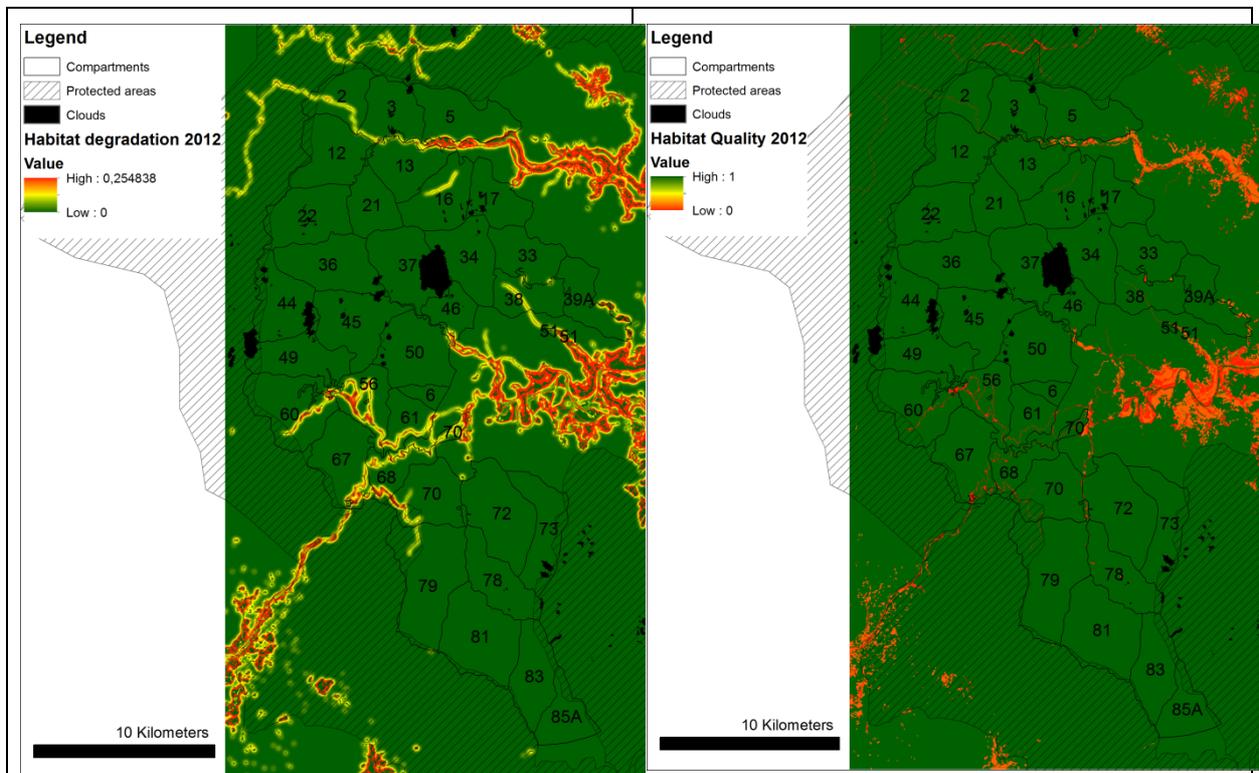


Biodiversity –Huong Son

EO services have been produced over the Huong Son area in central Vietnam. The products are a detailed land cover and land use map and a forest change.

The Huong Son Landscape is situated between the Ho Chi Min highway and the border to Laos. It is bordered by protected areas to the north, south and west. This is important to consider when analysing habitat degradation and quality. As the area is not protected and there has not been any field data made available on the biodiversity of the area, the main function considered is the connectivity between the protected areas and the green infrastructure in the area. As there is a major road crossing the area, the QL8A along the major river, there is risk that the connectivity between the protected areas is affected. This should be considered in the forest and landscape management plan securing the connectivity between the protected areas. Roads do also give access to areas for poachers and are in many tropical regions followed by slash and burn farmer creating an agricultural buffer along roads, this process is often called ribbon development.

Habitat quality depends on natural conditions and is impacted by historic land use. According to the forest management plan the forest have been selectively cut and depleted on the most valuable tree species. This has affected the biodiversity of the area, but how other species and communities have been affected is unclear and must be revealed by field surveys.



The degradation is mostly taking place along the road and river network, which is not very extended into the forest. The forest is homogenous in its appearance. Green is undisturbed habitat in the left image and unfragmented forest in the right. Areas that are green in both have potential for high biodiversity. The striped areas are conservation areas and the compartments are digitised from the forest management plan, black are no data areas due to cloud cover.

The habitat of the Huong Son area is only to a small extent degraded, as detectable by the EO services. The area has though been selectively logged, which of course have degraded the habitat and the species composition. The important north-south connectivity between the adjacent national parks is cut by infrastructure and should be considered in both forest management and other landscape level policy processes. There are still wild elephants in the Ha Tinh province where Huong Son is located. It is therefore important that the construction of timber roads and the negative impact this might have on poaching is mitigated in a proper way. Before 1980 wild elephants were distributed throughout the Annamite mountain

ranges. The decline since then due to poaching and habitat degradation puts an extra emphasis on mitigation on negative consequences of the remaining population.

Conclusions

It is of importance to monitor how the connectivity between the protected areas is affected by infrastructure development as well as of the forest management in the area. As the forestry practices are based on selective cutting of the species with high market value some of the degradation is not visible with EO. The timber roads are visible and the development of the road network is the most important measure of habitat quality and ecosystem integrity.

Antipoaching measures should be taken so that the construction of logging roads does not jeopardize the remnant elephant population that might utilise the forest.

Lessons learnt

- The land cover of the study area is relatively homogeneous and dominated by dense forest. For biodiversity purposes it would be important with more field survey based information.
- The importance of the north-south connectivity depends on the biodiversity in the area; this also implies the need for field surveys.