

AHP Anticipatory Action Fund

Post-Activation Report - Readiness

1. Activation Overview

Project Title	Anticipatory Action Fund (Readiness Activation Report)		
Country	Papua New Guinea		
Hazard Type	Floods		
Location/s	Eastern Highlands Province		
Lead Partner	CARE International in Papua New Guinea		
Local Implementing Partner	N/A		
Date of readiness activation	12/02/2026	Date of stand-down	17/02/2026

2. Program Delivery

2.1 Activation Process (1/2 page)

On 11 February 2026, between 9:00PM and 12:45AM, early warning information indicated the risk of riverine flooding in Gitunuha village, Lapegu ward, Gahuku Local Level Government (LLG), Goroka District of Eastern Highlands Province. Forecast from the Papua New Guinea National Weather Service, through its Forecasting and Warning Centre, disseminated multiple warnings of heavy rainfall and potential flood. These alerts were communicated to communities through the Disaster Risk Mitigation Committees (DRMCs), with support from CARE's Humanitarian team.

Hazard indicators were monitored through a combination of formal and community-based systems. The Community-Based Flood Early Warning System (CBFEWS), supported by CARE, integrated traditional knowledge with physical monitoring tools. Community members and DRMC focal points observed key environmental signals such as upstream dark cloud formation, rising river levels, and changes in water colour and debris flow. These observations were corroborated by the installed water level markers with colour-coded thresholds, which was the key driver in estimating the lead time before the actual alert indication for evacuation. Once alert levels were reached, bells were used to disseminate warning messages rapidly across the community. This system proved effective in triggering timely preparedness actions, including household readiness and targeted early evacuation of high-risk households.

Real-time communication was facilitated through a dedicated CARE Anticipatory Action WhatsApp group, involving CARE teams, the Eastern Highlands Provincial Disaster Office (EHPDO), Organizations of Persons with Disabilities (OPDs), CBOs, DRMCs and community leaders. DRMC representatives shared live updates and photos, enabling continuous situational awareness. Contingency support, including provision of mobile credit, ensured uninterrupted communication throughout the night. Based on verified trigger thresholds, CARE informed CARE Australia and the Australian Humanitarian Partnership Support Unit (AHPSU), which enabled rapid approval for activation on 12 February 2026.

Internal coordination within CARE began immediately, along with the deployment of a field verification team. Communication trees were activated with other AA project sites, recognizing that four of the five sites are interconnected through the Asaro river system and therefore exposed to similar flood risks. The activation process demonstrated strong alignment with the community's Flood Risk Mitigation Preparedness and Response Plan and reporting structures outlined in the Community Action Plan, enabling timely feedback to the community through the DRMCs and focal points. Early monitoring systems and trigger thresholds were largely appropriate, providing sufficient lead time for preparedness and risk reduction actions.

CARE's Programme Quality team and the Humanitarian Program team conducted household surveys, Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs) to assess community response, identify gaps, and inform adaptive actions. Daily Situation Reports were produced over five days, contributing to both operational monitoring and capacity strengthening of DRMCs in reporting and coordination. Awareness sessions reinforced key messages on early warning systems, preparedness actions, and community response planning.

Situation Reports indicate that on the first day of the flood event (12 February 2026), a household, comprising five individuals (3 males (2 children under five and 1 adult), and 2 females (1 child under five and 1 adult), were affected. Vulnerable groups, particularly persons with disabilities, and children were among the first to relocate to higher ground prior to and following the early warning alerts, demonstrating a timely response to risk communication. Additional households began evacuating as warnings intensified. At Day 2, the rain stopped and water levels receded. These households had already been evacuated on day 2, and no additional impacts were recorded. By Day 3 (14 February 2026), the number of affected households increased to 52, with a total of 261 individuals. This included 142 males (21 children under five, 70 youths aged 6–24, three persons with disabilities, and 48 adults) and 119 females (13 children under five, 49 youths aged 6–24, four persons with disabilities, and 53 adults). This represented the peak of displacement during the event. Despite the increase in affected populations, no significant damage to homes, livestock, or livelihoods was reported - due to early evacuation and preparedness actions facilitated by the early warning system. One participant reflected:

"Community members were on high alert and moved [swiftly] up to higher grounds on both sides of the [flooding] river to the assigned safe spots/places. With CARE trainings and water level marker [setup], we socialized them to the community making reference to a devastating flood that took place in the past [2018 event], in which we lost houses, livestock and food gardens; that such destructions could be avoided if we followed what CARE Trainings and activities taught us. That's why [unlike in the past] the people were on high alert and heed our calls/bell dongs to move out and up to higher spots." | **DRMC Member, Nupaha**

Key learning from this activation includes the effectiveness of combining indigenous knowledge with simple technological tools for early warning in remote areas with limited existing data sets. However, the process also highlighted the need for clearer communication on the scope of anticipatory action support, as some community members expected emergency relief assistance once triggers were met. Future activations could be strengthened by reinforcing community understanding of anticipatory action objectives, refining communication strategies, and addressing local governance dynamics within DRMC structures.



Figure 1: 4 July 2025



Figure 2: 14 February 2026

2.2 Activities and Implementation (1/2 page)

Following the activation, CARE implemented a series of readiness and verification activities to support community preparedness and assess flood risk in Gitunuha. These activities began with an initial rapid assessment, which was conducted to verify early warning indicators, assess water level markers, evaluate DRMC coordination, assess the damage and understand community response, including the evacuation of 53 high-risk households and individuals to higher ground and the evacuation centre.

From 12 February 2026 onwards, the Humanitarian Program Manager initiated daily coordination meetings with regular situation meetings, enabling real-time information sharing and updates, task delegation, and logistics planning. Prompt approval from AHPSU allowed access to the readiness funds, which supported procurement of basic materials to support the strengthening of the evacuation centre as planned.

Field-level assessments and community engagement were closely coordinated between CARE teams, DRMCs, and community leaders to strengthen readiness and improve evacuation conditions. The following rehabilitation and maintenance activities were undertaken at the evacuation centre:

- Rehabilitation and upgrading of the Gitunuha Evacuation Centre:** Leveraging the shelter repair action line, CARE supported the rehabilitation of minor damage to the evacuation site. CARE supported targeted improvements, including the installation of tarpaulins to seal roof leakages and enable safe rainwater collection. Community members, including the DRMC representatives, youths, women, and leaders, were actively engaged in completing and strengthening the shelter. Additional improvements included the establishment of a safe fireplace with stored firewood for cooking and warmth, the setup of benches, and the provision of woven bamboo floor mats to improve comfort and usability.



Figure 3: Maintenance done to the Gitunuha Evacuation Centre

- Installation of latrines and rainwater harvesting systems:** Two accessible pit latrines (segregated for males and females) were constructed to ensure dignity and inclusion, particularly for persons with mobility challenges. Two temporary rainwater harvesting systems were installed at both ends of the evacuation centre, with tarpaulins used to support clean water collection from the kunai-thatched roof. Sandbags were placed around the structure to reduce groundwater inundation. In addition, three solar kits, 12 buckets with lids, and 10 5L water containers were provided to enhance water access, storage, and basic service provision.



Figure 4: Temporary water harvest system #1



Figure 5: Rainwater harvest system #2



Figure 6: Construction of latrines at the Evacuation Centre

- **Restoration of access through Temauka bridge repair:** Access to the evacuation centre was temporarily disrupted when the Temauka bridge collapsed during heavy rainfall, preventing both vehicle and pedestrian crossing. Community members were forced to cross the fast-flowing creek on foot, posing safety risks. A ward councillor mobilized local resources and labour to initiate repairs but faced material shortages. CARE responded by providing essential materials, including nails, bolts, cement, and food rations for labourers, enabling the community to complete the bridge reconstruction within four days and restore safe access to the evacuation site and surrounding services.
- **Preparedness through food voucher system:** Food vouchers were printed in advance to support up to 52 affected households in the event of full activation. Supplier and transport arrangements were also pre-identified and placed on standby, ensuring that assistance could be rapidly mobilized once activation triggers were met.

Despite initial displacement increasing from 5 to 52 households before declining, assessments confirmed minimal physical damage to homes and livelihoods. This demonstrates that early warning dissemination and evacuation measures were effective in reducing exposure. The readiness phase was progressively scaled down as water levels receded, with households returning home after short-term evacuation.

2.3 Community Impact and Effectiveness (1/2 page)

The readiness activities had a clear positive effect on reducing the impact of the flood on the Gitunuha community. Localising the early warning system through the CBFWS strengthened community ownership by placing monitoring and first response responsibilities with the DRMCS and community members. During the activation, the water level markers, bell signals, other traditional signs and community communication pathways were used to warn households early, and many families were able to move to safer locations before floodwaters rose further. This contributed to the limited physical impact recorded during the event, despite the number of affected members increasing from 5 households on day 1 to 52 households at peak (day 2), before declining. There was minimal damage to homes, livelihoods, and livestock.

Household survey, FGDs and KIs indicate that the early warning and readiness support were widely understood and valued by the community:

"Water level rising, smell of water/river... water colour and cloud formation, especially up on the mountains, were the first signs that signalled us of the flood... We also used the water level marker that was installed for us by CARE... When the trigger point was reached, we heard the bell ringing continuously. The number of dongs signals different messages. The continuous one was obviously for us to move out quickly to a safe place" | Male FGD

"I live on a delta, surrounded by two river mouths. When the rainfall continued, I anticipated flooding. Since I am a person with disability, I decided to move away and across to the mainland to be with my aunt. It was my

own initiative. When the trigger message was sent out, I was already safe with my aunt, who led me and others to this safe place [Evacuation site]." | **Female with disability, Female FGD**

"We depended on cloud formation, water colour, sound and smell to tell impending floods... We were told that continuous bell dongs were a sign for us to evacuate. When we heard the continuous sound of the bell, it was around 1:30 AM. My other sister-in-law (who was pregnant) and I were amongst the first people to be led out and up here by my aunt." | **Female with disability, Female FGD**

Survey responses showed that household received warning messages mainly through the community bell, 91% (93% females and 90% males), while 9% (8% female and 10% males) received the warning from someone in the community. Almost all participants (99% - 100% females and 97% males) indicated that they understood the action to take after receiving the warning signal. Additionally, 97% (100% females and 94% males) found the warning systems, training and simulation exercise "very helpful", and 97% (100% females and 94% males) reported that their awareness of early warning systems had "increased" since the start of the project. This is further corroborated by the qualitative data, which also pointed to the simulation exercise done in the preparatory stage as effective and community now value the exercise.

"The DRMC has taught us what and how to do things in events like this. So, when the bell rang and the DRMC warned us, we moved quickly to the safe house without delay... [Also], there was a major simulation activity staged by CARE last year that we participated in to prepare for similar events like this one" | **Male FGD**

"I remember [CARE] staged a simulation exercise for us and we acted as in a real situation... We realize the importance of this simulation exercise that was acted out." | **Female FGD**

"I can say the simulation activity we did late last year prepared us for such a time as this because when the bell rang, we remembered the steps taken during simulation to apply it in a real situation" | **Male FGD**

The evidence also suggests that the warning helped the community avoid or minimise losses that might otherwise have occurred. 17% of respondents (25% females and 8% males) reported harvesting cash crops such as sweet potatoes, taro, bananas, and cassava, and 38% (39% females and 26% males) harvested their gardens based on the triggering of early warning information dissemination. Other participants mentioned that they relocated their livestock to "higher grounds", while some mentioned that they had reinforced the livestock, which was already "stationed above the ground", hence not requiring relocation.

97% (100% females and 94% males) of respondents explicitly linked the warning system to lower fear and improved understanding of where to go and what to take. As observed in many of the quotes above, community members also noted that the warning system built on traditional knowledge rather than replacing it, helping confirm local observations of river changes and strengthening confidence to act early.

"In the past, I never slept well in the night when it's flooding due to the fear that I am helpless. But, now, because of the awareness you guys [CARE] have made, I decided to take action early to avoid a potential bad situation on my part." | **Female with disability, Female FGD**

At the same time, the activation revealed important limitations. Community response was uneven, and not all affected households were adequately prepared. Survey responses and field observations show that key barriers included mobility constraints for elderly people, difficulty moving at night, and insufficient household preparedness items. Some respondents also remained at home because they perceived the risk to be low, their homes were on higher ground, or they feared theft and loss of property if they left.

"To be honest, most of us did not bring any food or water with us because we know the flood won't take that long. But what if the flood was to take long that a week or two, in such cases, we will run out of food, especially if our food gardens are destroyed by water. Next time we will move with our food and water and livestock." | **Male FGD**

An unintended consequence was that the neighbouring community along the same river, who were not severely impacted, saw the experience in Gitunuha and have recommenced developing their community DRR plan and have begun to renovate their evacuation site.

Gender Considerations

Across nearly all indicators (as noted in the narrative above), women demonstrated higher rates of engagement in early actions and reported higher rates of improved wellbeing as a result of early actions. CARE's field observations and community FGDs found that women, especially mothers, led families to the evacuation centres. This also explains why female in the survey consistently have a higher score than their male counterpart.

2.4 Lessons learned and good practices (1/2 page)

This activation demonstrated several good practices that should be retained and replicated in future AA activations. First, the CBEWS functioned well as a localised and practical warning mechanism. The combination of traditional indicators, water level markers, and bell signals provided timely and credible warnings that community members understood and acted upon. This confirms that blending indigenous knowledge with simple, community-managed tools is both appropriate and effective in this context.

Second, the activation highlighted the value of preparedness investments made before the event, particularly the establishment of the evacuation centre, simulation exercises, existing DRMCs and awareness activities. These measures helped households understand where to go, what to do, and how to respond once the trigger was reached. The simulation exercise was especially useful, as community members were able to recall and apply steps practiced earlier.

Third, coordination across actors positively influenced the success of the readiness phase. Communication between CARE, DRMCs, community leaders, the Provincial Disaster Office, and CARE Australia enabled timely information flow and quick readiness approval. Internally, CARE's cross-team coordination supported rapid verification, logistics, and operational planning. At community level, however, the activation showed that DRMC performance was uneven. While some focal points and leaders responded effectively, coordination gaps within the DRMC structure affected the consistency of messaging and support to vulnerable households.

The activation also revealed challenges that will inform future improvements. Household-level preparedness remained uneven, with many families evacuating without essential items such as food, water, lighting, protective materials, or emergency bags. Persons with disabilities, older people, pregnant women, and caregivers faced additional difficulties, especially at night, due to mobility constraints and insufficient support. This shows that while community-level systems are in place, family preparedness planning needs to be strengthened further, with more emphasis on practical household readiness measures and support for vulnerable members.

2.5 Financial and Risk Management (1/2 page)

Expenditure during the readiness activation was largely in line with the planned budget, with funds utilised for rapid assessments, coordination, logistics, and targeted rehabilitation of the evacuation centre. Early access to AA readiness funds enabled timely procurement of materials and operational deployment. However, some deviations from the original plan occurred due to contextual and operational challenges.

A key adjustment related to the food voucher modality. The initially identified preferred vendor withdrew from the agreement during Day 2 of the response, requiring CARE to urgently identify an alternative supplier. While a second vendor was secured, they were unable to deliver pre-arranged food baskets to the community as planned. Instead, the modality shifted to a voucher redemption system at the vendor's shop, which required affected households to travel to redeem assistance.

An additional unplanned but necessary expenditure was incurred to support the rehabilitation of the Temauka bridge, which collapsed due to continuous rainfall and disrupted access to the evacuation centre. This posed

immediate safety risks, forcing community members to cross a fast-flowing creek. The bridge was successfully restored within four days, re-establishing safe access for affected populations.

The following key risks were identified during implementation:

Misalignment between anticipatory action and community expectations: A significant challenge was ensuring that communities understood the distinction between AA and emergency response. Despite prior awareness efforts, some households expected relief distributions once evacuation occurred. When assistance was not immediately provided, rumours emerged regarding unmet obligations and lack of transparency. This risk is being managed through planned community engagement sessions to clarify AA objectives, reinforce messaging, and address misinformation.

Limited household preparedness: Many households arrived at evacuation centres without essential items such as food, water, lighting, or emergency kits. This reflects a gap in translating awareness into practical household-level preparedness. The risk is that, in a more severe or prolonged event, this would lead to increased vulnerability and potential humanitarian need. Future interventions should prioritise strengthening household preparedness planning and ensuring communities internalise their roles in AA.

Operational and supplier risks: The withdrawal of the initial vendor highlighted the vulnerability of relying on single suppliers. While quickly mitigated, this disruption underscores the importance of establishing multiple pre-qualified vendors and formal agreements during the preparedness phase. Budget provisions may also need to account for alternative delivery mechanisms.

Gaps in continuity between project phases: The phased nature of the AA approach, particularly in sites where other AHP Disaster READY activities had concluded, created periods of limited engagement between preparedness and activation. This reduced community readiness and made it challenging to sustain momentum. Future programming should consider bridging or complementary activities to maintain engagement, strengthen DRMC functionality, and reinforce preparedness behaviours between activation cycles.