DOMINICA
Lessons Learned from Hurricane Maria

As part of the H2H Network, ACAPS is providing analytical products to support decision-making in Dominica following Hurricane Maria response. The lessons learned outlined in this document are a result of discussions held during sector coordination meetings working in the Hurricane Maria response in Dominica, between December 2017 and January 2018.

The examination of best practices and lessons learned from humanitarian efforts offer valuable insight for making improvements on the execution of future efforts. The goal of this exercise is to improve the performance of actors working in the early recovery from Hurricane Maria, and encouraging positive action by decision makers in preparedness, recovery and resilience.

For all ACAPS products on Hurricanes Irma and Maria, please click here.

Overview

Scope and scale

On 18 September Hurricane Maria made landfall on the island with maximum sustained winds of nearly 160 miles per hour. More than 90% of roofs were damaged or destroyed and almost 63,000 people, around 90% of the population, were directly affected and had urgent needs.

Most of the damages sustained were in the housing sector (38%), followed by transport (20%) and education (8%). The greatest losses were sustained in the agriculture sector (32%), followed by the tourism (19%) and transport sector (14%).

Hurricane Maria resulted in estimated damages USD 931 million and losses USD 380 million and estimated recovery needs are almost USD 1.4 billion.

Key priorities needs

- Water
- Food
- Electricity
- Livelihood (agricultural) assistance
- Rehabilitation of damaged housing and building repair materials
- Subsidised sales of necessities
- Education
- Rehabilitation of health centres

Response capacity

The response was led by the Dominica government with the support of CDEMA, the regional coordination mechanism, as well as the humanitarian community and UN agencies. The government of Dominica set up an Emergency Operation Centre (EOC), which carried out weekly meetings with national response committees and international organizations.

As of December 2017, humanitarian actors started transitioning from relief to recovery-oriented activities and coordination mechanisms are reflecting this shift. The Ministry of Planning took over multi-sector coordination from the Emergency Operations Centre.

At the peak of the response, in total, eight UN agencies, 17 NGOs, and the IFRC were present in Dominica providing humanitarian assistance. There is no permanent presence of UN agencies or INGOs on Dominica, even though they have participated in previous hurricane responses, usually under the leadership of the Red Cross.

Key Lessons Learned

- UN agencies, NGOs, and government employees shared the same workspace for the first four months of the response. This helped collaboration and information sharing as well as reduced communication problems and facilitated the quick resolution of issues.
- Sector-specific and cross-sector coordination meetings allowed agencies and government actors to present and update their activities, share information that reduced delays, increased collaboration between actors, and fostered joint projects and common problem solving.
- The lack of reliable baseline data greatly hampered efforts and delayed carrying out assessments and distributions properly during the response.
- Better communication and collaboration between UN agencies, actors, and CDEMA was needed, to avoid considerable delays in assessments and overlap in activities.
- Appropriate and context-specific communication mechanisms need to be tailored in order to ensure two-way communication with affected communities, taking vulnerable and at-risk communities in consideration.
- Local technical staff were overstretched and exhausted. Agencies are encouraged to build up their technical surge capacity in preparation of an emergency.
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**All Sectors**

- **The UN agencies, various NGOs, as well as government employees shared the same workspace for the first four months of the response, in the Fort Young Hotel.** This included the emergency response teams, sector leads, information managers and admin staff. Sharing the same physical space created a "response hub", where a majority of the actors were present, and a central information-sharing centre originated. This greatly aided collaboration and sharing of information between agencies. It reduced communication problems and helped facilitate the quick resolution of issues and coordination of certain activities.

- Waves of staff are common in humanitarian response settings, and the **high turnover of staff** during this response hampered, to a certain degree, the continuity of projects. Although development and humanitarian agencies are used to working with different contract-length mechanisms, staff ideally are placed in posts with sufficient time to create relationships with key counterparts. Appropriate handovers should also be ensured.

- The **lack of reliable baseline data** during the response greatly hampered efforts and delayed carrying out assessments and distributions properly. Many of the government offices and computers were compromised due to the hurricane, resulting in the loss of valuable data. In many instances the remaining data was incomplete or outdated. Agencies should work towards **improving baseline data and proper management of information/data**, and encourage actors to collaborate through appropriate information management tools. National agencies should collect and make available datasets on settlements, villages, communities, schools, health facilities, etc., ensuring these are properly organised, presented, and stored. Following recommendations, government agencies have started **finalising and approving new baseline data** (e.g., local governments and community boundaries), which will be key in planning and recovery.

- **Sector-specific and Inter-Sector coordination meetings** proved a good opportunity for different agencies and government actors to present and update their activities. This information sharing greatly reduced delays, increased collaboration between actors, and fostered joint projects and common problem solving. Nevertheless, local agencies are encouraged to identify focal points that can regularly attend these meetings. **The absence of some key actors** in coordination meetings meant that a key partner in response activities was missing. Ministries and agencies are encouraged to identify focal points for continued collaboration and cooperation with other actors, in order to collectively decide on priorities and identify bottlenecks.

- **Disaster Risk Management policies need to be improved and technical capacities built within the Office of Disaster Management in order to enhance preparedness for disaster response.** Even though a number of preparedness guidelines exist, all relevant agencies and ministries, NGOs, and other actors should ensure that staff are given access to and properly trained in emergency preparation and planning, with necessary tools, systems, and technical capacities, as well as carrying out practical exercises.

- More attention needs to be placed on the **proper identification and targeting of vulnerable groups**, paying particular attention to the protection of women, children and adolescents. The sectors need to ensure that their assessment and analysis processes identify vulnerable groups.

- **Appropriate and context-specific communication mechanisms** need to be tailored to fulfil the needs of affected communities, in particular vulnerable groups, and make sure that they are reached. Ground Truth Solutions carried out two perception surveys that can guide recommendations to help ensure that vulnerable communities are reached. The CDAC Network is also working in Dominica in improving the quality of the response by identifying the most appropriate two-way dialogue with the affected communities.

- The visit by UN Secretary General Antonio Guterres, as well as having the Donor Conference during the response, allowed for a **high visibility of the emergency** and highlighted the need for additional funding.

- Dominica Prime Minister Roosevelt Skerrit was **highly involved in the response and decision-making**. His engagement and openness to climate resilience has had positive effects in encouraging Dominicans to build back better and increase preparedness for future weather events. Additionally, the daily press briefings conducted by the government to communicate to the affected community and actors (both in Dominica and abroad) about the response was seen as helpful.

- Given that communication and collaboration did not come easily with CDEMA, the **signing of a Memorandum of Understanding (MoU) with Caribbean Disaster Emergency Management Agency (CDEMA) will pave the way to better and more effective collaboration and coordination** between international agencies and CDEMA. Mechanisms should be put in place in order to ensure that the Memorandum of Understanding (MoU) is applied and respected.

- **The small geographic scope of the emergency allowed for a collaborative environment between experts, agencies and with the local community. Staff worked together with a spirit of collaboration, which made coordination and management of programmes easier.** Although having a limited number of actors and implementing
partners can sometimes prove challenging as resources (both human and financial) can be scarce, it allowed for easy coordination between government and UN actors.

- The fact that the working language in Dominica is English made administrative work, recruitment of staff, and communication within agencies and with the affected community much easier. Language barriers that commonly exist with affected populations were avoided.

- International organisations in Dominica found local staff with very high technical capacities, as well as high-quality deployed staff. All agencies were also keen on committing themselves to the New Ways of Working. Nevertheless, local staff clearly became overstretched and exhausted. Government agencies are encouraged to continue building on their staff, ensuring they have enough surge capacity for a humanitarian emergency. Additional capacity-building mechanisms could also benefit local NGOs.

- The coordination mechanism and ways of working between UN leadership also allowed for constant and meaningful access and engagement to top decision makers in Dominica. Government officials were easy to access and engaged, open to suggestions, and willing to accept support and contributions. Nevertheless, it is important for agencies to design, and when appropriate, apply simplified operational procedures to avoid complex or time-consuming bureaucracy during an emergency response.

### Cash Transfers

- Although in the context of Dominica it appeared early on that cash was the appropriate modality, the decision whether or not to embark on this requires reviewing existing infrastructures in order to ensure that cash programmes are viable and appropriate. The findings from the World Bank Post Disaster Needs Assessment and the existing Social Protections Programs were key in deciding that CASH was the way to go. There’s only a limited number of other cases in the world (e.g., Ecuador, Fiji, Philippines) where cash transfers have been led by the government, where international agencies support through technical assistance.

- Appropriate collaboration and coordination between agencies supporting the cash transfers (government, UNDP, UNICEF, WFP and Red Cross) has been key in avoiding duplication of work. A Cash Working Group was formed, and coordination meetings were held at the beginning of the response in order to share information and divide tasks. In the case of Dominica, complementarity between agencies, joint programming, and innovative problem solving enabled agencies to avoid overlaps.

- The lack of reliable or outdated baseline data greatly hampered the speed at which the vulnerability assessments could take place. The government is encouraged build their capacities on assessment tools and mechanisms in order to quickly and effectively gather information about the population, avoiding existing assumptions, so the most vulnerable people can be quickly identified and reached.

- Because most large international organisations do not have a permanent presence in Dominica (most commonly a regional presence), there was a need to quickly analyse and evaluate the existing Public Assistance Programs and build upon them to establish cash transfers. Government agencies are encouraged to establish appropriate preparedness mechanisms within the programmes for humanitarian emergencies, as well as having appropriate briefing materials that explain in detail how these work.

- Delays were caused as agencies waited to receive the results from CDEMA Needs Assessment. As the results were not properly distributed, agencies were left waiting for vital data to design and implement cash transfer programs. Further steps need to be put in place in order to ensure proper collaboration mechanisms with CDEMA, as well as increase the “cash capacity” within CDEMA.

- The Ministry of Social Services, Family and Gender Affairs-Social Welfare Division has strong, yet limited technical capacity. Given the propensity of Dominica to weather events, the Ministry should invest in building a strong surge capacity for humanitarian emergencies, as well as strengthening preparedness within the Social Protection System.

- The small geographical location made communication with communities easier. Through a number of assessments and experiences in the beginning of the response, the direct and good communication with Village Councils was identified as highly beneficial, as the messages would be quickly conveyed to the population. Nevertheless, agencies need to make sure that messages are well described and interpreted in order to avoid confusion or misinformation. This point is further supported by the results of the Food Distribution Report and Ground Truth Solutions’ perception surveys, which show that word of mouth works well in Dominica.

- Despite the presence of feedback mechanisms (hotline and consultations with beneficiaries), no formal protocol is in place for the use of feedback or how to respond to complaints. A better and more robust centralisation of complaints and coordination on how to attend to these should be made.

As the Joint Emergency Cash Transfers (JCET) in Dominica are still in the process of carrying out disbursements, the points above represent Lessons Learned acquired in the
set-up to the JECT. The results of the JECT, and Lessons Learned from the whole cycle of the program will be reviewed once they have finalised.

### Coordination

- There was a **high level of collaboration and coordination between sectors**. This was particularly clear during the Post Disaster Needs Assessment process: in the case of the Hurricane Maria response the PDNA was done at an earlier stage than in other similar hurricane responses, and although strained capacities in country it proved to be extremely useful for the connection between emergency recovery phases. Better planning and appropriate placement of resources should be reviewed in order to avoid additional stress in the future.

- The dynamics created by the CMU allowed for a **pragmatic approach to problem solving** that ensured that issues and bottlenecks were resolved quickly and effectively, by agreeing which agency took the responsibility to address problems. Agencies were sharing information and flagging problems through OCHA to UNDP, and these messages were conveyed quickly and effectively to the appropriate focal point in the government in order for follow-up.

- By request of the Government, a UN-wide Crisis Management Unit (CMU) was created, led by a senior UNDP official and composed of other UNDP and OCHA personnel. The CMU was able to effectively support the implementation of the New Way of Working (NWOW), an example of humanitarian and development actors working side-by-side and collaborating on collective outcomes, through an emergency response while continually planning for early recovery. The CMU was able to ensure that emergency sectors were working with multi-sector and early recovery approaches. Nevertheless, the creation of the CMU should have undergone a more thorough validation process. Staff should be briefed before arrival in country, and hold clear terms of reference, agreed upon accountabilities, and lines of management.

- The CMU allowed for a **coordination mechanism tailored to the needs of Dominica**. Having a UNDP senior official meant there was an interlocutor with high levels in the government and paving the way to early recovery-oriented interventions. OCHA, on the other hand, was facilitating the humanitarian coordination between sectors, focusing on the interventions in the field with the assistance an early recovery focal point.

- **Appropriate and simplified processes and procedures** should be put in place by government agencies in order to effectively process, evaluate, and approve proposals submitted by international agencies. Considerable time was dedicated to following up and tracking approval processes.

- Initially the CMU was meant to physically sit with the ministries, but it was later decided that OCHA would remain with the other humanitarian agencies in the Fort Young hotel. **This greatly benefitted the coordination of activities and sharing of information**, as well as ensuring that there was a presence both with the government and with key actors of the response.

- **Communication with the Caribbean Disaster Emergency Management Agency (CDEMA) should be improved** in preparation for a next emergency. Given the similarities in the coordination mandates of CDEMA and OCHA, future collaborations between the two agencies should consider the creation of a joint coordination cell or strategic committee, in order to discuss ways of working and better coordinate emergency response. Finding ways to work together, share information, and prioritise collectively will allow for a better level of coordination and avoid overlaps. Since Hurricane Maria, CDEMA and OCHA have signed an MoU, which will enhance collaboration and cooperation between both agencies.

- **Duration, location, and purpose of Emergency Operations Centre (EOC) meetings** need to be clarified and effective. Meetings should be convened with key strategic and operational actors and clear follow-up on action points. Time should be managed carefully, particularly in early stages of the response, as capacities are usually stretched.

- **Collaboration on assessments**, as well as sharing of information, needs to be improved with CDEMA and national and international actors. Appropriate mechanisms should be developed to ensure that the recently signed MoU between CDEMA and OCHA is implemented. This would avoid information sharing problems in the future, and ensure that assessments be planned in collaboration with key actors, and its results disseminated quickly.

- There was a **high turnover of leadership positions** in a number of international agencies, which in some cases hampered the level of continuity and connections made throughout the response. Having a **full time WASH Coordinator** – the only sector that did - meant that there was a designated person dedicated solely to coordination of actors and activities. The coordinator was not ‘double hatting’, thereby allowing for more time to prepare, to connect people, make linkages, prepare for coordination meetings, better explore who was doing what, and identify issues and bottlenecks. The coordinator also made sure that information was compiled and shared. Additionally, time allowed for the coordinator to set up and manage a
beneficiary feedback mechanism. This was helpful in addressing overlaps and underserved settlements by WASH actors.

**Education and Child Protection**

- The strong technical capacity that flew in and resources of agencies that arrived in the country after the Hurricane helped speed up the response and sharing of information. Further efforts for the capacity building of local staff are encouraged.

- Education and Protection actors were able to collaborate and together implement pragmatic and integrated approaches to solving problems and reducing bottlenecks. Clarity in the division of tasks, roles and activities was clearly distributed between the sectors from the beginning and therefore avoided overlap and disagreements. Specific tailored approaches were also implemented in carrying out activities, such as using Child Friendly Spaces in order to promote the idea of therapeutic play.

- There was an effective coordination between the Ministry of Education, UNICEF and international NGOs, with vital support from local NGOs for implementation. Additionally, thematic working groups for gender-based violence (GBV) and mental health and psychosocial support (MHPSS) were established in order to improve coordination within those sectors.

- Even though education and protection baseline data was not available in a timely manner, the data collected in the first three months after the hurricane has been very valuable for the monitoring and evaluation of education activities. Actors on the ground were able to identify this problem early on and once access to settlements was open, started assessing every school in the island.

- The provision of psychosocial support to community members and local social workers immediately after Hurricane Maria hit meant that these individuals were better prepared and equipped to offer these services to the affected community.

- A mapping of actors working with local governments needs to take place in order to ensure proper coordination and identification of actors working in education activities. This is key to ensure that gaps are addressed and to avoid overlap.

- Clear referral pathways are particularly important when dealing with Child Protection cases. Referral pathways that protect the interests and confidentiality of children. These have been developed by the Ministry of Social Services and Ministry of Education, but it is unclear at what degree they are used. Proper mechanisms should be put in place in order to ensure the pathways are communicated and implemented.

- It is vital for schools to be safe and accessible places for children, but humane living conditions are also needed for those left without shelter. Improved coordination and collaboration is needed between the ministries of Education, Social Services, and Housing, as well as international agencies, to identify transition plans of affected communities using schools as shelter. This would ensure that children stay out of school the least time possible.

- The lack of Education and Protection specific information management and assessment officers meant that the collection of data, processing of data and analysis of information was delayed. Additionally, appropriate monitoring and evaluation mechanisms should be put in place from the first day of activities.

- Volunteers were key to the success of the response as it plays a key role in a number of Education and Protection activities, like setting up Child Friendly Spaces and ‘Return to Happiness’ programmes. Volunteers also ensure community participation and engagement. Appropriate tools to measure the success and input of volunteering should be developed.

- The limited amount of implementing partners and protection services available in Dominica greatly limited the extent to which the Education and Protection sector could reach vulnerable populations and effectively reach those in need. It is recommended that local technical capacities be built through training or capacity building exercises.

- The capacities of the national education system, along with damages and needs need to be assessed in order to set realistic goals, like opening dates for schools and resumption of school activities.

**Food Security and Livelihood**

- Allowing for a certain level of adaptability and flexibility within the sector greatly benefited the collective problem solving, which in itself fostered teamwork and collaboration. The participation of agencies not traditionally part of the sectors was particularly helpful, as it allowed for a holistic view of the food security and agricultural needs.

- Agencies were able to tap into existing structures, like the Social Security Ministry, to have a direct connection with the communities. This allowed them to quickly react with blanket food distributions in the immediate aftermath of Hurricane Maria. This also helped alleviate the most pressing needs within a week of the Hurricane.
• It was very encouraging and beneficial for the sector to have strong participation and leadership from the Ministry of Planning. The fact that the same person was on-board from the beginning meant there was a level of commitment and continuity that allowed for the proper continuation and follow up on activities and bottlenecks.

• A more comprehensive and robust crisis management plan needs to be developed and enforced in order to enhance the resilience of the food security and agricultural sectors in Dominica against weather events like Hurricane Maria. The right time of activation needs to be identified in order for the necessary provisions to be put in place.

• Implementing and following food security and agriculture disaster risk reduction activities is crucial in Dominica in order to protect livelihoods from shocks, to make food production systems more resilient and capable of absorbing the impacts of future hurricanes. The lack of these programs and practices affect sectors that are particularly important for Dominica: in the agriculture, livestock, fisheries/aquaculture and forestry.

• The quality of questions and indicators within assessments needs to be ensured before undertaking them. Data collected through the initial assessments could not be mapped or processed, delaying the analysis of results and identification of needs. It is encouraged that actors use the appropriate information management tools to gather, process and analyse data.

• Proper collaboration and communication mechanisms need to be put in place between the government, Caribbean Disaster Emergency Management Agency (CDEMA) and international agencies in order to timely and comprehensive assessments.

Mental Health and Psychosocial Support & Gender Based Violence

• Psychosocial support provided by international agencies to local social workers was greatly appreciated and effective, as it meant that workers were able to assist the affected population sooner than expected. Nevertheless, there should be a greater presence of social workers, psychologists or behaviour change specialists in collection centres and affected populations to ensure vulnerable communities are reached.

• The establishment of the MHPSS/GBV Working Group and the attendance of both international and national agencies was helpful in the identification and coordination of activities. It provided a forum to raise issues and problems so collective solutions could be found.

• There was an effective collaboration of international and local NGOS to mobilise resources, as well as involve local organisations to expand the network. As evidenced by the positive impact of involving the Bureau of Gender Affairs in coordination meetings, it is vital to encourage and foster greater collaboration with government agencies.

• MHPSS and GBV actors were able to provide technical expertise and capacity building exercises and trainings tailored to the needs of the response to local staff. It was very positive to see considerable interest from local agencies to improve technical expertise and further capacity building is encouraged so the in-country capacity can be maintained. Additionally, innovative ways of engaging with local communities could consider training of the unemployed to get them involved in the sector.

• Communication with communities during emergencies needs to be tailored to different vulnerable groups in order to make sure that the messaging is received and understood. Particular care should be paid towards children, older people, youth/adolescents, young people, and persons with disabilities in collective centres etc.

• Clear communication is needed on availability, scheduling, and opening hours to make sure beneficiaries are able to access available MHPSS and GBV services. Partnership with different media or communication agencies is encouraged to ensure messaging is tailored to the context and needs. Community dialogues/meetings should also be explored to allow for greater targeting amongst high-risk groups.

• Single-session psychological debriefing, although well intentioned, goes against best practices and should be avoided. Psychological First Aid is an approach recommended by the WHO which should be promoted instead, along with the use of IASC best practice guidelines.

• Even though referral pathways and guidelines for GBV and MHPPSS interventions have been approved, the extent to which these are integrated and enforced is unclear. Local agencies are encouraged to ensure actors are informed and follow the referral pathways.

• Local police, the Ministry of Health and Ministry of Social Services should collaborate to develop a monitoring system in Dominica to enhance protection and ensure confidentiality and investigation of GBV cases.

• Local agencies need to make sure that they practice better data collection mechanisms and use specialised information management tools so different actors
can contribute and benefit. Additionally, the 4Ws Matrix of MHPSS & GBV actors that has been developed during the response should be updated and maintained by local actors.

- Even though there are clear Guidelines for Integrating Gender-Based Violence Interventions in Humanitarian Action, these were not known or implemented by local agencies. Agencies, both national and international, should ensure that staff are familiar and properly trained in applying the Guidelines to the response.

Information Management

- Despite a number of actors that suffered delays in identifying appropriate mechanisms to collect and share data, collaboration and cooperation on sharing information and data between a majority of the government agencies, UN agencies, and NGOs local and international actors was constant, improving the quality of the Information Management (IM) products.

- The use of the Distribution Tracking Sheet (Google spreadsheet) was useful for sharing information early into the response, as it meant that agencies were able to track, collaborate, and constantly update information about assessments and distribution. As the response became more complex, a better format needed to be identified to reduce data entry errors. A tool can be developed to easily integrate data, or a user interface can be developed to reduce data entry errors. Better guidelines are needed for all partners to introduce data. All data should be ‘integratable’ into ActivityInfo in order to be shared and used more widely.

- Local technical capacities in Geographical Information System (GIS) and IM capacities, particularly within the Ministry of Planning was a great asset, as both humanitarian and government agencies were able to work side by side on activities from the beginning of the response. It is encouraged to build upon current GIS and IM capacity within the Ministry of Planning, and ensure capacity building in other Ministries.

- Cross-sectoral information management was very difficult as each Ministry handles their sector-specific data in different geographic zones, i.e.: Water Areas do not correspond to the Agriculture Areas, nor to Forestry Areas, etc. Finding a common, nation-wide delimitation of areas would greatly help the sharing of data across sectors as well as facilitating joint programming.

- IM collaboration with government agencies resulted in the creation of accurate baseline settlement data, and following a great commitment of time and efforts, within three months were able to agree on the formal identification of 163 settlements. This will greatly benefit local agencies in the future, as assistance will be able to be better organised and coordinated.

- Sectors delayed undertaking assessments as the findings from the Initial Damage Assessment undertaken by CDEMA were expected. However, the assessment was disseminated appropriately, limiting the extent to which agencies could quickly and adequately respond to the needs of the affected populations. A process for undertaking a multi-agency rapid assessment and sharing findings via an assessment registry should be agreed.

- The use of paper assessment forms delayed the processing of assessment results. It is recommended that future data collection be done with tablets. Training of enumerators should be part of preparedness measures.

- Technical issues, especially with printers, reduced the IM working group’s efficiency. The lack of sector-specific IM and assessment capacity led to two OCHA IMOs backstopping all sectors. Stretching capacities to this rate meant that the process of assessment data was delayed and affected the production of other IM material (i.e., infographics and maps). It would be best for all sectors to have their own IM capacity, ensuring that assessment experts design and carry out assessments while IMOs support the data entry, cleaning and manipulation of data.

- The lack of clear workflows and guidelines on IM materials meant there was a level of confusion between sign-offs and approvals. When collaborating with different offices, agencies and sectors, it is best to agree on standard operating procedures in order to avoid confusions and delays.

Shelter

- Agencies and organizations were able to deploy staff to the field in the early stages of the response, allowing for the identification and assessment of damaged buildings. This also enabled the rebuilding damaged buildings to start a month into the response. Nevertheless, despite the urgency of needs, more time should be devoted to understanding the context and analysing data to determine medium and long-term goals.

- Communication with the affected population and their involvement in the reconstruction process helped avoid misunderstandings around planned activities. Additionally, updated 3Ws enabled actors to inform beneficiaries of other agencies’ activities as well as their own. This helped gain the trust from beneficiaries and helped establish good relationships within communities.
• Before the technical working group was formed, collaborative brainstorming on quick fixes and urgent needs was done at the field level. With enough flexibility, actors were quick to identify what was working and what wasn’t working in order to adjust the response. A collaborative atmosphere meant that collective constraints were shared and solved.

• A number of time-consuming administrative tasks and “red tape” were undertaken before arrival to the country, expediting activities once the response started.

• Appropriate mechanisms need to be put in place in order to ensure that actors have liquidity to buy building material, as well as guaranteeing the proper stocking and storage of building material.

• Shelter actors were able to partner with NGOs, like Engineers without Borders and Electricians without Borders, to provide technical expertise. These technical experts were able to undertake a number of trainings (Building Damage Assessment and Housing Guidelines), reaching hundreds of workers and builders. Additionally, this allowed for the evaluation of the level of technical expertise of trainees, which was deemed to be very high.

• Shelter actors were properly informed on Dominica’s Guidance on Building Standards, information on insurance coverage, import waivers, etc. Nevertheless, realistic goals should be set as to the enforcement of building codes while ensuring that reconstruction lessens vulnerabilities to future risks.

• In the early stages of the response, there was little control over the distribution of some shelter relief items and, particularly tarpaulins, making it difficult to keep track of what areas had and had not received aid. Better coordination and logistics is needed to ensure the tracking of beneficiaries. Agencies are also encouraged to train beneficiaries on the installation of shelter relief items to ensure proper use.

• The delay in the inclusion of WASH facilities when assessing and budgeting for the reconstruction of homes caused several problems, as plans and budgets had to be reworked. Better and more formalized collaboration between shelter, early recovery and WASH is needed to ensure that new houses are built respecting both building and WASH standards. Consideration of physical accessibility in transitional shelters should also be made to ensure beneficiaries with special needs are adequately served with relevant modifications.

• Clearly defining each sector’s mandate and objectives is necessary to avoid overlap and confusion. Early recovery has undertaken tasks that usually fall under the purview of Shelter, like roofing and temporary facilities. This has caused some confusion at the time of assessments, reporting and funding, as there is some ambiguity as to the scope of work the Early Recovery Sector has undertaken vis-à-vis the Shelter Sector. The confusion is compounded by the fact that both sectors are led by the Ministry of Housing.

• Assessments need to ensure that vulnerable communities are effectively identified, and their needs are flagged. The targeting of vulnerable communities, particularly of “renters”, should be improved. Additionally, caution needs to be exercised if using outdated or incomplete beneficiary lists, as vulnerable populations can sometimes fall through the cracks. Imposing unrealistic building codes on the most vulnerable population sometimes excludes them from receiving help.

WASH

• In the early stages of the response, it was very valuable for agencies to quickly undertake fieldwork in order to identify that state of natural water resources and have an initial assessment on the extent of the damage. This allowed the sector to understand the scope of work and recovery to be done.

• The active use of ActivityInfo by the WASH agencies meant that information was being uploaded, updated and distributed using the same standards, indicators and logical framework on one single platform and made information about population, needs, and response available for all. Agencies reported that the use of ActivityInfo helped make more informed decisions. The support from OCHA IM in assisting setting up ActivityInfo and helping WASH agencies with IM issues and maps greatly helped in the proper use of information management.

• Good coordination between, and hard work of, DOWASCO, the Environmental Health Department of the Ministry of Health, and WASH actors resulted in repairs (quick fixes) of damaged water supply systems, water trucking to settlements connected to water supply systems that could not be immediately repaired, provision of water treatment facilities, distribution of water tanks at settlements and household level water treatment products. This made it possible for the affected population to regain access to safe drinking water within a reasonably short period of time.

• Dominica’s level and quality of services and capacities in WASH sector are much higher than many other countries where humanitarian actors usually operate. Given that beneficiaries are used to receiving high quality services, WASH partners should attempt to better understand Dominica’s institutional WASH capacities and tailor their approach to the context of Dominica, in order to quickly and appropriately adapt interventions.
• **Water trucking** to affected populations with damaged or destroyed water systems was a quick solution that proved very positive. It meant that households were able to quickly access safe drinking water. However, it is advisable to monitor and ensure access to trucked water to vulnerable groups such as older persons and persons with disabilities.

• In the early stages of the response, the **Health, Shelter and WASH sectors should have had closer collaboration**. The delay in receiving the CDEMA-led assessments delayed the WASH response and possibility of collaboration between these actors. For this reason, mechanisms should be put in place in order to ensure collaboration between international, regional and national agencies from the beginning of the response.

• Although the initial focus on drinking water was greatly effective in reaching affected communities to restore access to safe drinking water, **sanitation needs were only identified at a much later stage**. For future responses, all WASH needs need to be assessed early to avoid delays in the addressing sanitation needs (in this case). Consideration should also be made on how best to incorporate sanitation needs of vulnerable groups, especially on aspects of physical accessibility for older people and persons with disabilities.

• The **lack of WASH emergency standards or guidelines** hampered the speed at which some WASH actors could respond. Greater preparedness activities and exercises is encouraged in government agencies; these would potentially increase the population’s knowledge of WASH, and decrease the time in which agencies can respond and better adapt their interventions.

• **Greater capacity building in national environmental health teams** is needed in order to avoid shortage of technical expertise during a response.

• A number of instances were reported where beneficiaries were not able to properly use distributed WASH material. **Proper training, communication of clear instructions, provision of easy-to-read flyers/posters, and follow up can ensure that beneficiaries understand the proper use and maintenance of WASH material.**