Terms of Reference (TOR)

Project Title:	**Surveying and installing wildlife camera traps in Kaeng Krachan Forest complex**
Under Project:	**Kaeng Krachan Forest complex wildlife Conservation project**
Fund WWF by:	**WWF US : Project - Award:** 40002716 - 410408 **Task:** 100003

1. General Information

Supervisor : Thanee Dawrueng

Period : 1 Dec 2026 – 31May 2027

Location of work : Kaeng Krachan Forest complex (Prachuap Khiri Khan ,Phetchaburi,Ratchaburi)

2. Purpose and Background: Provide a brief description of the project, background information, and the reason why the goods or services are required:

The Kaeng Krachan Forest Complex is a natural World Heritage site, recognized as one of the most ecologically rich and biodiverse areas in Southeast Asia. Encompassing Kaeng Krachan National Park, it serves as a vital habitat for several globally endangered species including the tiger (*Panthera tigris*), leopard (*Panthera pardus*), Asian elephant (*Elephas maximus*), and Malayan tapir (*Tapirus indicus*) as well as various large mammals and predators that play a crucial role in regulating the ecosystem. Consequently, this forest complex stands as a strategic area for wildlife conservation, both nationally and internationally.

However, wildlife and their habitats within the Kaeng Krachan Forest Complex currently face numerous threats, including climate change, encroachment, and human-wildlife conflict. Consequently, the systematic and scientifically rigorous monitoring of wildlife populations and their distribution is essential for assessing the status of these species and the effectiveness of protected area management.

The use of camera traps, combined with field surveys to identify animal signs, is a highly effective and internationally recognized methodology. It allows for the collection of empirical data such as species identification, behavior, and relative abundance even in remote, hard-to-reach forest areas, all without disturbing the natural lives of the animals. Therefore, this six-month wildlife survey and camera-trapping project has been established to build a comprehensive wildlife database. Furthermore, it aims to enhance the operational capacity of forest rangers through specialized training, ensuring the long-term sustainability of monitoring and conservation efforts for the forest resources and wildlife of Kaeng Krachan Forest Complex.

3. Project Objectives: State the objectives of the assignment and the expected outcomes

The consultant will be responsible for the following tasks and will be primarily responsible for all field activities, working in collaboration with Kaeng Krachan National Park staff. Key responsibilities include:

• Planning & Survey Collaborating with park staff to determine coordinates for wildlife camera trap installations.

• Conducting field surveys in the deep forests of Kaeng Krachan to identify signs of wildlife (such as elephants, tigers, serows, predators, etc.) and select optimal locations for camera installation. Responsible for transferring knowledge and techniques, enabling Kaeng Krachan National Park staff to carry out the work independently and sustainably

4. Scope of Work / Product or Service Specifications: Describe in detail the required goods, services, or consultancy, including

Phase 1: Preparation and Training (Month 1)

• Design a sampling grid system based on research principles appropriate to the behavior of the target wildlife species.

• Conduct a practical training workshop (covering both theory and field-based practice) for national park staff.

Phase 2: Field Operations and Installation (Months 2–3)

• Install wildlife camera traps in the field, housing them in protective steel cases to prevent damage by large animals and securing them to trees using standard mounting straps.

• Record GPS coordinates (WGS84 datum) and conduct a "walk test" at each installation site to verify that the camera's motion-triggered shutter system is functioning correctly.

• Visit the sites for the first round of maintenance and data retrieval (downloading image files and replacing battery sets).

Phase 3: Data Retrieval and Ongoing Field Maintenance (Months 4–5)

• Conduct field visits to check the security of the cameras, clear away vegetation obstructing the sensors, and periodically retrieve memory cards.

• Repair damaged equipment or replace it with backup units at the existing locations.

Phase 4: Data Management and Analysis (Month 6)

• Clean the raw image dataset by removing corrupted or unusable files and categorizing the data.

• Identify wildlife species based on taxonomic classification and perform statistical analysis of the research findings.

5. Roles and Responsibilities: Clearly define the responsibilities

Contractor duties

• Deployment & Maintenance:

• Transporting equipment and installing cameras housed in protective steel security boxes on trees, in accordance with established research standards.

• Ground Truthing: The field team must conduct on-site surveys at target coordinates to select the most suitable trees or locations, specifically those showing signs of wildlife presence, such as footprints, droppings, or claw marks on trees.

• Camera Installation (following technical standards)
• Secure the camera to a tree using straps, place it within a protective steel housing, and lock it with a cable to prevent loss.
• Adjust the camera angle and height to be parallel to the ground (approximately 40–50 cm high for small-to-medium-sized animals, or 1–1.2 meters for large animals).
• Precisely record the GPS coordinates (WGS84 datum) of the actual installation site.
• Walk Test: Personnel must walk in front of the camera to verify that the sensor system triggers the shutter within the desired range and ensure that no branches or vegetation obstructs the field of view. Maintenance & Data Retrieval
• Routine Monitoring: Visit the site every 1 or 2 months (as specified in the plan) to replace the memory card (SD card) and install fresh batteries.
• Equipment Maintenance: Clean the camera lens and sensor window; trim any vegetation or branches obstructing the camera; and inspect the steel housing for damage caused by moisture or wildlife.
• Handling Damaged or Lost Equipment: In the event that a camera is found to be damaged or missing... Repairs must be carried out, or a replacement camera must be installed in the original location, immediately and within the specified timeframe to ensure there is no gap in the data.
• Other duties as identified.

6. Deliverables / Expected Outputs: Specify the expected deliverables, including measurable outputs and acceptance criteria.
The consultant will be expected to produce:
A monthly report comprises.
• Camera Deployment Report: A summary table containing the actual installation coordinates (WGS84 GPS), camera ID, installation date,
• Walk Test Images: Photographic evidence of personnel walking in front of each camera to test the sensor system and confirm there are no blind spots or obstructing branches.
• Time Sheet: A record of an employee's working hours, signed and certified by the area supervisor.
• Equipment Return and Inspection Documentation: A summary report detailing the condition of the camera unit and all accessories upon the conclusion of the project.

7. Timeline: Project commencement date, Delivery schedule (if applicable)
1 Dec 2026 – 31 May 2027

8. Payment Terms: Payment schedule,Supporting documents required for payment
Payments are made monthly. Supporting documents required for disbursement

1. Invoice / Receipt: Clearly specifying the project phase (installment), project name, and the exact amount requested for payment.
2. Deliverable Approval Form: Signed and dated by the project supervisor confirming that the deliverables meet the acceptance criteria for the respective phase.
3. Timesheets and Monthly Activity Reports.

9. Qualifications and Experience: Specify the minimum qualifications required, including:Education, Professional experience, Technical competencies, Certifications or licences (if applicable)

Minimum completion of Grade 9 (Matthayom 3) or an equivalent level of education.
• Physical and Field Readiness: Must possess the physical fitness and capability to undertake long-distance treks and work safely in tropical rainforest environments, including steep terrain and remote areas.
• Technical Skills: Must have a fundamental understanding of how to use GPS devices, patrol data-recording applications (such as SMART Patrol), and digital camera settings.
• Ecological Understanding: Preference will be given to candidates with practical field experience in identifying the tracks, signs, and behaviors of wildlife native to the Kaeng Krachan forest complex.

10. Submission Requirements : Exp.Technical Proposal,Financial Proposal / Quotation,Company Profile,Company Certificate or Copy of ID Card (for individual vendors),Relevant experience and references etc.

- Quotation
- CV
- A copy of ID card

11. WWF Support :

Submission Deadline: 15 November 2026

Contact Information: Please submit all application documents

to: thaneed@wwf.or.th ,keakwongsa@wwf.or.th , **Cc**. : procurement@wwf.or.th

Email subject line: Apply for surveying and installing wildlife camera traps in Kaeng Krachan Forest complex