



Viet Nam: Drought and Saltwater Intrusion

Office of the UN Resident Coordinator

Flash Update No. 3 (As of 25 March 2020)

This update is issued on behalf of the UN Resident Coordinator in Viet Nam in collaboration with humanitarian partners. It covers the period from 27 February to 25 March 2020. The next update will be issued once new information becomes available.

Highlights

- Since the last quarter of 2019, severe drought and saltwater intrusion conditions have been detected and have begun to significantly affect people across 13 provinces¹ in the Mekong Delta region.
- Seasonal weather forecasts indicate that the level of severity will continue to increase, peaking in March to May 2020.
- On 15-17 January, the Central Committee for Natural Disaster Prevention and Control (CCNDPC), INGOs, Viet Nam Red Cross (VNRC) partners and the UN, conducted a joint multi-sector rapid assessment and published a [joint assessment report](#).
- On 1 February, IFRC launched a [three month Disaster Relief Emergency Funding \(DREF\) operation](#) to support VNRC to assist affected people in Ca Mau, Bac Lieu, and Tra Vinh.
- On March 3, the UN reaffirmed its commitment to working closely with the Government, Viet Nam Red Cross, INGOs, and bilateral institutions to best respond to unmet needs of affected people, as well as supporting the Government to recover, rehabilitate and build back better.
- As of 7 March, five provinces have declared a state of emergency².
- On March 8, the PM while visiting affected areas, agreed to declare natural disaster in five Provinces² and announced VND 350 billion to support relief efforts.
- The COVID-19 outbreak is putting an additional socio-economic pressure on vulnerable households already affected by drought and saltwater intrusion.



A woman cleaning vegetable in a dried pond in Khanh Binh Tay Commune, Ca Mau Province. (Credit UN Women, Jan 2020)

95,600

Households currently affected by water shortage

5

Provinces in state of emergency²

38,800

Hectars of damaged/ lost agricultural land

Source: Central Steering Committee of Natural Disaster Prevention and Control, Vietnam Disaster Management Authority (VDMA)

¹ Ca Mau, Soc Trang, Hau Giang, Tien Giang, Ben Tre, An Giang, Dong Thap, Vinh Long, Tra Vinh, Long An, Bac Lieu, Kien Giang, Can Tho

² Kien Giang, Tien Giang, Ben Tre, Long An, Ca Mau

Situation Overview

The 2019 rainy season in the Mekong basin appeared much later than in average years, resulting in drought conditions and historic low levels of flow, raising concerns for elevated drought and saltwater intrusion for the entire Mekong Delta in the 2019-20 dry season. Saltwater intrusion has appeared earlier in the year than the historic 2015-2016 low levels of flow. To date, saltwater intrusion of 4 g/liter has entered up to 110km inland (Vam Co Dong, Vam Co Tay), more than 30km beyond the highest long-term average levels (VDMA, Meteorological Department, MARD).

Satellite observations from October 2019 to February 2020 indicate poor vegetation health, prolonged dry spells, and soil moisture deficits, indicating drought conditions. As the dry season progresses, drought conditions are affecting aquifers (underground water sources) which usually support the domestic water demand, agriculture, and livelihoods, especially of poor and near-poor households ([UNOSAT](#), [ECHO](#)).

According to experts³, the Mekong Delta region is facing abnormal weather attributed to climate change, tide changes in amplitude, propagation and discharge, subsidence resulting from over-extraction of groundwater, and upstream water retention. As of 17 March, Mekong River tidal stations of Tan Chau and Chau Doc reported water levels fluctuating in line with their Long-Term Averages (LTAs) due to the tidal effect from the sea (Mekong River Commission).

The ongoing drought, water shortage and saltwater intrusion have so far affected 95,600 households and are exposing a higher number of vulnerable people in the Mekong Delta region to significant water shortage risks. A total of 13 out of the 63 provinces of Viet Nam have been affected and 5 provinces (Kien Giang, Tien Giang, Ben Tre, Long An, Ca Mau) have declared a state of emergency (level 2).

Considering seasonal forecasts, the Government and partners are implementing actions to address needs and assist affected households. National and international actors are supporting households with improved water storage systems and with communication campaigns on WASH, Food Security, Agriculture, Health and Nutrition, Education, Gender and Protection. The Government has identified several measures that need to be implemented on the ground and which highlight some of the existing response gaps to be addressed.

Overview of Impact and Actions

Impact

WASH (Water, Sanitation, Hygiene)

- 95,600 households lack enough water for domestic use (Soc Trang 24,400, Ca Mau 20,100, Ben Tre 20,000, Kien Giang 11,300, Tra Vinh 8,600, Long An 7,900, Bac Lieu 3,300). The total number of households facing difficulties in 2015-2016 was 210,000. (source MARD)

Food Security, Livelihoods, Agriculture

- As of 7 March, drought and saltwater intrusion caused losses of rice crop in 2019 and Winter-Spring seasons of 2019-2020 to 38,800 ha accounting for about 1.2% of the total sowing area planting area, equal to 9.6% of the affected area in 2015-2016⁴. In addition, Ben Tre province has about 5,000 ha damaged by spontaneous sowing. (Source MARD)

Education

- Since schools are temporarily closed due to COVID19 concerns, no changes in increased absenteeism due to the drought and saltwater intrusion could be monitored.

Health and Nutrition

- No change in the nutrition status of targeted women and children groups has been observed by NIN. NIN is working with the provincial Centre for Disease Controls to closely monitor the nutrition situation of women and children for timely response as appropriate.

Gender and Protection

- Women and girls, being the primary care givers and responsible for household care, are disproportionately affected by water shortages and salinity intrusions. Women spend an additional 1 hour per day to collect water and complete their house and care work. This is limiting their time for paid work.
- Extended heat and lack of clean water increased sickness among younger children and older people.

³ Vietnam Disaster Management Authority, Southern Institute of Water Resources Research, Raise and Fall Project – Utrecht University and Can Tho University

⁴ The Government has drawn on lesson learnt from the drought and saltwater intrusion of 2015-2016 and took various early actions to minimize the impact on agriculture productions, i.e. timely dissemination of early warnings, clear instruction of seasonal calendar to start crop as early as possible or to skip crops, etc.

Response Actions

- In order to proactively cope with impacts, minimize damage to agricultural production and prevent people from lacking domestic water, the Government is implementing the following effective measures:
 - MARD has been monitoring and forecasting the situation since June 2019, actively directing and reporting to the Prime Minister. Several meetings and with national and local leaders have taken place.
 - Most saltwater intrusion control sluices have been functioning since late 2019 in the affected provinces. The MARD and Provincial offices have scaled up construction projects 6-13 months ahead of schedule. To date, five saltwater prevention and control projects are operational since December 2019 and January 2020. These prevention measures have significantly reduced impacts on the 2019-2020 Summer-Autumn and Winter-Spring crops compared to 2015-2016.
 - Rice production: Sowing of the 2019-2020 Winter-Spring rice crop has taken place 10 to 20 days ahead of schedule to effectively avoid the saltwater intrusion peak (1,540,000 ha sown). Currently MARD is supporting local agencies to develop a plan to sow the next crop (Summer-Autumn, Season) suitable to the situation, to the water conditions and adapted to prolonged saltwater intrusion.
 - Fruit production: MARD issued the technical guidance "Technical guidelines on cultivating fruit trees in drought and salty conditions in the Mekong Delta".
 - Ben Tre: Water filters have been installed in 12 of 35 water supply stations providing enough fresh water for people. The Navy shipped 250m³ of fresh water in three communes of Ba Tri District.
 - Soc Trang: The water supply network has been expanded of 115km to serve 4,000 households and another 604km of pipelines will be further installed and completed soon to ensure water supply for an additional 22,400 households suffering water shortage.
 - Kien Giang: The province allocated funding for the expansion of the water supply network to reach an additional 9,000 households. Remaining affected households will be served by water trucking during the peak of the saltwater intrusion.
 - Ca Mau: Households facing water shortage habitually face regular annual water shortages. Currently, local people are proactively using household-based water supply solutions.
 - Bac Lieu: The water supply network will be expanded by 36km and four groundwater wells will be drilled.
 - Long An: In addition, the province has provided funding for 160 water storage tanks (1m³) for poor and near-poor households in Can Giuoc district.
 - Tien Giang: 50 public taps have been installed to serve 2,200 households.
 - The National Institute for Nutrition (NIN) facilitated monitoring, communication and support of the most affected provinces including Tra Vinh, Kien Giang, Soc Trang, supporting the local health system to track nutrition status of women and young children. In addition, it has reviewed current sector preparedness plans and selected specific actions to be implemented starting in March.
- UN agencies, Viet Nam Red Cross and INGOs are supporting and coordinating with the Government and VNDMA to monitor impacts and respond to identified gaps, including the following activities:
 - UNDP (USD 185k) is supporting the Government with field assessments, information sharing, coordination and planning events, recovery and long-term resilience building planning, and livelihood support.
 - UNICEF (USD 200k) is supporting WASH activities (providing 1000l water tanks, soap, hand sanitizers and water filters) and communication campaigns on WASH, Health and Nutrition, Education, Child Protection in Ben Tre and Soc Trang.
 - UN Women and FAO (VND 600 million) are supporting community awareness raising and technical assistance in Ca Mau.
 - IFRC/VNRC (CHF 132k) launched a 3-month Disaster Relief Emergency Funding (DREF) operation (February to April) to support VNRC to assist 24,000 affected people in Ca Mau, Bac Lieu, Tra Vinh with WASH activities (intensive need assessment, deploying 12 brackish-water filtration machines, distribution of safe drinking water, improvement of WASH services through hygiene and health promotion).
 - Save the Children (USD 110k) is supporting with household water storage utilities and WASH in schools and communities in Ca Mau.
 - East Meets West (USD 40k) is supporting affected communities with WASH activities in Ben Tre.

General Coordination

The Government through the MARD, UN agencies, the Vietnam Red Cross Society and NGOs/INGOs jointly completed a multi-cluster rapid assessment in the Mekong Delta region, with field teams completing data collection on 17 January. The [Joint Assessment Report](#) has been shared with partners and with CCNDP Vice-Chairman. According to the joint Government/NGO/UN Contingency Plan developed in 2018, National authorities, the UN, IFRC/VNRC, INGOs and partners are working in close coordination to regularly share information and closely monitor impacts in each of the provinces affected by drought and saltwater intrusion.

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