



FOCUS: PURPLE ECONOMY AUGUST 2022

Component of a 10-year Management Plan

FOCUS: PURPLE ECONOMY

for the

North-East Tobago Man and the Biosphere Area



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Table of Contents

1	Executive Summary	5
2	The Way Forward	
3	Introductory Remarks	
4	Methods	
5	Limitations	
6	Vision	
	Mission	
7		
8	What is the UNESCO MAB Programme?	
9		
	2 Designation of NE Tobago	
10		
	0.1 Addressing Barriers to Sustainable Management	
11	Purple Economy	32



1 EXECUTIVE SUMMARY

his document was developed as part of a project titled: "Caribbean Small Island Developing States Trinidad Sub-Project Rehabilitation of Quarries" (IWEco TT) with funding from the Global Environmental Facility, under approval of the United Nations Development Programme and via a contract with the Environmental Management Authority of Trinidad and Tobago. It is meant to be a guideline for the future management authority and staff of the North-East Tobago UNESCO Man and the Biosphere Reserve (NETMABR). While it will be open to all stakeholders, it is not meant to be an instrument for outreach activities; an outreach-friendly, intelligible version of the management plan will be developed in late-2022. The document represents the second component of the overall 10-year Management Plan for the NETMABR. The first, complementary component was finalised in December 2021 and a third and final one will be finalised under other interventions and consolidated in November 2022.

This draft plan was developed via review and analysis of primary and secondary literature as well as formal and informal stakeholder consultations between 2018 and 2022; major limitations were based on COVID-19 restrictions and significant primary data deficiencies. The draft plan at hand will be discussed with stakeholders between June and November 2022, revised and finalised accordingly.

This, second component of the Plan includes:

- Revision of previous Stakeholder and Communication Plans,
- Participatory Development of Vision, Mission, Objectives and Principles,
- Site Description,
- SWOT and PESTLE,
- Alignment with existing Legal and Regulatory Framework, Policies and International Conventions.

Furthermore, it includes situational analyses, high level goals, priorities, strategies and proposed actions for three management topics / components:

- Conservation Strategies, Programmes and Priority Projects
- Climate Change Resilience Strategies, Programmes and Proposed Actions
- Community-based, Green, Blue, Purple Economic Strategies, Programmes and Proposed Actions



Next steps and two key recommendations are provided in the chapter below.

The ERIC team would like to thank the EMA Office, Trinidad and Tobago, specifically Alicia Aquing, GEF IWEco National Project Coordinator, and Mr Linford Beckles, Director, Department of the Environment, Tobago House of Assembly for facilitating this intervention and put trust in our technical capabilities.

North-East Tobago Man and the Biosphere Reserve Management Plan Components

SLM

- 1. Background
- 2. Literature Review
- 3. Addressing Barriers to Sustainable Management
- 4. Governance
- 5. Financing and Donor Data Base
- 6. Alien Invasive Species
- 7. Sustainable Agriculture and Sustainable Land Management Practises
- 8. Sustainable Tourism
- 9. Pollution
- 10. Research
- 11. Education
- 12. Networking

<u>IWEco</u>

- 13. Principles
- 14. Vision
- 15. Mission

- 16. Key Objectives
- 17. Site Description
 - 17.1. Biogeographic Location
 - 17.2. Biophysical Characteristics
 - 17.3. Ecosystem Descriptions
 - 17.4. Conservation Status
 - 17.5. Human Systems
 - 17.6. Land Tenure
 - 17.7. Zoning
 - 17.8. Existing And Proposed NNH Sites
- 18. Cultural and Socioeconomic Background
- 19. Historical Background
- 20. Cultural Background
- 21. Folk Tales
- 22. Socio-economic Background
 - 22.1. SWOT
 - 22.2. PESTLE
- 23. Relevant Legislations and Policies
- 24. Relevant International Conventions
- 25. Conservation
- 26. Climate Change Resilience Strategies
- 27. Development
 - 27.1. Green Economy
 - 27.2. Blue Economy
 - 27.3. Purple Economy

<u>SGP</u>



- 28. Marine Zoning Guidelines
- 29. Sustainable Fisheries
- 30. Sustainable Cultural Entrepreneurship
- 31. Arts
- 32. Historical Sites
- 33. Income Sharing
- 34. Disaster Mitigation and Prevention
- 35. Branding
- 36. Marketing
- 37. Aesthetics
- 38. Safety
- 39. Twinning
- 40. Implementation Schedule
- 41. M&E and BR Review
- 42. Budget
- 43. Conflict Resolution

Annexes

- 44. Non-exhaustive list of relevant networks
- 45. Non-exhaustive list of relevant donors
- 46. Revised Stakeholder Register and Engagement Plan
- 47. Revised Communications Plan
- 48. List of Conservation Relevant Species
- 49. Intelligible Online Knowledge Management Platform



2 THE WAY FORWARD

he ERIC has successfully applied to the UNDP Small Grants Programme, Trinidad and Tobago, to fund the final components of the Management Plan and create a knowledge sharing platform for the Plan via a project titled: "Drafting the Final Components of the Management Plan for the North-East Tobago UNESCO Man and the Biosphere Reserve and Intelligible Knowledge Management". The proposal was endorsed by the Department of the Environment, Tobago House of Assembly, which is the Focal Point for the UNESCO MAB Programme in Trinidad and Tobago and by Division of Ecological and Earth Sciences, UNESCO, Paris, France. This final component was approved in May 2022.

This timing aligns perfectly with a contract between the Inter-American Development Bank and Syntegra Change Architects Limited (Trinidad) with the following key objectives:

- 1. to structure the corporate governance framework of the NETPAMPT under a research-driven and participatory approach;
- 2. to structure the institutional framework of the NETPAMT, using components of an environmental and social management systems and including the foundations for a fund-raising strategy; and
- 3. to provide training and dissemination of i) the corporate governance framework; and ii) E&S institutional framework to key stakeholders.

Having started in February 2022, this intervention, of which the NETPAMT, and by extension the Tobago House of Assembly, is the direct beneficiary, will allow the NETPAMT, as future management organisation of the UNESCO Man and the Biosphere Reserve in North-East Tobago, to revise, refine, and apply the finalised management plan.

Based on these interventions, **the key recommendations** for advancing the sustainable development goals under the UNRESCO MAB Programme for NE Tobago are to:

- engage the Government of Trinidad and Tobago and the Tobago House of Assembly to provide the necessary budget allocations (2022-2024) for the operations of the NETPAMT until initial Green Fund funding and subsequent, self-financing is secured, and
- 2. facilitate stakeholder awareness and tangible benefits for communities in the NETMABR.



3 INTRODUCTORY REMARKS

his document was developed as part of a project titled: "Caribbean Small Island Developing States Trinidad Sub-Project Rehabilitation of Quarries" (IWEco TT) with funding from the Global Environmental Facility. It is meant to be a guideline for the future management authority and staff of the North-East Tobago UNESCO Man and the Biosphere Reserve (NETMABR).

The document represents a component of the overall 10-year Management Plan for the NETMABR. The additional, complementary components will be finalised under another intervention, and both consolidated in June 2022.

Amongst other guidelines, the Technical Guidelines for Biosphere Reserves (TGBR, UNESCO 2021) were taken into consideration for preparing this document.

The TGBR provides an indicative list of several main items a UNESCO Biosphere Reserve Management Plan should contain:

- a. a recommendation for an organisational/governance structure responsible for implementation of the plan,
- b. a situational analysis,
- c. a vision,
- d. medium-term goals,
- e. management priorities,
- f. proposed priority projects, and
- g. monitoring indicators,

The document at hand covers, for the components under the contract with the EMA, items **b**, **c**, **d**, **e**, **and f**. Item **a** was covered under a previous assignment, item **g** will be covered under the above-mentioned complementary SGP project.

The components (topics) of the NETMABR Management Plan covered under this assignment included:

- Revision of previous Stakeholder and Communication Plans
- Participatory Development of Vision, Mission, Objectives and Principles
- Site Description, SWAT and PESTLE
- Alignment with existing Legal and Regulatory Framework, Policies and International Conventions
- Conservation Strategies, Programmes and Priority Projects
- Climate Change Resilience Strategies, Programmes and Proposed Actions



- > Community-based, Green, Blue, Purple Economic Strategies, Programmes and Proposed Actions
- Stakeholder Consultations, Local Capacity Building and Media Outreach

As discussed with the funding agency, stakeholder consultations were quite limited due to time- and COVID-19 restrictions. Furthermore, stakeholder consultations will be most efficient and effective when the full draft of the Management Plan will be available in 2022 and a more concise and intelligible version can be produced to meaningfully engage at all stakeholder levels. Once all documents will have been consolidated, the final layout will be polished using an advanced desktop publishing and page layout designing software application. Once funding permits, an intelligible and interactive website will be created to facilitate ease of access to and navigation through the Management Plan.



Figure 1. Fishermen in Castara Bay



4 METHODS

his draft document was developed via review and analysis of primary and secondary literature (see Annex 1) as well as formal and informal stakeholder consultations between 2018 and 2022. These consultations were conducted in relation to the drafting of the UNESCO Man and the Biosphere Nomination Form for NE Tobago, the drafting of the Dossiers for the Designation of NE Tobago's Main Ridge Forest Reserve, Islets and Reefs as Natural National Heritage Sites of Trinidad and Tobago and the drafting of a proposal to the Inter-American Development Bank titled: "Organisational Governance and Operational Strengthening of the North East Tobago Protected Area Management Trust (NETPAMT)".

It should be noted that this document applies the common writing style of UNESCO MAB Reserve Management Plans and, as such, does not claim to be or follow the writing style of a scientific research paper.

5 LIMITATIONS

he bulk of the document was prepared between November 2021 and June 2022 when restrictions regarding the COVID-19 pandemic prohibited workshops, group consultations and broader community involvement. Additionally, the extremely tight timeline for delivery of the draft and final document did not allow for the desired stakeholder participation.

However, these limitations can be addressed in mid-2022, when the complementary components of the management plan will be finalised and a more intelligible version of the management plan can be developed, which will be more directed towards stakeholder engagement than programme management guidance (as it is the case for this document).

An additional, major limitation is the ubiquitous data deficiency for NE Tobago regarding all components of the management plan. Therefore, many statements in the situational analyses are based on recent, oral stakeholder reports and personal observations of the resident expert team. Hence the reason that baseline surveys, monitoring and evaluation interventions are essential to inform the future implementation organisation.



6 VISION

M

AB Vision: A world where people are conscious of their common future and their interactions with the planet, and act collectively and responsibly to build thriving societies in harmony within the biosphere.

To be based on stakeholder consultations.

7 MISSION

The MAB Mission 2015–2025 is to

- y develop and strengthen models of sustainable development through the WNBR;
- y communicate experiences and lessons learned, and facilitate the global diffusion and application of these models;
- y support evaluation and high-quality management of biosphere reserves, strategies and policies for sustainable development and planning, and accountable and resilient institutions;
- help Member States and stakeholders to achieve the Sustainable Development Goals by sharing experiences and lessons learned related to exploring and testing policies, technologies, and innovations for the sustainable management of biodiversity and natural resources and mitigation and adaptation to climate change.

To be adapted on stakeholder consultations.

Figure 2. Children planting trees in Parlatuvier Bay (Janina Ewals)





8 KEY OBJECTIVES

In order to address NE Tobago conservation and sustainable development challenges through strengthening the functions of a BR, the technical team proposes the following **Main Objective** for the management of the NETMABR:

To successfully consolidate and co-manage interventions related to sustainable and regenerative development, research, capacity building, education and networking on landscape, human- and eco-system levels for the benefit of NE Tobago's cultural and natural heritage, communities, and people.

Note: To be adapted based on stakeholder consultations

This key objective is designed to address the <u>12 key barriers</u> that were identified by previous management plans for NE Tobago and IFPAM documents further as follows:

- 1. outdated legal and regulatory framework for establishing and managing natural and cultural resources,
- 2. unclear, fragmented roles responsibilities of stakeholders, especially managing authorities,
- 3. disempowered and under-resourced management authorities,
- 4. inadequate funding,
- 5. willingness to participate if interventions seem to be too restrictive,
- 6. stakeholder conflicts,
- 7. lack of broad, bipartisan political will,
- 8. lack of technical capacity to identify and address issues,
- 9. minimal capacity on the ground with respect to practical approaches to effective natural and cultural heritage management,
- 10. inadequate law enforcement,
- 11. minimal experience with income-generating opportunities, and last but by no means least,
- 12. a lack of transparency, accountability and compliance with regulation and legislation by the Tobago House of Assembly.

While IFPAM and other programmes and projects were able to partially address these barriers, and while it can be stated that conservation status and efforts in NE Tobago have never been better, it remains a fact that all of the above barriers are still valid and need attention.

The Management Plan at hand is based on the methodical approach that most of the above-mentioned barriers can be addressed by implementing strategies aligned with the three MAB functions.

These, below-described key strategies, are mainly based on the results of the recent Improved Forest and Protected Area Management Project (IFPAM, 2015-2020) which applied a participatory approach in identifying objectives and potential solutions to overcome conservation barriers; additionally, the ongoing interaction between the technical team and key stakeholders was used to refine recommendations included into the Management Plan.

These strategies are reoccurring and supported by proposed activities in the various components of the Management Plan at hand. It should be noted that, while IFPAM continuously considered socio-cultural aspects of NE Tobago as essential to successful management of natural resources, there was, unfortunately, not a matching project to similarly address the management of NE Tobago's cultural heritage.

Figure 3. Iguana Bay (Janina Ewals)





9 WHAT IS THE UNESCO MAB PROGRAMME?

n 1971, United Nations Educational, Scientific and Cultural Organisation (UNESCO) launched the intergovernmental Man and the Biosphere programme (MAB) that aims to establish a basis for the improvement of relationships between people and their environments. It predicts the consequences of today's actions on tomorrow's world and thereby increases people's ability to efficiently manage natural resources for the well-being of both human populations and the environment (30).

The working unit of MAB is the Biosphere Reserve (BR), an international description of recognition from UNESCO for an area in the world, which is deemed to demonstrate a "balanced relationship between humans and the biosphere".

Biosphere Reserves are internationally recognised areas comprising terrestrial, marine and coastal ecosystems. Each reserve promotes solutions reconciling the conservation of biodiversity with its sustainable use by local communities. BRs are nominated by national governments and remain under the sovereign jurisdiction of the states where they are located.

BRs are intended to be model regions for demonstrating successful approaches to protection and sustainable development at a regional level. MAB sites are established with the goal to:

- > harmonise conservation of biological and cultural diversity with economic and social development, and
- make a tangible contribution to the transition to green societies and support national governments' efforts to attain the Sustainable Development Goals (SDGs).

Biosphere Reserves have three inter–connected functions:

- > Conservation: protecting cultural diversity and biodiversity, including genetic variation, species, ecosystems, landscapes, and securing services provided by such diversity.
- **Development**: fostering economic and human development that is environmentally and socially sustainable and culturally appropriate; and
- > Logistic Support: facilitating demonstration projects, environmental education and sustainable development education and training, research and monitoring.



The 3 functions of biosphere reserves



Figure 4. Schematic overview of 3 functions of biosphere reserves.

A BR consists of three areas or zones – The core, buffer, and transition zones.

The core zone is usually a legally protected area in which human activity is strictly limited and where monitoring of conservation priorities take place.

The buffer zone allows for appropriate activities such as research and scientific study, ecotourism, education and training.

The transition zone contains human settlements, agricultural and other commercial activities synonymous with human settlement.



Biosphere Reserve Zonation

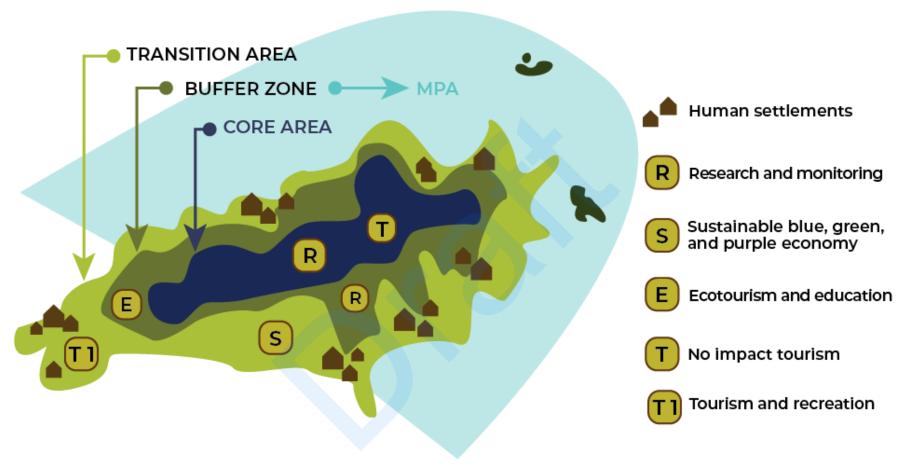


Figure 5. Schematic overview of NE Tobago Biosphere Reserve zonation (ERIC 2021).



The MAB Programme has a significant World Network of Biosphere Reserves (WNBR) which serves as a management tool for various municipal regions to improve strategies for sustainable development. As the pressures upon ecosystems increase with growing populations and climate change, the need for upgraded relationships between people and their natural surroundings only increases.

The MAB Programme Mission for the period 2015-2025 (31) is to:

- develop and strengthen models for sustainable development in the WNBR;
- communicate the experiences and lessons learned, facilitating the global diffusion and application of these models;
- y support evaluation and high-quality management, strategies and policies for sustainable development and planning, as well as accountable and resilient institutions; and
- help member states and stakeholders to urgently meet the Sustainable Development Goals through experiences from the WNBR, particularly through exploring and testing policies, technologies and innovations for the sustainable management of biodiversity and natural resources and mitigation and adaptation to climate change. (MAB Strategy 2015-2025 & Lima Action Plan)

9.1 Administration

he international MAB Programme

The MAB programme is organised under an international agreement through UNESCO; state parties undertake actions within the MAB programme voluntarily and sites remain under national jurisdiction. At the global level, the MAB Programme is governed by its International Coordinating Council (ICC), under the overall authority of the UNESCO General Conference and its Executive Board.

The next level of governance is represented by regional and thematic networks. Governance at the national level is ideally through MAB National Committees.

The MAB institutional structure is outlined in Figure 6.



UNESCO - MAB Institutional Set-Up

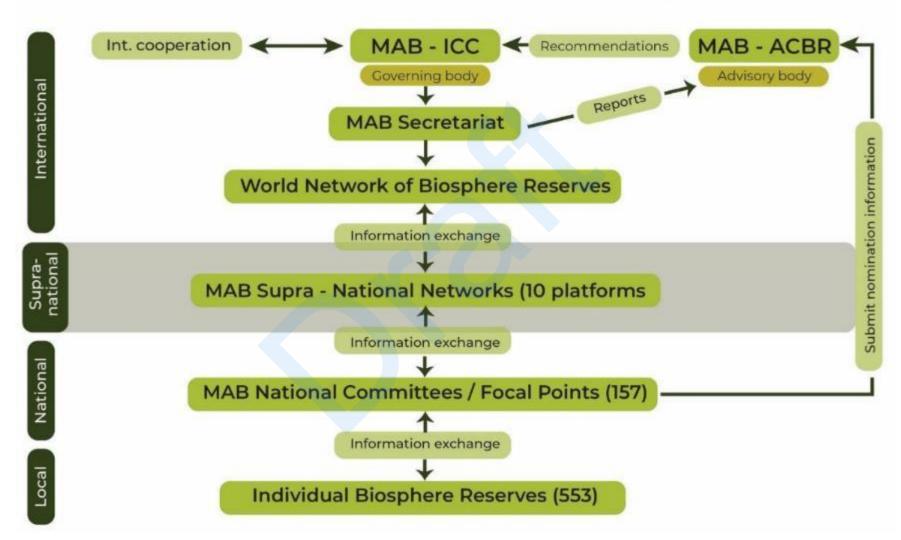


Figure 6. Diagram of the MAB institutional structure adapted from Schliep (24).



The MAB International Coordinating Council (ICC) is the governing body that meets biannually and consists of 34 Member States elected by UNESCO's General Conference. The ICC elects a chair and five vice-chairpersons from each of UNESCO's geopolitical regions that constitute the MAB Bureau which undertakes the responsibilities of the ICC between its biannual meetings. The MAB International Advisory Committee for Biosphere Reserves is the primary scientific and technical Committee body advising the ICC. The MAB Secretariat is the administrative centre for MAB based at UNESCO's Division of Ecological and Earth Sciences in Paris, the Secretariat work closely with the different field offices and Supranational Networks (e.g., IberoMAB - Iberian Peninsula and Latin America/ Caribbean region) around the world to coordinate the work of the MAB programme at the regional, national and individual Biosphere Reserve levels.

MAB is funded through the regular budget of UNESCO and mobilises funds-in-trust granted by Member States, bilateral

and multilateral sources and extra-budgetary funds provided by countries, the private sector and private institutions.

UNESCO's intergovernmental structure provides MAB with a framework to help national governments support the planning and implementation of research and training programmes with technical assistance and scientific advice.

MAB-related activities are nationally financed however the programme can grant seed funding to assist countries in developing projects and/or to secure appropriate partnership contributions.

MAB offers <u>fellowship opportunities</u> co-sponsored by a number member states to assist the technical development of individuals seeking to build a profession within the field of the UNESCO programme priorities. These opportunities would be available to local staff to apply for.

Importantly, designation as a MAB Reserve does not necessarily require the formation of new laws.

9.2 Designation of NE Tobago

n September 2019, the Government of Trinidad and Tobago successfully submitted a Nomination Form to UNESCO with the request to consider NE Tobago as a Man and the Biosphere Reserve.

The eligibility criteria taken from the Biosphere Reserve Nomination Form are shown in Table 1.



Table 1. The eligibility criteria taken from the Biosphere Reserve Nomination Form (2018).

	MAB Eligibility Criteria	NE Tobago
1	Encompass a mosaic of ecological systems representative of major biogeographic region(s), including a gradation of human interventions	✓
2	Be of significance for biological diversity conservation	✓
3	Provide an opportunity to explore and demonstrate approaches to sustainable development on a regional scale	✓
4	Have an appropriate size to serve the three functions of biosphere reserves	✓
5	A legally constituted core area/s devoted to long term protection of sufficient size to meet long term conservation objectives.	✓
6	Buffer zone/s clearly identified & surrounding or contiguous to the core area/s, where only activities compatible with the conservation objectives can take place".	✓
7	Outer transition area where sustainable resource management practices are promoted and developed	✓
8	Organisational arrangements should be provided for the involvement and participation of a suitable range of inter alia public authorities, local communities and private interests in the design and the carrying out of the functions of a biosphere reserve".	Ongoing
9	Able to describe arrangements in place or foreseen	✓
10	Mechanisms to manage human use and activities in the buffer zone or zones	✓
11	Management policy or plan for the area as a biosphere reserve	Currently developed
12	Designated authority or mechanism to implement this policy or plan	Department of the Environment, NETMAPT
13	Programmes for research, monitoring, education and training	√



In the Nomination Form, NE Tobago' values were described as follows:

"Covering over 835km², the proposed area encompasses three protected areas, one of which is the oldest protected tropical forest reserve in the world, a large planned Marine Protected Area (MPA) and 15 communities which are home to approximately 10,000 residents with a rich historical and cultural heritage. The area's rare and largely intact Caribbean Island Ridge-to-Ocean eco- and human-systems are well equipped to fulfil the three functions of a UNESCO Biosphere Reserve (BR): its biodiversity, range of ecosystems, and specialinterest species are important on a regional and global scale (Conservation); the cultural heritage is a living example for the region's deeply rooted, historical, socio-economic and spiritual relationship between communities and natural resources (Development); and decades of regionally outstanding educational, research and networking activities (Logistic Support).

The close linkage between ecosystem services and natural resource use, active community groups, successful sustainable development projects, governmental initiatives and its closeness to Trinidad's resources provide the area with the prerequisites to successfully implement a BR and share lessons learnt with its Caribbean neighbours while serving as a regional role model. Being a hotspot for conservation related research for decades and having a track record of environmental

education, capacity building and monitoring are well established cornerstones for providing and further increasing logistical support.

The legal, policy and institutional framework to manage a MAB area exist; current projects and programmes as well as those in the national and local development pipeline, and improved collaboration between government, civil society and private sector are demonstrably supportive of this BR nomination initiative. On varying levels, NE Tobago is already close to meeting the key conservation objectives of a successful BR as mentioned in the Seville MAB Strategy.

Coordinating future sustainable development efforts under a MAB umbrella and the inclusion of all relevant sectors of the society will significantly improve conservation and livelihoods through responsible use of our natural and cultural heritage which is the central goal of Tobago's guideline policy document, the Comprehensive Economic Development Plan."

On 28 October 2020, NE Tobago was officially declared a UNESCO MAB Reserve.



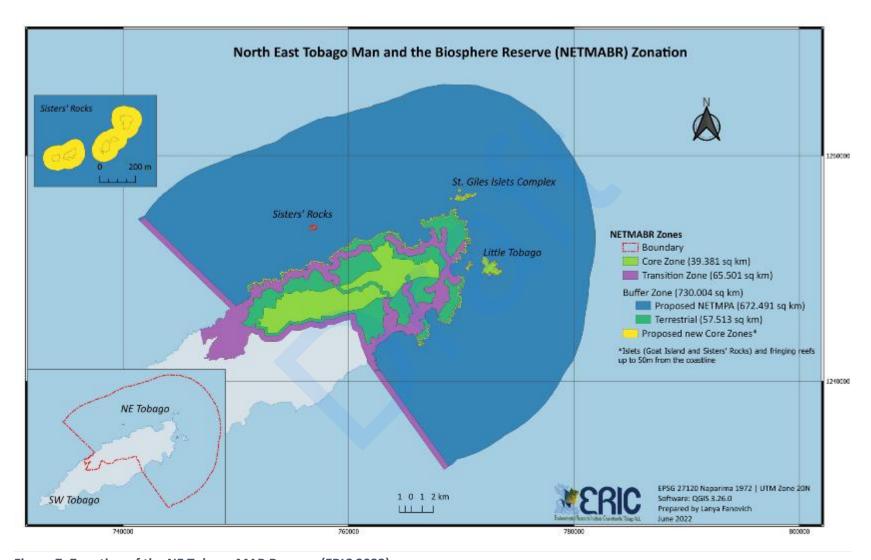


Figure 7. Zonation of the NE Tobago MAB Reserve (ERIC 2022)



The **Core Zone** of the NETMABR consists of three legally protected areas: the MRFR, Little Tobago and the St Giles Islet Complex, all of which are terrestrial.

It should be noted that, at the moment, the Core Zone does not include any marine areas, due to lack of protective legislation and regulations; however, work has started to designate high conservation value, coastal fringe reefs as Natural National Heritage Sites (which is the fastest way of to achieve legal protection) in 2021, and the National Protected Area Systems Plan was approved by Cabinet, which hopefully will result in the designation of the overall NE Tobago Marine Protected Area with some special, IUCN 1a category areas. Once these marine areas receive legal protection, they can, later on, switch from Buffer to Core Zone status within the BR.

The **Buffer Zone** for NETMABR was defined as:

- y all lands between the Transition Zone and the MRFR Core Zone,
- y a 125m belt on both sides of roads within the Core Zone (combining to a width of 250m)
- y a 250m belt along the boundary between the Core Zone and the south-western area outside of the NETMABR,
- y coastal areas between the boundaries of the NETMPA and the Transition Zone, and
- * the entire marine realm of the proposed NETMPA.

As mentioned in the section above, some marine Buffer Zones might change to Core Zone as soon as legal protection can be provided. Therefore, the terrestrial, coastal Buffer Zones are crucial to protect sensitive marine ecosystems.

The **Transition Zone** was defined as all lands that are located within a 250m belt on both sides of all roads within the overall boundaries of the NETMABR; this includes all communities, and economic activities in the NETMABR (except for some micro-scale subsistence farming and hunting in the Buffer Zone). The result of this definition is a Transition Zone band, sandwiched between the terrestrial and marine Buffer Zones on which it has significant influence.



10 MANAGEMENT PLAN COMPONENTS

he following chapters are subdivided into situational analysis, goals, strategies, and proposed activities. It is important to understand that the chapters are at different results framework levels therefore the subheadings are not necessarily on similar logic levels as well. This is the result of the High-Level Goal of each Component starting on a different logic level.

Table 2. Management plan component levels

Component level	Definition			
Summary Situational Analysis	The current state of the BR respectively to the chapter subject, descriptively identifying			
	strengths, weaknesses, opportunities and threats			
High-Level Goal	The desired status achieved by the management plan			
Priorities	Interventions that either significantly contribute to achieving the goal, or significantly reduce			
	existing threats to the goal			
Strategies	Long-term plans of action designed to achieve the goal			
Proposed Activities	Programmes, projects, and other interventions that are aligned to the strategies and should be			
	revised once the situational analysis significantly changes.			



10.1 Addressing Barriers to Sustainable Management

he NETMABR is subject to a series of interconnected, indirect threats to successful implementation of the MAB programme. Local residents and stakeholders are not commonly inspired to undertake conservation-relevant practices. This is partly because intelligible, adequate and continuous environmental education still requires improvement. While knowledge often exists, it is not successfully translated into a positive attitude and actual practise. This in turn is partially due to perceived and actual lack of ownership and empowerment on the part of residents in NE Tobago. On the other hand, and in certain cases, the sense of ownership is very well developed and strongly articulated; however, ownership rarely translates into stewardship.

Similarly, residents facing environmental challenges are often not informed enough to take appropriate actions against those perpetrating the violations (e.g., seek assistance from the Environmental Police and/or the Environmental Commission of Trinidad and Tobago).

Additionally, the lack of coherent and consistent conservation co-management and co-operation often undermines good efforts in some areas by neglect in others. For example, efforts of CSOs to protect nesting sea turtles are undermined by a lack of law-enforcement regarding the use of turtle nets and turtle meat consumption.

The principal barrier to addressing direct threats to the ecosystems of NE Tobago is fragmented management and use. The National Protected Areas Policy, the National Protected Area Systems Plan (7), the IFPAM Project (6) and ERIC's stakeholder assessments have all identified and prioritised this barrier for NE Tobago. Regulations and roles are unclear and consequently there is limited "enforcement / implementation of regulations concerning natural resource use" as stated in the NE Tobago Management Plan (2003). Fragmented, formal and informal, public and private, land management and use create an environment where it is nearly impossible for a single stakeholder to meaningfully influence the direct threats that are degrading NE Tobago's ecosystems. This barrier has two components.

Government Sector

The *government component* involves the formal management of public lands and waters. This barrier includes outdated legislation and policy, a labyrinthine institutional structure and limited government capacity and resources. Repeated government initiatives since the 1970's have failed to address this issue; a case in point is the National Protected Areas Policy (2011) that called for a wide range of actions to be undertaken by 2016. These include the "revision, development and declaration of supporting legal instruments [to] enact an enabling legislative framework", the establishment of a centralised authority "to administer the coordination and



implementation of the National Protected Areas Policy for Trinidad and Tobago", and the establishment of protected areas under the new policy. Unfortunately, all efforts to declare the North East Tobago Marine Protected Area have failed since over half a decade.

Non-Government Sector

Fragmented management and use of land and waters also occurs in *non-government sectors*. The absence of a national land use planning framework combined with outdated regulations and limited enforcement means that private land management and use is largely unrestricted. There is a concomitant lack of mechanisms and incentives for private land owners to engage in or benefit from conservation. The current, forested state of most private land in NE Tobago is therefore not a result of public policies or priorities, but an artefact of the priorities and preferences of individual owners. Although this speaks to the conservation commitment of some land owners, it is a highly vulnerable state for long-term conservation. Land owners may choose to develop their land with infrastructure or unsustainable agriculture that compromises the NETMABR.

Informal management and use of the land- and sea-scape, including public and private areas, is likewise unrestricted. As explained in the THA Comprehensive Economic Development Plan 2.0 (20), Tobago hosts "longstanding insecure land tenure arrangements with as much as 83 percent of the lands of Tobago allegedly in informal tenure (the majority being family lands)". Informal but long-standing family lands, squatting, small agricultural plots, unregulated dumping, hunting, harvesting of timber and other forest products, and harvesting of fish from the marine environment all represent often legitimate uses of public and private lands that can none the less contribute to fragmentation and degradation of ecosystems.

The implementation of the UNESCO MAB programme, including the operationalisation of the NE Tobago Protected Area Management Trust, offers a significant opportunity to de-fragment and consolidate the management of natural and cultural resources under one, overarching programme.

Although fragmented management is the principal barrier to conservation in NE Tobago, another critical barrier is a lack of monitoring and communication. This issue captures two hindrances to biodiversity conservation regionally as identified by the Caribbean Islands Biodiversity Hotspot assessment: limited technical and scientific knowledge and poor availability of information needed for effective decision-making, and lack of awareness of importance of biodiversity and ecosystem services. This similarly applies to the socio-cultural and economic development aspects of the NETMABR. Limited information and communication mean that it is difficult to:



quantify threats, foster informed discussions, prioritise management actions, measure the success of interventions, and inspire stakeholders to take action. This barrier will be specifically targeted by strengthening the logistic function of the NETMABR.

In order to address the described challenges through strengthening the functions of a BR, the technical team proposes the following **Main Objective** for the management of the NETMABR:

To successfully consolidate and co-manage interventions related to sustainable and regenerative development, research, capacity building, education and networking on landscape, human- and eco-system levels for the benefit of NE Tobago's cultural and natural heritage and people.

In order to go into more depth, previous management plans for NE Tobago and IFPAM documents further detailed 12 key barriers to successful natural resource management in NE Tobago as follows:

- 1. outdated legal and regulatory framework for establishing and managing natural and cultural resources,
- 2. unclear, fragmented roles responsibilities of stakeholders, especially managing authorities,
- 3. disempowered and under-resourced management authorities,
- 4. inadequate funding,
- 5. willingness to participate if interventions seem to be too restrictive,
- 6. stakeholder conflicts,
- 7. lack of broad, bipartisan political will,
- 8. lack of technical capacity to identify and address issues,
- 9. minimal capacity on the ground with respect to practical approaches to effective natural and cultural heritage management,
- 10. inadequate law enforcement,
- 11. minimal experience with income-generating opportunities, and last but by no means least,
- 12. a lack of transparency, accountability and compliance with regulation and legislation by the Tobago House of Assembly.



While IFPAM and other programmes and projects were able to partially address these barriers, and while it can be stated that conservation status and efforts in NE Tobago have never been better, it remains a fact that all of the above barriers are still valid and need attention.

The Management Plan at hand is based on the methodical approach that most of those barriers can be addressed by implementing strategies aligned with the three MAB functions.

These, below-described key strategies, are mainly based on the results of the recent Improved Forest and Protected Area Management Project (IFPAM, 2015-2020) which applied a participatory approach in identifying objectives and potential solutions to overcome conservation barriers; additionally, the ongoing interaction between the technical team and key stakeholders was used to refine recommendations included into the Management Plan.

These strategies are reoccurring and supported by proposed activities in the various components of the Management Plan at hand.

It should be noted that, while IFPAM continuously considered socio-cultural aspects of NE Tobago as essential to successful management of natural resources, there was, unfortunately, not a matching project to similarly address the management of NE Tobago's cultural heritage.

Figure 8. View from Speyside onto Little Tobago and Goat Island (Janina Ewals)





Conservation Function

Development Function

Logistic Function

- 1. Secure sustainable financing mechanism for the NETMABR (3, 4, 11)
- 2. Provide secure human and material resources required to efficiently and effectively implement the management plan (3, 4, 9)
- 3. Improve the legal and regulatory framework for the management of cultural and natural heritage (1)
- 4. Facilitate an effective and efficient BR management organisation which fosters participatory co-management of cultural and natural heritage and is aligned with the mandates of existing governmental agencies (2, 3, 4)
- 5. Execute a stakeholder engagement and communication plan that uses preferred communication styles of recipients and creates stakeholder buy-in through improved knowledge, attitudes and practices (5, 6, 7, 12)
- 6. Provide resources and intelligible information that allow stakeholders to meaningfully participate in the decision-making process (3, 4, 8, 11)
- Contribute to the compliance with environmental, cultural and sustainable development obligations on a national and international level (1, 2, 7)
- Inform and collaborate with law enforcement state agencies (1, 10)
- Foster cultural authenticity, stimulate creativity, protection and interpretation of cultural heritage and traditional knowledge (3, 9)
- Reduce direct and indirect threats to ecosystem health and biodiversity (1-12)
- 11. Improve climate change resilience of communities and natural resources (1-12)

- 12. Support the development of livelihood opportunities based on the sustainable use of natural and cultural resources (11)
- 13. Support the transition towards a green and blue economy (11)
- 14. Discourage activities that threaten cultural and natural heritage as well as the wellbeing of residents (5, 6, 9)
- Prioritise tangible economic benefits to residents within the NETMABR (5, 6, 7)
- Optimally use the UNESCO MAB and Biosphere Reserve brand (11)

- 17. Improve and create research and educational opportunities and partnerships linked to the sustainable management of cultural and natural resources from primary to tertiary level (9, 11)
- 18. Actively participate in the MAB network (8, 9, 11)
- 19. Continuously monitor cultural and natural baselines as well as the efficiency and effectiveness of the management organisation and update the management organisation and update the management plan and all its subcomponents every five years (9)
- 20. Facilitate stakeholder conflict mediation (6)

Figure 9. Proposed Main Strategies for the BR Management Plan, Addressed Key-Barriers in (brackets)



11 PURPLE ECONOMY

P

lease note, this chapter discusses the economic aspects of cultural activities in the NETMABR; it does not describe the entire cultural sector or cultural heritage background of NE Tobago (see NE Tobago UNESCO MaB Nomination Form).



Introduction

"Creativity drives our ideas and emotions, as well as our ability to connect, to question and to be understood. But culture and creativity are a lot more than an expression of our identities, they are livelihoods, careers, and economic opportunities for millions of people around the world, especially women, youth, and vulnerable groups. The creative economy has the power to drive sustainable development" (UNESCO's 2005 Convention on the Protection and Promotion of the Diversity of Cultural Expressions).

See: https://www.youtube.com/watch?v=zMJ62tpa93Y

The term "Purple Economy" is still not clearly defined and various from region to region, it also overlaps with the term creative economy.

The Creative Industries Mapping Document (https://www.gov.uk/government/publications/creative-industries-mapping-documents-2001) provides this useful definition:

"Industries which have their origin in individual creativity, skill and talent which have a potential for job and wealth creation through the generation and exploitation of intellectual property"

UNESCO provides a framework for cultural domains (see Fig. 69) and a creative economy concentric circles model (Fig. 70) which can be linked to existing purple economic activities in the NETMABR.



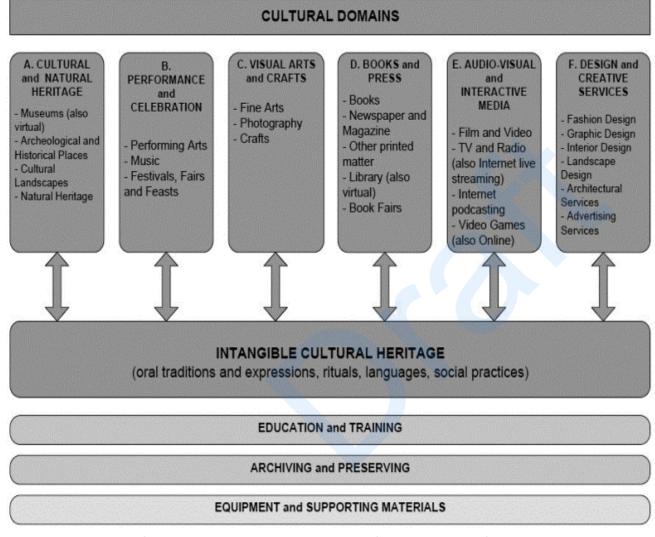


Figure 10. Framework for cultural domains, UNESCO Section for the Diversity of Cultural Expressions



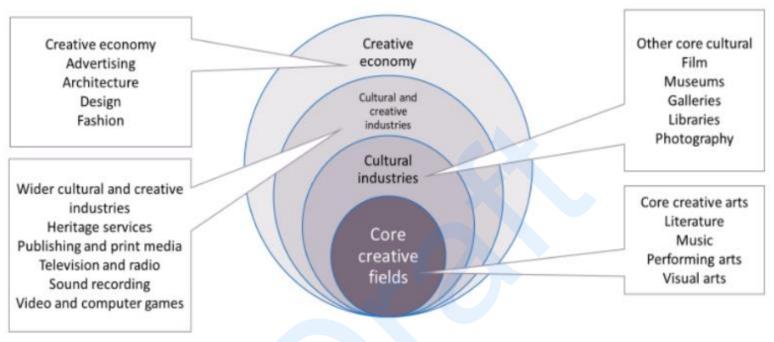


Figure 11. Creative economy concentric circles model, UNESCO Creative Economies Policy Action Guide, 2021

The SDGs describe a future that is equitable, inclusive, peaceful, and environmentally sustainable; this vision demands creative approaches.

When the SDGs are grouped around the economic, social, and environmental objectives as the three pillars of sustainable development, then culture and creativity contribute to each of these SDG pillars transversally.

The economic, social, and environmental dimensions of sustainable development, in turn, contribute to the safeguarding of cultural heritage and nurturing creativity.

Cultural heritage and creativity are renewable economic resources that need to be protected and carefully managed. They can serve both as drivers for achieving the SDGs as well as enablers, when culture-forward solutions can ensure the success of interventions to achieve the SDGs.



"Culture is who we are and what shapes our identity.
Placing culture at the heart of development policies is the only way to ensure a human-centred, inclusive and equitable development."

J. Hosagrahar, Culture at the Heart of SGS (2017)

Sustainable Development Goals in which culture plays a crucial role are:



















Understanding and supporting these linkages between culture, creativity and SDGs, UNESCO declared 2021 the International Year of Creative Economy for Sustainable Development and made commitments to:

- assist countries in the collection of data and cultural statistics,
- > advocate for the enhanced monitoring of culture's contribution to the economy, and
- y spearhead a series of activities including the creation of a knowledge-sharing platform, partnerships with major cultural events and communications campaigns.



Summary Situational Analysis

For its population size and relative remoteness, the NETMABR is blessed with highly creative, passionate, and talented artists.

This renewable source of creativity must be utilised for the benefit of individuals, communities, and ecosystems.

As for other topics of the Management Plan, information about purple economic activities in the NETMABR are extremely data deficient, especially in relation to financial figures. Unfortunately, the purple economy is unorganised and mainly driven by individual actors.

Interviews with artists actively participating in NE Tobago's purple economy paint a picture of highly talented and passionate entrepreneurs. Almost all are unable to depend on their purple economic activities to provide an adequate standard of living and have to rely on other means of income. A private market for purple economic products is not sufficiently developed and the appreciation, as well as willingness to pay, for various local artforms (possibly with the exception of music/festivals/events) by residents is underdeveloped. Overall, there is a heavy dependence on funding from the THA for cultural activities or opportunities to display and showcase NE Tobago's talents on a national, regional, and international stage. The lack of capacity building

opportunities regarding extended skill improvement and entrepreneurship as well as difficulties in accessing / sourcing locations and material are being mentioned as impeding factors for the development of the sector.

The opportunities linked to the UNESCO MaB designation have not been sufficiently communicated to NE Tobago's artists. However, interviewees expressed the opinion that the designation could have a positive impact on the purple economy, especially for artists who are linked with the topics of cultural and natural heritage as well as in the area of regional and international knowledge exchange, marketing, and networking.

In comparison to other economic sectors, the purple economy is relatively minor; however, highly talented persons can be found in every community, and the declaration of the NETMABR brings additional hope for further development of the sector especially in conjunction with the rich natural and authentic cultural heritage of NE Tobago.

Most established are economic activities related to festivals, events, culinary arts, fashion design, and music.

Festivals and events are fixed annual components of social life in NE Tobago and attract visitors from the entire island, Trinidad and in some cases international spectators.



Figure 12. Established and emerging sectors in NE Tobago's purple economy



Table 2. Cultural events and festivals in the NETMABR.

Focus	Attraction	Location	Frequency	Activity	Main Target
	I tour, I learn	Various villages	Annually	Belle Garden Police Youth Club learning the history of Forts in Tobago	local youth
	Easter Summer Camp	Castara	Annually	Castara Youth Centre teaching programmes to encourage sustainable livelihoods and learn culture	local youth
	Heritage Tobago Ole Time Wedding	Moriah	Annually	Perform traditional dances and re-enact traditional weddings	national
	Heritage Tobago Ole Time Harvest	Various villages	Annually	Re-enact traditions of Tobago Culture	national
JRAL	Heritage National Treasure Day	Various villages	Annually	Re-enact traditions of Tobago Culture; Cocoa dancing, baking in dirt oven, squeezing cane	national
CULTURAL	Heritage Bele Dance Festival	Various villages	Annually	Re-enact traditions of Tobago Culture; traditional dances	national
	Summer Youth Awareness	Various villages	Annually	Division of Tourism and Transportation – learning about ecosystems, history and culture of Tobago	local
	Documentation of Historical Sites	Various villages	2017-2019	NTTT and private citizens documenting forgotten historical sites and buildings	national
	Blue Food Festival	Bloody Bay	Annually	Celebration of root tuber vegetables	local
	Fishermen Fete	Various villages	Annually	Fisherfolk harvest	local



Focus	Attraction	Location	Frequency	Activity	Main Target
	Speyside Jazz	Speyside	Annually	Music festival with regional artists	national
	Harvest	All villages	Annually in each village	Originally agriculture related, now general thanksgiving for the year	local
	Carnival	Roxborough	Annually	Music, dance, masquerading	local

Of all purple economic activities, clients seem mostly be willing to pay for culinary arts and performances related to festivals, concerts, and events.

Many communities have culinary artists preparing dishes famous beyond the village boundaries. This includes, wines, cakes, bread, fish and meat dishes. Specifically, the annual Blue Food Festival in Bloody Bay is a celebration of NE Tobago cuisine that attracts many non-resident visitors.

Other, annual cultural related events that create economic opportunities include the Roxborough Carnival, Speyside Jazz, the Tobago Harvest, and the Tobago Heritage Festival.

Unfortunately, business activities, associated with these events, are more of a secondary nature (catering, etc.) than actually income generation for NE Tobago artists.

The Speyside High School is a focal point for fine arts and has, with the help of a gifted art teacher (Tomley Roberts), produced highly talented persons over the past decades; another village famous for its artists, is L'Anse Fourmi, with Jason Nedd and Earl Manswell, both of which have also exhibited internationally.



Figure 103. Blue Food Festival calendar of events



In 2022, the UNESCO Cluster Office financed the creation of a statue depicting three Tobagonian characters uplifting the Biosphere Reserve which was realised by T. Roberts. Additionally, the Office of the Chief Secretary financed the creation of the NE Tobago UNESCO Art Trail which will consist of over 20 art pieces (paintings and sculptures) alongside a terrestrial and underwater roundtrip around the NETMABR. These activities are the most significant art undertakings in NE Tobago for decades and demonstrate the triggering potential of the UNESCO designation.

More or less active dance groups are existing in almost every village; however, these performers are mostly volunteers at community events and entrepreneurship is not well developed.

Non-exhaustive list of cultural groups involving artists from the NETMABR:

Roxborough Police Youth Club

The Roxborough Police Youth Club seeks to provide discipline for young people in the community and to develop a positive and healthy lifestyle with the aim of reducing crime and anti-social behaviour. The club provides opportunities to participate in cultural activities such as dancing, drumming, steel orchestra, culinary arts, and speech band. Its members performed the Grand Creole Bele at Belle Garden for the Tobago Heritage Festival in 2018.



Tobago Performing Arts Company (TPAC)

The TPAC is committed to fostering a holistic and multi-disciplinary approach to Figure 14. Children at Roxborough Carnival (ERIC) the Performing Arts by:

- * enhancing latent talent in the disciplines of Dance, Music, Drama & Film;
- engaging, educating and entertaining local audiences through riveting, resonant and immersive performance experiences;
- promoting cultural retention, preservation and representation to bolster Tobago's Cultural Tourism thrust;
- becoming a catalyst for Tobago's Orange economy by utilizing performance as a mechanism for social development.



Arts Alive Tobago (AAT)

AAT's objectives are to provide:

- instruction in the performing arts for deserving children, youths and adults (including those with special needs) in order for them to develop skills that may include but would not be limited to the following: music performance, music arrangement, music or video recording, acting, dancing, choreography, lighting, set design and set making, costume design and costume making;
- performing opportunities for "abled" and those "differently-abled" through concerts and shows that will be of benefit to the greater community while giving the performers first-hand experience in performance and the opportunity to develop confidence, self-esteem, teamwork and the many other positive personal qualities related to performing;
- music programmes in the community for children, youths and adults including those with special needs; and
- professional development in the performing arts for school teachers.

> The Tobago Drama Guild

A community-based initiative established to promote theatre in Tobago with the mission to use the theatre arts as a means of assisting and encouraging our youth with self-expression, moulding them into well rounded citizens of our twin island state, and making them employable in the field of culture through certification.

Tobago Visual Arts Association (TVAA)

TVAA is a non-profit organisation, formed in 2011 with the primary aim of promoting Visual Arts in Tobago.

> IMIJ Expression Dance Group

Vision: "With a vision to establish our name in world of entertainment and dance as well to be one of the best dance groups in the country, we intend to eventually grow into a dance academy, where our foundation dancers are so skilled, experienced and knowledgeable in art of dance that they can pass on their knowledge and produce a future generation of exceptional dancers".

The groups objectives are to

- * take dance through art, creativity and passion,
- achieve excellence and enjoy the path leading towards our goals,



- romote discipline, self-confidence and self-respect through the art of dance, and
- produce dancers skilled and knowledgeable in various types of dance.

Moriah Ole Time Wedding Performing Group

This group is dedicated to keep the tradition of old-time weddings and the associated cultural activities, oral traditions, dance, and music alive. They perform annually at the Moriah Heritage Harvest Festival, but also at other occasions with a commercial background. See: https://www.youtube.com/watch?v=JwgrzC8aJjk



Figure 14. Moriah Ole Time Wedding (THA)



High Level Goal

A thriving, authentic, and sustainable purple economy provides adequate livelihood opportunities for cultural entrepreneurs and supports the integrity of NE Tobago's cultural and natural heritage.

Priorities

- > Data regarding the purple economy in the NETMABR are analysed, publicly available, and used for decision making regarding the development of the sector;
- Increased appreciation of local cultural expressions and their value;
- An enabling environment for the development of a striving purple economy; and
- Cultural authenticity is maintained and regenerated.

Strategies

- 1. Establish a purple economy research and monitoring programme.
- 2. Include purple economy into education, local outreach activities, and governmental development projects.
- 3. Based on a needs and SWAT assessment remove hindrances and create opportunities for the development of a purple economy.
- 4. Encourage authentic purple economic products where possible.



Figure 15. NETMABR sculpture 'Ah Ahwe Own' (Tomley Roberts)



Programmes and Projects

Re. Strategy 1: Establish a purple economy research and monitoring programme.

Facilitating:

- documenting the status of artists and cultural professionals in the NETMABR, including: number of persons involved and depending on it, in what fields, estimated production value, etc.,
- > establishing a purple economic research programme in collaboration with local and international academic institutions,
- establishing a periodic economic performance monitoring programme, and
- making intelligible information on purple economy in the NETMABR available to stakeholders.

Re. Strategy 2: Include purple economy into education, local outreach activities, and governmental development projects. Facilitating:

- demonstrating culture's contribution to sustainable growth and prosperity,
- y improving cultural education on all educational levels including aspects of cultural entrepreneurship,
- mandatorily including Tobago authentic art in any governmental development project, and
- routinely celebrating local artists.

Re. Strategy 3: Based on a needs and SWAT assessment remove hindrances and create opportunities for the development of a purple economy.

Facilitating:

- > coordinating cultural activities in such a way that a sustainable, critical mass of participants can be maintained,
- by local, regional, and international exchange programmes e.g., learning journeys, performances, and exhibitions,
- > the availability of affordable raw materials and equipment,
- promoting NETMABR artists locally, regionally, and internationally,
- art competitions and awards,
- access to funding opportunities, and
- linkages to the private sector.



Re. Strategy 4: Encourage authentic purple economic products where possible.

Facilitating:

- > establishing a NETMABR cultural centre for exhibitions, performances, sales, and skill development,
- > the mandatory usage of authentic economic products at all government funded public events and festivals.



Figure 16. Charlotteville jetty with natural heritage murals (UNESCO/Jacob Bock)

