

Draft policy brief on advancing community-based early warning systems

TEC/2026/32/7
14 April 2026

Why this brief now?

83.4M

people living in internal displacement
at end 2024

45.8M

new disaster displacements recorded
in 2024

119

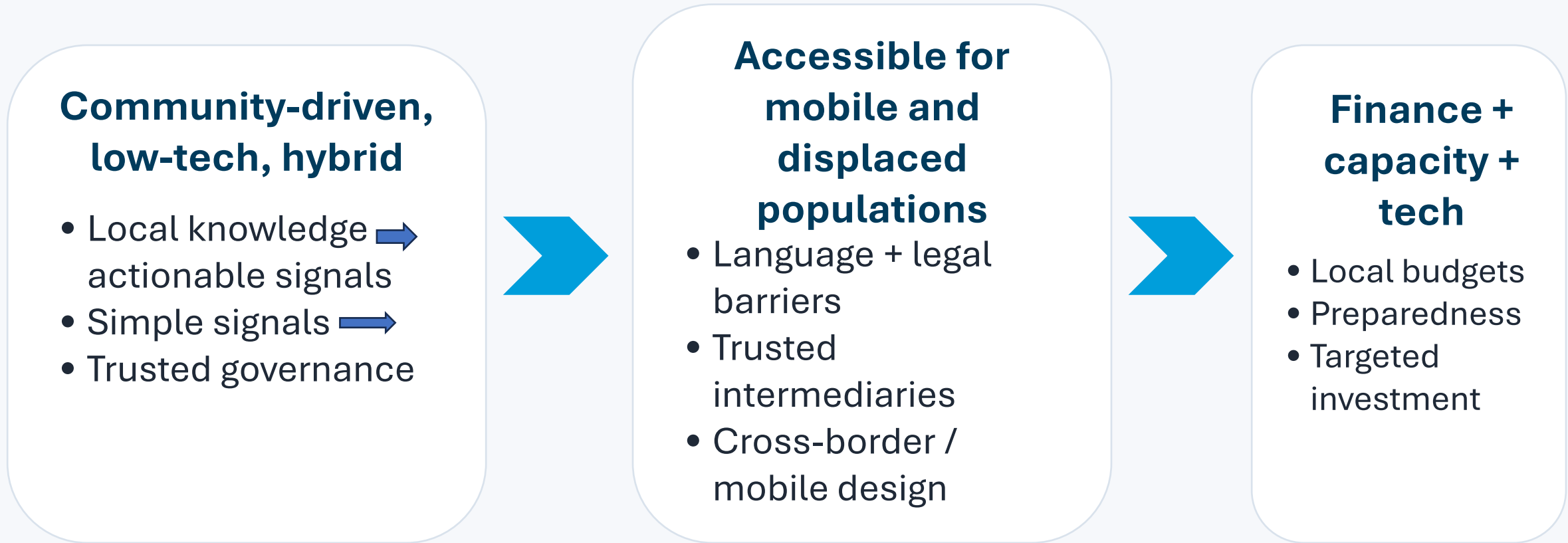
countries reporting a MHEWS in 2025
(~60%)

- Progress is real—but uneven across warning dissemination and preparedness.
- The biggest gap is not only detecting hazards; it is turning alerts into trusted, timely action specifically for the last mile.
- This brief is the operational companion to the TEC–GEO brief: from technology availability to people-centered effectiveness.

MOBILITY GAP

Displaced and mobile people are often outside formal registries, fixed jurisdictions, and standard alert pathways. The biggest gap is not warning generation but whether people can act.

The draft's core argument



Headline: make EW4All work for people on the move, not only for places on the map.

Evidence base for the brief- case studies

The brief draws on 6 detailed case studies and over 20 additional operational examples across regions and contexts including over 25 country and regional applications spanning Africa, Asia-Pacific, and Latin America.

Core case studies

1. Burundi – community flood early warning (low-technology thresholds and reception verification)
2. Dominica – hybrid systems using Common Alerting Protocol and community-based dissemination
3. Bangladesh (Cox's Bazar) – refugee camp early warning dissemination through volunteer networks
4. Peru – inclusion of migrants through community preparedness brigades
5. Philippines – institutionalized local dissemination mechanisms (“Bandilyo”)
6. Climate Mobility Innovation Lab – displacement risk analysis and catalytic financing

Evidence base- additional content inclusion

Illustrative examples across regions:

- **Africa and regional systems**

Kenya, Somalia, Mozambique, African Union (AMHEWAS), IGAD (ICPAC)

- **Asia-Pacific systems**

Türkiye, Indonesia, India (Odisha State), Fiji, Nepal

- **Latin America and regional cooperation**

Chile, Central America (CRRH/SICA)

- **Humanitarian, financing and private sector approaches**

Haiti, Bangladesh, Kenya, Senegal and Mali, Red Cross and Red Crescent, Sauti East Africa

Coverage across contexts

- Displacement and human mobility
- SIDS, LDCs, and fragile settings
- Camp, urban, peri-urban, and rural environments
- Sudden- and slow-onset hazards
- Low-connectivity contexts

Section 1: What works at the last mile

Community-driven, low-tech and hybrid solutions

- Warnings work when they are understandable, trusted, and locally governed.
- Low-tech often outperforms digital when connectivity, literacy, or trust is weak.
- Maintenance, drills, and community ownership matter as much as the channel itself.

Burundi

Markers + megaphones + door-to-door
= trusted flood warnings in weak-connectivity settings

Dominica

CAP + village councils + ham radio
= resilient island last-mile reach after Maria

Lesson 1: trust and reception verification

Lesson 2: hybrid only if it improves reliability

Section 2: Who warning systems miss

*“2.6 billion people remain offline globally”
(ITU)*

Accessibility for mobile and displaced populations

- Barriers: language, legal status, phone/SIM access, weak trust, high-exposure settlement patterns.
- Conventional systems assume stable populations and fixed boundaries; mobility breaks that assumption.
- The design response: multilingual messaging, trusted intermediaries, and mobility-aware dissemination.

Cox's Bazar

Rohingya-language messaging, flags, megaphones, volunteers, rumor management

Peru

Migrant brigades linked into civil defense = formal roles, stronger trust, better uptake

Key insight: accessibility is not just channel access; it is whether the warning is believable and feasible to act on.

Section 3: What last-mile delivery actually needs

Finance + capacity + technology as one package

- Failure can happen in detection, delivery, or uptake—especially for migrants and displaced people.
- Climate change is reshaping both hazard footprints and settlement patterns; peri-urban risk is rising.
- The last mile is geographic, institutional, social, and legal.

Philippines

“Bandilyo” shows local institutionalization + small flexible financing can sustain dissemination.

CMIL / RICD / CCF

Risk analysis can target investment; flexible grants can move money to communities faster.

Takeaway: Without sustained financing, systems degrade — maintenance and drills are recurrent gaps globally. Ultimately, funding architecture shapes who can act.

Implications for policy and implementation

4 clear takeaways from the policy brief:

1. **Shift focus from technology availability → operational effectiveness**
2. **Design for mobility- This means treating mobility as core design parameter**
3. **Invest in the last mile- financing has to be combined with capacity development to ensure real system performance**
4. **Institutionalize inclusion of migrants and displaced persons via trusted intermediaries and community governance structures to ensure uptake**

Thank you

Nicholas Bishop
Head, Climate Resilience & Security
International Organization for Migration (IOM)
nbishop@iom.int