

Following days of heavy rainfall due to the passage of Son-Tinh tropical storm over the country, a hydro-power dam under construction overflowed in Attapeu province, releasing 5 billion cubic metres of water. 16,256 people living in eight downstream villages of Sanamxay District were affected. National authorities report that more than 1,300 houses have been damaged though the extent of the damages is unspecified. 26 people are confirmed dead and more than 130 people are missing. These events took place while the monsoon season is ongoing which could exacerbate the situation and hamper the recovery of the affected communities.

### NEED FOR INTERNATIONAL ASSISTANCE



### IMPACT



Source: Reuters

### Anticipated scope and scale

26 people were found dead but at least 130 people are missing. The **death toll is expected to increase** over the next days. At least 6,000 people will be in urgent need of **shelter** after losing their homes to the floods.

Though engineers working at the hydropower plan have said that water levels were back to normal, **heavy rains** are forecast over the region between 26 and 28 July, which could aggravate the situation and lead to more floods.

### Key priorities



**+16,000**  
people affected



**+1,300**  
homes damaged



**clean water**  
systems are cut off

### Humanitarian constraints



The floods have caused extensive damage to the road system and bridges. Helicopter and boat are required to access Sanamxay district, where most of the affected villages are located. Many areas remain inaccessible.

#### Limitations

There are only few sources reporting on the events, The official Laos News Agency communicates slowly about the situation and there are conflicting reports on numbers of people affected and damages to houses.

## Crisis impact

On 24 July, a significant increase in water levels due to the effect of the southwest monsoon, exacerbated by Son-Tinh tropical storm since 18 July, damaged one of seven dams comprising a large hydroelectric network built along the Xe-Pian river. Around 5 billion cubic meters of water were released in the valley, impacting principally six villages within Sanamxay district, Attapeu province: Ban Mai, Ban HinLath, Ban ThaSengchan, Ban Thahintai, Ban Sanong and Ban Nonghin. (ASEAN 25/07/2018) In these villages, almost the entire population was displaced to temporary shelters and around half of them have lost their homes. (Radio Free Asia 25/07/2018) Villages along the Sekong River in neighboring Cambodia were also impacted and at least 6,000 people had to be evacuated. (The Guardian 26/07/2018)

An estimated 16,256 people are affected by the floods in Attapeu province (representing around 10% of the total population). (ASEAN 25/07/2018) At least 26 people were killed while more than 130 others are still missing. (Radio Free Asia 25/07/2018)

**Food:** According to the IFRC Asia Pacific, the dam collapse resulted in high food needs as stocks were either lost or damaged. Displaced families are in urgent need of food aid. (IFRC 25/07/2018) Shortages of drinking water and firewood are likely to hamper cooking. Food security will be impacted even after the affected population are able to return to their villages as the floods damaged fields. Most people in the area depend on survival agriculture to sustain their food needs.

**WASH:** Shortages of safe drinking water are expected as access to safe drinking water has been cut off. Risks of waterborne diseases are likely to increase if the affected population is forced to resort to drinking contaminated water.

**Shelter:** Housing has been severely damaged. According to government data, at least 1,300 houses have been damaged though the extent of the damages are not clear. (ECHO 26/07/2018) These figures are likely to increase when a drop in the water levels leads to improved access to conduct further assessment of the situation. (Radio Free Asia 25/07/2018) Over 1,370 families (around 6,630 people) who were displaced are housed in temporary shelters organised inside local schools. (OCHA 24/07/2018, ASEAN 25/07/2018)

**Livelihoods:** Attapeu is a largely agricultural province where most people rely on rice production for their livelihood. (WFP 01/09/2016) The extent of damage is unknown at this stage, but paddy fields were flooded in many areas, which could mean significant crop losses, as July is the end of the sowing season. (FAO 18/07/2018)

**Education:** Schools were likely flooded in the affected areas. An unspecified number of schools are being used as temporary relief centres, which will disrupt education. (OCHA 24/07/2018)

## Vulnerable groups affected

There are protection concerns for vulnerable groups such as children, women, older people, and people with disabilities. Women and girls are particularly vulnerable to security risks around temporary shelters when displaced by natural disasters. There is an increased risk of exposure to incidents of rape, sexual assault and gender-based violence, and such incidents go largely underreported. People with disabilities and older people may find leaving their shelters more challenging. Difficult terrain acts as a barrier to accessing relief shelter or aid. Children are at risk of exploitation and abuse, especially when left unattended during the recovery period when their parents may be busy collecting relief items and restoring livelihoods.

Though there are no official breakdown numbers regarding gender and age of the affected population, the Pacific Disaster Centre estimates that at least 34% of the populations in need of humanitarian assistance is composed of children under 15 years and 4% are over 65 years old. (PDC 24/07/2018)

## Humanitarian and operational constraints

The floods have caused extensive damage to the road system and to 14 bridges, in a region that is, under normal circumstances, very remote and hard to reach. Helicopter and boat are required to access Sanamxay district, where most of the affected villages are located, but the government could only dispatch three helicopters and many areas remain inaccessible. (OCHA 24/07/2018) Due to access constraints, more than 3,000 people remained stranded on the roofs of their houses and on top of trees for 48 hours before being rescued. (Lao News Agency 26/07/2018)

Unexploded ordnance and landmines can be found in the rural areas of all 17 provinces of the country, which may further hamper humanitarian access. (Mine Advisory Group 2018)

## Aggravating factors

### Monsoon season

Heavy rainfall has been reported in Laos since 18 July, leading to flooding all over the country. In total, 373 villages across 10 provinces have been impacted. According to the forecast published by the Laos Department of Meteorology and Hydrology, rain is expected for at least three more days between 26 and 28 July, while soil is already saturated.

## Proximity of critical infrastructure

Over 70 projects similar to the Xe-Pian hydroelectric plant are underway or planned in the country. Laos has adopted an aggressive dam building policy, hoping to develop its economy by becoming the “battery of South-East Asia” and selling power to neighbouring countries. (Reuters 24/04/2018) The damaged dam is one of seven dams built as part of the project along the Xe-Pian river.

Environmental rights groups have long criticised this policy and have raised concerns about the impact of dams on the Mekong River and its tributaries, its flora and fauna and the rural communities that depend on it. Food security in southern Laos had already been impacted by the massive construction of dams disrupting the natural migration of fish. Critics have underlined the lack of proper environmental impact assessment which could lead to similar situations happening again. (Al Jazeera 25/07/2018, Asian Correspondent 24/01/2018)

## Response capacity

### Local and national response capacity

The local government was quick to react and on 24 July the Prime Minister’s Office declared the affected areas in Attapeu province as a “*National Disaster Emergency Zone*”.

A Provincial Disaster Prevention and Control Committee was activated with military and police assisting evacuation of villagers. Search and Rescue teams were deployed with three helicopters and rescue boats. (OCHA 24/07/2018, ASEAN 25/07/2018)

The Lao Red Cross, which counts more than 3,000 volunteers and 350 staff members, is also participating in the evacuation of the affected population and has started distributing drinking water, food and NFIs. (IFRC 24/07/2018, IFRC 25/07/2018)

Although some items such as dewatering pumps, chlorine powder, emergency food or vitamins are prepositioned inside the country, access constraints mean that most NGOs and INGOS have limited access to areas outside their current areas of operations. (HCT 06/2018)

The country has been offered bilateral assistance by various ASEAN member states such as Malaysia, Thailand, Brunei, Myanmar, Singapore or the Philippines (ASEAN 25/07/2018) and by numerous other countries. So far, it is unclear whether the government plans on accepting it or not.

### International response capacity

The IFRC Country Cluster Support Team (CCST) in Bangkok is deploying one member of its team to provide in-country coordination and is preparing to dispatch 1,400 food relief kits in coordination with the Thai Red Cross Society (TRCS). IFRC Asia Pacific regional office in Kuala Lumpur warehouse can also mobilise enough non-food supplies

(including tarpaulins and hygiene kits) to respond to the situation immediately. The regional logistics team is checking cost estimates for a charter. (IFRC 24/07/2018) UNICEF is providing water, sanitation, and hygiene supplies for 1,500 households (around 7,500 people). The goods should reach the affected communities within the next 24-48 hours. (UNICEF 25/07/2018)

## Information gaps and needs

The Government of Laos has deployed its Rapid Assessment Team, but the results are not known yet. Data is lacking on specific sectoral needs other than food and shelter. The extent of the damages, especially to crops, cannot be assessed in all areas due to the high water levels. Information on groups with specific needs, such as women, children, elderly or disabled people, are not available.

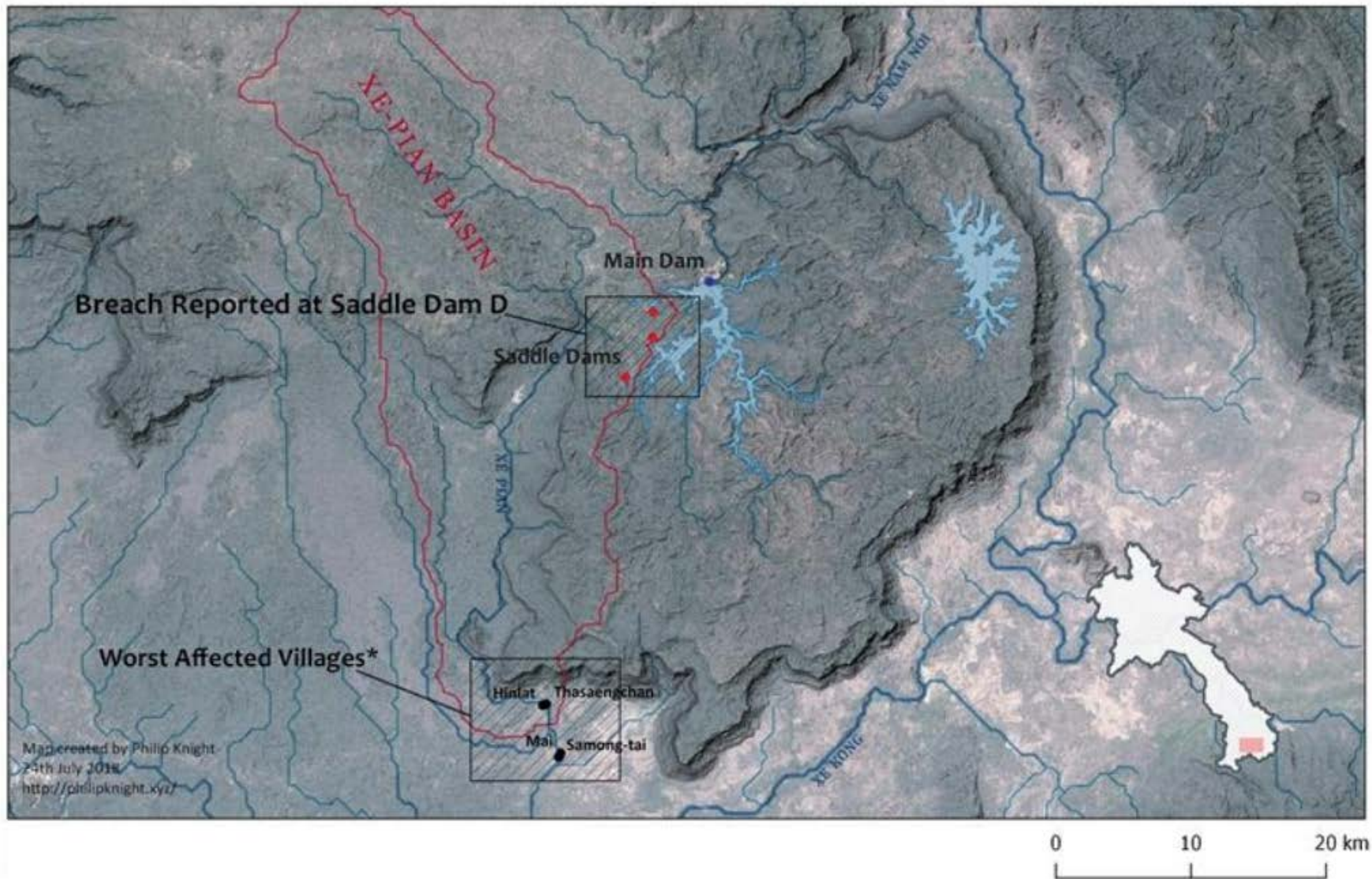
Further assessment of the consequences of the floods on the water and sanitation infrastructure will also be required to avoid contamination.

## Lessons learned

In September 2017, a similar event occurred in Xieng Khouang province in northern Laos when the reservoir of the Nam Ao Dam broke following heavy rainfall. One village was severely damaged by the 500,000 cubic meters that overflowed from the dam. No injuries or deaths were reported. The project was under development when the dam broke, leading to questions about safety standards implemented in such large-scale projects, and underlining the necessity to learn from those man-made disasters to avoid repetition.

Floods are frequent in Laos during the southwest monsoon season, from July to September. The central and southern provinces are usually the most affected due to the significant network of rivers and tributaries. Climate change has impacted the rainfall trends with a rainy season starting earlier than usual, while tropical storms are more intense. (HCT 06/2018)

## Map: Areas affected by the dam collapse in Attapeu province



Source: ASEAN 25/07/2018