Qatar coral reef at risk from warming seas: researchers

August 31 2015, by David Harding

A traditional dhow is pictured at sea off the southeastern coast of Qatar, on April 25, 2015

High sea temperatures off the coast of Qatar threaten precious coral reef and have caused mass deaths among some 20 types of fish, Doha-based marine researchers said on Monday.

A study carried out by experts from Qatar University, the environment

ministry and the interior ministry last week has revealed that water temperatures during the fierce Gulf summer have passed 36 degrees celsius (97 farenheit).

Researchers said there is a cause for concern to marine life once sea temperatures pass 34 degrees.

Although the phenomenon can occur once every two or three years at the height of the summer, researchers told AFP they are especially concerned about the potential long-term impact on the coral reef in waters surrounding Qatar.

"I am really worried about the coral reef," said Qatar University marine biology professor Ibrahim Al-Maslamani.

"The coral reef may be affected by the temperature, we don't know yet. Thirty-six degrees, this is really too much. It's really sensitive to high temperatures."

"If the system shuts down it will really be a disaster," he added.

There are several areas along the Qatari coastline where coral reef can be found, including the offshore Halul Island, which is northeast of the capital Doha.

As well as the heat's potential impact on the reef, fish have also been affected, said Maslamani.

He estimates that fish among "more than 18" different species have been killed by the high temperatures and a low level of dissolved oxygen in sea waters.

Fish mortality

Among the species impacted in the past week are Safi, an edible local type of rabbitfish, and Jesh, also known as the Gold Spotted Trevally.

Less mobile fish which swim closer to the sea bed are thought to be most at risk because of changes in water temperatures.

Maslamani said further study was needed to determine just exactly how many different species of fish perished during the high summer temperatures.

The work carried out last week from a research vessel included studying samples of dead fish as well as monitoring the physical characteristics of sea water to a depth of 29 metres (95 feet).

Water salinity and purity were among the other factors also tested by the team of researchers.

The study also found that sea bed temperatures reached up to 35.9 degrees Celsius in the past week.

Maslamani's Qatar University colleague, professor Ibrahim Mohamed Al-Ansari, said the particularly high sea temperatures can occur in the region every "two or three years during the last week of August and the first week of September".

Qatar University has been monitoring fish mortality since the mid-1990s.

Almost two decades ago, Ansari found that high sea temperatures were the cause for some 40 tonnes of fish dying in the waters off Qatar.

Further tests are expected to be carried out in the next few weeks by the same researchers to determine the potential for any long-term damage

caused by warmer waters.

It is expected that water temperatures will fall slightly through September.