DOMINICA RESETTLEMENT STRATEGY

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1. Introduction, purpose and scope

The main purpose of the resettlement strategy is to define a comprehensive approach to the resettlement process undertaken by the Government of Dominica (hereafter, GoD) after the catastrophic events resulting from the passage of the Tropical Storm (TS) Erika. It aims to respond to the needs of the people affected in an integrated fashion, addressing the anthropic factors that triggered the effects of the disaster. It is based on the vision of the GoD for the process, lessons learned in resettlement processes in the LAC Region, international best practices, and resettlement policies of financial agencies, many of them adapted to the Dominica context.

The strategy intends to guide the process to resettle communities and families that cannot continue living where they used to live –regardless of whether or not their houses were destroyed or damaged by TS Erika-, because the land in which they settled is highly vulnerable to natural hazards. Therefore, although the strategy originated -and primarily focuses- on the need to provide a proper dwelling in a safe environment to those affected by TS Erika, it has a broader approach that aims to reduce the number of lives and properties at risk due to the hazardous location of houses and communities in Dominica. In this respect, the strategy should be seen as a framework to guide a long-term development process, instead of a medium-term limited response to the housing resettling needs after TS Erika.

Some policy related decisions –which are pointed out in this document- have yet to be taken, and the budget allocation may not suffice to accomplish the desired overall outcome of the resettlement program. Therefore, the present strategy will be subject to edition and updating, conditional to the changes in context. It is a dynamic tool that establishes the principles and main guidelines for the resettlement process, assesses the main topics and key issues to be addressed, and drafts a broad timeline for its implementation; but it should not be seen as a program document –encompassing the specific targeted communities and relocation sites for each case-, nor should it be expected to include specific plans for the resettlement projects.

2. Background

2.1. The event

On August 27, 2015 Dominica experienced a most severe phenomenal rainstorm event referred to as a cloudburst, brought about by the passage of TS Erika. On this day, over 305mm of rain fell within a six hour period. According to a report from the Dominica Meteorological Centre, 321.5mm of rain registered at the D'leau Gommier weather station. The rainstorm caused widespread devastation through floods, landslides and mudslides that occurred all over the island. The worst damage was in the southeast region and along the West Coast, where 11 people died, 22 went missing and many were injured. The communities of Petite Savanne and Dubique were unaffected.

Due to the mountainous island topography and the saturated conditions of the soil, the heavy rainfall resulted in intense and rapid flooding. Dominica suffered severe infrastructural damage, primarily transportation, housing and agriculture related, with the worst damage occurring in the south and southeast parts of the island. Several factors contributed to the severe impact of the storm. Prior to TS Erika, Dominica had experienced an unusually pronounced dry season that had deeply dried the grounds, particularly the clay, and provoked deep cracking of the surfaces. As a result, the intense rainfall quickly permeated the subsurface and essentially lubricated the areas beneath the clay, rapidly destabilizing the grounds and accelerating the landslide process.

Additionally, the accumulation of debris in river courses triggered flash flooding, effectively creating temporary dams which released when overflowed. Furthermore, the island topography coupled with short transit times from the central mountains to the coast, contributed to a major flash flood event. The combination of the intense rainfall, an unusually dry season and the cracking of clay grounds contributed to slope failures and generated debris, which caused major damages and fatalities throughout Dominica.

2.2. Problem statement & needs analysis

The preliminary assessment of housing stock initially focused on the Special Disaster Areas of 1. Bath Estate (Paradise Valley) 2. Dubique 3. Petite Savanne 4. Campbell 5. Coulibistrie 6. Pichelin 7. Petite Soufriere 8. Good Hope and 9. San Sauveur, where the highest concentration of impact per housing stock had been confirmed. An island-wide rapid assessment is still ongoing but has been delayed because of lack of access to professional engineering services to conduct thorough landslide risk assessments, flood risk assessments and structural impact assessments.

TS Erika wreaked serious havoc on the housing settlement, and based on field assessments to September 25, 2015, and information from the Central Statistics Office, over 890 homes were destroyed or are uninhabitable due to the imminent risk of further destruction. The figures provided are expected to increase since the field assessments carried out thus far account for 82% of the declared special and critical areas. In addition to the confirmed damages, a significant number of houses are considered to be unsafe for continued habitation. These are primarily located in the disaster areas but will also include housing stock across the country.

According to the Rapid Damage and Impact Assessment (RDIA) undertaken by the GoD and the World Bank, which is based on a summary of the data reported from each affected sector, TS Erika resulted in an estimated total damages and losses of EC\$1.25 billion (US\$465 million), equivalent to 87% of Dominica's Gross Domestic Product (GDP). The majority of damages were sustained in the transport sector (58%), followed by the housing sector (17%) and the agriculture sector (10%).

Sectors	Damage EC\$	Loss EC\$	Total EC\$	Damage US\$	Loss US\$	Total US\$	
	Productive						
Agriculture	\$ 109,722,705	\$ 13,109,373	\$ 122,832,078	\$ 40,789,110	\$ 4,873,373	\$ 45,662,483	
Tourism	\$ 52,401,200	\$ 31,478,727	\$ 83,879,927	\$ 19,480,000	\$ 11,702,129	\$ 31,182,129	
Industry & Commerce	\$ 9,200,000	\$ 8,100,000	\$ 17,300,000	\$ 3,420,074	\$ 3,011,152	\$ 6,431,227	
		Infr	astructure				
Water and Sanitation	\$ 25,737,582	\$ 1,500,000	\$ 27,237,582	\$ 9,567,874	\$ 557,621	\$ 10,610,645	
Air and Sea Ports	\$ 40,075,000	\$ 214,890	\$ 40,289,890	\$ 14,897,770	\$ 79,885	\$ 14,977,654	
Roads and bridges	\$ 643,585,667	\$ 41,692,503	\$ 685,278,171	\$ 239,251,177	\$ 15,499,072	\$ 254,750,249	
Electricity	\$ 5,889,000	\$ 883,825	\$ 6,772,825	\$ 2,189,219	\$ 328,559	\$ 2,517,779	
Telecommunications	\$ 26,900,000		\$ 26,900,000	\$ 10,000,000		\$ 10,000,000	
	Social						
Housing	\$ 122,125,725	\$ 43,925,010	\$ 166,050,735	\$ 45,399,898	\$ 16,329,000	\$ 61,728,898	
Education	\$ 3,550,000	\$ 385,500	\$ 3,935,500	\$ 1,319,703	\$ 143,309	\$ 1,463,011	
Health	\$ 1,727,900	\$ 3,501,782	\$ 5,229,682	\$ 642,342	\$ 1,301,778	\$ 1,944,120	
TOTAL	\$ 1,104,019,215	\$ 145,839,728	\$ 1,249,858,943	\$ 410,416,065	\$ 54,215,512	\$ 464,631,577	

Table 1: Summary of Damages and Losses by Sector

Source: Rapid Damage and Impact Assessment - Draft Report (September 24, 2015). GoD – World Bank

Despite the limitations for having a more accurate assessment of the damages and losses in the housing stock, as well as an overall assessment of the total housing needs -more specifically those of tenants who must be relocated- the resettlement strategy tentatively aims to benefit 1,000 households.

3. Vision statement and objectives

3.1. Vision statement

The Dominica resettlement strategy implementation solves the deficit of safe housing solutions for the Dominicans living in high-hazard areas, in a sustainable and accountable way; prioritizing the communities on the post-TS Erika Special Disaster Areas.

3.2. **Objectives**

Overall objective

 Resettling people and (re)building communities in safe and sustainable environments, enabling people to resume their normal lives with better opportunities for individual, family and community development.

Specific objectives

- All resettled families are living in a low hazard settlement, in a proper housing unit that meets their needs, with urban services coverage –water, sewage, electricity, waste collection- and access to Education & Health public services.
- The new settlements are socially organized and integrated into each ones' social environment, complying with common rules agreed upon.
- Remaining infrastructure in the resettled communities' previous locations is demolished and the land is declared State Property; land property in the new settlements is transferred to the families (residential plots) and to the institutions in charge of its maintenance and operation (public spaces).

4. Guiding principles and approaches

The above mentioned vision and objectives rest on the following principles and approaches.

4.1. Guiding principles

- The key to a development-oriented resettlement scheme is to adopt a people-centered focus rather than a property-compensation approach (e.g. by addressing landlessness with land-based schemes; joblessness with employment schemes; homelessness with home reconstruction schemes; community disarticulation with community reconstruction schemes; etc.).
- Resettlement should include an assessment of the environmental impacts of the proposed resettlement and measures to mitigate and manage the impacts. Unless careful thought is given to the environmental consequences of population concentration at relocation sites, it may mean environmental degradation due to the impact of rapid population increases and the stress placed on local resources. In the absence of adequate water supply and sanitation, water pollution and health problems are likely to arise from the flux of new settlement.
- Resettlement sites should be selected very carefully to minimize the number of secondary affected people and –where applicable- the cost of land development. Proposed resettlement sites should, as long as possible, be located close to the existing access roads and infrastructure facilities, and should possess opportunities for productive activities. Where possible, the sites selected for

relocation should be geographically close to the original homes. Resettlement sites should be carefully selected in order to reestablish the socioeconomic condition and cultural practices of those resettled.

- The resettlement projects have to be conceived and executed as part of a development program, with resettled persons provided sufficient resources and opportunities to share in the project benefits. Work should be done to ensure that affected communities give their demonstrable acceptance to the resettlement and the development program, and that any necessary displacement is done in the context of negotiated settlements with affected communities.
- Planning for the provision of economic and social services at the resettlement site must take into account the needs of both the resettled and the host communities, in order to minimize conflicts and create a common interest in the success of the resettlement project.
- Resettled persons should be compensated for their losses at "full replacement" cost prior to their actual move or before taking of land and related assets or commencement of project activities, whichever occurs first.
- Conflicts between hosts and resettled communities may develop as increased demands are placed on land, water, services, etc., or if the resettled communities are provided services and housing superior to that of the hosts. These impacts must be carefully considered when assessing the feasibility and costs of any proposed project involving resettlement, and adequate resources must be reflected in the budget for the mitigation of these additional environmental and social impacts.
- Particular attention should be paid to the needs of disadvantaged groups among those displaced, especially those below the poverty line, the elderly, women and children, and other minorities; including those without legal title to assets, and female-headed households. Appropriate assistance must be provided to help these disadvantaged groups cope with the resettlement and to improve their status.
- The criteria for site selection should be explicit and should be discussed in detail with the affected families. It is important to ensure to the highest extent possible that a whole community is resettled together. Productive land provided should be at least equal in quality to that previously inhabited. Other infrastructure and public services such as access roads, community centers, education and health services should be provided as necessary to improve living standards of the resettled families.
- For successful implementation of the resettlement strategy, full cooperation is necessary from many stakeholders. Such cooperation can only be achieved with strong leadership from the GoD, combined with early involvement of other agencies in the resettlement planning.

4.2. Specific approaches

Characteristic State St

Resettlement success relies on addressing the loss of basic resources with respect to both the people affected and the host communities, in order to minimize conflicts, and to create a common interest among the stakeholders. Therefore, the resettlement strategy aims at ensuring that when people must be displaced they are treated equitably, and that they share in the benefits of the project that involves their resettlement. The objectives are to ensure that the disruption of the livelihood of people in the project area is minimized, and to ensure that the resettled persons receive assistance so as to improve their living standards. That is why the resettlement program has to be based on a development

approach that addresses issues of the livelihood and living standards of the displaced persons, as well as compensation for loss of assets, using a participatory approach at all stages of project design and implementation.

Building back safer

A *building back safer* approach has to lead the resettlement process, for its outcome must represent durable housing in less vulnerable locations. In this respect, the designs of the new settlements have to ensure they are not exposed to hazards (and/or incorporate the necessary mitigation measures), consider best practices and adequate standards in urban and housing design and construction; and assess the previous physical conditions –urban and housing- of the resettled communities/families in order to allow the resettling to be an opportunity to regain and improve their habitability conditions.

But this *Building back safer* approach does not only involve building houses which have improved capacity to survive hazards; it also means working with the community to improve their ability to respond to and recover from shocks themselves. It involves making achievable, steady, incremental improvements in the safety and resilience of communities and their infrastructure; it involves making people less vulnerable and putting them on a firmer footing from which they can continue to build what they know is better for themselves, enabling the resettling process to act as a "healing process".

Building communities process

The resettlement should be seen not as a *building houses* process, but a *building communities* one. In this respect, a proper and early-on approach to social and cultural issues of the resettlement is critical for its sustainability. Avoiding negative implications for people's livelihoods and/or cultural customs, the resettled communities' social integration within their new environment and the social organization of the new settlements (especially when it integrates people coming from different communities), a proper implementation of whichever community participation / contribution scheme is adopted, or the consideration of cross-cutting issues (e.g. gender equity, human rights approach) in the resettlement process, among others, have to be ensured.

Therefore, a social program within the overall resettlement process must be designed and implemented, starting by assessing the social organization and customs of the resettled community as well as that of the community in (or by) which the new settlement will be built -and their position and concerns about it-; and identifying the necessary social work for a proper community-based organization of the new settlement and its best integration within their new environment.

General guidelines, such as, prioritizing locations that do not affect people's livelihoods, assessing and avoiding potential frictions between the resettling community and the host community, as well as between different communities integrated in the same settlement –e.g. due to cultural differences-; and drafting mutual accountability agreements between previous and new community members, inclusive of rules of coexistence with which all agree to comply with, among others, could help a better social organization outcome and strengthen the "building community" approach.

Mutual accountability

The resettlement strategy is promoted by the GoD but is not its sole responsibility. Involved communities will not only have to agree upon the relocation and receive whatever support the GoD provides towards it; they will also have responsibilities and commitments to fulfill. A mutual accountability approach has to be applied, in order to ensure that the problems that might arise during the resettling process -and later, the settlements' functioning- are faced with clear accountability of all parties –Government, community, services providers, others-. Mutual accountability should be

understood as a process by which two (or multiple) partners agree to be held responsible for the commitments that they have voluntarily made to each other. It relies on trust and partnership around shared agendas, rather than on 'hard' sanctions for non-compliance, to encourage the behaviour change needed to meet commitments. It is supported by evidence that is collected and shared among all partners¹.

It implies the obligation of each partner (in this case, GoD and the communities) to explain its decisions and actions before the other(s) partner(s) with which it works towards a common goal, and to mutually facilitate performance information in order to allow the other to form an opinion about it; it also means to set up the mechanisms for a more effective use of the information and to ensure that all partners meet the agreed upon commitments, and that effective reparation mechanisms –in case they do not- are available. This mutual accountability approach should not remain solely as a statement of intentions, specific agreements should be signed between all partners –GoD, community, others-.

Community effective participation and contribution

The need for effective information management and community participation in the resettling from its very early stages is essential to reduce the risk of duplication and gaps, and to ensure the project's sustainability. Information management with all stakeholders -including the communities- is also critical to ensure housing needs are met in a sustainable way. Therefore, all the resettlement projects undertaken under this strategy must ensure the community's participation in the decision-making and their contribution to the outcome –to whichever extent is agreed-. Communities shall not be seen under any circumstances –not even those most affected by the disaster- as passive subjects of the resettlement process, on the contrary, they must contribute actively to their own solutions with the support of the GoD and its cooperation stakeholders.

The strategy leaves open whether the land (and/or the houses built on it) is to be donated, subsidized and/or financed to the resettled families, as this policy is yet to be determined by the GoD -and could also be influenced by donors' conditions-; but, in either case, families would be asked to contribute to some extent to the overall cost of the resettlement project. Flexible options for in-kind and/or economic contributions -with equitable value in equal conditions- can be eligible, and the extent of the contribution can vary to fit people's different capacities and/or availability to provide their contribution. Regardless of whichever scheme(s) is/are applied, and of the need to draft clear requirements to be eligible for each one, the requested contribution aspires to foster a communities' pro-active attitude, more than to reduce the financial burden of the GoD.

Disaster Risk Reduction

Disaster risk reduction is the concept and practice of reducing disaster risks through systematic efforts to analyze and reduce the causal factors of disasters. Reducing exposure to hazards, lessening vulnerability of people and property, wise management of land and the environment, and improving preparedness and early warning for adverse events are all examples of disaster risk reduction.

Disaster risk reduction includes disciplines like disaster management, disaster mitigation and disaster preparedness, but is also part of sustainable development. In order for development activities –as is the Dominica resettlement strategy- to be sustainable they must also reduce disaster risk. On the other hand, unsound development policies will increase disaster risk - and disaster losses. In this respect, resettlement projects will have to contribute to disaster risk reduction in its broader environment, both by integrating physical measures within the settlement development but also by assessing possible

¹ Mutual accountability: emerging good practice. OECD

impacts on its surroundings that may increase disaster risks. Also, strengthening the communities' capacities for disaster management and preparedness should be part of the social work towards the resettlement.

Legal safety

Land tenure remains a major problem in the design and implementation of resettlement programs. Legal compensation requirements have generally been applied to property owners rather than those occupying the land. In such cases, population was negatively affected and impoverished by the project especially when they were excluded from consideration for compensation for loss of income or assets.

Houses and land are the most valuable assets for the population, they use them not only for direct dwelling and productive purposes, but also as a guarantee for access to loans. Thus, ensuring property safety has to be an essential issue of the resettlement process.

Resettling communities has many complicated legal implications-; moving forward in the projects and investing without a comprehensive framework of how the legal aspects are going to be solved, could lead to complicated situations in the future, if not to lawsuits against the State. In order to ensure the legal safety of both the new and the previous settlements, they have to be promptly addressed, to prevent people from returning to high-hazard houses and/or building them back, to ensure public domain of the previous locations and to reinforce the long-term and development vision of the resettlement process, as well as to guarantee that the rights of the population –especially with regard to their previous possessions- are not damaged.

For all cases, but particularly for those in which relocation is not voluntary, the main rules for making resettling mandatory and enforceable have to include clear technical and policy related criteria. And, if necessary, legislation amendments and/or legal mechanisms to declare the resettled communities' previous sites state property, should be drafted before fully engaging in the resettling process.

On the other hand, in the longer term legal safety has to be guaranteed to the resettled families in their new location. In this respect, the conditions for the property in the new settlement have to be defined early-on, ensuring at the end of the process the property transfer to resettled families (residential lots) and for public institutions (public spaces), and establishing any possible restrictions to the property, such as, if it could be transferred and/or mortgaged.

Other legal aspects can affect the resettlement strategy viability, such as, how the mortgaged properties in the previous locations are going to be managed if resettlement is mandatory and the land is declared State owned. The expropriation laws and regulations are normally clear on the type and valuation of the compensation that must be paid to the affected parties. However, they are less clear on how to compensate for the land-based resources and economic activities foregone as a result of resettlement. Consequently, many of those subjected to resettlement may receive adequate compensation from the state, and yet remain impoverished soon after resettlement. Mechanisms for a mortgages bail-out o back-up scheme could be put in place, but their legal and financial implications should be carefully assessed.

C Transitional shelter towards full housing recovery

Part of the people who are going to be resettled are IDPs, most of them from the communities of Petite Savanne and Dubique. As of the end of September 2015, about 300 people were in shelters and many others, not fully accounted for, with family and friends. It was anticipated that in the beginning of October some of these transitional, collective centers would be closing, with the families moving to guest-houses for a long-term transitional dwelling while the permanent housing solutions are

delivered. Despite this progress, not all transitional shelter needs were met, and the operational aspects of the solutions put in place were only being addressed as they came up.

It is important that the transitional shelter is integrated in a comprehensive way in the resettlement strategy, since the long-term IDPs should be its prioritized recipients. Issues such as the community contribution in the process, social organization towards resettling, information management and participatory decision-making, among others, will be hampered if the IDPs' living conditions do not meet adequate conditions. Thus, it is critical to ensure that the transitional shelter/housing solutions are properly managed.

5. Design and implementation guidelines

5.1. Main components of the resettlement

To translate the resettlement strategy into a resettlement program and then into specific resettlement projects, the following components should be considered, addressing at least the aspects exposed for each component.

Land and environmental aspects

Main aspects	Objectives
Land allocation	Assess the overall capacity (no. households) of all potential sites for the resettlement program, and decide which ones will be prioritized.
Environmental / hazard assessment	Ensure the sites are low risk / hazard exposed and/or assess feasible mitigation measures to encompass the resettlement project
Feasibility for urban development	Assess all aspects that may affect the urban design and the development construction costs, to be considered in the project design and budgeting

Legal and financial aspects

Main aspects	Objectives
Criteria for resettlement	Prevent people from returning to high-hazard houses and/or building them back Reinforce the long-term and development vision of the resettlement process Try to keep the communities as such, (same name, etc.) and avoid fragmenting them to the largest possible extent
Land tenure and property transfer schemes	Ensure property transfer of the new settlements to resettled families (residential lots) and for public institutions (public spaces) Ensure public domain of the previous locations
Budget definition	Assess in the most accurate way possible the costs of the resettlement process, in order to inform budget allocation and external fundraising
Construction costs accountability	Adopt mutual accountability with the communities / families for the resettlement costs (urban works, housing construction)

Social and cultural aspects

Main aspects	Objectives
Location in relation with resettled communities' previous location	Avoid negative implications for people's livelihoods and/or cultural customs
Social integration within the new environment	Ensure that the new settlement will properly integrate within its social environment
Social organization	(when a new community integrates families from different communities) Ensure the new settlement has a community-based organization and rules of coexistence with which all agree to comply
Community participation / Families contribution scheme(s)	Ensure that the contribution requested from the resettled communities / families in exchange for the house is properly and timely delivered
Cross-cutting aspects	Ensure gender equity in the resettling process, and that the specific needs of children, elderly and other vulnerable groups are considered and integrated.

C Urban and housing design aspects

Main aspects	Objectives
Urban design standards and guidelines	Ensure all new settlements meet main common standards and guidelines, follow best practices for urban design; and integrate properly in the nearby urban environment
Land use and construction regulations	Ensure proper future urban and/or structural growth
Housing guidelines and typologies	Ensure that the housing design in the new settlements meets people's needs
Construction standards	Ensure that every house/building and urban infrastructure in the new settlements meets a minimum construction quality

Public services and other aspects

Main aspects	Objectives
Social services	Ensure that the new settlement has access to Education and Health services
Waste management	Ensure that solid urban waste is properly managed
Public safety	Provide best possible security conditions to the new settlement
Emergency access and evacuation	Ensure emergency vehicle access to the site and houses; as well as an appropriate evacuation plan in case of an emergency
Rubble clearance	Remove and dispose rubble from previous settlements and from new settlements construction works

Institutional aspects

Main aspects	Objectives
Transitional shelter management coordination and responsibilities	Ensure that IDPs have a transitional dwelling that meets minimal conditions until permanent houses are delivered
Settlements' maintenance	Establish clear institutional accountability for the settlements' ordinary operation and maintenance
Construction permits and supervision	Ensure that the resettlement implementation complies by the legal procedures and authorizations

5.2. Anticipating and dodging constraints

Some constraints during the implementation of the strategy can be anticipated. Planning should consider their possible impact and assess the necessary measures to avoid or mitigate them.

Land allocation

- Availability of State land price of private land to be purchased. Need to determine to what extent private land is going to be needed.
- Difficulties to access private sites for surveys. Need to start the acquisition process to get access
- Reduction of useable land for residential use, due to environmental restrictions. Conservative estimations of sites' preliminary capacity are advisable.
- Allocation of agriculture and/or other productive uses would be advisable in some cases (once it is decided which community/ies are resettling there), but this will reduce their housing capacity.
- Lack of a seismic faults map hampers the seismic hazard assessment. A global seismic-resistant code should be applied to all buildings.
- Existing hazard maps are in a broad scale. Specific risk and environmental assessments have to be carried out

C Legal and financial aspects

- Vague boundaries of the communities and the fact that in the most vulnerable and/or affected ones not all housing stock was affected, compromise legal procedures to declare a piece of land unsuitable for human settlement. Clear technical and policy criteria need to be defined and applied equally to all communities.
- Mortgaged houses in the resettled communities are one of the main concerns in voluntary resettlement. Bail-out or back-up schemes could solve this constraint but at a high financial risk.
- Different precedents in the country may lead to public misunderstanding of the cost accountability scheme(s) adapted for the house delivery –donated, subsidized and/or financed-. A clear policy for either case has to be drafted and disseminated.
- Making public the criteria for each cost accountability scheme before carrying out the economic assessment of beneficiaries, could bias people's responses to surveys (e.g. if the lower the income stated, the higher the donation received).
- Using data on poverty exclusively to inform the cost accountability policy could lead to people mistakenly perceiving the resettlement program (based on disaster impact and hazard exposure) as a social housing program. Exposure to natural hazards has to be the main reason for public housing support within the resettlement program.

- Donated houses might not fit all the resettled families' needs and expectations. Flexible housing
 options to allow complementing of dwellings should be assessed.
- Donors / financial agencies conditions may conflict with political decisions or affect the resettlement program schedule. Allocating those specific funds to whichever project better fits the donor requisites and/or negotiating more flexible schemes with the donors could allow dodging the constraints and avoiding donor-driven decisions.

Social and cultural aspects

- Some people are reluctant to participate in the resettlement because they think it is too long of a process, and are afraid that it will affect their livelihood. Receiving a small plot could negatively affect the willingness to be resettled and/or complicate the livelihood support approach. A livelihood alternatives development program and/or allow the use of part of the previous land for productive uses could be considered.
- It is necessary to start engaging the communities and informing them of what the final outcome is going to be, but the livelihood support for the resettlement is yet to be defined.
- Even if the position of the "host community" is against the resettlement, it is very likely to happen; in those cases, it will be necessary to elicit higher involvement from that community.
- Social changes and integration always take time; a "problem control scheme" has to be drafted to anticipate possible measures.
- More complex social integration and organization can be anticipated when people have marked different cultural backgrounds and incomes. A rapid socio-economic assessment of the communities reduces the risks of this occurring.
- Lack of previous social links between groups and different cultural customs hamper the community organization; innovative approaches and a stronger and longer institutional leadership and mentoring will be necessary
- People's different capacities and/or availability to provide their contribution can hinder their compliance. Flexible options can be offered in equitable conditions/value.
- In-kind contributions in the construction works (labour) may be difficult to coordinate with private construction companies' schedules. Flexible options to provide in-kind contribution have to be assessed, such as, social work, other physical works not linked to a contractor's output, etc.
- Cross-cutting issues, such as, gender equity and a human rights approach, are often superficially addressed, more to comply with donors' and/or national policies than to actually aim at specific goals; but avoiding this inappropriately broad approach should not mean that these issues overcome all other aspects either. A proper balance between cross-cutting issues and the main purpose of the resettlement program has to be achieved.

O Urban and housing design aspects

- Best practices and guidelines from other countries / disaster recoveries may not always apply to Dominica's context. Need to adapt them to national broad urban context and standards
- Broader physical planning is outside of the resettlement program. Lack of land use zoning in the surrounding area could hamper the settlement's sustainability if it develops inadequately.
- Budget availability may not allow the standardized houses solutions to meet every families' needs; in those cases, exceptions could be evaluated
- A too specific range of building construction solutions may exclude others not known at the moment that could meet the required quality standards; in this respect, although several examples can be provided, the definition of eligible construction solutions should focus more on

the quality required (resistance, durability, comfort, etc.) rather than on specific material or construction systems.

Institutional aspects

- Unclear institutional scopes/mandates may lead to gaps in the necessary support to the transitional shelter program. Clear leadership in this matter needs to be defined without further delay, combined with a definition of involvement by other institutional stakeholders, both public and private.
- Some public institutions could perceive the attention to the new settlements as a burden that exceeds their current capacities; budgetary needs should be assessed along with the responsibility distribution
- Lack of official codes and/or permit requirements may lead to decisions that are not diligent; in that case, additional requirements should be imposed for the resettlement projects.

Other aspects

- In some cases, although Education (secondary) and Health catchment may not vary, an increased demand may arise due to proximity to the facilities; in this respect, augmentative calculations of forthcoming needs would be advisable.
- In resettlements not close to an existing community, extending the waste collection service could mean a high investment and/or increase of operational costs. In those cases, it could be advisable to put in place an inside waste management system, along with occasional selective garbage collection.
- People from the surroundings might perceive the new settlement as a threat for their safety; therefore, overly restricting access to the new settlement –to ensure its own safety- could turn into "ghettoizing" the community.
- Access and evacuation not only depend on the site design, but on the conditions of the surroundings. Community emergency plans have to be developed including nearby conditions.
- The rubble volume can be large in some cases, exceeding nearby dump capacity, resulting in higher transportation costs. Reusing rubble in the settlement's construction whenever possible could reduce the load on rubble removal and disposal.

6. Resettlement planning

6.1. Stages in the resettlement project process

All resettlement projects go through a well-defined project process cycle beginning from inception to implementation and passing through various phases that include: project identification, pre-feasibility study, feasibility study or preliminary designs, detailed technical design, and implementation. The level of information and detail on social, economic, environmental and technical aspects varies from a very general nature at the project identification stage to very detailed and specific at the feasibility and technical design stage. The resettlement planning and implementation activities run parallel to the technical and engineering activities in a project following the same project process cycle. A general description of these activities is summarized below.

Project Identification

The first step in planning a project involves project identification. At this stage only preliminary information on the location and scope of the project is generally available. Very rarely the project

proponents are in a position to describe specific location or physical boundaries of projects at this stage. At this stage, it is required to collect some basic information regarding potential social issues and impacts to make a preliminary assessment of potential environmental and social benefits and impacts of the project. In terms of resettlement considerations the main tasks in this phase include conducting initial social assessment as a basis for preliminary assessment of land acquisition/allocation requirements and the need for social impact assessment.

Pre-feasibility

Pre-feasibility is a step forward from project identification and its main purpose is to refine the project objectives, conducting specific technical studies and economic analyses and preparation of preliminary designs. Pre-feasibility gives an account of the scope of the project and resources needed for its implementation. More specific information on the scope of the project and its probable impact areas are generally available during the pre-feasibility stage of projects, although information on precise project boundaries may not be available at this stage. Based on the available information, prefeasibility will also determine whether the potential impacts of the proposed project are likely to be significant, and if the land for resettlement has adequate conditions for the project implementation, regarding (low) hazard exposure, soil's capacity, and others. Pre-feasibility of services suppliance – water & sanitation, electricity, others- will also be addressed in this stage. Identification of key stakeholders including project affected persons and groups and beneficiaries is made, and more specific information on the scale and degree of potential social impacts and socioeconomic characteristics of project affected persons and groups is collected through field investigations, surveys and interviews with selected population from within and adjoining project areas. Since the information collection and analysis on social impacts is carried out parallel to preparation of preliminary design of projects, the exercise also includes assessment of various design options for avoiding or minimizing adverse impact and selection of suitable design option.

Feasibility and Detailed Design

In a project, pre-feasibility and feasibility studies are carried out as a continuous activity that refines technical aspects. The project proponents conduct detailed studies incorporating all the components and aspects of the project. During the feasibility study stage project boundaries are finalized, although these may be further modified after the feasibility studies are completed, if necessary, during the detailed technical design stage. Technical aspects in the projects are finalized and preparations for detailed technical designs are made. In parallel to the feasibility studies and preparation of technical designs, social assessment studies are completed where necessary. To address resettlement and other social issues during the feasibility stage of project preparation, detailed census and socioeconomic surveys are completed and inventory of affected assets prepared as an essential element of resettlement preparation. Where it is required, additional information on minority groups is collected. Consultation with stakeholders is carried out throughout the resettlement preparation stage. Based on detailed surveys and field investigations, necessary documents such as the Resettlement Plan are prepared and finalized. Government approval for projects is obtained upon completion of the feasibility studies, after which detailed engineering designs and bidding documents are prepared.

Implementation

The final stage of the project cycle is implementation. Successful implementation depends upon timely disbursement of resources, efficient institutions and human resources, adequate consultation with and participation of the community in the project process and timely delivery of entitlements, plus adequate monitoring of activities.

6.2. Main elements of the resettlement planning

A resettlement plan has to be developed for each specific case. The documents will be developed according to the significance and timing of resettlement impacts. The contents and level of detail vary with circumstances. However, they necessarily cover the following essential elements.

- Statement of resettlement objectives and strategy
- Organizational responsibilities
- Community participation and disclosure arrangements
- Findings of the socioeconomic survey and social and gender analysis
- Legal framework, including eligibility criteria and an entitlement matrix
- Mechanisms for resolution of conflicts and appeals procedures
- Identification of alternative sites and selection
- Site hazard assessment and mitigation measures
- Inventory, valuation of, and compensation for, lost assets
- Description and full design of housing solutions and urban layout and infrastructure
- Social services coverage
- Landownership, tenure, acquisition, and transfer
- Resettlement impacts on livelihood and compensation measures
- Environmental protection and management
- Cross-cutting issues; gender, human rights
- Detailed cost estimate with budget provisions
- Implementation schedule, showing how activities will be scheduled with time-bound actions
- Monitoring and evaluation actions

In justifiable cases (e.g. the anticipated pilot project to relocate Dubique community in Grand Bay), a short resettlement plan can be developed. It will cover the same issues as that of a full resettlement plan, as relevant, but in less detail. However, the short resettlement plan must ensure that adequate compensation and resettling arrangements are planned and budgeted.

7. Phases and stages of the strategy

As previously stated, the strategy encompasses a long-term development process. However, considering the complexity of undertaking an island-wide resettlement process at once, the strategy is divided into two main phases, first focusing on the response to the resettlement of those affected by TS Erika, and secondly addressing the resettlement process in the rest of the country. These two phases are summarized as follows:

Phase 1

The initial phase is medium-term (2.5 years), to deliver permanent housing solutions to people affected by TS Erika who cannot continue living in the same location. Prioritized Special Disaster Areas resettlement needs will be initially worked, such as, Petit Savanne, Dubique and others with anticipated long-term IDPs. In this phase, a short resettlement project can be developed in order to address the most urgent housing needs, take advantage or the opportunities of donations close at hand, and also serve as a pilot project for the other resettlement projects to be undertaken. This phase is roughly broken down into the following stages:

Stage	Approx. timeframe	Summary description	Goals
1	September – October 2015	Initial assessments, emergency shelter response, strategic planning and policy decision-making	Damages, losses and needs assessment – broad scope of the resettlement plan Preliminary identification and assessment of land available for resettlement Strategy and policy drafting - main technical and policy related guidelines for the resettlement design and implementation Emergency shelter supply & transitional shelter planning and kick off Pilot project identification and planning
2	November 2015 – February 2016	Global Programming	Site assessments Resettlement program draft – scope, locations, overall budget Cost accountability scheme(s) and other financial issues definition and draft Project identification Resettlement design guidelines Social assessments – negotiation with resettling communities Transitional shelter functioning Pilot project design implementation start
3	March – July 2016	Resettlement project planning	Project pre-feasibility, feasibility and detailed designs Social development plans – mutual accountability agreements with resettling communities Pilot project completion and delivery
4	August – September 2016	Implementation start	Bidding processes Construction works start Social development plan implementation
5	October 2016 – March 2017 (estimated duration)	Projects implementation	Resettlement physical outputs Social work outputs Property transfer implementation

Phase 1 Stages. Timeframe, description and goals

Phase 2

A long-term (5 or more years) phase to resettle communities –totally or partially- that remain in high disaster-prone areas and vulnerable to future events. Actions towards this goal can –and should- be undertaken in an earlier stage (years 1 & 2), such as, an island-wide hazard assessment, social and economic assessment of the population subject to relocation; and drafting of legal and financial policies to address involuntary resettlement projects, among others. However, this second phase implementation should feed and benefit from the accumulated experiences in the Phase 1 implementation.

Annex 1: Summary framework of the resettlement components

Component / Main elements	Objective	Key aspects to be addressed	Possible constraints				
Land and environmenta	Land and environmental aspects						
Land allocation	Assess the overall capacity (no. households) of all potential sites for the resettlement program, and decide which ones will be prioritized.	Finish site surveys Assess if the sites are occupied, have use related constraints, and/or have a better potential for uses other than residential (e.g. agriculture). Estimation of the total housing unit capacity	 Availability of State land – price of private land to be purchased. Need to determine to what extent private land is going to be needed. Difficulties to access private sites for surveys (need to start the acquisition process to obtain access) Reduction of useable land for residential use, due to environmental restrictions Allocation of agriculture and/or other productive uses should be advisable in some cases (once it is decided which community/ies are resettling there), but this will reduce its housing capacity. 				
Environmental / hazard assessment	Ensure the sites are low risk / hazard exposed and/or assess feasible mitigation measures to encompass the resettlement project	Topography Landslide susceptibility / exposure Floods / flash-floods exposure Seismic hazard (if possible) Environmental impact on natural resources –vegetation, water sources, etc., inside and outside the site-, and in nearby communities	Lack of seismic faults map Existing hazard maps in a broad scale Modeling required in the most sensitive cases (more time and higher costs)				

Component / Main elements	Objective	Key aspects to be addressed	Possible constraints
Feasibility for urban development	Assess all aspects that may affect the urban design and the development construction costs, to be considered in the project design and budgeting	Geotechnical aspects (implications on urban design and streets and foundation costs) Soil's absorption capacity (individual sanitation systems feasibility or costs for a collective sewage system) Water and electricity supply (possible additional costs to extend lines)	Advisable to run laboratory tests in most cases (existing capacities in country?)
Legal and financial aspe	ects		
Criteria for resettlement	Prevent people from returning to high-hazard houses and/or rebuilding them Reinforce the long-term and development vision of the resettlement process Try to keep the communities as such, (same name, etc.) and avoid fragmenting them to the largest possible extent	Set up and officially approve the main rules for mandatory and enforceable resettlement Define a range of possible new uses for the land, from which the resettled community could benefit to some degree (e.g. productive) Declare Petit Savanne and Dubique areas unsuitable for human settlement	Vague boundaries of the communities Not all Petite Savanne has been affected and remaining houses are more valuable Need of thorough environmental assessment to avoid future legal implications
Land tenure and property transfer schemes	Ensure property transfer of the new settlements to resettled families (residential lots) and for public institutions (public spaces) Ensure public domain of the previous locations	Define (and opportunely, apply) legislation amendments and/or legal mechanisms to declare the resettled communities previous site state property. Definition of the conditions for the property in the new settlement (possible restrictions on transferring and/or mortgaging, etc.) Decision on adopting a bail-out / back-up mechanism for mortgaged houses in the previous locations.	Vague boundaries of the communities Mortgaged (and uninsured) houses in the resettled communities Risk of high cost of mortgages bail-out or back-up

Component / Main elements	Objective	Key aspects to be addressed	Possible constraints
Budget definition	Assess as accurately as possible the costs of the resettlement process, in order to define budget allocation and external fundraising	Set up standards for housing and urban design and define average costs Develop a broad budget for the resettlement program (first, for TS Erika affected communities; whenever full assessment is available, island-wide)	Vague boundaries of the communities Mortgaged (and uninsured) houses in the resettled communities Risk of high cost of mortgages bail-out or back-up
Construction cost accountability	Adopt mutual accountability with the communities / families for the resettlement costs (urban works, housing construction)	Definition of a financial scheme for the resettlement program (cases in which houses/land will be donated, subsidized or financed –repaid- Define criteria for either case	Different precedents in the country may lead to public misunderstanding Using data on poverty exclusively to inform the cost accountability policy could lead to people mistakenly perceiving the resettlement program (based on disaster impact and hazard exposure) as a social housing program. Exposure to natural hazards has to be the main reason for public housing support within the resettlement program. Donated houses might not fit all the resettled families' standards and expectations Donors / financial agencies conditions may conflict with political decisions or affect the resettlement program schedule If criteria are defined (and made public) before the economic assessment of beneficiaries, they could bias people's responses to surveys (e.g. the lower the income stated, the higher the donation given)
Social and cultural aspe	cts		
Location in relation to the resettled communities' previous location	Avoid negative implications for people's livelihoods and/or cultural customs	Assess previous livelihood and cultural customs - broad social impact of the resettlement on the community (whenever necessary) Assess and include in the project design complementary measures for livelihood alternatives (e.g. if they won't be able to continue to work on their previously owned farms, land for productive uses should also be provided within the resettlement project)	Low availability of land could negatively affect the willingness to be resettled and/or complicate the livelihood support approach Difficulty to address early on the livelihood issue with the communities in a balanced way. Some people are reluctant to participate in the resettlement because they think it is too long a process, and are afraid that it will affect their livelihood. It is necessary to start engaging the communities and informing them of what the final outcome is going to be, but the livelihood support for the resettlement is yet to be defined.

Component / Main elements	Objective	Key aspects to be addressed	Possible constraints
Social integration within the new environment	Ensure that the new settlement will properly integrate within its social environment	 (whenever necessary) Assess the social organization and customs of the community in (or by) which the new settlement will be done, and their position and concerns about it Prioritize land that does not create conflict between the resettling community and the host community Draft mutual accountability agreements between previous and new community members, inclusive of rules of coexistence with which all agree to comply Assess the necessary complementary social work for a better integration of the resettled community within their new environment 	Even if the position of the "host community" is against the resettlement, it is very likely to happen; in those cases, it will be necessary to elicit higher involvement from that community. Social changes and integration always take time; a "problem control scheme" has to be drafted to anticipate possible measures
Social organization	(when a new community integrates families from different communities) Ensure the new settlement has a community- based organization and rules of coexistence with which all agree to comply	Assess prioritized communities organization backgrounds and possible controversial matters between them Draft a program for community-based organization strengthening	More complex social integration and organization can be anticipated when people have marked different cultural backgrounds and incomes Lack of previous social links between groups and different cultural customs hamper the organization; innovative approaches and a stronger and longer institutional leadership and mentoring will be necessary
Community participation / Families contribution scheme(s)	Ensure that whichever contribution is required from the resettled communities / families in exchange for the house are properly and timely delivered	Define possibilities for in-kind contributions, and measure and appraise them with regard to the overall project value (land, construction, others) Draft operational schemes (how-where-when) to deliver contributions in either case	In-kind contributions in the construction works (labour) may be difficult to coordinate with private construction companies' schedules Different schemes would be necessary to fit with people's different capacities and/or availability to provide their contribution. Therefore, flexible options can be offered in equitable conditions/value, but it will complicate its management
(other) Cross-cutting aspects	Ensure gender equity in the resettling process, and specific needs of children, elderly and other vulnerable group's are considered and integrated.	Draft a Gender and Human Rights approach for the resettlement process, and specific guidelines applicable.	Cross-cutting issues, such as, gender equity and a human rights approach, are often superficially addressed, more to comply with donors' and/or national policies than to actually aim at specific goals; but avoiding this inappropriately broad approach should not mean that these issues overcome all other aspects either. A proper balance between cross-cutting issues and the main purpose of the resettlement program has to be achieved.

Component / Main elements	Objective	Key aspects to be addressed	Possible constraints			
Urban and housing design aspects						
Urban design standards and guidelines	Ensure all new settlements meet main common standards and guidelines, follow best practices for urban design; and integrate properly in the nearby urban environment	Define urban design minimum-maximum standards (e.g. plot sizes, reserve for institutional/recreational uses, roads/streets widths, parking needs, etc.) Best practices and guidelines compilation (wherever necessary) Assess the urban environment in which the new settlement is integrating and the relevant elements that should guide the settlement layout. Application of guidelines and standards to site layouts	Best practices and guidelines from other countries / disaster recoveries may not always apply in Dominica's context. Need to adapt them to national broad urban context and standards			
Land use and construction regulations	Ensure proper future urban and/or structural growth	Define inner land use zoning and regulations and building regulations for each settlement, within common guidelines	Broader physical planning is outside of the resettlement program. Lack of land use zoning in the surrounding area could hamper the settlement's sustainability if it develops inadequately.			
Housing guidelines and typologies	Ensure that the housing design in the new settlements meets people's needs	Lay down a range of possible housing solutions for the resettlement projects (bungalow, two-stories, apartment types), and applicable design guidelines and minimum standards for either case	Budget availability may not allow the standardized houses solutions to meet every families' needs (household members); in those cases, exceptions could be evaluated			
Construction standards	Ensure every house/building and urban infrastructure in the new settlements meet a minimum construction quality	Lay down a range of eligible construction solutions and standards to each case scenario (community housing background, cultural customs, land availability, etc.) Establish quality standards for roads/streets pavement and sidewalks, bridges, water systems, sewage, drainage systems, electrical and telecommunications grids, as well as for "soft infrastructure (parks, public facilities, etc.)	A too specific range of building construction solutions may exclude others not known at the moment that could meet the required quality standards; in this respect, although several examples can be provided, the definition of eligible construction solutions should focus more on the quality required (resistance, durability, comfort, etc.) rather than on specific material or construction systems.			
Public services and other aspects						
Social services	Ensure that the new settlements have access to Education and Health services	Assess the capacity of existing nearby facilities to respond to increased demands (whenever necessary) Assess the need for creating or expanding the facilities, human resources and/or new services (e.g. psychological support)	In some cases, although Education (secondary) and Health catchment may not vary, an increased demand may arise due to proximity to the facilities; in this respect, augmentative calculations would be advisable			

Component / Main elements	Objective	Key aspects to be addressed	Possible constraints
Waste management	Ensure that solid urban waste is properly managed	Assess the capacity of existing waste services to respond to increased demands (whenever necessary) assess the needs to extend the service to the new settlement	In resettlements not close to an existing community, extending the waste collection service could mean a high investment and/or increase or operational costs. In those cases, an inside waste management system could be advisable along with occasional selective garbage collection
Public safety	Provide best possible security conditions to the new settlement	Define and apply sites' accesses design guidelines to prevent criminal actions from outsiders Assess Police's capacities to take care of the resettled population safety; and whenever necessary advocate for capacities' increase	People from the surroundings might see it the other way around and feel the new settlement as a threat for their safety; therefore, excessively restricting access to the settlement could result in "ghettoizing" the community
Emergency access and evacuation	Ensure emergency vehicle access to the site and houses; as well as an appropriate evacuation plan in case of an emergency	Assess and incorporate fire truck access and maneuverability in the urban design guidelines Incorporate emergency management aspects in the settlements design and costs, such as, evacuation routes, safety signaling, location of hydrants, etc.	Access and evacuation depend not only on the site design, but on the conditions of the surroundings, which may not be appropriate and difficult (or too expensive) to solve.
Rubble clearance	Remove and dispose rubble from previous settlements and from new settlements construction works	Assess costs for removal and disposal Assess potential dumps and/or rubble reuse possibilities	In some cases the rubble volume can be large, exceeding nearby dump capacity thus resulting in higher transportation costs. Reusing rubble in the settlement's construction will reduce the load of rubble removal and disposal
Institutional aspects			
Transitional shelter management coordination and responsibilities	Ensure that IDPs have a transitional dwelling that meets minimal conditions until permanent houses are delivered	Establish and implement transitional shelter options and draft a framework for extended support Define each institution responsibilities for the timeframe Manage and/or monitor the habitation conditions of the IDPs	Unclear institutional scopes/mandates may lead to gaps in the necessary support to the transitional shelter program
Settlements' maintenance	Establish clear institutional accountability for the settlements' ordinary operation and maintenance	Define each institution's competencies (e.g. waste management, road maintenance, etc.)	Some public institutions could perceive the attention to the new settlements as a burden that exceeds their current capacities; budgetary needs should be assessed along with the responsibility distribution

Component / Main elements	Objective	Key aspects to be addressed	Possible constraints
Construction permits and supervision	Ensure that the resettlement implementation complies by the legal procedures and authorizations	Assess the mandatory procedures, permits and construction codes for the physical development of the settlement, and encompass them in the timeline and budget (if applicable)	Lack of official codes and/or permit requirements may lead to decisions that are not diligent; in that case, additional requirements should be imposed for the resettlement projects