

A Real Time Development Study for Automated Centralized Remote Monitoring System at Royal Belum Forest

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Abstract : Nowadays, illegal logging has been causing much effect to our forest. Some of it causes a flash flood, avalanche, global warming, and etc. This comprehensibly makes us wonder why, what, and who has made it happened. Often, it already has been too late after we have known the cause of it. Even the Malaysian Royal Belum forest has not been spared from land clearing or illegal activity by the natives although this area has been gazetted as a protected area preserved for future generations. Furthermore, because of its sizeable and wide area, these illegal activities are difficult to monitor and to maintain. A critical action must be called upon to prevent all of these unhealthy activities from recurrence. Therefore, a remote monitoring device must be developed in order to capture critical real-time data such as temperature, humidity, gaseous, fire, and rain detection which indicates the current and preserved natural state and habitat in the forest. Besides, this device location can be detected via GPS by showing the latitudes and longitudes of its current location and then to be transmitted by SMS via GSM system. All of its readings will be sent in real-time for data management and analysis. This result will be benefited to the monitoring bodies or relevant authority in keeping the forest in the natural habitat. Furthermore, this research is to gather a unified data and then will be analysed for its comparison with an existing method.

Keywords : remote monitoring system, forest data, GSM, GPS, wireless sensor

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