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**SENATE**

**P.S. RES. No. 851**

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Introduced by Senator Paolo Benigno "Bam" A. Aquino IV

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**RESOLUTION**

**DIRECTING THE APPROPRIATE SENATE COMMITTEES TO CONDUCT AN INQUIRY, IN AID OF LEGISLATION, ON THE USE OF SCIENCE AND TECHNOLOGY FOR DISASTER RISK REDUCTION AND MANAGEMENT IN ORDER TO BETTER IMPLEMENT CURRENT POLICIES, PROTOCOLS, AND MECHANISMS TOWARDS A MORE IMMEDIATE AND SYSTEMATIC STATE RESPONSE TO NATURAL AND MAN-MADE DISASTERS**

1 WHEREAS, under Section 10 of Article 14 of the 1987 Philippine Constitution,  
2 it states that science and technology are essential for national development and  
3 progress and that the State shall support their application to the country's productive  
4 systems and national life;

5 WHEREAS, Section 12 of Article 14 of the 1987 Philippine Constitution  
6 provides that the State shall regulate the transfer and promote the adaptation of  
7 technology from all sources for the national benefit;

8 WHEREAS, Section 2(a) of Republic Act No. 10121, also known as the  
9 "Philippine Disaster Risk Reduction and Management Act of 2010," states that the  
10 State shall uphold the people's constitutional rights to life and property by  
11 addressing the root causes of vulnerabilities to disasters, strengthening the country's  
12 institutional capacity for disaster risk reduction, and management and building the  
13 resilience of local communities to disasters including climate change impacts;

14 WHEREAS, based on the latest Global Climate Risk Index Report 2018, which  
15 was developed by the German think tank German Watch that covers 182 countries  
16 worldwide, the Philippines was ranked as the 5th most affected country from  
17 extreme weather events covering a 20-year period from 1997-2016;

18 WHEREAS, the Philippines is prone to hurricanes and tropical cyclones due to  
19 its geographical location in Southeast Asia that generally produces heavy rains,

20 flooding of large areas and, strong winds that results in casualties and destruction to  
21 human lives, crops, and properties. As such the Philippine Atmospheric, Geophysical  
22 and Astronomical Services Administration (PAGASA) reports that every year, an  
23 average of twenty (20) tropical cyclones enter the Philippine Area of Responsibility  
24 (PAR) and five (5) of which shall be most destructive;

25 WHEREAS, the Philippines is also vulnerable to volcanic eruptions and  
26 earthquakes due to the country being situated along the highly-seismic Pacific Ring  
27 of Fire which causes several occurrences of earthquakes, tsunamis and volcanic  
28 eruptions. According to the Philippine Institute of Volcanology and Seismology  
29 (PHIVLOCS), the country experiences an average of five (5) earthquakes a day;

30 WHEREAS, the Philippines has also been plagued in recent years by man-  
31 made disasters such as armed conflict, insurgency, and terrorism;

32 WHEREAS, an earthquake hit the island province of Bohol with a recorded  
33 magnitude of 7.2 on October 15, 2013. The earthquake was recorded to be the  
34 deadliest earthquake to occur in the last 30 years. According to the official reports of  
35 the National Disaster Risk Reduction and Management Council (NDRRMC), there  
36 were 222 casualties, 8 reported missing persons, and 976 injured people. There  
37 were also damages done to more than 73,000 structures;

38 WHEREAS, in November of 2013, Super Typhoon Yolanda (International  
39 name: Haiyan) struck the Philippines, recording wind speeds of almost 300 km/h  
40 and storm surges of almost 4 meters (7 meters in Tacloban, Leyte). The final report  
41 of NDRRMC stated that a total of 6, 300 people were killed, 28, 688 people were  
42 injured, and 1, 062 people were reported missing;

43 WHEREAS, Mayon Volcano located in Albay, Bicol, was reported to be  
44 spewing ash starting January 13, 2018. The alert level status was set to Alert Level  
45 1. However, by January 22, 2018, it was raised to Alert Level 4 given the rapid  
46 increase in volcanic activity. Thousands of individuals and families were evacuated;

47 WHEREAS, last August 11, 2018, water levels in Marikina River rose to 20.6  
48 meters above sea level which prompted the Marikina City government to call upon a  
49 forced evacuation of citizens especially those living near Marikina River. The rise in  
50 water levels was due the heavy rains brought on by the Southwest monsoon  
51 (Hanging Habagat) and heightened by Tropical Storm Karding. Around 14,768  
52 individuals or 3,321 families affected by flooding in Marikina City were evacuated by  
53 the Marikina city government;

54 WHEREAS, there is a need to ensure that all efforts being done by the State  
55 for disaster risk reduction and management are sufficient enough to guarantee the  
56 safety of the lives of the Filipino people;



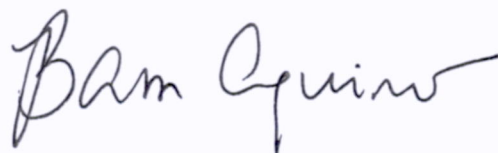
57 WHEREAS, in recent years, there have been recognition of the rapid  
58 advancement of science and technology and its contribution towards a better  
59 response to both natural and man-made disasters. As such, science advisory  
60 services and initiatives especially towards disaster risk reduction and management  
61 must evolve to meet these challenges;

62 WHEREAS, a shift is required by the State for the better understanding of  
63 disaster risk in all its dimensions of hazard, exposure, and vulnerability as well for  
64 creating disaster risk governance that ensures disaster risk is factored into planning  
65 and development at all levels across all sectors in disaster preparedness,  
66 rehabilitation, recovery and reconstruction;

67 WHEREAS, shortcomings still exist in the prediction of natural disasters, in the  
68 logistics and communications efforts that are being done before, during, and after  
69 disasters, and in promoting awareness of the impacts of natural and man-made  
70 disasters. Scientific and technological advancements can help address these;

71 NOW THEREFORE, BE IT RESOLVED, as it is hereby resolved by the Philippine  
72 Senate to direct the appropriate Senate Committees to conduct an inquiry, in aid of  
73 legislation, on the use of science and technology for disaster risk reduction and  
74 management in order to better implement current policies, protocols, and  
75 mechanisms towards a more immediate and systematic State response to natural  
76 and man-made disasters.

Adopted,

Handwritten signature of Bam Aquino in black ink.