Saturday's Powerful and devastating magnitude-8.8 earthquake that rocked the South American country of Chile has again placed on the radar Jamaica and the wider Caribbean's vulnerability to such disasters, readiness of state agencies and the region's seismic safety.

Ronald Jackson, executive director of the Office of Disaster Preparedness and Emergency Management (ODPEM), said that the two recent seismic catastrophies - Haiti on January 12 and Chile - serve as warnings to Jamaica.

"What is critical for us now is to measure the strength of this quake against the structural integrity of the buildings in Chile and see how they fare. We also need to look at their emergency response - how effective was it?

"From what I see, most of the buildings are still standing after such a powerful shock, which speaks to the code of standards for building. It is an opportunity for us to examine our codes and to push for higher standards," Jackson told The Sunday Gleaner yesterday.

At a recent Gleaner Editors' Forum, Franklin McDonald, environmentalist and former director of the National Environmental Planning Agency, argued that there are a number of problematic buildings in Jamaica, many of which would not hold up to a quake of similar magnitude to Haiti's.

"There are a number of hospitals and schools that need to be examined ... . We need to take a hard look at engineered buildings in Jamaica," McDonald said.

Dr Lyndon Brown, head of the Earthquake Unit at University of the West Indies, is concerned that the outmoded analogue system that the unit now uses to capture seismic data is inadequate.

Better analogue system required

He says this needs to be replaced by a seismometer, an automated system which has a wider band width capable of capturing more data.

"The seismograph is strong enough to pick up activity over a very wide area. It can pick up an earthquake where and when so we can be better informed and equipped.

"If we are struck now, we would lose a lot of signals, some of it would go off the scale. These signals are important in terms of not only establishing building codes, but predicting how different parts of the island would react," Brown said.

The quake which rocked the southern coastal region of Chile does not come as a surprise, said Brown. "It is normal for such earthquakes to hit the region. In the 1960s, a 9.6-magnitude quake hit Chile. The thing is the return cycles for these, which is normally 25-100 years, is getting less."