## GOVERNMENT OF INDIA EARTH SCIENCES LOK SABHA

UNSTARRED QUESTION NO:3603 ANSWERED ON:26.04.2012 PREDICTION OF NATURAL CALAMITIES Panda Shri Baijayant;Pradhan Shri Nityananda

## Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether a certain university(Amrita) has developed wireless technology system to predict natural calamities in the country;
- (b) if so, the details thereof;
- (c) whether any State or the Central Government has shown interest in such a technology;
- (d) if so, the details thereof; and
- (e) whether any other country has developed such a technology and if so, the details thereof?

## **Answer**

MINISTER OF STATE IN THE MINISTRY OF PLANNING, MINISTER OF STATE IN THEMINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THEMINISTRY OF EARTH SCIENCES (DR. ASHWANI KUMAR)

- (a)&(b) No Madam. However, a pilot deployment of a tailored real time wireless sensor network (WSN) is designed and developed by Amrita University for monitoring and detection of heavy rainfall induced landslides only over a selected hill slope of Munnar, Kerala. Extensive field experiments will have to be conducted for determining the effects of density of the nodes, vegetation, location of sensor columns etc., for detecting rainfall induced landslides that may possibly help in the development of low cost wireless sensor network for landslide detection in the future.
- (c) Yes Madam.
- (d) Research group of Amrita University is encouraged fully to fine tune and firm-up the methodology, as per the details at part-b) above, by the Government of India and North East Council.
- (e) Customized WSN systems, in a proof-of-concept mode, have been developed for Drought monitoring in Taiwan and Africa, weather alerts in Thailand, Coastal Erosion Monitoring in India,