

**(Wildlife Conservation Society
WCS Cambodia Program**

TERMS OF REFERENCE

Name:

Position Title: GIS Officer for Northern Plains Landscapes (2 Positions)

Location: Preah Vihear

Department: GIS

Report To: Landscape Manager, SMART Team Leader, National GIS Analyst

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. There is a need for WCS to provide Geographic Information System (GIS) supports and Remote-Sensing needs, such as general map-making and technical work related to cartography and deforestation monitoring in the Northern Plains. WCS also provides technical support to Protected Area management, including patrolling (law enforcement patrol and community patrol) and use of SMART (Spatial Monitoring And Reporting Tool) database management.

Role: GIS Officer for Northern Plains Landscape provides technical GIS, Remote Sensing and SMART Administration for Northern Plains, in particular Kulen Promtep Wildlife Sanctuary, Prey Preay Roka Wildlife Sanctuary, Chhep Wildlife Sanctuary and Phnom Tbeng Heritage Park. SMART administration includes SMART data collection includes law enforcement ranger patrols, local community patrols, biodiversity research teams, tracking reports and law enforcement material procurement.

Main tasks:

GIS

1. Responsible for GIS and Remote Sensing Data Management for NPL
2. Provide maps producing services and help National GIS Analyst with cartographic requests for NPL (as required e.g. demarcation, patrol planning, community land use planning and monitoring, wildlife and habitat, management planning)
3. Assist in GIS data management and documentation
4. Produce maps for compliance unit, SMP, CPA, and PLUP teams for checking location of new land clearance
5. Conduct regular forest monitoring procedures as they are established
6. Along with National GIS Analyst, identify and source up-to-date satellite and other remote sensing images and use them to monitor land-use change and land clearance in NPL, and produce regular reports and maps for landscape.
7. Produce maps and reports, and assist in spatial analyses, as and when required by site managers and advisors.
8. Update and backup GIS and Remote Sensing library

SMART Database Administration:

9. Responsible for SMART and CyberTracker Data Management for NPL
10. Generate monthly SMART reports for each protected areas of NPL
11. Update and backup SMART and Biodiversity database

12. Assist PA director, team leaders, landscape manager, and Technical Advisors in identifying key areas for management interventions using SMART outputs and organizing any compulsory document related to SMART database works
13. Work with SMART Team Leader to update Standard Operating Procedures (SOP) and protocols of SMART Data Collection as required
14. Work closely with each project site team leaders to make sure SOP and protocols of SMART data collection is implementable, get feedback to update
15. Collect SMART Data, follow up and quality control
16. Assisting to provide periodical training courses on SMART Data Collection and on Basic Ranger Skills to implement SMART system
17. Work with technical advisors on linkage between SMART and Cyber Tracker for each SMART Project
18. Establish Quality Control procedures for all SMART activities.

Remote Sensing:

19. Download available remote sensed data as needed
20. Digitization of landscape features on remote sensing imagery

Other:

21. Provide supports to Compliant Unit to get needed documents
22. Conduct regular ranger training

Outputs:

1. Monthly monitoring reports
2. A well-managed spatial database
3. Maps that support all operations (law enforcement, land-use planning, zoning, Ibis Rice, eco-tourism, biodiversity monitoring etc.)
4. Maps and reports that monitor and highlight land-use and land-tenure change
5. Monthly SMART reports, and periodic SMART summaries and analysis.
6. SMART standards and procedures understood and followed by field staff.
7. Maintain WCS programmatic databases.
8. Training course materials, schedules, and reports.

QUALIFICATIONS AND EXPERIENCE:

- At least bachelor degree in natural/physical sciences; Land management, geography or equivalent in GIS and mapping.
- At least 2 years' practical experiences in data management, map design and production, and monitoring and evaluation
- Experiences in data collection, analysis and synthesis and preparation of strategic information for decision makers
- Experience in writing reports and reviews, delivering presentation and defending recommendations
- Experience of working in multi-cultural environment and NGO
- Very good skills in use of ArcView, ArcGIS, SMART database, MS Word, MS Access, MS Excel, MS Power Point
- Preferably good command written spoken English.

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.

**Wildlife Conservation Society
WCS Cambodia Program**

TERMS OF REFERENCE

Name:

Position Title: GIS Officer for SMP (1 Position)

Location: Preah Vihear

Department: GIS

Report To: SMP Program Manager, National GIS Analyst

Purpose of Position:

This is a landscape officer level position, with advancement opportunity, to support GIS works for the SMP Cambodia. The GIS Officer is to work with GIS Team members on a variety of cartography and GIS, remote sensing, database, and data management tasks for SMP Ibis Rice target villages in the landscapes.

Job Duties:

1. Office works

- 1.1. Responsible for Spatial Database of VMN and Organic Rice
- 1.2. Digitize land parcels bases on the field data collection with attributable creation which include land parcel owners information
- 1.3. Assistant to National GIS Analyst on mapping land parcel expansion and other deforestation in/around SMP Ibis Rice target villages
- 1.4. Provide maps producing for teams and help National GIS Analyst with cartographic requests
- 1.5. Assist in GIS data management and documentation to synchronize and backup into WCS GIS library
- 1.6. Download available remote sensed data as needed
- 1.7. Digitization of landscape features on remote sensing imagery
- 1.8. Tasks as needed by supervisor or program manager or technical advisors

2. Field works

- 2.1. Propose and coordinate meeting with communities or villages for field checking or land parcels verification
- 2.2. Field data collection as needed
- 2.3. Ground-truthing for satellite imagery interpretation
- 2.4. Tasks as needed by supervisors and technical advisor

Deliverable outputs:

1. Spatial Database for SMP, Ibis Rice
2. Maps for SMP, Compliant Unit
3. GIS and remote sensed data

QUALIFICATIONS AND EXPERIENCE:

- At least bachelor degree in natural/physical sciences; Land management, geography or equivalent in GIS and mapping.
- At least 2 years' practical experiences in data management, map design and production, and monitoring and evaluation

- Experiences in data collection, analysis and synthesis and preparation of strategic information for decision makers
- Experience in writing reports and reviews, delivering presentation and defending recommendations
- Experience of working in multi-cultural environment and NGO
- Very good skills in use of ArcView, ArcGIS, SMART database, MS Word, MS Access, MS Excel, MS Power Point
- Preferably good command written spoken English.

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