

Islas Resilientes

Report on community selection in the Dominican Republic, using the Strategic Targeting Methodology and Ecosystem Based Adaptation checklist. Results and lessons learned

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Acronyms

CADRIIM	
CNCCMDL	Consejo Nacional de Cambio Climático y el Mecanismo para el Desarrollo Limpio (National Council on Climate Change)
COE	Comité de Operaciones de Emergencia (DR Emergency operations committee)
DR	Dominican Republic
DRC	Dominican Red Cross
DRR	Disaster Risk Reduction
EbA	Ecosystem Based Adaptation
FLACSO	Latin America Faculty of Social Sciences
FondoMARENA	Environmental Trust fund of the DR's Ministry of Environment
IFRC	International Federation of Red Cross and Red Crescent
INAPA	National Institute of Potable Water
NS	National Societies of Red Cross and Red Crescent
ONAMET	National Meteorological office
SINI	Sistema Nacional Integrado de Información (National Integrated Information System)
SIUBEN	Sistema Único de Beneficiarios (Unified Beneficiaries System)
STM	Strategic Targeting Methodology
TAG	Technical Advisory Group
TNC	The Nature Conservancy
UNDP	United Nations Development Program
SN-PMR	Sistema Nacional de Prevención, Mitigación y Respuesta ante Desastres de RD (Spanish acronym, National prevention, mitigation and response system -based on Law 147-02)

I. Background information

The community prioritization process was undertaken in the Dominican Republic in accordance to the Resilient Islands technical proposal, combining the Strategic Targeting Tool developed by CADRIM / IFRC, and combining it with a checklist for rapid identification of ecosystems developed by the project.

The Dominican Republic legal framework for Disaster Risk Management has an integrating nature and fosters the transition from a reactive to a preventive disaster risk management system. The DRR law mandates the creation of a series of national collegiate bodies (National Emergency Commission, Technical Committee of the Commission, Emergency Operations Center) and municipal level entities (Municipal Committees for Prevention, Mitigation and Response to Disasters) to coordinate efforts in Prevention, Mitigation and Response to Disasters. In this way, the National System of Prevention, Mitigation and Response to Disasters is a tool to know, share, articulate and finance actions of each organization / entity aimed at reducing disaster risk. The actual reduction actions are selected by each entity / sector, which uses the tools it considers most relevant to it.

As part of the effort to strengthen the effectiveness of Disaster Prevention and Mitigation actions, there have been multiple exercises aimed at exposing vulnerabilities to disaster risks and encouraging their reduction to be integrated into the policies, programs and actions of public and private entities. This effort includes national and international organizations, SN-PMR organizations and entities such as international agencies (NGOs, UN, etc.). The biannual exercises of the Office of Humanitarian Aid and Civil Protection of the European Union, such as the "risk analysis of disasters and vulnerabilities in the DR", the UN system (UNDP / UNISDR), which reach priorities up to the level of province, at best.

The Dominican Republic Government has its own prioritization tool related to the implementation of its subsidies / social policy, and the information is also available in case of emergencies, to direct response and relief. However, no government entity (nor non-governmental) has expressed the need to prioritize communities for disaster risk / vulnerability preparation. The information the DR Government generates, is used to plan for response during emergencies and for subsequent recovery investment. The use of the strategic targeting methodology (STM) subsequently became an exercise to understand the potential usefulness of the tool for Dominican stakeholders, and its applicability.

Thus, considering that an explicit need for community prioritization does not exist in the Dominican Republic, this process was undertaken with the aim of learning about the Dominican context, the information needs and the technical capacities of decision makers and entities that work on prevention. Additionally, since the environmental dimension is part of the prioritization (looking for the possibility to implement nature-based solutions as part of vulnerability reduction), the process was undertaken as a means to learn how the environmental information should be gathered, analyzed and conveyed in tandem with vulnerability assessments. The tools and the process are detailed in subsequent sections, including

the stakeholders that have facilitated the process of testing the tools, preselecting and selecting the communities.

The Strategic Targeting Methodology (STM)

The objective of the strategic prioritization tool (STM) is to favor the prioritization of interventions towards communities that are more vulnerable to disasters. It is a methodology built from the Community Selection Tool (CST) used in various countries and adapted with the experiences and knowledge acquired in the English-speaking Caribbean. Both the CST and the STM have not been used in the DR, with the RI project incorporating this first application experience. As a tool, it is supported on an EXCEL calculator so that it is accessible to any entity; it is simple (quantitative mathematical formulas) to favor transparency and seeks to avoid interference in prioritization.

The tool includes assessments of historical risk exposure, structural vulnerability, access to health and education, and disaster response management capabilities. The methodology that accompanies the tool is based on the collection of information, multisector participation, and consensus among knowledgeable actors of the communities studied. The STM is designed to provide a clear prioritization through a scoring, which must be taken into consideration along with other design / intervention specifications. It is designed to collect and organize existing secondary data on communities, to be subsequently validated and discussed with corresponding stakeholders in pursue of a prioritization scoring. (Please see appendix 1).

Members of the TAG in the Dominican Republic are: Ministry of Environment and Natural Resources (more specifically the Viceministry of Coastal Marine Resources), the National Council on Climate Change (CNCCMDL), FondoMARENA, INAPA, UNDP, FLACSO, ONAMET, the Dominican Red Cross, the National Forum on DRR, and TNC.

Rapid ecosystem identification tool (“EBA Checklist”)

As mentioned before, in order to propose the inclusion of environmental dimensions of exposure to risks (especially hydrometeorological) a checklist style document on how to include EBA approaches in community assessment tools was developed by the Resilient Islands project. Its purpose was to enable practitioners to include EBA approaches in the application of currently used community prioritization and assessment tools. The DR team was the first in testing the checklist as it was drafted, and some modifications were made to the same to facilitate its implementation and understanding by the local actors participating in the assessment process. It was originally conceived as to generate a score be added to the STM’s and facilitate community ranking. Its implementation indicated that this was not practical nor necessary (more details in subsequent sections).

The Technical Advisory Group (TAG)

In parallel with data gathering for the STM process, the DR team organized the local Technical Advisory Group (TAG), which accompanied the process through regular working sessions, facilitating information, expertise and advise to the project team. The TAG groups technicians / experts from various institutions

that can provide guidance and participate in the discussions generated by the project. The team met regularly with the TAG to present the tools to be used, develop the criteria for preselection the communities for which prioritization would be carried out, preselect and then select the communities using the STM and the EbA checklist.

In order to be able to visualize the elements to be discussed during TAG meetings, the TNC science team worked in the habilitation of the Coastal Resilience portal for data visualization to accompany the discussion and the selection process.

It became evident since the inception that given the dimensions and number of administrative units in the Dominican Republic (municipalities and municipal districts) it would not be feasible to carry out a nation-wide STM, nor necessary for project purposes. An initial broad analysis started assessing the most recurrent vulnerabilities of all coastal provinces (and its municipalities) of the Dominican Republic, highlighting those with recurrent hydrometeorological vulnerabilities (more relatable to climate change most recurrent impacts). Furthermore, inland municipalities (with no coastal areas) were removed from the preselection given the project scope related to coastal areas. This allowed for an in-depth analysis based on existing standardized information to start. This process was led by the project team with the support of the DR TAG. Parallel, the STM tool was revised, interpreted and adapted to the DR context, standardized information availability and local characteristics (e.g. names of entities or processes).

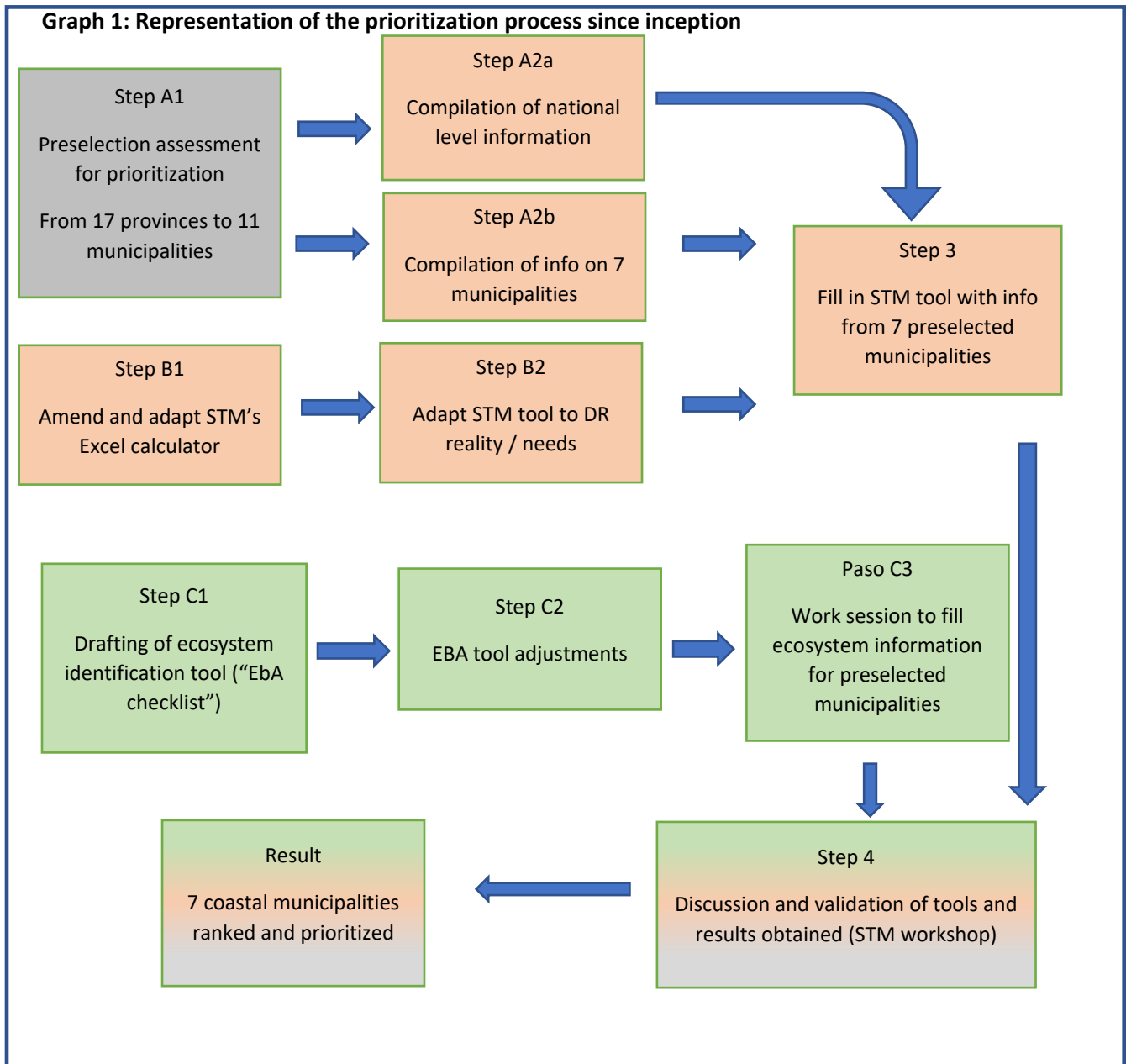
II. National level selection process

2.1. Description of the preselection process and criteria

Graph 1 shows the first part of the prioritization process followed, which was the sum of the application of the two methodologies already discussed (STM in orange, EBA in Green) and validation by the TAG (gray color). The exercise required the management of public and private information (Process A) and technical skills of adaptation and adjustment of software (Processes B and C).

The strategic targeting methodology (STM) process in the Dominican Republic started in May 2018, with the collection of numerous existing secondary data, regarding socioeconomic and demographic variables, as well as environmental and ecosystem-related information.

During the second DR TAG working session, the preselection criteria centered in the discussion of the following information: a) Information form SIUBEN on multidimensional poverty (ranked by the quality of life index, categories 1 and 2) and its index of vulnerability to weather shocks; and b) TAG members knowledge and experience in terms of their work and knowledge of the areas / communities. Resulting from discussion 7 provinces were selected to be analyzed in more detail, in order to preselect 6 to 8 communities / municipalities. In other words, a rapid analysis of social and physical vulnerability, and recent history events, were used as benchmark to start the preselection.



Using SIUBEN information, the coastal resilience portal and the Ministry of Environment’s environmental information portal, the information was further summarized in table format, with the aim of assigning objective criteria (using similar principles as the vulnerability assessment to be conducted by the Science team) and a ranking. To each criterion a ranking was assigned to grade the range of the characteristic in order to have a composite ranking to hone the preselection and conduct the STM.

1. % of vulnerable homes based on SIUBEN's quality of life index¹.
2. SIUBEN's index of vulnerability to weather shocks (IVAAC)².
3. % of the municipal territory prone to flooding (Based on data generated by the Ministry of Environment), as a proxy to understand potential proclivity to storm surge and sea level rise.
4. Presence of Coastal marine habitats
5. Proximity of the main settlement (head municipality) to the coastline

An important consideration of the revision process was to ponder on potential users of the tool and include -to the extent possible- easily collectable information, taking advantage from the sources and data available in country.

The project team identified all coastal municipalities of the areas preselected by TAG on July 2018. All necessary info was collected and /or calculated for each of the municipality and the scoring was assigned. The criteria and the scoring were presented to the TAG on Sept. 13, validating results founds and criteria set forth, resulting in the preselection of the following 7 communities.

#	Province	Municipality	Municipal district
1	El Seibo	Miches	Miches
2	Españolat	Gaspar Hernández	Gaspar Hernández
3	Maria Trinidad Sanchez	Nagua	Nagua
4	Maria Trinidad Sanchez	Nagua	San Jose de Matanzas
5	Maria Trinidad Sanchez	Río San Juan	Río San Juan
6	Puerto Plata	Puerto Plata	Maimón
7	Hato Mayor	Sabana De La Mar	Elupina Cordero de las Canitas

For analysis convenience and given information availability, preselection was based on the aggregation level of municipality / municipal district. This eventually proved to be very limiting, as every municipal government is composed of multiple communities (neighborhood, rural sections, other) and vulnerability is not equal / homogeneous among all of them.

STM tool adaptation

Based on the principles of the STM, the DR based IFRC, Red Cross and TNC revised the tool's workbook³ and proposed changes to make it more compatible with Dominican reality and information availability. Considering that the original approach considered an assessment from the national level, most variables proposed include standardized existing information while maintaining the structure of the STM. This revision was done in consultation with the CADRIM/IFRC representative, as well as TNC Science team lead. One important motivation for the adjustment was to adapt and include variables for which information might be available in the DR, as a means to facilitate data collection and analysis for potential users that

¹ <https://siuben.gob.do/como-trabajamos/como-medimos-la-pobreza/>

² <https://siuben.gob.do/ivacc/>

³ Please see appendix 1.

might not have the means and resources to do direct data collection or a series of participatory workshops. A subsequent adjustment to the Excel workbook ensued to reflect the changes done to the questions.

The proposal was discussed with CADRIM and IFRC at the regional level and final adjustments as well as interpretation were made. The project team collected all secondary information beforehand (national census, SIUBEN, other) to fill out the forms for preselected municipalities / municipal districts. The municipal territory was selected as the administrative unit of reference for analysis, both for the STM and the rapid Ecosystem assessment carried out with the draft EbA Checklist. The justification is the availability of standardized data (although there are sources that can provide more disaggregated data).

The data collection process to pre-fill the STM workbook took approximately two and a half months, as some of the information had to be collected first-hand (such as the risk information and emergency response capacity) and some had to be obtained through formal requests.

The Rapid Ecosystem Identification assessment (EbA checklist) at the national level

Given the need to have a specific discussion regarding the ecosystems a work session was carried out with representatives from the Ministry of Environment and Natural Resources of the Dominican Republic (both from the Protected Areas and Biodiversity Viceministry, as well as the Coastal-marine resources Viceministry) and TNC representatives. With the support of the Coastal Resilience portal and the Environmental Information portal of the Ministry, a discussion was carried out based on the questions included in the first version of the EbA checklist – which permits to conduct a rapid ecosystem assessment in the communities and obtain a qualitative ranking for each. Results were compiled to feed the national – level STM discussion. Some of the participating experts also participated in the STM workshop.

The discussion was carried out separately from the STM workshop to have the possibility to discuss details in depth and also to test the tool for the first time. Participants agreed with the scale used by the tool, given the general approach of just identifying ecosystems. A few observations were made, that were subsequently presented to the participants in the National-level STM workshop as part of the tools' general revision component of the session.

2.2. National-level Strategic Targeting Methodology workshop

The in-depth discussion was carried out using STM workbook and EbA results obtained with participating entities, which included: the Ministry of Environment, FondoMARENA, Ministry of Planning, Economy and Development (MEPyD), Dominican Federation of Municipalities (FEDOMU), ONAMET, FLACSO, CNCCMDL, IFRC, TNC, and DRC. National stakeholders have a general knowledge of municipalities preselected and it was so indicated during the workshop.

The second part of the workshop focused on reflecting on the tools and their usefulness for the Dominican reality and potential users. During the workshop, scores and findings were presented for the preselected communities, discussing with the participants those aspects that entailed additional questioning or analysis. The ecosystems information and analysis results were presented as well.

The selection resulting from the data collection, analysis and discussion was the following:

Municipalities / municipal districts	Risk	Vulnerability and resilience	Emergency response capacity	STM Score	EbA Score
	35%	30%	20%		15%
Matancitas	12.60	9.00	3.00	24.60	3.75
Maimón, Puerto Plata	14.70	8.40	0.60	23.70	3.45
Nagua, MTS	12.60	6.00	2.00	20.60	3.53
Las Cañitas SDM	10.15	7.50	2.00	19.65	2.55
Gaspar Hernández	12.95	6.50	0.00	19.45	2.70
Miches	10.15	6.50	2.00	18.65	3.30
Rio San Juan	8.75	6.25	1.50	16.50	2.70

Lessons learned and conclusions

Conclusions and recommendations from the workshop were:

- a) On ease of use and utility of the STM tool:
 - It is a simple tool but feeding it with information requires a certain rigor, and some Dominican stakeholders / entities that or could use it have technical limitations. The Excel calculator is very manageable but basic knowledge from users is necessary.
 - Data necessary to fill out the form and calculating the score is readily available, although specific information regarding local DRR capacities needs to be consulted with local DRR actors, who will have more recent information, regarding vulnerabilities.



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

b) Potential users identified by participants are:

- The Emergency Operational Committee (COE) as part of the CNE could make use of a tool like this, especially for interventions aimed at preventing and mitigating risks, as well as for the preparation processes, which is where the greatest gaps in the system are found.
- The Ministry of Economy, Planning and Development / the Planning Directorate
- Development agencies. Civil society organizations that work on issues of development and humanitarian action
- Water provision and service entities such as INAPA (which also benefits from mangroves and wetlands to provide its services).
- The Dominican Federation of Municipalities -FEDOMU – supporting the implementation of municipal development plans. It was noted that small municipalities may not have the technical capacity to use Excel. When the final guide is developed, infographics or illustrations on how to use the spreadsheet should be included.

c) About proposed changes to STM tool:

- Include the population disaggregated by sex and / or the number of single-parent households headed by women
- Remove ambulances from the STM because they are not indicators of real risk management capacity, only one service
- Titles of the STM sections: The B component of the STM is designated as "vulnerability and resilience" for a value of the sum. Vulnerability and resilience are usually two opposing values leaving only "vulnerability" as a title since the characteristics that indicate resilience do not subtract from the vulnerability estimation.
 - Change the name of section A by Threat and Risk Profile
 - Change Title section C: emergency management capacity, not risks
- In the capacity of disaster risk, also consider community capacity, taking into account that for several years the focus of work in this area includes the strengthening of community capacities: organization of community networks, with neighborhood councils (“juntas de vecinos”) and other actors.
- The group proposed changes in relatives scores of the STM sections and EbA assessment, being the historical exposure of the community the most important analysis factor when prioritizing. Proposed changes were:

Relative score	Risks information	Vulnerability/ resilience	Risk Management capacity	EbA score
Original weight proposed	35%	25%	25%	15%
Workshop’s proposal	35	30	20	15

Is important to note that further along in the process it was concluded that: a) relative weighting is not necessary and that STM and EbA scores should not be added but compared and analyzed together for prioritization of communities and interventions.

d) Observations to the “EbA checklist”

- A section of the EBA asks about floods, which is already asked in the STM. In addition, it incorporates flood areas without indicating if they are wetlands. Flood may be normal / usual / necessary for the environment and community.
- The values (ranges) of each indicator do not make a big difference between municipalities because the administrative unit areas are significantly bigger than ecosystems areas or characteristics. This means that all the communities are in the same range and prevents effective prioritization.
- Within an administrative unit several different communities usually coexist. While for rapid ecosystem assessment the landscape approach or watershed could be the departure point of analysis, subsequently complemented by the ecosystems or habitats directly related or in proximity a specific community. A bridging between the community definition used by the Red Cross and the ecological continuum necessary for ecosystem analysis should be created.
- The guide presently has a coastal bias with the% of the population within the coastal zone.

e) On combining the STM and EbA results and using the tools:

Originally it was considered that the scoring of both tools should be added in order to rank communities. However, given the nature of information it became immediately apparent that the STM score and the ecosystem rapid assessment score should not be added. Instead, the EbA score should be a reference to determine if nature-based solutions could be considered, or if environmental conditions are so extremely altered that other types of solutions should be prioritized (infrastructure investment, people relocation, etc.).

f) On the scale for application

Both tools are more useful at smaller scales at the national level in order to obtain a higher level of information. The necessary time and resources required to make a national assessment using these tools make them unviable, especially considering that there are other indexes and methods that would allow a first pre-selection process and then move to a more detailed analysis in a smaller unit of the territory, such as a province or a municipality.

Subsequent to the workshop and following the STM methodology, the DR team decided to conduct site visit to the 2 prioritized municipalities. While there it became apparent that the municipalities subdivisions have different levels of vulnerability, and that the main settlement or the head town is not necessarily the most vulnerable or the most suitable aggregation for the vulnerability assessment and prioritization.

2.3. Local level prioritization process

After visiting the 2 prioritized municipalities and discussing with local DRR personnel and municipal authorities, the team identified that the analysis using the administrative unit (municipality) as the aggregation level, invisibilizes a lot of information. More concretely:

- In one administrative unit (municipalities in the case of the DR) several communities co-exist with differentiated vulnerability levels.

- Usually the main settlements (main town within an administrative unit) present vulnerabilities related to poor urban planning, increased population density, and deficient basic service provisions (poor garbage management, inexistent wastewater management among other) that require a very firm political will and significant capital investment to be addressed, independently of the presence of surrounding ecosystems. In the short and midterm existing social issues outweigh environmental problems regardless of how these might be related.
- The fact that the STM includes vulnerabilities not related to climate change or hydrometeorological events (civil unrest, pollution, traffic accidents) makes an additional case for not combining the STM and ecosystems scores, as these are recurrent problems that cannot be addressed through ecosystem management and/or rehabilitation.
- Rapidly changing dynamics in the territory easily identifiable by local actors, national ones won't be as informed. An example of this are new constructions, social conflicts within communities, among others.



Some of the local-level STM workshops. Photos: Resilient Islands team.

The first conclusion reached it that starting with the necessary preselection process, some information was lost for the prioritization of vulnerable communities. Also, the fact that all information related to risk recurrence, vulnerabilities and emergency response capacity is necessary local, the assessment should be conducted at a lower scale, not from a national or regional perspective. It was decided that local STM would be conducted in the 7 preselected municipalities in order to prioritize with a more in-depth level of discussion and information, using the same tools to test their effectiveness with local stakeholders. The local level sessions centered around the discussion of the communities within a municipal area that are recurrently prone to disaster and emergencies.

Resulting from this process 23 communities were assessed and ranked. The EbA rapid identification was also included in the process, and to facilitate discussion with local stakeholders, an EbA rapid assessment workbook was developed and included in the STM workbook⁴. The EbA score was not added to the STM score, but it was calculated to reflect a traffic light approach for nature-based solutions in prioritized communities, meaning the following:

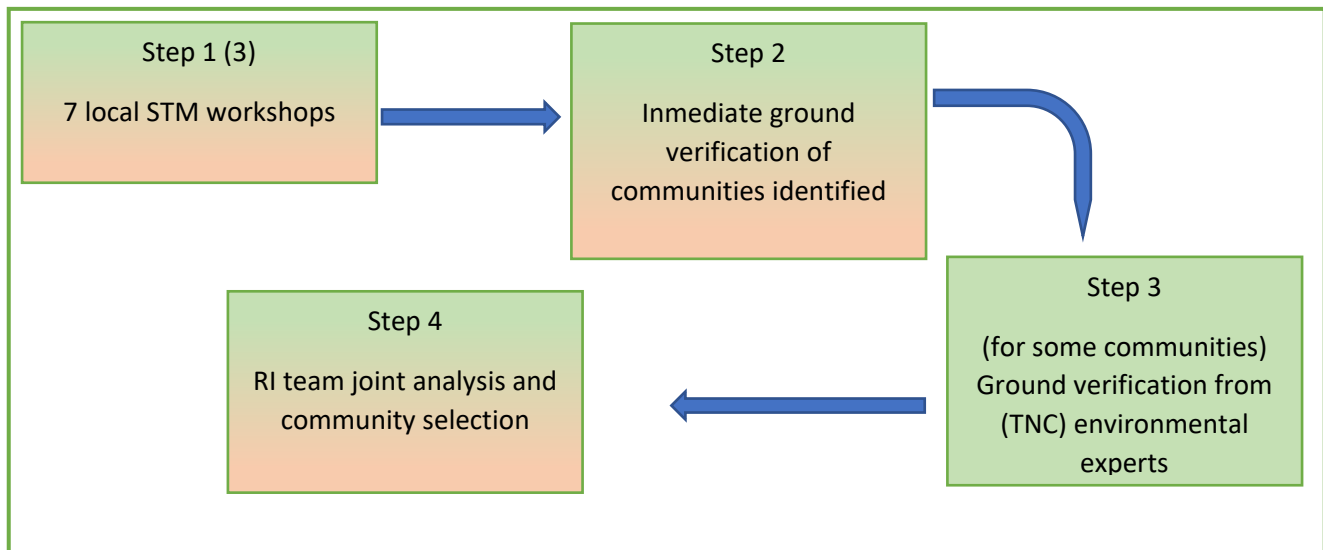
⁴ Please see appendix 2.

RED	YELLOW	GREEN
3 points	2 points	1 point
Existing natural conditions are highly affected. Gray and /or hybrid solutions might be necessary	Existing natural conditions are affected, proceed with caution.	Existing natural conditions are acceptable there are significant possibilities for nature-based solutions.

The local selection process resulted in:

- The municipality of Maimón de Puerto Plata prioritized 4 communities.
- The municipality of Elupina Cordero de las Cañitas (Prov. Hato Mayor) prioritized the main settlement.
- Three communities of the municipality of Sabana de La Mar (Hato Mayor) were incorporated, which was initially a municipality not included in the last 7.
- The municipality of Nagua incorporated only two communities.
- The Nagua technicians incorporated the BOBA community of the municipality of Las Gordas (near Nagua) as a zone of high vulnerability. There was no prioritization workshop in Las Gordas, but La Boba was visited and incorporated into the study.
- In several cases, the vulnerable settlements prioritized were not adjacent to the shoreline or even near the sea (several km inland) and additionally vulnerability from recurrent flooding was the most recurrently exposure mentioned for most communities.

Graph 2: Local community prioritization process



The local level STM assessment allows for a more in depth and qualitative information regarding vulnerable communities (both in terms of time and firsthand knowledge of most current occurrences in the field) than a national level assessment. This gives the possibility to ponder on what information from the original STM form could be included /discussed again, while being useful for intervention purposes.

Is important to note that although the team strived to have a broad participation in the local workshops (to include DRR representatives, local government officials, and provincial environmental authorities) this was not always possible, since some of the municipalities visited are removed from the head of province. Considering this, all workshops were subsequently followed by an on the ground verification of information obtained (both social and environmental). Graph 2 shows a representation of the local prioritization process followed.

Local STM scores obtained were as followed

Community Name	Community No.	Municipality / Municipal district	Location	STM Score	Puntuacion Ecosistemas
Pescadero	1	MTS- Matanzas	Interior	68	*
lascejavietnam	2	MTS - Matanzas	Llanura costera	64	*
acapulco	3	MTS-RSJUAN	Costera	62	2.70
lasgarzas	4	MTS - Matanzas	Llanura costera	62	*
bocaderoio	5	El seibo - Miches	Costera	59	2.55
Riomar	6	MTS-Nagua	Costera	55	2.91
veragua	7	GH-GH	Costera	50	2.73
Boba	8	MTS-Nagua	Costera	47	1.91
buenosaires	9	MTS-RSJ	Llanura costera	47	2.73
losmameyes	10	El seibo	Costera	46	2.18
dongregorio	11	PP-Maimom	Costera	44	2.68
nychiquito	12	MTS-RSJUAN	Costera	37	2.82
canitassbdm	13	Hato Mayor	Costera	35	2.27
5casitas	14	Hato Mayor	Costera	35	2.64
tejadashavon	15	PP - Maimon	Interior	34	1.73
avispas	16	PP - Maimon	Interior	34	1.91
puebloabajo	17	Hato mayor	Costera	32	1.59
losdajaos	18	PP Maimon	Interior	31	1.80
barrioJPG	19	MTS-Nagua	Interior	29	2.64
cuevaleones	20	GHGH	Llanura costera	28	2.64
laermita	21	GH-GH	Costera	27	2.55
centropueblo	22	El seibo - Miches	Costera	25	2.48
javillacatarey	23	Hato Mayor	Llanura costera	0	1.91

* ecosystem scoring incomplete as the community is located amongst rice paddies – formerly an estuary for which the hydrology was altered over 30 years ago. Presence of remaining natural ecosystems not detected.

The local level STM assessment allows for a more in depth and qualitative information regarding vulnerable communities (both in terms of time and firsthand knowledge of most current occurrences in the field) than a national level assessment. This gives the possibility to ponder on what information from the original STM form could be included /discussed again, while being useful for intervention purposes.

As part of the learning process resulting from the initial prioritization, the scores obtained from EbA rapid identification, were not added but taken as a reference for pondering on community selection. Those higher than 2.5 usually indicate areas in which the alteration of the natural environment is significant and additional considerations are necessary to determine if proceeding with nature-based solutions is an option. Also, after assessments and scorings, a subsequent field verification is necessary, since different types of activities were encountered in the ecosystems, that don't make any action viable in terms of social and political will, not necessarily environmentally speaking (e.g. rice paddies).

Final community selection

In order to finalize selection, the list above was shortened to include communities in the coastal area and with obvious interaction with the sea, this in order to comply with project's scope. The remaining list was the following:

Community Name	Community No.	Municipality / Municipal district	Location	STM Score	Puntuacion Ecosistemas
acapulco	3	MTS-RSJUAN	Costera	62	2.70
bocaderoio	5	El seibo - Miches	Costera	59	2.55
Riomar	6	MTS-Nagua	Costera	55	2.91
veragua	7	GH-GH	Costera	50	2.73
Boba	8	MTS-Nagua	Costera	47	1.91
losmameyes	10	El seibo	Costera	46	2.18
dongregorio	11	PP-Maimom	Costera	44	2.68
nychiquito	12	MTS-RSJUAN	Costera	37	2.82
canitassbdm	13	Hato Mayor	Costera	35	2.27
5casitas	14	Hato Mayor	Costera	35	2.64
puebloabajo	17	Hato mayor	Costera	32	1.59
laermita	21	GH-GH	Costera	27	2.55
centropueblo	22	El seibo - Miches	Costera	25	2.48

Final selection was determined, not only by the score, but also by the conditions of the project related to working in the coastal space and the possibility to work in the surrounding ecosystems to promote nature-based solutions. The team acknowledged the fact that the collected information was not sufficient to make a selection, and additional ground verification with the participation of TNC's hydrologist and one biologist were carried out for Rio San Juan (includes Acapulco and NY chiquito), Nagua (Rio Mar), Matancitas (Las cejas de Vietnam, Pescadero, and Las Garzas), and Miches (Boca de Rio, Centro Pueblo and Los Mameyes-Lengua Afuera).

Several rounds of discussion between TNC technical staff and the Red Cross subsequently took place to assess information collected through the tools and field trips. The main agreement was that other considerations - not included in the STM score nor the EbA – need to be considered for selection. Things considered were the following:

- a) 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
- b) The possibility to synergize 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).
- c) The possibility to scale up environmental assessment if the communities belong to the same municipality

Finally, in consultation with the Resilient Islands management and science teams it was decided to select the 2 communities in Miches given the possibility of having two communities of a municipality and try to intervene at the “environmental” level at the landscape level and combine necessary analysis costs.

Lessons learned from the local -level prioritization process

Although the STM score and the rapid ecosystem assessment checklist were decisive, other factors not added to the score also had considerations. The post-STM reconnaissance trips showed a lot about the perception of the communities about their natural environment (Matancitas case, or Nagua). Significant alterations of the natural environment can be perceived as extremely positive by local communities if these contribute to livelihood or income, such as the rice paddies in the Bajo Yuna estuary. Although Matancitas communities are the most recurrently vulnerable, their source of vulnerability is in great extent the cause of their current location and also income generation. Solutions other than ecosystem rehabilitation must be considered in similar situations. The STM and the EbA form don't collect this type of information.

Parallel, the disaster risk reduction that the Red Cross carries out is applicable in all realities while nature-based solutions might not be feasible in all scenarios at least not as the first option. First step should be using a habitat layer to develop shortlist based on vulnerability. Some environmental indexes regarding ecosystems protection potential exist for the coastal space, and some new could be developed for other areas such as inland territory. If ecosystem-based adaptation and nature-based solutions are an explicit objective for intervention, the departure point for the vulnerability assessment should be a database on restoration potential. This does not exclude the potential subsequent need (once the communities have been selected) for more in-depth environmental assessments in order to develop nature-based solutions.

Is necessary to establish boundaries to be able to combine conservation and restoration with disaster risk reduction in a coherent manner.

III. Suggested next steps

The natural next step is to present process and findings to CADRIM team for appropriation of lessons learned. CADRIM and IFRC will have to decide if STM promotion in the DR is viable and desirable, if so, this process must include:

- a. A new revision of the variables included in the STM should be carried out and repurpose it as a local-level tool for the Dominican Republic. Inclusion of changes suggested resulting from the national and local STM workshops.
- b. Once the tool has been amended and the lessons learned incorporated, the Resilient Islands team with IFRC and CADRIM's concurrence should present the tools and the process to potential local users and gauge possible adoption. (e.g. Foro Nacional de Gestion de Riesgos).
- c. The use of the tools and the workbook will not be intuitive for all potential users in the DR. A dissemination plan and strategy should be developed as well.

Is important to reflect on the potential contribution of the tool to existing policy instruments related to disaster risk reduction. The DR disaster risk reduction law mandates the creation of municipal preparation and response committees, along with municipal preparation, mitigation and response plans. Most municipalities in the Dominican Republic have not created their committee nor developed the plan, regardless of how recurrent their risks are. This could be an opportunity to present and promote the STM and its potential use to Dominican stakeholders.

Develop a discussion to agree on boundaries for interventions and approaches to combine ecosystem restoration and rehabilitation with DRR. Collect experiences from all over the globe and create a process that is easily replicable by entities such as municipalities, the Red Cross and other NGO's regardless of their technical level. Use the coastal resilience portal as a repository for already interpreted information. Additionally, the ongoing work with the coastal resilience portal, should be included in the dissemination strategy.

IV. Appendixes

Appendix 1: STM Form with amendments for the Dominican Republic

Herramienta de focalización estratégica

País:	<input type="text" value="reptom"/>	Provincia:	<input type="text" value="El seibo"/>	No. Comunidad:	<input type="text" value="0"/>
Comunidad:	<input type="text" value="canitca"/>				
Tipo de Comunidad:	<input type="text" value="Urbana"/>	Ubicación:	<input type="text" value="Costera"/>	Número de HHs:	<input type="text"/>
Puntuación compuesta:		Riesgo Vulnerabilidad/Capacidades:	<input type="text"/>	Rango:	<input type="text"/>
Fecha de la Evaluación:	<input type="text"/>				

A) INFORMACIÓN DE RIESGO 0

No.	Top 5 riesgos principales que ha	Frecuencia	Puntuación	% de la comunidad que fue afectado	Puntuación	que tan severo fue este desastre la	Puntuación	Puntuación	Factor principal que hace a la comunidad vulnerable a este peligro
1			0		0		0	0	
2			0		0		0	0	
3			0		0		0	0	
4			0		0		0	0	
5			0		0		0	0	

B) VULNERABILIDAD/RESILIENCIA 0

1. Infraestructura física y perfil económico de base 0

a) Complete la siguiente matriz relativa a la infraestructura física.

Acceso a la comunidad (en condiciones "normales")	<input type="text"/>	<input type="text" value="0"/>
Riesgo de aislamiento de la comunidad en caso de desastre	<input type="text"/>	<input type="text" value="0"/>

b) Porcentaje de vivienda de alta calidad estructural (según Censo 2010) 0

c) Disponibilidad de conexión a acueducto (en la casa o en el patio) 0

d) Como dispone la basura la mayoría de la comunidad 0

e) % de hogares con conexión a inodoro 0

f) Cuán extendido es el acceso a la electricidad 0

g) A qué servicios tiene acceso la gente para obtener información (marque la casilla que corresponda) 0

% de hogares con teléfono fijo	<input type="text"/>	<input type="text" value="0"/>
% de hogares con internet	<input type="text"/>	<input type="text" value="0"/>
% de hogares con celulares	<input type="text"/>	<input type="text" value="0"/>

h) ¿Cual es la categoría ocupacional de la mayoría de las personas en edad de trabajar? 0

i) Describir la presencia de siguientes servicios financieros 0

Institución financiera (banco, asociación de ahorros y préstamos)	<input type="text"/>	<input type="text" value="0"/>
Sistemas de transferencia de dinero (remesas)	<input type="text"/>	<input type="text" value="0"/>

2. Perfil de Salud y educación 0

a) ¿Cuales centros públicos de salud hay en la comunidad o su entorno? 0

b) ¿Hay escuelas públicas (primarias y secundarias) en la comunidad? 0

c) Describa la accesibilidad a los siguientes servicios 0

Distancia de los servicios de salud	<input type="text"/>	<input type="text" value="0"/>
Acceso a educación primaria	<input type="text"/>	<input type="text" value="0"/>
Acceso a educación secundaria	<input type="text"/>	<input type="text" value="0"/>

d) % de analfabetismo de la comunidad / municipio / unidad 0

C. CAPACIDAD DE GESTIÓN DE DESASTRES		0
a) ¿Cuándo fue el último desastre que sobrepasó la capacidad de respuesta local?	<input type="text"/>	0
b) Existe un comite de Prevencion, Mitigacion y Respuesta (PMR) SI O NO	<input type="text"/>	0
c) ¿Existe un plan de respuesta para el municipio?	<input type="text"/>	0
d) Presencia de Entidades / facilidades de Respuesta a Emergencias		0
Bomberos	<input type="text"/>	0
Policia	<input type="text"/>	0
Defensa Civil	<input type="text"/>	0
Cruz Roja	<input type="text"/>	0
Ambulancias	<input type="text"/>	0
e) Funcionamiento de Sistemas de comunicaciónde emergencia (radio, VHF, satelite, otros) a nivel de instituciones (Defensa Civil, FFAA, Otros).	<input type="text"/>	0
f) Han hecho simulacros o no	<input type="text"/>	0
g) Presencia de refugios y/o albergues / SI o NO	<input type="text"/>	0
CONSIDERACIONES ADICIONALES: existen proyectos o iniciativas de reduccion de riesgos en la comunidad? Mayor descripción sobre características sociales existentes, entre otros		
<input type="text"/>		
<input type="text"/>		
<input type="text"/>		
<input type="text"/>		
Fecha de la evaluación:	Evaluación completada por:	
<input type="text"/>	Nombre	Título
	<input type="text"/>	<input type="text"/>
	<input type="text"/>	<input type="text"/>
	<input type="text"/>	<input type="text"/>
	Organización	<input type="text"/>

Appendix 2: EbA rapid identification form and definitions

D. Analisis rapido de ecosistemas														
a. Riesgo de inundación de la unidad administrativa												0		
b. % Poblacion dentro de la zona costera (1km de franja)												0		
c. % Poblacion dentro de terreno inundable												0		
d. Tipo de comunidad												0		
e. Presencia de ecosistemas cercanos al asentamiento / comunidad												0		
Puntacion sub-seccion												0		
f. Características de los ecosistemas o habitats de la comunidad														
No.	Ecosistema	Area total del ecosistema	Puntuación	Cambios del ecosistema/habitat en los pasados 10 años	Puntuación	Salud del ecosistema	Puntuación	Designación del ecosistema	Puntuación	Capacidad de gestion	Puntuación	Interacción de la comunidad	Puntuación	Puntuación total
1			0		0		0		0		0		0	0
2			0		0		0		0		0		0	0
3			0		0		0		0		0		0	0
4			0		0		0		0		0		0	0
5			0		0		0		0		0		0	0
									total			0		
									numero ecosistemas			0		
									Promedio			#DIV/0!		