

Importance of Remote Sensing in Monitoring of Deforestation in Balikpapan

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Abstract: Business approaches based on palm oil, brown coal and paper industry in the area of Balikpapan Bay in Indonesia are often inconsiderate to the surrounding environment and have a longterm negative impact on living conditions of local nature as well as inhabitants. Some areas have acquired a status of protected area lately. Still there is a need to monitor their current situation. There are also attempts to expand these areas before a total degradation of their surroundings. This contribution is to assess the potential and impact of application of satellite remote sensing technologies for practical needs of experts working on environmental issues of Balikpapan Bay area in Indonesia. Various aspects are covered, beginning by a simple inspect of devastation of forests using satellite images, for example to detect expansion of palm oil plantages or forest burned by local communities, continuing by remote sensing usage in assessing environmental impacts of changes in Balikpapan caused by heavy industrialization and mining during last decades, and ending by a summary of remote sensing techniques recommended to be used in following projects.

Keyword : Landsat, Envisat, remote sensing, deforestation, Balikpapan