
Breaking the Circuit of Information Poverty

Early Warning Messages and DHH Communities in Vietnam


Research Insight Dissemination

Abdul Rohman, PhD


School of Communication and Design • RMIT University
Vietnam

Full Paper Available at
preparecenter.org

The Last Mile is Cultural, Not Geographic



100% Geographic Reach



0% Informational Coverage

THE CORE INSIGHT

Current early warning metrics conflate geographic proximity with information access. For the ~1 million Deaf and Hard of Hearing (DHH) individuals in Vietnam, proximity to a siren offers no protection.

THE PARADIGM SHIFT

We must re-wire how practitioners define coverage, shifting from mapping physical towers to mapping identity, language, and sensory access.

Anatomy of a Systemic Disconnect

Modality 1: Siren & Loudspeaker

Output: Public address systems broadcast approaching storm warnings.

Modality 2: Long Official Text Alerts

Output: Local People's Committees post detailed, multi-paragraph text announcements on official channels.

Modality 3: National TV Sign Language

Output: National news broadcasts feature a sign language interpreter in the corner of the screen.

Sensory Barrier

Complete auditory exclusion. DHH individuals living alone are entirely bypassed unless a hearing neighbor intervenes.

Literacy Barrier

Complex Vietnamese sentences are unreadable for many whose primary language is sign, exacerbated by systemic exclusion from formal education.

Identity Barrier

Broadcasters only use the Sign Language from the main administrative center, alienating others. The alert becomes culturally unfit and meaningless.

The Grassroots Resilience Engine

Step 1: Official Broadcast (The Raw Material)

Mainstream TV news displays a storm path (often inaccessible text/audio).



Step 2: Trusted Hearing Allies (The Bridge)

DHH leaders observe the visuals and ask trusted hearing family members to summarize the complex official announcements.

Step 4: Micro-Distribution (The Network)

Bespoke alerts are pushed instantly to closed, highly trusted Facebook and Zalo community groups.

Step 3: Content Co-Creation (The Alchemy)

DHH individuals repackage the information: capturing TV screenshots, recording custom sign language videos tailored to local dialects, and writing simplified subtitles.

Actionable Insight: Treat these Facebook and Zalo groups not as informal social chatter, but as *highly efficient, life-saving infrastructure* to integrate with, rather than to build over.

Engineering an Inclusive Alert

Regional Sign Integration

Prioritize embedded video over complex text. Ensure the interpreter uses the regional sign dialect (**Northern, Central, or Southern**) native to the target demographic.

Concrete Visual Evidence

Discard generic vector illustrations. Use visceral, real-world photography (e.g., actual local shelters, real life jackets, specific flooded roads).

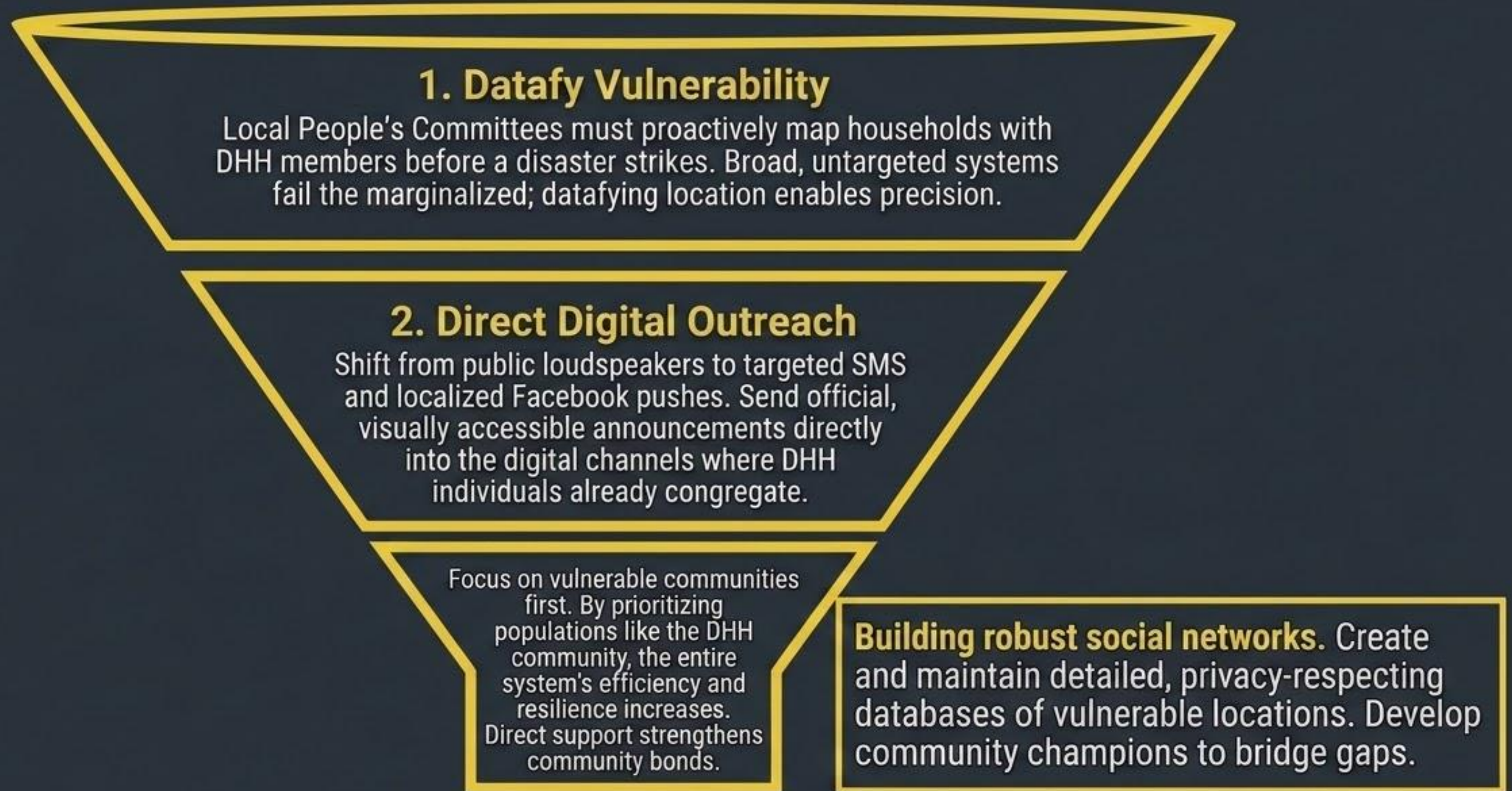
Universal Action Symbols

Overlay clear, high-contrast symbols. Use a stark Green Checkmark (✓) for approval/safe actions and a Red Cross (✗) for danger/prohibited actions to bypass literacy barriers.

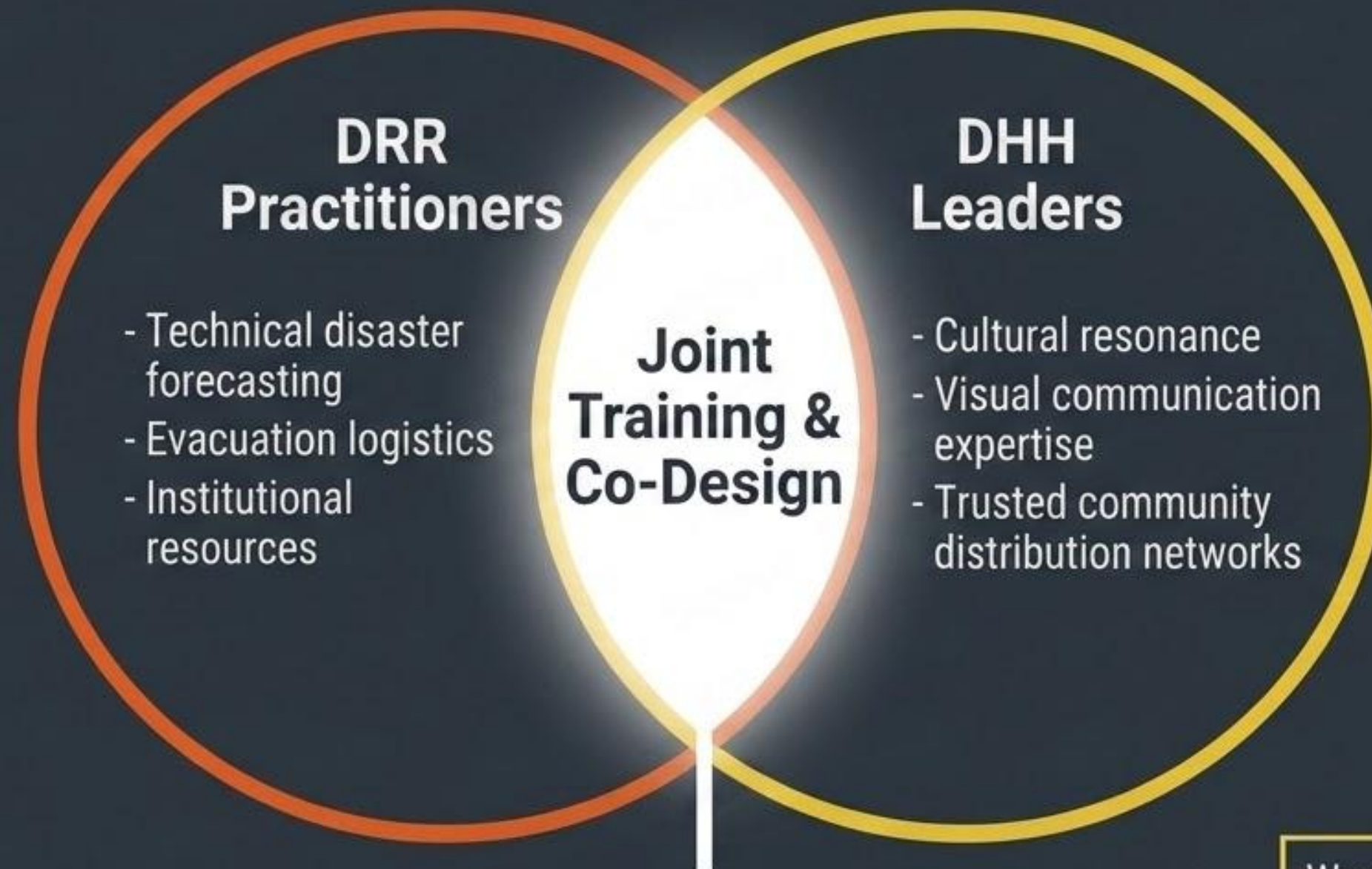


"Deaf individuals are accustomed to images and videos. Reading text can be confusing... flyers or leaflets should include vivid illustrations, culturally resonant with our community." – DHH Club Leader, Dak Lak

From Passive Broadcast to Targeted Intervention



Designing With, Not For



True inclusion requires sitting in the same room.
Hearing practitioners learn how to encode accessible messages, and DHH individuals gain the technical foresight to protect their networks autonomously.

We cannot break the circuit of information poverty in a vacuum. The future of early warning systems must be co-authored.

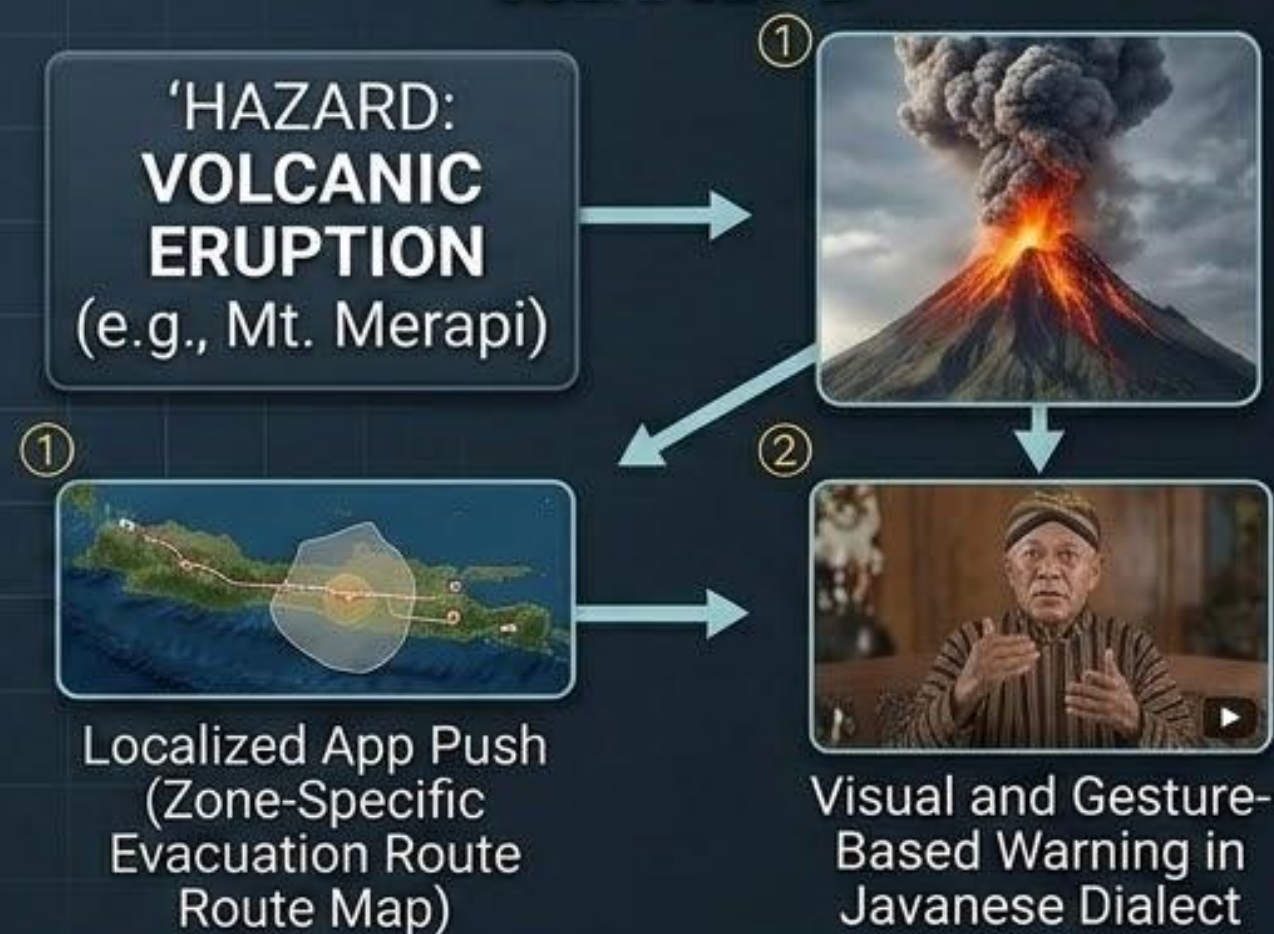
EXTRAPOLATING THE INCLUSIVE WARNING MODEL TO INDONESIA

SCENARIO A



Goal: High speed, low bandwidth, universal reach.

SCENARIO B



Goal: Local trust, precision maps, cultural resonance.

- ①  **Linguistic Mapping:** Capture all regional sign and spoken languages.
- ②  **Dissemination Diversity:** Use WhatsApp, local media, cell-broadcasting.
- ③  **Community Co-Design:** Form local committees with DHH representatives.

SCALING PRINCIPLES

- ④  **Datafication for Precision:** Maintain dynamic lists of vulnerable locations.

The 'one size fits all' warning is a fallacy. For Indonesia over 17,000 islands & hundreds of cultures, **precision inclusion** is the only resilient design.

Breaking the Circuit of Information Poverty

Early Warning Messages and DHH Communities in Vietnam

Research Insight Dissemination

Abdul Rohman, PhD

School of Communication and Design • RMIT University
Vietnam

Full Paper Available at
preparecenter.org