

APPLICATION PACK

Project Manager, Salt-Mine Project, Berbera, Somaliland

The Pastoral and Environmental Network in the Horn of Africa (PENHA) is a non-governmental organisation that works to promote development in the pastoralist communities of the Horn of Africa. Founded in 1989, PENHA is an African inspired and led NGO, registered as a charity in the UK and headquartered in London. PENHA operates across the IGAD region and has country offices in Ethiopia and Somaliland. PENHA's mission is to empower pastoralist communities and their institutions to play a full role in their own development, fostering sustainable and diversified livelihoods. PENHA works at both the grassroots and policy levels, combining research, policy work, advocacy and project implementation, with a participatory and bottom-up approach.

Seawater Greenhouse Project, Berbera, Somaliland

PENHA and Seawater Greenhouse (SG) Ltd UK established a Seawater Greenhouse Pilot Project at Berbera, Somaliland, introducing technology developed by Charlie Paton of SG Ltd UK, with a focus on seawater desalination for horticulture, salt production and drought-proof livelihoods for communities along the region's hot, arid coastline.

Salt-Mine Project (funded by the Belmont Forum/Sida)

Extending the work at the Berbera site, the Salt-Mine Project explores the opportunity to utilise solar-powered desalination for horticulture and the extraction of salt and minerals, including lithium, to develop sustainable management options for seawater desalination brine, with new livelihoods for East African coastal communities. This Sida-funded research project involves a Consortium, led by the Norwegian Institute for Water Research (NIVA).

The role

As Project Manager of the Salt-Mine Project, you will play a pivotal role in growing this innovative initiative, ensuring its ongoing development and delivering impactful outcomes.

You will work closely with colleagues in the PENHA-Somaliland project team, working primarily from your home base, with some travel to the project site in Berbera and with the potential for international travel in relation to project development and research activities. In addition, you will liaise with Salt-Mine Project Consortium members.

You will have a strong track record in project development, financial management, grant management, project design and partnership building within the environmental and/or not-for-profit sectors, with knowledge of lower-income country contexts, ideally Somaliland, and other countries along the East African coastline.

You will have a passion for sustainable development, as well as the development of coastal/ocean-associated livelihoods.

Strong partnership-management and communications skills are essential to the role in order to develop positive, collaborative relationships with internal and external stakeholders, including Consortium members and local stakeholders in Somaliland, as well as governmental agencies.

The role offers the opportunity to be part of an innovative and enterprise-oriented project, engaging with an international team of researchers and practitioners.

Purpose

The Project Manager will lead the delivery of PENHA's specified outputs under Work Package 2 of the Salt-Mine Project (see "Background"), as well as broader Seawater Greenhouse Project development.

The Project Manager is primarily responsible for driving the implementation of all PENHA activities and inputs associated with the project and coordinating with consortium partners.

Summary of key functions

- Principal responsibility for project management and development (to include work plan and budget preparation, results and risk management, monitoring and evaluation (M&E), and reporting).
- Fundraising/donor relations for the wider SG/PENHA Berbera Project, including approaches to all relevant Norwegian donors, seeking matching and complementary funding.
- Representation in relation to the SG/PENHA Berbera Project, to include partner/Consortium coordination.
- Managing sub-contracting arrangements, in collaboration with the Regional Programmes Coordinator (RPC)
- Operational management (to include prescribed analytical inputs)
- Programme oversight and implementation.
- Programme development, in relation to expansion of the SG/PENHA Berbera Project and associated business development.

The Project Manager shall be principally responsible for the delivery of Work Package 2 of the Salt-Mine Project, and for ensuring effective collaboration among Consortium partners. The Project Manager shall also facilitate collaboration and the exchange of ideas with those responsible for Work Packages 1, 3 and 4.

Specific tasks and deliverables

1. Project planning, management, and implementation:

- Developing and updating work plans and budgets, in consultation with the RPC and partners, in particular Seawater Greenhouse Ltd UK.
- Coordinating and monitoring field activities and project staff, specifically the site foreman and senior staff responsible for horticulture, landscaping and agricultural production
 - Supporting the RPC in the direct management and supervision of project staff.
- Promoting capacity building, team work, collaboration and synergies among the project teams and with the project partners and any sub-contracted agencies (in particular, Charlie Paton of Seawater Greenhouse Ltd).
- Providing leadership in overseeing delivery of project outputs and ensuring fair and transparent procurement, efficient logistics and sound financial management as well as the consistent application of PENHA's policies, rules and regulations.
- Supporting the RPC in ensuring adequate financial management, in particular administrative, financial and budgetary aspects related to the Salt-Mine Project.

Operational delivery

- Lead on the delivery of project activities and deliverables defined in the funding agreement, coordinating support and technical input from Seawater Greenhouse Ltd UK and on-site staff.
- Review, develop and monitor detailed work plans collaboratively with Consortium partners, and ensure delivery of anticipated results, adapting work plans as necessary.
- Monitor and report against verifiable indicators, and ensure all internal and external reporting requirements related to the project are met in line with work plans and budget.
- Develop high-quality donor and technical reports.
- Ensure project and all sub-contracts and agreements are implemented in compliance with operating standards, policies and procedures.
- Identify and procure resource needs with the PENHA/Seawater Greenhouse Ltd UK project team (equipment, etc).

2. Representation and coordination:

- Representing PENHA in meetings, workshops and online forums/video conferencing (*emphasised as part of Covid-secure practice*).
- Ensuring proper coordination with Salt-Mine partners in delivery of outputs (as appropriate).
- Maintaining effective collaboration and coordination with project partners.
- Being the primary point of contact for project partners, and supporting the RPC and the Project Officer in engagement with other relevant stakeholders.
- Support communication and social media efforts in relation to the PENHA Seawater Greenhouse Project.

3. Support to resource mobilisation and project development:

- Leading fundraising and partnership activities with the aim of further developing and/or scaling up the SG/PENHA Berbera Pilot Project, to include developing a fundraising plan (with the identification of potential fundraising sources regionally and internationally), proposal preparation (based on a comprehensive review of existing documentation), and presentation to donors/funding providers.
- Promoting the identification and synthesis of best practices and lessons learned for dissemination (eg linked to fundraising) and organisational learning, to include sustainable business models.
- Taking the lead in elaborating suitable, inclusive business models for the envisioned commercial expansion of the project, in collaboration with senior PENHA staff members and SG Ltd UK.

4. Institutional development and compliance with donor requirements:

Financial management

With the support of PENHA UK and the in-country finance team, ensure the following:

- Accurate financial management
- Compliance with internal financial policies and procedures
- Compliance with contracts and grant agreements, including procurement requirements.

Address the specific requirements of the current grant agreement:

- Supporting the RPC in PENHA's efforts to: (i) comply with auditors' requirements; and (ii) effectively address the areas for improvement as set out in the due diligence report commissioned by the National Research Foundation (NRF, South Africa) at the outset of this project (including support to drafting/revising and implementing policies, regulations and guidelines).
- Ensuring the timely preparation and submission of required reports, in consultation with the RPC, and in line with the NRF Funding Agreement (19 March 2021).
- Other tasks related to the project as changing circumstances may require.

BACKGROUND

The Salt-Mine Project involves a Consortium led by the Norwegian Institute for Water Research (NIVA) and PENHA (the project owner), with funding from the Swedish International Development Cooperation Agency (Sida, the donor agency), under the Belmont Forum 2019 Collaborative Research Action (CRA) Ocean Sustainability call.

About 4 billion people currently live in conditions of severe water scarcity for at least one month per year. Additionally, food production in dry coastal areas of least developed countries (LDCs) like Somalia and Kenya is severely limited by lack of affordable irrigation water. Oceans and their resources are crucial in alleviating poverty and enabling coastal communities in LDCs achieve Sustainable Development Goal (SDG) 14 (Conserve and sustainably use the oceans, seas and marine resources for sustainable development). Desalinated water is expected to play a key role in narrowing the water demand-supply gap. However, management of ca. 142 million m³/day of brine (hyper-saline concentrate produced during desalination) is a major environmental and economic challenge associated with desalination technologies. Concurrently, the ongoing shift to electric vehicles is fuelling a demand for lithium and other battery materials, creating an opportunity to solve these challenges simultaneously.

The Salt-Mine Project explores the opportunity by aiming **to develop sustainable management options for seawater desalination brine**, including:

- i) Development of better materials (e.g. membranes) and affordable chemistry for the extraction of valuable minerals (e.g. lithium (Li)) from desalination brine, combined with environmentally-better brine disposal methods.
- ii) Development and piloting of effective seawater greenhouses, enabling high-value crops cultivation in arid coastal LDCs.
- iii) Assessment of the impact of seawater intake and brine discharge on pelagic and benthic marine organisms, to limit ecological disturbance.
- iv) Analysis of the socio-economic aspects for the coastal communities of these technologies to evaluate their potential for the attainment of the SDGs, with the emphasis on coastal job creation, food security and business development for value-generation.

The Consortium brings together partners from Norway, the UK, Somaliland, South Africa and Kenya. The Salt-Mine will connect with the Coast-LaB project, part of the Norway-South Africa CRA on ocean sustainability, also studying the impact of land-based activities on the coastal environment. PENHA's contribution is focused on Work Package 2 (WP2), outlined below, but extends across the programme, working in an integrated manner.

WP2: Improving the horticultural and artisanal mineral extraction efficiency of artisanal SG in semi-arid coastal regions of least developed countries. Lead **Project Manager** and with academic and technical partners.

Objective: i) explore the possibility of replicating the least-cost, closed-loop SG in Berbera Somaliland, on the Kenyan coast; ii) assess the improvements needed to the Berbera SG in terms of efficiency in; seawater desalination, horticultural production and artisanal mineral extraction and iii) carry out a value chain analysis and market assessment of the horticultural crops and mineral produced by the SG.

Description of work: SG range in complexity from state of the art like one in Port Augusta artisanal versions like the Berbera SG. Slightly more advanced SG versions exist in the Middle East. This WP will assess the replicability of the Berbera SG model in semi-arid coastal setting in Kenya (e.g. Lamu County), but with a different social economic and environmental setting than Berbera, Somaliland.

The long-term objective is to establish a proof of concept for a viable artisanal SG suited for semi-arid coastal regions in developing countries. Important considerations will therefore include an assessment of how to maximise the production and efficiency of the key SG deliverables; i.e. freshwater and mineral extraction via better reverse osmosis-RO membranes and horticultural crop production via better air flow modelling and construction. The social economic aspects regarding the Artisanal SG model include; job creation (via horticultural crop and mineral sales) for coastal communities, strengthening of local food security, and economic growth through business development.

Task 2.1 *More efficient desalination system and establishing a versatile artisanal SG test site. Lead **Project Manager**-PENHA and SG-London (subcontractors. others; NIVA*

Task 2.2. *Field test of mineral extraction at the Berbera SG site (PENHA, NIVA, academic and technical partners)*

Task 2.3 *Assess feasibility of replicating SG in Kenya (PENHA, East African academic partners)*

Task 2.4 *Socioeconomic Baseline Survey (PENHA, East African academic partners).*

APPLICATION PROCESS

The closing date for applications is **04 December 2021**. Candidates should apply by emailing a short cover letter (1 page maximum), describing themselves and their suitability for the post, attaching a curriculum vitae/resume (2 pages maximum), to info@penhanetwork.org. Please use subject heading: Ref: '**Project Manager, Salt-Mine Project, Somaliland**'.

Only shortlisted candidates will be contacted for interview, which may be conducted remotely (by Skype or Zoom).

Expected starting date: 17 December 2021

Deadline for applications: 04 December 2021

It is expected that interviews will be held, by Zoom, beginning **10 December 2021**.

Shortlisted candidates will be informed by the end of the day on 12 December 2021. If you have not heard from us by then please assume that you have not been shortlisted. We are

unfortunately not able to offer feedback on applications from candidates who have not been shortlisted.

Thank you for your interest in PENHA.