

Opinion

From Symbol to Substance: Transforming Disaster-Resilient Villages/Sub-Districts Towards Sustainable Resilience

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ABSTRACT

While being designated a disaster-resilient village/sub-district is an important achievement in strengthening community capacity, administrative status alone does not necessarily indicate functional resilience when a disaster occurs. This opinion article argues that community resilience needs to be understood as a continuous process built through three interrelated pillars: knowledge, awareness, and concrete action in disaster risk reduction. These three pillars require the support of local government commitment, policies translated into programs and budgets, and inclusive access to basic services. Evidence compiled from the literature and experiences across various contexts suggests that disaster education, skills training, simulations, community participation, and cross-level governance can strengthen preparedness and response capacity. At the same time, investment in basic services such as water, sanitation, health, transportation, and communications determines a community's ability to maintain basic functions and recover quickly after a disaster. In the Indonesian context, the key challenge is not simply the existence of policies or the size of budgets, but the consistency of their translation into measurable actions and outcomes. This article encourages a policy shift from labeling and administrative outputs to measuring resilience outcomes, strengthening the cycle of risk assessment, mitigation, preparedness, emergency response, recovery preparedness, and learning, integrating disaster risk reduction into development, and investing in inclusive basic services. Therefore, resilient villages/sub-districts need to be assessed not only by their resilience documents, but also by the community's ability to act, utilize basic services appropriately and wisely, and learn from risks.

Keywords: Disaster-resilient village; community resilience; transformation

1. INTRODUCTION: WHEN LABELS DON'T GUARANTEE RESILIENCE

The Disaster Resilient Village or Sub-district (*Destana*) program has become a key policy instrument within the community-based Disaster Risk Reduction (DRR) framework to build an integrated resilience system. Within the scope of local governance, this program produces village resilience indicator documents, including risk assessment documents, disaster management plans, community action plans to reduce threats and vulnerabilities and increase capacity, the establishment of DRR forums, the preparation of contingency plans, early warning system plans,

evacuation plans, and volunteer training that provide an institutional foundation for risk reduction.⁽¹⁾ However, a fundamental gap that is often overlooked is the gap between administrative resilience (bureaucratic resilience) and operational resilience (functional resilience). Most evaluations so far are still trapped in the formal paradigm that the success of disaster-resilient villages/sub-districts is assessed from the availability of documents on paper, not from the system's readiness when facing a real crisis.⁽²⁾

Concrete problems that continue to recur in the field show that when a disaster actually occurs, command posts do not function because village/sub-district disaster preparedness teams are confused, early warning equipment is damaged so that the exact time when people should carry out independent evacuation is unclear, evacuation routes are hampered, and the logistics system is paralyzed due to rarely being used for simulations.⁽³⁾ High dependence on external assistance proves that the capacity built has not fully transformed into the ability to act independently. As a result, communities labeled "Resilient" often experience adaptation failure (maladaptation) and a high potential for loss of life, economic loss, infrastructure damage, and disruption of government services that should have been prevented. This condition emphasizes the urgent need to redefine the concept of local resilience amidst the increasing complexity of disaster crises.⁽⁴⁾ Therefore, the more relevant question is no longer "does a village have the status or label of being resilient?", but rather "to what extent does this resilience work adaptively and operationally when risks turn into real events?".

This opinion offers novelty in thinking by proposing a paradigm reorientation: shifting the focus of resilience from mere symbolic compliance to the substance of sustainable resilience.⁽⁵⁾ This opinion argues that resilience is not a static endpoint in the form of a technocratic predicate, but rather a dynamic, continuous process (dynamic evolutionary process). This process is built through the integration of local knowledge, critical awareness, high levels of concern, and real community action, which is then strengthened by local government commitment, operational policies, and guaranteed access to basic services.

2. SIMULATION AS A TEST OF RESILIENCE

Resilience is most readily apparent when capacity is tested. One of the most concrete forms of testing is

regular emergency response simulations involving communities living in at-risk areas. Simulations should not be viewed as mere performances to fulfill program agendas, but as a collective and participatory learning mechanism. Through simulations, residents can test whether they recognize danger signs, receive and understand early warnings, know evacuation routes and assembly points, and are able to carry out safety measures before external assistance arrives.⁽⁶⁾

Groups at risk and with special needs should be positioned as key actors, not merely recipients of assistance. Pregnant women, the elderly, children, people with disabilities, and groups with limited mobility need to be involved throughout scenario planning, implementation, and evaluation. This approach allows communities to identify barriers often hidden from documentation, such as inaccessible routes, assistance needs, communication gaps, or transportation limitations.

The value of simulation lies in its cycle: practice, evaluation, improvement, and rehearsal. Simulations conducted without evaluation risk becoming merely ceremonial. Instead, simulation results can be used to update contingency plans, improve evacuation routes and points, test early warning systems, and clarify the division of roles between actors. Therefore, the frequency of simulations is not the sole measure; the quality of learning and the resulting changes are more meaningful indicators.⁽⁷⁾

3. KNOWLEDGE, AWARENESS, AND ACTION: THREE PILLARS THAT MUST BE CONNECTED

Knowledge of hazards and risks is a starting point, but knowledge does not automatically translate into preparedness. Awareness gives meaning to risks, while action transforms knowledge and awareness into usable capacities.⁽⁸⁾ Therefore, the three must be viewed as a continuum.

Various studies have shown that programs that combine education, skills training, and simulations tend to be more effective in promoting preparedness than approaches that only provide information. The experience of the People-Led Preparedness program in New South Wales, for example, demonstrates the importance of an approach that combines behavioral science, community participation, and governance in

promoting preparedness.⁽⁹⁾ Findings from the Philippines and other disaster-prone regions also reinforce the importance of linking knowledge-building with practical skills and training.

The same lesson is relevant for Indonesia. Communities in areas prone to earthquakes, tsunamis, floods, landslides, and strong winds need understandable risk information, opportunities for practice, and the space to make decisions. Participatory risk mapping, evacuation drills, the formation of preparedness teams, micro-infrastructure maintenance, and early warning systems that reach the household level are examples of how knowledge can be translated into action. Without the action phase, knowledge and awareness risk remaining as mere discourse.⁽¹⁰⁾

4. LOCAL GOVERNMENT COMMITMENTS: FROM POLICY TO IMPLEMENTATION

Community resilience cannot be solely the responsibility of the community. Village/sub-district and regional governments are strategically positioned to ensure that community capacity receives institutional support, regulations, resources, and program sustainability. Disaster risk reduction policies become meaningful when translated into development planning, budgeting, authority allocation, and evaluable performance indicators.

A common challenge is the gap between policy and implementation. The existence of strategies or regulations does not guarantee consistent program implementation. For example, a multi-sectoral disaster risk reduction forum requires a clear mandate, role allocation, coordination mechanisms, and resource support. Without these, the forum can become a meeting place with no real influence on disaster risk reduction-based development decisions.⁽¹¹⁾

In the Indonesian context, budgetary issues highlight the importance of linking policy commitments to fiscal priorities. Analysis of local government spending indicates that spending on public security, economics, environment, and health contributes to risk reduction, while contributions from other functions do not always show the same pattern. This finding does not imply that other development functions are unimportant, but rather highlights the need to ensure that public spending clearly links to risk reduction. Therefore, disaster risk reduction

needs to be more consistently integrated into the RPJMDes (Village Medium-Term Development Plan), RKPD (Regional Work Plan), APBD (Regional Budget), and local regulations, with measurable outcome indicators.

The issue isn't just budget size. Planning capacity, prioritization accuracy, implementation quality, and budget absorption determine whether resources truly generate resilience. Therefore, the measure of government commitment should shift from "how much budget is allocated?" to "what resilience outcomes are generated from that budget?".

5. BASIC SERVICES: THE OFTEN-OVERLOOKED FOUNDATION OF RESILIENCE

Community resilience goes beyond the ability to respond to threats. Communities must also be able to use basic services appropriately and wisely, and have the capacity to restore basic services damaged by disasters. Clean water, sanitation, hygiene, health services, education, transportation, and communications are all part of the foundation of these basic services.

Disruptions to basic services can magnify the impact of a disaster and prolong the recovery process. Communities with limited access to clean water, health care, transportation, and communications face greater challenges when disruptions occur. This is especially critical for groups that require continuous services.⁽¹²⁾

Therefore, the disaster risk reduction agenda should not stand apart from the development of basic services. Water and sanitation infrastructure must consider disaster risks; primary health care facilities must have the capacity to remain functional; evacuation routes must be usable by all groups; and communication systems must reach households in remote areas. Investing in basic services with a resilience perspective will strengthen communities' resilience and accelerate recovery.

6. CHANGING THE WAY WE ASSESS RESILIENT VILLAGES/SUB-DISTRICTS

If resilience is a process, then the way it is assessed also needs to change. Assessments cannot simply focus on the number of documents, the formation of forums, or

the presence of volunteers. Indicators need to move toward outcomes that demonstrate whether capacities are actually utilized and result in change. Some more outcome-oriented indicators could include the frequency and quality of simulations, the coverage of households receiving early warnings, the ability of vulnerable groups to access evacuation routes, the timing of command structure activation, the availability of preparedness facilities, the time it takes to restore basic services, and the proportion of risk reduction budgets actually implemented. These indicators can be tailored to the characteristics of the threat and the capacity of each region.⁽¹³⁾

Changes in indicators must also be accompanied by changes in working methods. Disaster-resilient villages/sub-districts need to implement a cycle of disaster risk assessment, knowledge building, awareness building, mitigation and preparedness actions, emergency response, recovery, and participatory learning.⁽¹⁴⁾ Every incident and every simulation should generate feedback to improve subsequent policies and actions. In this way, resilience becomes a continuously evolving, adaptive process, not a status quo that is completed upon obtaining a certificate or designation.

7. POLICY RECOMMENDATIONS: FROM LABELS TO RESILIENCE OUTCOMES

1. Performance indicators for resilient villages/sub-districts need to be directed from administrative outputs to outcomes. Disaster-resilient village/sub-district indicator documents are still necessary, but their success must be linked to the community's level of awareness and capacity to act on disaster risk reduction.
2. Emergency response simulations should be used as learning and evaluation tools, not merely ceremonial events. Each simulation should produce a record of findings, a follow-up plan, a responsible party, and a timeline for improvement.
3. Disaster risk reduction needs to be integrated into development planning and budgeting. Resource allocation should be directed toward interventions that clearly link to risk reduction and community capacity building.
4. Investments in basic services should be treated as investments in resilience. Water and sanitation

infrastructure, health facilities, transportation, and communications should be designed and maintained with local disaster risk assessments in mind.

5. Community participation must be meaningful. Residents should be involved not only during outreach and simulations, but also in risk mapping, disaster management planning, decision-making, monitoring, and evaluation. Vulnerable groups need equal opportunity to express their needs and determine solutions.

5. CONCLUSION

The title of resilient village/sub-district does not guarantee community resilience during disasters. The main finding of this opinion is the need to shift the measurement of resilience from administrative status to tangible outcomes, through strengthening knowledge, community action, policy and budget support, and the availability of adequate basic services. Therefore, resilience indicators need to be directed at community capacity to act, emergency preparedness, and rapid recovery after a disaster.

Ethical Approval

This opinion article follows up on our research titled "Study of Actions to Improve Village Resilience in Facing Disasters: A Case Study of Implementation in Magetan Regency," which received ethical approval from the Health Research Ethics Committee of Poltekkes Kemenkes Surabaya (Approval Number EA/3177/KEPK-Poltekkes_Sby/V/2025).

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Competing Interests

Although there is funding support from the Magetan Regency Disaster Risk Reduction Forum, East Java, Indonesia, there is no conflict of interest between the author and the forum, in fact the research results can be used by the forum to provide assistance to other disaster-resilient villages.

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Underlying Data

The author has nothing to report.

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