

CLIMATE CHANGE ADAPTATION IN POST-DISASTER RECOVERY - POLICY BRIEF 5

IMPACTS OF CLIMATE CHANGE ON SMALL BUSINESSES IN KRATIE TOWN, KRATIE PROVINCE, CAMBODIA

This policy brief presents how climate change has impacted small businesses in Kratie Town, Kratie province, Cambodia, and how they responded to the impacts. It also examines support and intervention institutions that could be enhanced to mitigate adverse effects and to make businesses climate-resilient. This study is based on 32 interviews conducted with small businesses, including street vendors, grocery shops, restaurants and guesthouses.

KEY MESSAGES

- ◆ Making small businesses climate-resilient is vital since the economy of Kratie province increasingly depends on the inter-linkage between agriculture and tourism and related enterprises.
- ◆ Businesses have been affected by climate-induced disasters, including floods, storms and droughts. Business exposures and locations, climate risk perceptions and businesses' supply chains and client bases determined different levels of impacts and responses.
- ◆ Businesses adopted certain adaptation strategies, including mobility, stock piling, resource conservation, financial saving and relocation. However, these strategies were temporary and disaster-based rather than long-term systematic measures.
- ◆ Supporting networks and systems were quite limited. Businesses lacked the needed external assistance from their business peers, the industry and concerned authorities.
- ◆ Strengthening adaptive infrastructure, both physical and informational, will improve businesses' capability to prepare for and cope with natural hazards. This would particularly include refining flood-mitigating infrastructure and increasing accessibility and timeliness of climate information.

CONTEXT

The economy of Kratie province depends largely on agriculture, but tourism is also becoming increasingly important. More than 80% of the provincial population are farmers. However, the number of agriculture- and tourism-related enterprises is gradually rising. According to the 2011 Economic Census, there are 11,046 business establishments in the province, accounting for 2.2% of the total number of business establishments in Cambodia. Almost all of these establishments are small businesses.

Kratie province, situated along the Mekong River, has a long history of being impacted by various natural hazards, including floods, droughts, storms and lightning. Floods and droughts have been the most frequent and devastating, causing substantial social and economic damages. In addition, recently the province has experienced heavier rains and rising heat waves due to climate change.

Studies on climate change in the province have mainly focused on impacts on agriculture. However, given the growing presence of small enterprises and the rising inter-linkage between agriculture and tourism in the provincial economy, it is crucial to comprehend how climate change has affected small businesses and what can be done to make them climate-resilient.

FLOODS AND STORMS ARE MAJOR CLIMATIC HAZARDS THAT IMPACT SMALL BUSINESSES

The majority of respondents reported that their businesses have been affected by natural disasters, including floods, storms, droughts and lightning. However, businesses experienced different levels of frequency and severity based on their exposures and locations, climate risk perceptions and their businesses' supply chains and client bases.

For instance, floods have affected businesses in a number of ways. These included decreasing numbers of clients (especially for tourism-related businesses), cutting-off of the supply of products (particularly for businesses relying on agricultural products and natural resources), and eventual losses of profits. For businesses that are located in open spaces (such as along main roads) or flood-prone areas (such as the central market), the impacts included damages of products, services and shops, causing relocations of businesses to non-flooded areas. Floods also disrupted business planning, limiting opportunities and options and hindering capacities to grow. Further to economic losses, participants reported that floods caused mental health impacts although they are seasonal natural events.

Storms are reported as the second most disastrous hazard after floods. Similarly, their impacts varied depending on the types of businesses, the exposures and locations of businesses and the vulnerability of business compounds. Impacts caused by storms included damages of shops and physical items, disruptions of products and services, losses of profits and mental disturbances.

BUSINESSES' RESPONSES TO NATURAL HAZARDS ARE TEMPORARY AND SHORT-TERM

Participants reported that they did not have access to an Early Warning System or any technology-based informing system. Therefore, they relied on different sources of information about the weather, climate

change and natural disasters. These sources included traditional media (particularly radio and TV), social media (specifically Facebook), local authorities (via direct, oral announcements), neighbours and customers (through direct talks), and self-observation (based on own experience and knowledge).

Businesses responded to the natural disasters in various ways, including doing nothing, temporarily closing shops, temporarily fixing the problems (such as hiring a machine to pump flood water out of the shop or moving shop furniture to higher grounds), and moving to other places (for movable businesses). Other adaptation strategies included stock piling, resource conservation, financial saving and relocation. However, these strategies were temporary and disaster-based rather than long-term systematic and adaptive measures. Even relatively large businesses, such as a tour company, did not incorporate disaster risk management in their business plans.

Although participants anticipated that Kratie province would experience more frequent and severe natural hazards, many showed little understanding about climate risks to their businesses and thus a low level of preparedness. There are three types of climate risk perceptions among them. One is that they did not perceive climate change as a risk to their businesses at all. Therefore, they did not plan remedial actions or even had no willingness to join any awareness or training programme. The second type are those that were short-sighted with regard to the impacts of climate change on their businesses and, based on their experience, they perceived the impacts as temporary and affecting only physical assets. From that perception, they adopted a short-term strategy just to temporarily avoid the effects without taking any long-term measures. The third and least frequent type are those that perceived climate risks as serious and severe because their businesses were directly and greatly affected by natural disasters. To avoid future effects, they prepared their internal business assets, resources of production, financial reservation and business location.

One of the factors that influenced the first and second types of perceptions could be, as mentioned above, limited access to climate information, an early warning system and predictable climate technology. This finding implies that awareness-raising programmes and interventions on climate change adaptation among small businesses have been inadequate.

BUSINESSES FACE BOTH INTERNAL AND EXTERNAL CHALLENGES IN BECOMING CLIMATE-RESILIENT

A number of key challenges facing small businesses' responses to climate change can be drawn from this study. First, small businesses were uncertain about possible risks due to the lack of access to relevant information and the minimal cooperation between the public and private sectors in this field. There was no sound preparedness within and among individual businesses as well as between the public and private domains, which exacerbated the vulnerability of small businesses to climatic hazards. Businesses' perceptions of the future risks reflected that most of them tended to rely on knowledge of the past experiences rather than on a vision or guidance from relevant institutions. Therefore, facilitation and provision of access to climate information and technology and coping methods that are workable and applicable for specific businesses and locations are of utmost importance.

Another challenge lied in the characteristics of small businesses themselves (small size and poor financial capacity), which imposed barriers to becoming climate-resilient. Poor endowment and limited knowledge about disasters prevented them from developing long-term strategies and a more resilient mindset.

Therefore, most of them adhered to immediate and short-term responses and failed to see climate change adaptation as an incentive for long-term profit-making, resulting in poor or non-preparedness.

A third challenge was the lack of adaptive infrastructure, both physical and informational. This made businesses concerned about the future risks despite some interventions and immediate responses from local authorities. Weak physical infrastructure would worsen disaster impacts on businesses. For example, respondents reported that the central part of Kratie Town, where businesses are concentrated, is a lower-lying land area where water overflow from the river can easily spread. It is the most flood-prone area where sometimes only a few hours of big rain can cause flood. Further, the sewage system that is often broken or blocked compounds this vulnerability. This is a serious problem since the system is critical for the flood-alleviating strategy of the town.

Also, the absence of digital infrastructure of climate change information weakened businesses' capability to cope with disasters. This impediment made businesses react rather than being proactive with effective and reliable measures during crisis times. This unavailability of information infrastructure also impeded the potential of grassroots-level information sharing among business networks and information feedback from businesses to relevant institutions. Due to the lack of information tools businesses faced difficulties in obtaining updated knowledge about climate conditions, while relevant authorities found it difficult to gather data and strategize policies and interventions. In short, businesses practised some adaption strategies, but these were often temporary and disaster-based given the limited information and supporting networks.

Most respondents reported that they lacked the necessary external support from their business peers, the industry, and relevant authorities. None of them mentioned access to credit, aid and insurance for their businesses, except their own preparation.

The only external agency that intervened during and after disasters was local authorities who in the last few years enabled small businesses to prepare for and recover from floods by pumping the flooding water out of the central market and the flooded zones and by building new roads and dams in the surrounding areas. However, this intervention was not expansive and not embedded in institutional plans. This at times caused inconsistent and un-coordinated interventions. An example of the lack of coordination mechanism among state institutions was the difficulty to select secure relocating places for businesses after the central market had been flooded.

POLICY IMPLICATIONS

- ◆ Awareness-raising programmes and interventions on climate change adaptation among small businesses have been inadequate.
- ◆ More and better efforts are needed to make small businesses embrace climate change adaptation as a profit incentive and adhere to long-term responses.
- ◆ This requires institutionalization of interventions and better coordination among state actors and with the private sector. Tapping existing programmes of civil society organisations and development partners working in the field will increase both synergy and efficacy.

SOURCE

This policy brief has been prepared by Dr. Chanrith Ngin, The University of Auckland, New Zealand, and is based on the following material:

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