

Barriers and solutions to effective climate change adaptation in Indonesia

Perspectives of local planners

Policy pointers

- Cities which have already faced large disasters – Padang, Mataram and Aceh – are now some of the most pro-active in both CCA and disaster management
- However, planning to address climate change and its related impacts is still limited, only discussed among the bureaucracy, at all levels, rather than being turned into policy, thus hindering its implementation at local levels.
- Provision of adequate funding and technical support are imperative for the development of effective adaptation policies and measures at the level of local government in Indonesia.
- Persistent efforts are needed to raise the awareness of communities and decision makers of climate change, to increase the personal and institutional capacity within the affected sectors and to enhance collaborative and coordinated actions amongst stakeholders.

As an archipelagic country vulnerable to climate change, Indonesia's policy makers have taken some measures to build climate resilience. However, a lack of capacity, coordination and financial resources amongst government agencies is evident. This briefing assesses the perceptions and understanding of local planners regarding barriers to and possible effective responses to address climate change impacts, especially at local levels. Local planners from several Indonesian urban coastal cities were interviewed about four key themes: perceptions of climate change impacts on local communities; the level of climate change adaptation (CCA) policy development; the extent of CCA mainstreaming; and the level of planning for climate change¹.

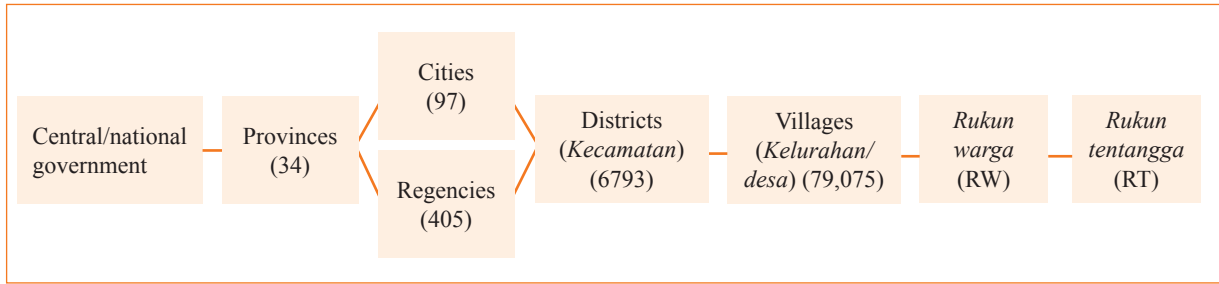
1 The Indonesian policy context

Indonesia has three levels of government: the central or national government, provinces, and cities and regencies, which are shown in Figure 1. These respective government structures have the authority to draft their social economic development plans according to Law No. 25/2004 concerning the national development planning system, and spatial plans according to Law No. 28/2008 on spatial planning. They include the 20-year regional spatial plan called *Rencana Tata Ruang Wilayah (RTRW)* and the development plan called *Rencana Pembangunan Jangka Panjang (RPJP)*, which are specified in the five-year or mid-term development plan called *Rencana Pembangunan Jangka Menengah (RPJM)*. Development in Indonesia centres on these planning documents.

Numerous policies and measures have been developed by the Indonesian government to address climate change adaptation, mitigation and disaster risk reduction (see Box 1). Most policies are initiated and implemented by central government, while the efforts of local governments (provinces and cities/regencies) are limited and tend only to extend central government policies. Additionally, the policy environment is still dominated by climate change mitigation responses.

2 Imperative factors for CCA and DRR development at local levels

The study interviewed 26 local urban planners from seven cities across Indonesia (Figure 2). From these interviews emerged five factors necessary for planning and implementation of local CCA and DRR in Indonesia, set out below.

Figure 1. The structure of Indonesian government²

Box 1. Milestones of Indonesia's climate change adaptation and mitigation and disaster risk reduction policies

1966–99	National coordination for natural disasters Established National Disaster Management Coordinating Board – Bakornas PBA First National Communication
2000–05	Mid-term national development programme (RPJMN 2004–2014)
2006–10	RANMAPI (National CCA Plan) National Disaster Management Agency (BNPb) and its local counterparts (BPBD) act as the lead agencies for DRR coordination at local levels Indonesia Climate Trust Fund (ICCTF) established to link international finance sources with national investment strategies
2011–12	Second National Communication RAN and RAD-GRK (national and local action plans for emissions reduction) National Platform for DRR (Planas-PRB)

2.1 Climate change awareness at local levels

The first barrier to be addressed was a lack of community awareness of climate change, caused by the failure to see its impact on lives which were dealing with other more immediate priorities, as well as the unpredictable future of climate change.

According to the planners, natural disasters are still perceived by many communities as an act of God and consequently, fatalistic attitudes often prevail. Helping communities to relate climate change impacts to their own lives while changing this fatalistic view could help to ensure community participation in addressing the issue.

Future visioning of climate change impacts through the use of visual learning tools and storylines could make the impacts explicit to local communities, especially in the decision making and planning systems for local community leaders.

2.2 Coordinated efforts to enable CCA mainstreaming

Governments should lead the way in employing effective policies and measures for climate change adaptation, especially to increase the resilience of the most vulnerable communities whose livelihoods heavily depend on the climate, such as low-income fishermen and farmers.

The active participation of the private sector, universities and other community institutions is also imperative. Corporate social responsibility (CSR) promotion has become a popular trend, however only government-owned companies have utilised their CSR funds for addressing environmental issues, including climate change.

Sectoral disconnection between central and local government agencies is inevitable since many local government leaders remain unresponsive to laws and policies set up by central government, especially due to a lack of financial and technical support.

2.3 Capacity development at local level

The recruitment of skilled and capable personnel was believed necessary to enhance the capacity of local governments. Additionally, adequate training and workshops to build the institutional capacity of government and non-governmental entities in developing coordinated actions to enhance each other's strengths and potentials, was seen as imperative for developing effective responses.

...all local decision makers need to have a basic understanding regarding climate change issues, although climate change terms are not directly employed ... but environmental protection approaches

Figure 2. The field sites of Baubau (B), Banda Aceh (A), Padang (S), Bantul (Y), Mataram (M), Palu (P), and Jayapura (J).



Source: www.wikiadapt.org/index.php?title=Indonesia.

are used, allowing local decision makers to identify and address environmental issues and then to insert them into the RPJMD [medium-term development plan of local government], renstra [strategic plan], and [more importantly] into the renja [work plan] of every government sector and institution as our annual work plans (respondent PKD).

Lessons from ACCCRN³ also suggest integrating CCA knowledge within the ongoing capacity-development agenda of cities through the learning and exchange of local experiences and actions. This could be combined with conducting a training needs assessment and developing customised training products, especially for the city's planners to accommodate climate change uncertainties.

A media sector with adequate knowledge about climate change and funding resources and arrangements was seen as important in informing vulnerable communities about the funds that could be used by their cities to enhance their resilience.

2.4 Financial incentives and programs

While several international adaptation funds are available to build the resilience of vulnerable communities in less developed and developing countries, these funds are difficult for cities and communities to directly access.

The Indonesia Climate Change Trust Fund (ICCTF), as the national investment strategy to overcome climate change funding deficiencies, tends to require demanding reporting criteria that even local governments find challenging to meet, let alone the local community institutions. Reporting on the use of locally managed funding mechanisms is beyond their capacity to manage.

The provision of information and technology for fishermen and farmers to enhance community resilience, was also another imperative for effective local CCA development along with the establishment of special mechanisms to protect the community. They included the enhancement of communities' local economic development, particularly for those vulnerable communities whose livelihoods are sensitive to climate change.

2.5 Motivation to address climate change impacts

*Musrenbang*⁴, as a well-known participatory public forum, could play a significant role in promoting the active participation of local communities in CCA development. This would allow the accommodation and integration of their needs into the development agenda of local government.

Several challenges remain, including some communities lacking awareness of how climate change can affect their daily lives. *Musrenbang* may not be attended by all community members but only their representatives, who as the elites of the villages may fail to represent general community needs.

The involvement of local community leaders and customary institutions is imperative to encourage community participation, particularly for local governments where local culture is still upheld. Alternatively, in the heterogenic contexts more common to contemporary Indonesian society, neighbourhood associations could play the role.

Community leaders need to be more active to raise the awareness of the community to safeguard the environment. In Padang we have [customary and community institutions such as] Kerapatan Anak Nagari, Tungku

Tigo Sajarangan, Bundo Kanduang... They conduct meetings among the members before meeting with the government to discuss various issues pertaining to their welfare [...] and also youth organisations ... [Their] roles are still very strong in Padang. If the customary and community leaders say 'no' to an activity, then that activity will not be pursued (respondent SKB).

3 Addressing constraints to planning and implementation

Although those cities which have already faced large disasters – Padang, Mataram and Aceh – are now some of the most pro-active in both CCA and disaster management, planning to address these issues is still limited and only discussed among the bureaucracy. It is not yet at the stage of policy making, which is hindering its implementation at the local levels. Most local government institutions, especially in those sectors most affected by climate change, are still lacking the capacity and resources to best develop and implement adaptation in their localities.

The respondents of this study believed that mainstreaming CCA and DRR means the insertion of CCA into local regulations and planning documents through the creation of regulation and documentation to specially address the issue. There is a significant advisory role for NGOs and other development agencies to collaborate with local governments to enhance community roles, and they should be actively encouraged to promote CCA and DRR, especially by central government. Persistent efforts are needed to raise the awareness of communities and decision makers, to increase the personal

and institutional capacity within the affected sectors and to enhance collaborative and coordinated actions amongst stakeholders. Moreover, the provision of accessible and adequate funding and technical support are imperative for the development of effective adaptation policies and measures at the level of local government in Indonesia.

The experience of Semarang and Bandar Lampung, as Indonesia's ACCCRN cities, showed that effective sectoral coordination and committed engagement of a range of city-level officials working with the ACCCRN team and a wide range of stakeholders including civil society and NGOs, academics and practitioners, was key to the institutionalisation of CCA towards building urban resilience. Learning from externally driven initiatives such as ACCCRN can provide both support and resources for initiating and sustaining urban adaptation. For example, a workshop conducted by ACCCRN on mainstreaming CCA, concluded that public and media pressure could be used to build demand for CCA from government and non-governmental entities. The creation of a simple mechanism so that local governments can also have direct access to ICCTF, along with the promotion of the role of the private sector through their CSR programmes, can also address climate change and disaster management funding deficiencies. Additionally, climate change impacts need to be related to communities' lives. Their fatalistic views on the causes of these impacts could be changed through the use of future visioning and awareness-raising storylines developed by community leaders, scientists and experts from sectoral government and non-governmental institutions.

Notes

1. Yoseph-Paulus, R. 2014. Perspectives of planners on adaptation to climate change in Indonesia. Working Paper Series 9, IIED: London. Available for free download at <http://pubs.iied.org/10704IIED.html>.
2. Numbers stated are very likely to grow where regional development policy divides jurisdictional areas (*pemekaran wilayah*) in line with the implementation of regional autonomy.
3. The Asian Cities Climate Change Resilience Network, a Rockefeller Foundation-funded initiative begun in 10 cities across four Asian countries (India, Thailand, Vietnam and Indonesia) to develop and implement strategies to build urban climate change resilience.
4. *Musrenbang* is an annual process during which residents meet together to discuss issues facing their communities and to decide on short-term priorities. See <http://solokotakita.org/en/planning-tools/musrenbang>.

Further reading

Yoseph-Paulus, R. 2014. Perspectives of planners on adaptation to climate change in Indonesia. Working Paper Series 9, IIED: London. Available for free download at <http://pubs.iied.org/10704IIED.html>.

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