IFRC

Resilient Islands

Tools and Methodologies Evaluation

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Delegation (POS CCD) of the
International Federation of the
Red Cross and Red Crescent
Societies (IFRC)

With the Support of:

The Nature Conservancy (TNC),
Jamaica Red Cross,
Grenada Red Cross,
Dominican Red Cross, as well as
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Suggested Citation:

IFRC (2022) Resilient Islands:
Tools and Methodologies
Evaluation
Port-of-Spain Country Cluster
Delegation for the Dutch- and
English-speaking Caribbean.

Graphics and Design

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Photography Credits:

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Date:

10 Sep. 22

Version:

V 6.0

Original Text:

English

FOREWORD

According to the 2022 Global Risk Report prepared by the World Economic Forum, the top five global-scale risks anticipated in the next 10 years are: (1) Climate Action Failure (2) Extreme Weather (3) Biodiversity Loss (4) Social Cohesion Erosion, and (5) Livelihood Crisis. For Small Island Developing States (SIDS) in the Caribbean, these threats are magnified due to their small size, remote location, limited natural resources, geographic positioning, high-density coastal development, limited technical capacity, open markets, and economies intimately dependent on tourism and natural resources. Nature-based solutions (NbS) are an essential strategy for addressing all anticipated risks because they directly address climate change mitigation and adaptation, while providing co-benefits of ecosystem conservation, human health protection, livelihood protection, and improved social cohesion.

NbS can build resilience at the community and national levels. The International Federation of the Red Cross (IFRC) defines 'resilience' as *"the ability of individuals, communities, organisations or countries exposed to disasters, crisis and underlying vulnerabilities to anticipate, prepare for, reduce the impact of, cope with, and recover from the effects of shocks and stresses without compromising their long-term prospects".* Historically, the IFRC has sought to build resilience through the humanitarian sector, with decades of on-the-ground community programmes aimed at improving human health, reducing disaster vulnerability, and alleviating poverty.

Building on the success of "At the Water's Edge" (AWE) – a collaboration between The Nature Conservancy (TNC) and the Grenada Red Cross – the TNC partnered with the IFRC in 2017 to combine their world-class science-based tools with the Movement's deep-rooted community ties to develop novel nature-based solutions. Tried-and-true methodologies and tools from both organisations were combined and new tools developed. These were piloted in Jamaica, Dominican Republic and Grenada, to identify and develop NbS and socio-economic resilience-building projects and affect national policy. This report answers the question "To what extent was this experiment in 'greening the red' successful?" It does not seek to evaluate the success of the Resilient Islands Project in the traditional sense of evaluation. Instead, it examines the evolution and combination of methods and tools to glean valuable insights for scaling-up and replicating similar interventions in other SIDS.

In March 2022, Hans Otto-Portner, co-chair of the IPCC working group on climate mitigation delivered a stark warning: "*Any further delay in concerted global action will miss a brief and rapidly closing window to secure a liveable future.*" We must all take heed and act. Projects such as Resilient Islands represent an innovative community-centred and mission-driven approach to tackling the climate crisis, underpinned by collaboration. The key take-aways from this evaluation shall form a critical foundation for the TNC-IFRC's continued partnership, and the basis of more streamlined NbS partnerships throughout the region. To secure a liveable future for us all, we must all work together. As Helen Keller once said, "Alone, we can do so little; together we can do so much."

Marisa Clarke-Marshall
IFRC Coordinator – Partnerships and Planning

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ACKNOWLEDGEMENTS

The IFRC acknowledges all of those involved in the Resilient Islands Project without whom this evaluation would not have been possible. Thank you for your courage and enthusiasm to pilot this novel partnership and to implement the methodologies and tools in the communities of Old Harbour Bay (Jamaica), Grenville Bay Area (Grenada), Boca del Rio, Miches (Dominican Republic) and Los Mameyes, Miches (Dominican Republic). Thank you to all government stakeholders, community leaders, and community members for their outstanding support and contributions.

We are especially grateful for our project partner, The Nature Conservancy, and its technical staff who supported this project through the science team, policy team, and communications and CEA team, as well as through direct project management at the country and programme level. The science-based insights and technologies used enriched the resilience-building process and you have truly become family to us at the IFRC.

Finally, we thank the National Societies of the target countries for their leadership and commitment to project implementation and their keen support of this evaluation of the methodologies and tools of Resilient Islands. Although each island and National Society faced unique constraints and challenges, they were all unified in their commitment to improve resilience of their countries through this novel process.

Thank you.

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LIST OF ACRONYMS AND ABBREVIATIONS

3CA	Caribbean Climate Change Adaptation
AWE	At the Water's Edge
CADRIM	Red Cross Caribbean Disaster Risk Management Cell
CAN	Communities Adapting with Nature
CBHFA	Community-Based Health and First Aid
CCA	Climate Change Adaptation
CDEMA	Caribbean Disaster Emergency Management Agency
CEA	Community Engagement and Accountability
DAC	Development Assistance Committee
DR	Dominican Republic
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EbA	Ecosystem-based Adaptation
eVCA	Enhanced Vulnerability and Capacity Assessment
FCR	Framework for Community Resilience
GBA	Grenville Bay Area
GFFO	German Federal Foreign Office
GIS	Geographic Information Systems
GPS	Geographic Positioning Systems
ICRC	The International Committee of the Red Cross
IFRC	International Federation of the Red Cross and Red Crescent Societies
IKI	International Climate Initiative
KAP	Knowledge Attitudes and Practices
MVRI	Modified Vulnerability Ranking Index
NbS	Nature-based Solutions
NVRI	National Vulnerability Ranking Index
ODPEM	Office of Disaster Preparedness and Emergency Management
OECD	Organisation for Economic Co-operation and Development
PASSA	Participatory Approach to Safe Shelter Awareness
POS CCD	Port of Spain Country Cluster Delegation for the Dutch- and English-speaking Caribbean
R2R	Roadmap to Resilience
RCRC	Red Cross and Red Crescent
REA	Rapid Ecological Assessment
RI	Resilient Islands
SAM	Strategic Action Mapping
SIDS	Small Island Developing States
STM	Strategic Targeting Methodology
TAG	Technical Advisory Group
TMR	Tools Methodologies and Resources
TNC	The Nature Conservancy
ToR	Terms of Reference
VRI	Vulnerability Ranking Index

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The Resilient Islands (RI) project is a collaboration between the International Federation of Red Cross and Red Crescent Societies (IFRC) and The Nature Conservancy (TNC) aimed at helping Caribbean islands cope with the impacts of climate change by promoting ecosystem-based solutions that protect and restore coastal habitats proven to reduce risks. Born from a previous collaboration between TNC and the Grenada Red Cross titled "At the Water's Edge", this project sought to expand on the success of its predecessor. The RI project worked with communities to integrate ecosystem-based adaptation strategies into national policies and implement ecosystem restoration projects in vulnerable coastal areas in the Dominican Republic, Grenada and Jamaica.

The project combined each organisation's strengths: the TNCs methodologies and tools for science-based environmental assessment with the IFRC's deep community-based methodologies and tools. New methodologies and tools were also created. These combinations of pre-existing and new tools allowed for the community selection and assessment based on both science and local values, paving the way for context-specific ecosystem restoration projects. This evaluation examines nine methodologies and tools used throughout the RI project with an aim to determine their successes, opportunities for improvement, as well as potential to scale after considering how they were applied and/or modified.

Four of the nine methodology and tools identified were pre-existing IFRC tools: The Roadmap to Resilience (R2R), Strategic Targeting Methodology (STM), Knowledge Attitudes and Practices (KAP) surveys, and Enhanced Vulnerability and Capacity Assessment (eVCA). Three were novel tools created for RI: the Ecosystem-based Adaptation (EbA) Checklist, National Vulnerability Ranking Index (NVRI), and Communities-Adapting-to-Nature (CAN) Checklist. Two pre-existing TNC tools were also considered: the Rapid Ecological Assessment (REA) and the Spatial Action Mapping (SAM).

The evaluation methodology utilised was designed around guidelines prepared by the Network on Development Evaluation, the subsidiary body of the Development Assistance Committee (DAC) at the Economic Co-operation and Development (OECD) Guidelines. Data was acquired through a combination of a literature review and stakeholder interviews. The literature review focused on reviewing key project documents such as International Climate Initiative (IKI) Interim Reports known as "Pledge Reports", project reports and project factsheets. Interviews were held with the project implementing teams and relevant supporting personnel to develop a comprehensive project narrative.

The data reviewed for this evaluation was mainly qualitative, comprising of narrative descriptions and anecdotal evidence provided by the key informants and International Climate Initiative Interim Reports/ Pledge Reports. Due to this qualitative nature, the actual effectiveness of the tools cannot be conclusively and objectively determined, because this evaluation does not and cannot draw on numeric values to substantiate the statements reported.

Furthermore, the scope of data gathering for this project only extended to two of the three islands listed, with two of the three islands identified within the project - Jamaica and the Dominican Republic. Grenada was considered outside

the remit of this evaluation because all the tools identified for evaluation were individually or collectively used prior to the RI project and were at the stage of intervention, implementation and policy assessment.

Each methodology and tool examined played a different but vital role in the project. Efforts were made to determine the replicability and scalability of these tools, outside the project context. Each tool was deemed to be replicable and scalable depending on specific caveats. Tools utilised in community selection such as the STM and NVIR required contextualisation to the locality they were being applied and the availability of data. Similarly, tools utilized in assessing the community required modifications such as the KAP having a pilot to fine tune to meet the community needs and the eVCA's existing climate and environmental considerations being supplemented and enhanced by another tool.

Overall, the various tools utilised within the context of this project resulted in the successful completion of individual objectives. Two critical success factors were identified: 1) before each use, project teams assessed the social and community context of the chosen locality, considering existing indigenous tools to see what can be learnt from these tools or what modifications can be made, along with what data inputs were available; 2) stakeholder engagement and sensitisation were key in directing and shaping the way the tools were used. The abovementioned success factors should be repeated for future projects as they provide a solid foundation for implementation.

Table summarising the key conditions to scale and replicate the examined RI Tools

Tool	Replicability	Requirements and Conditions
R2R	✓	• No Specific Requirements.
STM	⚠	• Requires strong technical support. • Requires modifications to meet data availability. • Not recommended for national level use due to data requirements.
EbA Checklist	⚠	• Good for use in Small Island Developing States. • Community size and dynamics must be understood. • Not recommended for land locked areas or large areas containing wetlands.
NVRI	⚠	• Requires available data. • Many indicators, some of which may not be relevant. • Requires technical support.
CAN Checklist	✓	• Focuses on community level. • Most impactful when used in conjunction with other tools. • May require further fine-tuning based on use case.
KAP	✓	• Requires fine-tuning to meet community needs. • Greatest success obtained when community is sensitised.
eVCA	✓	• Many in-built toolkits for use. • Does not require data to be collected all at once. • Can be used with other tools.
REA	✓	• This tool is not limited by location, climate, or culture. • Tool's only limitation is if the technical capacity is present.
SAM	✓	• Requires and understanding of what objectives the tool is trying to achieve. • Requires technical capacity.

RESILIENT ISLANDS: METHODOLOGY AND TOOLS

EVALUATION

Jamaica Red Cross
eVCA Seasonal Calendar
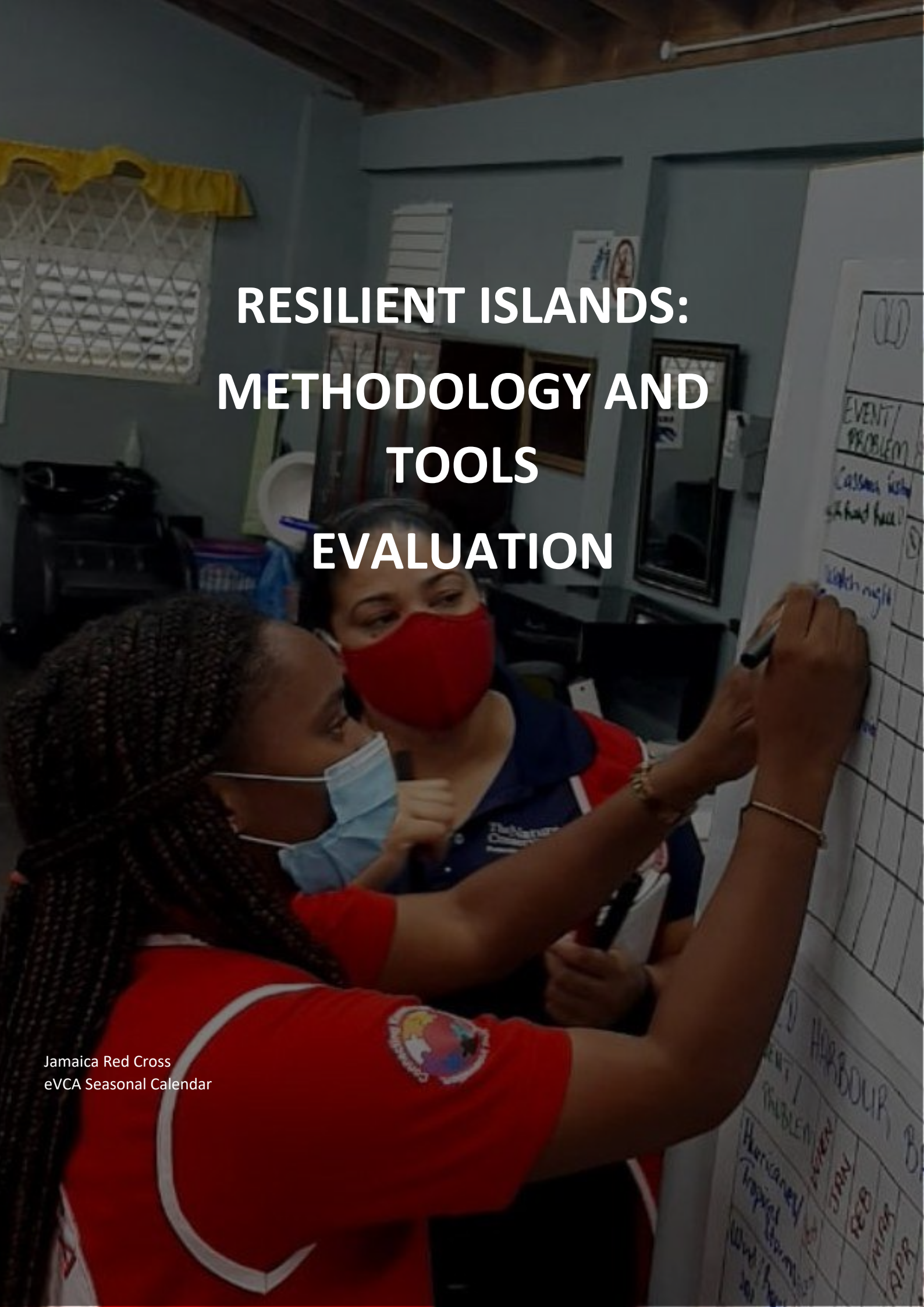
1.0 INTRODUCTION

1.1 Project Context

Caribbean Small Island Developing States (SIDS) are among the most vulnerable to natural hazards and the impacts of climate change. [1] The realised damages of climate-mediated disasters such as hurricanes, extreme weather, and drought account for billions of dollars spent throughout the region and the figures are expected to rise towards the middle-late century under all climate scenarios [2]. Inaction is untenable.

Ecosystem-based Adaptation (EbA) is recognised globally as a viable strategy for disaster risk reduction (DRR) and climate change adaptation (CCA). However, the mainstreaming of EbA strategies into national policies has been constrained by a plethora of challenges including, but not limited to, inadequate information available to decision-makers; insufficient case-studies demonstrating benefits; absence of ecosystem considerations in vulnerability assessments; limited human, technical and financial capacities in SIDS; a dearth of climate baseline data; and gaps in persistent financing [3]. Mainstreaming EbA is predicated on addressing these challenges.

The Nature Conservancy (TNC) is the largest environmental non-profit organisation by assets and revenues in the Americas. TNC was established in 1951 with the goal of conserving natural diversity. The organisation has over one million members and a dedicated staff of over 400 scientists who execute science-based conservation projects in 76 countries and territories [4].

Over the period 2011 – 2017, TNC undertook the project "At the Water's Edge" (AWE) with funding from the German Federal Foreign Office (GFFO), in collaboration with the Grenada Red Cross[5].The AWE project sought to test and implement ecosystem-based adaptation (EbA) strategies which enhance communities' resilience, while protecting natural environments along the Grenadine Bank – an archipelago with over 30 islands and cays shared by the nations of Grenada and St. Vincent & the Grenadines[6]. A flagship project for AWE was the mangrove restoration, beach revegetation, and coral-reef re-engineering in the Grenville Bay Area (GBA) of Grenada.

Over the period 2017 – 2022 TNC, in partnership with the International Federation of the Red Cross and Red Crescent Societies (IFRC), undertook the project "*Resilient Islands by Design: Integrating Ecosystem- and Community-based Approaches to Enhance Climate Change Adaptation in the Caribbean*" (RI), supported by a grant of approximately USD6 million from the German government's International Climate Initiative (IKI) [7]. The RI project expanded on the success of AWE, continuing the work in the GBA and expanding its reach to include high-risk coastal communities in Jamaica and the Dominican Republic. Like

the preceding project, this RI project sought to use Nature Based Solutions (NbS) to build climate resilience while improving social cohesion and livelihoods. The RI project was a collaborative effort between the TNC and the IFRC with the former being designated as the project lead and the latter, the implementing partner [8].

The IFRC is the world's largest humanitarian organisation and an integral part of the wider Red Cross and Red Crescent (RCRC) movement which also comprises 192 national societies and the International Committee of the Red Cross (ICRC). Its mission is "*to inspire, encourage, facilitate and promote at all times all forms of humanitarian activities by National Societies with a specific view to prevent and alleviate human suffering*". In the Americas, the IFRC is organised into groups of support services and technical functions. The Port of Spain Country Cluster Delegation (POS CCD) covers thirteen (13) National Societies in the Dutch and English-Speaking Caribbean.

The innovative partnership between the IFRC and TNC, under the RI project, represents a conjoining of two institutions with tremendous expertise in community-based action and environmental science, respectively. In addition to expert knowledge, both entities also brought with them a cadre of methodologies and tools. These tools were applied individually and in combination with one another so that TNC's science-based techniques were leveraged within IFRC's community engagement and resilience-building strategies. In this regard, the RI project could be seen as an experiment in "greening of the red" - an allusion to the incorporation of environmental science and NbS into the IFRC's community resilience-building processes.

The overarching goal of the RI project is to have governments and communities of Grenada, the Dominican Republic, and Jamaica integrate ecosystem and community-based adaptation into their decision-making to prioritise and invest in approaches to reduce vulnerability and boost adaptive capacity [8]. This will be achieved by:

    I.   Developing and testing an innovative adaptation toolkit that will promote better decision-making around disaster risk management (DRM) and climate change adaptation (CCA).

    II.   Identifying priority areas for locally tailored NbS interventions, developing a portfolio of NbS interventions and implementing them in two vulnerable communities per country.

    III.   Identifying and training up to 45 change agents and yield country-specific policy recommendations to mainstreaming EbA and NbS.

1.2 Purpose and Scope of the Evaluation

The overall purpose of this evaluation is to glean the success of 'greening the red', that is, to assess the extent to which the creation, evolution, and incorporation of TNC and IFRC tools can result in improved community resilience planning and management, centred around nature.

'Resilience' in the context of this evaluation does not only refer to 'climate resilience' but also includes resilience against external shocks such as adverse health impacts, economic hardship, or corrosion of social adhesion.

The specific objectives of this evaluation are to:

I. Identify the methodologies and tools used within the RI project and the extent to which these tools or their intended application were modified in Jamaica, Grenada and the Dominican Republic.

II. Review the application and perceived challenges and successes of these tools in different country contexts with an aim to:

a. Determine the extent community resilience planning and management were enhanced using NbS-influenced methodologies and tools.

b. Identify key messages and lessons learnt for the future design and implementation of methodologies, tools and similar projects.

c. Make recommendations to support the replication and upscaling of methodologies and tools.

III. Evaluate the IFRC's Roadmap to Resilience (R2R) as methodology for partnership and community engagement, as well as assess the influence of the RI project on the R2R's development.

Although the overall achievements and successes of the RI project may be attributed, in part, to the tools applied, the scope of this evaluation is strictly limited to the methodologies and tools developed, modified and/or applied in the RI project. This is not an evaluation of the RI project's overall design, implementation or outcomes.

An understanding of the wider project was considered only so far as understanding how project-level constraints, limitations, opportunities, and choices affected the development, integration and/or implementation of the methodologies and tools.

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At a clarification meeting held between the Consultant and the IFRC on 05 April 2022, it was confirmed that this evaluation's scope would be limited to the following seven tools:

I. The Roadmap to Resilience (R2R);

II. The Strategic Targeting Methodology (STM);

III. Enhance Vulnerability Capacity Assessment (eVCA);

IV. Knowledge, Attitudes and Practices (KAP) Survey;

V. National Ecosystem-based Adaptation (EbA) Checklist;

VI. Community-scale Ecosystem-based Adaptation checklist, rebranded as the Communities Adapting to Nature (CAN) checklist;

VII. Modified Vulnerability Capacity Index (MVRI) rebranded as the National Vulnerability Capacity Index (NVRI).

Interviews conducted over the period 12 April – 05 May 2022 with stakeholders brought to light other tools used by the TNC, namely the Rapid Ecological Assessment (REA) and Spatial Action Mapping (SAM). These tools were also included within the scope of this evaluation because they were incorporated into scope-relevant methodologies and tools in some instances.

Policy methodologies and tools were gathered from conversation with the IFRC's Policy Team. These were considered outside of the scope of this evaluation since they did not form part of the toolkit of 'greening the red' and were not influenced by the TNC's NbS tools.

The scope of this evaluation is limited to the RI project. Therefore, it does not consider the application of these tools individually or collectively in the AWE project. Under the RI Project, Grenada was at the implementation and policy stages and so the evaluation of nine identified TNC/IFRC tools was not possible for Grenada.

1.3 Evaluation Methodology

1.3.1 Evaluation Planning and Design

The methodology for undertaking this evaluation was designed around guidelines prepared by the Network on Development Evaluation, the subsidiary body of the Development Assistance Committee (DAC) at the Economic Co-operation and Development (OECD) Guidelines [9]. Specifically, the evaluation process followed the sequential, ethical, and quality standards of:

I.   Establishing Purpose

        II.   Planning

        III.   Designing

        IV.   Implementing

        V.   Reporting

        VI.   Learning and Applying Results

On the 16th of March 2022, an *Inception Meeting* was held between the project team at the POS CCD and the Consultants which corresponded to DAC Quality Standards I – III. At this meeting, the purpose of the evaluation was established as well as the planning and design of the evaluation. The latter was subsequently refined following a *Scope Clarification Meeting* on the 5th of April 2022.

1.3.2 Data Sources and Collection

Over the period 16th March 2022 – 05th May 2022, the Consulting Team worked closely with the POS CCD and key stakeholders to collect information to support the analysis. This process corresponded to DAC Quality Standard IV. Implementing the evaluation was done through two main modes of data collection: literature review and stakeholder interviews.

Literature was predominantly International Climate Initiative Interim Reports also known as RI *Pledge Reports* to the Donor from the period 2018 – 2021. These reports, which are published quarterly, identify key project activities such as the progress of the various tool implementation, awareness raising and project staff additions. These serve as a type of qualitative data in the form of narratives. Other sources that were utilised included personal correspondence, project documents and project output documents. These were provided by the POS CCD, CADRIM, TNC, IFRC and National Societies.

A list of potential interviewees was prepared by the POS CCD, and they were contacted directly by the consultant and through the support of the POS CCD. Interviews were conducted over the period 12th April 2022 - 05th May 2022. The interview period was extended due to multiple schedule clashes with the key respondents who were engaged in other ongoing projects. The persons interviewed are listed within APPENDIX *A*.

Interviews were conducted in a semi-structured format, using a pre-designed template to ensure consistency and comparability of answers. A sample of the pre-designed template is included in *APPENDIX B.*

During these interviews, the key informants committed to sharing additional documentation and resources with the consultants to substantiate their statements and support a thorough and objective analysis. In most instances, respondents delivered on their commitment to submit additional documents. However, at the close of this review, some were unable to submit due to scheduling and time constraints.

1.3.3 Evaluation and Constraints

The analysis of the data collected corresponds with DAC Quality Standard IV. This was done independent of the input and influence of the IFRC or TNC and is the product of the best professional judgment of the consultant, given the information available.

The data reviewed for the most part is qualitative, comprising narrative descriptions and anecdotal evidence provided by the key informants and International Climate Initiative Interim Reports/ Pledge Reports. The absence of process KPIs, or a controlled environment in which a similar project was undertaken without an attempt to incorporate greening tools, makes it challenging to draw conclusions objectively and definitively through a typical evaluative process. As such, this evaluation cannot draw on objective, numeric values to substantiate points provided by data sources.

National societies also, for the most part, lacked documentation of specific modifications made, although they were able to describe them in general terms. For example, while interviewees were able to offer that survey questions were shortened, they were unable to produce a specific example of a shortened question or provide documents to clearly illustrate this. This significantly affects the ability to visually illustrate before-and-after for several tools.

Grenada, Jamaica and the Dominican Republic each has unique contexts and challenges for which the application of these methodologies and tools were done. At the conclusion of this evaluation, the RI project remained ongoing with each country achieving a different level of progress and results, determined mainly by factors beyond these methodologies and tools. The status of the project and its outcomes cannot be used as a proxy for the effectiveness of the methodologies and tools. Thus, this evaluation deviates from the traditional project/intervention evaluation standards of 'relevance', 'efficiency', 'effectiveness', 'impact', and 'sustainability'.

The methodologies and tools were critically assessed with the aim of understanding:

a) The origins and evolutions of the methodology/ tool;
b) The extent of modifications made to the methodology/tool towards incorporating NbS;

c) The perceived effectiveness and value of these changes in achieving project goals;

d) The appropriateness of replicating/scaling up the methodologies/tools and the required enabling conditions for this;

e) The broader principles to guide replication/ upscaling based on the experiences of those involved in the RI Project;

f) Clear recommendations for improving the methodologies/tools.

1.3.4 Evaluation Reporting

The Draft Report was submitted to the POS CCD for review on the 3rd of June of 2022. This corresponds with DAC Quality Standard V. After a reiterative process of discussion and clarification, the final submission was made on 28th July 2022. Editorial improvements were suggested, and a final edit was provided on the 10th of September 2022.

1.4 Resilient Islands (RI) Methodology and Tools

The tools used in the RI project were utilised to achieve specific objectives to further the goal of building resilience. These objectives fall into two main groups: 1) Selection of Communities and 2) Community Assessment. To this end, both the TNC and IFRC leveraged methodologies and tools familiar to them while creating novel methodologies and tools. These novel tools were produced under the RI project in two ways:

I. Creation of NbS-focused tools by specialised support units comprising IFRC and TNC technical staff to respond to specific needs and challenges in resilience planning.

II. Modification of existing methodology and tools by Country Teams who partially or fully integrated elements of other methods and tools to promote NbS.

The decisions on which methodologies and tools to select, modify and/or develop were made through collaborative dialogue between the IFRC and TNC. Technical staff from both entities formed three (3) RI Support Teams specialised in Science, Policy, and Communications and Community Engagement and Accountability (CEA), respectively. These teams provided support to Country Teams which comprised National Red Cross Societies, TNC technical staff, and other nationally relevant stakeholders. The Country Teams were responsible for implementing the tools, including adjusting them as needed.

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The situational context at the inception of the project determined which methodologies and tools would be piloted. Also considered were the enthusiasm of stakeholders, technical capacity, disaster history and project history. The following table shows nine (9) tools applied under the RI Project that are within the remit of this evaluation.

Table 1: RI Project Islands and Respective Tools and Methodologies Used

METHODOLOGY/TOOL	ORIGIN	COUNTRY USED		
		Jamaica	Dominican Republic	Grenada
Road Map to Resilience (R2R)	IFRC	✓	✓	
Strategic Targeting Methodology (STM)	IFRC	✓	✓	
Ecosystem Based Adaptation (EbA) Checklist	*New!* Created under RI	✓	✓	
Modified Vulnerability Ranking Index (NVRI/MVIR)	*New!* Created under RI	✓		
Communities Adapting to Nature Checklist (CAN)	*New!* Created under RI	✓	✓	
Knowledge Attitudes and Practices (KAP) Survey	IFRC	✓	✓	
Rapid Ecological Assessment (REA)	TNC	✓	✓	
Spatial Action Mapping (SAM)	TNC	✓	✓	

Grenada is under-represented because the target tools were applied under the AWE project. Under RI the focus in Grenada was pilot project implementation and policy assessment which are beyond the scope of this evaluation.

For posterity, it should be noted that the policy team developed a methodology of evaluating laws in Jamaica and Grenada that combined the 2015 IFRC Checklist on Law and Disaster Risk Reduction with the International Union for the Conservation of Nature (IUCN) *CLIMA* tool matrix [10,11]. *The* team distilled the resulting checklist from over 100 questions to a simpler method meant to drive action. The result was the creation of a Checklist for evaluating NBS in laws. The success of this methodology/tool cannot be determined because at the time of publication of this evaluation, the synthesis reports were still being prepared and finalised.

Three (3) new tools – the national EbA Checklist, CAN Checklist, and National Vulnerability Ranking Index (NVRI) of Jamaica were developed under the RI project. These tools were created through a collaborative

approach between the IFRC and TNC to help further project objectives. Details on these tools, along with those familiar to the IFRC and TNC, are provided in subsequent chapters.

Figure 1: Process Flow of Tools used in Jamaica
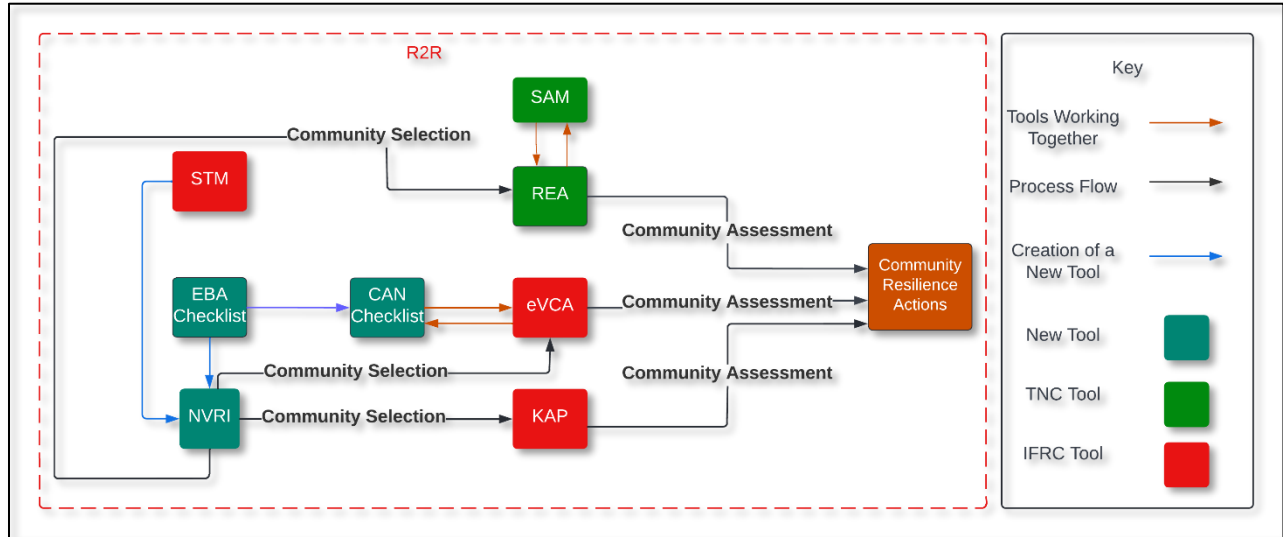
Figure 2: Process Flow of Tools used in the Dominican Republic
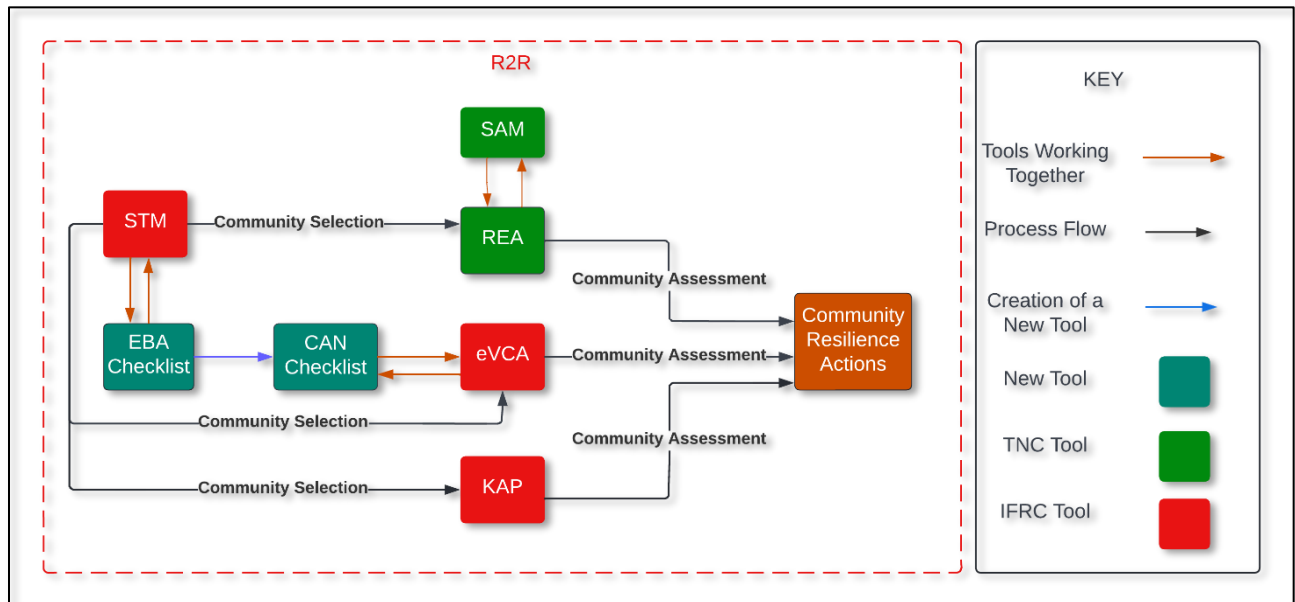
2.0 ROAD MAP TO RESILIENCE

2.1 The Road to Resilience: Origins of the R2R

The concept of *community resilience* encompasses the entirety of what the International Federation of the Red Cross and Red Crescent Societies are working to achieve. The 192-strong member network has often undertaken community resilience-building projects and campaigns in one form or another. In 2014, the IFRC sought to standardise these various forms of community resilience- building and developed the revised Framework for Community Resilience (FCR) with the objective of establishing a foundation on which all community resilience actions could be conceptualised, implemented, and sustained [10].

At the request of the various 192 national societies, in 2016 the IFRC developed the Road Map to Community Resilience (R2R) to support implementation of the Framework for Community Resilience. The R2R provides a step-by-step guidance on operationalising the framework. The roadmap and framework are part of a trio of IFRC documents that provide guidance, with the last document being the Communication Guidance to National Societies on Community Resilience [10].

Figure 3: IFRC Resilience Guidance Documents

Framework for Community Resilience
- Purpose : To establish commitment and guiding principles

Road Map to Community Resilience
- Purpose: To provide practical guidance to operate the framework

Communication Guidance to National Societies on Community Resilience
- Purpose: To help communicate and advocate
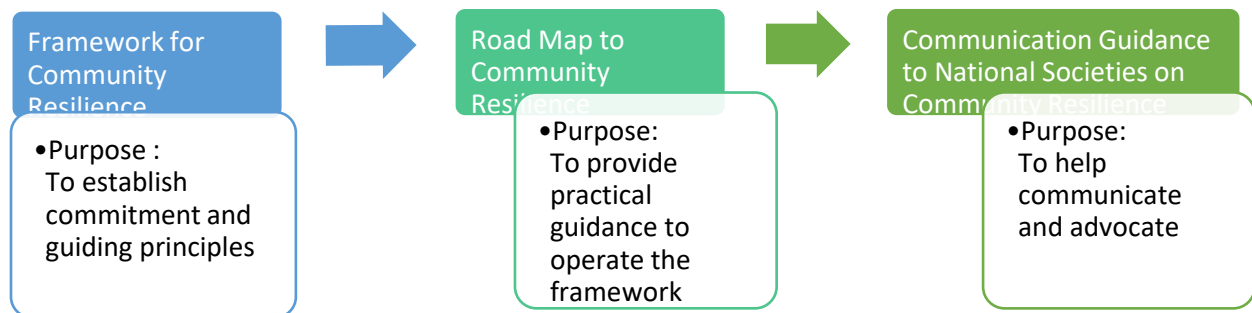
The R2R is a high-level global methodology meant to be applicable to multiple localities and jurisdictions. At the time of this evaluation there had been two iterations of the Roadmap to Resilience, with the most recent being published in 2021. However, this evaluation will only focus on the 2014 document. The 2014 version of the roadmap document is divided into five distinct sections as illustrated in Figure 4.

Figure 4: IFRC R2R Sections

ORIENTATION

Defines resilience and explains why it is relevant for
communities in all contexts, National Society and IFRC staff and volunteers.

STAGE 1: ENGAGING AND CONNECTING

Focuses on guiding National Society resilience-building, while establishing how to engage communities and providing advice on which communities require more attention in the resilience building process.

STAGE 2: UNDERSTANDING RISK AND RESILIENCE

Provides guidance on how to steer communities through the process of assessing the risk they face and measuring their resilience.

STAGE 3: TAKING ACTION FOR RESILIENCE

Gives direction on guiding communities on how to develop and implement their action plans.

STAGE 4: LEARNING

Focuses on basic monitoring and evaluation principles.

Each *stage* is subdivided into multiple *steps* which guide communities towards *seven milestones*. The document is highly flexible and non-prescriptive which means that practitioners may choose steps that are relevant to their context and may skip some steps altogether. The stages, steps, and milestones of the 2014 R2R are presented in Figures 5 to 8. Each step presents a non-exhaustive list of community engagement tools which could be used by practitioners.
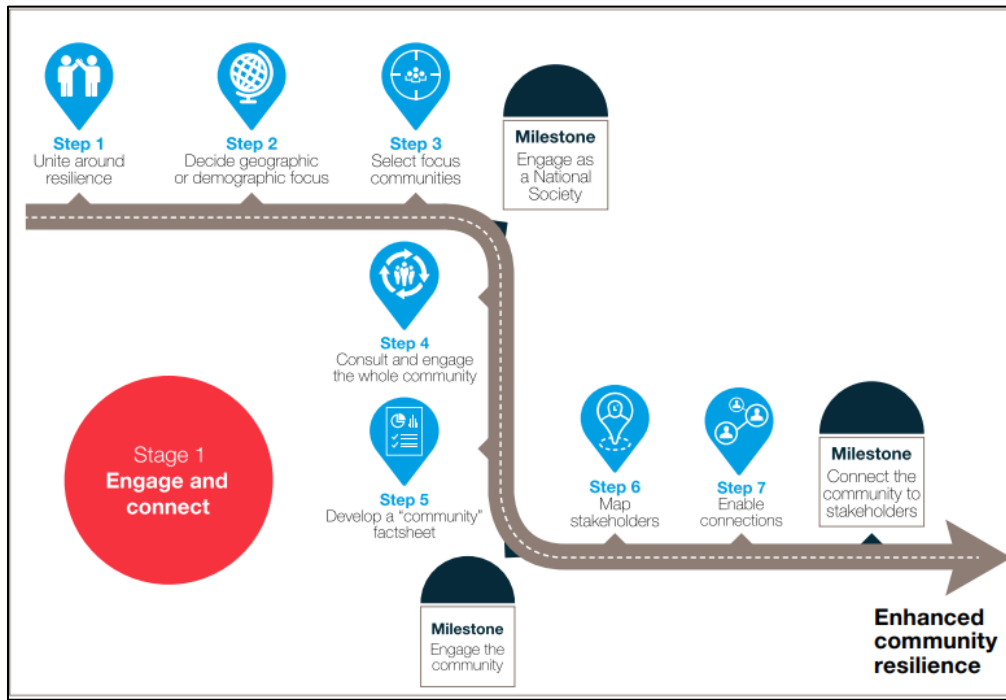
Source: IFRC (2015) "Road Map to Community Resilience"

Figure 6: Stage 2 of the Road Map to Community Resilience
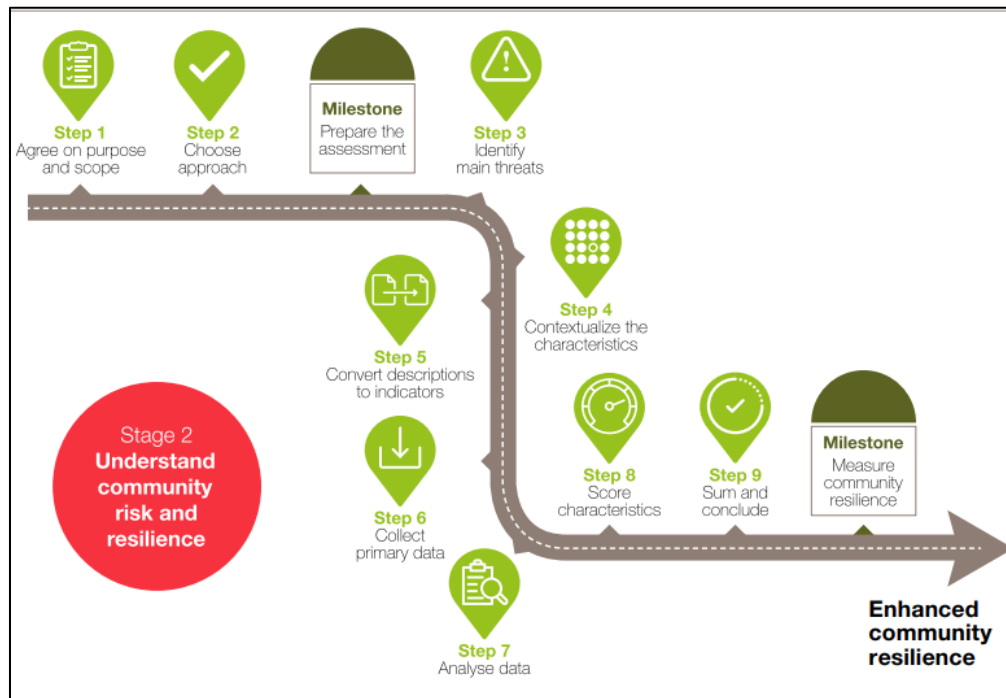
Source: IFRC (2015) "Road Map to Community Resilience"
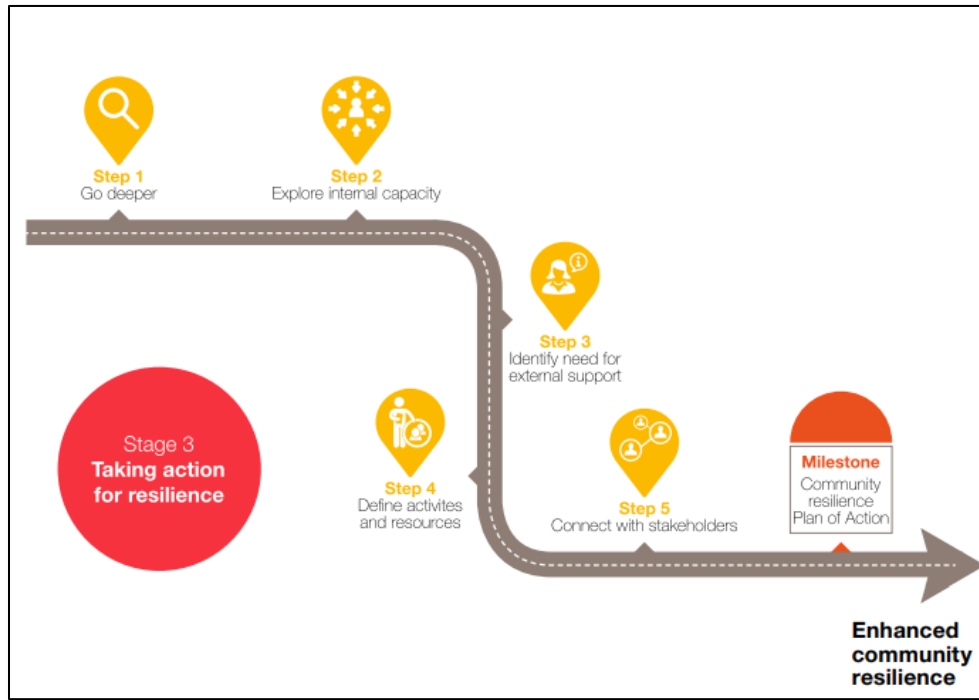
Source: IFRC (2015) "Road Map to Community Resilience"

Figure 8: Stage 4 of the Road Map to Community Resilience
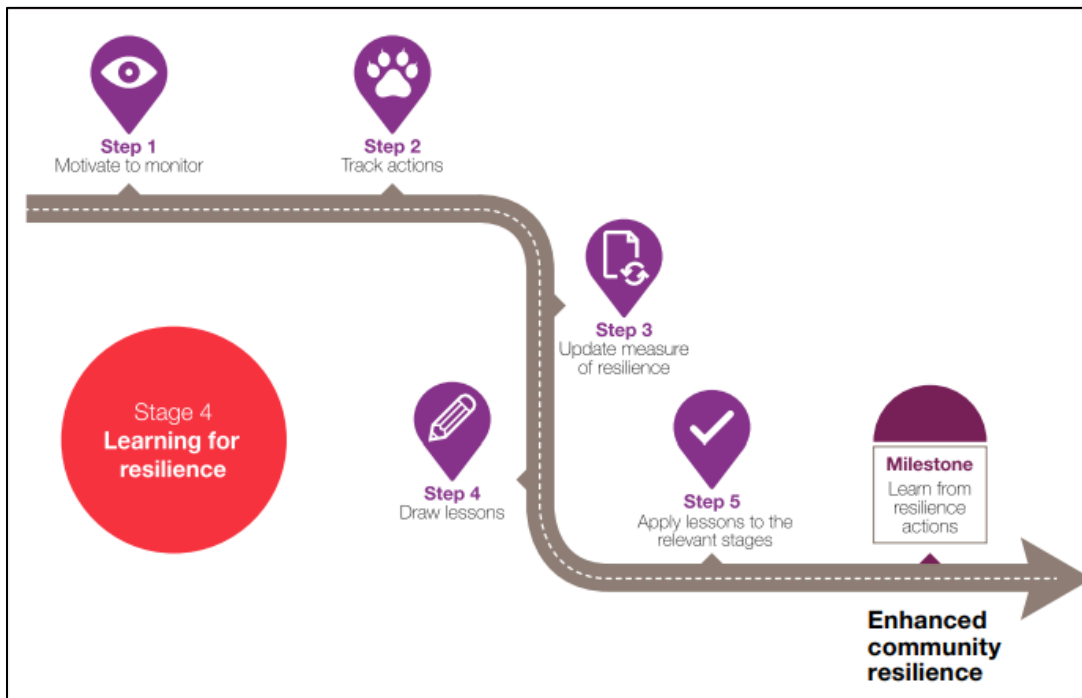
Source: IFRC (2015) "Road Map to Community Resilience"

2.2 Purpose of the R2R in the RI Project

The R2R was formally adopted within the Resilient Islands Project following the Tools, Methodologies and Resources Workshop that was held between the 10th to 12th April 2019 in Panama. At this workshop the R2R was presented and highlighted as the modality for community engagement that would allow the implementation of various project tools, while providing a method for sustainability-in-action beyond the project's closure. This workshop was attended by the Reslient Islands project teams and other staff from the Red Cross and partners, such as TNC [12].

Following this initial workshop, a subsequent two-day workshop was held in June 2019 in Barbados where the Jamaican RI team met and started the process of adapting the R2R to the Jamaica context [12]. Two months later, in August 2019, the Jamaica Red Cross reinforced R2R adaption by the formation of a *"Resilience Champions"* Team to lead the National Society's focus on resilience and on the use of the R2R in the implementation of its programmes. The first meeting of the "Resilience Champions" Team was conducted on 8th August 2019 and was attended by the Jamaica Red Cross' Director General [13]. Similarly, later that year, the Dominican Republic RI team adapted R2R using local references to allow for integration into the Dominican Republic context.

The R2R is a tool that serves as a process connector, weaving an intricate design connecting the different tools used in each national instance to create tapestry of community resilience. In the context of the RI project, the R2R also served as a 'people connector'. The R2R was the common starting point to connect the IFRC and TNC in partnership and identify synergies between the two organisations. With this tool, both teams had a common language to communicate and collaborate with each other, which brought the technical staff of both organisations together.

> *"The R2R served as the foundation for the partnership with the IFRC and for us to figure out how we would work together...it brought our teams together and we are now like family."- **RI Project Team Member***

The adoption of R2R into the Resilient Islands Project came almost a full year and a half after project inception which speaks to the flexibility and adaptability of the tool. Even with this late adoption, steps already taken by the various country RI teams fit seamlessly into actions already undertaken by the project teams, even if the actions were out of the normal sequential order of the RI milestone map.

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Figure 9: Timeline of R2R Adoption into the RI Project
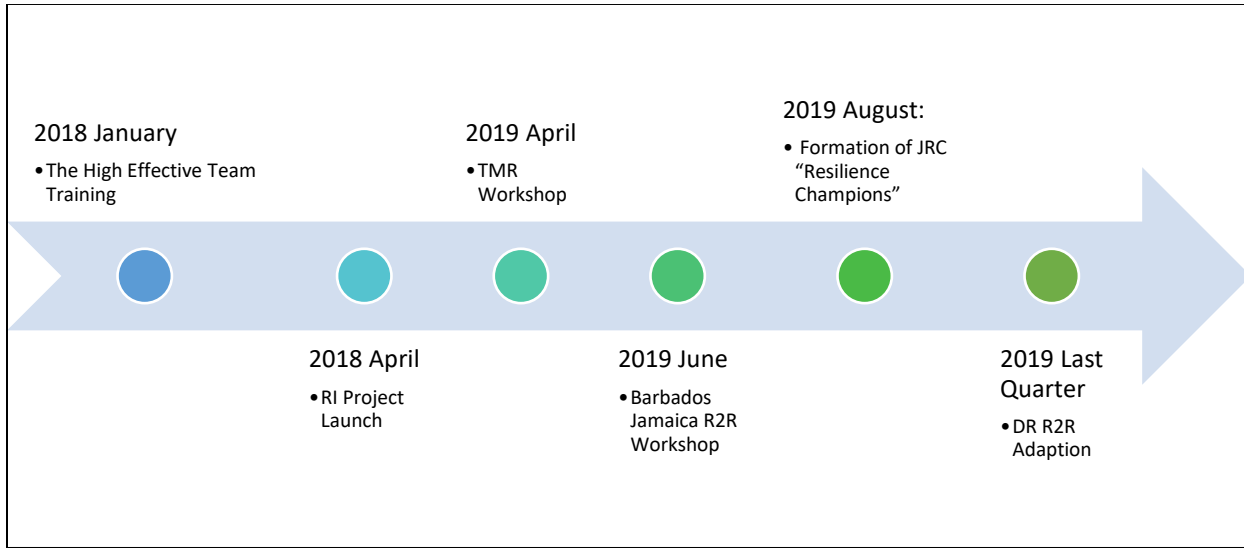
The table below shows how the activities undertaken in Jamaica align with the 2014 Version of the R2R.

Table 2:Summary of activities undertaken by the Jamaican Country Team within the framework of the R2R.

MILESTONE	STEP	PROJECT ACTIVITY
STAGE 1: ENGAGE AND CONNECT.		
1. Engage as a National Society.	1. Unite Around Resilience.	- RI Project Launch – April 2018. - Jamaica Red Cross "Resilience Champions" Group created. - Partnership Agreements around Resilience established. - RI Technical Advisory Group (TAG) set up. - Engaged Government Agencies, Ministries and Divisional Support.
	2&3. Geographic Focus and Select Focus Communities.	- Preselection Process: - World Bank Project for Forests (PROFOR). - Technical Advisory Group - ODPEM: Modified Vulnerability Ranking Index.
2. Engage the Community.	4. Consult and Engage the Whole Community (Old Harbour Bay).	- Stakeholder Meetings with partners and community leaders. - Community Sensitisation Meetings and Focus Group Discussions. - Participate /Support all important Community Activities. - Old Harbor Bay Liaison Group Formed.
	5. Develop a Community Fact Sheet.	Community factsheet developed using secondary data and community interaction and validation.

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MILESTONE	STEP	PROJECT ACTIVITY
3. Connect the Community to Stakeholders.	6. Map Stakeholders.	• Communities and stakeholder consultation sessions. • Communities' internal and external stakeholders mapped using Resilience Characteristics.
	7. Enable Connections.	• Partnership established with external stakeholders (government and NGOs) to engage in Project Activities.
STAGE 2: -UNDERSTANDING RISK AND RESILIENCE.		
4. Prepare the Assessment.	1&2. Agree on Purpose, Scope and Choose Scope.	• Policy Analysis. • KAP Surveys. • eVCA. • EbA Checklist. • Ecological Assessment. • CAN Checklist.

5. Measure Community Resilience.	3-9. Measure community resilience.	• Identify main threats, collect primary data scores, and conclude:
		   o eVCA Tools and Process.
		   o Drone Mapping.
		   o Digitization of drone imagery.
		   o KAP Surveys.
		   o Infuse Livelihood Strategies.

STAGE 3: TAKING ACTION TO STRENGTHEN RESILIENCE		
6. Community Resilience Plan of Action.	1. Go Deeper.	• Old Harbor Bay Rapid Ecological Assessment.
	2. Explore Internal Capacity.	• Community Capacity Mapping. • Transect Walk. • Digitisation of Drone Imagery.
	3. Taking Action to Strengthen resilience Identify need for external support & Connect with Stakeholders.	• Community led fundraising activities and Proposal Writing Training.
	4. Community Resilience Action Plan Define Activities and Resources.	• Community Resilience Action Plan. • Micro Projects to include NbS. • Livelihood strategies. • Community Resource Mobilisation Plan. • Capacity Building Initiatives.

MILESTONE	STEP	PROJECT ACTIVITY
STAGE 4-LEARNING FOR RESILIENCE.		
7. Learn from Resilience Actions.	1. Motivate to Monitor.	• Provide Basic Performance Monitoring Evaluation and Reporting (PMER) Training for Community Members. • Establish Community PMER Team.
	2-5. Track Actions.	• Set up a monitoring framework, timeline and implement using PMER team. • Establish closer link with JRC Branch. • Repeat.

2.3 Modifications to the R2R

The R2R as a tool was unique in the sense that the steps listed are optional and non-prescriptive, therefore making it highly flexible and adaptable to any national context. To modify this tool, direct changes would have to be made to alter the milestones and outcomes presented by this tool. This was not the case, as the use of the novel NbS tools or modified tools with NbS features within different steps, or the omission of steps in national implementation, did not result in changes to the milestones and outcomes of the tool.

During the implementation of R2R under the RI project, there were other adjustments made such as: (a) utilising remote and digital strategies in particular steps to cater to the COVID-19 response in the participating countries, and (b) the translation of some tools from English to Spanish. For understanding the 'greening of the red', these are not considered to be NbS modifications. They do, however, underscore the adaptability and power of the R2R as a resilience-guiding methodology.

2.4 Evaluation of the R2R

2.4.1 R2R as a Partnership Tool

As a tool for partnership and collaboration between the IFRC and TNC, the R2R is extremely successful as it served as guide to identify where TNC's interventions would contribute significantly to project outcomes by greening/revising project tools or inclusion of new methods. Key examples of this include the incorporation of TNC specific tools such as the SAM and REA in assessing communities.

> *""The R2R was used to guide the implementation of RI and to help the TNC-IFRC team determine how to mix strategies and tools for implementation."*
> *- RI Country Project Team Member*

All interviewees lauded the R2R for its role in creating an enabling framework for partnership, indicating that it allowed technical staff from both organisations to collaborate and engage in cross-training. All interviewees agreed that the partnership would still have worked in the absence of the R2R however, they were clear that the strength of the bond between them was enhanced because of its use.

2.4.2 R2R as a Community Engagement Tool

The R2R is a community engagement tool that encourages community and stakeholder involvement at every stage of the process. The success of involving the community is evident by various anecdotal stories presented by interviewees, who spoke to community members and expressed to in-country teams their profound gratitude and appreciation for the project.

Figure 10: R2R Community Engagement in the Dominican Republic

In Jamaica, the community leaders' eagerness to continue the RI activities was best described by Sandra Nembhard, a pastor and president of the Old Harbour Bay Community Development Association, when she exclaimed "*we need this project like yesterday!*" [14].

The Jamaica Country team further testified that by executing the various modified tools within the framework of the R2R, there were two major factors that contributed to their RI project success.

I.   Including the local government early created the opportunity for experimentation with the Vulnerability Ranking Index (VRI), and the eventual creation of the National VRI.

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II. Community engagement created a two-way channel of communication in which the project team was able to gain community-level knowledge on hazards, while simultaneously educating the community on the value of the ecosystems. The result was that the community was able to propose several resilience "micro projects" that yielded both environmental and socio-economic benefits.

By proxy, these outcomes speak to the success of both the R2R and concomitant tools, *viz.* the modified eVCA, as community engagement tools.

The feedback from the Jamaica Country team reinforces sentiments captured by the IFRC's 2022 Draft Nature Navigator Handbook that the R2R Methodology is well-aligned with processes for designing NbS for resilience and disaster risk reduction [15]. However, special effort must be made to ensure that the tools applied within the R2R framework introduce a wider landscape or ecosystem-scale understanding and assessment, since NbS are usually larger than the community level.

In the Dominican Republic, the R2R as a communication framework was appreciated for creating a common framework for partnership between TNC, IFRC and in-country actors. However, there were some suggestions for improvement offered by interviewees:

I. Simplifying the steps to make it more easily understood.
II. Better translation of the document to the colloquial Spanish and adapting the tool to their context, *a la* "Dominican-isation" of the document.

2.4.3 RI R2R 2014 and the Global R2R 2021

Anecdotal evidence to suggest that the success and representation of the RI project may have influenced the changes to the global R2R in 2021. It was suggested that through the AWE and RI Project, the green modifications of IFRC tools were validated and they were therefore included in the revised toolkits for the R2R version 2. However, no clear documentation was provided to substantiate these claims or to identify which items were influenced.

> *"Geneva accepted most of the greening tools (not all). Geneva may have utilized the ones most global in context."*- **RI Project Manager**
>
> *Geneva referring the IFRC main headquarters

2.5 RI R2R Key Take Aways

The R2R is an adaptable global tool that can be used to guide relationship building and community engagement if practitioners are well versed in the tool. When the R2R is not properly understood, or properly translated (as in the case of the Dominican Republic), its usefulness diminishes. It was noted that some practitioners found the document to be too lengthy and onerous at times.

Additionally, a key learning was that implementing agents – especially non-Red Cross partners – need to be informed that the R2R is part of a trio of resilience-guiding documents: the Framework for Community Resilience and Communication Guidance to National Societies on Community Resilience. The failure to recognise this bigger picture led some to have misperceptions about the tool, and its relevance to the project. One participant opined, "*The R2R was used to figure out where to collaborate at the beginning but was not used after that*", failing to recognise that its presence and application were ubiquitous.

With regards to approaches, the R2R can accommodate both traditional in-person and remote techniques. The remote aspect within the RI project was demonstrated during the COVID-19 pandemic, with the use of WhatsApp groups and virtual meetings to facilitate direct communications with community members. Other instances of remote approaches would have been the digitalization of the KAP survey which utilized an online platform, to allow for project costs and allowing for reduced paper usage, the survey platform allowed for automatic translation to overcome language barriers.

There are mixed opinions on the usefulness and success of remote approaches. One in-country project team expressed that there was general hesitancy for engagement within their communities unless there was a strong in-person presence. Remote efforts also proved challenging when reaching older members of the community. Lastly, it was indicated that some implementations required the provision of key technological infrastructure to allow for internet connection, this would have resulted in added costs.

Considering these limitations, a key lesson learnt was that special emphasis needs to be placed on logistical planning. Specifically, budget line items and considerations need to be given to the possible loss of certain demographic ranges due to age, culture or economic statuses.

Because the R2R can include both traditional and technological approaches, it can facilitate NbS knowledge-transfer to communities and allow for the exploration of wider watershed/ecosystem assessments. This makes it a powerful tool for mainstreaming NbS and resilience, provided that the tools selected are tailored to each community's circumstance.

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2.6 Recommendations for Replication/Scaling-Up of the R2R

The R2R has high potential for replication because its steps are optional and non-prescriptive. This allows it to be integrated into resilience efforts seamlessly as seen when it was rolled into the RI project one year after project start. Another aspect that adds to the tool's replicability is the fact that R2R can incorporate both traditional and technological approaches. This combination of factors therefore makes the R2R highly flexible and adaptable to any national context. The main recommendation for improving replication of the R2R is ensuring that the contents of the IFRC companion resilient documents are understood by practitioners.

3.0 STRATEGIC TARGETING METHODOLOGY (STM)

3.1 The Strategic Targeting Methodology: A history

The Strategic Targeting Methodology Tool (STM) is designed to be used in the selection of communities for disaster risk reduction (DRR) type initiatives/interventions. Its methodology evolved from the Community Selection Tool (CST) which was used in various countries and adapted with the experiences and knowledge acquired in the English-speaking Caribbean. The tool was developed by CADRIM, Caribbean Disaster Emergency Management Agency (CEDMA) and the IFRC [11].

The STM gathers information from participants in a detailed manner, based on community hazards, vulnerability, and disaster management capability. The hazard profile covers information on the hazards experienced, how hazards affect the livelihoods of different groups, the hazards that have similar impacts on one another and how human behaviour increases hazard susceptibility. Participants also provide information on the vulnerability and resilience of communities by indicating on a matrix the physical infrastructure, detailing economic profiles, education and health, technology capabilities and social profiles. Additionally, information on disaster management systems already existing in the community is outlined in the data gathering process [11].

The collected data is entered into an excel sheet that sorts the data and provides a ranking based on communities from highest (most vulnerable) to lowest (least vulnerable). This ranking is then used to determine which communities should be targeted for disaster risk reduction efforts based on their vulnerabilities [11]. This thorough approach reduces human bias and selection subjectivity to some extent.

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Figure 11:STM Dominican Republic Spreadsheet

3.3 Modifications to the STM

This section will focus on the modifications made to the STM *within the context of the Dominican Republic.* The modification of the STM in Jamaica and the subsequent creation of a new tool, the National Vulnerability Ranking Index, (NVRI) will be discussed in a later chapter.

The STM process in the Dominican Republic started in May 2018, with the collection of numerous existing secondary data, regarding socio-economic and demographic variables, as well as environmental and ecosystem-related information. Concurrently to the data gathering, a Technical Advisory Group (TAG) was organised to aid in the STM application/implementation [11].

During the second TAG meeting which took place in July 2018, a rapid analysis of social and physical vulnerability and recent historical events were used as benchmark to start the pre-selection. The information input for this pre-selection process came from SIUBEN, the Single System of Beneficiaries of the Government of the Dominican Republic. This resulted in 11 municipalities being pre-selected, with the project team focusing on seven coastal communities to utilise in the STM process [11].

Parallel to this, the STM was revised from its original format by the Dominican Republic-based IFRC, Red Cross and TNC teams. This revision was done to make the STM more compatible with the Dominican

Republic's reality and information availability while maintaining the structure of the STM. The subsequent adjustment was made to the STM Excel workbook. Additionally, a new tool, the EbA checklist, was created to be utilised alongside the STM, to help in the selection process [11].

Information from seven coastal communities was used to fill the STM, with the results from this initial use being discussed and validated at an STM workshop held on the 13th of September 2018. During this workshop further modifications were proposed, which are listed below:

- Including the population disaggregated by sex and / or the number of single-parent households headed by women
- Removing ambulances from the STM because they are not indicators of real risk management capacity.
- Changes to the titles of the STM sections:
  - Changing the name of section, A by Threat and Risk Profile;
  - Changing the B component of the STM from "vulnerability and resilience" to "vulnerability";
  - Changing Title section C: emergency management capacity, instead of risks;
- Incorporating considerations about community capacity into the capacity of disaster risk;
- Changing the relative scores of the STM sections and EbA assessment, so that historical exposure of the community is the most important analysis factor when prioritising.

Following the results obtained by the STM workshop, it became apparent to the Dominican Republic team that the two prioritised municipalities' subdivisions had different levels of vulnerability. In addition, the main settlement or the head town is not necessarily the most vulnerable or the most suitable aggregation for the vulnerability assessment and prioritisation. This led to a localised STM analysis of each subdivision for the two prioritised municipalities which presented results for 23 communities. This list was shortened to 11 by focusing on communities that had direct interactions with the sea [11]. The communities ranked most vulnerable by the STM were not utilised. The reasons for this will be explored in Section 3.4.

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STM workshop in Santo Domingo, January 2019. Photo: C. Cattafesta, TNC.

3.2 Purpose of the STM in the RI Project

The STM is an Excel-based tool which was applied in both Jamaica and the Dominican Republic to identify vulnerabilities and select the appropriate communities for the Resilient Islands project. However, implementation strategies differed by country, with aspects of the tool being included in the community selection process in both countries.

3.4 Evaluation of the STM

The STM's implementation within the context of the Dominican Republic can be considered mostly successful. The tool was able to achieve the required criteria for success, first at the municipal level and then later at the local community level. The tool, however, was not able to aid in the final selection of communities due to the realisation that other factors need to be considered for selection. These include:

1) The presence of politically important productive activities, for which nature-based interventions would require significant political will and a timeframe and resources significantly bigger than those of the project [11];

2) The possibility to synergise with other initiatives that could facilitate the implementation of the actions to be identified, especially those that go beyond the communities themselves (for example, the basin) [11];

3) The possibility to scale up environmental assessment if the communities belong to the same municipality [11].

Deliberations between the Resilient Islands management and science teams led to the decision that there would be the selection of two communities within the same municipality. This was done to intervene at the "ecosystem" level regarding the landscape as well as combining necessary analysis costs.

3.5 Key takeaways of the STM

The STM may require more than one application, depending on the area/location being utilised. In a municipality setting with multiple communities, some communities may be more vulnerable than others. Furthermore, some settlements/communities may present vulnerabilities related to poor urban planning, increased population density, and deficiency in basic service provision. All of this requires a very firm political will and significant capital investment to be addressed.

These types of vulnerabilities may not relate to climate change and can outweigh environmental ones. This requires the use of a separate tool such as the EbA checklist which was created specifically for assessing environmental interventions. Additionally, due to the problem of not being environmental in nature, scores generated by both tools need to be kept separately as the summation of scores may result in key vulnerabilities being masked. This may also pose a challenge as interpreter judgment will be needed to balance two different scores.

3.6 Recommendations for Replication/Upscaling of the STM

The STM is a functional tool in terms of assessing social vulnerabilities and can be replicated in most contexts, ***proving modifications are made*** to incorporate the data/information packages available at the locality in which the STM is being utilised.

In addition to the data/information inputs for the STM, a working technical group consisting of experts should be organised to modify the weighing of scores, to properly represent the area being assessed. In some cases, pre-selection of areas may be required due to the heavy data requirements and the time constraints that may be imposed. It is highly recommended that this tool ***should not be used*** at a national

level for large geographical areas. It is ideally suited for smaller geographies with clearly defined municipalities.

In conclusion, the scores obtained from the STM should be verified by the technical group/project group to ensure social considerations are incorporated into the results. For example, conditions that might seem negative from a DRR/environmental standpoint might not be considered as such by the communities, especially if those conditions contributed economically to the community.

> *"It was too cumbersome and, not appropriate for an island of the size of the DR. It is better suited for smaller islands."* - **RI TNC Project Manager**

> *"The assessment should be conducted at a lower scale, not from a national or regional perspective."* - **RI TNC Project Manager DR**

4.0 ECOSYSTEM BASED ADAPTATION (EbA) CHECKLIST

4.1 The EbA Checklist: A Product of the RI Project

The EbA (Ecosystem Based Adaptation) checklist is a checklist-style document that targets agencies working in DRR, natural resources management and implementing climate change adaptation initiatives. It is a form of rapid ecosystem identification. The EbA Checklist allows users to identify ecosystems and their potential services, and rank communities and ecosystems based on their potential to consider EbA approaches for interventions to reduce climate risk. It considers the role of ecosystems in reducing exposure and vulnerability and can be utilised alongside social vulnerability risk assessments [11, 16].

4.2 Purpose of the EbA Checklist in the RI Project

This tool was created under the RI project and was used initially in the Dominican Republic by the project team and later adopted by the Jamaica project team. The tool was utilised in each country's community selection process. In the case of the Dominican Republic, the EbA score was calculated to reflect a traffic light approach. In the Jamaica context, the ODPEM incorporated the EbA it into its MVRI/ NVRI tool, where

ecosystems became one of the four main components of vulnerability assessed in ranking communities [11,16,17].

Figure 13: Traffic Light Model used in the Dominican Republic

Red	Yellow	Green
3 Points	2 Points	1 Point
Worse	Regular/ Acceptable	Good
Environmental conditions are highly degraded or altered and would require significant intervention and/or investment to protect the community.	Environmental conditions are acceptable and EbA solutions are a feasible approach.	Good environmental conditions, there is no need for significative intervention.

4.3 Modifications to the EbA Checklist

The EbA Checklist was a newly minted tool under the RI project. It should be noted that in the development of this tool, the design of the tool was not modified, but instead the way that it was used was the subject of modification. The initial conceptualisation of the EbA checklist saw it as producing a numerical value to added STM score. However, this method was abandoned due to the following factors:

a) The EbA Checklist and the STM; both EbA and STM assessing the flooding, with the EbA not accounting for considerations if the area was a wetland or not, or if flooding was necessary for the area [11];

b) Due the nature of the information collected by both the EbA and STM, masking may occur where environmental vulnerabilities may be masked by socio-economic ones;

c) The range of each indicator may not differ significantly between municipalities because the administrative unit may be significantly bigger than the ecosystem area [11];

d) Coastal bias occurring since a large percentage of the population resides within coastal areas [11].

To overcome these shortcomings, the tool became its own standalone reference value. Furthermore, during the project process, it became apparent that it was advantageous to have two separate checklists: a national level EbA checklist and a community level-based checklist. This tool remained in use as the national level checklist and a community-level checklist (CAN) was developed.

4.4 Evaluation of the EbA Checklist

The EbA Checklist proved to be useful within the RI project as it was used in conjunction with different tools across both the Dominican Republic and Jamaica in the community selection process. In interviews with both the Resilient Islands' Project Manager and the Technical Officer, the EbA checklist was acknowledged as being very useful in achieving its success criteria of selecting the appropriate NbS to reduce vulnerabilities identified within the selected communities.

*"It allows for us to look for the best type of solution for identified vulnerable communities and was very helpful."- **RI Project Manager***

4.5 Key takeaways of the EbA Checklist

The EbA Checklist is useful as a reference value when selecting and prioritising vulnerable community selection. However, it is not meant to be a standalone tool and should be utilised with other tools that assess the socio-economic aspects so that a full, detailed understanding can be achieved. It should be noted, however, that this tool, while extremely useful, does have a few bugs, for example:

1. It is unable to distinguish whether certain areas are wetlands or whether the flooding is a necessary process for the general environment and community;
2. There is bias towards coastal zones, which may be useful in a small island developing context but not land locked context.
3. It cannot accurately be used in communities whose administrative units are bigger than the ecosystems themselves.

4.6 Recommendations for Replication/Upscaling of the EbA Checklist

This checklist can easily be replicated within small island developing states, however, replication becomes problematic in areas that are land locked or where there are great inland volumes or areas that contain vast wetlands, as the checklist may contribute to unfair scoring. Another point of importance is also understanding the size of the community being screened and the system dynamics, as the scores may not differ vastly.

5.0 NATIONAL VULNERABILITY RANKING INDEX (NVRI)

5.1 The NVRI: the Tool of Many Faces

This tool was formally known as the Modified Vulnerability Ranking Index (MVRI). It has now been rebranded as the NVRI (National Vulnerability Ranking Index) owing to the national status of the tool as incorporated into Jamaica's new Disaster Risk Management Act. This tool was used as the community selection tool for Jamaica and is a new product developed during a 10-month collaboration with the RI project.

The NVRI displays hazard vulnerability at parish, community and sector levels. Jamaica's hazard vulnerability is displayed in the NVRI tool using four categories. These are Physical, Economic, Environment and Social Vulnerability. The level of vulnerability is ranked from low to high using a five-point colour coded weighting system. The NVRI Tool is designed for use by a myriad of stakeholders. Users of the tool can search for vulnerabilities by category, sector, indicator and type of hazard. The NVRI Tool is the first of its kind in the Caribbean and is one of the key steps towards building national disaster resilience in Jamaica.

Figure 14: NVRI Database

ALL PARISHES		Allman Town	August Town	Barbican	
V-rank	PHYSICAL (25%)	MH	M	M	
V-score		18	13	14	
V-rank	ECONOMIC (25%)	H	MH	MH	
V-score		22	16	16	
V-rank	ENVIRONMENT (25%)	MH	M	M	
V-score		16	12	12	
V-rank	SOCIAL (25%)	H	H	H	
V-score		20	20	20	
Vulnerability Rank (H, MH, M, ML, L)	TOTAL (100%)	M	M	M	
Vulnerability Score%		76	61	62	

Further information on the NVRI can be found on its website: [Scoring Index | National Vulnerability Ranking Index for Jamaica (nvrijamaica.com)](#).

5.1.1 Whatever happened to the STM?

During the first quarter of 2018, the STM was on track to be Jamaica's community selection tool for the RI project. Discussions were being held between the Jamaica Resilient Islands Project Team and the Office of Disaster Preparedness and Emergency Management (ODPEM) about STM implementation in the country, while eight (8) communities had already been identified in the pre-selection process carried out by the Jamaican Technical Advisory Group (TAG) and the project team. These developments created a timeline for STM roll out to start as early as September 2018 [18].

The Jamaican RI project team, at the request of the ODPEM on the 27th and 28th September 2018 convened a stakeholder meeting. This meeting was attended by representatives from Caribbean Disaster Emergency Management Agency (CDEMA) and several key Government, Non-Governmental Organisations (NGOs), and Academic Stakeholders who are critical to the DRM and NRM landscapes in Jamaica. The progress of the Caribbean Community Risk Information Tool (CCRIT), the successor of the STM, was outlined and details of the piloting of the tool were shared in Suriname. All the IFRC's and TNC tools were also presented, as well as the ODPEM's Communities Vulnerability Ranking Index (VRI) Tool.

This workshop resulted in the conclusion that the STM or CCRIT in their current format were no longer the ideal community selection tool to be used for the RI Project [17]. The CDEMA, at this workshop, also declared that the CCRIT, the successor of the STM, was not necessarily a community selection tool and that it would need other pertinent information to facilitate the selection of communities based on the project`s criteria [17].

It was decided that a modified or hybrid version of ODPEM'S VRI would be developed and used to select communities, which would include aspects of the STM/CCRIT and other relevant tools. The components of focus under the modified VRI Tool were also finalised at the workshop [17].

5.2 Purpose of the NVRI in the RI Project

The purpose of this tool is to identify vulnerabilities and select the appropriate Jamaican communities for the Resilient Islands project. The methodology provided a clear ranking to aid decision-makers in determining which communities should be engaged for the project.

5.3 Modifications to the NVRI

The VRI was developed in 2009 by the ODPEM to rank communities across Jamaica. The tool was designed to highlight and rank multi-hazard and socio-economic vulnerabilities at the community level. This initial design, however, did not provide comprehensive factors of vulnerability and did not consider environmental aspects [19].

Collaboration between the ODPEM, Jamaican DRR stakeholders and the Resilient Islands Project led to the revision the VRI to include inputs from the STM and EbA Checklist into the model's decision-making. This resulted in a model which had a total of 46 indicators, and which was used to rank and prioritize eight (8) vulnerable coastal communities for the Resilient Islands Project [19].

The NVRI model used in the RI project should be referred to as the 2019 version as the current version of the tool now has an impressive total of 331 indicators that are used to measure the vulnerability. The indicators are grouped in the following categories:

- Baseline: 51 indicators
- Physical: 136 indicators
- Economic: 27 indicators
- Environment: 23 indicators
- Social: 94 indicators

5.4 Evaluation of the NVRI

This tool is extremely successful because it was able to adequately identify vulnerable communities while also moving past the project use and being adopted into the Jamaican National DDR framework. The evolution of the tool also speaks to its robustness for in the space of 4 years the tools' total number of vulnerability indicators increased by 619.6%.

5.5 Key Takeaways of the NVRI

The success of the NVRI can be attributed to high levels of early stakeholder engagement, involvement, and enthusiasm. The workshops that were held on 27th and 28th September 2018, are the perfect example of the benefits of the engagement process and are part of the reason why Jamaica fully adopted the project.

> *"We got many people involved early which made all the difference… An opportunity was presented, and we leaned into it. It was a great collaborative effort that was helped because everyone had the same goal."*
> *- Member of the Country Team*

5.6 Recommendations for Replication /Upscaling of the NVRI

The concept and methodology for the NVRI can be replicated in different contexts, however the determining factor of success is the availability of data for components of this model that can be adequately addressed, along with having strong stakeholders and technical support.

6.0 COMMUNITY ADAPTING TO NATURE (CAN) CHECKLIST

6.1 The CAN Checklist - a proud product of the RI Project

The Communities Adapting to Nature Checklist (CAN) was a new tool developed in the Resilient Islands (RI) project. An offshoot of the EbA Checklist, the tool was a local community level EbA checklist which was renamed the CAN checklist.

6.2 Purpose of the CAN Checklist the RI Project.

Originally the EbA Checklist was the only checklist product being utilised within the RI project. The need to have two separate checklists became very clear through the process of development and it was decided that a national level EbA Checklist and a local, community-level checklist would be developed [20].

A local level checklist was developed specifically to be integrated or used alongside community-based tools. Formerly referred to as the Local Level Ecosystem-based Adaptation Checklist, the RI Team unanimously agreed to the new name: Communities Adapting with Nature (CAN) Checklist [20].

The concept of the checklist was presented to a wide audience of other Red Cross project teams, as well as the RI team via a webinar in March 2019, organised by CADRIM and facilitated by TNC. A subsequent workshop was held on June 2019 in Barbados, where the CAN Checklist was introduced for integration into field application [20].

The CAN Checklist is designed to identify and collect specific information necessary to evaluate possibilities and the applicability of ecosystem-based adaptation (EbA) in a community. It provides a list of 25 elements to be verified through three main sections: (1) Background Information, (2) Disaster Risk Reduction Assessment, and (3) Ecosystem-based Adaptation. The tool also suggests additional resources such as the Caribbean Climate Change Adaptation (3CA) tools that can be used to gather the necessary data. The tool was applied in tandem with the eVCA to determine specific nature-based solutions desired by the community. Figures 15 and 16 illustrate part of the CAN Checklist.

CAN Checklist

1. Background information

Define the target community

Elements to verify:

- ☐ Population size
- ☐ Type: Capital, industrial, tourist, colonial, commercial, port city, other.
- ☐ Location: Coastal, riverside, island, intra-mountainous, valley, highlands, watershed or micro watersheds, areas neighboring the capital city, periphery of a metropolis, micro regions, boundaries, other.
- ☐ Density Population: concentration and dispersion.
- ☐ Governance levels: Community participation in decision-making, social inclusion.

Methodologies/3CA tool
- Secondary data: national census, population and economic reports, Human Development Report at national and local levels, urban poverty maps, and geographic and contour maps.
- GIS maps of enumeration districts and the associated attribute data
- Semi-structured surveys with community members, key (national and local government) stakeholders

Figure 16: CAN Checklist: Ecosystem Adaption

3. Ecosystem-based Adaptation

Gather local-level/community maps with current habitat presence

Elements to verify:

- ☐ Existence of benthic habitat[2] maps.
- ☐ Maps of ecosystems and ecosystem service provision for the target area.
- ☐ Maps of biodiversity corridors, endangered or protected fauna.
- ☐ Maps of areas under protected status (i.e. protected, parks, reserves, etc.)

Methodologies/3CA tool
- Ministries/Departments of Planning, Environment, Agriculture, and Water Resources. Coastal zone, watershed or forest studies for the area.
- Semi-structured interviews and data compilation from community members (historical profiles) as well as ministries and national and local organization related to planning and natural resources.

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Internal

6.3 Modifications to the CAN Checklist

No modifications were made to this tool in the countries of implementation.

6.4 Evaluation of the CAN Checklist

The CAN Checklist was especially useful within the eVCA process. The tool allowed for the incorporation of mainstreaming ecosystems and environmental considerations into the eVCA process. It allowed communities to reduce their exposure to the impacts of climate change and natural hazards by assessing nearby natural environments and the services they provide.

> *"The tool (CAN Checklist) is easily understandable and easy to use by persons in communities and did not require explicit knowledge. Communities were very receptive in terms of understanding importance of environmental factors and how nature plays a role in their lives and what they can do."*
> - **RI Project Manager**

6.5 Key Takeaways of the CAN Checklist

The CAN checklist was well received by both project staff and community members due to its highly intuitive nature. The fact that simple tools and products can result in significant community engagement vs complex models and frameworks reiterates *Occam's razor*, that is, the simplest solution is almost always the best.

6.6 Recommendations for Replication/ Upscaling of the CAN Checklist

The CAN model can be replicated because it is focused on the community level instead of the national level. However, maximum usability is achieved when paired with other tools such as the eVCA. The tool may require refinements when scaled, as additional components may be required in use case scenarios.

> *"I can suggest that the CAN checklist be revised in time to add additional components."*
> - **RI Project Manager**

7.0 KNOWLEDGE ATTITUDES AND PRACTICES (KAP)

7.1 The KAP: Not Just a Survey

The idea of KAP surveys goes beyond the concept of a standardised questionnaire. It is a methodology for collecting baseline information to establish a comprehensive, pre-intervention collection of knowledge, attitudes, and practices of a community.

7.2 The Purpose of the KAP Process and Survey in the RI Project

The process and tool were used to establish a baseline understanding of the target communities' knowledge, attitudes, and practices to develop a behaviour changing communication strategy for the implementation of the project, with both aspects specifically targeted which included the community's understanding of climate change and nature-based solutions. They were applied both in Jamaica and the Dominican Republic, but not in Grenada.

7.3 Modification of the KAP Process and Survey in the RI Project

In the initial stages of the RI project within the fourth quarter of 2017, the IFRC and its Caribbean National Red Cross Societies were implementing the "*Caribbean Zika Response and Preparedness Project Phase II*". It was proposed that efforts be combined to adapt the IFRC KAP tools by expanding the Technical Advisory Group (TAG) that was being formed at the time to modify the KAP tool under Zika, to include considerations of RI and other projects. [21]

Within the first quarter of 2018, both Jamaica and the Dominican Republic implemented KAP surveys to evaluate the impact of behavioural change in beneficiaries generated by project activities. Concurrent to this, the IFRC began internal discussions with the Caribbean Zika Response and Preparedness Project Phase II Project team to explore the possibility of collaborating on the KAP surveys [18].

Between the second and third quarters of 2018, a TAG had been formed. This group was established to consolidate the KAP objectives, thematic foci, and risk drivers into one methodology, to harmonise and streamline the approach in the Caribbean that was being implemented by the Red Cross and Partners [17, 22].

The formation and work of the TAG lead to the creation of a draft KAP survey by January 2019. This draft survey included components that addressed both climate change and EbA. Following the creation of this draft, an online training course was conducted by CADRIM for the RI Project Team as well as other RCRC staff that will now use the amended KAP instrument.

Within the first quarter of 2019, a two-day KAP Survey Preparation Training and Pilot Survey was held on 26th and 27th March 2019 at the Jamaica Red Cross Headquarters and the neighbouring community of Central Village. These involved volunteers being trained/ refreshed in KAP survey basics, ODK software, community engagement best practices and an in-depth analysis of the KAP Survey instrument developed by the CADRIM Team [20].

The pilot aspect focused on assessing the draft KAP among 49 individuals. - first among volunteers (14 questionnaires) and then in the local community of Central Village (35 questionnaires) adjacent to the Jamaica Red Cross. The collected feedback and recommendations from the pilot exercise were sent to the CADRIM, to allow for fine-tuning the KAP instruments to ensure that they were adapted to the local and cultural contexts of the localities. This resulted in the EbA, and climate change considerations being integrated into the KAP questionnaire for testing [20].

Within the second quarter of 2019, the RI country teams in Jamaica and Dominican Republic compiled feedback from their respective pilot exercises to send to CADRIM for the development of the Final KAP survey. The teams also made a final selection of the Sampling Methodology that will be used for the KAP Surveys with consultation and guidance from the IFRC planning, monitoring, reporting and evaluation (PMER) regional team coordinator in Panama [22].

During the third quarter of 2019, KAP Surveys were administered in Old Harbour Community, Jamaica and Miches, Dominican Republic using the newly developed KAP survey tool which included contributions from the Resilient Islands Project, as well as climate change and ecosystem considerations infused. This quarter analysis began with the lessons from the KAP baseline informing the modification of the KAP instrument in anticipation of the end line surveys. The end-line surveys were scheduled to take place during the first quarter of 2022, in the Dominican Republic and Jamaica [23,24].

> *"KAP surveys can provide solid data to measure trends and progress but require a lot of time to design a clean instrument that balances the needs of donors, implementing teams and respondents."*
> *- RI Country Team Member*

7.4 Evaluation of the KAP Process and Survey in the RI Project

The KAP survey results provided the necessary baseline and served as one of the major data sources in the creation of key information products. One such product was the infographics that were created for each of the communities to educate and bring awareness about the inherent value of their ecosystems. The effectiveness of this awareness product is not known because the endline surveys were not available at the time of this evaluation. Another important key product derived from the KAP results was the EbA projects that were created to fit within the Community Resilience Action Plans. Due to the creation of these two information products, the KAP survey is a pivotal tool.

7.5 Key Takeaways of the KAP Process and Survey

KAP surveys are vital for the creation of baselines and development strategies that can bring awareness to key issues and alter community behaviour. It was noted in this project that the sensitisation of the community played a key role in the level of receptiveness towards the KAP survey, as well as adapting to the specific locality.

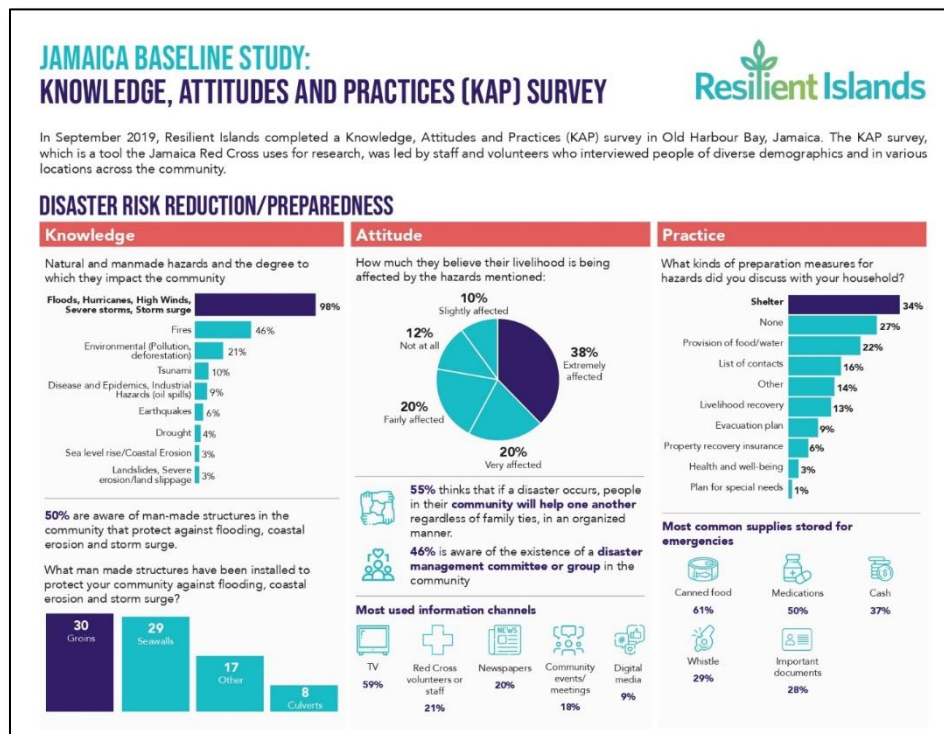*Figure 17: KAP Jamaica Baseline Study Sheet 1*
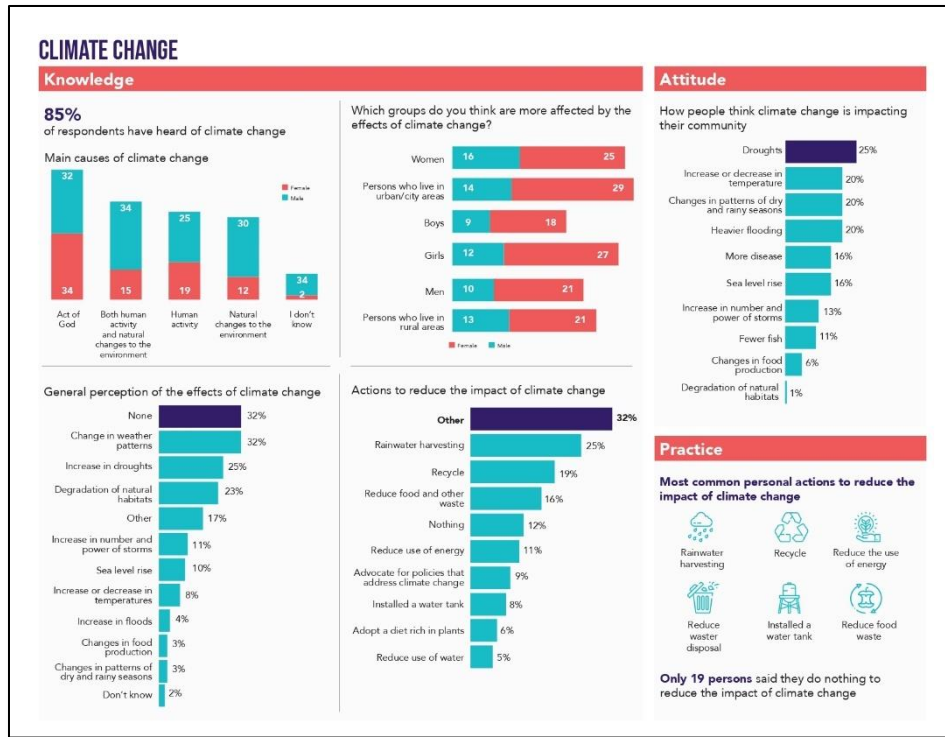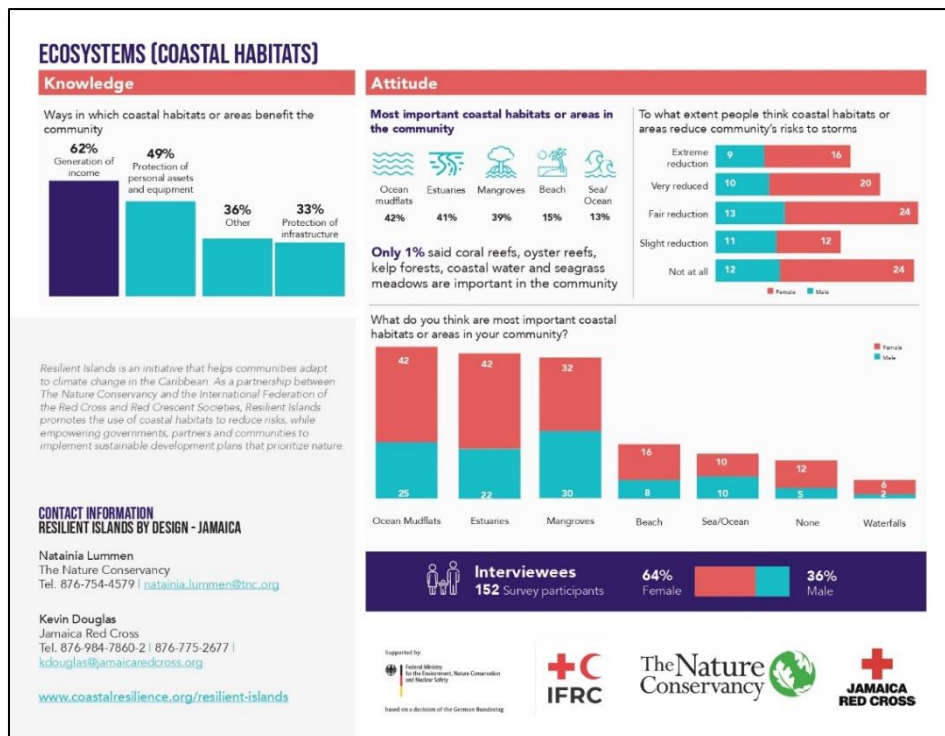
Figure 18: KAP Jamaica Base Study Sheet 2

Figure 19: KAP Jamaica Base Study Sheet 3

7.6 Recommendations for Replication/Upscaling of the KAP Process and Survey

The KAP process is replicable but requires beta testing in the chosen locality before a refined instrument can be produced that adequately collects the information needed. Special care must be given to using understandable language to the target population, both in terms of the literal language and choice of words. Respondent needs must also be considered as KAP surveys can be lengthy and time-consuming. Depending on survey design, literacy of the target audience, and level of training by the implementer, a survey can take up to two hours per person. Additionally, target community sensitisation is also required to improve KAP receptibility.

8.0 ENHANCED VULNERABILITY AND CAPACITY ASSESSMENT (eVCA)

8.1 The eVCA, what is in the E?

The Vulnerability and Capacity Assessment (VCA) is a long-standing participatory process of the IFRC, developed to allow communities to become more resilient via the assessment and analysis of the risks they are facing and the identification of solutions to address them. The Enhanced VCA or eVCA is a revised version and is the result of an extensive review of the VCA guidance, toolkit and application conducted in 2015[25].

This revision of the VCA brought it into alignment with the Roadmap to Resilience and has allowed it to better analyse the different characteristics of resilient communities. The eVCA is a 13-step methodology that includes climate change and, gender and diversity considerations. It also provides a platform for future guidance on conducting eVCAs in an urban or conflict context as well as the utilisation of digital tools [25]. Table 3 compares the differences between the VCA and eVCA.

Table 3; Differences between the VCA and eVCA

VCA	eVCA
The VCA is not a process for community leadership in risk reduction and is perceived as a one-off process.	The eVCA includes guidance on promoting community leadership during the preparation, analysis, reporting, implementation and follow up stages.
The VCA starts with the immediate use of VCA tools to collect data.	The eVCA indicates different tools to be used to assess different elements of risk. The eVCA is more data focused.
The VCA tools required revision	The tools under the eVCA have been updated to integrate the factors of gender, diversity, climate change and resilience.

VCA	eVCA
The VCA required all data analysis to be undertaken after collection of data from all tools.	Data collection is done for each component (capacity, exposure, hazard and vulnerability) separately. This allows for analysis to be conducted directly for each component and then later combined during synthesis.
The VCA is perceived to be a more DDR focused tool.	The eVCA takes a more holistic approach.
The VCA did not clearly indicate alignment without other assessment tools.	The eVCA aligns with other tools such as the CBHFA and PASSA.

Figure 20: eVCA Process
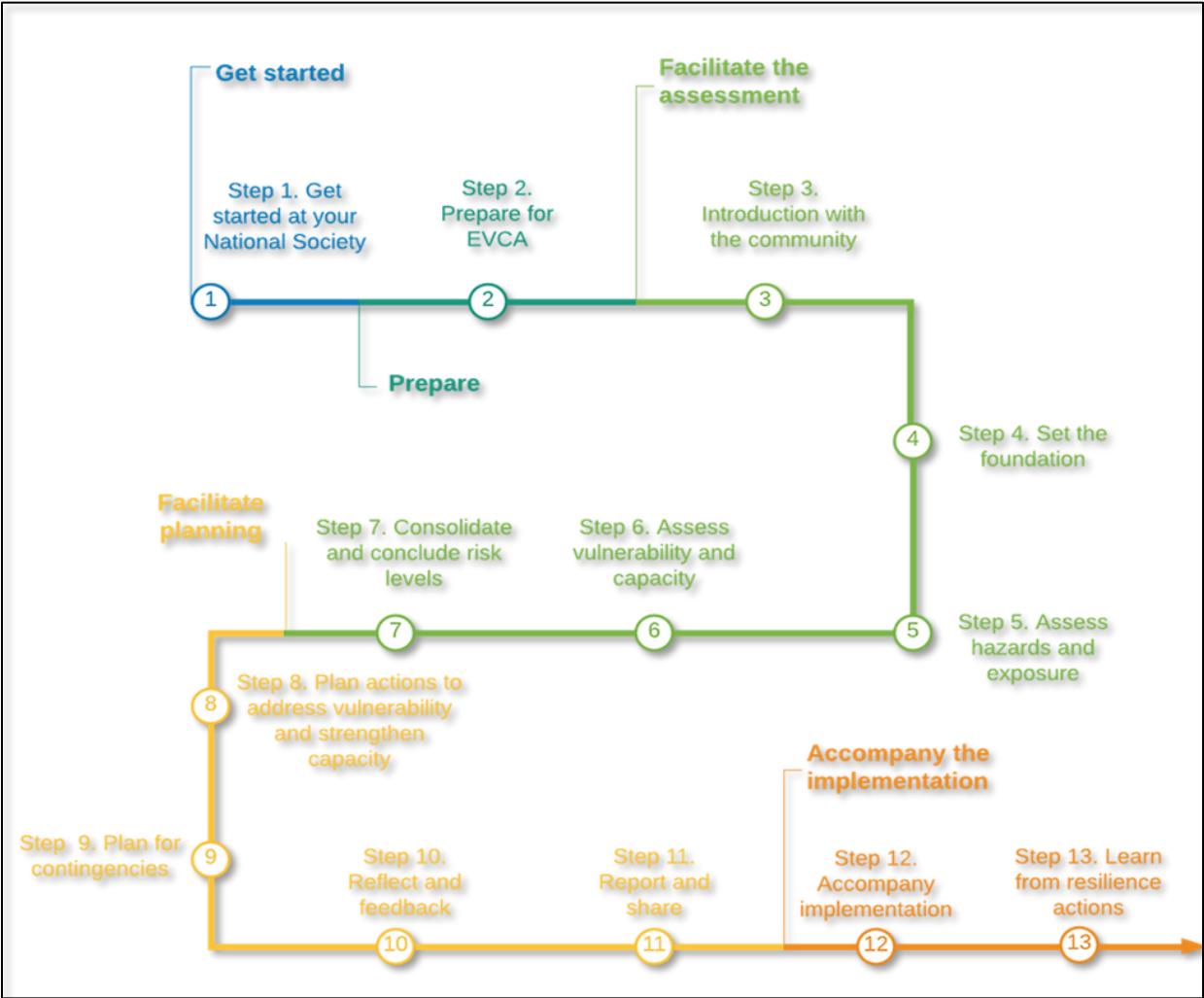
Source: IFRC. (2018). "How to do eVCA"

8.2 Purpose of the eVCA in the RI Project

The purpose of the tool was to build knowledge of the resilience, existing opportunities and capacities directly from the communities.

Figure 21: eVCA training in the Dominican Republic

8.3 Modifications to the eVCA in the RI Project

The modification made to the eVCA during the RI project was the CAN Checklist which was added to bolster climate change and environmental aspects already present within the eVCA. This was done, recognising that nature-based solutions provided a lower cost with respect to the adaptation and resilience of communities and to avoid exorbitant costs associated with disaster response, recovery, and reconstruction. Benefits of this inclusion also provided greater data collection leading to better analysis of communities, while also allowing community knowledge about ecosystem services present.

> *"There were definite 'AHA!' moments where community members made the connections between their actions and the environment"*
> *- RI Project Country Team*

8.4 Evaluation of the eVCA.

The eVCA on its own is a powerful tool in building resilience. This is because it encourages community leadership during the preparation, analysis, reporting, implementation and follow up stages.

This, in turn, contributes to the success of building continued community resilience. The modular nature of analysis also contributes to resilience and usability as the programme is not hindered by linkages between the data components.

The inclusion of the CAN in the process bolstered the already existing environmental considerations in the eVCA because it allowed the community to understand the value of ecosystem services. This enabled communities to integrate environmental considerations into their resilience-building.

Examples of this came from the micro projects implemented during the project. Salina's Area is one such micro project where efforts were made to capitalise on the high density of migratory and native birds to develop a bird watching site. This utilises nature in a low-impact way to generate socio-economic benefits.

8.5 Key Takeaways of the eVCA

The eVCA is successful in meeting its case use objectives. It allowed for the formation of a stronger partnership among the project organisations. The staff at TNC gained valuable training in this method, which had not previously existed, while the IFRC staff gained from the development of the CAN checklist.

Additionally, the eVCA utilised a form of "environmentally sensitive" community development and contributed to overall resilience by allowing the communities to meet their socio-economic needs to place more focus on environmental needs. This magnification of the importance of ecosystems in the minds of the community members allowed for connections to be made between their personal actions and the impacts on the environment. In conclusion, the eVCA results were a crucial input in the community action plan development process.

8.6 Recommendations for Replication/ Upscaling of the eVCA

The eVCA is a highly replicable community tool as its approach to community leadership, structure of its components and inbuilt toolkit allow it to be utilised in almost any context. The use of the CAN Checklist is optional and highly dependent on the project goals and outcomes. The aim of the project focused on ecosystem-based adaptation; however, other projects may not look at adaptation through an environmental lens.

9.0 RAPID ECOLOGICAL ASSESSMENT (REA)

9.1 Rapid Ecological Assessment (REA)

The Rapid Ecological Assessments (REAs) are detailed scientific studies that focus on creating comprehensive and reliable biodiversity resource datasets in situations of limited time and financial constraints. These studies utilise a combination of aerial reconnaissance, remote sensing, field data collection and spatial data visualisation.

9.2 Purpose of the REA in the RI Project

The rapid ecological assessment tool was used to pinpoint and map the major pressures, threats and vulnerabilities to each countries' ecosystems and biodiversity by anthropogenic and natural phenomena (including climate change). The Rapid Ecological Assessment tool allowed for the pairing of the scientific data along with the community needs to allow for the success of the project. The REA was applied in both Jamaica and the Dominican Republic. This tool was not applied in Grenada.

Figure 22: REA findings from Jamaica
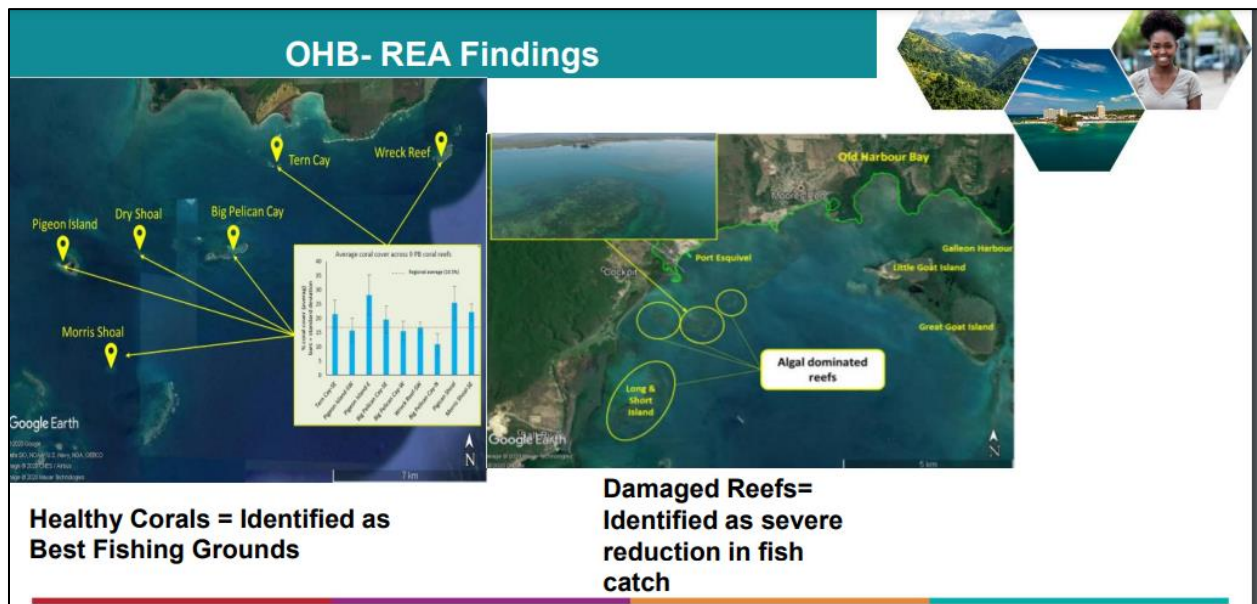
Source: Kevin Douglas (2018) "Resilient Islands Project: Nature-based Solutions for Coastal Resilience in Jamaica"

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9.3 Modifications to the REA in the RI Project

No modifications were made to this tool.

9.4 Evaluation of the REA

The REA helped support informed decisions for sustainable and community-based approaches for ecosystem-based adaptation and management. It also set a foundation for sustainable management of biological and ecological resources.

9.5 Key Takeaways of the REA

The take-away from the REA is that all nature-based solutions, disaster-based reduction and management work should be centred on strong scientific principles that can tie into local knowledge and opinions of the community members. Furthermore, it is recognised that the relevant technical competence must be present to ensure data tools are utilised correctly and the subsequent results are analysed in an expedient and accurate manner.

9.6 Recommendations for Replication/ Upscaling of the REA

The REA is easily replicable and scalable as this tool was developed by the TNC for all jurisdictions and localities. This tool is not limited by location, climate, or culture. The only limitation is technical capacity; the tool requires the implementor to have a basic understanding of ecological principles and geo-spatial analysis.

10 SPATIAL ACTION MAPPING (SAM)

10.1 Spatial Action Mapping

Spatial Action Mapping is a broad spectrum of remote sensing processes, which aligns planning with actions by considering the probability of success and return-on-investment for interventions. This process can range from simple methods such as community engagement and the capture of GIS points using handheld GPS Units to complex satellite monitoring.

10.2 Purpose of SAM in the RI Project

SAM is part of the REA process and is utilised for mapping the habitats, community assets and locations of potential interventions that could be applied. This tool also functioned as a community engagement tool to facilitate consultations/conversations with the stakeholders.

Figure 23: Spatial Action Mapping of Miches, Dominican Republic
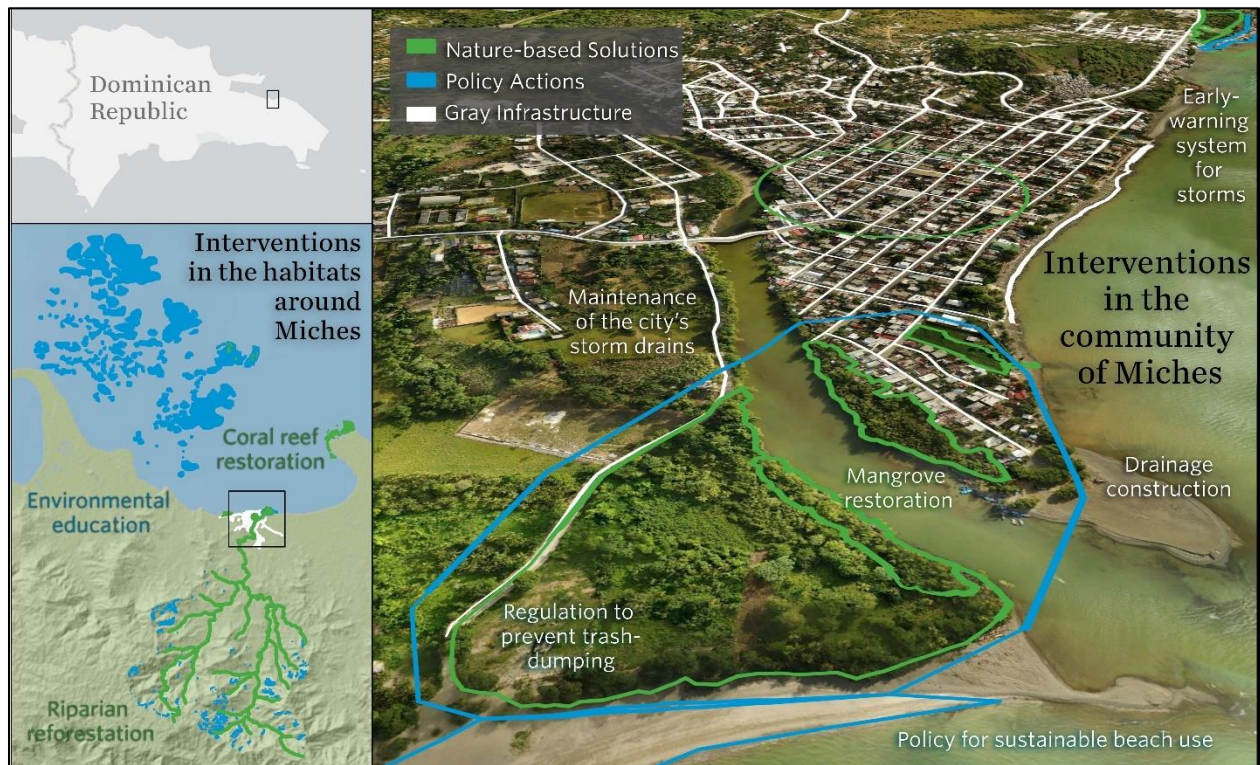
Source: Resilience Islands (2020). "Maps"

10.3 Modifications to the Tool

No modifications were made to the tool in its implementation in Jamaica, however, modifications were made within the DR context. These modifications occurred in the delivery process as implementation coincided with the COVID-19 response along with governmental responses. This led to changes in the community engagement and data collection process. The community engagement process moved from the physical in-person to digital communication tools such as WhatsApp, online surveys etc.

10.4 Evaluation of this Tool

This tool was successfully applied as its outputs were part of the success of the REA process and allowed for the selection of appropriate interventions and micro projects.

10.5 Key Lessons and Takeaways

The key takeaway from this tool's application is to consider the specific context of the location in which the tool is being implemented. The two islands chosen had different socio-economic, governance and stakeholder interests which led to different priorities as evident in the type of micro projects chosen.

10.6. Recommendations for Replication/Upscaling of the SAM

The tool can be replicated/upscaled. The main consideration for this, however, must be the context of the location in which it is being implemented and what the use of the tool is expected to achieve. Like the REA, lack of technical capacity may be a roadblock to implementation.

11. KEY CONCLUSIONS AND RECOMMENDATIONS

Overall, the various tools utilised within the context of this project resulted in the successful completion of individual objectives. The only exception to this rule is the STM which saw success at various levels, first at the municipal level and then later at the local community level. The tool, however, was not able to aid in the final selection of communities due to the realisation that other factors are required to be considered for selection.

The common denominator shared by the implementation of each tool was that before each use case, the project teams assessed the social and community context of the chosen locality, considering existing indigenous tools to see what can be learnt from these tools or what modifications can be made, along with what data inputs were available. This approach was a critical success factor as it allowed for greater stakeholder engagement while also creating usable tools.

Another crucial success factor within the project was the sensitisation and engagement of stakeholders. Throughout the project life, various stakeholders such as governmental agencies, NBOs, CSOs etc. were able to help direct and shape the tools while also driving adaptation. Specific clean-cut examples of this include the development of the NVRI and the KAP pilot programme.

The above-mentioned success factors should be repeated for future community projects. However, during this evaluation, it was noted that there existed differing and sometimes conflicting viewpoints among project staff. The cause for these differing viewpoints may have occurred due to each project member's locality. It is therefore recommended that communication and education of project processes/tools need to be undertaken to avoid cases where implementing teams begin acting in silos.

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APPENDICIES

A. The Final List of Stakeholders Interviewed under this Evaluation Process
B. Interview Template

Appendix A - The Final List of Stakeholders Interviewed under this Evaluation Process.

Key Informant	Organisation	Contact	Role	Date of Interview	Time (AST)
Keisha Sandy	IFRC	Keisha.SANDY@ifrc.org	POS CCD RI Focal Point	12-Apr	10:00
Eddy Silva	TNC	eddy.silva@tnc.org	Resilient Islands Project Manager (overall) TNC	12-Apr	14:00
Valerie Pietsch McNulty	TNC	valerie.mcnulty@tnc.org	Geographic Information System (GIS) and Geospatial Modelling Science lead	12-Apr	16:00
Diane Medina	IFRC	Diana.MEDINA@ifrc.org	Resilient Islands Community Engagement, Communications and Accountability Manager	13-Apr	10:00
Jessie Jordan	IFRC	Jessie.JORDAN@ifrc.org	Disaster Law Officer, IFRC Trinidad	13-Apr	14:00
Velda Ferguson Dewsbury	IFRC	Velda.FERGUSON@ifrc.org	IFRC Project Manager -Resilient Islands Project	19-Apr	8:00
Samantha Dickson	Grenada Red Cross	grcspresident2018to2020@gmail.com	President of Grenada Red Cross	19-Apr	14:00
Jesus Vizcaino	DR Red Cross	jesusvizcaino@cruzroja.do	Dominican Republic Red Cross-	20-Apr	10:30
Ahmad Khan	IFRC	ahmad.khan@ifrc.org	IFRC POS CCD Information Officer	20-Apr	13:00
Catherin Cattafesta	TNC	catherin.cattafesta@tnc.org	TNC's Lead in the DR	26-Apr	10:00
Kevin Douglas	Jamaica Red Cross	kdouglas@jamaicaredcross.org	Jamaica Red Cross-PM-Resilient islands	05-May	11:00
Kimmoy Tulloch	Jamaica Red Cross	kimmoytulloch@yahoo.com	Felid Officer-JRC	05-May	11:00
Natainia Lummen	Jamaica Red Cross	natainia.lummen@TNC.ORG	TNC's Lead in Jamaica	05-May	11:00
Shanrick Thomas	Jamaica Red Cross	sthomas@jamaicaredcross.org	Jamaica Red Cross-Admin Assistant	05-May	11:00

Appendix B - Interview Template

DISCLAIMER:

- The notes reflected in this document are the paraphrased interpretations of the reviewer and are NOT direct transcripts of the interviewees.
- The views expressed in this document are those of the individual, interpreted and presented by the Interviewers at Advisors Next Door Limited and are not the views of the IFRC, TNC, or their agents.
- The views reflected represent the discussion as held in the moment of the interview and information presented in these tables have not been validated or fact-checked before recording. The reader is responsible for exercising his/her full discretion in the interpretation and use of this information. The IFRC, TNC, AND, or their agents cannot be held liable for losses arising from the use of this information by the reader.
- At the beginning of the interviews, persons were asked to identify from the list of tools within the scope of this evaluation those with which they were intimately involved and only those were discussed. Additional tools and information were also collected as time permitted, to add to the richness of the discussion and provide additional opportunities for learning.

01. General

1.1.1 Meeting Date and Time	
1.1.2 Interviewers	
1.1.3 Key Personnel	
Name	
Organisation	
Role in the RI Project:	

02. Tools

2.1 R2R: Roadmap to Resilience

QUESTION	GENERAL	JAMAICA	DOMINICAN REPUBLIC	GRENADA
2.1.1 Was this tool applied and for what purpose?				
2.1.2 Was this tool modified?				
2.1.3 Why was this tool modified? /What were the challenges that led to this modification?				
2.1.4 How was this tool modified?				
2.1.5 How did this modification improve project experience/outcomes?				
2.1.6 Do you have any data, reports or statistics that you can share with us to validate this success?				
2.1.7 What were the main lessons learnt and major successes from applying these tools?				
2.1.8 Would you replicate this tool in another context? /With or without your modifications?				

2.2 KAP: Knowledge, Attitudes and Practices Surveys

QUESTION	GENERAL	JAMAICA	DOMINICAN REPUBLIC	GRENADA
2.2.1 Was this tool applied and for what purpose?				
2.2.2 Was this tool modified?				
2.2.3 Why was this tool modified? /What were the challenges that led to this modification?				
2.2.4 How was this tool modified?				
2.2.5 How did this modification improve project experience/outcomes?				
2.2.6 Do you have any data, reports or statistics that you can share with us to validate this success?				
2.2.7 What were the main lessons learnt and major successes from applying these tools?				
2.2.8 Would you replicate this tool in another context? /With or without your modifications?				

2.3 eVCA: Enhanced Vulnerability and Capacity Assessments

QUESTION	GENERAL	JAMAICA	DOMINICAN REPUBLIC	GRENADA
2.3.1 Was this tool applied and for what purpose?				
2.3.2 Was this tool modified?				
2.3.3 Why was this tool modified? /What were the challenges that led to this modification?				
2.3.4 How was this tool modified?				
2.3.5 How did this modification improve project experience/outcomes?				
2.3.6 Do you have any data, reports or statistics that you can share with us to validate this success?				
2.3.7 What were the main lessons learnt and major successes from applying these tools?				
2.3.8 Would you replicate this tool in another context? /With or without your modifications?				

2.4. CAN: Communities Adapting to Nature Checklist

QUESTION	GENERAL	JAMAICA	DOMINICAN REPUBLIC	GRENADA
2.4.1 Was this tool applied and for what purpose?				
2.4.2 Was this tool modified?				
2.4.3 Why was this tool modified? /What were the challenges that led to this modification?				
2.4.4 How was this tool modified?				
2.4.5 How did this modification improve project experience/outcomes?				
2.4.6 Do you have any data, reports or statistics that you can share with us to validate this success?			.	
2.4.7 What were the main lessons learnt and major successes from applying these tools?			.	
2.4.8 Would you replicate this tool in another context? /With or without your modifications?				

2.5 STM: Strategic Targeting Methodology

QUESTION	GENERAL	JAMAICA	DOMINICAN REPUBLIC	GRENADA
2.5.1 Was this tool applied and for what purpose?				
2.5.2 Was this tool modified?				
2.5.3 Why was this tool modified? /What were the challenges that led to this modification?				
2.5.4 How was this tool modified?				
2.5.5 How did this modification improve project experience/outcomes?				
2.5.6 Do you have any data, reports or statistics that you can share with us to validate this success?				
2.5.7 What were the main lessons learnt and major successes from applying these tools?				
2.5.8 Would you replicate this tool in another context? /With or without your modifications?				

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2.6 MVRI: Modified Vulnerability Ranking Index

QUESTION	GENERAL	JAMAICA	DOMINICAN REPUBLIC	GRENADA
2.6.1 Was this tool applied and for what purpose?				
2.6.2 Was this tool modified?				
2.6.3 Why was this tool modified? /What were the challenges that led to this modification?				
2.6.4 How was this tool modified?				
2.6.5 How did this modification improve project experience/outcomes?				
2.6.6 Do you have any data, reports or statistics that you can share with us to validate this success?				
2.6.7 What were the main lessons learnt and major successes from applying these tools?				
2.6.8 Would you replicate this tool in another context? /With or without your modifications?				

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2.7 REA: Rapid Ecological Assessment

QUESTION	GENERAL	JAMAICA	DOMINICAN REPUBLIC	GRENADA
2.7.1 Was this tool applied and for what purpose?				
2.7.2 Was this tool modified?				
2.7.3 Why was this tool modified? /What were the challenges that led to this modification?				
2.7.4 How was this tool modified?				
2.7.5 How did this modification improve project experience/outcomes?				
2.7.6 Do you have any data, reports or statistics that you can share with us to validate this success?				
2.7.7 What were the main lessons learnt and major successes from applying these tools?				
2.7.8 Would you replicate this tool in another context? /With or without your modifications?				

2.8 SAM: Spatial Action Mapping

QUESTION	GENERAL	JAMAICA	DOMINICAN REPUBLIC	GRENADA
2.8.1 Was this tool applied and for what purpose?				
2.8.2 Was this tool modified?				
2.8.3 Why was this tool modified? /What were the challenges that led to this modification?				
2.8.4 How was this tool modified?				
2.8.5 How did this modification improve project experience/outcomes?				
2.8.6 Do you have any data, reports or statistics that you can share with us to validate this success?				
2.8.7 What were the main lessons learnt and major successes from applying these tools?				
2.8.8 Would you replicate this tool in another context? /With or without your modifications?				

2.9 EbA: Ecosystem Based Adaptation Checklist

QUESTION	GENERAL	JAMAICA	DOMINICAN REPUBLIC	GRENADA
2.9.1 Was this tool applied and for what purpose?				
2.9.2 Was this tool modified?				
2.9.3 Why was this tool modified? /What were the challenges that led to this modification?				
2.9.4 How was this tool modified?				
2.9.5 How did this modification improve project experience/outcomes?				
2.9.6 Do you have any data, reports or statistics that you can share with us to validate this success?				
2.9.7 What were the main lessons learnt and major successes from applying these tools?				
2.9.8 Would you replicate this tool in another context? /With or without your modifications?				

03. Overall

3.1.1 What was the biggest challenge with applying the R2R?	
3.1.2 What could have been improved?	
3.1.3 What do you consider to be the greatest success of the application of these tools and methods?	

04. Other

KAP surveys Data	

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