

# HURRICANE MATTHEW

## Impact across the Americas

Hurricane Matthew caused devastation across the eastern Caribbean and south-eastern US in October 2016 (see figure 1.16). It was the most powerful storm of the season, claiming hundreds of lives.<sup>82</sup> Different levels of exposure, vulnerability and coping capacity in each country and area affected, and the storm's path and changing intensity, meant that its impacts varied significantly from place to place. As the initial and evolving displacement figures show, understanding the severity of those impacts requires far more than a consideration of the number of people who fled.

As the storm developed in late September and early October, it prompted small-scale and short-lived evacuations in St Vincent and the Grenadines, St Lucia, Barbados, the Turks and Caicos Islands and Jamaica, though it did not make landfall in any of these small island countries.<sup>83</sup> In Jamaica, 3,500 people moved to 193 shelters, of which 900 people were staying in the two shelters that remained open a couple of days after the storm passed.<sup>84</sup> Indirect impacts of the storm also brought floods and landslides to the Dominican Republic where nineteen provinces were placed under red alert and almost 18,000 people evacuated to stay with friends and relatives while around 800 moved to official shelters.<sup>85</sup> The Bahamas was hit more directly, and of around 5,000 people evacuated to safer places, 3,500 were still living in shelters or with their relatives ten days later.<sup>86</sup>

Matthew made its first landfall in Haiti and its second in Cuba, each time as a very strong category four storm. In Cuba, the hurricane forced the evacuation of 1,079,000 people in six eastern provinces before it made landfall. It is a testament to the effectiveness of the evacuations that there appear to have been no casualties.<sup>87</sup> Evacuations were followed however by continued displacement for thousands of people whose homes were destroyed or left uninhabitable.

In the worst-affected municipalities of Baracoa and Maisí in Guantánamo province, up to 94 per cent of homes were damaged or destroyed, with houses with lightweight roofs shown to be particularly vulnerable.<sup>88</sup> Including figures for Imías and San Antonio del Sur in Guantánamo as well,

the homes and possessions of 121,176 people, or more than 77 per cent of the province's population, were lost or damaged.<sup>89</sup> As of 31 October, the national civil defence authorities reported that more than 70,000 evacuees in Guantánamo province were still unable to return to their homes because of the hurricane's impacts.<sup>90</sup>

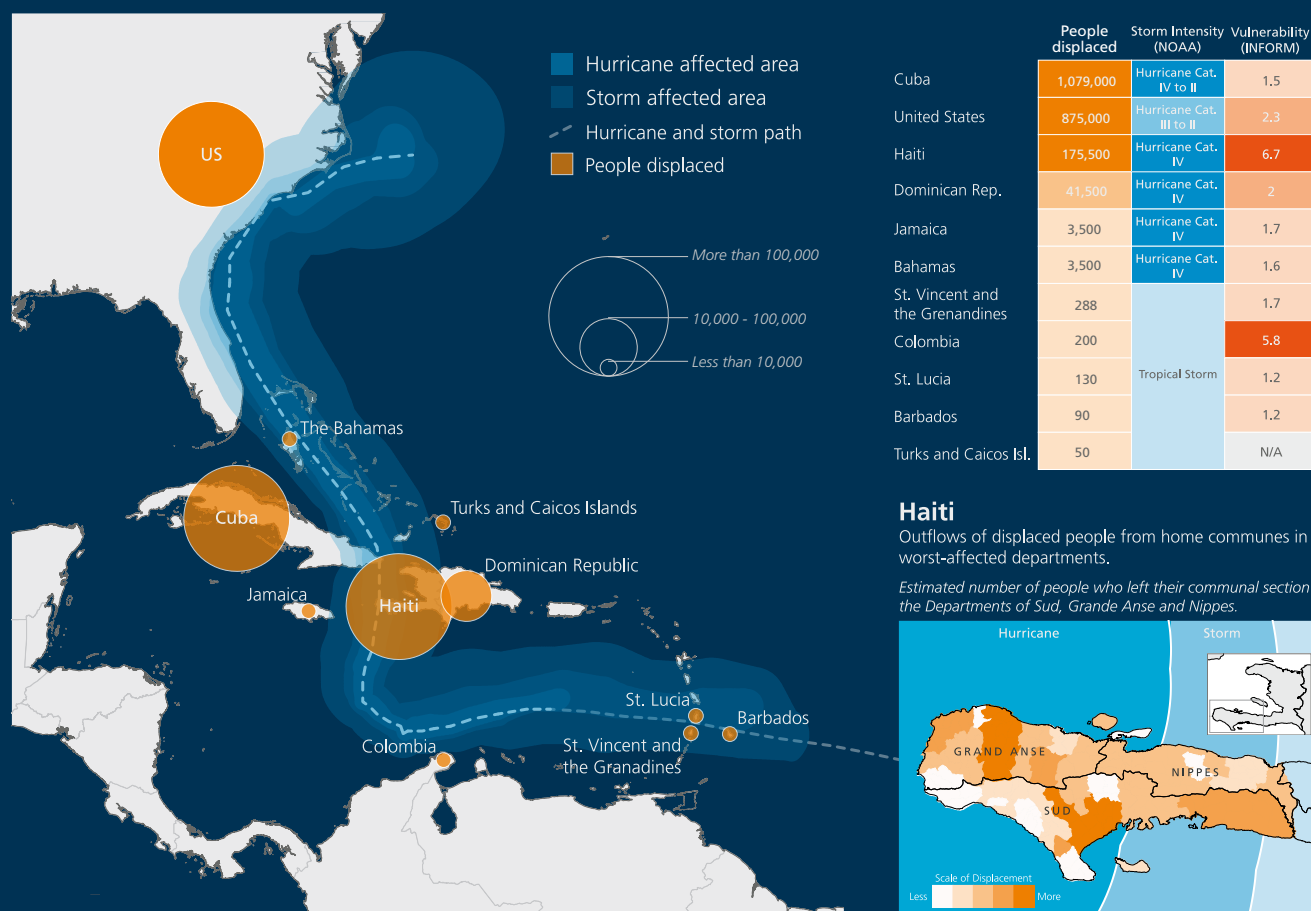
By the end of the year, around 54 per cent of damaged homes had been repaired or reconstructed. This reconstruction rate was remarkably quick. Nevertheless, thousands of families whose homes were completely destroyed were left facing longer delays and more time in displacement.<sup>91</sup>

Mass evacuations also took place in southern and eastern states of the US, where Florida, Georgia, North and South Carolina were worst affected by heavy rainfall and floods. Of more than 2.5 million people the authorities ordered to evacuate as the hurricane approached, between 875,000 and 1.25 million people – or 35 to 50 per cent – are estimated to have complied.<sup>92</sup> Though the impacts in some areas were significant, the overall damage was less feared because the storm weakened and only made brief landfall in Georgia.<sup>93</sup>

Overall loss and damage statistics were only publicly available online for North Carolina, where 28 lives were lost and 82,000 people registered for state or federal assistance in the storm's aftermath, including displaced homeowners and low-income tenants.<sup>94</sup> The last emergency shelter was closed on 14 November, but more than 1,400 households whose homes were left uninhabitable were put up in hotel rooms under the government's transitional shelter assistance programme.<sup>95</sup> Other reports point to particular communities where people were struggling to recover. In Nichols, South Carolina, for example, four out of five homes were still unoccupied five months later, with some displaced people unlikely to return.<sup>96</sup>

Haiti, however, suffered the worst impacts and displacement. Matthew made landfall as a category four storm overnight on 3 October in the poor and largely rural south-west of the country. Around 550 people lost their lives<sup>97</sup> and as many

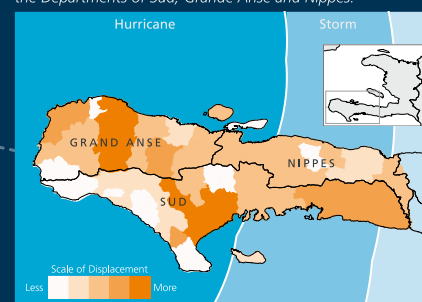
Figure 1.16: The displacement impacts of Hurricane Matthew



### Haiti

Outflows of displaced people from home communes in worst-affected departments.

Estimated number of people who left their communal section in the Departments of Sud, Grande Anse and Nippes.



Sources: Hurricane path and Storm area (NOAA, 2016), Human vulnerability (INFORM, 2017), Displacement data (Different sources compiled by IDMC), Outflows population (Estimates are based on movements of SIM cards which made or received at least one call pre-hurricane and in the week up to 8 November 2016 - Flowminder & Digicel Haiti). The boundaries, names shown and the designations used on this map do not imply official endorsement or acceptance by IDMC.

as half a million displaced people sought refuge with friends and family or set up makeshift shelters<sup>98</sup>, but the majority returned to their home areas within weeks of the hurricane.<sup>99</sup> Many people moved out of the badly affected departments of Sud, Grand’Anse and Nippes toward urban areas including the Port-au-Prince metropolitan area, Jeremie and Les Cayes<sup>100</sup> and more than 175,500 displaced people took shelter in more than 220 evacuation sites.<sup>101</sup>

An estimated 90 per cent of homes were destroyed in the worst-affected areas, and the pace of reconstruction has been slow. Most of the destruction was in rural areas where traditionally built homes of timber, thatch and mud were unable to withstand the strong winds and flooding.<sup>102</sup> In the coastal town of Les Cayes in Sud department between 70 and 80 per cent of houses were rendered uninhabitable.<sup>103</sup>

Six months after the hurricane, hundreds of thousands of people whose homes were damaged or destroyed were still living in makeshift shelters.<sup>104</sup>

Little assistance had reached the mountainous or island areas of Grand’Anse department, which were only accessible by motorcycle or boat or on foot, and whose populations were already extremely vulnerable before the hurricane hit.<sup>105</sup> Matthew damaged or destroyed 98 per cent of homes in these areas, 85 per cent of which had yet to be repaired or rebuilt five months on. Few families had the means or materials to do so.<sup>106</sup> This meant that most people displaced to shelter with friends or family or in evacuation sites elsewhere had returned to their former home areas to ongoing displacement near their original houses.

Widespread vulnerability has been heightened by the devastation of food production, loss of livelihoods and capital and rising food prices following Hurricane Matthew, resulting in a food and nutritional crisis.<sup>107</sup> The fate of around 47,000 people still displaced almost seven years after the 2010 earthquake shows the potential for recent displacement to become further prolonged and protracted.<sup>108</sup>