Terms of reference (ToRs) for the procurement of services

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Biodiversity Expert Team for developing a manual for species inventory, monitoring and data analysis and Resource person to provide advice in development of the biodiversity monitoring scenario and other national biodiversity and ecosystem indexes.	**Project number:** 20.9041.3-001.00

Contents

0. List of abbreviations 2

1. Context 3

2. Tasks to be performed by the contractor. 4

3. Concept 5
   Technical-methodological concept 6
   Project management of the contractor (1.6) 6
   Further requirements (1.7) 6

4. Personnel concept 6
   Team leader/Coordinator 6
   Key expert 1 - Mammals expert 8
   Key expert 2 - Aves expert 9
   Key expert 3 - Herpetofauna expert 10
   Key expert 4 – Botanist/Plants expert 11
   Short-term expert pool 1 – Layout and Graphic Designer (1 person) 13

5. Costing requirements 13
   Assignment of personnel and travel expenses 13
   Specification of inputs 14
   Deliverables 14

6. Requirements on the format of the bid 15

0. List of abbreviations

Bappenas	*Badan Perencanaan Pembangunan Nasional*
BKSDA	Balai Konservasi Sumber Daya Alam, DG NREC's regional office
BPPE	*Bina Pengelolaan Pemulihan Esensial*
Clarity	Climate and Biodiversity Project
CV	Curriculum Vitae
DG	Directorate General
GIZ	*The Deutsche Gesellschaft für Internationale Zusammenarbeit* -German Agency for International Cooperation GmbH
Ha	Hectare
HCV	High Conservation Value
KKHSG	*Konservasi Keanekaragaman Hayati Spesies dan Genetik* – Species and Genetic Biodiversity Conservation
KSDAE	*Konservasi Sumberdaya Slam dan Ekosistem* – Nature Resource and Ecosystem Conservation
KLHK	*Kementerian Lingkungan Hidup dan Kehutanan* – Ministry of Environment and Forestry
KSDA	Konservasi Sumberdaya Alam
MaxEnt	Maximum Enthrophy
SIDAK	Sistem Informasi dan Data Konservasi, Ditjen KSDAE
SOP	Standard Operating Procedures
ToRs	Terms of reference
UPT	*Unit Pelaksana Teknis* – Technical Implementing Unit

1. Context

Based on Strategic Plan 2020-2024 of the Ministry of Environment and Forestry (KLHK Regulation No:P.16/MENLHK/SETJEN/SET.1/8/2020 on National Program Environmental Quality, the DG of Natural Resources and Ecosystem Conservation (DG KSDAE) is mandated to conduct inventory and verify a high diversity value of 70 million hectares by 2024 (43 million hectares from outside the Conservation Area and 27 million from the Conservation Area including 5 million ha of marine area). Cumulatively during the 2020–2022 period, the area outside conservation area that has been inventoried and verified by the DG KSDAE team is about 23.783.703,75 Ha of which 56% and it confirmed as high biodiversity area. Compared to the BAPPENAS target areas of 43 million, it means that there is still about 20 million ha to be surveyed and verified from outside of the conservation area by 2024 (BPPE, 2023). In 2022, the Climate and Biodiversity Project (Clarity) has supported the DG KSDAE report on inventory and verification of areas with high biodiversity, specifically based on species occurrences. Based on the species richness, using the existing DG KSDAE data from four taxa mammalian, Aves, reptile and herpetofauna (per January 2023), the high biodiversity area is reported covers a total area of 16.48 million ha. Meanwhile, using the MaxEnt, species distribution modelling, based on habitat suitability of the species which corrected by residential and road features data, the area of high biodiversity value was 102.96 million ha.

The Minister of Environment and Forestry Instruction Number 1 Year 2022 also implies the importance of wildlife protection inside and outside the area. This is derived from the urgency of consideration of wildlife habitat protection from the issuance of area concession licences, consideration of the Regional Spatial Plan by the Regional Government, and any other interests that overlap with forest and land use as wildlife habitat, thus DG KSDAE has mandate to develop SOPs/Manuals that cover wildlife protection. Inventory and verification activities by technical unit offices within DG KSDAE (BKSDA office and national parks) have various challenges at the site level, such as the lack of quality and quantity of data collected in the KSDAE information system (SIDAK). Problems in wildlife data governance are also a challenge that must be resolved with a rigid and clear standard operational procedure or manuals.

The lesson learned from development of the 2022 Report on Inventory and Verification HCV areas coordinated by KKHSG implied the need for more robust management interventions in data governance and biodiversity data information systems. The assessment of areas of high biodiversity value in 2022 was conducted using a species richness approach and MaxEnt modelling with determination of priority species. Each taxon basically has a set of rules and procedures to be able producing high quality and quantity of data, which consists of a robust sampling design, a set of monitoring guidelines, as well as data analysis methodology. The large number of species and biodiversity in Indonesia is indeed a challenge to be able to manage data properly. Not to mention the problems at the site level that often make the governance of biodiversity data and information become constrained. However, it can be approached by planning, implementing, and monitoring systematically and scientifically proven biodiversity data inventory and verification for better management. For this reason, it is necessary to develop a manual for 4 taxa with a set of sampling design rules, implementation guidelines, and analysis guidelines for inventory and monitoring for technical implementation units of DG KSDAE along with prioritization of species target.

Against this background and in implementing **activity III.4.A.2** (CLARITY, PN: 20.9041.3-001.00) **"Provision of advice and expert support to the Clearing House body to develop a SOP document",** GIZ CLARITY is supporting **the Directorate Biodiversity and Genetic Resources Conservation (KKHSG)** on the development of a manual for biodiversity data inventory and verification to be implemented by field staff in the technical implementation unit offices such as national park and BKSDA offices to standardize the report**. To support this**

activity, it needs a biodiversity expert team consists of a coordinator, four taxa specialists (mammals, aves/bird, herpetofauna, plant), and a layout designer to develop the manual for inventory, monitoring and data analysis of high-biodiversity area. In addition, especially the team coordinator will also support the project as resource person to provide advice in development of the biodiversity scenario monitoring and other national biodiversity and ecosystem indexes. Their expertise will ensure that the protocols and methodologies used are scientifically based and designed to be portable and handy, with the objective to achieve well-structured and field-verified data.

2. Tasks to be performed by the contractor.

The contractor is responsible for providing the following services:

Task 1. Initial preparation

The objective of this scope of work is the consultant to conduct kick off meeting to discuss details tasks, review relevant documents identified by stakeholders, and develop work plan. With proper planning, it is expected that consultant can implement the activities smoothly and produce high quality manual.

1.1 Initiate and participate in the kick-off meeting with DG KSDAE, specifically Dit. KKHSG and GIZ to discuss the detail tasks and work plan;

1.2 Facilitate broad stakeholder consultations with related experts from university and research centre, also field staffs e.g., PEH and technical implementing unit (UPT) to ensure the manuals meet their needs.

1.3 Identify the data needed and existing policies and measures within the scope of this TOR. The consultant team is expected to also conduct desk study to collect, review, and compile existing literature from latest scientific research, best practices based on developed manuals, or based on commonly used standard for mammals/ aves/ herpetofauna/ plant survey design in inventory, monitoring, and analysis.

1.4 Update and revise the work plan based on DG KSDAE and GIZ inputs and comments.

Task 2. Assessment the species priority of the four taxa, develop a standard sampling design concept, and outline of the Manual Inver

The tasks including, but is not limited to:

2.1 Summarize the national status and situation of biodiversity data as input for a chapter in the manual draft.

2.2 Assess the species priority of the four taxa and priority areas based on inputs from the taxa specialists, following national and common international standards.

2.3 Develop a standardize sampling design concept for biodiversity inventory nationally (or regionally)

2.4 Set up the outline of the manual.

2.5 Based on this TOR and review result as well as the outline of manual, submit detailed work plan and the outline at the latest in mid-Oct or within 2 weeks of the contract commencement date.

2.6 coordinate with relevant key stakeholders and the Dit. KKHSG, DG KSDAE.

Task 3. Develop standard methodology for manual species inventory, monitoring, and data analysis

The tasks including, but is not limited to:

3.1 Develop standard methodology for species inventory with robust sampling design, as well as monitoring and analysis of the four taxa (mammals, aves/bird, herpetofauna, and plant) guideline sections.

3.2 Develop standard methodology for data collection of the target priority species.

3.3 Develop standard methodology for data analysis of the four taxa.

3.4 Conduct coordination, FGDs, workshops with relevant key stakeholders and the Dit. KKHSG, DG KSDAE to review the manual draft.

3.5 Review the agreed manual document.

Task 4. Develop a comprehensive final report

4.1 Layout and design the agreed manual document to be a user-friendly manual.
4.2 Provide approval to the final layout manual.
4.3 Print the final manual.
4.4 Socialization the manual document to the relevant stakeholder under coordination with Dit. KKHSG and GIZ.

Period of assignment: from 31 October 2023 until 31 March 2024.

Certain milestones for developing a manual for species inventory, monitoring and data analysis, as laid out in the table below, are to be achieved during the contract term:

Milestones/partial works	**Deadline**
Interim Report:	
Detailed work plan with timeline activities and draft outline of the Manual Inver	Beginning of November 2023
First draft of the Manual Inver	End of November 2023
Final Report:	
Second draft of the Manual Inver	December 2023
Final document of the Manual Inver	January 2024

3. Concept

In the bid, the bidder is required to show how the objectives defined in Chapter 2 (Tasks to be performed) are to be achieved, if applicable under consideration of further method-related requirements (technical-methodological concept). In addition, the bidder must describe the project management system for service provision.

Note: The numbers in parentheses correspond to the lines of the technical assessment grid.

Technical-methodological concept

Strategy (1.1): The bidder is required to consider the tasks to be performed with reference to the objectives of the services put out to tender (see Chapter 1 Context) (1.1.1). Following this, the bidder presents and justifies the explicit strategy with which it intends to provide the services for which it is responsible (see Chapter 2 Tasks to be performed) (1.1.2).

The bidder is required to describe the key **processes** for the services for which it is responsible and create an **operational plan** or schedule (1.4.1) that describes how the services according to Chapter 2 (Tasks to be performed by the contractor) are to be provided. In particular, the bidder is required to describe the necessary work steps and, if applicable, take account of the milestones and **contributions** of other actors (partner contributions) in accordance with Chapter 2 (Tasks to be performed) (1.4.2).

Project management of the contractor (1.6)

The bidder is required to explain its approach for coordination with the GIZ project. In particular, the project management requirements specified in Chapter 2 (Tasks to be performed by the contractor) must be explained in detail.

The bidder is required to draw up a **personnel assignment plan** with explanatory notes that lists all the experts proposed in the bid; the plan includes information on assignment dates (duration and expert months) and locations of the individual members of the team complete with the allocation of work steps as set out in the schedule.

Further requirements (1.7)

Sustainability requirements
- The bidder has proven experience on wildlife inventory and its data analysis both statistically and spatially, experience in developing similar manual would be a plus.
- Experience in working with government/international organization is highly preferred.

4. Personnel concept

The bidder is required to provide personnel who are suited to filling the positions described, based on their CVs (see Chapter 6), the range of tasks involved and the required qualifications.

The below specified qualifications represent the requirements to reach the maximum number of points in the technical assessment.

Team leader/Coordinator

<u>Tasks of the team leader:</u>
Coordinator for developing a manual for species inventory, monitoring and data analysis of the four taxa (Mammals, Aves, herpetofauna and plants) that includes:

- Overall responsibility for the advisory packages of the contractor and ensuring the coherence and complementary of the services of the contractor delivered by the timeline and milestone activities.
- Coordinating and ensuring communication with Directorate of KKHSG and GIZ, and others involved in the activities.
- Develop a robust sampling design that accommodates comparability among time and areas, as well as possibility for multi-species of the four taxa using grid sampling regime.
- Assess species priority of the four taxa and priority areas based on inputs from the Directorate KKHSG and taxa specialist.
- Develop standardize data collection form of the target species.
- Standardize data analysis on the high biodiversity-value areas, this may include the status of distribution and abundance of the priority species; richness and diversity community of the species; as well as its trend.
- Coordinate with four taxa specialists in developing the manual for species inventory, monitoring, and data analysis starting from preparation, writing process, reviewing, consultation, and finalization.
- Regular reporting in accordance with deadlines

Tasks as resource person: (timeframe Oct 2023 to March 2024):

- Provide advice in development of national priority RedList Biodiversity Index
- Provide advice in development of national Ecosystem Index
- Provide advice in development of other national biodiversity and ecosystem indexes
- Provide advice in development of a national biodiversity monitoring scenario
- Perform other duties and tasks at the request in supporting biodiversity conservation

Qualifications of the team leader:

- Education/training (2.1.1): Advanced university degree (Master or PhD) in Biology, Forestry, conservation wildlife management, natural resource management, environmental sciences, or any related discipline.
- Language (2.1.2): business fluency in English and Bahasa Indonesia
- General professional experience (2.1.3):
  - Minimum of 10 years of experience in wildlife inventory and analysis data, and areas conservation management also wildlife management and research
  - Prior experience in conducting any ecological survey design, setting up monitoring programs, and expertise in analysing biodiversity data
  - Knowledgeable on wildlife inventory and its data analysis both statistically and spatially, experience in developing similar manual would be a plus
  - Knowledgeable about biodiversity conservation concept both nationally and globally such as CBD conventions, Targets and Indicators Global Biodiversity Frameworks, SGDs, etc.
  - Knowledgeable and experience in developing biodiversity and habitat indexes specifically Red List Index, Ecosystem index, and other national biodiversity and ecosystem indexes
  - Experience as a lead/coordinator of a team researching wildlife or area conservation and publishing the research in a scientific journal or as an editorial or publication team member will be preferable.
  - Good interpersonal relationships and communication skills and familiar with the government's working environment, specifically KLHK as the GIZ/CLARITY Project's main partner
- Specific professional experience (2.1.4):
  - More than 7 years research experience working with national (Indonesia) agency

- Experienced on wildlife inventory and its data analysis both statistically and spatially, experience in developing similar manual would be a plus

- Leadership/management experience (2.1.5): minimal 2 years of management/leadership experience as project team leader or manager in a company

Key expert 1 - Mammals expert

Tasks of key expert 1:

Support Team Leader in the brainstorming and implementing the output a manual for inventory, monitoring and analysis data of the mammal species that includes:

a) An inventory manual that has a robust sampling design and accommodates observational and environmental variation
   - Clear protocols for recording species diversity, abundance, and distribution;
   - Recommendations for using appropriate survey methods for species priority based on habitat and species characteristics (e.g., transect sampling, camera trap, mark recapture, track and sign, etc.)
   - Robust sampling design for allocate variation/replicates (sampling intensity, sampling technique stratified random, etc.)
   - Standardize data collection of the target mammal species priority
b) Monitoring Guidelines section to serve as the basis for providing data series and management (can be included in the section with the inventory or specifically separated to detail this following part):
   - Detailed guide for establishing and implementing monitoring programs in high biodiversity areas (frequency/interval, spatial distribution, etc.)
   - Guidance on data management, storage, and quality control to ensure accurate and reliable results.
c) Analysis Manual section for presentation of data collection results along with the method of drawing conclusions and interpretations
   - Guidelines for analysing survey and monitoring data (calculating abundance, species richness, diversity indices, etc.) for mammal species using relevant software and statistical techniques.
   - Recommendations for interpreting and presenting analysis results to inform biodiversity management decisions.
   - Standardize methodology of survey analysis data on the high biodiversity-value areas emphasizing on well-structured and verified data based on field
d) Assessment of the species priority of the mammal taxa along with scope of ordo or family based on national species (ungulate, primate, carnivore, small mammals, etc.) and priority areas based on inputs from the Directorate KKHSG and experts

Qualifications of key expert 1

- Education/training (2.2.1): bachelor's degree or higher in Biology, Forestry, conservation wildlife management, natural resource management, environmental sciences or any related discipline
- Language (2.2.2): business fluency in English and Bahasa Indonesia
- General professional experience (2.2.3):
  - Minimum of 5 years of experience in wildlife inventory and analysis data, and areas conservation management also wildlife management and research specifically in mammals.
  - Prior experience in conducting mammals-any other ecological surveys, setting up monitoring programs, and expertise in analysing biodiversity data

- Knowledgeable on wildlife inventory and its data analysis both statistically and spatially, experience in developing similar manual would be a plus
- Knowledgeable about biodiversity conservation concept both nationally and globally such as CBD conventions, Targets and Indicators Global Biodiversity Frameworks, SGDs, etc.
- Experience as a member of a team or assistant in conducting wildlife research or area conservation and publishing the in a scientific journal or as an editorial or publication team member will be preferable.
- Good interpersonal relationships and communication skills and familiar with the government's working environment, specifically KLHK as the GIZ/CLARITY Project's main partner.

- Specific professional experience (2.2.4):
  - More than 5 years research experience working with national (Indonesia) agency
  - Experienced on wildlife inventory and its data analysis both statistically and spatially, experience in developing similar manual would be a plus

Key expert 2 - Aves expert

<u>Tasks of key expert 2:</u>

Support Team Leader in the brainstorming and implementing the output a manual for inventory, monitoring and analysis data of the Aves species that includes:

a) An inventory manual that has a robust sampling design and accommodates observational and environmental variation.
   - Clear protocols for recording species diversity, abundance, and distribution;
   - Recommendations for using appropriate survey methods for species priority based on habitat and species characteristics (e.g., point counts, transect surveys, mist-netting, etc.)
   - Robust sampling design for allocate variation/replicates (sampling intensity, sampling technique stratified random, etc.)
   - Standardize data collection of the target bird species priority
b) Monitoring Guidelines section to serve as the basis for providing data series and management (can be included in the section with the inventory or specifically separated to detail this following part):
   - Detailed guide for establishing and implementing monitoring programs in high biodiversity areas (frequency/interval, spatial distribution, etc.)
   - Guidance on data management, storage, and quality control to ensure accurate and reliable results.
c) Analysis Manual section for presentation of data collection results along with the method of drawing conclusions and interpretations
   - Guidelines for analysing survey and monitoring data (calculating abundance, species richness, diversity indices, etc.) for Aves/birds species using relevant software and statistical techniques.
   - Recommendations for interpreting and presenting analysis results to inform biodiversity management decisions.
   - Standardize methodology of survey analysis data on the high biodiversity-value areas emphasizing on well-structured and verified data based on field
d) Assessment of the species priority of the bird taxa along with scope of ordo or family based on national species (raptor, aquatic / water bird, etc.) and priority areas based on inputs from the Directorate KKHSG and experts.

Qualifications of key expert 2:

- Education/training (2.3.1): bachelor's degree or higher in Biology, Forestry, conservation wildlife management, natural resource management, environmental sciences or any related discipline
- Language (2.3.2): business fluency in English and Bahasa Indonesia
- General professional experience (2.3.3):
  - Minimum of 5 years of experience in wildlife inventory and analysis data, and areas conservation management also wildlife management and research specifically in aves/bird.
  - Prior experience in conducting aves and any other ecological surveys, setting up monitoring programs, and expertise in analysing biodiversity data
  - Knowledgeable on wildlife inventory and its data analysis both statistically and spatially, experience in developing similar manual would be a plus
  - Knowledgeable about biodiversity conservation concept both nationally and globally such as CBD conventions, Targets and Indicators Global Biodiversity Frameworks, SGDs, etc.
  - Experience as a member of a team or assistant in conducting wildlife research or area conservation and publishing the in a scientific journal or as an editorial or publication team member will be preferable.
  - Good interpersonal relationships and communication skills and familiar with the government's working environment, specifically KLHK as the GIZ/CLARITY Project's main partner.
- Specific professional experience (2.3.4):
  - More than 5 years research experience working with national (Indonesia) agency
  - Experienced on wildlife inventory and its data analysis both statistically and spatially, experience in developing similar manual would be a plus

Key expert 3 - Herpetofauna expert

Tasks of key expert 3:

Support Team Leader in the brainstorming and implementing the output a manual for inventory, monitoring and analysis data of the herpetofauna species that includes:

a) An inventory manual that has a robust sampling design and accommodates observational and environmental variation
   - Clear protocols for recording species diversity, abundance, and distribution
   - Recommendations for using appropriate survey methods for species priority based on habitat and species (e.g., transect sampling, visual encounter, pitfall traps, etc.);
   - Robust sampling design for allocate variation/replicates (sampling intensity, sampling technique stratified random, etc.);
   - Standardize data collection of the target reptile and amphibian species priority
b) Monitoring Guidelines section to serve as the basis for providing data series and management (can be included in the section with the inventory or specifically separated to detail this following part):
   - Detailed guide for establishing and implementing monitoring programs in high biodiversity areas (frequency/interval, spatial distribution, etc.)
   - Guidance on data management, storage, and quality control to ensure accurate and reliable results.

c) Analysis Manual section for presentation of data collection results along with the method of drawing conclusions and interpretations
   - Guidelines for analysing survey and monitoring data (calculating abundance, species richness, diversity indices, etc.) for herpetofauna species using relevant software and statistical techniques.
   - Recommendations for interpreting and presenting analysis results to inform biodiversity management decisions.
   - Standardize methodology of survey analysis data on the high biodiversity-value areas emphasizing on well-structured and verified data based on field
d) Assessment of the species priority of the herpetofauna taxa along with scope of ordo or family based on national species (anura, squamata, testudine, etc.) and priority areas based on inputs from the Directorate KKHSG and experts.

Qualifications of key expert 3

- Education/training (2.4.1): bachelor's degree or higher in Biology, Forestry, conservation wildlife management, natural resource management, environmental sciences or any related discipline
- Language (2.4.2): business fluency in English and Bahasa Indonesia
- General professional experience (2.4.3):
  - Minimum of 5 years of experience in wildlife inventory and analysis data, and areas conservation management also wildlife management and research specifically in herpetofauna.
  - Prior experience in conducting herpetofauna and any other ecological surveys, setting up monitoring programs, and expertise in analysing biodiversity data
  - Knowledgeable on wildlife inventory and its data analysis both statistically and spatially, experience in developing similar manual would be a plus
  - Knowledgeable about biodiversity conservation concept both nationally and globally such as CBD conventions, Targets and Indicators Global Biodiversity Frameworks, SGDs, etc.
  - Experience as a member of a team or assistant in conducting wildlife research or area conservation and publishing the in a scientific journal or as an editorial or publication team member will be preferable.
  - Good interpersonal relationships and communication skills and familiar with the government's working environment, specifically KLHK as the GIZ/CLARITY Project's main partner.

- Specific professional experience (2.4.4):
  - More than 5 years research experience working with national (Indonesia) agency
  - Experienced on wildlife inventory and its data analysis both statistically and spatially, experience in developing similar manual would be a plus

Key expert 4 – Botanist/Plants expert

Tasks of key expert 4:

Support Team Leader in the brainstorming and implementing the output a manual for inventory, monitoring and analysis data of the plants species that includes:

a) An inventory manual that has a robust sampling design and accommodates observational and environmental variation.
   - Clear protocols for recording species diversity, abundance, and distribution;
   - Recommendations for using appropriate survey methods for species priority based on vegetation types and plant community characteristics (e.g., point, transect surveys, quadrat sampling, remote sensing, etc.);
   - Robust sampling design for allocate variation/replicates (sampling intensity, sampling technique stratified random, etc.);
   - Standardize data collection of the target plant species priority
b) Monitoring Guidelines section to serve as the basis for providing data series and management (can be included in the section with the inventory or specifically separated to detail this following part):
   - Detailed guide for establishing and implementing monitoring programs in high biodiversity areas (frequency/interval, spatial distribution, etc.)
   - Guidance on data management, storage, and quality control to ensure accurate and reliable results.
c) Analysis Manual section for presentation of data collection results along with the method of drawing conclusions and interpretations
   - Guidelines for analysing survey and monitoring data (calculating abundance, species richness, diversity indices, etc.) for plant species using relevant software and statistical techniques.
   - Recommendations for interpreting and presenting analysis results to inform biodiversity management decisions.
   - Standardize methodology of survey analysis data on the high biodiversity-value areas emphasizing on well-structured and verified data based on field
d) Assessment of the species priority of the plant taxa along with scope of ordo or family based on national species and priority areas based on inputs from the Directorate KKHSG and experts.

<u>Qualifications of key expert 4</u>

- Education/training (2.5.1): bachelor's degree or higher in Biology, Forestry, conservation wildlife management, natural resource management, environmental sciences, or any related discipline
- Language (2.5.2): business fluency in English and Bahasa Indonesia
- General professional experience (2.5.3):
   - Minimum of 5 years of experience in wildlife inventory and analysis data, and areas conservation management also wildlife management and research specifically in plants.
   - Prior experience in conducting plant and any other ecological surveys, setting up monitoring programs, and expertise in analysing biodiversity data
   - Knowledgeable on wildlife inventory and its data analysis both statistically and spatially, experience in developing similar manual would be a plus
   - Knowledgeable about biodiversity conservation concept both nationally and globally such as CBD conventions, Targets and Indicators Global Biodiversity Frameworks, SGDs, etc.
   - Experience as a member of a team or assistant in conducting wildlife research or area conservation and publishing the in a scientific journal or as an editorial or publication team member will be preferable.
   - Good interpersonal relationships and communication skills and familiar with the government's working environment, specifically KLHK as the GIZ/CLARITY Project's main partner.

- Specific professional experience (2.5.4):
  - More than 5 years research experience working with national (Indonesia) agency
  - Experienced on wildlife inventory and its data analysis both statistically and spatially, experience in developing similar manual would be a plus

Short-term expert pool 1 – Layout and Graphic Designer (1 person)

Tasks of the short-term expert pool 1:
Support in developing the document of manual for inventory, monitoring and analysis data as layout and graphic designer for designing a manual output document that includes (but not limited to):

- In coordination by coordinator and taxa specialists, review the content provided by the subject matter experts and stakeholders.
- Develop a visually appealing and user-friendly layout design for the manual.
- In coordination by coordinator and taxa specialists, incorporate a logical flow and structure to aid navigation and producing portable manuals.
- Format the text, headings, and subheadings and select suitable typography, fonts, and color scheme for easy readability.
- Design appropriate figures, tables, diagrams, and graphics to enhance understanding.

Qualifications of the short-term expert pool

- Education/training (2.6.1): bachelor's degree or higher in communication, design, biology, forestry, environmental sciences, or any related discipline
- Language (2.6.2): business fluency in English and Bahasa Indonesia
- General professional experience (2.6.3):
  - At least 5 years of experience in layout and graphic design related to illustration for forestry, wildlife, or environmental subject areas.
  - Proficiency in design software such as Adobe In design, illustrator, and photoshop.
  - Ability to comprehend and visually present complex technical information in a clear and engaging manner.
  - Familiarity with biodiversity, ecology, conservation, or related fields will be preferable.
  - Excellent communication skills to collaborate with team leader and subject matter experts. Willingness to incorporate feedback and revision to meet project goals.
  - Experience as a member of a team or assistant in conducting wildlife research or area conservation and publishing the output will be preferable.
  - Good interpersonal relationships and communication skills and familiar with the government's working environment, specifically KLHK as the GIZ/CLARITY Project's main partner.

- Specific professional experience (2.6.4):
  - Prior experience in designing similar manuals with creative visual and able to create simple and handy outputs.

5. Costing requirements

Assignment of personnel and travel expenses

The contractor shall assemble a competent and reputable team with the appropriate experience in each assignment field and can fully fulfil its terms.

Overnight accommodation allowances are reimbursed against evidence. Transportation allowances are reimbursed as a lump sum up to the maximum amounts permissible by GIZ.

All business travel must be agreed in advance by the officer responsible for the project.

Specification of inputs

Fee days	**Number of experts**	**Number of days per expert**	**Total**	**Comments**
Team Leader as **resource person**	1	15	15	Lump sum against timesheet
Travel expenses	**Quantity**	**Price**	**Total**	**Comments**
Overnight allowance in location of assignment	12	IDR 1.000.000	IDR 12.000.000	Maximum cost (for 6 experts, 2 nights)
Transportation (train, bus, public transport) DKI Jakarta, Banten, West Java, vv.	12	IDR 500.000	IDR 6.000.000	On assignment away from regular domicile and/or seat of business
Other costs	**Number**	**Price**	**Total**	**Comments**
Design and printing of final document of the manual inver (Indonesian version), minimal 4 expl	1	IDR 1.000.000	IDR 1.000.000	Against evidence. The budget contains the following costs: submission of a file storage (i.e., USB or CD) containing soft and hard copy of editable version of final report, all presentation, photos and video, all data and calculation, and simulation result.
Flexible remuneration	1	IDR 10.000.000	IDR 10.000.000	A budget of IDR 10.000.000 is foreseen for flexible remuneration. Please incorporate this budget into the price schedule. Use of the flexible remuneration item requires prior written approval from GIZ.

Deliverables

For deliverables, we ask you to offer your services at **a lump sum price**. Therefore, please divide the lump sum price into the milestones described below.

Milestone/Deliverables	**Deadline**
Interim Report:	
Detailed work plan with timeline activities and draft outline of the Manual Inver	Beginning of November 2023

First draft of the Manual Inver	End of November 2023
Final Report:	
Second draft of the Manual Inver	December 2023
Final document of the Manual Inver	January 2024

6. Requirements on the format of the bid

The structure of the bid must correspond to the structure of the ToRs. In particular, the detailed structure of the concept (Chapter 3) should be organised in accordance with the positively weighted criteria in the assessment grid (not with zero). The bid must be legible (font size 11 or larger) and clearly formulated. It must be drawn up in in English.

The complete bid must not exceed 10 pages (excluding CVs). If one of the maximum page lengths is exceeded, the content appearing after the cut-off point will not be included in the assessment. External content (e.g., links to websites) will also not be considered.

The CVs of the personnel proposed in accordance with Chapter 4 of the ToRs must be submitted using the format standard for application. The CVs shall not exceed 4 pages each. They must clearly show the position and job the proposed person held in the reference project and for how long. The CVs must be submitted in English.

Please calculate your financial bid based exactly on the parameters specified in Chapter 5. Please offer a fixed lump sum price for the deliverables. The price bid will be evaluated based on the specified lump sum price. Therefore, please also provide the calculations in the explanations column (in the price schedule) which the prices are based on.

In addition, the contractor is not contractually entitled to use up the days, trips, budgets in full. The number of days, trips and the budgets will be contractually agreed as maximum limits. The detailed specifications for pricing are defined in the price schedule.