

## **Annex 1**

### **Terms of Reference**

#### **A. Project Description or Context and Background:**

##### **Biodiversity management context**

Indonesia is rich in terms of its biological diversity (biodiversity). The country's various biological resources as well as their habitats form ecosystems which are specific and unique. Furthermore, the ecosystems are very important for the rest of the world since it is functioning as a part of the lungs of the world. In the national context, uniqueness and beauty of the country's ecosystems have attracted the attention of the international community and provided a huge contribution to the growth of the national economy.

Wallacea includes the Indonesian regions of Nusa Tenggara (almost equivalent to the Lesser Sundas), Sulawesi and Maluku (almost equivalent to the Moluccas). The entire region is remarkable for the high degree of localised endemism, and has been subdivided into 10 Endemic Bird Areas (four in Nusa Tenggara, three in Sulawesi and three in Maluku) and one Secondary Area (in Sulawesi). In several of these EBAs (e.g. Timor and Wetar; Sulawesi; Buru) the threatened species include both lowland and montane forest specialists, and some threatened species are highly localised (e.g. Black-chinned Monarch is confined to the tiny island of Boano); conservation measures are therefore required to protect both lowland and montane forests in these EBAs, and in the areas which support highly localised species. The remarkable total of 27 highly threatened species mainly comprises birds affected by habitat loss within their small ranges, but also several species under pressure from exploitation for the wild bird trade (e.g. Chattering Lory and Yellow-crested Cockatoo) or for their eggs (e.g. Maleo)

Cage birds play an important role in Indonesian culture. Parrots are particularly popular, and the massive demand for cockatoos and lorries, both domestically and internationally, fuels a vigorous trade. Capture for trade is the most important factor in the decline of several threatened parrots in this region, even after trade was banned, hundreds of birds were traded openly in Jakarta and other cities and thousands were annually smuggled abroad. White and Salmon-crested Cockatoos are also declining for the same reason. At least 10,000 Salmon-crested Cockatoos were being trapped annually in the 1980s and the number probably still exceeds 4,000 per annum. As cockatoos tend to raid plantations and agricultural fields, they are persecuted as crop pests wherever they cause damage, with farmers using lime to capture the birds, and then selling them as pets.

Under BIOFIN's work, the analysis of biodiversity finance needs and gap in order to achieve IBSAP's national target was conducted. The results showed the total cost to reach the 8 (eight) IBSAP national targets was up to Rp167 trillion in 2020. While the current finance for biodiversity was around Rp9 trillion, hence the total gap was Rp158 trillion.

The Government of Indonesia has recognized that it can not stand alone in fulfilling all of the conservations' needs. In March 2018, through the Ministry of Finance, it issued the first sovereign green sukuk (Islamic Bond) in the country. Through this way, the government has tried to create an innovative financing mechanism for financing green development. While biodiversity is one of the eligible sectors for sukuk financing, the number of biodiversity projects have been found limited. Therefore, developing a biodiversity project that enables sukuk financing is important to ensure the biodiversity sector accessing innovative financing mechanism. This idea is worth to be taken into consideration by the Government of Indonesia since the success to do resource mobilization through this way means that the country will have a more capability in financing its biodiversity.

The objective of this consultancy assignment is to develop and prepare a feasibility study for a full funding proposal. Under UNDP Indonesia, BIOFIN Indonesia is working to connect some of the biodiversity funding resources, especially sukuk, with some of the government's biodiversity projects in order to catalyze biodiversity preservation in Indonesia. The feasibility study made by this assignment is expected to give understanding to the relevant stakeholders about how biodiversity management should be best made.

### **Context of the Biodiversity Finance**

Biodiversity Finance Initiative (BIOFIN) is a global partnership addressing the biodiversity finance challenge in a comprehensive manner. The initiative provides an innovative methodology enabling countries to measure their current biodiversity expenditures, assess their financial needs in the medium term and identify the most suitable finance solutions to bridge their national biodiversity finance gaps.

Indonesia is among the 31 countries currently participate BIOFIN. In Indonesia, BIOFIN aims to strengthen the national biodiversity financing framework and close the global financing gap for the conservation and sustainable use of biological diversity by assisting IBSAP (Indonesia Biodiversity and Strategic Action Plan) in identifying, accessing, combining and sequencing sources of biodiversity funding in order to meet IBSAP target/Alchi target by 2020.

BIOFIN phase 1 provides a comprehensive methodology framework which consists of several steps: 1) Policy Institutional Review (PIR), in the process, the roles of Government institutions in financing and utilization of conservation areas mapped out. In terms of policy, threats to biodiversity still require supporting laws and regulations. Policy analysis reveals laws and regulations that have a negative impact on biodiversity and laws and regulations needed to support biodiversity conservation; 2) Biodiversity Expenditure Review (BER), process involved analyzing public and non-public expenditures in Indonesia that benefit biodiversity. According to the BER, most of the expenditure for biodiversity management (43 percent) is managed by the central government and used to conduct four main activities: management of conservation areas, recovery for ecosystems outside conservation areas, pollution control, and integrated management of watersheds; 3) Financial Needs Assessment (FNA), a process that included analyzing management activities based on strategies and action plans to achieve the targets of the IBSAP, with respect to the standard of activities and

cost of managing biodiversity; 4) Biodiversity Financing Plan (BFP), summarizes all work from BIOFIN and proposes steps to implement a mix of finance solutions in order to expand and improve the country's biodiversity financing gaps and achieve national biodiversity targets.

The various studies undertaken during the first phase provided a purview of existing finance mechanisms and estimated biodiversity financial needs. The overarching objective is to close this financial gap through effective finance solutions that reduce/prevent the degradation of biodiversity, ecosystems and ecosystem services. This will be done through 1) designing and developing innovative finance solutions; 2) leveraging biodiversity financing from non-traditional sources (non-government), and 3) strengthening partnerships between stakeholders to enhance collaboration and prioritize resource mobilization.

BIOFIN phase II aims to implement two financial solutions, of which include (1) Unlocking Sukuk for biodiversity project financing, and (2) Unlocking Islamic social funding for biodiversity programs.

### **Context of the TOR**

Within the framework of BIOFIN, UNDP along with Bappenas, Ministry of Finance, Ministry of Environment and Forestry and LIPI had supported the development of framework on biodiversity financing through policy and institutional review, biodiversity expenditure review and biodiversity need assessment and biodiversity finance plan. Some biodiversity finance solutions have been tested for its feasibility study and currently UNDP support preparation of implementation finance solutions. They are biodiversity project preparation for sukuk financing and unlocking islamic social fund for biodiversity positive projects.

The scope of the implementation of this Project Feasibility Study is:

- A. Analysis of secondary data to narrate the importance of the proposed project;
- B. Feasibility analysis of the proposed project which include but note limited to determination of conservation direction and priorities, the potential location and needs of priority infrastructure for conservation and rehabilitation;
- C. Preparation of the draft design for the priority infrastructure development which aligned with conservation and environmental-friendly principles.

### **Geographical Focus**

The Maluku Island comprises of approximately 1,027 islands over a total area of 850,000 sq km, of which 90% is sea. Halmahera and Seram are the two largest islands, while sparsely populated, and Ambon and Ternate are the most developed islands. The islands are mainly mountainous and forest-covered, while some are swampy and flat. Several of the islands are volcanic in origin. Seram is home to the highest mountain, Mount Binaya at 3,027m. The Maluku Islands sit on the meeting point of two continental blocks and four geological plates. As such, it is one of the most rich biodiversity in the region.

## **Objective**

The objective of this assignment is to develop and prepare a Feasibility Study (FS) and Detail Engineering Design (DED) for a project related to management of parrot in Moluccas area. In order to assist the Ministry of Environment and Forestry, a qualified and highly experienced consultant will be engaged to provide technical assistant for full project feasibility study for potential project and develop detail design engineering proposal. The expected output of this consultant will be delivered and submitted for project proposal to be financed by sukuk in 2021 budget cycle.

### **B. Scope of Works:**

The consultant is required to conduct feasibility appraisals as well as create detail engineering design (DED) of the proposed project. The scope of work will include:

- Review existing data available for proposed intervention to develop suitable biodiversity management program in the given site. This includes but not limited to policy and institutional context, needs and gap for biodiversity, vulnerability and exposure to biodiversity management program in terms of economic, social and environment);
- Develop master plan of biodiversity conservation and management which consist of detailed plan, associated draft budget and timeline.
- Identify critical infrastructure project relevant to biodiversity conservation and management in the given site.
- Prepare the detail engineering design (DED) including the bill of quantities for the proposed biodiversity infrastructure;
- Outline a realistic timeline for the proposed set of activities of biodiversity management program;
- Evaluate the technical, economic, social and environmental feasibility of biodiversity critical infrastructures for economic development;
- Undertake public consultation upon pre-assessment phase, master plan development involving relevant key stakeholders: government/ministry, local government, CSOs and local community
- Conduct community consultation to assess the social impact of the proposed interventions;
- Identify and analyze any gender based challenges which has potential impact to the future biodiversity conservation project; as well as identify potential solutions to eradicate the gender equality;
- Identify the barriers and challenges - if any - that could determine the sustainability of the project; and
- Identify and analyze any governance and capacity issues that will be critical during the implementation of the project as well as to ensure the sustainability of the project.

### Project criteria through Sukuk Issuance

Referring to Article 9 of Government regulation No. 56/2011 concerning Project Financing through the Issuance of Sukuk, there are four types of projects, namely:

1. Infrastructure development, including construction work to build or improve infrastructure capabilities and / or infrastructure management projects and / or infrastructure maintenance in order to improve the benefits of infrastructure.
2. Provision of public services, namely projects carried out in the form of providing services to the community in the form of providing goods and / or services in order to support the function of public benefit.
3. Empowerment of domestic industries, namely projects carried out with the aim of encouraging the improvement of domestic industries and / or the use of domestic production.
4. Other development in accordance with the government's strategic policy

**Table 1. Expected Outputs**

No	OUTPUTS	Activities/Scope of Works	Target of Completion	Review and Approvals Required (Indicate designation of person who will review output and confirm acceptance)
1	Conduct preliminary study	<ul style="list-style-type: none"><li>• Identify key stakeholders</li><li>• Desk review on social, economic and environmental situation of area</li><li>• Assessment of scope of bird and wildlife conservation and management</li><li>• Outline full scope of feasibility study</li><li>• Develop detail work plan</li></ul>	November 2019 (first week)	UNDP Indonesia, BIOFIN Indonesia Project Manager, Directorate Environment Bappenas, Senior Technical Advisors in Global BIOFIN Team

2	Analysis of existing and needs of bird and wildlife conservation and rehabilitation development	<ul style="list-style-type: none"> <li>• Analyze policy and institutional context</li> <li>• Identify needs and gap analysis for biodiversity</li> <li>• Identify risk, vulnerability and exposure to biodiversity management program in terms of economic, social and environment</li> <li>• Develop draft analysis of existing and needs of bird and wildlife conservation in the given site</li> <li>• Prepare final draft</li> </ul>	November 2019	UNDP Indonesia, BIOFIN Indonesia Project Manager, Directorate Environment Bappenas, Senior Technical Advisors in Global BIOFIN Team
3	Develop masterplan of bird and wildlife conservation and rehabilitation	<ul style="list-style-type: none"> <li>• Identify critical infrastructure project relevant to biodiversity conservation and management in the given site.</li> <li>• Conduct community consultation to assess the social impact of the proposed interventions;</li> <li>• Identify and analyze any gender based challenges which has potential impact to the future biodiversity conservation project; as well as identify potential solutions to eradicate the gender equality;</li> <li>• Prepare the detail engineering design (DED) including the bill of quantities for the</li> </ul>	November 2019	UNDP Indonesia, BIOFIN Indonesia Project Manager, Directorate Environment Bappenas, Senior Technical Advisors in Global BIOFIN Team

		<p>proposed biodiversity infrastructure;</p> <ul style="list-style-type: none"> <li>• Outline a realistic timeline for the proposed set of activities of biodiversity management program;</li> <li>• Identify the barriers and challenges - if any - that could determine the sustainability of the project; and</li> <li>• Identify and analyze any governance and capacity issues that will be critical during the implementation of the project as well as to ensure the sustainability of the project.</li> </ul>		
4	Formulation of feasibility study and technical proposals for bird and wildlife conservation and rehabilitation	<ul style="list-style-type: none"> <li>• Evaluate the technical, economic, social and environmental feasibility of biodiversity critical infrastructures for economic development</li> <li>• Develop draft technical documents describing core elements of viable sustainable bird conservation and management</li> <li>• Prepare final technical proposals</li> </ul>	November 2019	UNDP Indonesia, BIOFIN Indonesia Project Manager, Directorate Environment Bappenas, Senior Technical Advisors in Global BIOFIN Team

5	Develop communication materials (fact sheet, summary reports, recommendations, and policy briefs.)	<ul style="list-style-type: none"> <li>• Prepare documents required for submission to Ministry</li> <li>• Prepare and develop communication materials for fact sheet/ brochure, infographic etc.</li> </ul>	December 2019	UNDP Indonesia, BIOFIN Indonesia Project Manager, Directorate Environment Bappenas, Senior Technical Advisors in Global BIOFIN Team
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### **C. Institutional Arrangement**

- The Service organization will have close supervision and coordination with Biofin Project Manager UNDP and Directorate of Environment Bappenas and Technical Advisor for Natural Resources and Governance
- The Service organization will interact, liaise with other BIOFIN stakeholders, i.e.: National Development Planning Agency (Bappenas), Ministry of Finance, Ministry of Environment and Forestry and Indonesia Life of Science
- The Service organization will report to the BIOFIN National Project Manager of UNDP Indonesia; and Senior Technical Advisors in Global BIOFIN Team
- The payment will be made at each payment schedule, upon technical clearance and approval of satisfactory submission of results from BIOFIN National Project Manager of UNDP Indonesia; and Senior Technical Advisors in Global Team

### **D. Duration of the Work**

The assignment will cover for approximately 45 working days within 2 months, from November to December 2019. Detail estimate time table is presented in Table 1. The timetable has considered lead time needed by the BIOFIN National Project Manager of UNDP Indonesia; and Senior Technical Advisors in Global BIOFIN Team to review outputs, provide feedback and certify on the outputs/workdone. Delay on the completion of the work might affect total budget approved unless it is due to reasons beyond the selected organization's control.

### **E. Location of Assignment**

The selected organization will work in Maluku Island specifically in Ambon and Seram area. The CSO is expected to maintain close communication with UNDP, Bappenas, Ministry of Finance, Ministry of Environment and Forestry and Indonesia Life of Science



**F. Qualification of Successful Service Provider at Various Levels**  
**Institutional Qualification:**

- Experiences in the area of economic of environment/natural resource management/biodiversity, business and management, institutional arrangements, accountability and coordination mechanisms for environment/natural resource management/biodiversity.
- Experiences in providing policy and strategy advisory services for government institutions.
- Experiences working with the Government of Indonesia and/or at the environment/natural resources management biodiversity finance would be an advantage.
- Have knowledge on Indonesian key policies related to environment/natural resources management/biodiversity finance and management effectiveness of protected areas.