

JAMAICA

Food Security Monitoring
Impact of Hurricane Melissa – Four Months On



Context

Hurricane Melissa made landfall in Jamaica on 28 October 2025 as a **Category 5 storm**, causing catastrophic damage across the country and marking the most powerful hurricane in the island's recorded history.

The hurricane caused **significant damage particularly in the western and north-western parishes**. The storm triggered widespread flooding, landslides, and road blockages, crippling critical infrastructure including hospitals, schools, roads, and telecommunications networks.

Following Hurricane Melissa, **Real-Time Monitoring coverage was scaled up significantly**—from just over 500 observations before the event (January – October 2025) to over 4,100 calls post-event. **This expansion greatly improves visibility on emerging trends, though results should still be considered indicative** rather than fully representative at parish level until sample sizes grow further.

Although food security indicators show improvement four months after Hurricane Melissa, **significant underlying vulnerabilities persist**.

Many households continue to struggle with the cumulative effects of the hurricane, which has exacerbated pre-existing economic and livelihood challenges. As a result, **the gains observed to date remain fragile**, and affected communities, particularly in the hardest-hit western and north-western parishes, continue to face heightened risk of food insecurity as they work toward long-term recovery.

HIGHLIGHTS

Four months after Hurricane Melissa, food security conditions show partial stabilization but remain significantly worse than before the storm. Insufficient food consumption has declined from its November peak (30%) to 13% yet remains nearly double the pre-Melissa rate (7%), indicating incomplete recovery. Diet quality continues to lag, with one-third of households still consuming no fruit in the previous week, and dairy access recovering slowly, reflecting sustained nutrient gaps. Severe coping and livelihood stress have declined but remain elevated, especially in the west and north-west, where market access also remains most constrained. FIES remains high (43%) despite improvements in short-term indicators including the Food Consumption Score and reduced Coping Strategies Index.



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Crisis or emergency food-based coping remains elevated, dropping from 36% one month after the storm to 18% at four months, but still above pre-Melissa levels (14%). The most severe stress is concentrated in Trelawny, Westmoreland, St. Elizabeth, Hanover, and St. James, forming a persistent high-impact belt in the west and north-west. Crisis and emergency strategies peaked at 29% and 20% respectively, before easing to 26% and 9% by month four, still above pre-event levels. The largest increases in asset-depleting coping occurred in Westmoreland, Trelawny, and Hanover.



Moderate or severe food insecurity (FIES) remains high despite short-term improvements in FCS and rCSI. FIES rose from 33% pre-Melissa to 54% two months post-event, and although it has eased to 43%, levels remain well above baseline, reflecting ongoing constrained food access, and lingering experiences of skipping meals or going hungry.



Market access deteriorated sharply after Melissa: 53% of households faced challenges, peaking mid-month and remaining high into weeks 7–8, while fresh foods recovered slowly, staples and hygiene rebounded quickly, and medicines showed volatile availability. The worst access constraints are concentrated in the west and north-west (e.g., Hanover, Trelawny, Westmoreland, Saint Elizabeth).

JAMAICA FOOD SECURITY MONITORING: CONTENT



Demographics



Household Main
Source of Income



Food Consumption



Food-based
Coping Strategies
and FIES



Livelihood
Coping Strategies



Market Access



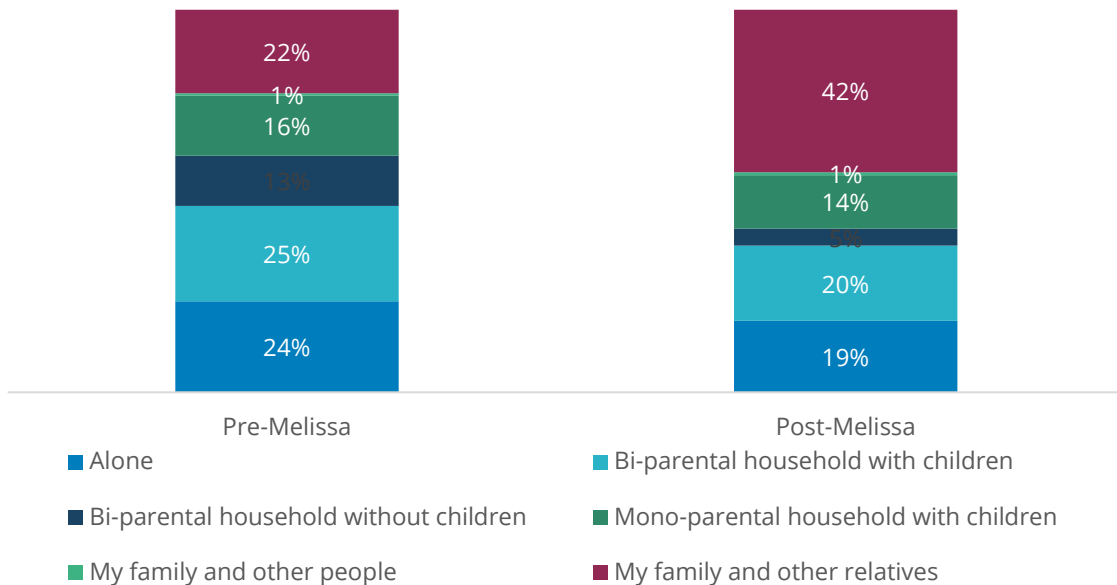
Methodology



DEMOGRAPHICS

Household composition patterns shifted notably after Hurricane Melissa, with extended family arrangements becoming the dominant structure, rising from 22% pre-event to 42% post-event. In contrast, bi-parental households with children declined from 25% to 19%, households without children fell sharply from 14% to 4%, and mono-parental households with children decreased slightly from 7% to 5%. The proportion of individuals living alone remained essentially unchanged at about 16%. Overall, these changes suggest a post-disaster consolidation of households, likely reflecting increased reliance on shared resources and family support networks.

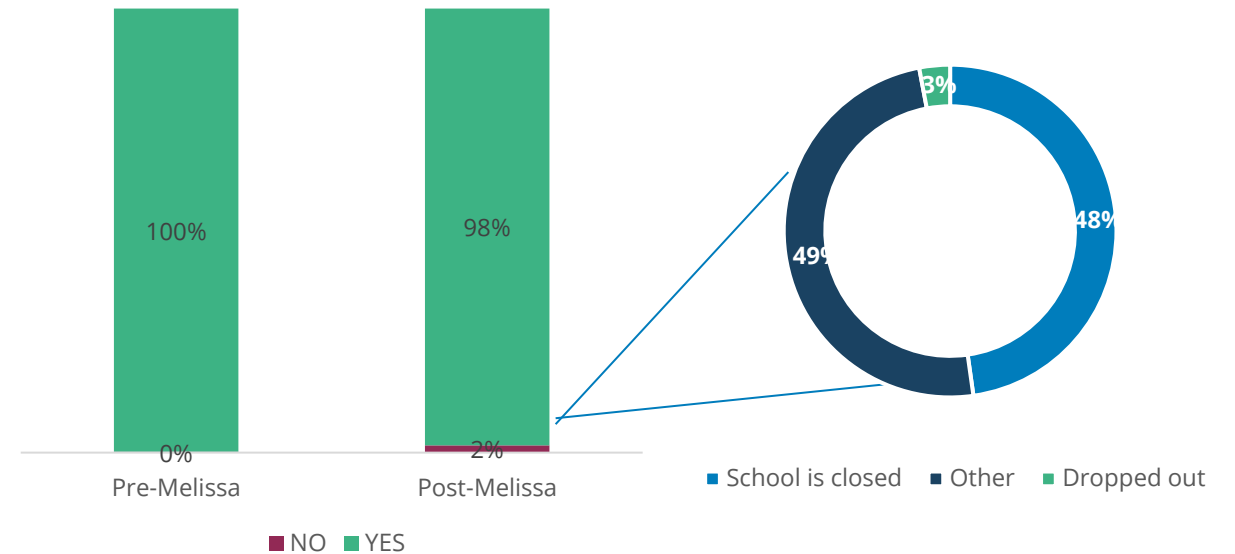
Figure I: Household Composition pre- and post-Melissa



School attendance has shown strong recovery, decreasing from nearly 100% pre-event to 94% one month after the hurricane, and rising again to 98% by four months post-event.

Among the households still reporting non-attendance four months after the hurricane, nearly half (49%) cited school closures as the primary reason, followed by hurricane-related impacts (33%) and other factors (18%). Overall, the small rise in non-attendance is closely linked to storm-related disruptions, particularly temporary school closures.

Figure II: School Attendance and Reason for Non-Attendance post-Melissa





INCOME SOURCES

Post-Melissa, income sources shifted markedly away from stable earnings toward more precarious and informal activities.

Salary-based income remained the largest source but showed no recovery, holding at 46% pre- and post-event. Own business and trade activities experienced a sharp contraction, falling from 20% to 9%, while daily or informal labour increased from 9% to 13%, indicating greater reliance on insecure work.

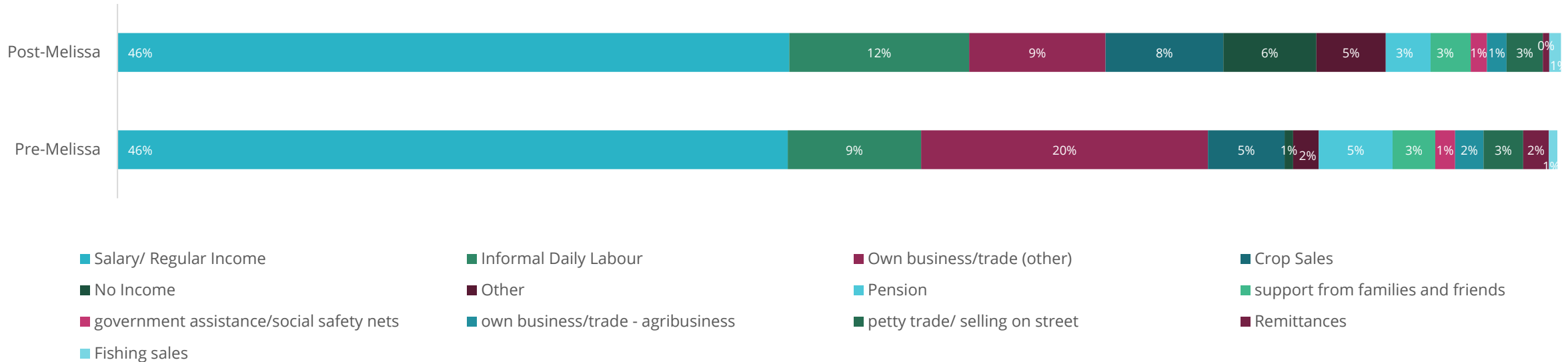
The share of households reporting no income rose noticeably from 1% to 6%, underscoring growing economic vulnerability.

Crop production saw a modest increase from 6% to 8%, suggesting some households turned to small-scale farming for support.

Government assistance and social safety nets rose slightly from 1% to 2%, while remittances remained unchanged at 1%, reflecting limited external financial support.

Overall, these patterns point to reduced economic stability and an urgent need for livelihood recovery and market-strengthening interventions.

Figure III: Income Sources





FOOD CONSUMPTION

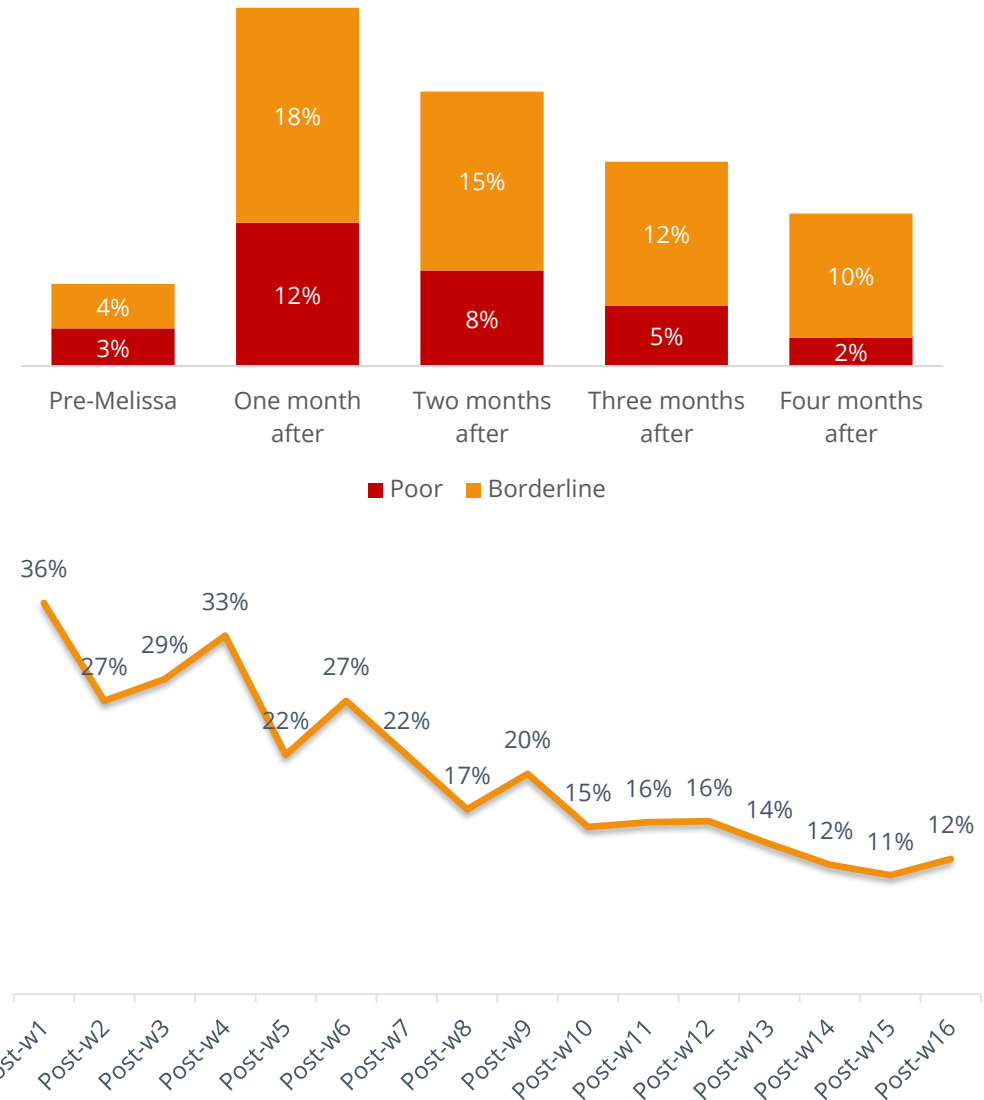
Food consumption declined sharply after Hurricane Melissa, with the proportion of households experiencing insufficient consumption (poor + borderline) rising from 7% pre-event to 27% immediately after the storm. **Insufficient food consumption** (Poor + Borderline FCS) **peaked at ~30% one month after** (12% Poor; 18% Borderline), then eased to 23% (two months), 17% (three months), and 12% (four months)—still above the pre-Melissa baseline (7%). **Weekly monitoring confirms this trajectory:** 36% (week 1), 27% (week 2), 29% (week 3), 33% (week 4), then gradually declining to 11% by week 15 before marginally increasing to 12% in week 16. This pattern reflects the results of an initial shock followed by uneven recovery, with households not returning to pre-event conditions.

Where is the situation worst? Pre-Melissa, nearly all parishes maintained high acceptable consumption levels above 85%, **but post-event figures show notable deterioration**, particularly in **Clarendon** (acceptable consumption dropping from 96% to 69%), **Saint Elizabeth** (98% to 67%), **Hanover** (96% to 80%), and **Saint Mary** (100% to 75%).

Where did conditions deteriorate the most? Post-Melissa, **borderline consumption surged** in multiple areas, including **Clarendon** (4% to 20%), **Saint Ann** (3% to 14%), and **Westmoreland** (3% to 17%), while **poor consumption increased** most notably in **Manchester** (2.8% to 10.6%) and **Clarendon** (0% to 11%). These shifts align with national trends showing reduced access to diverse, nutrient-rich foods, declines in vegetables, fruits, pulses, and proteins, and increased reliance on cheaper staples.

Across all major food groups, consumption frequency declined after Hurricane Melissa, with the **sharpest early reductions seen in vegetables and fruit**. Roughly one-third of households reported consuming neither for an entire week one month after the storm, up from pre-Melissa levels of just 4–8%, and fruit consumption remained particularly slow to recover, with 31% still at zero days four months later. **Dairy intake showed a similar prolonged constraint**, with zero-day consumption rising to about 42% one month after and staying high at 37% by month four. **Staple foods remained the backbone of diets but were not consumed daily as before**, daily staple intake fell from, 82% pre-Melissa to 53% one-month post-event, while fat/oil consumption stayed relatively high, consistent with a shift toward cheaper, energy-dense foods during periods of limited diversity.

Figure IV: Trend of Insufficient Food Consumption by Period





FOOD-BASED COPING STRATEGIES

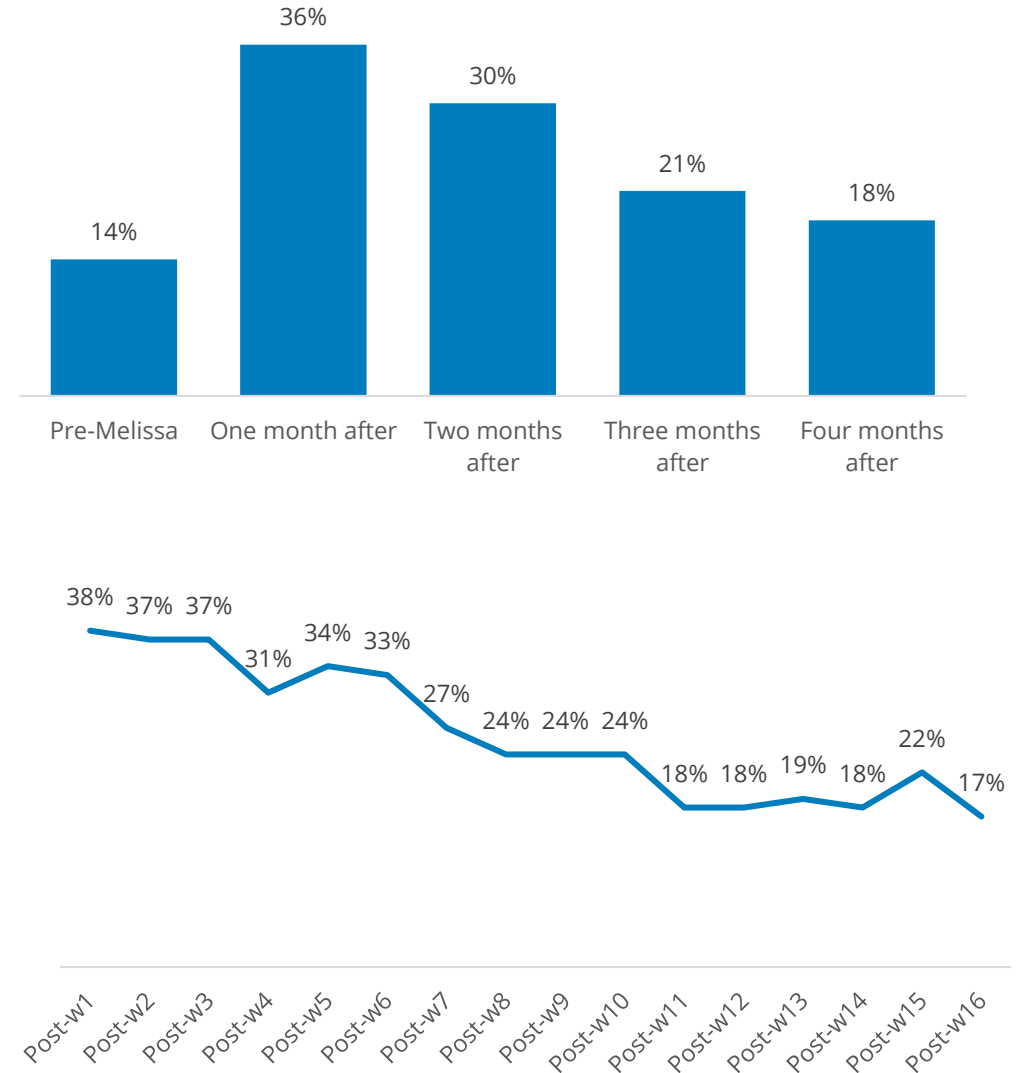
Food-based coping increased sharply after Hurricane Melissa, with the share of households using crisis or more severe strategies rising **from 14% pre-Melissa to 36% one month after**, before gradually easing to 30% at two months, 21% at three months, and **18% by four months**. Weekly data show the same pattern: coping levels remained elevated in the early weeks (38%, 37%, 37%, 31%, 34%, 33%) before tapering to the mid-20s by weeks 7–8 and falling to 18% by week 10. Although coping levels are declining, they remain well above pre-Melissa levels, demonstrating that many households continue to face prolonged consumption-related stress.

Where is the situation worst? Across parishes, Hurricane Melissa triggered sharp increases in severe consumption-based coping, with the highest crisis-level rCSI consistently concentrated along the western and north-western belt, particularly **Trelawny (36%), Westmoreland (40%), St. Elizabeth (40%),** and **Hanover (35%)**. In contrast, eastern and urban parishes such as Kingston & St. Andrew, St. Catherine, St. Thomas, St. Mary, and Portland exhibited faster stabilization.

Where is the impact most prolonged? Four-months post-event, recovery is slowest in Trelawny (36%), Hanover (35%), and St. James (32%), indicating sustained pressure on household food consumption in these parishes.

Overall, the data show a clear geographic divide, with the deepest and most persistent food-related stress concentrated in rural western Jamaica.

Figure V: Prevalence of Crisis or Above Food-based Coping Strategy by Period





FIES

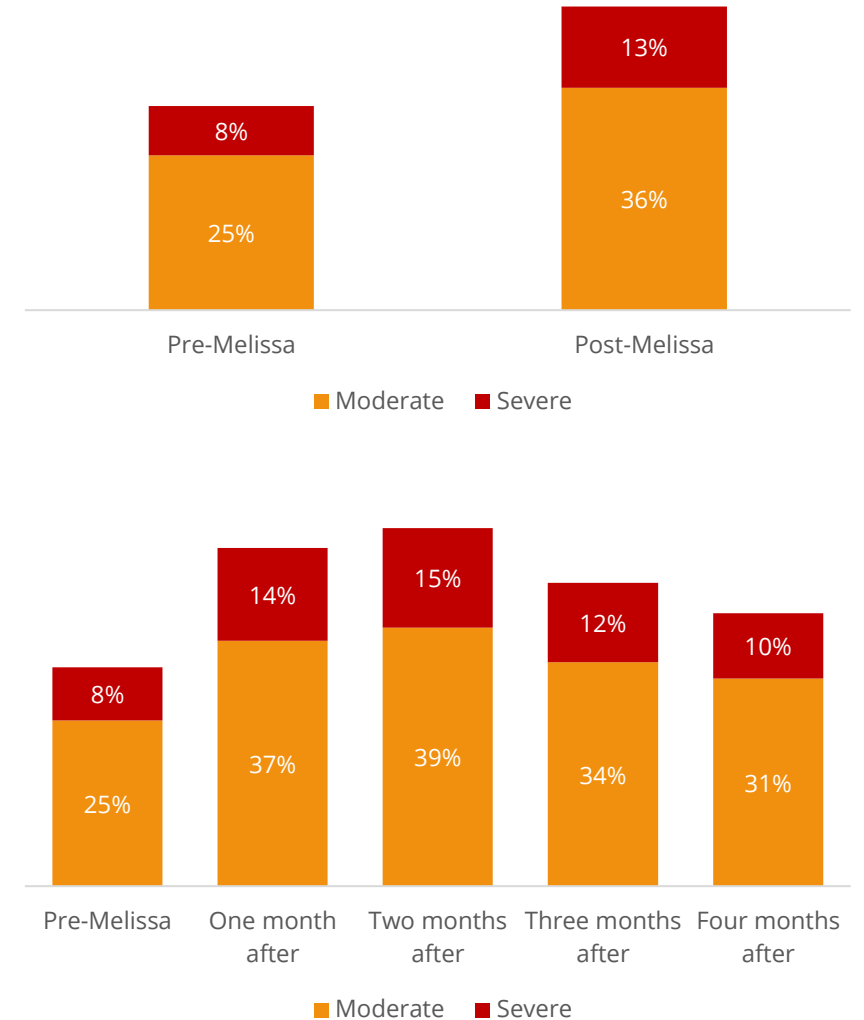
Prior to Hurricane Melissa, 33% of households experienced moderate or severe food insecurity. One month after the hurricane, this figure rose sharply to 51%, and by two months post-event it increased further to 54%, indicating a sustained deterioration in household food access. Although levels gradually declined over the following months, **food insecurity remained elevated at 49% three months after and 43% four months after**, still **well above pre-Melissa conditions**. This trajectory demonstrates only partial recovery, with households continuing to face significant challenges in meeting their food needs.

Where is the situation worst? Post-Melissa, the highest prevalence of moderate or severe food insecurity is found in **Westmoreland (61%), Trelawny (55%), St. Ann (51%), St. Elizabeth (55%), and Hanover (58%)**.

Severe food insecurity alone exceeded 15% in Clarendon and Hanover, underscoring acute vulnerability in these areas. In contrast, Kingston & St. Andrew reported much lower levels (42% moderate or severe), remaining relatively stable compared with rural western and northern parishes.

Where are conditions deteriorating the most? Rural western and north-western Jamaica, where Melissa's impact was most severe, experienced the biggest jumps in food insecurity, with both moderate and severe food insecurity rising sharply. This reinforces the need for continued and targeted assistance in these high-impact parishes.

Figure VI: Prevalence of Moderate and Severe Food Insecurity (FIES) by Period



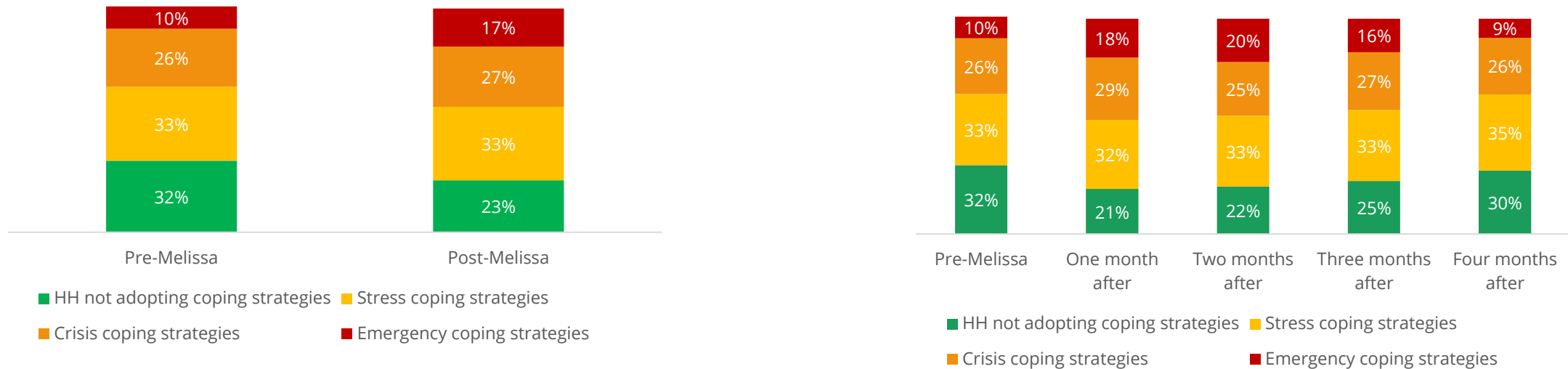


LIVELIHOOD COPING STRATEGIES

Before Hurricane Melissa, 32% of households reported no livelihood-related coping, relying primarily on stress strategies (29%), with crisis (26%) and emergency strategies (10%) less common. **After the hurricane, this balance shifted sharply**: no coping fell to 26%, stress coping remained stable (28%), but **crisis coping rose to 27% and emergency coping nearly doubled to 19%**, signaling a move toward more severe, asset-depleting behaviours. One month after the event, crisis coping peaked at 29% while emergency coping reached 18%, reflecting mounting pressure on household livelihoods. By two months post-event, crisis coping eased to 25%, but emergency strategies increased to 20%, indicating continued strain and a reliance on the most harmful coping mechanisms. Three months after, crisis coping stabilized at 27% while emergency coping declined to 16%, suggesting early signs of easing but still elevated stress compared with pre-Melissa. By four months after the event, emergency coping fell further to 9% and crisis coping to 26%, marking a meaningful improvement. However, **both indicators remain above pre-crisis levels**, showing that **households have not fully recovered their ability to withstand livelihood shocks**.

Post-Melissa, the burden of severe livelihood coping is concentrated in the west and north-west. Four months after the hurricane, **Hanover reports the highest emergency coping (16%)**, followed by Trelawny (16%), and Westmoreland (14%). Compared with pre-crisis levels, **the largest jumps in emergency coping occurred in Westmoreland (+16 pp), Trelawny (+15 pp), and Hanover (+12 pp)**, highlighting persistent vulnerability and the need for strengthened livelihood assistance in these areas.

Figure VII: Prevalence of Livelihood Coping Strategy by Period





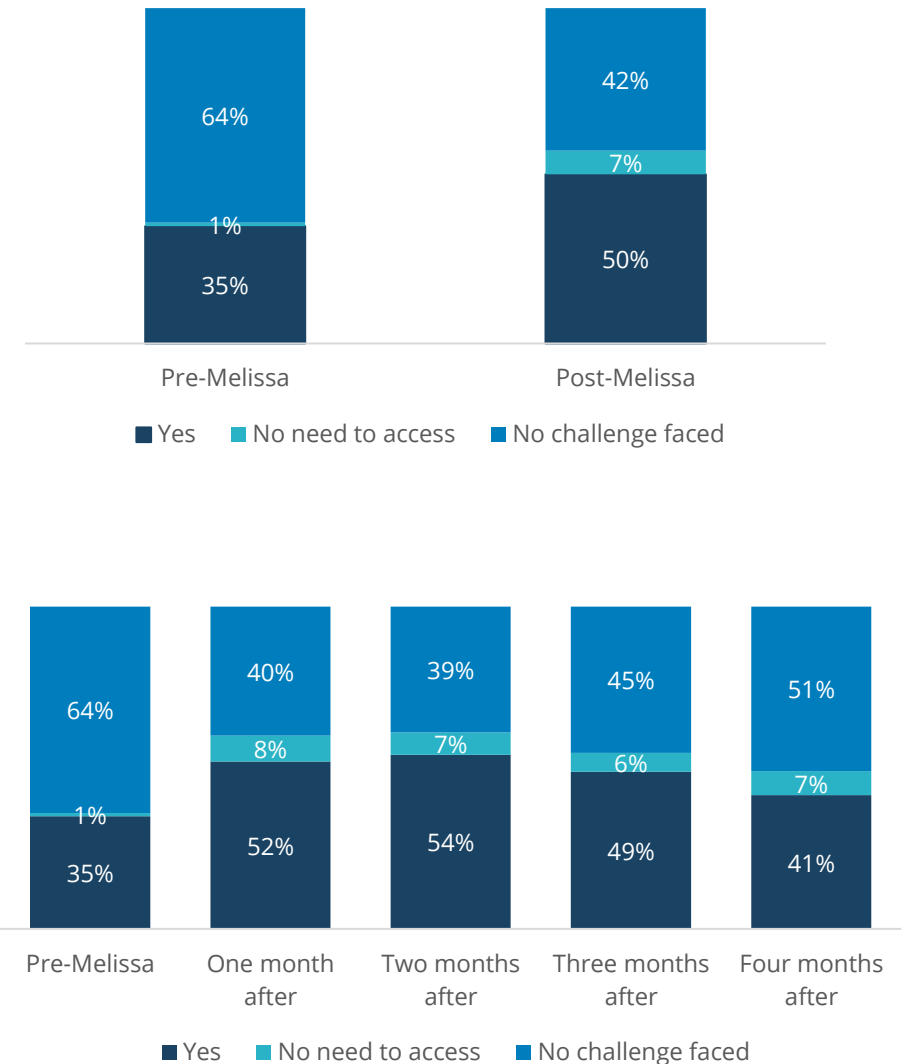
HOUSEHOLD MARKET ACCESS

Market access deteriorated sharply after Hurricane Melissa and has recovered only gradually. Before the hurricane, market access was relatively stable, with 64% of households reporting no challenge and 35% reporting difficulties. Post-event, this balance reversed: **53% reported challenges and only 40% faced no difficulty**, with 8% not needing to access markets (likely relying on stocks or assistance). Month-to-month monitoring shows a slow but persistent improvement, with **market access challenges peaking at 54% two months after impact**. By four months after, **challenges remain elevated at 41%**, well above pre-Melissa levels, indicating that recovery is incomplete and market functioning remains fragile.

Items availability - Fresh foods show the largest and longest disruptions. Fresh items experienced the steepest shortages, with unavailability jumping from 1% pre-event to 12% in week 1, rising further to 16% in weeks 2–3, and improving only gradually to 7–9% by weeks 8–10, still far from pre-shock levels. **Staples (basic foods) recovered more quickly:** unavailability rose to 16% in weeks 1–3 but returned to ~1–2% by month four. **Hygiene items followed a similar pattern**, with unavailability fluctuating between 2–4%, while medicines remained intermittently unavailable (3–7% post-event), pointing to restocking delays or information gaps.

Post-Melissa, market access challenges are highest in western and north-western parishes: The highest rates of households reporting challenges are observed in Hanover (62.6%), Trelawny (62.4%), Westmoreland (61.7%), St. Elizabeth (58.8%), Portland (56.3%), and St. James (56.1%). These same parishes also experienced major jumps compared with pre-Melissa, including Westmoreland (+36 pp), Trelawny (+34 pp), St. Mary (+30 pp), Manchester (+27 pp) and Hanover (+32 pp)—showing that western and interior parishes faced the steepest and most persistent market-related disruptions.

Figure IX: Market Access by Period





METHODOLOGY

Sampling

Real-time monitoring is conducted via Computer-Assisted Telephone Interviews (CATI) using Random Digit Dialling (RDD) to generate new numbers each round. RDD draws across all active mobile network operators to improve coverage. Collection runs on a rolling, 30-day cycle with weekly quotas to provide near real-time updates.

Limitations

The real-time monitoring rounds prior to Melissa were relatively small, totaling 511 observations. After Melissa, coverage expanded significantly to over 4,100 observations, improving visibility on emerging trends. However, figures at parish level remain indicative and should be interpreted with caution, especially where base counts are low. **Estimates are directional signals rather than definitive prevalence rates. It is important to note that these results do not fully capture conditions in areas without mobile network coverage, where households may not have been able to participate in the survey.** Despite these limitations, the current data already underline the severe impact of the hurricane on food security and livelihoods, providing an early indication of the scale and nature of needs across Jamaica.



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