

CONVENTION ON WETLANDS (Ramsar, Iran, 1971)

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Nagao Wetland Fund (NWF)

Section B “Request for Funding” Form

Note. Please complete and enclose both Section B.1 “Project Summary and Endorsement Form” and Section B.2 “Detailed Project Proposal”, following the section structure and guidance provided below on what to include in each section of the proposal. Thank you.

Section B.1 Project Summary and Endorsement Form

Please fill in sections a, b, c, f, g, h and i, and either section d or section e.

- a.** Country requesting support: Samoa
- b.** Title of project proposal: Enhancing the conservation and wise use of Vaipu Swamp Forests in Samoa.
- c.** Category of assistance requested (please consult the Operational Guidelines and indicate one option only):

Contracting Parties:

- Implementation of the Ramsar Strategic Plan 2016-2024. Please indicate relevant Goals and Targets (s):

Goal 1: Addressing the Drivers of Wetland Loss and Degradation
Target 1-3.

Goal 2: Effectively Conserving and Managing the Ramsar Site Network
Target 6.

Goal 3: Wisely Using All Wetlands
Targets 9-11.

Please fill in **either** section **d** or section **e** below:

- d.** If the financial support sought from the NWF is requested to carry out part of a larger project, please indicate:
 - Title of the main project:

- Duration of the main project:
 - Total cost of the main project:
 - Amount requested from the NWF:
 - Have the main project and the other funds been approved: Yes No
 - If yes, please indicate the sources of these funds, showing whether the source is in-country or external:
- e. If the proposed project is a stand-alone activity, please indicate:
- Duration of the activities to be covered by NWF grant: 12 months
 - Amount requested from the Ramsar NWF: USD 18,000
 - Other financial contributions (including in-kind) – indicate whether these are from in-country or external sources: The Government of Samoa (GoS) is offering co-financing consisting of 10,000 USD in-kind contribution (e.g. office space, vehicles, phones, faxes, copiers, power, water, national communications, staff counterparts and technical assistance). Permanent staff of the Ministry will extend technical assistance and directly involved during the implementation of the project. Other contribution including on-going national events to raise awareness and understanding about the importance of wetlands including the national commemoration of World Wetlands Day every year on February which is a commitment to enhance the visibility of Vaipu Swamp Forests and the urgency for strategic management activities.
- f. Name, address (including phone/fax numbers and e-mail address) and website of the recipient agency, i.e. the institution responsible for the project, specifying the name and contact details of the person responsible for preparing and executing the project.
- Recipient Agency:** Forestry Division, Ministry of Natural Resources and Environment. Private Bag, Beach Road, Apia, Samoa. Telephone: +685 67200 / 21054. Fax: +685 23176.
- Program Coordinator:** Ms. Elizabeth Kerstin. Principal Forestry Research and Development Officer. Forestry Division, Ministry of Natural Resources and Environment (MNRE). Telephone: +685 67200. Fax: +685 23176. Email: elizabeth.kerstin@mnre.gov.ws, elizabeth.kerstin83@gmail.com
- g. Summary (maximum 500 words)
Describe background, justification, objectives and intended follow-up. Indicate if the project will be carried out in a Ramsar site(s) or how it otherwise contributes to the implementation of the Ramsar Strategic Plan 2016-2024 and the fulfillment of its objectives:

The Vaipu Swamp Forests (VSF) is considered as the rarest and the only last remaining vegetation community of its type in Samoa with an unusual mixture of lowland rainforest and swamp forest species. The swamp is identified as a Key Biodiversity Area (KBA) due to its high

levels of endemism richness and ecological importance covering approximately 227 hectares. The swamp forest is a very important water catchment area for the Salani river system. It has some archaeological significance and a great potential for eco-tourism activities.

A hydro-electric power scheme has recently been developed in the catchment area. The wetland is threatened by development of plantations and expansion of the road network in the area. Pigeon hunting and shrimp farming have great disturbance and altered the ecological conditions of the area. Recent series of tropical cyclones caused limited damage to the natural vegetation. Development of the Afulilo Hydro-electric Power Project in the water catchment area resulted in the destruction of the site and proposed expansion of this project could have a detrimental effect on the ecological conditions for wildlife and will reduce the quality and quantity of water for local communities. Since 1991, Vaipu Swamp Forests (VSF) has been recognized as one of the highest priorities for conservation in Samoa.

The overall objective of the project will enhance knowledge on the status of the ecological characteristics, ecosystems services and wider landscape connectivity of VSF with improved and effective immediate and long-term management strategies and support the future designation as Samoa’s potential Ramsar Site. The proposed project will greatly contribute to the expansion of Protected Area and Wetland Network in Samoa and form part of the Ministry wider programme at the national level to further promote the conservation and wise use of wetlands.

The Ministry will be committed to implement short and long term activities during and after the project to ensure the safeguarding of biological resources and a successful designation of the site as a Ramsar Site. Such activities will be reflected in the National Environment Sector Plan (NESP) for future implementation by the Ministry and all relevant stakeholders.

The proposed project is inline and will support the implementation of the Ramsar Strategic Plan 2016-2024 by establishing short and long-term framework for the conservation, wise use and ecological restoration of the site and future designation. It will contribute to each of the three Strategic Goals and Targets of the Plan:

SG 1, Targets 1-3. By assessing the wetland resources and multiple ecosystem benefits of VSF, enhance understanding of the drivers of wetland loss and degradation of the site, enabling measures to address key threats to be integrated into planning and decision-making processes across all sectors.

SG 2, Target 6. By supporting VSF’s designation as a Ramsar Site, support the Samoa’s obligations under the Ramsar Convention to expand protect area and wetland network and maintain the ecological character of internationally important wetland sites.

SG 3, Targets 9-11. By promoting the wise use of VSF wetlands by demonstrating, documenting and disseminating their services and benefits to all stakeholders. Research findings will be disseminated at the local, regional and national levels to inform an integrated approach to natural resource management across sectors and beyond.

h. Endorsement of this project application by the Ramsar Administrative Authority:

Please confirm the importance of this proposed project in relation to your national Ramsar Convention implementation priorities. **Please tick (✓) only one of the following statements:**

1. The project’s outcomes will deliver significantly increased implementation capacity for a high national priority. OR	<input checked="" type="checkbox"/>
2. The project’s outcomes will deliver increased implementation capacity for a lower national priority. OR	<input type="checkbox"/>

3. The project's outcomes will not directly lead to increased implementation capacity.




Institution/Agency: Ministry of Natural Resources and Environment

Name/Title: Mr. Ulu Bismarck Crawley. Chief Executive Officer, Ministry of Natural Resources and Environment. Ramsar Administrative Authority Focal Point.

Date:

1/4/19

Signature:



Please return this form along with the Detailed Project Proposal to:
Nagao Wetland Fund (NWF), Ramsar Convention Secretariat,
28 Rue Mauverney, CH-1196 Gland, Switzerland. Fax: +41 22 999 0169, E-mail: asia.oceania@ramsar.org

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Section B.2

Structure and contents of Detailed Project Proposal

Details of proposal

A. Background and justification

The Vaipu Swamp Forest is a large patch of swamp forest covering approximately 227 hectares in a poorly drained basin on one of the main tributaries of the Salani River. The swamp is fed by Afulilo Falls and stream, and lies below the site of the former Punataemo'o swamp forest which was recently submerged by a hydro-electric scheme. The basic alluvium and basic colluvium soils in the central part of the basin are saturated with freshwater, and there is some open water in the northeast. The swamp forest is a very important water catchment area for the Salani river system. The forest comprises a mixture of typical swamp forest species and lowland rain forest species, with *Barringtonia samoensis*, *Calophyllum neo-eburlicum*, *Cananga odorata*, *C. harveyi*, *Canthium merrillii*, *Clidemia hirta*, *Cyathea spp.*, *Dysoxylum samoense*, *Elaeocarpus tonganus*, *Fagraea berteriana*, *Ficus tinctoria*, *Hernandia moerenhoutiana*, *Hibiscus tiliaceus*, *Macaranga stipulosa*, *Myristica fatua*, *M. hypargyrea*, *Neonauclea forsteri*, *Pisonia sp.*, *Planchonella torricellensis*, *Pometia pinnata*, *Rhus taitensis*, *Scirpodendron ghaeri*, *Syzygium samarangense* and *Terminalia richii* (Pearsall & Whistler, 1991). The screwpine *Pandanus turritus* and various endemic woody trees such as *Aglaiia samoense*, *Clintostigma samoense* and *Sterculia fanaibo* have also been recorded. The swamp forest lies adjacent to disturbed lowland rainforest and secondary forest.

The site contains a rare type of swamp forest (mixed upland species swamp forest) with a number of endemic tree species. Wildlife recorded at the site includes Pacific Boa (*Candoia bibroni*), two species of flying fox (*Pteropus sp.*), Pacific Black Duck (*ulnas uperciliosa*), Mao (*Gymnomysa samoensis*) and possibly Spotless Crake (*Porzana tabuensis*). The endangered Tooth-billed Pigeon (*Didunculus trigroristris*) is known to occur in the area.

The area has some archaeological significance, with old Samoan settlements at both ends of the wetland. These are believed to have been occupied by the Paramount Chiefs for generations. The wetland and surrounding areas are entirely under customary ownership. A hydro-electric power scheme has recently been developed in the catchment area. The wetland is threatened by development of plantations and expansion of the road network in the area. Pigeon hunting causes some disturbance, and there may be a small amount of logging. Recent series of tropical cyclones caused only limited damage to the forest. Development of the Afulilo Hydro-electric

Power Project in the water catchment area resulted in the destruction of the neighbouring Punataemo'o Swamp Forest; any further expansion of this project could have a detrimental effect on Vaipu Swamp Forest. Holloway and Floyd (1975) recommended that the site be protected as a nature reserve, and this was supported by Dahl (1980). The site has been recognized as one of the highest priorities for conservation in Samoa, and was listed as the third highest priority by Pearsall and Whistler (1991) in their "Terrestrial Ecosystem Mapping for Western Samoa". The wetland has been identified in 2010 as a one of Samoa's Critical Key Biodiversity Area that requires urgent need to be "protected and managed". It has great potential for eco-tourism, although at present it is seldom visited except by pigeon hunters. The area has never been properly surveyed and is in urgent need of a detailed study.

B. The problem(s) to be addressed

There is limited up-to-date and reliable data available about the status of the ecological characteristics, socio-economic value, negative impacts, management strategies and wider landscape connectivity of the VSF. However, with the approval of this project proposal will provide an extremely rich and unique source of information to implement the necessary actions and to identify critical knowledge gaps for the conservation and wise use of VSF. The new sets of data collected as a result of this project will be useful to support the designation of the site as a protected wetland area and as a Ramsar Site in the near future. Results obtain will be disseminated to local communities living and rely on the area as well as the wider community to boost conservation and effective management actions.

C. Objective(s)

General Objective(s):

The overall objective of the survey is to "enhance knowledge of the status of the wetland ecosystems of the Vaipu Swamp Forest and improve management by establishing immediate and long-term plans for its conservation".

Specific Objective(s):

1. A comprehensive research studies of the ecological characteristics and associated biodiversity of Vaipu Swamp Forests is implemented
2. To develop the sustainable management and governance of Vaipu Swamp Forests
3. To enhance knowledge and understanding and be appreciative of the benefits and contribution of wetlands

D. Outputs

1. A comprehensive technical survey report
2. Sets of species raw data
3. Specimen collection
4. Management plan
5. Commitment from village representatives is secured for long-term and sustainable management of VSF
6. Survey findings disseminated to multi-stakeholder and local communities
7. RSIS and maps of VSF is completed

E. Activities

Objective 1: A comprehensive research studies of the ecological characteristics and associated biodiversity of VSF is implemented.

Activities:

- 1.1. Organise ToRs for a technical expert.
- 1.2. Mapping exercise and finalise survey methodologies
- 1.3. Conduct survey on ecosystem connectivity
- 1.4. Prepare a draft survey report
- 1.5. Review survey report
- 1.6. Approve and launch survey report

Objective 2: To develop the sustainable management and governance of VSF

Activities:

- 2.1. Conduct series of internal, external and community consultations.
- 2.2. Prepare a draft management plan
- 2.3. Review management plan
- 2.4. Approve, launch and implement management plan

Objective 3: To enhance knowledge and understanding and be appreciative of the benefits and contribution of wetlands

Activities:

- 3.1. Presentation of survey findings to multi-stakeholders and local communities
- 3.2. Prepare a draft RSIS for VSF
- 3.3. Review and finalise RSIS with inputs from multi-stakeholders and local community.
- 3.4. Hold a community awareness event to boost awareness on site information and wetlands in general and designate VSF as Ramsar Site
- 3.5. Implement management plan

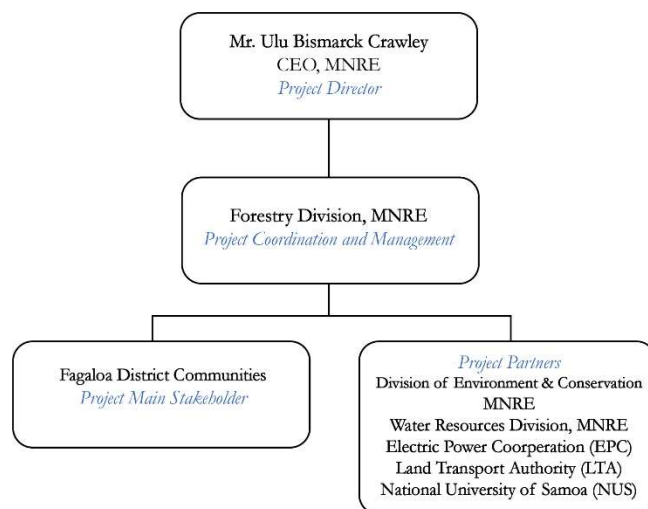
F. Logical frame of the project

Problems	Objectives	Outputs	Activities
Lack of ecological and biodiversity baseline information of VSF Lack of technical expertise within government to conduct scientific research studies	A comprehensive research studies of the ecological characteristics and associated biodiversity of VSF is implemented	A comprehensive technical survey report Sets of species raw data Specimen collection	1.1. Organise ToRs for a technical expert 1.2. Mapping exercise and finalise survey methodologies 1.3. Conduct survey on ecosystem connectivity 1.4. Prepare a draft survey report 1.5. Review survey report 1.6. Approve and launch survey report
Unsustainable use of VSF due to an expansion of hydro-electricity power and new developments	To develop the sustainable management and governance of VSF	Management plan Commitment from village representatives is secured for long-term and sustainable management of VSF	2.1. Conduct series of internal, external and community consultations. 2.2. Prepare a draft management plan 2.3. Review management plan 2.4. Approve, launch and implement management plan

<p>Insufficient knowledge and awareness on which to base VSF conservation and management decisions</p>	<p>To enhance knowledge and understanding and be appreciative of the benefits and contribution of wetlands</p>	<p>Survey findings disseminated to multi-stakeholder and local communities RSIS and maps of VSF is completed</p>	<p>3.1. Presentation of survey findings to multi-stakeholders and local communities 3.2. Prepare a draft RSIS for VSF 3.3. Review and finalise RSIS with inputs from multi-stakeholders and local community. 3.4. Hold a community awareness event to boost awareness on site information and wetlands in general and designate VSF as Ramsar Site 3.5. Implement management plan</p>
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G. Project management arrangements and stakeholders

The project will be managed by the Research and Development Section of the Forestry Division of the Ministry of Natural Resources and Environment. The activities will be implemented directly by the staff of Forestry Division, based in Upolu, with the support of relevant Divisions such as Division of Environment and Conservation (DEC) and the Water Recourses Division (WRD). Please see the attached diagram showing the management structure and roles and responsibilities of the project team.



The CEO of MNRE is the Project Director with the supporting role of the ACEO Forestry Division. The staff of the Forestry Division in Upolu will be leading the implementation of the project however the coordination and management role will be the responsibility of the Forestry Research and Development Section. Two other Divisions of the MNRE will be sharing the implementation role including Water Resources Division and Division of Environment and Conservation as they are solely responsible for other ecological and biodiversity components such as watersheds, water quality and quantity, birds, moths and insects etc. However, other critical project partners including EPC, LTA and NUS will be working together with staff of MNRE in the planning and implementation phase of the project. The local communities of Fagaloa District are very important stakeholders of the project and they will also be part of the implementation and management of the project.

H. Work Plan

Outputs & Key Activities	Responsible person	Month												
		1	2	3	4	5	6	7	8	9	10	11	12	
Output 1: A comprehensive technical survey report														
Activity 1.1: Organise ToRs for a technical expert	FD	■	■											
Activity 1.2: Mapping exercise and finalise survey methodologies	Technical expert, FD, DEC, WRD			■										
Activity 1.3: Conduct survey on ecosystem connectivity	Technical expert and FD, DEC, WRD, local community, NUS				■	■								
Activity 1.4: Prepare a draft survey report	Technical expert						■	■						
Activity 1.5: Review survey report	Technical expert, FD, DEC, WRD, local community, LTA, EPC, NUS							■						
Activity 1.6: Approve and launch survey report	FD, DEC, WRD, NUS and local community								■					
Output 2: Management Plan														
Activity 2.1: Conduct series of internal, external and community consultations.	FD, DEC, WRD			■			■	■			■	■	■	■
Activity 2.2: Prepare a draft management plan	Technical expert							■	■					
Activity 2.3: Review management plan	Technical expert, FD, DEC, WRD, local community, LTA, EPC, NUS										■	■		
Activity 2.4: Approve, launch and implement management plan	FD, DEC, WRD, NUS and local community												■	
Output 3: Survey findings disseminated to multi-stakeholder and local community														
Activity 3.1: Presentation of survey findings to multi-stakeholders and local communities	Technical expert, FD, DEC, WRD, local community							■						
Activity 3.2: Prepare a draft RSIS for VSF	FD												■	
Activity 3.3: Review and finalise RSIS with inputs from multi-stakeholders and local community.	FD, DEC, WRD													■
Activity 3.4: Hold a community awareness event to boost awareness on site information and wetlands in general and designate VSF as Ramsar Site	FD, DEC, WRD, NUS and local community													■
Activity 3.5: Implement a management plan	FD, DEC, WRD, and local community													■

I. Budget

i) Budget summary

This proposal is a sample for your reference and budget information has been removed from this version of the proposal.

ii) Overall itemized budget

J. Follow Up

The MNRE, all relevant partners and local communities will lead the post implementation of activities for the VSF. Each activity will be listed in the proposed Management Plan following the approved standard monitoring procedure recommended for each ecological components such as the ecological restoration of the site to rehabilitate degraded area and recommended tree and plant species will be raised and propagated by MNRE in its nursery for replanting at a later stage at the VSF. The revision of the RSIS for VSF will be completed after six years of designation however, monitoring activities of the sites will be on-going with the process lead by MNRE with the continuous support by local community and its partners to further promote the conservation and wise use of VSF. The different activities of the Management Plan will be incorporated and reflected in the next National Environment Sector Plan (NESP) and will be partly funded by the national budget. Simultaneously, the MNRE will continue to source other available external funding support to formulate, implement and monitor management plans that promote the conservation of VSF, Ramsar and non-Ramsar wetland sites across Samoa.

K. Bibliography

1. Atherton, J & Bruce, J. (2012) *Rapid biodiversity assessment of upland Savai'i, Samoa*. Ministry of Natural Resources and Environment and Secretariat of the Pacific Regional Environment Programme. Apia, Samoa.
2. Jenkins, A. P., Keith. P., Marquet, G., Mailautoka, K. K., (2008). A preliminary Survey of Samoan Freshwater Macro-faunal Biodiversity. Wetlands International-Oceania & Paris Museum of Natural History. 32pgs.
3. Pearsall, S.H. and W.A. Whistler. (1991). *Terrestrial ecosystem mapping for Western Samoa: I. Summary, project report, and proposed national parks and reserves plan*; 72 pp. II . Technical report and appendices; 213 pp. +maps. South Pacific Regional Environmental Programme and the East-West Center, Environment and Policy Institute, Honolulu.

