

Briefing

Urban; Climate change

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Policy pointers

Local governments must integrate city-level climate resilience strategies with local actions. One approach is to use an interactive visual toolkit to help communities understand the risks posed by climate crises.

Toolkits can be used by local governments, NGOs or community-based organisations to work with local urban communities to identify risks (such as flooding) and which assets (social, physical, economic) can be used to plan for and adapt to these risks.

Government initiatives and programmes should integrate with existing community initiatives and ways of functioning to make the most of social and physical assets available in communities.

Government should implement policies which improve access to or returns on assets and which contribute to asset accumulation – like the Baan Mankong slum upgrading programme (land tenure security and improved housing, infrastructure and social capital).

Climate crisis planning: a toolkit for building local urban resilience

Thailand's cities are highly vulnerable to the impacts of climate change and are already struggling to deal with these impacts.¹ Making urban areas like Bangkok as safe and resilient² as possible must be a policy priority for local and national governments. But to be effective, planning for urban resilience must be inclusive and involve local communities to prepare to deal with potential crises such as flooding, drought or an economic crisis. This briefing describes how a new interactive toolkit has been developed and tested in urban communities in Bangkok to help develop strategies for managing climate crises.

Past experiences of disasters in Asian cities have shown that the most marginalised members of society are the most vulnerable, lacking the asset base which protects wealthier urban residents. As the world grapples with the reality of a changing climate, how can we ensure that responses to climate change also address inequalities and contribute to inclusive governance — especially in urban contexts?

This briefing discusses the development and application of an interactive community-level toolkit called '*Kin dee, you dee*' (meaning 'eat well, live well', which in Thai equates to 'a good life' and therefore resilience) (see Box 1). It is tailored to local communities and aims to help them recognise which assets they have which can help foster their collective and individual resilience to future crisis events — including climate crises such as floods or droughts, or economic shocks such as oil price rises.

The toolkit discussions can help to reveal the extent to which crisis planning can be internally managed and implemented, using existing community resources and assets. Also, it shows where external support is required. As

such, local government, NGOs or community-based organisations should consider using toolkits such as *Kin dee, you dee* to work with communities to prepare to deal with climate crises, at the local community level and on a city scale.

Why inclusive urban planning matters

In the unequal and yet highly exposed cities of lower- and middle-income countries, inclusive urban governance is a challenge. Local governments may lack the tools and capacities to ensure participatory processes include all residents, including marginalised lower-income populations. A key challenge is communicating the potential impacts of climate change and how these impacts can be planned for and adapted to in advance — rather than merely coped with — to foster resilience in affected populations.

The IPCC Global Action and Research Agenda on Cities and Climate Change Science⁶ calls for the need to 'capture, integrate, model and weave together diverse forms of knowledge and

Using this kind of toolkit can provide local governments with the scope to integrate community views, schemes and local knowledge into city-level plans

data from a wide range of sources and perspectives' and to 'explore the role of urban and spatial planning in reducing vulnerability and in adaptation to climate change'. Interactive toolkits, which foster discussion and reflection using visual aids and group activities, can help address these gaps and others, such as the 'different forms of governance that can best support climate action across a highly uneven institutional and financial landscape; and transformative climate change responses that

can address urban inequalities and ensure inclusive modes of governance'.³ Toolkits can be a way to bring together the necessary, diverse forms of knowledge needed to adapt to climate change and build urban resilience, and so this format was selected as a methodology for the Planning for Eco-Cities and Climate-Resilient Environments: Building Capacity for Inclusive Planning in the Bangkok Metropolitan Region (PEACE-BMR) programme.

How the toolkit works: identifying assets for resilience planning

The PEACE-BMR toolkit focuses on different types of resources used by residents, from water, food, shelter and people to economic resources and community assets. It was piloted during 2018 with low-income communities in the Bangkok Metropolitan Region (BMR), who had previously been affected by severe flooding and who were case studies for the PEACE-BMR research project on the role of collective assets in building resilience (see Box 2).

The toolkit is designed to facilitate dialogue within a group of participants and is split into three main stages:

1. Understanding definitions: the toolkit starts with a discussion of key concepts such as 'resilience', 'risks', 'assets', 'resources' and 'climate change'. The aim is to ensure everyone

has the same understanding of key terms. This is done by matching puzzle words with definition cards. For example, 'assets' can refer to physical assets (such as schools, hospitals and roads) or to socioeconomic assets (such as human capital).

2. Mapping assets: this stage looks at which assets are used and how in a typical day and week. Participants have a satellite image of the local community and surrounding area, and identify both individual assets (at home) and collective assets (shared by the community). The assets are then pinned to a community map. They also discuss 'problem' assets, such as canals polluted with sewage. Participants then consider how their local area might be affected by a crisis, and which assets can be used to respond to and reduce the impact.

3. Strategies for adaptation: building on the first two stages, this stage facilitates collective planning strategies in response to potential threats. Participants discuss hypothetical crises, such as flooding. Which resources, internal and external, are at risk? Which can be used to overcome the risks? Does this require mechanisms of coping, retreating, adapting or something new? Participants can develop plans for how the assets previously identified can be used in advance of the crisis striking, to help them weather the impact.

How the toolkit promotes inclusive planning

This interactive toolkit offers the potential to be truly inclusive. It can be used to engage a range of participants and can be targeted at certain population groups — for example youth — who may bring different perspectives, such as the potential offered by social media and mobile phones as assets.

In developing the toolkit, a number of factors were considered to ensure it is suitable. The toolkit is intended for use with participants from low-income communities and is designed to be highly visual, including pictograms, simple cards, flags and maps, to make it easy to use. The toolkit went through a number of

Box 1. Creating the toolkit

The toolkit was co-developed as part of an initiative led by IIED and the Urban Futures Research Unit, Faculty of Architecture and Planning at Thammasat University (APTU),³ named Planning for Eco-Cities and Climate-resilient Environments: building capacity for inclusive planning in the Bangkok Metropolitan Region (PEACE-BMR). IIED and APTU worked with Openspace⁴ on the toolkit; a collective of community architects with experience of developing an interactive game focusing on planning options for urban resilience in the Coastal Cities at Risk initiative.⁵

Box 2. Piloting the toolkit in the Bangkok Metropolitan Region

Each stage of piloting took place in a different case-study community or district of the Bangkok Metropolitan Region, with participants recruited by community leaders, and feedback collected by the research team to revise the toolkit. A pilot session was also held with staff from the Community Organizations Development Institute (CODI). Community leaders commented on their experience of participating in the pilot:

"I came here today not sure what I would be doing. It ended up being more about speaking and discussing and learning new ways of understanding things. It was easier with less reading and more pictures. It's not boring — it's a game with pictures and people are encouraged to ask questions and making mistakes is not a problem. It helps us to understand how urban planning goes wrong and how to correct it."

"It has value in that it makes us think together and lay a plan together, in a way that is good. We can adjust ourselves to come together. It makes us think more about how to resolve problems. It has nice pictures. It can be useful when applied in the community to think about shared issues. However, different communities have different issues and ways of working."

rounds of testing and refinement based on feedback from participants within communities. Text was minimised and images used instead wherever possible.

Good facilitation is key to ensuring that participants gain as much as possible in a limited time (about three hours but potentially up to a day). A facilitator is required to guide the discussion and ensure that a usable community-level plan is developed. If the facilitator is from an outside institution (local government, NGO or university) this offers the potential for external actors to better understand how local communities perceive risks and which actions they can take to address them — and also what external support and resources are needed.

A community can use the toolkit to develop its own plan, for example through community-level meetings. Ideally, the plan would also be shared with the municipality, but many of the actions proposed may be community-specific (for example, encouraging households to practise greywater recycling). Such actions would not necessarily need to feed into municipal plans. But some actions such as 'upgrade canal embankments' would need to be integrated with wider planning.

Integrating local action into city policies and planning

The toolkit increases awareness of what community assets are available to help tackle crises. But policies or programmes which enhance or secure these assets are also required. For example, the communities testing the toolkit had been part of the Baan Mankong participatory slum upgrading programme, which has been key to enhancing

their assets: it provides communities with land tenure as well as improved housing and infrastructure, enhancing the security and value of physical assets while strengthening social assets through the participatory nature of upgrading.

As well as programmes like Baan Mankong, there are other measures which can be taken by governments to maintain social and physical assets at the community level. Policy measures to promote insurance schemes can help to protect physical and financial assets, while environmental initiatives around waste management, canal maintenance, or other priority areas as identified by residents can help to maintain social and physical assets at the community level.

As the climate and other risks change over time, and as communities evolve, certain assets will gain and lose importance — for example, community-level social capital such as relying on help from neighbours may become insufficient as the magnitude of hazards grows.⁷ Additionally, an ageing population was highlighted as a concern through the toolkit discussions. This means that engaging with communities needs to use their prioritised issues as an entry point — such as developing evacuation plans for less mobile residents in the event of an emergency.

However, while the toolkit can enhance local awareness of potential strategies for building resilience, in terms of planning for longer-term risks, a lack of information at the community level may remain. For example, while a flood drainage canal might be built as part of government flood-reduction measures, patterns of flooding may change as urban development continues — information which

local residents may not have. While the toolkit shows where technical specialist knowledge and planning can be supplemented by local knowledge based on past events, sometimes technical experts are needed to help fill knowledge gaps for communities as well.

Taking the toolkit forward

The final version of *Kin dee, you dee* will be introduced to local officials and community leaders for further rollout in 2019. Using this kind of toolkit can provide local governments with the scope to integrate community views, schemes and local knowledge into city-level plans — understanding that while community assets and resources are important, sometimes external support will also be crucial, and that integrating these resources effectively will be key. Government initiatives and programmes should integrate with existing community

initiatives and ways of functioning to make the most of social and physical assets available in communities. This approach will reduce the disconnect between official approaches and community and individual approaches to coping with crises — and help cities like Bangkok become more resilient to the impacts of climate crises in the future.

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Knowledge Products

The International Institute for Environment and Development (IIED) promotes sustainable development, linking local priorities to global challenges.

The Urban Futures Research Unit at the Faculty of Architecture and Planning at Thammasat University focuses on multidisciplinary research to empower key urban actors to manage a better urban future.

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Notes

¹ OpenDevelopment Thailand (2018) Climate change. <https://thailand.opendevolutionmekong.net/topics/climate-change> / ² 100RC defines urban resilience as 'the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience.' 100RC, What is urban resilience? www.100resilientcities.org/resources / ³ Planning for Eco-Cities and Climate-Resilient Environments: Building Capacity for Inclusive Planning in the Bangkok Metropolitan Region (PEACE-BMR) is a collaboration between IIED and the Faculty of Architecture and Planning of Thammasat University (APTU). The IIED-APTU partnership will strengthen the understanding of community organisations of the risks of climate change and actions that can be taken to reduce impacts. See: www.urbanfuturestu.com/what-we-do-2/urban-resilience-2/iied / ⁴ Openspace is a collective of architects, researchers and development practitioners, specialising in working with communities through participatory processes. See: www.openspacebkk.com/about / ⁵ See: <http://coastalcitiesatrisk.org> / ⁶ IPCC (2018) Global research and action agenda on cities and climate change science (short version). <http://bit.ly/2W1niaP> / ⁷ Prowse, M and Scott, L (2008) Assets and adaptation: an emerging debate. *IDS Bulletin*, 39(4).