There are 127 active volcanoes in Indonesia. In 2010, characteristic eruptions occurred at Sinabung and Merapi volcanoes. Under SATREPS Project of JST and JICA collaborated with Indonesian groups for mitigation of hazards from earthquake and volcanic eruption, we extend volcanic observation network to permanent observation by CVGHM in Indonesia to predict volcanic eruption in short and long-term. Inflation ground tilt is detected by a borehole tiltmeter installed near the crater of Semeru volcano before gas emission event. Amount of the tilt is proportional to scale of the type of event. Guntur volcano, which frequently repeated explosions till mid 19th century, have high seismicity of VT earthquake. We extend seismic network within 40km from the volcano and install GPS stations. Seismicity of VT earthquake is concentrated in geothermally active zones on and around the volcano. Talang volcano erupted with phreatic type, 2 days after Mentawai Earthquake on April 10, 2005. Tectonic earthquake in Sumatra triggered seismicity of VT earthquake and/or phreatic eruption, when strong motion in MMI scale at the volcano exceeded IV. Sinabung volcano, North Sumatra erupted in August and September 2010 after more than 400 years dormancy. The volcano is closed to Great Sumatra fault. As VT earthquake not only occur beneath the volcano but also extend northeastward to the direction of Sibayak volcano. We added 6 seismic stations in wider area to 4 permanent stations near volcano and GPS stations to detect inflation. GPS stations were installed at Merapi volcano after eruptive activity in October and November 2010.