Consultancy Terms of Reference:
Spatial data analyst – HCVs in Indonesia

ZSL's Sustainable Business and Finance programme is seeking a consultant to support on landscape High Conservation Value (HCV) probability mapping and analysis using spatial data. Using ZSL's existing methodology, the consultant will develop an HCV 1-4 probability mapping for one province in Indonesia, as well as incorporating SPOTT assessment findings into the dataset which can be used for sourcing risk analyses. The consultant will also support ZSL on spatial data analysis for up to three case studies on forest-risk commodity sourcing risk analysis across four provinces in Indonesia.

ZSL's Sustainable Business and Finance team and SPOTT

The Zoological Society of London (ZSL), a charity founded in 1826, is a world-renowned centre of excellence for conservation science and applied conservation. ZSL's purpose is to inspire, inform and empower people to stop wild animals from going extinct. This is realised by carrying out field conservation and research in over 50 countries across the globe and through education and awareness-raising at our two zoos, ZSL London Zoo and ZSL Whipsnade Zoo, inspiring people to take conservation action.

The ZSL Sustainable Business and Finance (SBF) programme sits within ZSL's Conservation and Policy department, and its objective is for business and financial sector practices to be enablers for protecting biodiversity and habitats. A flagship project of SBF is SPOTT – Sustainability Policy Transparency Toolkit – a free, online platform supporting sustainable commodity production and trade. SPOTT assesses commodity producers, processors and traders on their public disclosure regarding their organisation, policies and practices related to environmental, social and governance (ESG) issues. Investors, buyers and other key influencers can use SPOTT assessments to inform stakeholder engagement, manage ESG risk, and increase transparency across the palm oil, natural rubber and tropical forestry sectors.

ZSL's HCV probability mapping

In 2020, the Sustainable Business and Finance team, in collaboration with our colleagues in the ZSL Indonesia office, began mapping potential landscape-level High Conservation Values (HCVs) in key provinces in Indonesia. This began with South Sumatra and Jambi – two provinces where we have had a focus for many years – and we have now completed a mapping for Riau as well. We have also been combining this mapping with our data from the SPOTT assessments. We have mapped the location of mills belonging to SPOTT-assessed palm oil companies across each province using Global Forest Watch's Universal Mill List data, and for each one have analysed the total area of potential HCV identified within a 50km sourcing radius of that mill. We are then able to cross-reference this with information from our SPOTT assessments – such as traceability progress, commitments and reporting on HCV identification and management, and procedures for assessing mill risk and engaging with suppliers.

The Consultant will support us to develop this work further, by repeating the mapping and analysis for an additional province in Indonesia, determined by ZSL (likely to be North Sumatra, but to be confirmed). This will include analysis of existing spatial datasets, development of a further forest cover data layer, and mapping HCVs at landscape level for the province. The consultant will follow ZSL's existing methodology, which is based on the HCV Network's guidance documents.[1] This process, including gathering required datasets, will be led by the consultant but supported by the SBF team located in the UK.

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[1] HCV Screening Guidance: https://hcvrn.egnyte.com/dl/8EhLQwfZGK and Indonesia toolkit.

The consultant will also provide support to the ZSL team in spatial data analysis as part of up to three case studies ZSL is creating, on analysing potential risk to HCVs from companies producing or sourcing palm oil (and/or other forest-risk commodities) in this newly mapped province as well as Riau, Jambi and South Sumatra. This support is likely to take the format of a more detailed spatial analysis of threats to HCVs around a particular mill or concession site, e.g. by integrating satellite imagery to identify deforestation rates.

ZSL is seeking a consultant with knowledge of HCVs, forest-risk commodity supply chains in Indonesia, and experience creating and analysing spatial datasets.

Deliverables

1) Landscape-level HCV probability mapping for one province in Indonesia (likely North Sumatra, but to be confirmed). This will follow ZSL's existing methodology but with improvements/additions made where needed. Findings and any changes to methodology to be summarised and provided to ZSL in an accessible format (e.g. Word document or Powerpoint presentation).
2) Sourcing risk analysis using SPOTT data, for the same province. ZSL will provide all SPOTT data and instructions on methodology.
3) Three case studies of forest-risk commodity sourcing analysis within the same province, and/or Riau, South Sumatra, and Jambi. This will include looking at landscape-level HCVs and company sourcing risk using SPOTT data, as well as satellite data on forest loss.
4) All relevant data, including data layers, shapefiles and map images, will be provided to ZSL.

Requirements

All requirements below are mandatory unless stated as desirable.

- Strong spatial data analysis skills, including proficiency in use of GIS programmes (e.g. ArcGIS, Q-GIS, etc)
- Remote sensing expertise; at least 5 years experience working with optical satellite monitoring datasets. Experience using radar and lidar is also desirable.
- Knowledge and applied experience of High Conservation Value (HCV) screening/mapping
- Knowledge of Indonesian forest-risk commodity sectors (specifically palm oil, forestry and/or natural rubber sectors).
- Excellent communicator, able to distil and summarise complex information in an understandable way
- Fluency in English
- Fluency/competency in Bahasa Indonesia (desirable)
- Strong contact network with relevant stakeholders in Indonesian soft-commodity sector and local/national government (desirable)

Timelines and hours required

The contract will ideally begin in June 2022, and end by January 2023, but there is some flexibility depending on consultant availability.

The landscape-level mapping and sourcing risk analysis of one province (Deliverables 1 and 2) is estimated to take approximately 40-50 working days, and the additional analysis for case studies (Deliverable 3) approximately an additional 10-20 days, depending on the number and complexity of case studies. However, these are approximations and ZSL asks applicants to provide their own estimate of days required. ZSL welcomes consultants to approach us to discuss estimated days needed in more detail before applying.

ZSL is seeking a long-term partner for landscape HCV mapping and satellite monitoring. It is possible a Phase 2 contract will be offered if the consultant provides a high-quality service under this (Phase 1) contract.

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Submission requirements:

Applicant shall submit:
- **A short (<5 page) proposal**, outlining their suitability for the contract, strategy and workplan, timelines and any other considerations.
- **CVs** of all staff who will/may work on the contract.
- **Budget** clearly showing the *number of days* allocated to the contract, as well as *day rates* applied to all staff. Plus, any expenses expected to be included.

For more information or to ask questions regarding this ToR, please contact Eleanor Spencer (Sustainable Business Specialist, Asia) at eleanor.spencer@zsl.org

Submission deadline:

Submission of final proposals should be sent to Eleanor Spencer (Sustainable Business Specialist, Asia) at eleanor.spencer@zsl.org by **9am (UK) Monday 13th June 2022.**

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