Using Remote Sensing Technology to Detect the Shoreline Change Caused by Mining Activities: Case Study of Thach Khe Iron Mine, Thanh Ha District, Ha Tinh Province, Vietnam

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Key words: Coastal Zone Management; Mine surveying; Remote sensing; coastal mining activities

SUMMARY

Thach Khe iron mine located in Thach Ha district, Ha Tinh province. It was the biggest iron mine in Viet Nam. Exploitation in Thach Khe mine has caused many environmental issues, especially changing shoreline. In the present study, change of shoreline from Cua Sot to the Thach Ha District was assessed by using remote sensing technology and geological information system. The analysis of Landsat images from the year of 2005 and 2015 has showed that there was a significant decline in shore line of Thanh Ha district. The Thach Ha coast has lost an area of 0.75 km2 for a ten - year period. Therefore, GIS and RS are the effective tools to detect the change of seashore line caused by coastal mining activities.

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