

Indonesia

INDONESIA – AN ARCHIPELAGO BESET BY NATURAL DISASTERS

Environmental context

Indonesia is the largest archipelago in the world, comprising an area of about 1.9 million square kilometers. Around 60 percent of its population of 240 million lives on the island of Java, which constitutes only 6 percent of the landmass. About 70 percent of the land area in Java is under intensive use, which is much higher than the second-ranked island of Sumatra with about 20 percent. These more densely populated regions are also the ones exposed to the biggest threats of natural disasters.









3 Worst Natural Disasters -NUMBER OF PEOPLE KILLED

Disaster type	Date	No Killed
Tsunami	26-Dec-2004	165,708
Earthquake	27-May-2006	5,778
Earthquake	12-Dec-1992	2,500

6 Worst Natural Disasters -**NUMBER OF PEOPLE AFFECTED**

Disaster type	Date	No Affected
Earthquake	27-May-2006	3,177,923
Wild Fires	Oct-1994	3,000,000
Flood	23-Dec-2006	618,486
Flood	9-Feb-1996	556,000
Wave/Surge	26-Dec-2004	532,898
Flood	27-Jan-2002	500,750



Many parts of Indonesia are prone to natural disasters. Between 2003-2005 alone, the national disaster agency (Bakornas) counted 1,430 incidences, including flooding, landslides, earthquakes, tsunamis and volcanic eruptions. The country also has more than 500 volcanoes, 128 of which are active. Furthermore, many parts of the country are susceptible to drought. The result is crop failure and uncontrolled bush fires that exacerbate forest fires. Added to this is the fact that there are more than 5.000 rivers, of which 30 percent cross high-density population areas, posing flooding hazards.

Indonesia's natural disasters are caused by largely uncontrollable forces such as the movement of tectonic plates or the eruption of magma through the earth's crust. However, exposure and vulnerability to disaster risks are more controllable. Exposure to risk is increased by poor spatial planning – for example, lack of necessary protected green zones, poor water flow management and poor natural resource management. Environmental degradation from human activities compounds the many natural risks posed by Indonesia's environment. Logging, mining, and the creation of large plantations have reduced the natural environment's capacity to withstand the challenges posed by nature.

Government context

Under Basic Agrarian Law (BAL) of 1960, land became a national asset and is controlled by the state on behalf of the people, and made available for distribution to all citizens under various forms of tenure, from freehold to leasehold. Under the Law, absentee ownership is prohibited but not strictly enforced, as is the limitation of size and number of individual holdings. In addition, foreign private ownership, except the right to temporary use, is also prohibited.

In legal terms, the National Land Authority (BPN) is the primary provider of land administration services and has sole authority over the surveying of non-forest land areas and the granting of land title certificates in Indonesia. It also has the legal authority to confirm land boundaries for parcels that are either not registered, or registered but lacking a letter of measurement or mapping. The Ministry of Forests is



responsible for the administration of all other land areas and the Ministry of Mines administers concessions for resource development on land and at sea. Under Indonesian law, the state has a right of control over land and natural resources. As it is interpreted, the state's right of control allows the state to claim all land that is not residential or subject to constant forms of use (so-called "free state land"), and all land subject to customary rights that are not recorded in the land register (so-called "not free state land"). Taken together,

DISASTER MANAGEMENT POLICY

In 2006, Indonesia issued a national action plan for disaster risk reduction (DRR) that seeks to:

- ensure that DRR is a national and local priority;
- identify, assess and monitor disaster risks and enhance early warning;
- use knowledge, innovation and education to build a culture of safety and resilience;
- · reduce underlying risk factors; and
- strengthen disaster preparedness for effective response.

In March 2007, the national parliament approved the Disaster Management Law that codifies this plan, sets out responsibilities for DRR as well as disaster response at the local and national levels, and modernizes institutional arrangements for disaster management.

this claim to state land potentially encompasses all land in Indonesia other than land parcels registered in the national land titles register.

There are an estimated 80 million parcels of land in the country. However, in the 45 years since the registration of land rights was established under the BAL, only 30 million parcels have been registered. At least 75 percent of all "recognized" property titles in Indonesia remain unregistered. This means that there is a very vague dividing line between unregistered (but recognized) titles and unrecognized occupation-based interests.

A localized land documentation system exists across Indonesia. These are letters acknowledging physical control and customary ownership when land is sold or inherited, or when parcels are divided. These documents are prepared by the village head or the sub-district head, and are often witnessed by representatives of the parties involved. In theory, copies of these documents should be forwarded to BPN, but in practice the parties involved



often forego BPN involvement to limit transaction costs. As a result, a large number of localized land documents exist but are not included in the formal land agency records. As far as state land is concerned, its definition and extent in Indonesia is not clear. State agencies are not required to register their land interests with BPN or to engage BPN to survey the boundaries of those interests. The de facto control of large land areas lies with the Ministry of Forestry and the military.

Available statistics indicate a considerable inequality in the distribution of land in Indonesia: about 69 percent of the land area is owned by just 16 percent of the population. This inequality is particularly evident in highly populated regions, where the amount of land available to households is barely sufficient to make a living. In fact, the average parcel size of a rural holding on the crowded island of Java is shrinking from what is already a non-viable 0.85 hectares.

Major land tenure issues

The status of land tenure at times of disasters is fragile. With a high dependency on land and with a depleting resource base, few communities in disaster-prone regions have found sustainable routes to maintain their access and rights to land areas. For the poorer communities, the added pressure caused by natural disaster can prove to be an almost insurmountable burden that eliminates their livelihood options,

When disaster strikes, the poor are often the least able to defend their livelihoods or to establish legal tenure rights over the resource. Therefore, it is important that security of tenure be established and asserted so that they can make long-term investments in sustainable livelihoods and resource management. Post-disaster operations need to deal early with a number of land tenure issues.

inadequate as they might have been. The communities are further burdened as their land tenure status is often unclear in modern legal terms.

Temporary or permanent resettlement

People have to be relocated from disaster prone areas when the likelihood of a natural disaster increases beyond a critical level. These relocations can be temporary, or resettlement might be permanent when an area is considered unsafe.

In the case of temporary resettlements as with the eruption fears of Mount Kelud in late 2007, temporary shelter is provided and services offered to the affected population. Although there are always questions about the adequacy of accommodation and services, the temporary loss of income is usually balanced with the acquisition of a secure place. If areas do become uninhabitable or uncultivable, or simply off-limits due to hazards, the selection of relocation sites is more often driven by the availability of land rather than by a consideration of peoples' genuine livelihoods.

Restitution of property rights

In situations like the tsunami disaster in Aceh, families were forced off their land. At the same time, in many cases all records that could prove their occupancy of the land in pre-disaster times were destroyed. Moreover, upon return to their original housing and

RESETTLEMENT AFTER THE FLORES **EARTHOUAKE IN 1992**

The Northern Part of Flores Island was hit by an earthquake and tsunami disaster in 1992, which killed 1,712 people. The Indonesian government prohibited the people from living in the tsunami prone site and provided resettlement locations for those who were forced to move. The adaptation to the new environment was very difficult for the victims, and some resettlement sites were abandoned within a few years. Many people have moved back to the original location, although it is still prohibited. Those who continue to live in the resettlement sites are those who did not have land at the original location. They continue to live in the resettlement not because their fear of tsunamis, but because they have no place to live except the resettlement site.

Source: Relocation Process At Resettlement Site After 1992 Flores Earthquake And Tsunami Disaster, in: Journal of Architecture, Planning and Environmental Engineering, No.556/2003.

farming plots, families were sometimes faced with questions about the legal status of their land. Families settling in undisputed or on what was – and still is – state land find themselves being treated as illegal

RECONSTRUCTION OF HOUSES IN ACEH

In Panggong village, Aceh Barat, 36 households were refused housing offered by an international NGO because their pre-tsunami houses had been built on land allegedly owned by the district government. Although they had been living on the land for 40 years, the district government claimed that the householders had only received a revocable license to occupy. In a similar case reported by UNDP, in a tsunami local fishers in an unidentified village had lost their houses and their land records, including evidence of land and building tax payments. They had no land title certificates. The district government wanted them to relocate, ostensibly for safety reasons, and argued that the fishers were living on state land. As a result, the fishers and their families were reportedly moved several kilometres inland to a location that made it difficult for them to access their primary source of livelihood.

Source: Fitzpatrick, D. Managing Conflict and Sustaining Recovery: Land Administration Reform in Tsunami-Affected Aceh, Oxfam, 2007.

settlers and facing eviction. Regardless of the actual legal status, this additional hardship and the uncertainty faced by affected families increase their vulnerability.

Compensation

There have been many reported disputes over the payment of compensation for the acquisition of land by the government both before and after the tsunami. These disputes involve allegations that certain landholders were not parties to the compensation agreements; or that payments have either been delayed by disputes or not forthcoming at all. In one case in Blang Pidie, Abdya District, landowners allege they are still waiting for more than half of the promised compensation payments for land that the government had been acquired in 2004.

Land as a collateral to finance disaster recovery investments

Land titling is important to ensure that the beneficiaries of the housing have sufficient security of land tenure. In the longer run, it is also important for economic recovery and development. Many disasters occur in areas that have not been part of systematic titling efforts; hence, there is little proof except for locally kept ownership documentation. Little research has

COMPENSATION AFTER A MUDFLOW DISASTER

One and a half years after the eruption of a mudflow volcano forced the relocation of around 3,000 families, buried four villages and 25 factories, and inundated around 300 ha, plans

RE-ESTABLISHING SMALL-SCALE BUSINESSES

In early 2006, one tsunami victim in Aceh Besar applied to BPN for replacement land title certificates. As of May 2007, he had not received the replacement certificates despite a number of a follow-up requests through his local village and sub-district heads. He runs a highly successful cafe that employs six local people, and wants to borrow money to expand his business. But he cannot borrow significant amounts from the banks without a certificate.

Source: Managing Conflict and Sustaining Recovery: Land Administration Reform in Tsunami-affected Aceh, Oxfam International Policy Paper, November 2007.

been conducted to determine the importance of actual title certificates for obtaining finances for emergency recovery. The success of immediate relief measures might depend more on social networks rather than on formal documents. However, for longterm reconstruction initiatives, proper land tenure documentation will certainly be beneficial.

The vulnerable status of women's rights

All natural disasters tend to have a disproportionate impact on women. Women who are primary caregivers, with greater responsibility for household work, will have less time and capacity to mobilize resources for recovery.

for compensation of victims has started to take shape. A presidential directive paved the way to pay for the damage to livelihoods. In addition to payments for daily allowances and moving expenses, documents have been prepared on land and building transactions.

Ownership of the disaster area is expected to be transferred to a private company. While the payment amounts may or may not reflect the previous market value of the land, families will still face difficulties in establishing livelihoods in new places. Moreover, regardless of the legal agreements, the payments to be received are regarded by many as a compensation for the loss of income rather than from the sale of land. As in other disasters, families would certainly like to return as soon as conditions allow.

Source: article in Jakarta Post, December 8, 2007.

The aftermath of disaster is the time when women most need land for recovery. Women who lacked land before a disaster, or who accessed land through a deceased husband or relative, will need specific programmes to support their rights to land.



They are less likely to participate in the public sphere in which relief is organized and delivered. They may be overlooked if relief efforts target programmes at household heads, or focus on primary employment as the sole source of livelihoods. And if these relief efforts also fail to collect gender-disaggregated data, the disproportionate impacts on women may not even register in monitoring mechanisms.

Disaster-induced displacement removes women from kinship structures that provide basic forms of social insurance against poverty and violence. Displacement also removes women from location-specific income, including access to common property resources. After displacement, some returning women lose access to land because prevailing social or legal norms mediate their entitlement to land through a deceased or missing husband or relative. This is particularly true for women who are widows, or who stand to inherit land from a deceased relative.

Inheritance entitlements

In Aceh, Syariah courts provide mobile courts at the village level. According to Syariah law, widows and female children have inheritance rights to land. Therefore, widows and female children who obtain inheritance rights over land must register their rights under their name. Under-age heirs, including orphans, who have inheritance rights to land can have their rights registered in their respective name with the assistance of a guardian. A guardian has custodial



responsibility for the land on behalf of the heir(s). The authority of quardians includes the handling land registration and does not entitle them to execute the transfer of rights over the land to other parties. The rights over land will be transferred to the heir when she/he has been declared to be of age.

As of December 2006, 328 custody cases had been legalized by the Syariah court. However, there are cases reported in which custodians take advantage of the entitlements of orphans, for example by pocketing rents on the house belonging to orphans under their custody.

Land acquisition and reconstruction

Land acquisition has been a key issue to reconstruction in Aceh because it failed to facilitate the rapid and conflict-free assembly of land for resettlement and infrastructure. The law and practice of land acquisition by the government causes significant conflict across Indonesia. These conflicts stem from procedural weaknesses, particularly in relation to consensual negotiation with landholders, and substantive failures to pay market value for acquired (or "released") rights to land. Both issues are inconsistent with international standards for the compulsory acquisition of rights to land for public purposes.

Institutional capacity

Institutional responsibilities go beyond the delivery of emergency relief. What is required are structures that minimize the potential negative effects, and allow for a guick and sustainable return to development.

The institutional environment in Indonesia is not yet fully equipped to quickly and sustainably deal with all aspects of land issues. Even under regular circumstances, progress in titling and registration is not as quick as desirable. The process already employs all resources available to an institution like BPN, and leaves little room to address other challenges. Even when financial constraints are eased by an inflow of foreign donor aid, there are no clear guidelines in place on how to address land issues, nor are there enough human resources or expertise available to cope with the additional work without neglecting other duties.

« The need for quick responses to emergencies requires a well-organized organizational structure with clear roles and responsibilities within an administration that also has the necessary financial and human resources to deal with disaster impacts.



The cross-cutting issue in all disaster management and recovery issues is the importance of good governance.



Good governance

The main responsibilities and burden in post-emergency situations lie on government institutions. However, the temptations created in emergency situations pose a challenge to all stakeholders, including those outside government. Ensuring a well regulated, simple and transparent process in addressing land issues becomes crucial, in particular when it comes to defending poor and vulnerable people's rights and interests. Oversight and management by an independent body can provide a safety mechanism to facilitate the implementation of rule of law and regulations.

Lessons learned for addressing land issues

Pre-disaster measures

Titling efforts in areas where natural disasters might potentially displace people would facilitate the provision of adequate compensation for resettlement and the reconstruction of public infrastructure. While titling and registration might be



the preferred options to secure ownership documentation in disaster-prone areas, resource constraints and resistance from local owners will prevent this from being a viable option in the short and medium terms. However, an immediate measure that could be initiated by local governments is the drafting of maps that indicate occupancy and ownership of land. The lack of even such simple evidence has proven a major obstacle to the quick response for housing or reconstruction assistance. Any ownership documentation needs to be stored in a safe place where damage or destruction can be avoided. Back-up documentation is also necessary.

Identifying relocation sites and having (local) government control them could help the sites be situated close(r) to original settlements. The National Action Plans prepared by Bappenas provides for such plans to be drawn up by local governments. However, advance preparation of such plans is still largely lacking. This puts additional stress on local government institutions (and affected families) in times when multiple disaster-related problems require simultaneous attention. The preparation of such plans should become part of local governments' duties, either as a stand-alone plan or as part of land use or emergency planning.

Generating land and valuation maps could avoid compensation quarrels. The reconstruction of infrastructure and houses in Aceh involved substantial

PRIORITY ACTION

An immediate step for Bappenas and BPN should be to encourage and empower local communities in disaster-prone areas to prepare their own local plans documenting land ownership and identifying areas for eventual resettlement, and inform people about their rights and obligations. Recognizing and acknowledging that the resilience of local communities is best strengthened when land matters are primarily dealt with by applying customary principles will be an important step in this process.

acquisition of land. In the absence of generally accepted maps or databases on land values, negotiations with owners over values and compensation required additional attention. Considering again the resource constraints within the potentially responsible institutions, this remains a long-term objective.

Information campaigns that explain to families in disaster-prone areas what their rights and obligations are would make for fairer and more efficient rehabilitation and recover processes. There are no clear communication strategies to explain to households their rights and responsibilities. Better information about the importance of ownership and occupancy documentation, formal and informal, and information about institutional responsibilities in case



of disaster should be communicated to households in potentially dangerous areas. The preparation and communication of respective material and information should be a priority for BPN and local governments.

Incentives should be created for voluntary resettlement to safer areas. This will only work when appropriate incentives and services are provided at destination sites. To ensure that social networks are not entirely damaged, relocation sites need to be close to original settlements. In addition, it needs to be ensured that squatters do not occupy endangered areas again. The new land reform programme initiated by BPN should prioritize disaster-prone areas, offering alternative sites for voluntary resettlements.

Post-disaster measures

Quickly restoring property rights through community-driven adjudication. In disaster areas where no official documentation of ownership and occupancy is available, a quick method for (re-) adjudicating plots is required. Community-driven

adjudication of land rights has proven to be relatively successful. While there was no generally prescribed methodology at the local level, community-driven adjudication generated sufficient documentation and certainty for housing providers to begin reconstruction. In practice, the first document generated by this method - the signed statement of ownership provided sufficient "legal" authority for most forms of house reconstruction. BPN should explore and decide in which ways such a community-driven adjudication process could be formalized to provide a sufficient legal basis for reconstruction efforts.

Verifying land tenure rights through (informal) documentation and confirmation with local authorities. Determining local ownership through landowner lists prepared by the local government can provide the tenurial basis to start rebuilding. In Aceh and Yokyakarta, many housing providers went ahead with localized evidence of land records, usually in consultation with local authorities and (sometimes) the district chief or city mayor. Delays and disputes would have been much worse if there had not been



a significant trust in the evidence provided through community consultations and local authorities. While such localized systems will probably not replace a formal registration system in the long term, they can provide sufficient evidence to greatly facilitate rehabilitation and reconstruction efforts. A review carried out by Oxfam (November 2007) on land administration issues in post-tsunami Aceh confirmed that community land-mapping helped prevent land grabbing and speculation and reduced land disputes.

Ensuring that women are not deprived of their land rights. All post-disaster restoration of land ownership needs to follow an approach that safeguards and strengthens the rights of vulnerable groups. In post-tsunami Aceh, the government placed women at the centre of a long-term, sustainable shelter strategy that called for measures to protect women's right and claims over family (or marital) land holdings, and to eliminate customary and traditional barriers to women's access to land, property and housing. Pretitling information campaigns were launched that promoted joint titling of land holdings, and local

SUGGESTED PRIORITY ACTION

It is important for the government to prepare guidelines and action plans to address postdisaster land issues. The official recognition of community- and customary land rights-based mechanisms would help to identify solutions for land tenure problems more quickly. Bakornas or Bappenas could elaborate respective guidelines for BPN and local governments to follow. Once ownership documents are available at local level, referring to in the event of disputes should be made a standard procedure. A fast review by BPN officials might need to take place to ensure that local practices and documentation safeguard the rights of vulnerable groups, in particular woman and children (orphans).

institutions and judges of Syariah Courts were trained on inheritance and guardianship issues. In addition, titling procedures required the direct and active participation of women in community land mapping



and in the decision-making process. Joint titling of land holdings was made mandatory.

Using a participatory approach to resolving land conflicts, and building on existing networks. The strengthening and empowerment of local communities and their leaders is as important as formal documents and regulations in resolving land conflicts. In situations where formal institutions are overburdened with the multiple impacts of natural disasters, reliance on trusted existing social networks is the best option for avoiding conflict or quickly resolving it. Having a participatory and transparent process to empower and, where necessary, reestablish local leadership, is also crucial.

NATURAL DISASTERS AND LAND TENURE GOVERNMENT INSTITUTIONS IN INDONESIA

Disaster management agencies in Indonesia are organized hierarchically, from the national level down to the district and sub-district level (not all areas are divided into sub-districts).

- National level: BAKORNAS PBP, the National Coordinating Board for Disaster Management and Internally Displaced Persons Affairs
- Provincial level: SATKORLAK PBP, the Implementation Coordinating Unit for Disaster Management and IDP Affairs

- *District/municipality level:* SATLAK PBP, the Implementation Unit for Disaster Management and IDP Affairs
- *Sub-district level:* Local disaster management Task Force

National Planning and Development Agency (Bappenas)
Bappenas' main task in natural disaster situation is

Bappenas' main task in natural disaster situation is damage assessment and analysis and organization of required reconstruction aid. It operates through its local government units, which are also involved in spatial planning, i.e. in officially demarcating potential zones for protection or resettlement.

Bappenas also hosts a UNDP-supported unit that deals with disaster risk reduction. The unit produced a "National Plan for Disaster Risk Reduction". The community disaster risk reduction plans are expected to include maps indicating disaster prone areas and allocated relocation sites for affected households. However, this is still in the planning stage.

National Land Agency

The National Land Agency (Badan Pertanahan Nasional – BPN) is responsible for administration of all non-forest land in Indonesia. It was established in 1988 as a separate agency in response to land issues impacting on development, with specific responsibility for recognition, registration and administration of property rights and transactions.

Aceh and Nias Rehabilitation and Reconstruction Board – BRR (Badan Rehabilitasi Dan Rekonstruksi NAD-NIAS)

Responding to the magnitude of the tsunami disaster in Aceh and Nias, the Government of Indonesia established a separate board that deals exclusively with coordinating the rehabilitation and reconstruction work. All government and donor assistance is coordinated by BRR. BRR cooperates, and provides direct implementation assistance to local governments.

The State Ministry of Environment - Kementerian Lingkungan Hidup (KLH)

Neither the State Ministry of Environment nor its local branches are directly and actively involved in post disaster, land related rehabilitation or coordination work. Their very limited involvement in land and disaster issues are through the spatial planning exercises that can be influenced through environmental considerations.



CONTACT:

FAO. Land Tenure and Management Unit. Mr. Paul Munro-Faure. Chief. Paul.Munro-Faure@fao.org Ms. Adriana Herrera Garibay Land Tenure Officer Adriana.Herrera@fao.org **UN-HABITAT.** Land, Tenure and Property Administration Section Shelter Branch.

Ms. Clarissa Augustinus Chief. Clarissa.Augustinus@unhabitat.org

FAO REPRESENTATION IN INDONESIA

FAO Representative: Mr. Manho So FAO-ID@fao.org http://www.fao.org/world/ indonesia/index.html