

# **APPLICATION OF REMOTE SENSING AND GIS TO ESTABLISH A RICE-LAND DATABASE FOR THE PROTECTION OF THE NATIONAL HERITAGE AREA OF TERRACED FIELDS IN HOANG SU PHI DISTRICT, HA GIANG PROVINCE**

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## **Summary**

Hoang Su Phi is a mountainous district located in the western part of Ha Giang Province, which is the political and economic capital of the province. The district has 25 administrative units including 24 communes and 1 town, with a total natural area of 63,238.06 ha. Having Tay Con Linh Range in Hoang Lien Son Range with beautiful terraced fields forming a wonderful natural picture, Hoang Su Phi has a great potential for the development of exploring tourism and community cultural village tours, including exploring terraced fields, which are the main type of cultivation of the indigenous farmers in the district and which have been recognized as a National Heritage. The present study has applied remote sensing technology and used visual classification method for the interpretation of SPOT5 image with 2.5m spatial resolution to establish a current rice-land map of Hoang Su Phi district with a scale of 1: 10.000 covering 764.8 ha of rice land in 6 communes including Ban Luoc, San Sa Ho, Thong Nguyen, Nam Ty, Ho Thau, and Ban Phung. The database comprises of three group of 13 mapping layers: Current land use status (including 2 layers), geographical background (9 layers), rice-land management (2 layers) and corresponding attribute data. This rice-land database can be stored, retrieved and updated promptly, helping the authorities at all levels manage the area of rice-land, preserve and exploit the potential of a national heritage site of terraced fields.

**Keywords:** *Database, terraced fields, remote sensing.*