

Ground subsidence and sea level rise threaten Mekong Delta and millions of people

by Ngoc Lan

Experts note that the region could disappear sooner than expected. Between 1991 and 2015, the ground dropped by 18 centimetres. Rapid urbanisation, underground water exploitation, sand mining and dam construction are the main causes.



Ho Chi Minh City (AsiaNews) – The Mekong River Delta is lower than previously thought. Ground subsidence and rising sea levels threaten the lives of more than 21 million people who inhabit the region as well as Vietnam's food security since the latter grows 56 per cent of the country's rice.

The process, many warn, is leading to an environmental emergency, causing major concerns among Vietnamese who want their government to do something quickly to counter it.

The Mekong River Delta is the third largest delta in the world, covering some 40,577 square kilometres. It reaches the South China Sea (East Sea for the Vietnamese) after crossing China, Myanmar, Laos Thailand and Cambodia.

Recent studies warn that the delta is sinking fast and might disappear this century, sooner than thought according to the latest research.

In September a group of Dutch scientists said that the delta has an "extremely low mean elevation" of just around 0.8 metres above sea level, which is dramatically lower than the 2.6 meters assumed earlier from NASA's Shuttle Radar Topography Missions data.

The study, conducted by a team from Utrecht University, estimates that at its current rate of subsidence the delta could be under 0.8 metre of sea within 57 years, forcing more than 12 million people to relocate.

The Dutch study found that the sea level is rising by 3 to 4 millimetres per year, whilst many parts of rural areas of the Mekong River Delta have an annual subsidence level of 10 millimetres to 20 millimetres. In urban areas and industrial zones, the subsidence is about 25 millimetres per year.

Between 1991 and 2015, the Mekong River Delta dropped by an average of 18 centimetres. Many experts blame rising sea levels caused by climate change and human activities, most notably urbanisation, groundwater exploitation, sand mining and dam operation.

Many residents in the western coastal provinces had to dig 5 to 7 metres to get fresh water. Now they have to drill wells between 130 to 150 metres and use strong pumps to get fresh water.

The Dutch research also points out that every day Delta residents use 2.5 million litres of ground water, which reduces pressure in the subsoil, facilitating subsidence.

Last month, Philip Minderhoud, a member of the Utrecht University research team, said that if the current trend continue, subsidence may not be the only consequence as the water table will likely be contaminated by sea water.

The researcher also mentioned the significant drop in sediment accretion as one of the factors for subsidence, as a result of sand mining and upstream dams.

According to the Stimson Center ASEAN Infrastructure Database released in June, 102 dams have been built on the Mekong River, including 11 in China and 64 in Laos (also invested by China). Another 64 dams are under construction.

