

## **Tidal floods inundate villages in Central Java for good**

Tidal flooding has inundated almost all of Bedono village in Demak regency, Central Java, as part of it has become one with the sea.

“I never imagined that my village would completely sink into the ocean, forcing us to relocate,” Zamroni, a former resident said near Bedono village recently. He recalled that tidal floods began hitting Bedono in 1995, eventually sinking the subdistrict, including 405 hectares of fishponds as well as hectares of rice fields and plantations.

Former residential complexes have been turned into mangrove conservation areas. Widespread relocations were carried out in 1999. Only an area about twice the size of a soccer field remains in Bedono subdistrict. Two hamlets — Tambaksari and Senik — are both far from public facilities such as community health centers (Puskesmas) and schools.

Although residents of the hamlets have decided to stay put, the fear that tidal floods will hit once again continues to haunt them. Residents said that they were relying on the mangroves to protect their villages from sea abrasion and high tides. “I used to be a farmer. Now I make a living by fishing near my house,” Ruwiyani, a resident of Senik, said.

Unlike Bedono residents, members of the fish farmers’ group in Mangunharjo subdistrict, Semarang municipality, realized the threat of tidal floods early on and learned that the mangrove could save their villages. “Thanks to the mangrove, homes were spared,” said Sururi, a mangrove planting activist from Mangunharjo, adding that only fishponds and fields were damaged by the tidal flooding.

Sururi said that over 160 hectares of coastal fields sank into the sea as tidal flooding started hitting his subdistrict in 1998. The conversion of mangroves into fishponds was blamed for the phenomenon. Some 60 percent, or 2,000 hectares of mangrove forests along Semarang’s coastal area have reportedly been damaged.

According to data from the Maritime Affairs and Fisheries Ministry, 90 percent or 5,000 hectares of mangroves were damaged in Central Java in 2012.

Among the regencies/municipalities that experienced the worst damage to mangroves were Jepara, Rembang, Demak, Semarang, Kendal and Brebes. Environmental observer Intan Muning of Semarang Diponegoro University (Undip) blamed the condition on development projects.

“The development of breakwater in the Semarang Port area, for example, has redirected the seawater stream that should have moved to the port to the Demak area instead,” Intan said.

She warned administrations along Java Island’s northern coastal area — or Pantura — not to conduct massive development projects in the beach areas and avoid beach reclamation to prevent further damage to the environment.

She also suggested administrations promote the planting of natural beach belt because it was a cheap and long-term solution to tidal flooding and abrasion problems. “We need to conduct widespread mangrove planting,” Intan said.

Hydrologist Nelwan, also of Undip, concurred that beach belt was more suitable compared to offshore dam and giant seawall development as the two last choices required huge beach reclamation works.

The Central Java provincial administration, however, has yet to decide what it will do despite worsening conditions.