactions between the reserve and ecosystems and anthropogenic activities in its immediate environs and to the broader implications for St. Vincent and the Grenadines as a whole.

13. GOAL

The Goal of this management plan is to provide strategic direction and guidelines that will assist with the conservation of the biological diversity, and to some extent the environmental integrity, of the KHFR consistent with Government's stated vision for rural development and by extension for overall national development.

14. OBJECTIVES

The objective of this management plan is to provide recommendations for the management of the KHFR through the promotion of the:

- sustainable use of natural resources within the KHFR
- participatory management of resources, particularly by surrounding communities
- development of sustainable livelihood opportunities to contribute to the economic viability of surrounding communities and the wider population of St. Vincent and the Grenadines
- integration of the conservation of the integrity of the KHFR into the national development planning process
- education and research in the KHFR and immediate environs
- the historic uniqueness and iconic character of the KHFR

- establishment of a legal and institutional framework to support the good governance of the KHFR

15. ASSUMPTIONS

This biodiversity management plan for KHFR was developed based on the following assumptions and recognizing that a number of factors outside of the control of this project could affect the achievement of the project objectives and activities and therefore the progress and successful implementation of this management plan:

- Funding would be available to implement the management plan
- There is political commitment to the project objectives
- There is community commitment to, and ownership of the project and its objectives
- That stakeholders are willing to participate to ensure the successful implementation of the management plan
- That stakeholders will be able to work harmoniously together to achieve project objectives
- That human and technical resources as well as inputs will be available to implement the project as needed
- That project activities would be implemented in a logical and timely manner
- That the communication strategy that is being developed by another consultant for this PERB project would complement this management plan
- That the biodiversity inventory conducted under this PERB is an accurate representation of the status of the resources in the KHFR.

16. THE MANAGEMENT PLAN

This biodiversity management plan for the Kings Hill Forest Reserve in St. Vincent and the Grenadines is developed to foster sustainable economic and social development within the framework of conserving the forest reserve and reducing poverty in the surrounding communities. It was developed based on the above stated assumptions and in the spirit of community and general stakeholder participatory management. It was also prepared, conscious of the draft vision statement that was reported from the consultation held with members of the surrounding communities during the execution of these PERB projects:

Vision (Draft): “to establish the King’s Hill Forest Reserve as a national icon that has recognition as an international site of significance.”

In addition, the management plan encourages the development of relationships and partnerships among stakeholders as well as with development agencies and other potential funding organizations and assumes the full cooperation of all involved.

It is noted too, that the successful management of the KHFR depends on the timely, effective and efficient organisation and utilisation of a number of natural, human, and technological resources and project tasks to accomplish the goal and objectives of the management plan within the context of available financial resources. This management plan therefore suggests an order or sequencing of activities and tasks that would promote efficient project implementation. Recognising the scarcity of human and financial resources in St. Vincent and the Grenadines and the presence of poverty in surrounding communities, it also promotes volunteerism, community service and environmental stewardship while suggesting ways of providing livelihood opportunities for community members. These, together with other relevant project results, would ensure the effectiveness of the management plan and produce the desired impacts in the surrounding communities and in the country as a whole.

A focused approach is being proposed in order to drive the management plan in the first instance. This approach was chosen because of the nature and magnitude of the things that need to be done in order to achieve the timely delivery of the desired outcomes and impacts of this initiative. It is however envisaged that once the major activities and tasks are undertaken and achieved in this context, the intense focused approach can be discontinued and that the resulting more long-term and sustainable programme would be serviced by way of a continuity strategy that would be administered through the relevant agencies and organisations. Towards this end, comprehensive record keeping is highly recommended and it is advised that management planning documentation be done electronically and backed up in print.

16.1 Programme Initiation

Task 1: Prepare national policy for KHFR

The management of the Kings Hill Forest Reserve should be guided by a national policy specifically for the KHFR that is fully endorsed by the Government of St. Vincent and the Grenadines. An early priority in the process of furthering the efforts of this management plan for the KHFR therefore, would be to prepare a policy paper on the initiative for the consideration of the Cabinet. This should be prepared by the Forestry Department with inputs from the members of the National Implementation Support Partnership (NISP) Committee and should clearly articulate the need for the policy as well as a vision for the future of the KHFR.

Task 2: Appoint a Management Team

Before the management plan can be implemented there is a need to appoint a management team and set up an office. This should be undertaken by the head of the Forestry Department or nominee and requires that:

- (i) the composition of the management team be agreed to
- (ii) the roles and responsibilities of each team member be clearly defined and
- (iii) job descriptions be prepared for each management team member.

Once this is done, the management team can be recruited.

The management team would be responsible for the day-to-day management and implementation of the biodiversity management plan for the KHFR and would ultimately be accountable to the head of the Forestry Department. This team should comprise a Director / Manager who would have day-to-day responsibility for the management of the initiative; technical officer who would assist the Director / Manager with the implementation of the technical aspects

of the management plan and the procurement of goods, services and works; a communications specialist, Finance and administration officer; a Secretary and a General worker who would be responsible for general office cleaning, delivering mail etc. Terms of reference, inclusive of job descriptions, should be prepared for each team member as well as the organisational structure and clearly defined roles and responsibilities of each member of the team.

The management team could be made up of individuals recruited through an interview process or it could take the form of a consulting company that has the required expertise to deliver the desired output. Given that the technical expertise in St. Vincent and the Grenadines is already stretched, the consulting company is the preferred option. In either case, non-technical posts could possibly be filled by locals, preferably persons from the communities surrounding the KHFR. The main objective is to appoint a team with the right skills to enable the successful delivery of the planned activities recognising that ensuring stability within the plan's delivery structures is an essential pre-requisite to successful development and implementation of the management plan. Given the uniqueness of the KHFR, this should be used as an opportunity to set up a management system that distinguishes this initiative from all others.

In the interim, provision should be made to house the management team. For this purpose, an office could be located in an existing government office; preferably an office of the Forestry Department or it can be located immediately outside of the KHFR itself, perhaps on crown lands that border the reserve. If the latter option is taken, a prefabricated wooden structure can be easily and quickly set up to house the project office and it can easily be dismantled and removed from the site after this aspect of the initiative closes.

Task 3: Review and revise list of stakeholder and update stakeholder analyses

The first order of business for the management team is to become familiar with the details of the management plan and then, in this

context, to review and revise the list of stakeholders as well as combine and update the stakeholder analyses that have been undertaken in the PERB projects. This should be done after consulting with any new persons or groups that might be added to the revised list and after reviewing the outputs of the three components of the PERB projects to ensure that the list is comprehensive and the issues, concerns and effects of and on the stakeholders are reflected in the revised analysis.

The objective here is to know all the stakeholders associated with this initiative so that it can embrace them, as well as solicit their contribution to, and participation in the successful delivery of the objectives. The intention is to arm the management team with this information so that they can ensure that all of the stakeholders are engaged in the activities associated with the management plan, that they are placed in a position to assume ownership of the plan and that none are left out or marginalised.

Task 4: Appoint and convene a Coordinating Committee

A Coordinating Committee, either the NISP Committee or a similar committee, should be appointed to steer the implementation of this management plan. The Coordinating Committee should be chaired by the head of the Forestry Department or nominee. Members of this committee would have to be named, informed and apprised of the progress to date as well as about plans to further this initiative. They should also be given terms of reference so that they are clear of their role and responsibility to the initiative.

A positive, engaged and cohesive Coordinating Committee speaking with one voice is a clear sign of the initiative's credibility. The Coordinating Committee should not be focused solely on delivery. The insights and experience of members should complement the work of the management team to spot opportunities and lobby on behalf of the plan.

Task 5: Revise organisational structure

At this point there is a need to agree on the final management and institutional arrangements for the implementation of the management plan for the KHFR. An indicative organisational structure ought to have been prepared and used in the procurement process that was undertaken to engage the management team. This should now be revised to reflect the realities of the management plan. Likewise, the roles and responsibilities of the members of the management team, Coordinating Committee and relevant agencies should now be refined to reflect the realities of the management plan. This will guide the management team and stakeholders to the correct actor(s) when seeking to address any issue related to the management plan.

Task 6: Confirm scope of management plan

Confirmation and agreement to the scope of the management plan is a very important start-up activity in projects of this nature and is an essential prerequisite to the successful implementation of this management plan.

The scope of the management plan is the boundary that clearly defines where the plan begins and ends. Despite the discussions that have taken place during the implementation of the PERB project components it is not clear that everyone is viewing the scope of the plan in the same way. This could lead to confusion about what falls inside the boundary of this specific project and what does not. Developing a scope for the plan and socialising it with the management team, sponsors and key stakeholders is critical.

Unfortunately, many management teams define their scope only in general terms. This lack of definition causes managers and key stakeholders involved to make assumptions related to their own interests, processes or systems whether these assumptions are within or outside of the scope of the initiative. Resulting from this, and in many cases after significant work has been completed by the management team, some involved are surprised to learn that their

assumptions were not correct and this could cause problems for the management team. Additionally, the management team could experience problems with "scope creep" as the initiative gradually takes on different perspectives during implementation and result in more and more work for the team. The management team therefore must be guided by a clear scope in order to minimise these problems.

The definition of the scope of the management plan is the responsibility of the agency with primary responsibility for the oversight of the implementation of the management plan. In this case that agency is the Forestry Department. This should be prepared prior to the recruitment of the management team and made available during the recruitment / tender process. It should also be part of the terms of reference for members of the management team and the Coordinating Committee and should be made available to all stakeholders involved in the initiative. The management team should however confirm the scope at the outset of the biodiversity management plan and assist to refine the definition so that it is clear, unambiguous and explicit.

Task 7: Confirm guiding principles for management plan (vision, goal, objectives, etc.)

Likewise, the management team would need to confirm that the goal, objectives and guiding principles that are outlined for the implementation of the management plan are agreed to and accepted by all. This too is intended to avoid ambiguity and uncertainty during implementation to reduce the likelihood of disappointment among stakeholders at the end. Note that the guiding principles define the broad philosophy that guide the work of the management plan and, in the context of a participatory management process such as this, would have to include transparency, integrity and innovation or entrepreneurship.

Task 8: Launch Management Plan

The launch signals that implementation of the management plan has started and is the occasion when stakeholders and the wider community are formally notified of the initiative to implement a management plan. It is also a time to provide information about the plan's scope, goals and objectives and give some insights to the expected outcomes and impacts of the initiative. The launch also provides an opportunity to bring stakeholders on board who have not been involved in the initiative thus far. Towards this end, and after completing tasks above, the management team should carefully plan and execute an official launch. Maximum publicity should be sought for this launch and it should be given national and regional and international prominence. There may also be scope for international publicity through the internet (establish a website) or by other means.

16.2 Programme Planning

Task 9: Agree on priorities and sequence of activities

The management team, coordinators and stakeholders must agree on the activities that will be undertaken during the initial phase of this initiative as well as to the priority or ranking and sequencing of each activity. Once this agreement is reached, the management team should create a list of tasks, deliverables and resources needed to implement the management plan and prepare the activity schedule accordingly.

Task 10: Procure and manage programme resources

Having prepared the activity schedule, the management team should now assign available resources to the task and then conduct a gap analysis to ascertain resource needs. A procurement plan should then be developed to acquire the needed resources within the constraints of the budget allocated for the management plan. Where possible, partnerships with the neighbouring residents, the local business community and development agencies in the region should be sought in order to maximise resources and access expertise necessary for the successful implementation of activities.

16.3 Programme Execution

16.3.1 *Boundaries and Zones*

Task 11: Confirm boundary

Based on the results of the community asset mapping exercise that was undertaken as part of another component of the overall project, i.e. the biodiversity study, it appears that key stakeholders in the area are uncertain about the location of the existing boundary of the reserve (Figure 3). The positive thing here however, is that the boundary outlined by each stakeholder group covers an area larger than that covered by the official boundary. This augurs well for the creation of a buffer zone.

In addition, two different boundaries were provided by the Forestry Department (Figure 4) and parts of the boundary as defined in these maps are well within vegetative cover which is considered by some as being part of the KHFR. It however appears that a combination of the two maps from the Forestry Department would present an ideal boundary that will ensure the long-term viability of the KHFR.

As a matter of priority therefore, it is recommended that the KHFR reserve be resurveyed and that the exact location of the boundary of the reserve be clearly identified and defined. This may require a redefinition of the boundary to take the existing development into consideration. The definition of the boundary should however, also be extended to include any corridors that might be established or re-established in order to facilitate connectivity to the coast and inland environs.

Figure 3: Perceived location of boundary (green) of the Kings Hill Forest Reserve, St. Vincent and the Grenadines as indicated by 3 different local stakeholder groups; real boundary overlaid (in red) (Compliments GeoOrbis International Inc.)

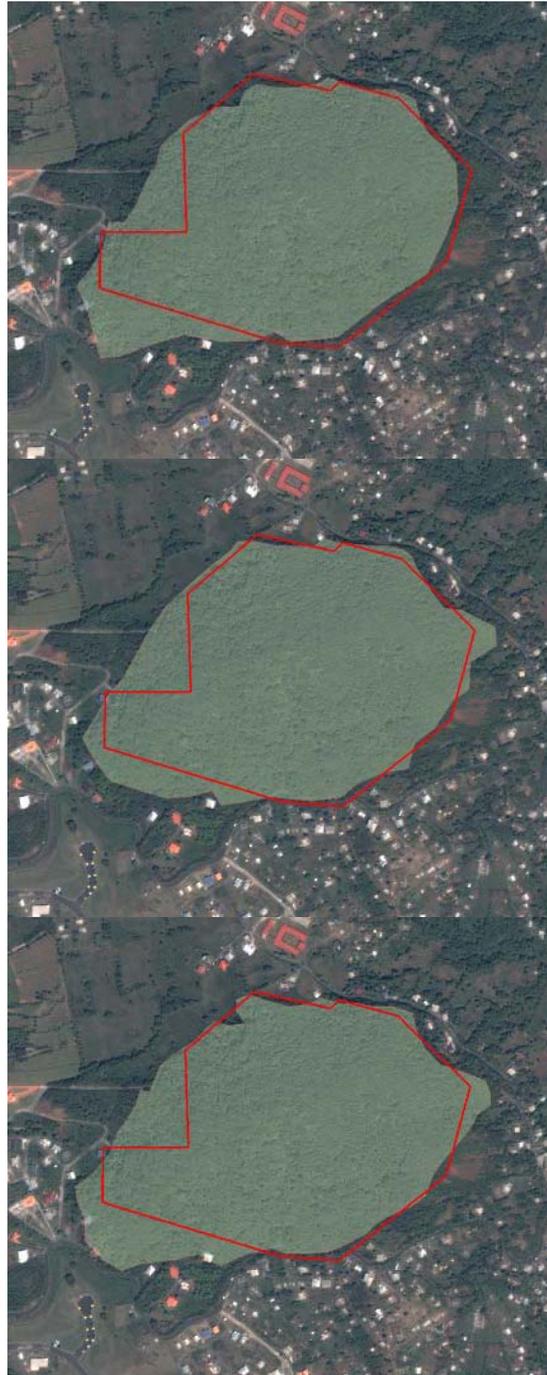
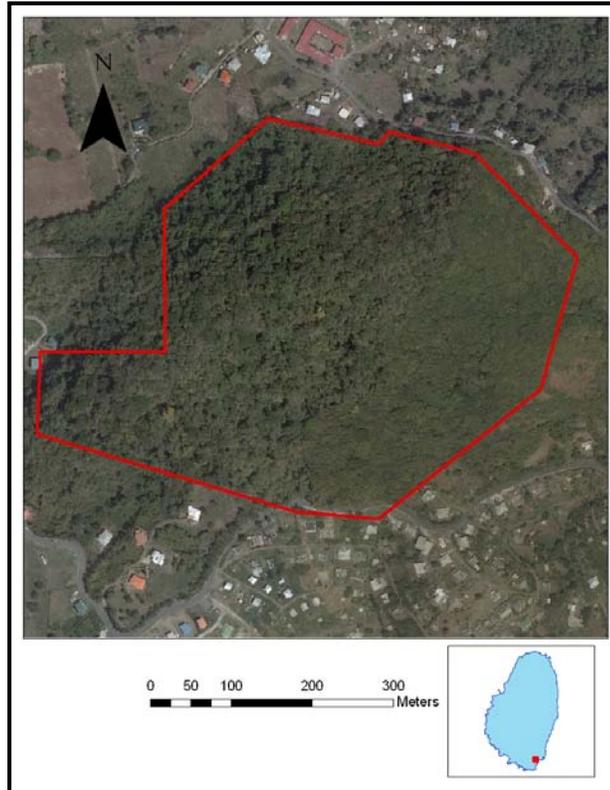


Figure 4: Boundary (red line) of the Kings Hill Forest Reserve provided by Forestry Department St, Vincent and the Grenadines; (Compliments GeoOrbis International Inc.)

(a)



(b)



Task 12: Establish Zones

(i) Buffer zone

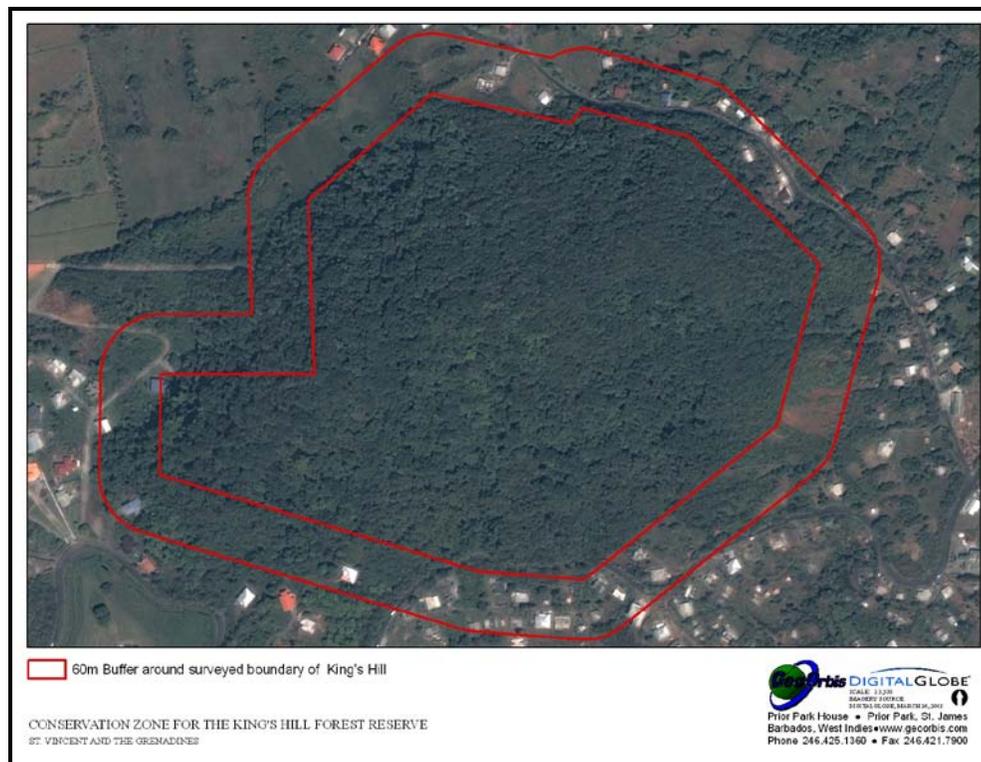
Central to the management of the KHFR is the establishment and management of the margins of the reserve. This will in part ensure conservation and sustainable use of forest resources. It is certain that farming and construction on lands adjacent to the KHFR will have significant and lasting effects on forest resources, inclusive of plant and animal diversity and a buffer zone created around the reserve will minimise the effects of anthropogenic activities. However, the literature makes it clear that there is no specific formula for the size and nature of buffer zones. For example, according to Semlitsch (1998), buffer zones are areas around protected resources where land use is regulated to protect the core area or as ‘a collar of land managed to filter out inappropriate influences from surrounding activities like encroachment, pollution, poaching/illegal removals; areas where conservation regions meet with human population; and areas of traditionally used land, often fragile and particularly susceptible to environmental destruction’ Neumann (1997). Further, Lynagh and Urich (2002), describe buffer zones as areas peripheral to a protected resource designated with the intention of benefiting the local community, while simultaneously providing an extra layer of protection to a conservation area. For the purpose of this study, the buffer zone is considered to be an area that borders the KHFR which is sustainably managed so as to facilitate the protection or conservation of a threatened resource.

The actual width of the buffer zone, the plant species composition and the types of activities allowed in the zone may vary, given the myriad of activities and the variance of housing encroachments that presently exist. The NRCS Planning and Design Manual which focuses on effective urban riparian forest buffer indicates that zones range from 6-60 m in width, but recommends a minimum buffer of 30 m. With this in mind, it is possible to envisage a buffer zone around the KHFR and which might vary in width or depth, depending on the proximity of houses and roads which is 30 m in some areas and up to

60 m in others. Figure 5 the extent of a 60 m buffer zone around the entire reserve, using the most recent boundary map (Figure 4 (b)) as the basis.

In so doing however, consideration ought to be given to any development that maybe within the boundary or buffer zone of the reserve and a decision should be made regarding whether to relocate these structures, shift the boundary and / or buffer zone to be located inside of the current development; or maintain the structures inside the boundary and or buffer zone and restrict any further development there. In this regard, note that the Wildlife Protection Act (1987) speaks to “a person who is ordinarily a resident within a wildlife reserve” and so it is conceivable that persons can to be allowed to reside within the buffer zone of the KHFR, albeit subject to particular restrictions and guidelines.

Figure 5: The approximate outer limit of a 60 m buffer zone around the boundary of the Kings Hill Forest Reserve, St, Vincent and the Grenadines; (Compliments GeoOrbis International Inc.)



(ii) Internal zones

The need for, and extent of internal zoning of the KHFR would depend heavily on the management approach that is finally adopted for the reserve. There are three basic choices: (1) isolate the reserve thereby permitting no access to the reserve except for occasional visits from the Forestry Department; (2) permit passive use of the reserve by allowing limited access only to approved persons for agreed activities or (3) allow full open access to the forest reserve. The medium between the extreme conservationist approach and the potentially detrimental and destructive open access is option (2) and this is the highly recommended option. Arising from the research undertaken for this study and based on the consultations conducted as well as on field observations, it is recommended that a zoning plan be developed for the area to reflect the following zones:

- Inside the KHFR
 - Monitoring and Research
 - Trail along the boundary and within the buffer zone
 - Short trails to the inside to see any special features of the reserve
 - Bird watching / bird hide

(iii) External zones

The land around the KHFR continues to develop at a rapid pace. The area is characterised by mixed development with industrial, institutional and recreational facilities, but is dominated by a rapidly growing residential development. In addition, there are plans for the construction of more houses as well as a stadium in the vicinity, and the Argyle International Airport is under construction in relatively close proximity to the reserve. There is also some agricultural activity close by. With these kinds of activities and development taking place in the area, the potential negative impact on the KHFR is growing. In order to minimise this impact, it is therefore becoming increasingly important to manage

the development around the reserve by creating physical planning and development criteria that will govern the area. Zoning external to the KHFR should include:

- Outside KHFR
 - Education (interpretative centre) in the buffer zone or entirely outside the reserve altogether
 - Medicinal germplasm bank
 - Camping – in the buffer zone or just outside of the buffer zone
 - Cultural centre – stage/ amphitheatre outside the reserve
 - Animal husbandry of wild life species (permit system) – could sell to locals and as well as has export potential – outside of the reserve
 - Green and organic farming on farming lots around the reserve
 - Construction outside the reserve

Task 13: Control access to the Reserve

Uncontrolled access to the KHFR will continue to present problems to any effort aimed at managing the reserve and maintaining or enhancing its integrity and species diversity. The reserve is being used by the surrounding communities for a variety of social purposes, primarily for the extraction of wild yams and hunting for wild meat. Persons are also known to remove plants for medicinal purposes as well as for the purpose of producing wood for fencing and fuel. In addition, some persons are known to use the reserve for recreational purposes. Although many of these activities are perceived by community members to have a low impact on the reserve, they have been deemed by the recently conducted biodiversity inventory study as having a potentially high negative impact on the long-term viability of the reserve and should therefore be discouraged.

One way of addressing this problem is to ensure that human access to the KHFR is limited to a single entrance which is maintained and managed by a competent authority. This is best linked to a facility

such as an office, a cultural centre or an interpretative centre that would serve as a check point and official gateway to the reserve. It is recommended that the type and location of the facility be agreed on, established, staffed and equipped in the shortest possible time. Access by way of any other point along the boundary of the reserve can be controlled by combining enhanced surveillance and enforcement of the law with increased public awareness and education and a tree planting scheme that utilises trees / plants that act as physical barriers to the reserve.

16.3.2 Ecological Corridor

Task 14: Re-establish connectivity to coastal area

Managers of coastal protected areas are moving towards or promoting the development of management plans within the context of a "ridge-to-reef" approach to ecosystem based management of the coastal protected area where watershed management and wise land use practices are included in an integrated coastal management regime. In islands such as St. Vincent where there are mountains and other watersheds that interface with the coast, the holistic management of the entire coastal zone, inclusive of coastal forest and coastal coral reefs, should address all ecosystem components and processes to maintain a full range of ecological interactions that ensures the highest possible standard of reef health and coastal biodiversity in the area.

In this context, and given that the KHFR is part of a watershed located less than 1 km away from the coast, it is recommended that the connectivity between the KHFR and the coast be re-established. The main function of this coastal connectivity would be the provision and maintenance of a very rich and diverse biological diversity including the ecosystems and biological processes. As such, re-establishing the coastal connectivity will promote and encourage biological diversity resulting in rich and diverse ecosystems and associated biological processes.

The coastal connectivity also allows the free movement of biological diversity in and out of the reserve. It also creates a microclimate over a wider area. In addition, it helps to trap dust particles thereby allowing cleaner air and reducing air pollution. Furthermore, coastal connectivity helps with drainage by reducing surface runoff and filtering the water before it gets to the coasts. This reduces pollution of the coastal waters.

The coastal corridor could be one of two (2) types: (i) continuous from forest to coast or (ii) patches along the path of ridge to reef. The

choice would depend on the authority's objective. A continuous path would have the potential to facilitate movement of crawling, walking and flying species and, depending on if there it is established around an old stream / catchment in the area between the reserve and the coast, it could also facilitate the movement of aquatic species such as crayfish. The patch corridor would essentially facilitate the movement of birds and flying insects and could serve as resting and nesting sites for such species.

The biodiversity study team has identified a green / partially forested area leading to the coast that can be considered for this purpose, however, other similar green areas could be considered and the most suitable option for this purpose selected. This corridor, between the reserve and the coast, as well as a buffer zone consistent with that for the forest itself, ought to be included in the boundary for the protected area.

Task 15: Establish inland corridors

In its present state, the KHFR is either presently or close to becoming isolated. In this regard, genetic isolation has possibly already occurred or is about to occur if the reserve is or becomes isolated. Other problems that can arise due to isolation include: (1) loss of genetic material / biodiversity, (2) reduce genetic diversity, (3) stress to biodiversity leads to species becoming endangered / threatened, and (4) possible species extinction.

Apart from the above proposed coastal corridor and buffer zone, inland ecological corridors and enrichment planting will stem the occurrence of reserve isolation and the possibility of species isolation by facilitating dispersal and free movement of species into and out of the KHFR. It also allows for genetic exchange and interchanges among individuals of a given species and contributes to the overall biological diversity in the area.

On this basis, it is recommended that the competent authority identify at least one such corridor inland of the KHFR to promote this

biological exchange. This would of necessity have to be a continuous corridor since there are some animals such as lizards, agouti, opossums, and spiders which are found in the reserve that cannot fly. The North Western Quadrant towards the site which is being proposed for green / organic farming or in the South Western Quadrant going towards Demba where the water catchment is located in that area would be ideal for this type of corridor. The other areas are hemmed in by roads and heavy developments that are not compatible with creating such linkages.

Task 16: Develop and Implement tree planting schemes

(i) Demarcate boundary

Apart from resurveying and establishing land survey markings on the boundary of the reserve, tree planting is another strategy that can be used to demarcate the boundary of the KHFR. In this regard, there are a number of options that are available from among the local tree species such as the whistling pine tree (*Casuarina equisetifolia*) and the yellow poui (*Tabebuia serratifolia*); but the galba tree (*Calophyllum antillanum*) has been identified as a good candidate for this purpose. This is primarily because the galba tree has a distinct look and is therefore easily recognizable, it is an evergreen species and is fairly fast growing and as such could provide the distinct demarcation that is desirable in relatively short time. This tree also bears a fruit that is eaten by barn owls (*Tyto alba*), a species of bird that is known to be found in and around the KHFR and would therefore provide added value with respect to its potential to attract and support wildlife in and around the reserve and thereby adding value to the biological diversity of the reserve. Note too, that this is the tree that was specified in the 1791 Kings Hill Enclosure Act and its use would contribute to preserving the spirit of this original legislation. It is therefore strongly recommended that galba trees be put in place immediately after the boundary has been resurveyed and defined.

(ii) *Plant buffer zone*

The establishment of a buffer zone is essential to the viability and sustainability of the KHFR. The establishment of the buffer zone and ecological corridors, inclusive of undertaking tree planting in the area, will stem the occurrence of isolation of the forest reserve. The buffer zone is essentially a band around the reserve between the boundary and houses and any anthropogenic activity that might exist in the vicinity of the reserve. Its function is to minimise the negative impacts of the surrounding anthropogenic activities on forest reserve. It also provides a safe drift zone for species that live in the reserve as well as facilitates the movement of species into connectivity corridors and ultimately between nearby habitats and ecosystems.

Against this backdrop, it is proposed that the buffer zone should contain different plant species within; inclusive of a germplasm plot with medicinal species. Enrichment planting can also be undertaken within the buffer zone. Local species that can be use in the enrichment planting exercise include Spanish ash (*Inga ingoides*), yellow poui, pink poui (*Tabebuia pentaphylla*), greenheart (*Lonchocarpus lenthmiamus*), and cassia species (*Cassia spp.*). These species will provide food for wildlife and are best able to survive in this coastal environment / climate.

It is further recommended that a sweet lime (*Triphasia trifolia*) or bread and cheese (*Pithecellobium unguis-cati*) hedge be planted on the outer edge of the buffer zone except for at the mouth of connectivity corridors. These plants, particularly the sweet lime, form thick hedges that can act as barriers to reduce ad hoc entry to the reserve. The sweet lime plant is prickly and people tend not to want to go through this type of hedge. Feral animals may also be reluctant to attempt to pass through this type of fence.

(iii) *Undertake enrichment planting of corridors*

Enrichment planting, and to a lesser extent replacement planting, should be undertaken to establish the buffer zone and connectivity /

ecological corridors between the KHFR and nearby habitats and ecosystems.

Replacement planting involves propagation from local genetic stocks of trees for replenishing the existing stands and preventing long-term depletion. Enrichment planting is a potential forest rehabilitation measure that involves propagation from local genetic stocks of trees whose populations are low in number and the planting of these propagated plants within or adjoining existing stands to increase their numbers and long-term viability. In some cases this may require the careful choice of a variety of genetic sources within the area to ensure that in-breeding is prevented.

A number of technical issues like line planting technique, spacing and species-site matching are crucially related to the success of this rehabilitation effort. Different factors are directly or indirectly related to the success of it. These factors affect the overall performance of the planting effort. The performance of different techniques varies from each other. The features of the new line planting technique are different from the other conventional planting techniques to some extent. Techniques of enrichment planting, thus, need to be reviewed to determine the technique(s) most suitable for the conditions around the KHFR.

It is anticipated that the trees resulting from this enrichment planting would attract a greater number and a wider variety of birds to the area.

(iv) Involve community in planting activities

The planting of the forest boundary, buffer zone and ecological corridors will necessitate access to a large number of trees and plants that are ready for installation. This provides a major opportunity for community involvement in this initiative. Not only are the prospects good for promoting volunteerism among community members and engendering a sense of ownership of the management plan, but there are possibilities for the development of livelihood

opportunities and to create linkages and partnerships among community members as well as with local businesses and development agencies in the region.

Participatory / community forestry management could essentially begin here by involving community members, who have an interest in agriculture / horticulture, in the planning and execution of these tree planting activities. In this regard, it is recommended that early in the life of this initiative, an agriculture plot should be earmarked for this purpose. This plot could be adjacent to the KHFR, located on crown lands or on lands donated by a landowner for this purpose. The plot should then be divided into 2 sections, one for the propagation of trees for replanting and replenishment and the other for a greenhouse to grow produce for the local market. The persons involved in this exercise could be then trained in tree propagation and planting techniques as well as in greenhouse technologies.

Their work on this programme would not only provide them with a sense of satisfaction knowing that they are making a meaningful contribution to the conservation of the KHFR but it would also provide them with an opportunity to be trained in agricultural / horticultural techniques and to generate income from the greenhouse venture. They can go on to use these new skills to make a livelihood for themselves. Inevitably, persons will venture out and engage in entrepreneurial activities. This would make room for new persons to participate in the programme and be trained in these areas as well.

A number of community members can benefit from this initiative in this way. In a spinoff effect, it is likely that the community members involved in this exercise would assume a role in the active protection of the KHFR. They can even influence their own family members and peers in this way as well. There, will therefore begin a cadre / core group of environmental stewards that are likely to watch over the forest reserve, rather than cause damage to it. This could also be another group of people that can transition out of poverty without feeling the need to engage in activities that would degrade the KHFR in anyway.

In pursuing this course of action, the management team and the Forestry Department should seek technical assistance and inputs from the local Ministry of Agriculture, the Food and Agriculture Organisation (FAO) and the Inter-American Institute for Cooperation in Agriculture (IICA). Sponsorship from local businesses can also be sought. Note too that it is likely that some of the produce grown in this initiative can be marketed to businesses around the area, at the Argyle International Airport, in the hospitality sector or even in the city.

16.3.3 *Resource Management*

Task 17: Monitor forest resources

Management of the KHFR should be responsive and adaptive to changing knowledge and needs as new information becomes available. This can only be achieved with adequate monitoring. Monitoring refers to the comparison of the actual performance of the forest against set targets.

In this regard, it is strongly recommended that a full inventory of the forestry resources be undertaken as a matter of priority. This should be accompanied by a comprehensive assessment of the health of the resources and an associated evaluation of the resources that are under threat and the nature of the threats faced.

The inventory would provide the baseline information for a monitoring plan to be devised. It should be then used to determine the need for rehabilitation of resources and the level of monitoring that has to be undertaken in order to gauge the success of the remedial measures that are implemented, if more remedial action is needed, and when such action should cease.

With respect to population size, the management team would need to consider the quantity of the various species of flora and micro-flora present to determine if there is a need for replacement or replenishment planting inside of the reserve. If such an exercise has to be undertaken, target quantities should be set and the planting programme implemented. The new plants would then have to be monitored, first on a frequent basis until they are properly established and then according to an established regular forestry monitoring plan.

Estimates of fauna in the KHFR should also be established and these population sizes monitored to determine the impact of the implementation of forestry management measures on these resources. If necessary, management measures would have to be

implemented to either enhance these populations or control them as the need arises.

For resources that are in good condition, and given the relatively small size of the KHFR and that there should be no legal logging taking place in this reserve, systematic, periodic monitoring of the resources is recommended; the period determined by the nature of the issue being monitored.

Some issues that should be included in a regular monitoring plan for the KHFR include:

- Boundary and buffer zone definition
- Boundary and buffer zone maintenance / management
- Resource inventory
- Diagnostic sampling
- Forest security and protection
- Environmental management
- Community activities and development
- Staffing

(i) Define boundary and buffer zone

Boundary and buffer zone definition involve land surveying and physical markings of the ground. Monitoring should be carried out through on-the-ground checking of the boundary markers and should be done at least annually. In addition, this type of monitoring should be undertaken whenever adjacent lands are resurveyed for development. When necessary, survey markers should be replaced at the earliest possible opportunity.

The Lands and Surveys Division should be responsible for this monitoring or the Forestry Department can have a certified surveyor on staff to perform this function. The action should however be managed by the management team / Forestry Department to the extent that they should arrange for the monitoring to take place and should receive reports of findings and action taken. If there are not sufficient resources in the Lands and Surveys Division, a private

surveyor should be contracted to provide this service. In this event, the Lands and Surveys Division should provide technical support to the Forestry Department regarding procurement of the services, approval of action to be taken and review of reports.

(ii) Maintain boundary and buffer zone

Physical, on-the-ground examination of the boundaries and buffer zone is the most effective strategy for reliable monitoring of boundary lines, plants and notices. Aerial photographs and satellite imagery can also be used. The on the ground examinations would provide reliable information with respect to logging, breaches of the boundary protection mechanisms and the presence of traps and other devices used for hunting, it would also provide the opportunity to identify issues related to plant health and the need for a related diagnosis and remedial action. Aerial photographs and or satellite imagery can be used together with this approach and primarily for record keeping purposes. In the first instance, comparison of on the ground results and aerial photographs and / or satellite images would provide the basis for determining whether these can be useful as monitoring tools in the medium to long term. This notwithstanding, they ought not to be used as stand alone monitoring tools as there will always be need for on the ground examination.

Responsibility for this monitoring should lie with the Forestry Department. This Department would however need to be supported by an agency which has the capability to produce aerial photographs and satellite images or this service would have to be outsourced.

Aerial photographs and satellite images should be produced annually, preferably around the same time of year for easy comparison. Underground monitoring should take place at least quarterly

(iii) Compile resource inventory

A comprehensive resource inventory is important to develop a baseline for monitoring programme. Species classification and abundance of flora and fauna and details of maturity of species status should form the basis of this baseline data. This is one of the first activities that need to be undertaken as part of this management plan which should either be conducted by the Forestry Department or outsourced to a competent consultant.

(iv) Conduct diagnostic sampling

There is need for pathology and entomology sampling of forestry resources in order to determine the status of the health of the resources and the action to be undertaken to address any issues that may arise. This sample should also extend to the boundary and buffer zone as well as to the ecological corridors and should look for the presence of invasive species. In addition there is need for a monitoring regime to investigate any impacts that might result from the use of herbicides, pesticides, or any similar techniques used by nearby farmers and other neighbours. A database should be developed from the diagnostic sampling and should include photographs of damage, pest and pathogens. The existing research plot in the KHFR could be used as the control area for the diagnostic sampling and other plots could be established to support the management plan.

(v) Secure and protect forest

The forest rangers have to monitor the nature and frequency of the security and compliance issues and if necessary revise the strategy to deal with them to raise the level of success. Aspects of the security of the KHFR could be outsourced to a security firm.

(vi) Manage Environment

Issues related to soil, water, and overall ecosystem condition fall under the ambit of environmental management. In the case of the KHFR soil inside the reserve is said to be sandy and relatively loose and as such there is potential for soil erosion and substrate deterioration either by weathering or by wear and tear from resource use.

The management team would need to identify any instances of soil loss and deterioration and implement remedial measures to address these. Depending on the nature of problem identified terracing, gabions, planting of ground cover, backfilling of holes, or some other appropriate measure could be used. There should be restricted access to vulnerable areas in the forest and if access is permitted to other areas it should be based primarily on the nature of the activity to be undertaken and the carrying capacity of the resource.

In order to monitor and control the amount of traffic that enters the reserve, the Forestry Department should implement a system that requires applying for a permit. The application form should be supplied by the Forestry Department and should clearly state the reason for the request, the nature of any activity to be undertaken in the reserve, the duration and the number of persons involved. The application should clearly state the name of the responsible party and should require a certificate of insurance once permission is granted. The Forestry Department should determine the type of coverage necessary for the insurance. Any repair work that might result from such visits should be undertaken by the applicant to the satisfaction of, and within the time specified by the Forestry Department.

With respect to water, the feasibility of re-establishment of waterways and water bodies should be investigated. This includes and investigation of water ways that historically connected the KHFR to the nearby coast.

Particularly in the context of the pending operation of the nearby Argyle International Airport, special attention should be given to bird

species that live in and visit the KHFR and nearby areas. The management team would therefore need to determine whether there would be an impact on flight paths, nesting sites and foraging grounds. In addition, the management team would be required to monitoring the impact of newly established ecological corridors and other management strategies on the biological diversity and general ecosystem health of the KHFR.

(vii) Monitor community activities and development

There is a need to constantly monitor the activity around the reserve to ensure that any existing or future threat is not a potential challenge for the reserve. In this regard, the Division of Planning would be key to the zoning of the surrounding area to support the successful implementation of the management plan.

The involvement of the community in all aspects of planning through town hall meetings and livelihood opportunities would minimise the extent to which there would be conflict with the activities of the KHFR.

(viii) Conduct manpower and skills assessment

In order to engage the public and maximise the benefits to the surrounding communities the management team should determine the extent of manpower and skills that are available in the surrounding communities and try to link this manpower and skills to activities associated with the management plan. This should also be treated as an opportunity to undertake a training needs assessment to inform how best to develop capacity within the community to fully participate in the initiative.

(ix) Staff forest reserve

The KHFR should have a staff complement that reflects the use of it and as such will require a core staff supplemented by a number of outsourced personnel (consultants) and service providers.

Among the core staff would be:

- 1 Superintendant or Manager
- 4 Forest rangers
- 1 Office Attendant

Maintenance and some aspects of security for KHFR could be outsourced.

Task 18: Conduct and facilitate research activities

KHFR has a research plot which has been utilised in the past by the Forestry Department and by both regional and international researchers. This research activity can be continued, however it needs to be carefully regulated to ensure that such activities are conducted within the carrying capacity of the reserve and that negative impacts are minimised. The research should be conducted with the proviso that the Forestry Department should have access to any data and reports that are produced from such research. Early preference should be given to a comprehensive wildlife study with priority given to birds and fly paths and the possible effects on and by the Argyle International Airport.

In addition to this, it is important that an economic valuation of the KHFR be conducted. This would be an invaluable tool in the decision making process associated with the KHFR and would assist in guiding decisions regarding the allocation of resources to the management of the reserve.

Task 19: Install education and social amenities

(i) Interpretation centre

KHFR is a fragile environment and therefore does not accommodate high traffic consequently innovative ways must be found to create a KHFR experience. In this regard, it is proposed that an interpretative centre be constructed and that exhibits and activities deliver that experience.

A possible interpretative centre could include: picture and poster displays that could be static or interactive and or portable. There could be videos inclusive of a virtual trail. A souvenir shop and café/restaurant could be revenue generating opportunities for members of the community. In this regard every effort should be made to brand souvenir, gifts items and clothing accessories that would be offered for sale and these should reflect the KHFR iconic brand. The interpretative centre should fall under the management of the park Superintendent/Manager and manned by trained persons from the surrounding community

(ii) Amphitheatre / cultural centre

There is a cultural consciousness among the neighbouring communities surrounding the KHFR. In addition there are a number of sporting activities that take place there. As an outreach to the community, a modern amphitheatre is being suggested to link the community into the management plan for the KHFR. A part of the design features could be a venue for spectator sports, concerts, rallies, or theatrical performances.

(iii) Medicinal germplasm bank

KHFR is a source of medicinal plants for members of the community. In order to reduce the traffic through the reserve is to establish a medicinal germplasm bank. In addition to reducing the traffic through the reserve, the germplasm bank would localise the medical plants

and make them more easily accessible to resource users. This would fall under the management of the Park Superintendent/ Manager

Task 20: Design and implement social and cultural activities

The desire to conduct tours and hikes and other outdoor activities has been voiced by member of the community. The interpretive centre is intended to minimise this type of activity. This notwithstanding tours and hikes on the perimeter of the reserve could be considered under the watchful guidance of the forest rangers. Investigations would have to be conducted to ascertain if the reserve can safely accommodate at least one trail leading to the tomb that is located on the interior of the reserve. Use of this trail if so developed would also have to be used under the watchful guidance of the forest rangers.

The Forest Rangers could also develop bird watching activities that are compatible with the management of the reserve and could manage a campsite located outside of the buffer zone if there is sufficient demand for this kind of activity.

Task 21: Organise and support new farming thrust

(i) Animal husbandry

In recognition that there is a demand for the exotic wild meat and in order to stem the hunting currently taking place, there should be the encouragement of some of the species in a confined environment for consumption. Community members could be responsible for this initiative. This could be used as a livelihood opportunity whereby farmers could sell this meat in the market.

(ii) Organic / green farming or greenhouse technologies

There is concern for the impact of the use of inorganic pesticides and other harmful chemicals by surrounding farmers. The mitigating measure being proposed is to create a green zone in the immediate environs of the KHFR and to restrict the use of these harmful chemicals in this zone. The green zone will incorporate the nearby farming communities to the north of the KHFR and should extend as far as (to be named). The farmers in this area should convert to green farming techniques/ organic farming and or greenhouse technologies. This should greatly reduce the potential for contamination from these farms. This presents an opportunity for partnerships to be forged with local, regional and international partners particularly FAO, IICA and CDB who have offered programmes in these areas. In addition, there are other potential partners, working in the agricultural sector, who may have an interest. Produce from these farms should be of premium quality, should capture good prices on the market, should realise high yield from their crops and hence should gain greater revenue. Farmers would be encouraged to formalise relationships with restaurants and other businesses in the community and surrounding areas that could be a ready market for their produce. Farmer could be encouraged to collaborate with each other or form a cooperative and the Ministry of Agriculture should consider ways to encourage this type of collaboration, through the provision of incentives and schemes.

16.3.4 Surveillance and Enforcement

Task 22: Develop surveillance programme

As a precursor to the surveillance programme, the management team should post signs, notices and warnings at strategic locations along the periphery of the KHFR. These should be clearly worded and penalties for breaches should be prominently displayed. These efforts should be supported by a communication strategy that informs the public of the management initiatives of the KHFR, the objectives and the negative impacts that could result from unlawful practices. The communication strategy should also provide information that relates to rules and regulations and the nature of the penalties for breaches of these rules and regulations.

The management team should upgrade the former post of Caretaker to that of Superintendent or Manager under whose management should fall Forest Rangers / Wardens. The Superintendent or Manager would have responsibility for the general oversight of the KHFR and would therefore act on behalf of the Head of the Forestry Department to regulate all aspects of the use of the KHFR. The Forest Ranger would be responsible for law enforcement and would engage in patrols in keeping with the spirit of the 1791 Kings Hill Enclosure Act and should have the power to intercept offenders. Forest Rangers should also engage in educational activities, tours, and emergency response (e.g. fire fighting and first aid). They could also be involved in the maintenance and administration of the KHFR. Alternatively, consideration might be given to engaging members of surrounding communities in a Ranger patrol like arrangement along the lines of that which was provided for in the Kings Hill Enclosure Act (1791).

Surveillance of the KHFR could combine a number of approaches in order to achieve maximum result. Observation cameras could be positioned along the boundary and these could be monitored on a 24 hour basis either by Forest Rangers or by a private security firm. Community watch programme could also be implemented to solicit

the assistance of the public to identify perpetrators of illegal activities and bring them to the attention of the authorities. This should work together with a hotline and emergency contact information through which the park authorities can receive information from the public.

Note that the work of the Forest Rangers can be supplemented by revenue generated by tours and other related activities.

Task 23: Enforce rules and regulations

Given the known breaches of the legislation related to the KHFR the management team would have to implement enforcement measures to ensure compliance with existing and any new legislation that might be developed for the reserve. Enforcement should be both passive (procedures to ensure that the terms and conditions of planning decisions are carried out) and active (warnings and prosecution).

16.3.5 Public outreach

Task 24: Coordinate the participation and contribution of government and statutory agencies

The effective management of the KHFR will require the coordinated collaboration of activities and resources of a number of government agencies and departments. It was unquestionably clear from research, interviews and discussions with stakeholders that in the natural resource management field, administrative and legislative action of government departments can often work at cross purposes and at times do not work in harmony to effect maximum efficiency. Given this state of events the implementation aspects of the manage plan should include a coordinating body, similar to this NISP, which has representatives from all of the relevant government departments. The objective of such a body would be review and oversee the proposed management activities in order that various government departments will be aware of how best and when to inject resources for maximum benefit to the initiative. A body of this nature should meet at least quarterly and also meet with the management team on a similar frequency. Beyond this however, it will also be necessary to ensure that a KHFR awareness programme be developed for the government agencies that will be required to support the implementation of the management plan.

Task 25: Coordinate the participation and contribution of NGOs and CBOs

The civil society organisations that operate in the vicinity of the KHFR have a history of activism in support of the conservation of the reserve and in fact in the case of the JEMS Progressive Community Organisation, may have been more influential in the preservation of the reserve than some government agencies. Notwithstanding, given the fact that that a key plank of the management plan focuses on community participatory management it is critical that civil society organisations be involved particularly as they are likely to provide a

core base of the required human resources. It is also vital that a strategy be put in place to encourage civil society involvement at all stages of the plan. In this regard, the strategy needs to have civil society involvement at the level of the coordinating body or NISP and beyond this, representative of the civil society groupings should sit on the various committees set up by the management team.

Task 26: Develop and implement public education, and awareness programmes

Standard operating procedure for a natural resources management initiative of the nature of the implementation of a management plan for the KHFR is to have a strong public education and awareness programme. The object of such a programme is to get information out to the various target publics that are likely to have some impact on the resource. Without doubt one component of the education and awareness programme must aim to raise the profile of the management plan amongst decision and policy makers and senior officials and demonstrate to them how the objective will be delivered. One strategy may be to hold roundtable workshops between the management team and key decision makers but of course, such an activity will be reinforced with the other components of the education and awareness programme that use the gamut of media that are available. In principle however, the critical publics, once identified through a stakeholder analysis, may each have an awareness programme that targets each of them. In general a reasonable strategy would be to have a general multi-media launch of the awareness programme to draw it to the attention of the general public. After this targeted messages can be developed for radio and television public service announcements. In addition, short video documentaries that focus on oral history and research can be produced and broadcast. It is also useful to have a strategy that shapes news items from the activities that are happening during the implementation phase of the plan, especially ones that highlight the benefits that the initiative is bringing to the stakeholders. This is also a useful way of keeping the public aware of progress in the management plan. However, the awareness and education activities

can also include competitions for the general public and schools, the development and dissemination of signs and posters, as well as exhibits and displays at suitable population centres, the primary focus being on the proposed interpretation centre for the area.

Task 27: Communicate and dialogue with stakeholders

Communication is critical for the success of any project, especially when the project has a large number of stakeholders. It will be useful for the management team to have a schedule of activities to ensure effective lines of communication are established throughout the life of the implementation phase and beyond. It is suggested that regular reports and updates be presented to the NISP and when necessary to the key decision and policy making bodies.

To ensure that the public and the communities of KHFR are updated town hall meetings can be scheduled and to ensure community participation regular consultations can be held with the communities. In addition a useful strategy to promote community involvement and buy-in is for the management team to set up committees which involve representatives from the various communities. Finally, the management team should give consideration to having a hotline that members of the community can call into to ask questions or the report occurrences of any nature.

Task 28: Develop iconic brand for and market the KHFR

Developing the iconic charter of KHFR is critical to the successful development of the management plan for the reserve. The suggested strategy is for the development of a logo representative of KHFR. One approach may be to host a highly visible national logo competition, as this would bring significant attention to the process while highlighting the uniqueness, cultural and ecological value of the reserve. Beyond this phase it would be more appropriate to engage a consultant to develop a marketing plan that would address the needs and aims of the management plan.

Task 29: Conduct training

Human resources development, particularly at the community level, is fundamental to the successful implementation of the management plan. In this regard, a repository of the skill sets that exist in the community should be developed and training opportunities provided to sure up the any short fall of skills that will be required for the successful implementation of the management plan.

16.4 Legislation

Although the Kings Hill Forest Act provides the legal basis for the protection of the forest reserve, its main focus was “preserving the timber and other trees growing thereon in order **to attract rain**”. This was seen to be extremely important at the time primarily because the surrounding lands were mainly used for agriculture production but also the area was generally dry and windswept. Without a doubt, the KHF Act is exemplary legislation and was innovative and adequate for the purpose and at the time it was conceived. However, as time passed, the land use patterns around the forest reserve changed to encompass multiple uses and as such, legislation governing the management of the KHFR should take these various uses into consideration. In addition, this legislation ought to reflect the numerous other functions of the KHFR (biodiversity, recreation, carbon sequestration etc.) as well as its iconic status in addition to that of attracting rain.

Task 30: Revise / Amend / Repeal the Kings Hill Forest Act

Consideration should be given maintaining the Kings Hill Enclosure Act as part of the iconic development of the KHFR. The revised Kings Hill Forest Act should take a holistic approach to the management of the reserve. It should cover ecological considerations, forest dynamics and external influences. This should be comprehensive and should address, in greater depth, the requirements for conservation of the forest reserve and the sustainable management, development, and control of the resource in and around the reserve to fulfil the needs of the people, industry and the protection of the environment.

The revised legislation should therefore allow for a more effective enforcement of the principles of management of the KHFR including mandatory high fines and stiff penalties for illegal practices in and around the reserve.

The types of activities allowed in and around the reserve should be clearly stated and associated permits be built into the legislation to facilitate the control of access to, and activity in and around the KHFR.

The legislation should require public consultation at all levels of planning and should provide the legal framework for the participation of an informed public in the management of the KHFR. This should take experience and local knowledge into consideration. In addition, user rights should be addressed and guidelines provided for the intellectual property rights of symbols associated with the iconic branding of KHFR.

Regular monitoring including, that of the status and health of the forest, should be a requirement in the legislation and the role and responsibilities of Forest Rangers should be clearly set out.

Further, the management structure of the reserve should be expanded to include a defined coordinating committee or advisory group and consideration should be given to whether the management of the KHFR will be vested in a legal entity other than the Forestry Department.

Every effort should be made to take regional and international obligations into consideration in the revisions. As well as to harmonise the revised Kings Hill Forest Act with existing and planned local legislation.

If however a decision is made to repeal the Kings Hill Enclosure Act (1791) relevant existing and planned legislation should take the above into consideration.

Task 31: Develop Physical Development and Land-use Plan

The National Physical Development plan for St. Vincent and the Grenadines speaks to the development of Forestry Management

Plans for a number of areas including the KHFR. It however indicates that priority should be given to the surveying and gazetting of all of these forest reserves “except the KHFR that has already been declared”. It is however recommended that the KHFR be included in this effort and that emphasis be placed on the re-establishing of the boundary markers as well as surveying and gazetting the buffer zone and connectivity corridors associated with the reserve.

Apart from physical delineation, there is a need to clearly define zones in and around the reserve and the types of activities and development that can take place in these zones, consistent with the agreed management plan for the KHFR.

16.5 Monitoring and Evaluation

Task 32: Monitor implementation of management plan

(iii) Track Project Progress

As a matter of priority, there is a need to establish a system that will track whether the management plan is proceeding as planned; collect accurate, timely and well-evidenced information that will alert management if there is need to take action to ensure that the management plan stays on track and to enable the authorities to complete claims; demonstrate to funders that outputs and outcomes have been met in accordance with the agreements; and inform stakeholders of progress.

In this regard, performance of the implementation of the management plan should be assessed with respect to efficiency. Progress should be measured against the schedule of activities, Logical Framework Matrix and performance indicators as prepared by the management team and reviewed and recommended by the Coordinating Committee.

This monitoring should be built into the day-to-day management regime for the implementation of the management plan for the KHFR, but will ultimately be the responsibility of the Coordinating Committee and the Forestry Department. It should be supported by the use of technology, including electronic devices (e.g. computer, audio and video) and tracking tools such as MS Project software. It should also be accompanied by the necessary training to ensure competence with these devices and tools as well as to ensure that maximum benefits are derived from them.

The management team, in consultation with the Coordinating committee, should develop monitoring report check lists and templates, and reports should be made to the coordinating committee at least on a monthly basis.

(iv) Obtain feedback from the public

There is also a need to obtain feedback from the stakeholders about their perception of the management plan, the implementation of the plan and their assessment of the progress and success of the plan. This information should be collected and assessed on a quarterly basis and should involve the conduct of a stakeholder meeting and the assessment of comments received from stakeholders, both verbal and written. Verbal comments should be noted in the official records of the quarterly stakeholder meetings. Written comments should however be made on a prepared questionnaire to be received either at said meetings or in the mail. These comments could also be dropped off at the office or sent by email. In this regard, an electronic version of the questionnaire should be available and posted on the internet if possible. Where feasible, comments from stakeholders should be taken into consideration during the implementation of this programme.

Task 33: Evaluate implementation of management plan

(vi) Assess policy context of management plan

Progress monitoring needs to be supplemented by evaluation. This goes beyond assessing quantitative outputs to exploring qualitative outcomes and broader impacts or outcomes. Evaluation of the Management Plan for the KHFR should therefore explore overall impacts, good practice for wider dissemination and aspects of the plan that need to be improved. Importantly, it should highlight successes and helps to make the case for further or continued funding.

In this regard, an assessment should be made as to the extent to which the implementation of the management plan remained consistent with and supportive of the policies and programme framework within which the plan is placed. This should be achieved by preparing a standard checklist of policies and programmes that

are intended to be supported by the project and by identifying the project interventions that have been undertaken in support of these. This assessment should be undertaken every 6 months and the results should be used to inform the programme's work plan for the next period.

(vii) Assess stakeholder participation

There should also be an assessment of the level of stakeholder participation in the management and implementation of the management plan and the level of local ownership achieved. From the outset, there ought to be agreement on the indicators for measuring stakeholder participation as well as on targets. Once these have been set, the necessary data can be collected to measure this parameter. Consideration should be given to using measurements such as number of persons attending consultations, number of comments received, and number of persons involved in programme activities (employed and as volunteers).

(viii) Assess knowledge, attitudes and perceptions of stakeholders

In addition stakeholder attitude towards the KHFR, their habits and interaction with the reserve as well as the extent to which local knowledge of the programme increases, ought to be assessed on a regular basis as part of the measurement of the success of the plan. This should be done by administering a knowledge, attitudes and perception (KAP) questionnaire survey 1 month from the start of the programme, 6 month later and annually thereafter.

(ix) Assess impact of management plan

Performance of the implementation of the management plan should be assessed with respect to effectiveness. In this regard, the implementation of the management plan should be assessed to determine whether the delivery of outputs and progress of activities

are achieving the purpose of the management plan. Management and coordination arrangements particularly with respect to the extent to which timely and appropriate decisions are made should also be considered. The quality of outputs and the prospects for sustainability and viability of the management plan must be examined. A review at the mid-term of the management plan and another towards the end of the period allocated for the implementation of the management plan are best suited for this type of assessment.

(x) Conduct financial audit

The management team should keep complete and comprehensive financial records to show all income and expenditure associated with the programme. In addition, the management team should demonstrate that funds have been used for the intended purpose as well as show how they have pursued value for money in the procurement of goods and services.

Procurement and financial management should be implemented in accordance with the Government and funding agencies requirements and should be audited accordingly. However, such audits should be undertaken at least once a year by an independent certified professional.

Measures should be put in place to address shortcomings raised by the audit immediately after receiving the audit report and, as far as possible, well in advance of the next audit.

Task 34: Review and revise management plan

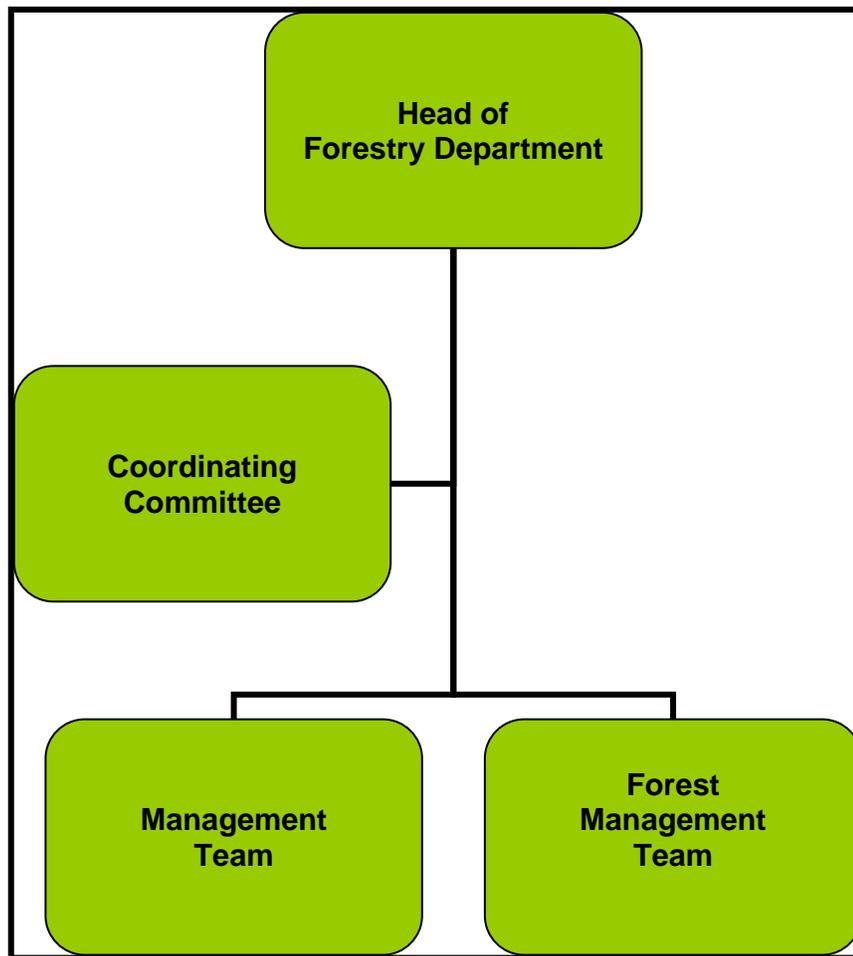
This management plan should be reviewed and revised every five (5) years. Such revisions should give consideration to revised policies and country priorities, additional regional and international obligations, recommendations and lessons learned from the previous five years, changes in technology, and new developments, best practices and recommended approaches in this field.

16.6 Administration / Management

(i) Amend Management Structure as needed

Based on the foregoing, the management structure for the implementation of the KHFR Management Plan would take the following structure:

Figure 6: Management Structure for KHFR Management Plan



Note that the organisational and management structures of the delivery agency, and the ways in which resources are deployed to achieve high quality day-to-day delivery and secure the future of the management plan, are important factors in determining whether plan's objectives can and will be achieved. In this context, a number of aspects need to be considered including: the diversity of the project's funding base; whether the legal form of the lead organizations (i.e. the Forestry Department and the management team) are appropriate for achieving the project objectives; the knowledge, skills and behaviours of the programme leaders, other staff and Coordinating Committee; and the extent to which there is flexibility within the budget to enable resources to be allocated to securing the future.

Task 35: Determine the legal status of the lead agency

Depending on the approach to financing the management plan, the status of the lead agency that will be implementing it should be determined and formalised. Consideration should be given to not for profit status as this might be attractive to some potential supporters.

(ii) Pursue Financing

Although this management plan is being conceived under the direction of government agencies, it is important to avoid relying too heavily upon government funding or any other single source of funding to support this initiative. Funding regimes and criteria change and reliance upon one, or even two, main funding regimes constitutes a risk to the successful delivery of the plan. As such, it is advised that the work envisaged under this management plan should be financed by multiple sources and that every effort made to separate the management plan's records from activities that may be delivered by the Forestry Department so that it is easy to demonstrate to funders and other stakeholders what the management plan is delivering for its money and its impact.

Financing for project activities can be obtained from one or a combination of the following:

- Government treasury – Government can contribute through annual budget allocations. This is necessary even if external funding is sought as funding agencies would be looking for Government commitment and involvement of the programme. It would assist also in leveraging funds during a fund raising exercise
- Conservation fund and / or Forestry development fund – These are provided for in existing or proposed legislation and can be used to apply funds to this programme
- National Parks, Rivers and Beaches Authority – This organisation has been charged with the responsibility of financing and marketing the national parks and protected area system and can therefore play a pivotal role in providing / mobilising finance for this programme as well as marketing the components of this initiative
- Development agencies – Various development agencies (e.g. CDB, IDB, UNDP-GEF Facility, FAO, IICA) may identify aspects of the management plan that appeal to them and qualify for funding. This would require a multilateral agency forum and a level of donor coordination that would allow all interested parties to participate in a satisfactory manner
- Bilateral funding – The European Union EDF facility and / or funding from friendly governments can be pursued providing that the programme objectives are in line with their priorities and development objectives
- Private donations – The initiative can receive donations from private individuals, companies and organisations. The success of attracting some of these funds however, might depend on the legal status of the lead organisation for the initiative. Large organisations in particular might want to write off their donation

as contribution to charity. Donations can be in the form of cash, training, equipment and materials or through volunteerism.

- User fees – Fees received from hikes, camps, the visitor centre, the cultural centre etc. can be used to finance the initiative. In addition, there can be a conference or training centre associated with the KHFR that can be rented for a fee.
- Trust fund – This initiative might benefit from the proposed protected areas trust fund or set up a similar one of its own.

In this regard, the Government of St. Vincent and the Grenadines will need to decide which of the above recommendations will be accepted in order to refine the scope of the project. This notwithstanding, the main resources required to implement the management plan, as presented, are listed in Table 1. This indicative list and the costs in Table 2 would need to be verified by sector specialists in order to arrive at a final budget for the overall management plan. This notwithstanding, the estimated cost to implement the management plan for the KHFR for the initial 5 year period is US\$3,686,000.00. Once these issues are settled, a full business plan can be developed for the delivery of the Management Plan (see Appendix 1 for an example outline of a business plan).

Table 1: Main resources required to implement the management plan for the Kings Hill Forest Reserve, St. Vincent and the Grenadines

MANAGEMENT	INFRASTRUCTURE AND EQUIPMENT	TRAINING
Management Team	Project office	Plant / Tree propagation
Director	Shade houses	Greenhouse farming techniques
Technical Assistant	Greenhouses	Green / organic farming
Finance and administration Officer	Signs & posters	Presentation skills
Secretary	Digital camera	Fire fighting
General worker	Medicinal germplasm bank	First Aid
	Bird hide	Forest Ranger Training
Forest Management Team	Interpretation centre	Administration and Management
Manager / Superintendent	Amphitheatre / cultural centre	
Forest Rangers (4)	Tents (10)	
Office Attendant		
Other Technical Resources	Other Farming Inputs	
Land Use Planner	Seeds	
Legal Expert	Plants	
Land Surveyor	Plant pots / bags	
Communications & Marketing Specialist	Gardening equipment	
Financial Analyst	Fertilizer	
Resource Mobilising Specialist		
Education Specialist		
Security Firm		
Gardening Services		
Aerial Photographs		
Satellite Imagery		
Radio and TV slots		

The tasks perceived under this activity are therefore as follows:

Task 36: Settle on preferred management options

Task 37: Prepare programme budget and business plan

Task 38: Develop financing plan and mobilize resources

Table 2: Indicative costs of the implementation of the management plan for the Kings Hill Forest Reserve, St. Vincent and the Grenadines for the first 5 years of operation

(a) *Infrastructure and Equipment*

RESOURCE	Estimated costs (\$US)					
	Year 1	Year 2	Year 3	Year 4	Year 5	Total
INFRASTRUCTURE AND EQUIPMENT						
Project office	50,000					50,000
Shade house		3,000				3,000
Greenhouses (7)		35,000				35,000
Signs & posters		5,000	5,000			10,000
Digital camera	1,000					1,000
Medicinal germplasm bank		500				500
Bird hide			500			500
Interpretation centre		250,000	250,000			500,000
Amphitheatre / cultural centre		250,000	250,000	250,000		750,000
Tents (10)				5,000		5,000
Other Farming Inputs						
Seeds, fertilizer, plant pots/ bags, gardening equipment etc.		10,000				10,000
Plants		60,000				60,000
Total	51,000	543,500	505,500	255,000	0	1,355,000

(b) *Training*

RESOURCE	Estimated costs (\$US)					
	Year 1	Year 2	Year 3	Year 4	Year 5	Total
TRAINING						
Plant / Tree propagation		10,000				10,000
Greenhouse farming techniques		10,000				10,000
Green / organic farming		10,000				10,000
Presentation skills		5,000				5,000
Fire fighting			10,000			10,000
First Aid			5,000			5,000
Forest Ranger training			40,000			40,000
Administration and Management				10,000		10,000
Total	0	105,000	55,000	10,000	0	170,000

(d) ©Management

RESOURCE	Estimated costs (\$US)					
	Year 1	Year 2	Year 3	Year 4	Year 5	Total
MANAGEMENT						
<i>Management Team</i>						
Director	90,000	90,000	90,000	90,000	90,000	450,000
Technical Assistant	60,000	60,000	60,000	60,000	60,000	300,000
Finance and administration Officer	48,000	48,000	48,000	48,000	48,000	240,000
Secretary	12,000	12,000	12,000	12,000	12,000	60,000
General worker	6,000	6,000	6,000	6,000	6,000	30,000
<i>Forest Management Team</i>						
Manager / Superintendent	36,000	36,000	36,000	36,000	36,000	180,000
Forest Rangers (4)	96,000	96,000	96,000	96,000	96,000	480,000
Office Attendant	12,000	12,000	12,000	12,000	12,000	60,000
<i>Other Technical Resources</i>						
Land Use Planner	5,000					5,000
Legal Expert	20,000					20,000
Land Surveyor	10,000					10,000
Communications & Marketing Specialist	10,000	20,000	20,000	20,000	20,000	90,000
Financial Analyst		10,000				10,000
Resource Mobilising Specialist		20,000	20,000	20,000	20,000	80,000
Education Specialist		10,000	10,000			20,000
Security Firm		12,000	12,000	12,000	12,000	48,000
Gardening Services		12,000	12,000	12,000	12,000	48,000
Aerial Photographs	1,000	1,000	1,000	1,000	1,000	5,000
Satellite Imagery	2,000	2,000	2,000	2,000	2,000	10,000
Radio and TV slots	3,000	3,000	3,000	3,000	3,000	15,000
Total	411,000	450,000	440,000	430,000	430,000	2,161,000

(d) Summary costs

RESOURCE	Estimated costs (\$US)					
	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Infrastructure and Equipment	51,000	543,500	505,500	255,000		1,355,000
Training		105,000	55,000	10,000		170,000
Management	411,000	450,000	440,000	440,000	430,000	2,171,000
Total	462,000	1,098,500	1,000,500	695,000	430,000	3,686,000

16.7 Institutional Arrangements

Task 39: Confirm institutional structure

The management team should implement the management plan for the KHFR in first instance on behalf of the Forestry Department of Government of St. Vincent and the Grenadines. The management team should execute the initiative under the strategic guidance of a Coordinating Committee.

Management: The main tasks of the management team should be to:

- (i) administer and manage the management plan;
- (ii) ensure coordination of activities;
- (iii) work with the consultants, contractors and staff to ensure the proper implementation of the management plan;
- (iv) procure goods, works and services;
- (v) monitor and evaluate progress;
- (vi) ensure proper accounting and financial management;
- (vii) contract annual external auditing of accounts, and
- (viii) represent the project before the Coordinating Committee.

The management team should be led by a Director who should report directly to Head of the Forestry Department. The Head of the Forestry Department should be advised by the Coordinating Committee.

The Coordinating Committee should:

- (i) review and recommend the work plans and associated budgets;
- (ii) monitor progress;
- (iii) review, analyse and provide guidance to the Forestry Department on related issues
- (iv) the Coordinating Committee should meet at least monthly.

However, during the first five years of implementing the management plan, provision would have to be made to accommodate any

institutional adjustments that have to be made as a result of, or to accommodate tasks 35 – 38.

17. OTHER

17.1 Continuity Strategy

One of the major barriers facing many projects is the lack of resources available to devote to succession planning and implementation. All too often effort needs to be focused on beneficiaries and on day-to-day management rather than securing the project's long-term future. In order to address this, the Management Team for the KHFR management plan should try to gain agreement from the funder(s) to realigning some of the resources towards planning and securing succession. Note that it is often in the funders' interest to give the best chance to continue activities in order that their investment achieves maximum impact and that that this is sustained for as long as possible.

Planning a succession or exit strategy for the KHFR management plan should start early; it should be an integral part of the management plan. All funding applications ask for evidence that succession of, or exit from, the project has been considered. All too often the opportunity this gives for creative thinking about sustainability is treated as a rudimentary and mechanical exercise – understandably so, given that detailed plans for succession really depend upon and respond to a range of factors, not least the policy and funding environment at the time of closure. However, effectively responding to that environment requires flexibility, creativity, awareness of opportunities and barriers and connecting to communities and key people and agencies that can help to carry forward what works. This requires good business planning and creating a 'sustainability culture' throughout the initiative's organisational structure and delivery approach from day one.

The following is a list of areas that need to be considered in order to advance planning for succession in the context of the management plan for the KHFR:

- *Mainstreaming* – transferring particular aspects of the initiative and/or knowledge, lessons and best practice arising from the initiative’s delivery in order to influence the way public sector services are provided; and providing training in administration and management for relevant persons if necessary
- *Further funding* – identifying alternative sources of grant funding or loan finance in order to continue the activities
- *Enterprise* - developing an alternative business and/or operational model, through commercialising aspects of the initiative, or creating a realisable asset base in order to bring in sustainable income to the initiative
- *Closure* – winding down the project component of the management plan for the KHFR as efficiently and effectively as possible in order not to impact adversely on the staff and clients, and to capture the benefits and any lessons learned.

As such, the following task should therefore be undertaken as part of this activity:

Task 40: Mainstream programme

Task 41: Identify sources for further funding

Task 42: Develop sustainable income earning initiatives

Task 43: Complete handover to long-term implementation agencies

17.2 Emergency Response

Task 44: Prepare and implement emergency response plan

An emergency response plan should be prepared for the KHFR and its environs. This should include but not be limited to the following:

- Facility Information
 - name of facility
 - type of facility

- business owner
- responsible party/ business owner/ technical resource
- physical address
- mailing address
- telephone number, etc.

- Description of activities and potential hazards

- Reporting and Notification
 - On-Site Notification
 - Neighbour Notification List
 - Telephone Lists
 - Emergency Response Number List
 - Important Numbers
 - Agency Numbers

- Mitigation (response , cleanup and recovery)
 - List of Emergency Response Equipment
 - Containment Procedures
 - Clean-up Procedures
 - Personnel Providing Technical Advice

- Evacuation Plan
 - Emergency Notification Procedures
 - Define/Post Evacuation Routes
 - Designated Person
 - Collection Point for Evacuees
 - Other Evacuation Procedures

- Training Plans and Procedures

- Maps
 - General Location Map
 - Map Symbols Key
 - Site Plan
 - Evacuation Assembly Areas Map

18. ACTION PLAN

Table 3: Indicative action plan for the implementation of the management plan for the Kings Hill Forest Reserve, St Vincent and the Grenadines

MANAGEMENT PLAN FOR KHFR: ACTION PLAN			
Phase	Tasks	Duration	Timing
Programme Initiation			
	1: Prepare national policy for KHFR	1 month	Immediately
	2: Appoint a management team	3 months	After policy is approved
	3: Review and revise list of stakeholder and update stakeholder analyses	2 weeks	Once management team is in place
	4: Appoint and convene a coordinating committee	1 month	Notification of appointments should be communicated immediately after policy is approved Meeting convened 2 weeks after completion of task 3
	5: Revise organisational structure	1 week	Concurrent with task 3
	6: Confirm scope of management plan	1 week	Concurrent with tasks 3 and 4
	7: Confirm guiding principles for management plan (vision, goal, objectives etc.)	2 weeks	On completion of task 6
	8: Launch management plan	3 weeks	On completion of tasks 1 – 7 and subject to availability of officials
Programme Planning			
	9: Agree on priorities and sequence of activities	2 weeks	After launch
	10: Procure and manage programme resources	ongoing	Once project team is appointed and as need arises and resources become available
Programme Execution			
Boundaries and Zones	11: Confirm boundary	1 month	On completion of task 9
	12: Establish Zones	2 months	Concurrent with task 11
	(iv) Buffer zone		Will depend on collaboration with planning agencies
	(v) Internal zones		On completion of task 11
	(vi) External zones		Will depend on collaboration with planning agencies
	13: Control access to the Reserve		On completion of task 17 (v). Will also be supported once task 19 (i) is complete
Ecological Corridor	14: Re-establish connectivity to coastal area	4 years	Will depend on success of planting scheme
	15: Establish inland corridors	4 years	Will depend on success of planting scheme
	16: Develop and Implement tree planting schemes	4 years	On completion of task 12
	(v) Demarcate boundary		Will depend on success of planting scheme
	(vi) Plant buffer zone		Will depend on success of planting scheme
	(vii) Undertake enrichment planting of corridors		Will depend on success of planting scheme
	(viii) Involve community in planting activities		On completion of task 12

MANAGEMENT PLAN FOR KHFR: ACTION PLAN			
Phase	Tasks	Duration	Timing
Resource Management	17: Monitor forest resources	ongoing	
	(x) Define boundary and buffer zone		On completion of task 12
	(xi) Maintain boundary and buffer zone	ongoing	Immediately
	(xii) Compile resource inventory	1 year	On completion of task 9
	(xiii) Conduct diagnostic sampling	ongoing	As part of inventory study and then at regular intervals thereafter
	(xiv) Secure and protect forest	6 months	On completion of task 12
	(xv) Manage Environment	ongoing	As part of inventory study and then at regular intervals thereafter
	(xvi) Monitor community activities and development	ongoing	On completion of task 9
	(xvii) Conduct manpower and skills assessment		Concurrent with tasks 11 and 12
	(xviii) Staff forest reserve		Commence on completion of task 9 and continue as required
	18: Conduct and facilitate research activities	ongoing	Informed by tasks 12, 17 (iii) and 17 (iv)
	19: Install education and social amenities	4 years	Phased as resources become available
	(iv) Interpretation centre	18 months	After task 38 and as resources become available
	(v) Amphitheatre / cultural centre	18 months	After task 38 and as resources become available
	(vi) Medicinal germplasm bank	2 years	After task 38 and as resources become available
	20: Design and implement social and cultural activities	ongoing	After task 9
	21: Organise and support new farming thrust	4 years	Concurrent with task 16
	(iii) Animal husbandry		
	(iv) Organic / green farming or greenhouse technologies		
Surveillance and enforcement	22: Develop surveillance programme		Preparation of plan on completion of task 9 Also depends on tasks 17 (vii) and 17 (ix)
	23: Enforce rules and regulations	ongoing	Immediately. Will be supported by 17 (vii), 17 (ix) and 22
Public outreach	24: Coordinate the participation and contribution of government and statutory agencies	ongoing	From initiation and as need arises
	25: Coordinate the participation and contribution of NGOs and CBOs	ongoing	From inception and as need arises
	26: Develop and implement public education and awareness programmes	ongoing	On completion of task 8
	27: Communicate and dialogue with Stakeholders	ongoing	On completion of task 1
	28: Develop iconic brand for and market the KHFR	ongoing	Commence after task 9
	29: Conduct training	As required	Commence after task 9. Will be informed by task 17 (viii)

Legislation	30: <i>Revise / Amend / Repeal the Kings Hill Forest Act</i>	6 months	After Task 1. To be informed by task 12
	31: <i>Develop Physical</i>		After task 12
MANAGEMENT PLAN FOR KHFR: ACTION PLAN			
Phase	Tasks	Duration	Timing
Monitoring and Evaluation	32: <i>Monitor implementation of management plan</i>	ongoing	After task 2
	(v) <i>Track Project Progress</i>	ongoing	monthly
	(vi) <i>Obtain feedback from the public</i>	ongoing	At least quarterly
	33: <i>Evaluate implementation of management plan</i>		
	(xi) <i>Assess policy context of management plan</i>	2 weeks	Annually
	(xii) <i>Assess stakeholder participation</i>	2 weeks	After task 9 and according to set targets
	(xiii) <i>Assess knowledge, attitudes and perceptions of stakeholders</i>	ongoing	1 month after task 9, 6 months later and then annually
	(xiv) <i>Assess impact of management plan</i>	6 months (total)	Mid term and then near end of 5 year period
	(xv) <i>Conduct financial audit</i>	3 months (each)	Annually
		34: <i>Review and revise management plan</i>	3 months
Administration / Management	35: <i>Determine the legal status of the lead agency</i>	6 months	After task 10
Financing	36: <i>Settle on preferred management options</i>	3 months	After task 9
	37: <i>Prepare programme budget and business plan</i>	4 month	On completion of task 9
	38: <i>Develop financing plan and mobilize resources</i>	6 month and ongoing	On completion of task 37
Institutional Arrangements	39: <i>Confirm institutional structure</i>	2 weeks	On completion of task 36
Continuity Strategy	40: <i>Mainstream programme</i>	ongoing	After task 12
	41: <i>Identify sources for further funding</i>	ongoing	After task 38
	42: <i>Develop sustainable income earning initiatives</i>	Ongoing	After task 38
	43: <i>Complete handover to long-term implementation agencies</i>	1 month	At end of first 5 year period
Emergency Response	44: <i>Prepare and implement emergency response plan</i>	6 months and ongoing	Prepare plan after task 9

19. APPENDICES

APPENDIX 1: OUTLINE OF A BUSINESS PLAN

I. COVER SHEET: Serves as the title page of your business plan.

- Name, address, and phone number of the company.
- Name, title, address, phone number of owners/corporate officers.
- Month and year your plan was prepared.
- Name of preparer.
- Copy number of the plan.

II. EXECUTIVE SUMMARY (or Statement of Purpose)

This is the thesis statement and states business plan objectives. Use the **key word approach** (who, what, where, when, why, how, how much) to summarize the following:

- Your Company (who, what, where, when).
- Who your management is and What their strengths are.
- What your objectives are and Why you will be successful.
- If you need a financing, why you need it, how much you need and how you intend to repay the loan or benefit the investor.

Note: Do not write the executive summary (statement of purpose) until you have completed your business plan! It is a summary and reflects the contents of the finished plan.

III. TABLE OF CONTENTS (Quick reference to major topics covered in your plan)

IV. PART I: THE ORGANIZATIONAL PLAN

What is included? This section should include a "summary description of your business" statement followed by information on the "administrative" end of your company.

A. SUMMARY DESCRIPTION OF THE BUSINESS

In a paragraph or two give a broad overview of the nature of your business, telling when and why the company was formed. Then complete the summary by briefly addressing:

- **mission** (projecting short- and long-term goals)
- **business model** (describe your company's model and why it is unique to your industry)
- **strategy** (give an overview of the strategy, focusing on short- and long-term objectives)
- **strategic relationships** (tell about any existing strategic relationships)
- **SWOT Analysis** (strengths, weaknesses, opportunities, and threats that your company

will face, both internal and external)

B. PRODUCTS OR SERVICES

- **If you are the manufacturer and/or wholesale distributor of a product:** Describe your products. Tell briefly about your manufacturing process. Include information on suppliers and availability of materials.
- **If you are a retailer and/or an e-tailer:** Describe the products you sell. Include information about your sources and handling of inventory and fulfilment.
- **If you provide a service:** Describe your services List future products or services you plan to provide.

C. INTELLECTUAL PROPERTY

- Address Copyrights, Trademarks, and Patents
- Back up in Supporting Documents with registrations, photos, diagrams, etc.

D. LOCATION

- Describe your projected or current location.
- Project costs associated with the location.
- Include legal agreements, utilities forecasts, etc. in Supporting Documents.

Note: *If location is important to marketing, cover in Part II - The Marketing Plan.*

E. LEGAL STRUCTURE

- Describe your legal structure and why it is advantageous for your company.
- List owners and/or corporate officers describing strengths (include resumes).

F. MANAGEMENT

- List the people who are (or will be) running the business.
- Describe their responsibilities and abilities.
- Project their salaries.
- (Include resumes in Supporting Documents)

Note: *If you are focusing on "total quality management" (TQM), you may wish to combine Sections F & G and address it at this point!*

G. PERSONNEL

- How many employees will you have in what positions?
- What are the necessary qualifications?
- How many hours will they work and at what wage?
- Project future needs for adding employees.

H. ACCOUNTING & LEGAL

- **Accounting:** What system will you set up for daily accounting? Who will you use for a tax accountant? Who will be responsible for periodic financial statement analysis?
- **Legal:** Who will you retain for an attorney? (Keep 'Murphy's Law' in mind.)

I. INSURANCE

- What kinds of insurance will you carry? (Property & Liability, Life & Health)
- What will it cost and who will you use for a carrier?

J. SECURITY

- Address security in terms of inventory control and theft of information (online and off).
- Project related costs.

V. PART II: THE MARKETING PLAN

What is a marketing plan? The Marketing Plan defines all of the components of your marketing strategy. You will address the details of your market analysis, sales, advertising, and public relations campaigns. The Plan should also integrate traditional (offline) programs with new media (online) strategies.

A. OVERVIEW AND GOALS OF YOUR MARKETING STRATEGY

B. MARKET ANALYSIS

- Target Market (identify with demographics, psychographics, and niche market specifics).
- Competition (describe major competitors assessing their strengths and weaknesses).
- Market Trends (identify industry trends and customer trends).
- Market Research (describe methods of research, database analysis, and results summary).

C. MARKETING STRATEGY

- General Description (budget % allocations on- and off-line with expected ROIs).
- Method of Sales and Distribution (stores, offices, kiosks, catalogues, d/mail, website).
- Packaging (quality considerations and packaging).
- Pricing (price strategy and competitive position).
- Branding.
- Database Marketing (Personalization).
- Sales Strategies (direct sales, direct mail, email, affiliate, reciprocal, and viral marketing).
- Sales Incentives/Promotions (samples, coupons, online promo, add-ons, rebates, etc.).
- Advertising Strategies (traditional, web/new media, long-term sponsorships).
- Public Relations (online presence, events, press releases, interviews).
- Networking (memberships and leadership positions).

D. CUSTOMER SERVICE

- Description of Customer Service Activities.
- Expected Outcomes of Achieving Excellence.

E. IMPLEMENTATION OF MARKETING STRATEGY

- In-House Responsibilities.
- Out-Sourced Functions (advertising, public relations, marketing firms, ad networks, etc.).

F. ASSESSMENT OF MARKETING EFFECTIVENESS*

* To be used by existing companies after making periodic evaluations

VI. PART III: FINANCIAL DOCUMENTS

The quantitative part of your plan. This section of the business plan is the quantitative interpretation of everything you stated in the organizational and marketing plans. Do not do this part of your plan until you have finished those two sections.

Financial documents are the records used to show past, current, and projected finances. The following are the major documents you will want to include in your Business Plan. The work is much easier if they are done in the order presented because they build on each other, utilizing information from the ones previously developed.

A. SUMMARY OF FINANCIAL NEEDS (needed only if you are seeking financing)

This is an outline giving the following information:

- (1) **Why** you are applying for financing.
- (2) **How Much** capital you need.

B. LOAN FUND DISPERSAL STATEMENT (needed only if you are seeking financing)

You should:

- (1) **Tell How** you intend to disperse the loan funds.
- (2) **Back Up** your statement with supporting data.

C. PRO FORMA CASH FLOW STATEMENT (BUDGET)

This document **projects** what your Business Plan means in terms of dollars. It shows cash inflow and outflow over a period of time and is used for internal planning. It is of prime interest to the lender and shows how you intend to repay your loan. Cash flow statements show both **how much** and **when** cash must flow in and out of your business.

D. THREE-YEAR INCOME PROJECTION

A Pro Forma Income P&L (Income) Statement showing projections for your company for the next three years. Use the revenue and expense totals from the Pro Forma Cash Flow Statement for the 1st year's figures and project for the next two years according to expected economic and industry trends.

E. PROJECTED BALANCE SHEET

Projection of Assets, Liabilities, and Net Worth of your company at end of next fiscal year.

F. BREAK-EVEN ANALYSIS

The break-even point is the point at which a company's expenses exactly match the sales or service volume. It can be expressed in: (1) Total dollars or revenue exactly offset by total expenses -or- (2) Total units of production (cost of which exactly equals the income derived by their sales). This analysis can be done either mathematically or graphically. Revenue and expense figures are drawn from the three-year income projection.

Note: *The following (G-J) are Actual Performance (Historical) Statements. They reflect the activity of your business in the past.*

- If your business is new and has not yet begun operations: the financial section will end here and you will add a Personal Financial History.
- If yours is an established business: you will include the following actual performance statements:

G. PROFIT AND LOSS STATEMENT (INCOME STATEMENT)

Shows your business financial activity over a period of time (monthly, annually). It is a moving picture showing what has happened in your business and is an excellent tool for assessing your business. Your ledger is closed and balanced and the revenue and expense totals transferred to this statement.

H. BALANCE SHEET

Shows the condition of the business as of a fixed date. It is a picture of your firm's financial condition at a particular moment and will show you whether your financial position is strong or weak. It is usually done at the close of an accounting period. Contains: (1) Assets, (2) Liabilities and (3) Net Worth.

I. FINANCIAL STATEMENT ANALYSIS

In this section you will use your income statements and balance sheets to develop a study of relationships and comparisons of: (1) Items in a single year's financial statement, (2) comparative financial statements for a period of time, or (3) your statements with those of other businesses. Measures are expressed as ratios or percentages that can be used to compare your business with industry standards.

If you are seeking a lender or investor, ratio analysis as compared to industry standards will be especially critical in determining whether or not the loan or venture funds are justified.

- Liquidity Analysis (net working capital, current ratio, quick ratio).
- Profitability Analysis (gross profit margin, operating profit margin, net profit margin).
- Debt Ratios (debt to assets, debt to equity).
- Measures of Investment (return on investment).
- Vertical financial statement analysis (shows relationship of components in a single financial statement).
- Horizontal financial statement analysis (percentage analysis of the increases and decreases in the items on comparative financial statement).

J. BUSINESS FINANCIAL HISTORY

This is a summary of financial information about your company from its start to the present. The Business Financial History and Loan Application are frequently one and the same. If you have completed the rest of the financial section, you should have all of the information you need to transfer to this document.

VII. PART IV: SUPPORTING DOCUMENTS

This section of your plan will contain all of the records that back up the statements and decisions made in the three main parts of your business plan. The most common supporting documents are:

A. PERSONAL RESUMES

Include resumes for owners and management. A resume should be a one-page document. Include: work history, educational background, professional affiliations and honors, and a focus on special skills relating to the company position.

B. OWNERS' FINANCIAL STATEMENTS

A statement of personal assets and liabilities. For a new business owner, this will be part of your financial section.

C. CREDIT REPORTS

Business and personal from suppliers or wholesalers, credit bureaus, and banks.

D. COPIES OF LEASES, MORTGAGES, PURCHASE AGREEMENTS, ETC.

All agreements currently in force between your company and a leasing agency, mortgage company or other agency.

E. LETTERS OF REFERENCE

Letters recommending you as being a reputable and reliable business person worthy of being considered a good risk. (both business and personal references)

F. CONTRACTS

Include all business contracts, both completed and currently in force.

G. OTHER LEGAL DOCUMENTS

All legal papers pertaining to your legal structure, proprietary rights, insurance, etc. Limited partnership agreements, shipping contracts, etc.

H. MISCELLANEOUS DOCUMENTS

All other documents which have been referred to, but not included in the main body of the plan. (for example, location plans, demographics, competition analysis, advertising rate sheets, cost analysis, etc.).

Source: www.business-plan.com/outline.html

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