

## Govt helps farmers, fishermen deal with climate change

With the disastrous impact of climate change already threatening the livelihood of farmers and fishermen, the government will soon roll out programs to help them deal with the menace.

With money from the Indonesia Climate Change Trust Fund, the government has started numerous programs including the mapping of areas most prone to extreme weather blamed on global warming.

Widada Sulistya, deputy of climatology at the Meteorology, Climatology and Geophysics Agency (BMKG), said the map would cover areas like West Java's Indramayu, one of the country's rice bowls, which has experienced more precipitation between 1981 and 2009.

"In the past, the highest precipitation was only around 180 mm. Now it can reach up to 300 mm. We found a similar result in North Sumatra. With this map we should be able to detect potentials for extreme weather in order to better apply mitigation and adaptation strategies," he said.

To disseminate information to the public, the agency has set up a network of BMKG officials at the local level through cellular network by which it could distribute information. The network also relies on popular social networking site Facebook and micro-blogging site Twitter.

Muhrizal of the Agriculture Ministry's research and development division said that the mitigation strategy would include the distribution of top quality seed that could survive extreme weather. He said that the seed could also thrive on soil with high level of salinity, the result of seawater intrusion.

Data from the Agriculture Ministry shows that by August 2011, 95,981 hectares of farm land turned fallow from extreme weather.

The ministry also recorded that between April and July 2011, 37,297 hectares of farm land suffered from failed crops, 31,455 hectares were pest-infested, 5,093 hectares were inundated and 749 hectares were ravaged by prolonged drought. The government has earmarked Rp 374 billion in compensation for farmers experiencing extreme weather-related failed crops since April 2011.

With rice remaining the main staple in the country, the government has made dissemination of information on the disastrous impact of global warming a priority.

Ali Suman from the Maritime Affairs and Fisheries Ministry's research and development division said that the mitigation and adaptation strategies for fishermen included education on fishermen on how to recognize the impact of global warming, including high waves and the change in the sea surface temperatures.

Mastery of such skills will help them deal with extreme weather like El Nino and La Nina.

Ali cited a study showing that sardines grew quickly during El Nino, a periodic warming of the surface temperature of the tropical Pacific Ocean.

"If we can predict the change in the climate, we can plan ahead different activities for fishermen during the fallow period for fishing," he said.

The central government has also prepared a number of programs to mitigate the adverse impact of climate change which include education, capacity building and preparing a new school curriculum.

So far, the government has carried out the project in locations: Serdang Bedagai in North Sumatra, Jakarta, Indramayu, Batu in East Java and Baubau in Southeast Sulawesi.