

Rebuilding a safe, secure and sustainable Thailand

DEVELOPMENT

SAID IRANDOUST

The suffering and loss experienced during the floods last year have forced planners to rethink the development strategies they have been pursuing over the past few decades. Blindly aping the West and using foreign methods to tackle Asian floods have resulted in disastrous consequences.

The Thai floods and the subsequent rethinking suggest Thailand and Southeast Asia have to look for a new development paradigm that is safe, secure and sustainable.

As Thailand re-emerges from the crisis, rebuilding, reconstruction and rehabilitation efforts will have to meet these criteria if we consider the long-term perspective.

Let us examine these concepts first.

The concept of safety implies people should be protected from potential disasters, especially floods.

The community should be safe from risk and danger, while buildings and other infrastructure should be safeguarded against potential damage.

Security, on the other hand, suggests a minimisation of the danger or threat. Though safety is within our hands as we can protect ourselves from potential danger, security is the state of being free from danger or threat.

Citizens need both kinds of protection, namely safety and security.

But sustainability is a broader concept, and in the long term sustainability ensures safety, security and survival, without hampering the needs and interests of future generations.

Providing and ensuring safety and security are essentially functions of the state with communities and the public having an equally important role to play. Sustainability is where experts intervene and convince the state and the public that in the long run there are no alternatives to sustainable development.

If Thailand and this region were to apply these principles to tackle disasters, people would be served better, the impact of disasters would not be so great, and the benefits of development would be long-lasting and optimal.

The rule of thumb is that every project should be analysed and reviewed to test whether it is safe, secure and sustainable. If it does not fulfil these criteria, it should not be implemented until necessary remedial alterations have been incorporated.

It is not that floods are new to Thailand or this region. At a recent discussion organised by the Asian Institute of Technology, experts pointed out that Thailand suffers from floods every four or five years. The intensity of the flood varies, but the country is generally considered flood-prone.

A comparison of the area affected by floods in 2010 and 2011 reveals that in 2011, the area covered by floods was one-third greater.

However, the devastation caused in 2011 was massive, and clearly out of proportion if we consider the statistics of flooded areas alone.

That is why sustainability is important. The critical principle is that even if the flooded area is greater, if the human impact is lesser, then we feel both safe and secure.

The impact of the floods on Thailand was immense. The United Nations International Strategy for Disaster Reduction estimates the damage caused by the floods was US\$40 billion.

More than 1,000 factories were shut down, and 700,000 people forced out of work. Over 800 people died in the floods. But it is not just Thailand which has been affected by floods. In the last decade, floods have devastated Bangladesh, China, India, Germany, Mozambique, Poland, and the United States.

At this time in Europe, the UN agency has warned the flooded Danube River could exacerbate the fatalities arising from the harsh European winter.

However, it can be safely assumed the cost of the floods in Europe is substantially less both in human terms and proportional monetary terms.

When floods affect less developed economies, the proportion of infrastructure and the investment in infrastructure which comes under immediate threat is much greater than that in developed economies.

They can result in massive fatalities, accompanied by a shock to the economy which can cripple prosperity for as long as a generation.

At the World Summit on Sustainable Development in 2002, the Johannesburg



Water surges into Don Mueang airport last October, during the height of last year's floods.

Plan of Implementation stressed the need to protect and manage the natural resource base of economic and social development.

It is not only infrastructure that needs to be protected. The benefits and gains of development, which include social and economic benefits, need to be secured from disasters.

From a sustainability perspective, it is important that risk management and vulnerability should include all such elements including socio-economic parameters.

Thailand has suffered on all counts. Human lives have been lost, the economy severely affected, and the scars will last a lifetime. It is time for us to seriously evaluate and take steps to lessen such an impact in the future. We can no longer sit back and take extreme events for granted.

Prior to the floods, planners did not take into account the tremendous resilience of the people.

Resilience of the people is what we forgot and ignored during the development debate of the previous decades.

The steadfast resilience of the people in Thailand as displayed during the floods, as well as during the earthquake and tsunami in Japan, offers many lessons for development experts and practitioners. Combine this with technology, early-warning systems and proper education, and we can make disaster-prone areas safer.

Sustainability has to be rooted locally, duly circumscribed by local conditions. Wooden houses raised on stilts, particularly those on river banks, had served Thailand for ages.

And yet when they were replaced by concrete houses, the issue of sustainability was not addressed.

When the floodwaters arrived, the concrete houses offered no protection against them. It is not to suggest a debate between concrete and wooden houses, but to ensure that development takes place by building on the strengths of our local systems, which at times have been found to be more sustainable than the ones which replace them.

The issue of creating a retaining wall versus a floodway has to be rooted in local conditions and in consonance with the topography of the region, rather than being a solution "imported" from another country where the terrain may be altogether different.

This is also the time to build on local knowledge. The Thai community is known for its resilience and tremendous tenacity. Their traditional accumulated knowledge was drowned under the cacophony of the modern development paradigm.

Education providers and universities need to build on this traditional knowledge. This will make our systems more sustainable, and will incorporate sustainability practices in our daily lives.

Retrofitting is another technique

which is recommended by experts as one of the least expensive ways of securing our infrastructure.

Existing structures can be reconfigured in a way that they will make them both safe and secure, so we can minimise the harmful effects of any future disasters or calamities.

While techniques like retrofitting can make us safer and secure, sustainability is a long-term phenomenon and has to seep deep into our policy decisions.

Thailand possesses considerable expertise in flood management, but it lost it in the deluge of unplanned construction that converted Bangkok into a concrete jungle.

It is time to adopt corrective measures so that while Thailand continues to reap the benefits of modern life, it can emerge as an economy which is a beacon of sustainability.

With climate change, the incidence of extreme events is rising and will increase every year. Last year, the number of floods and mass water movements exceeded 300, while the number of storms crossed 400. One hundred extreme temperature events were recorded.

Every day, the world is stuck with at least one, if not two disasters. A report by the Asia Development Bank says the average temperature in Southeast Asia has increased at a rate of 0.1-0.3 Celsius per decade, and the sea level has risen 1-3mm each year over the last 50 years.

For a city like Bangkok, where the northern tip of the Gulf of Thailand is located at the mouth of the Chao Phraya River, any further increase in the sea level will be catastrophic.

This suggests that while last year's huge floods may have been a one-time event, climate change can worsen our living conditions.

The safety of citizens in the megacities of the region, coupled with their security is what governments in Southeast Asia are increasingly worried about.

It is for us to ensure that sustainability too becomes a part of their agenda.

The flood has given us a warning that we cannot continue with a path which has proven to be non-sustainable.

If we fail to listen, then it is we alone who will be responsible for its consequences.

Said Irandoust is the president of the Asian Institute of Technology.