

**Wildlife Conservation Society
WCS Cambodia Program**

TERMS OF REFERENCE

Name :
Position Title : GIS Officer
Location : Preah Vihear Province
Department : GIS
Report To : Smart Team Leader

Introduction: The Wildlife Conservation Society (WCS) is a world leader in on-the-ground wildlife conservation, currently overseeing more than 320 projects in 60 countries worldwide. WCS Cambodia has been working in Cambodia since 1999, and works particularly across four landscapes – the Northern Plains, The Tonle Sap, the Eastern Plains and Koh Kong landscape. WCS’s work at these sites has a strong GIS and Remote-Sensing component. The projects also experiencing increasing threats from land clearance and land concessions, which is causing significant habitat loss. There is a need for WCS to: (1) map land-use change in the key project landscapes; (2) identify the agents of land-use change, such as companies and local people; and (3) conduct real-time monitoring in order to respond to increasing threats. In response to this increased need, a National GIS Analyst is required to ensure efficient and timely support to mapping activities at provincial level.

Role: To coordinate WCS’s work on GIS, land-use mapping and land-use monitoring across the WCS-Cambodia Program, with a particular focus on WCS’s four landscapes – the Northern Plains, The Tonle Sap, the Eastern Plains and Koh Kong landscape. This includes supporting the technical GIS officers in the different landscapes, providing broad GIS and Remote-sensing services to the WCS Cambodia Program, managing the GIS datasets that we hold, acquiring and interpreting remote sensed imagery, producing reports on land-use change at the different landscapes and producing maps as required.

Main tasks:

Land-use Monitoring: Monitor land-use in WCS landscapes.

1. Real-time land-use monitoring. By using Google Earth Engine technology or download near real-time imagery (e.g. Landsat 7, Landsat 8, Sentinel 1, Sentinel 2A, Sentinel 2B and MODIS fire products) for the target landscapes and alert WCS Project Managers and Technical Advisors if significant changes occur.
2. Land-use change reports. Measurement of land-use changes (especially deforestation) in the WCS target landscapes, and producing written reports.
3. Reports on land concessions. Within the target landscapes, identify the leakage deforestation, which happened outside ELC boundary.
4. Digitizing of resource use. Digitizing of information collected by different teams in the field on land or resource use.
5. Communicate with government authorities, project managers and other stakeholders to support patrol activities

General GIS tasks:

6. Provide map-making service for all projects as required. Help landscapes GIS officers to produce maps using a booking and queuing system and, maintain a portfolio of all maps produced.
7. Create and update spatial datasets with metadata for WCS.
8. Management, training and Support to junior GIS Officers in the program. Manage, provide backstopping support and training to the junior GIS officers employed by WCS in Cambodia. Develop written instructions/method documents for routine tasks to make it easier to delegate these tasks and to provide training. This includes regular checks (every two months or as necessary) on data organization by these officers, to ensure standardization and synchronization.

Responsible for staff management:

9. Coordinate with landscape GIS Officers to ensure that GIS and remote sensed data is recreated correctly and synchronized properly.

Field time requirements: Travel to WCS landscapes up to 50% of monthly work plan.

As well any and all other work assignments, duties, and/or functions as WCS or its management may designate or instruct in the course of its operation, which may include assignments, duties, and/or functions that vary from the above.