



International Organization for Migration (IOM)  
The UN Migration Agency

Hurricane Matthew Response

# DISPLACEMENT TRACKING MATRIX (DTM) - HAITI

February 2017



The DTM activities in response to Hurricane Matthew are supported by the following donors:



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## CONTEXT

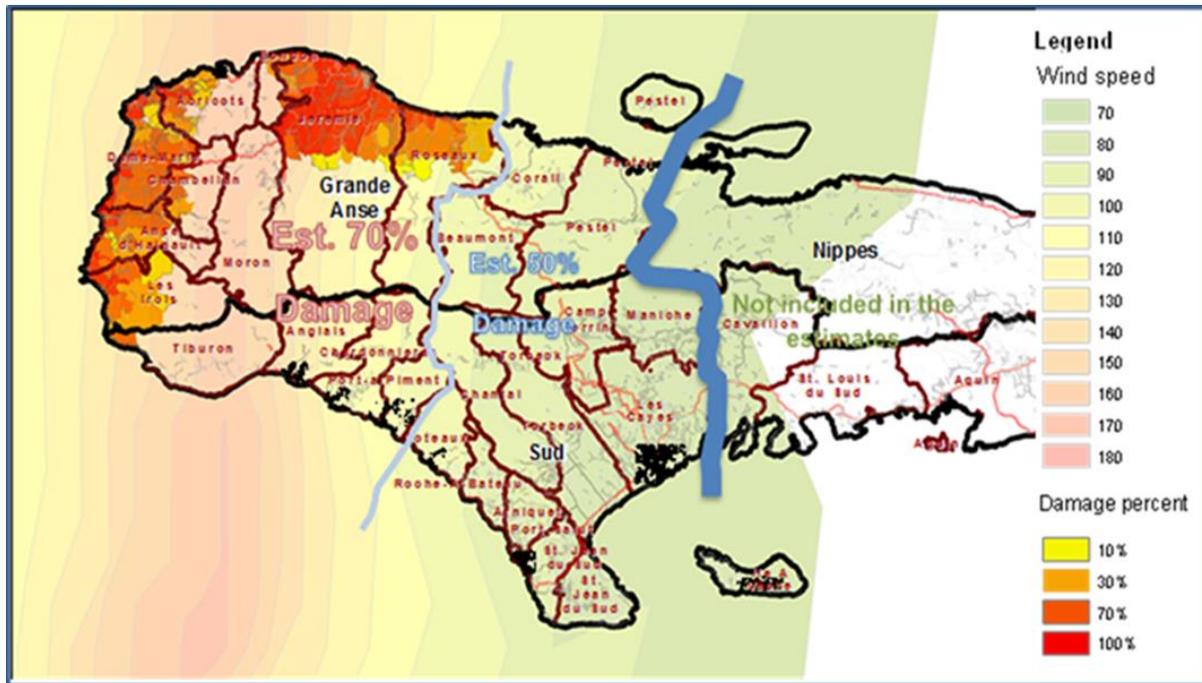
On the morning of Tuesday 4 October 2016, Hurricane Matthew made landfall in the Grand Anse and Southern Peninsula as a Category 4 hurricane, with heavy rain, strong winds and flooding. Winds up to 150 mph (240 km/h) barreled into southern coastal towns including Jeremie, Les Cayes, Port Salut, Dame Marie and Jacmel causing major damage to tin-roof homes, schools and other public buildings. Between 20 and 40 inches of rain were recorded across the southern Peninsula, which combined with important storm surge, caused major flooding across the entire region. As a result of the hurricane, many households have taken refuge in locally designated evacuation centers as well as other buildings which have served as evacuation centers.

Following a request from the Ministry of Interior (MICT) and due to the emergency of the situation and the multitude of needs, IOM tailored its Displacement Tracking Matrix process to respond to hurricane Matthew. The objective of the DTM is to acquire timely and accurate information on the displaced population living in the hurricane affected departments (Grand Anse, Sudand Nippes). Furthermore, DTM data aims to assist and advise both the Government of Haiti and humanitarian response actors in order to implement an effective recovery strategy. IOM uses various DTM tools to collect, analyze and disseminate information. The information produced by the DTM is shared with all relevant stakeholders through regular reports, factsheet, maps and tables and includes data on:

1. **Overall situation** and damage assessment of the areas affected by hurricane Matthew
2. **Shelter assessments and registration** of displaced population (inventory of all evacuation shelters in use and registration of their population)
3. **Mapping of affected areas with building inventory and status** (damaged, partially damaged, severely damaged, destroyed or not damaged)
4. **Demographics, vulnerabilities, and socio-economic profile** of the displaced populations linked to the inventoried buildings.
5. **Population movement** trends and tracking of the displacement
6. **Sectoral needs, gaps, and service provisions** to the displaced populations

# PRELIMINARY DAMAGE ASSESSMENT

The DTM incorporates damage assessments based on evaluations carried out by various expert partners in the field of cartography such as UNOSAT, Copernicus and NGA satellite data. UNOSAT has undertaken an analysis of the damage sustained by the departments most affected by the hurricane, using satellite images after the hurricane and comparing them with earlier images to determine the scope of the damage and estimate the number of damaged structures. The information was triangulated and punctually verified through the use of UAV imagery (drone) to ascertain the information produced by satellite. The shaded areas in the map below represent the damage percentage—which has been color coded from yellow (a 10% damage evaluation) to light orange (30% damage evaluation), bright orange (70% damage) and red (100% damage).



*Estimated damage assessment using UNOSAT evaluation and percentage of population in affected communes in Grand Anse and Sud (estimated 210,000 households of which 120,000 are affected)*

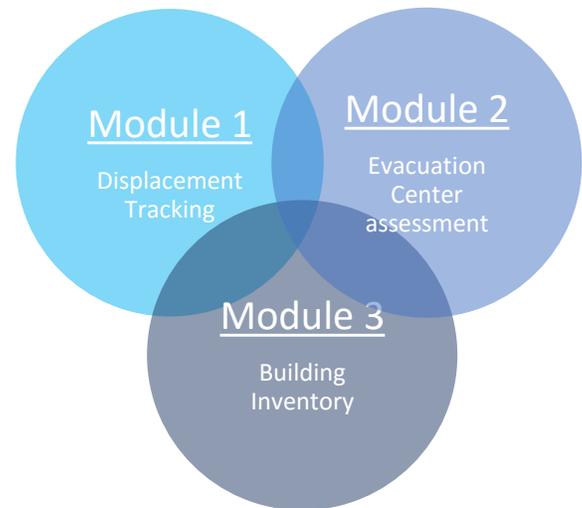
The DTM has also paired the aforementioned evaluations with the National Institute of Statistics (IHSI in French) national building inventory data, conducted in 2003. IHSI’s building inventory was carried out in geographical areas (census block units) used for censuses, surveys and data collection purposes, called Enumeration Section (SDE in French).

The current available data was extrapolated taking into account the wind speed during the passage of the hurricane to further elaborate the damage assessment. Areas that registered winds of 160 to 180 mph have been found to be areas with a maximum of damage (70% to 100 % of damage) while areas to have experienced 70 to 110 mph winds registered less damage (between 10 to 30% damage). Damage per SDE has also been estimated and it has been determined that the average damage level per SDE is 74%.

Based on IHSI’s population data from 2015, a total of 211,528 households reside in 175,634 buildings in 1,151 SDE units in the departments of Grande Anse and Sud (with an estimation of 1.2 households per building). Extrapolating the damages assessed to the estimated population, an estimated 124,866 households have been directly affected by damages sustained to the buildings where they are residing.

# METHODOLOGY

The DTM is carried out through three (3) **independent and simultaneous** modules, from the broadest image to the most precise, from the smallest geographical division – the “section communale” – to the locality/zones, to the evacuation centers assessment and registration – and to the building inventory and registration of the affected households in localities. All the activities carried out within this DTM are supported by damage analysis from existing satellite imagery (UNOSAT) which is complemented at the micro level by drone imagery undertaken by IOM teams and its partners. Using aerial images and geographical and satellite preliminary damage assessment, overlaid with official statistical information provided by Section d’ Enumeration (SDE), the DTM is implemented as follows:



## **1. Module 1: Displacement Tracking through Baseline Location and Area Profiling**

Baseline Area Profile is carried out in order to establish a database of IDPs and displacement patterns within the departments affected by the hurricane, using the smallest official geographical subdivision available in Haiti, the section communale. Following the baseline area profiling, detailed information by locality/neighborhood is collected. Information gathered in each section “communale” firstly and on each locality and neighborhood, secondly, includes estimations of affected population disaggregated by household living in homes and out of homes, as well as detailed information on building damages and evacuation centers. The information is collected through local key informants from the local government (including Assemblée de Section Communale (ASEC), Conseils d'Administration des Sections Communales (CASEC) and Mayors) and other local communal organizations. Displacement tracking and monitoring is carried out through interviews at bus stations where a standard sample of individuals traveling, voluntarily provided information on their trip/displacement.

## **2. Module 2: Evacuation Center/Site Assessment and Registration**

In-depth site assessments will be undertaken independently. Through field visits, observation, physical counts and key informant interviews, all evacuation centers identified before and after the hurricane and confirmed through Module 1, will be targeted for Evacuation Site Assessment. The DTM Evacuation Center/Site Assessment component contains a master list of information on the displaced population as well as additional information on multi-sectoral needs and services (Shelter, NFI, WASH, Food and Nutrition, Health, Education, etc.). In addition, information on sexual and gender-based violence (SGBV) and Counter Trafficking is collected. Simultaneously, systematic registration is carried out in evacuation centers and disaggregated information on population demographics, vulnerability needs, flow monitoring, and damage assessment of residences, etc. is obtained.

## **3. Module 3: Building Inventory and Household Registration in Locality/SDE**

Independently of the aforementioned modules, the registration in localities is carried out based on priority areas pre-identified by the GoH. The registration contains two (2) steps: 1) The building and plot inventory and cartography and 2) The household registration at SDEs level.

The building inventory consists of the cartography and listing of all buildings/housing the affected population. This step includes a basic damage assessment of each building/plot, as well as preliminary basic information on the household residing on the building/plot (aiming at identifying displacement within host communities).

In conjunction with the building/plot inventory, IOM teams, in collaboration with communal representatives of the Directorate of Civil Protection (DPC in French), conduct the individual emergency identification, registration and monitoring of affected households through face to face interviews. The information collected includes data relevant to all sectors of humanitarian assistance and as such, will flag urgent needs, improve geographical coverage by partners and will contain detailed information on each household (demographics, location, housing status and protection indicators).

# HIGHLIGHTS & CURRENT STATUS

## 1. Module 1

- Through key informant interviews, basic observations and bus stations surveys aimed at determining displacement patterns and trends, an estimated 58.1% of the interviewed displaced individuals have indicated the Ouest as their department of destination while 40.4% have indicated the departments of Grande Anse, Sud and Nippes as their destination.

## 2. Module 2

- A total of 711 evacuation shelters have been inventoried. Of these, 423 have been profiled and 79 have been registered by DTM teams.
- As of 14 February 2017, 47 evacuation shelters remain open hosting an estimated 7,015 persons (representing 1,564 households).
- Of the 47 shelters, 23 shelters have been registered by DTM teams and host a total of 4,596 individuals (representing 1,071 households). Of the total of individuals registered, 1,281 (27.9%) were identified as vulnerable.
- Of the 1,071 households, 66.1% of respondents indicated that their residence was completely destroyed by the hurricane while 26.1% reported that their residence was severely damaged and 7.8% did not sustain any damages to their residence.

## 3. Module 3

- A total of 46 SDEs have been inventoried in the communes of Dame Marie (32 SDEs) and Beaumont (14 SDEs).
- A total of 9,825 buildings have been inventoried housing 7,529 households (38,246 individuals).

# MODULE 1: POPULATION MOVEMENT TRENDS

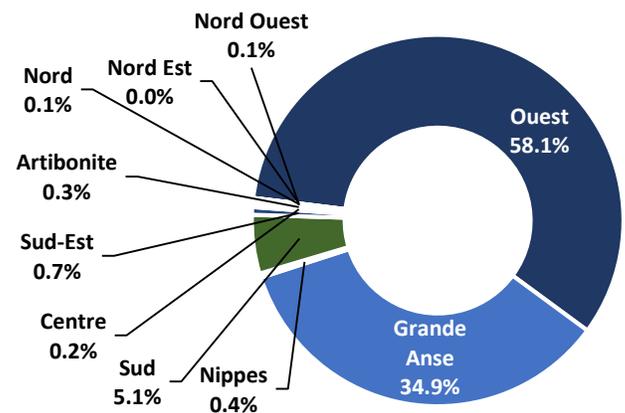
## DISPLACEMENT TRACKING

Primary information on displacement patterns and trends was collected through key informant interviews, observations as well as movement and displacement monitoring and tracking at bus stations in Grande Anse and Sud. These observations and interviews revealed that out of 4,972 individuals interviewed, a reported 2,891 have chosen the Ouest Department, particularly the metropolitan area as their destination. This represents a percentage of 58.1% of all movements monitored. In contrast, 40.4% of respondents (2,009 individuals) have indicated communes in the southern peninsula (Grande-Anse, Sud and Nippes) as their destination.

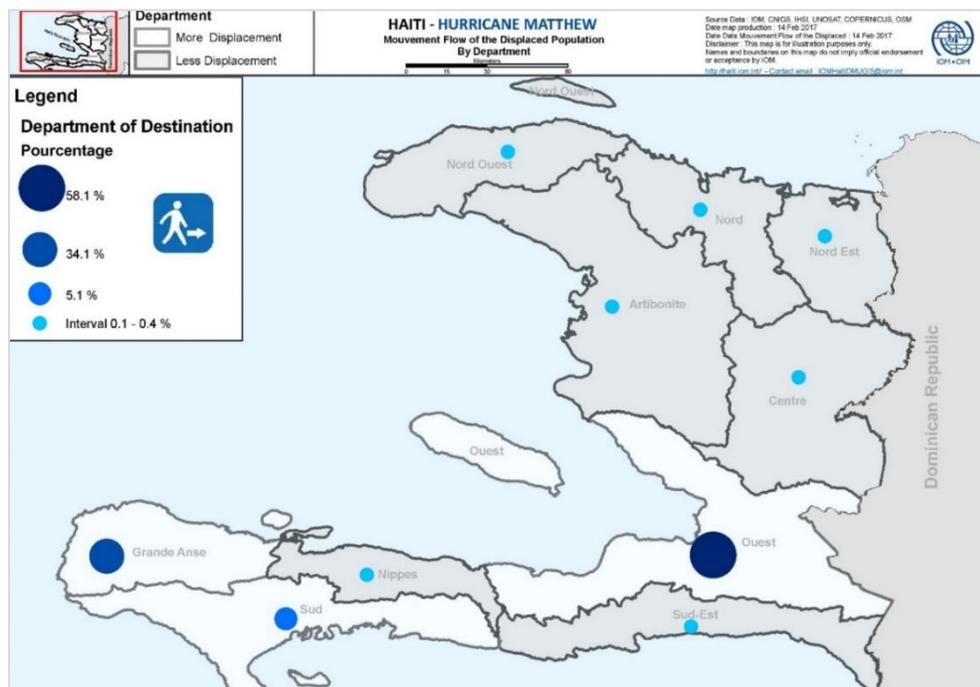
Table 1: Destination by Department

Department of Destination	Individuals	Percentage
Ouest	2,891	58.1%
Grande Anse	1,737	34.9%
Nippes	18	0.4%
Sud	254	5.1%
Sud-Est	33	0.7%
Centre	11	0.2%
Artibonite	17	0.3%
Nord Ouest	3	0.1%
Nord	7	0.1%
Nord Est	1	0.0%
<b>TOTAL INTERVIEWED</b>	<b>4,972</b>	

Graph 1: Destination by Department

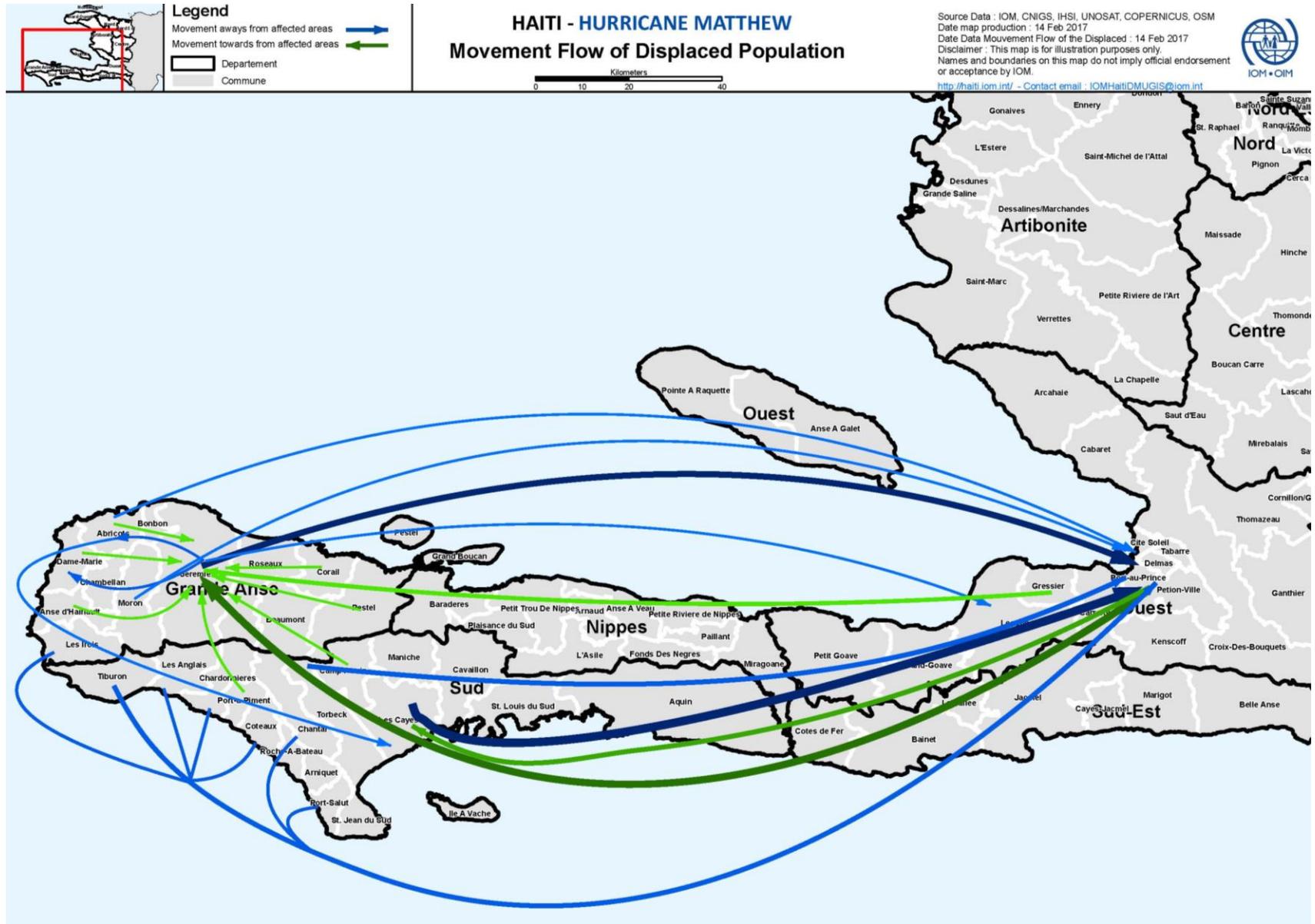


As reflected in the table above, this map highlights the movement trends among the individuals displaced by the hurricane. As such, the majority of the displaced population interviewed indicated that their destination was the Ouest department, particularly the metropolitan area.



### DISPLACEMENT TRACKING MAP

This map presents population movements trends (displacement and return) observed in the Grande Anse and Sud departments.



# MODULE 2: SHELTER PROFILING

## MAIN SHELTER PROFILING FINDINGS

Immediately following the hurricane, IOM carried out an inventory of all identified evacuation centers, consolidating information provided by the humanitarian partners, the government and national institutions. Resulting from this exercise, a total of **711<sup>1</sup> evacuation shelters were inventoried** by IOM teams. Subsequently, IOM teams conducted a profiling exercise (through field visits, observation, physical counts and interview with key informants) in 423 shelters. These **423 shelters inventoried and profiled** by IOM housed 10,531 households equivalent to 43,584 persons.

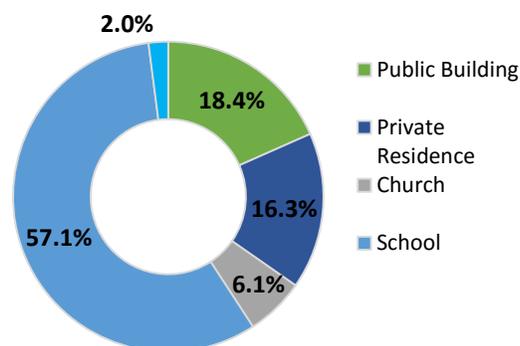
Registration exercises have been carried out in select shelters targeted for assistance and/or under risk of eviction. A total of **79<sup>1</sup> of the profiled shelters have been registered** by IOM teams to support humanitarian interventions.

The current round of DTM assessments in evacuation shelters covers the period from January 4<sup>th</sup> to February 10<sup>th</sup> 2017. At present, **a total of 47 shelters remain open in the three (3) departments** most affected by the passage of hurricane Matthew. These 47 shelters house an estimated 1,564 households representing 7,015 persons. Of these 47 open sites, 23 have been registered by IOM teams.

Table 2: Overview of Shelter Inventory and Assessments

Evacuation Shelters	Grande-Anse	Sud	Nippes	Total
Profiled	201	124	98	<b>423</b>
Closed	159	98	49	<b>306</b>
Open	15	25	8	<b>47</b>
Registered	47	24	8	<b>79</b>

Graph 2: Typology of profiled shelters



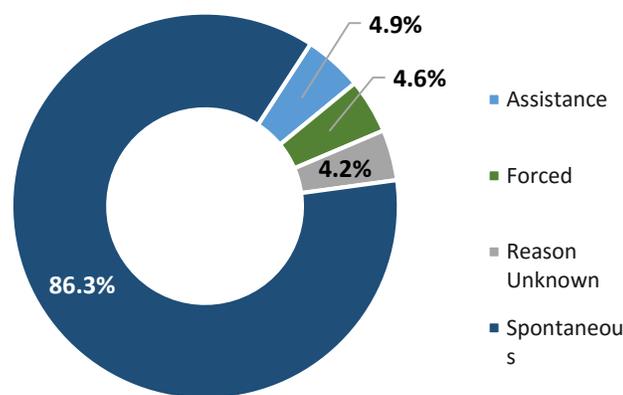
## CLOSURE OF SHELTERS

Field assessments carried out in the evacuation shelters in collaboration with the DPC have revealed that 307 shelters have been assessed as “closed” since the passage of the hurricane on October 4<sup>th</sup> 2016. More specifically: 160 in Grande Anse, 98 in Sud and 49 in Nippes.

The assessments have revealed that these shelters have closed for the following reasons:

- 265 evacuation shelters have closed spontaneously (this information has been provided by community leaders in the shelters, former residents of these shelters): 127 in Grande Anse, 90 in Sud and 48 in Nippes.
- 14 forced closures: 11 in Grande Anse and 3 in Sud
- Beneficiaries in 15 shelters in Grande Anse have been assisted by government and humanitarian partners.

Graph 3: Overview of shelter closure reason



<sup>1</sup>The figures presented in this report are being cross-checked with DPC available data and are harmonized regularly.

- The reason for closure of 13 shelters is still being investigated by field teams.

## SECTORAL ASSESSMENTS

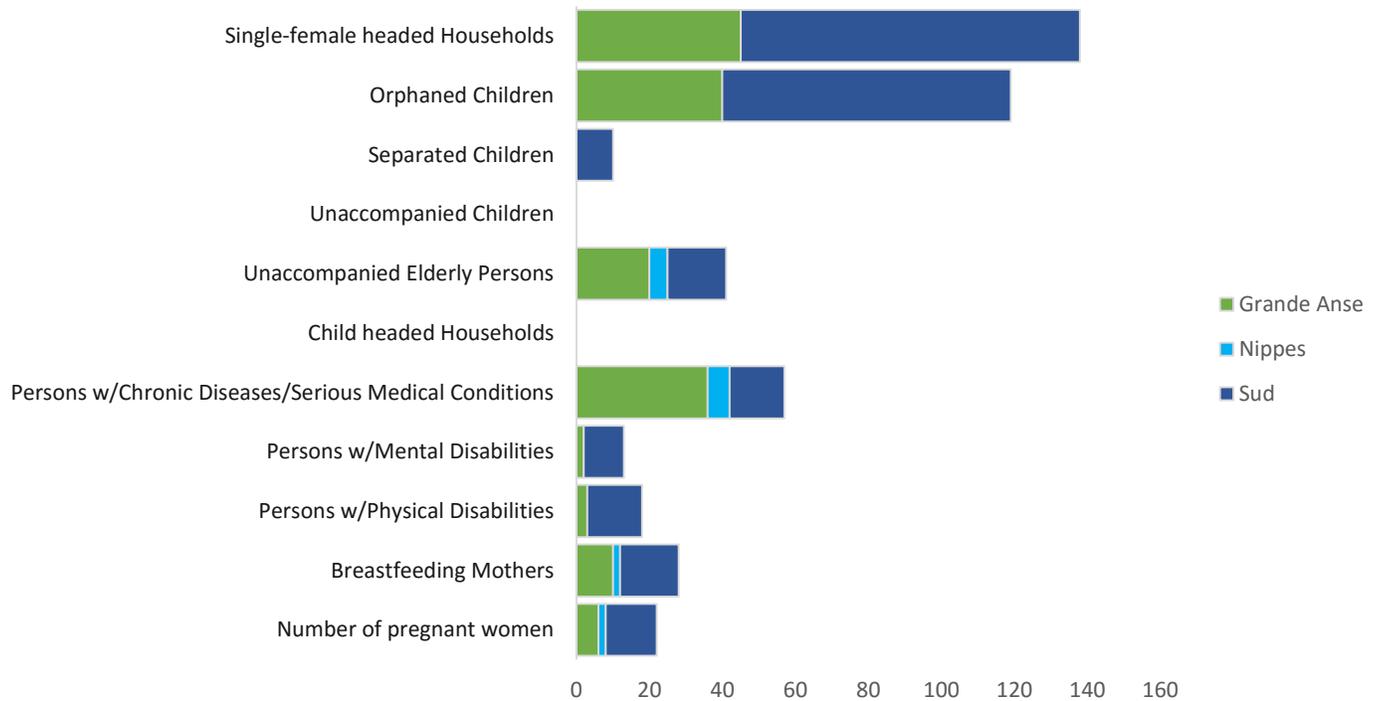
This section presents the findings following the needs assessments carried out during the evacuation shelters profiling phase. Data collection is ongoing and the figures presented in this section of the report refer to the completed sectoral assessments carried out in the 47 open shelters. DTM assessments are carried out continuously and figures updated regularly.

### PROTECTION

During field visits and assessments in open sites, preliminary information on vulnerable individuals was collected through interviews with key informants in the 47 open shelters. Specifically, a total of 446 individuals presenting vulnerabilities were reported to IOM the field teams:

- 138 female head of household (30.9%)
- 119 presumed orphan children (26.7%)
- 57 persons who have reported suffering from a chronic illness (12.8%)
- 41 unaccompanied elderly persons (9.2%)
- 28 breastfeeding women (6.3%)
- 22 pregnant women (4.9%)
- 18 persons with a physical disability (4.0%)
- 13 persons with a mental disability (2.9%)
- 10 children presumably separated from their parents or legal guardians (2.2%)

Graph 4: Vulnerabilities assessed during shelter assessments.



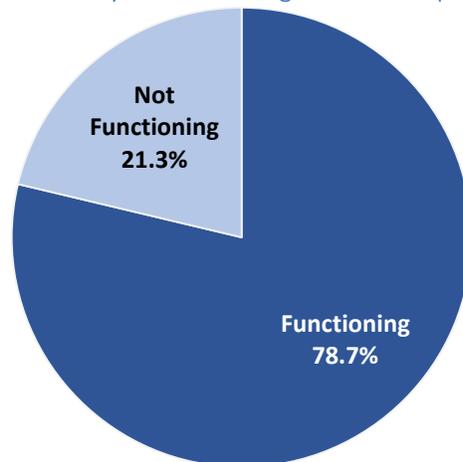
Following the shelter assessment and registration, all vulnerable individuals are referred to IOM’s Protection Unit for appropriate follow-up, assistance and referral.

WATER, SANITATION AND HYGIENE (WASH) 

FUNCTIONING LATRINES

Of the 47 open shelters, 37 have indicated having access to functioning latrines while in 10, the affected population has indicated not having access to functioning toilets.

Graph 5: Availability of functioning latrines in open shelters

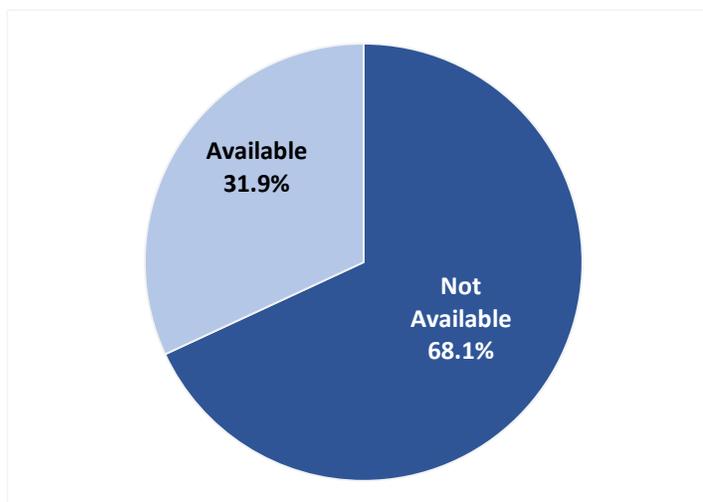


SEPARATED LATRINES AND BATHING AREAS

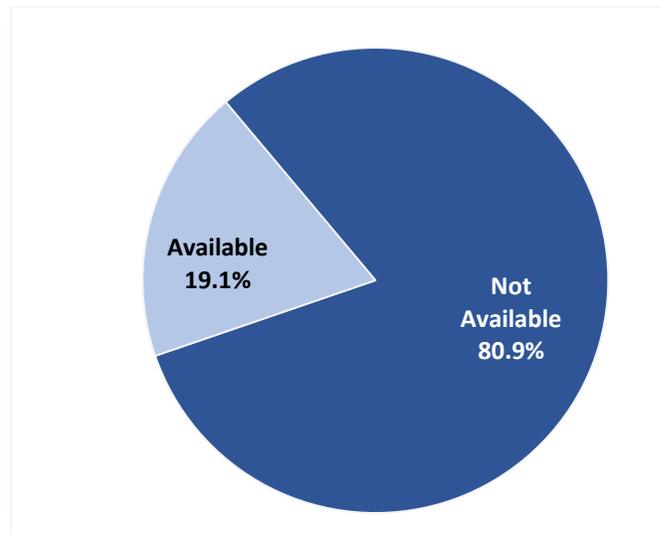
Residents of 15 out of the 47 open shelters have indicated having access to gender separated latrines while residents in 32 shelters have indicated the shelters they reside in are not equipped with those facilities.

In addition, residents of 9 shelters have indicated having access to gender separated bathing areas while in 38 shelters, residents have indicated that the shelters are not equipped with gender separated bathing areas.

Graph 6: Availability of separated latrines



Graph 7: Availability of separated bathing areas

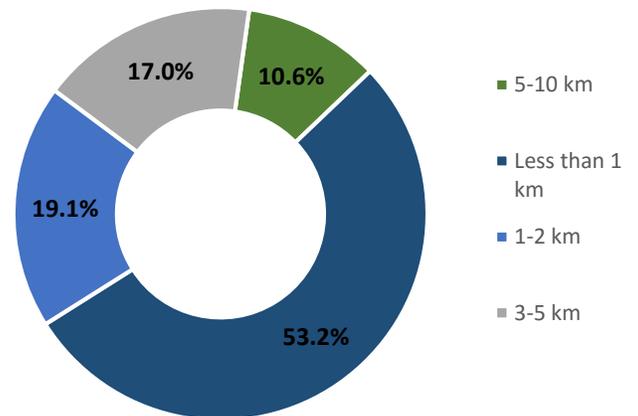
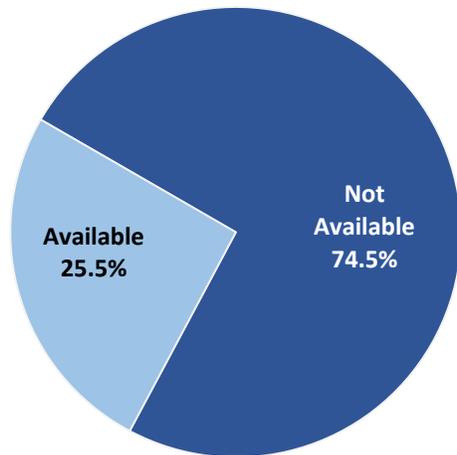


EDUCATION 

Children residing in 12 evacuation shelters (25.5%) are enrolled in school while children in 35 shelters (74.5%) are not currently enrolled in school.

In addition, out of the 47 open shelters, 25 shelters are located at less than 1 km from the nearest education facility, 9 are located between 1 km to 2 km from the nearest education facility, 8 shelters are located at a distance of 3 km to 5 km from the nearest education center and 5 at a distance of 5 km to 10 km.

Graph 10: Availability to education services for children    Graph 11: Distance of shelters to the nearest education facility



## MODULE 2: HOUSEHOLDS REGISTRATION IN SHELTERS

A total of 79 out of the 423 profiled evacuation centers have been registered by IOM teams, assisted by communal DPC volunteers and other partners in the departments of Grande-Anse, Sud and Nippes. Emergency registrations were carried out in shelters targeted for assistance and/or evictions. Of the 79 shelters initially registered by IOM teams, 56 have since closed and 23 remain open.

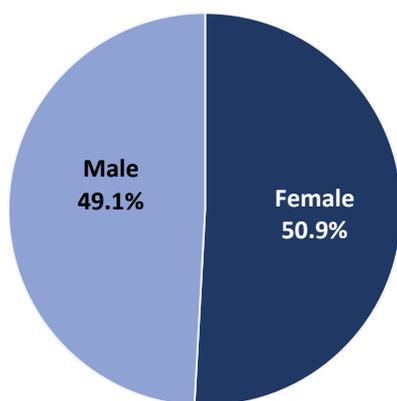
### REGISTRATION DATA

This section presents the registration data available covering 23 of the 47 remaining open shelters. Registration operations are carried out following requests from the GoH and humanitarian partners who aim to assist the affected population and in shelters with a high risk of eviction.

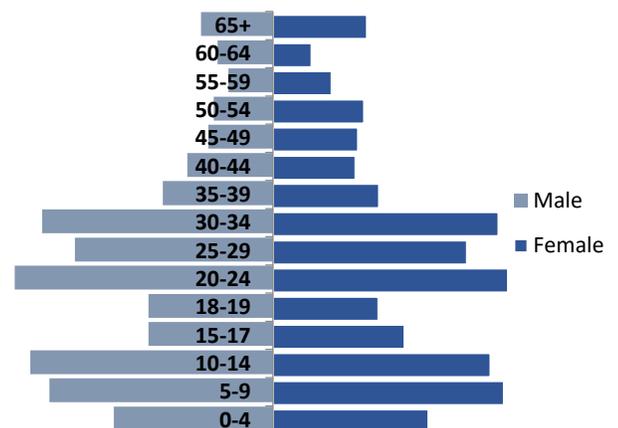
### DEMOGRAPHICS

Within the 23 registered shelters, a total of 4,596 individuals were registered (1,071 households), of which, 50.9% are female and 49.1% are male. 51.3% of the registered displaced population reported being aged between 18-49 years old, while 36.2% are minors (aged between 0-17 years old) : 7.7% are under the age of 5 and 28.5% are between 5-18 years old. The remaining 12.5% are 49 and above.

Graph 12: Sex Breakdown



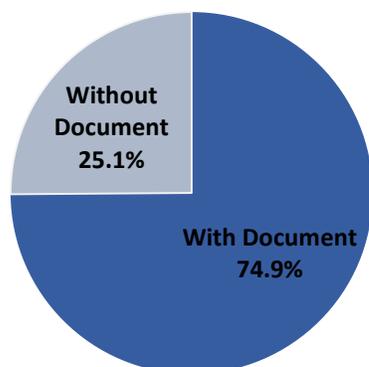
Graph 13: Age and Sex Breakdown



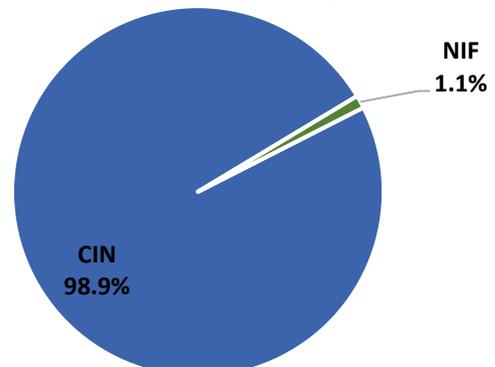
### DOCUMENTATION

74.9% of the 1,071 heads of households registered reported having identification documents, while 25.1% did not possess any documentation. The most common ID held is the Carte d’Identité Nationale or CIN (98.9% of households with documentation) while the Numéro d’Identification Fiscale, or NIF, is held by 1.1% of those registered.

Graph 14: Documentation status of registered households



Graph 15: Documentation held by registered households

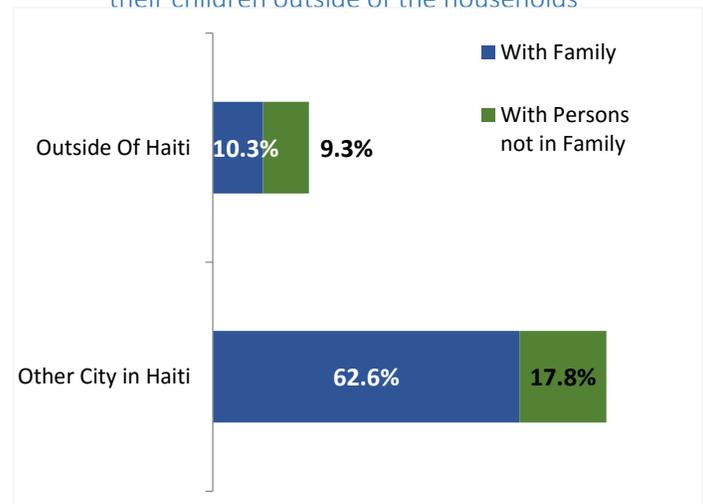


### COUNTER TRAFFICKING INDICATORS

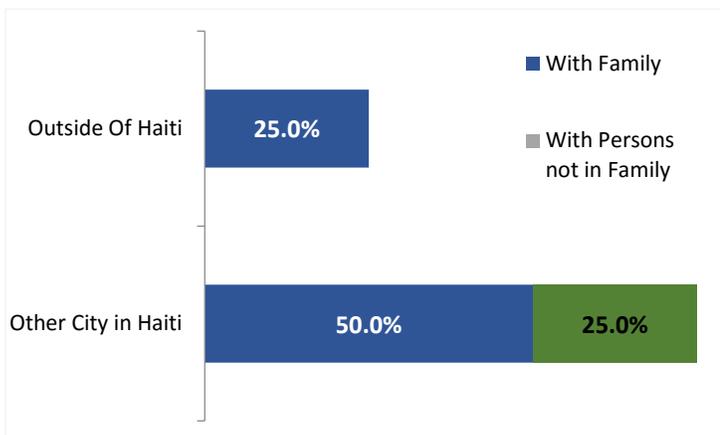
Of the 1,071 households registered, a reported 10.4% (111 households) indicated that they had decided to send their children outside of the household. More specifically of the 111 households:

- 67 households (60.4%) intend to place their child with family in another city in Haiti.
- 19 households (17.1%) intend to place their child with non-family members (acquaintances or other) in another city in Haiti.
- 11 households (9.9%) intend to place their child with family living in another country
- 10 households (9.0%) intend to place their child with non-family members (acquaintances or other) in another country.

Graph 16: Households who have decided to place their children outside of the households



Graph 17: Households who have been offered the possibility to place children outside of the household



In addition, 4 households (3.6%) of these 111 households have reported receiving offers to place their child in another home or household. The 4 households have specifically indicated the following:

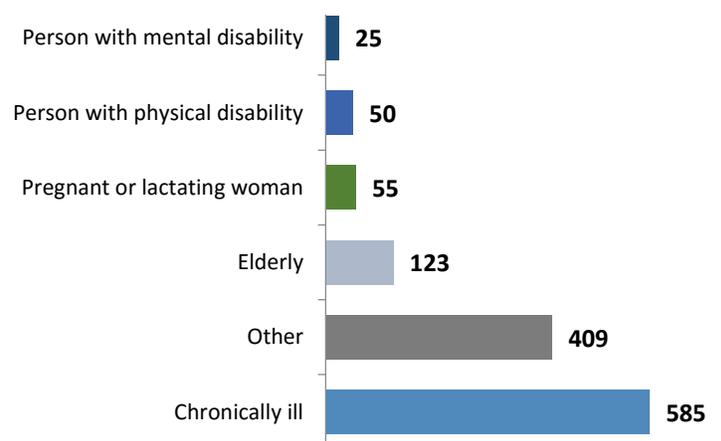
- 2 households of these 4 households have received offers to place their children with family in another city in Haiti, 1 household (25.8%) have been offered to place their children with non-family members in another city in Haiti.
- 1 household who has decided to place their children outside of the household.

### VULNERABILITIES

Of the 4,596 individuals registered in open shelters, 1,281 (27.9%) were identified as vulnerable. Of these: 585 (12.7%) are chronically ill, 123 (2.7%) are elderly 55 (1.0%) are pregnant or breastfeeding women. In addition, a reported 2 (0.04%) are presumed to be unaccompanied minors, 7 (0.2%) are orphaned children and 8 (0.2%) are minors who are separated from their parents or guardians.

Information collected through the shelter assessment and registration phase on vulnerable individuals are referred to the protection unit of IOM Haiti for appropriate follow-up, assistance and referral.

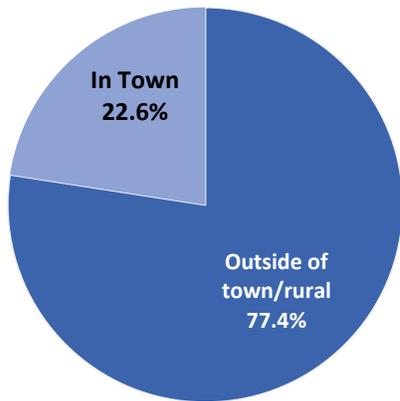
Graph 18: Six most common vulnerabilities assessed among registered households



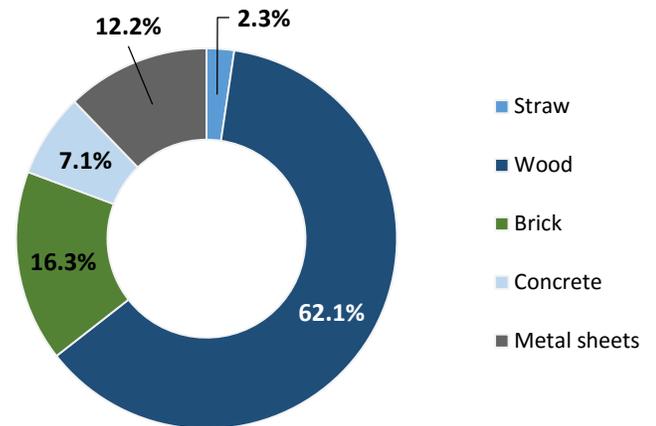
### HOUSE CHARACTERISTICS AND LOCATION

77.4% of 1,071 households registered have indicated that their residence is located in a rural area (outside of town) while 22.6% have indicated that they reside in an urban area (in town). Furthermore, 62.1% of 1,071 households have also indicated that their house is mostly constructed with wood, while 16.3% have indicated that their residence is built with bricks.

Graph 19: House location of registered households



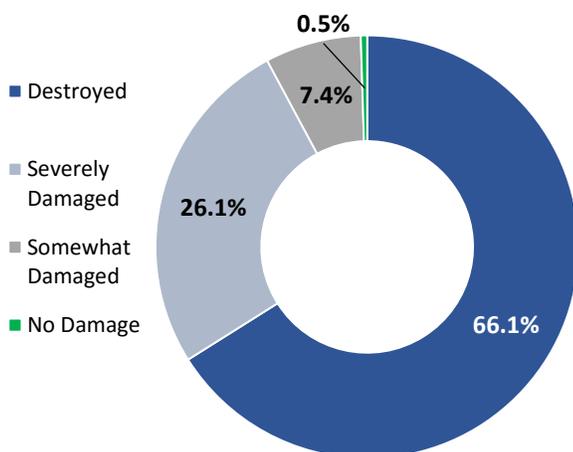
Graph 20: House material



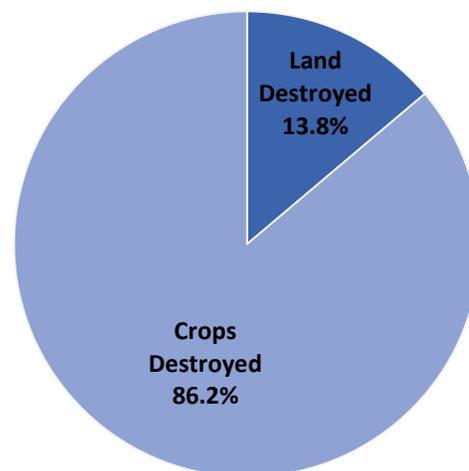
### DAMAGE ASSESSMENT

66.1% of households registered have indicated that their home has been destroyed while 26.1% have indicated that their home has been severely damaged by the hurricane. In addition, 86.2% of households indicated that their crops were damaged while 13.8% of respondents indicated that their land sustained damages (difference being the prior land had no crops growing while damage to crops includes also land damage).

Graph 21: Status of homes



Graph 22: Land and crop damage status



## MODULE 3: BUILDING INVENTORY

At the request of the Government of Haiti, through the Ministry of Interior (MICT), IOM teams have implemented a pilot operation aiming at carrying out building inventory and household registration (Module 3) in localities in the communes of Dame Marie and Beaumont, in the department of Grande Anse. This operation aimed to collect basic information on damage sustained by buildings as a result of the hurricane in an effort to support future reconstruction efforts. Building Inventory and household registration has been carried out at the neighborhood level, using the geographical unit coined by the National Statistics Institute (IHSI in French), called “Section d’Enumeration” or SDE.

At present, a total of 46 SDEs have been inventoried, containing a total of 9,825 buildings, in these two communes. Specifically:

- 32 SDEs in Dame Marie, corresponding to 6,401 buildings.
- 14 SDEs in Beaumont, corresponding to 3,424 buildings.

The operations related to the implementation of module 3 have been completed in Dame Marie and are currently ongoing in the commune of Beaumont. Data processing activities are ongoing for both communes.

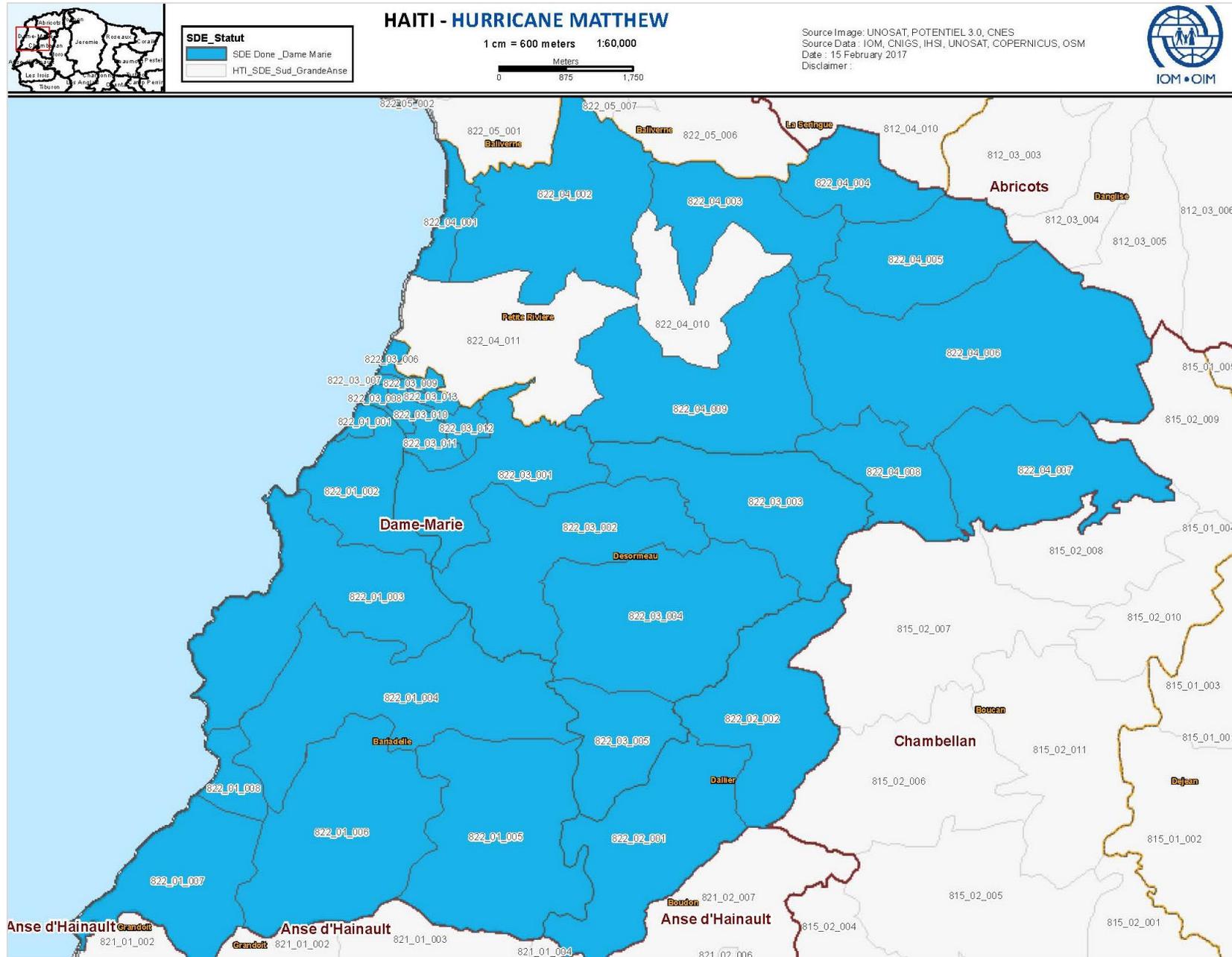
Table 3: Damage Status of Buildings Inventoried – Dame Marie

Damage Status	Number of buildings
No Damage	816
In Construction	445
In repair	567
Completely destroyed	803
Foundations Damaged	87
Walls damaged	664
Roof more than 75% destroyed	1244
Roof - Corrugated iron damaged/missing - less than 75% destroyed	1156
Roof - Corrugated iron damaged / missing	509
Damage Status to be confirmed	110

Table 4: Damage Status of Buildings inventories in Beaumont

Damage Status	Number of buildings
No Damage	372
In Construction	210
In repair	305
Completely destroyed	571
Foundations Damaged	72
Walls damaged	395
Roof more than 75% destroyed	410
Roof - Corrugated iron damaged/missing - less than 75% destroyed	446
Roof - Corrugated iron damaged / missing	424
Damage Status to be confirmed	219

Map 3: Building Inventory coverage in Dame Marie



# TRENDS ANALYSIS

This section presents an interpretation of the main trends observed in the departments affected by the passage of hurricane Matthew in the Sud department, through an analysis of the data collected and a comparison with the first Hurricane Matthew DTM Report (November 2016).

## MODULE 1

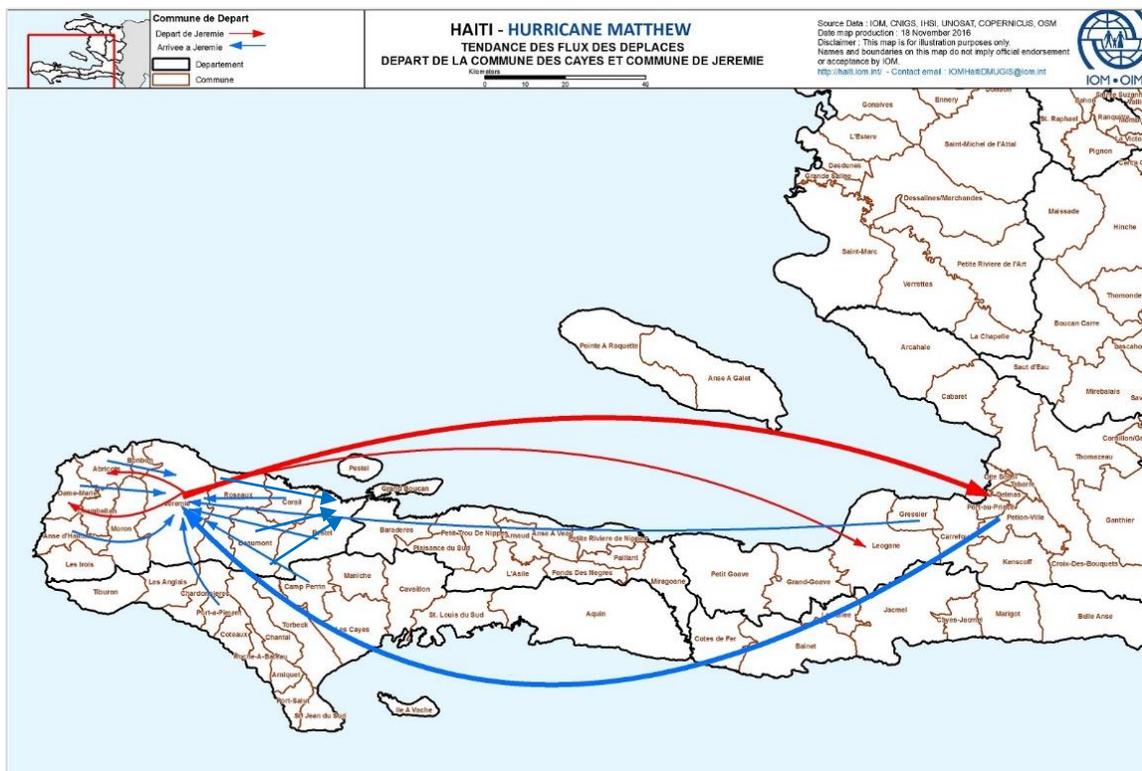
Key informant interviews, basic observations, movement and displacement monitoring and tracking at bus stations during the months of October and November 2016, have shown that movements are primarily towards the southern peninsula (Grande Anse and Sud). Individuals were observed or reported leaving the highly urban areas of the Ouest department (metropolitan area of Port-au-Prince) towards the south.

These movements were attributed to many factors. Particularly:

- **The need to have news from relatives living in the affected areas:** many people came from the Ouest to Grande Anse and Sud to verify the whereabouts about their loved ones, enquire about their wellbeing.
- **The need to provide assistance to relatives in the affected areas:** people from the Ouest department with relatives in the south had also wanted to provide aid to their relatives in the south, with food, clothes, hygiene articles, etc.
- **Show of solidarity to those affected:** following the hurricane and the news of the devastation it had caused, many Haitians displayed their solidarity the affected population, rounding up food, clothing and other articles to assist those directly touched by the hurricane (donations from schools, artists, businesses from the private sector, etc.)

However, movements were also observed within the affected communes, particularly persons residing in the rural or remote areas moving towards the urban areas; specifically towards the main cities, Jeremie in the Grande Anse department and les Cayes in the Sud department – where most of the assistance was located.

## DISPLACEMENT TRACKING MAP: NOVEMBER 2016

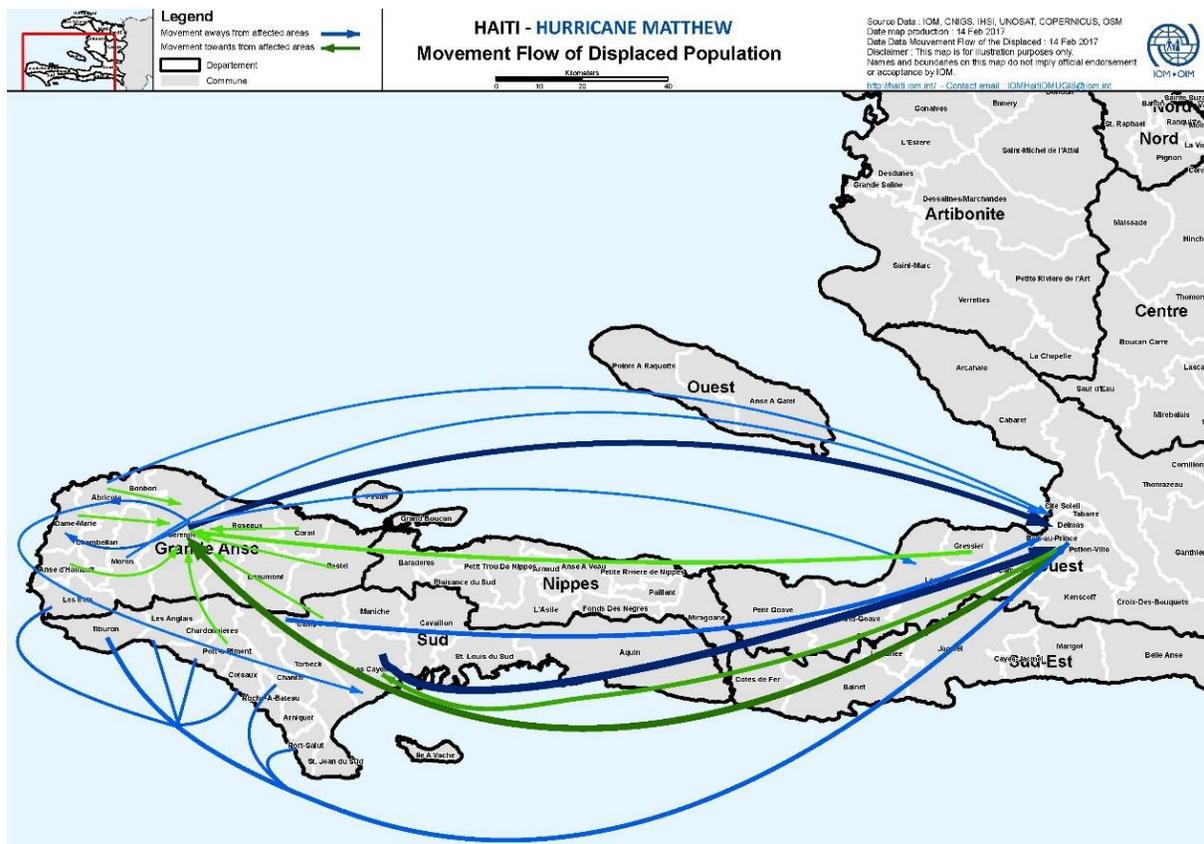


As of February 14<sup>th</sup> 2017, current displacement patterns have revealed a significant shift in the movements observed at the onset of the emergency, as people have increasingly moved away from the southern peninsula, towards the Ouest department (particularly the major urban areas such as the communes of Delmas, Port-au-Prince, Petion-Ville. Etc.). These changes in the movement patterns have been mainly attributed to the following factors:

- **Movement of affected population towards the urban centers in the Ouest department:** Being essentially agricultural departments, the destruction of crops and subsequently, the loss of their main livelihood and income generating activity has caused an exodus of population from Grande Anse and Sud departments to the Ouest department. As the population seems to have less and less perspective for recovery, many have chosen to leave for Port-au-Prince, with the hope that more livelihood opportunities will be available.
- **Decrease in emergency assistance:** As many of the affected households received assistance to facilitate their return home, thus causing the closure of many evacuation centers, the assistance provided by the humanitarian community has decreased significantly, forcing those who had been waiting for or expecting an assistance to migrate towards urban centers.
- **Movement of affected population from the rural (underserved) areas to the assisted areas in the affected departments:** Many of the communes affected by hurricane Matthew are located in remote areas, which remain difficult, or oftentimes, impossible to access. As the assistance was mostly located in the main cities of the affected departments (Jeremie and les Cayes), many inhabitants in the rural areas, who have lost their main livelihood (crops and cattle), have increasingly moved to the cities where they are most likely to receive assistance.

In addition, movements towards the Grande Anse department have been quite significant, with 34.9% of individuals interviewed through key informant interviews at bus stations indicating Grande Anse as their destination, particularly the urban center of Jeremie.

DISPLACEMENT TRACKING MAP: FEBRUARY 2017

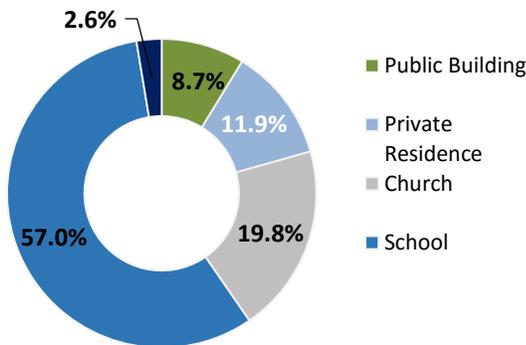


## MODULE 2

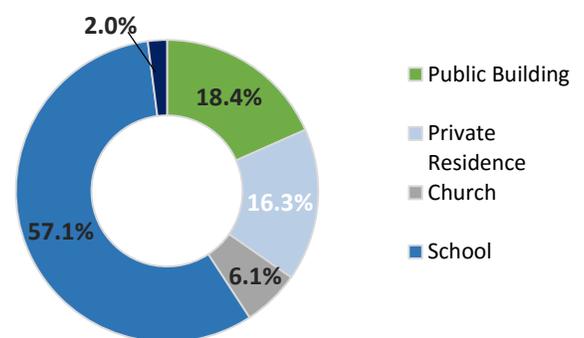
Main trends in shelters have largely remained consistent throughout the data collection period. Indeed, the inventory of all shelters have been carried out by IOM teams immediately following the hurricane and continued well into the current reporting period.

The shelter profiling has remain consistent, with shelters mainly being public buildings. The majority of these buildings are schools – mostly pre-identified evacuation shelters that been activated in anticipation of the hurricane, private residences where some people had taken refuge during the hurricane mostly, public buildings, businesses, etc.

Typology of profiled shelters in November 2016



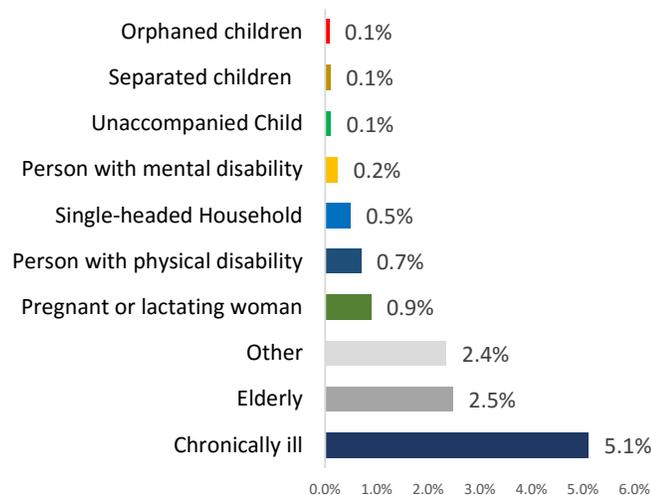
Typology of profiled shelters in February 2017



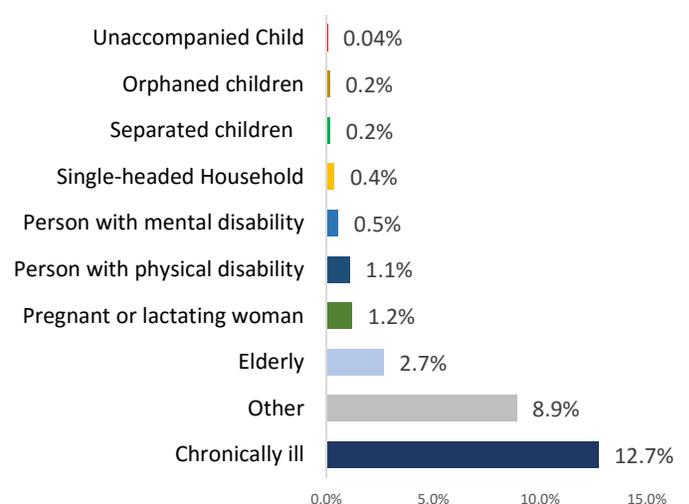
Population and household composition has remained similar during both periods. Nearly half of the registered population living in open shelters is female and the other half male. In addition, nearly half of the population is made up of working age adults (between the ages of 18 and 49 years old).

While the type of vulnerabilities most commonly encountered in shelters has remained consistent for the most part, some notable differences have been observed, however, with regards to the percentage of vulnerable individuals still residing in shelters. While the people with disabilities represented 12.6% of the overall population residing in shelters in November 2016, the vulnerable individuals now make up 27.9% of the population still residing in open shelters. This represent an increase of 15.3%, more than double the percentage reported in November 2016. This trend underlines the difficulties encountered by vulnerable individuals who have left areas of origin that are in rural or remote areas and may have difficulties returning home and highlights the importance of providing them with an assistance specifically tailored to their needs.

Most Common vulnerabilities in November 2016



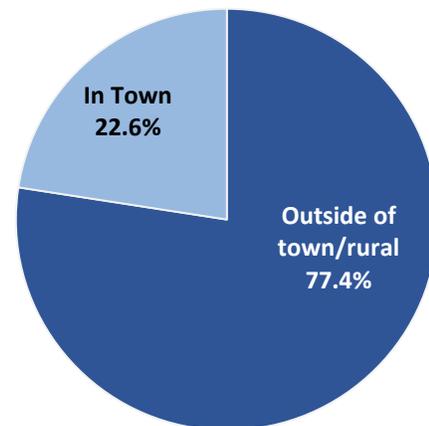
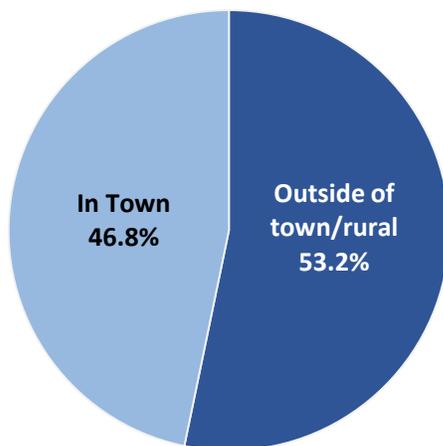
Most common vulnerabilities in February 2017



Changes in house location have also been observed during this round of DTM assessments. While in November 2016, 53.1% of respondents have indicated that their residence was located in an urban area and 46.9% in a rural area, an important shift has been observed with the current population residing in shelters. Merely 22.6% of the population has indicated residing in an urban area while 77.4% have indicated residing in a rural area. Rural areas are often difficult to access, thus these areas are rarely assisted. Thus these trends confirm the movement of people from rural areas, to urban areas, particularly to the evacuation shelters where they hope to receive assistance.

House Location of registered households: November 2016

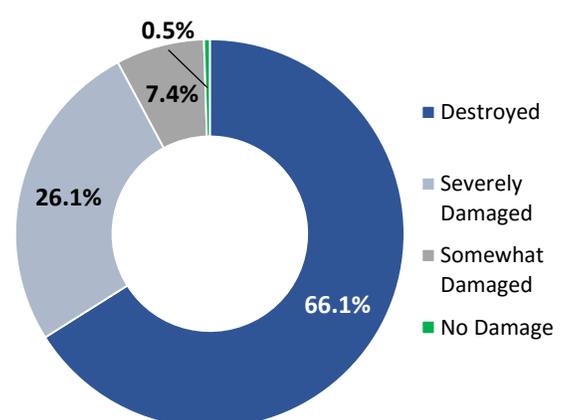
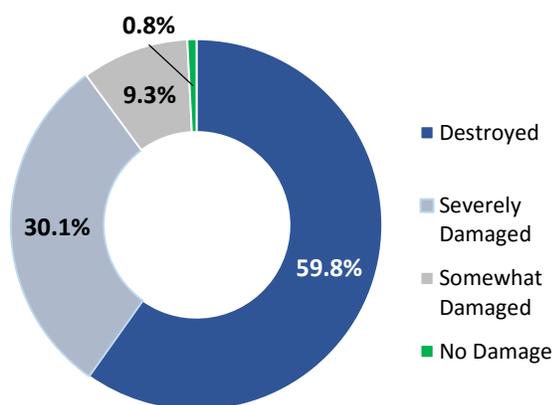
House Location of registered households: February 2017



The aforementioned trend could also be supported by analyzing the damage sustained by the buildings where these households resided prior to the hurricane. Indeed, while the damage assessments remains fairly consistent, the increase from 56.1% of houses destroyed in November 2016 to 66.1% during this reporting period is quite pertinent as it also confirms that many of the households residing in the evacuation shelters, apart from mostly coming from rural areas, for the most part do not have a tangible return solution as they have no home to return to.

Damage status: November 2016

Damage Status: February 2017



The current percentage of individuals with vulnerabilities remaining in collective centers (currently standing at almost a third of the total displaced population), originating mostly from rural areas calls for a specific and tailored protection assistance to support the safe and dignified return of these individuals to their home. As we are only four (4) months away from the start of the new hurricane season, a response that may allow for the safe return of these households as well as the provision of assistance that will facilitate their recovery is highly recommended.

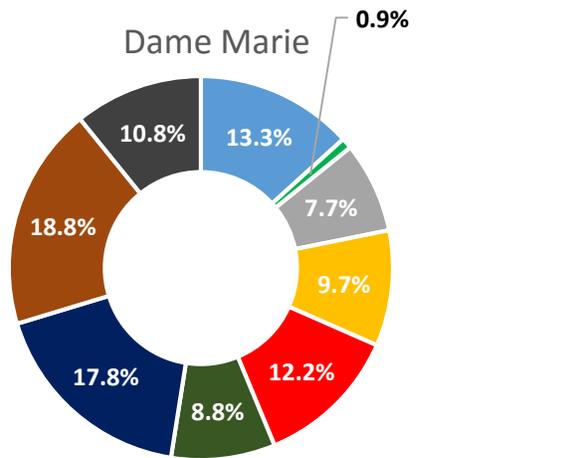
### MODULE 3

The module 3 pilot implemented in Dame Marie and Beaumont (department of Grande Anse) has provided a vast array of information that may not only explain or confirm trends observed through the information collected during Module 1 and Module 2 but also provide an overview of the situation in communes and areas that are far from the urban assisted center of Jeremie.

At present, 6,401 buildings have been inventoried in Dame Marie housing 4,868 households (25,943 individuals). The average household size in Dame Marie is 5.3 individuals per household. In Beaumont, IOM teams have carried out the inventory of 3,139 buildings which house 2,661 households (12,303 individuals) – the average household size is 4.6 persons per household.

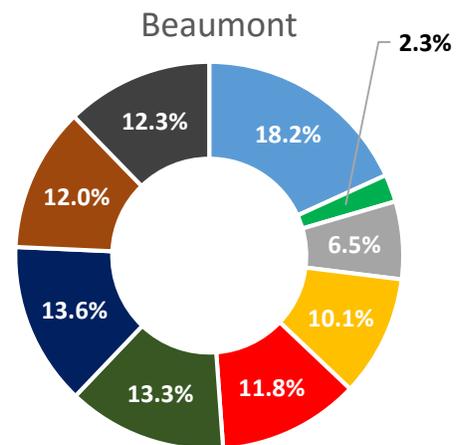
The majority of the buildings inventoried are occupied residences, representing 83.8% of all buildings inventories in Dame Marie and 77.7% of all buildings inventoried in Beaumont. These statistics linked to the damage assessment collected through the module 3 operation provide a snapshot of the damage sustained by buildings in the area and may help in tailoring an appropriate assistance.

Damage assessment in Dame Marie



- Completely destroyed
- Foundations Damaged
- In Construction
- In repair
- No Damage
- Roof - Corrugated iron damaged / missing
- Roof - Corrugated iron damaged/missing, less than 75% destroyed
- Roof more than 75% destroyed
- Walls damaged

Damage Assessment in Beaumont



- Completely destroyed
- Foundations Damaged
- In Construction
- In repair
- No Damage
- Roof - Corrugated iron damaged / missing
- Roof - Corrugated iron damaged/missing, less than 75% destroyed
- Roof more than 75% destroyed
- Walls damaged

The damage assessment shows that only 12.0% of buildings have had no type of damage following the hurricane in both communes: 12.2% in Dame Marie and 11.8% in Beaumont. A reported 14.9% have been completely destroyed while 55.9% have sustained some type of damage. Consequently, 7.3% are currently in construction (which supposes that these buildings had been destroyed) and 9.9% are currently in repair.

The damage assessment data available for these two (2) communes provides an insight on the extent of the damage in remote areas and highlight the importance of a comprehensive and extensive data collection in other communes to provide information on the level of damaged and orient reconstruction efforts. Given that these trends somehow confirm those observed in the data collected through Module 1 and Module 2, it is crucial that these efforts be undertaken as quickly as possible to prevent the exodus of affected families to urban areas of Jeremie or towards the metropolitan area of the Ouest department. This may in turn cause instances of land grabbing, if these individuals are not provided with a solution that may enable a dignified return to their area of origin.

As some households have already undertaken the reconstruction of their damaged or destroyed houses, it is also important that reconstruction efforts be deployed in a timely manner to ensure that families are trained on the proper construction and reconstruction techniques to better protect themselves from future disasters.



## CONTACT INFORMATION



International Organization for Migration (IOM)  
The UN Migration Agency

This report and other products are available on the DTM Haiti website:  
<http://iomhaitidataportal.info/dtm>

For additional information, please see visit our website or contact the DTM Haiti Team at  
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