



The Community Development Action Plan (CDAP) for the Bumbuna II Hydroelectric Power Project, Sierra Leone

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1. Introduction

Joule Africa Limited (Joule Africa) is a developer-owner-operator of sustainable power projects across Africa, with ~1GW of proprietary development rights in Africa, of which it is actively developing 630MW.

Joule Africa has been developing the Bumbuna II Hydroelectric Power Project in Sierra Leone (the 'Project', or 'Bumbuna II') since 2011. This is a 143MW expansion of the existing 50MW Bumbuna Hydroelectric Power Project ('Bumbuna I') commissioned in 2009. Bumbuna II represents a key component of the Government of Sierra Leone's long-term energy strategy.

This proposed hydroelectric power project will involve an extension to the existing dam (Bumbuna I) and the construction of a new dam and the creation of a new reservoir, 32 kilometres upstream at Yiben.

Different options were considered for the Yiben dam. The preferred option, approved by the Government, has less social and environmental impacts while still being able to provide much-needed all-year-round electricity.

Bumbuna II is now at an advanced stage of development, with both the Power Purchase Agreement (PPA) and the Implementation Agreement (IA) signed between the Government of Sierra Leone ('GoSL') and Seli Hydropower Limited (Seli Hydropower) on 4th August 2017.

Seli Hydropower was established in 2017 as the local Project Company and will manage the construction, commissioning and operations of the Project.

Seli Hydropower, Joule Africa and its local partner Energy Services Company (ESCO) share the same values and place sustainable development and transparency at the heart of their business practice, working closely with all stakeholders to create infrastructure assets that will generate mutual long-term value for all involved. Seli Hydropower believes that close consultation and positive investment in local communities and a sensitive approach to the environment are the best way to ensure a positive, long-term return for every stakeholder in the project.

To date, the following milestones have been achieved:

- ▶ The completion of comprehensive technical feasibility studies;
- ▶ The completion of an environmental, social and health impact assessment (ESHIA) that meets International Finance Corporation (IFC) Performance Standards and Equator Principles;
- ▶ A resettlement action plan (RAP) for the early works areas (RAP 1) and a scoping report, with full RAP under development, for the inundation area (RAP 2). This has been done in line with the guidelines, requirements and standards of Good Industry International Practice (GIIP), IFC Performance Standards, the European Bank for Reconstruction and Development (EBRD), the African Development Bank (AfDB), and the United Nations Human Rights guidelines;
- ▶ A Biodiversity Strategy with a Biodiversity Action Plan (BAP) underway, which fulfils IFC Performance Standards 6; and
- ▶ An engineering, procurement, and construction (EPC) tender, in line with European Investment Bank (EIB) procurement requirements, with technical bids that opened on

5th October 2017, with contractual agreements expected to be agreed and signed by the end of 2018.

In keeping with the Sierra Leone Environmental Protection Agency's (SLEPA) requirements, Seli Hydropower has created a Community Development Action Plan (CDAP), as well as a CDAP Plus (CDAP+) to support the resettlement and biodiversity action plans.

2. Overview of Community Development Action Plan (CDAP) and CDAP+

The Bumbuna II CDAP and CDAP+ activities outlined in this document build on and complement the expressed demands and priorities of the affected communities, as identified in the ESHIA and RAP reports. To summarise:

- 1) Livelihood Restoration (including RAP 1 and RAP2) has identified those activities which have been agreed in consultation with affected communities and will be implemented over five years from the point at which affected households start to move to new settlements.

This includes the construction of new housing and associated infrastructure for the affected communities: clearing and improving of replacement fields; technical and vocational training; employability skills development; functional literacy training, agricultural extension (see below); and the development of sustainable ecological aquaculture.

- 2) The CDAP encompasses affected communities and their catchment areas. It builds on the initiatives and activities highlighted in the RAP and will be implemented, managed and funded on an ongoing basis for the next 25 years.

This will include agricultural development and training; light provision for households and associated facilities; the improvement of public infrastructure, such as schools and health centres; water sanitation programmes; business training; and the creation of better access roads, all of which go beyond the Resettlement Action Plan.

- 3) The CDAP+ is a range of initiatives currently under consideration which goes beyond the requirements and activities outlined in the RAP and CDAP. The CDAP+ encompasses affected communities and their catchment areas. It builds on the initiatives and activities highlighted in the RAP and CDAP and will be implemented, managed and funded on an ongoing basis for the next 25 years. CDAP+ is also scheduled to run for the next 25 years.

Initiatives that have currently been identified include the creation of sustainable reservoirs at both Yiben and Bumbuna which generate wider fishing and tourism opportunities; a range of regional off-grid energy solutions; improvements to regional transportation links; micro-finance support; the promotion of environmental conservation; and the possibility of developing a micro-forestry and furniture business, following the clearing of the inundation area.

It is anticipated that the CDAP and CDAP+ can be used to enhance and expand the livelihood restoration programmes developed as part of the RAP 1 and RAP 2 process. The appendix to this document discusses in more detail those plans, the individual activities, and their inter-relationships:

- ▶ Annex: CDAP and CDAP+
 - Table 1: ESHIA and the Seli Hydropower Community Development Action Plan Recommendations
 - Table 2: Potential coverage of the Seli Hydropower Community Development Action Plan Plus (CDAP+)

Annex:

Table 1: ESHIA and the Seli Hydropower Community Development Action Plan (CDAP) Recommendations

Community Development Action Plan (CDAP) Actions and Recommendations			
ESHIA Section	ESHIA Recommendations (ESHIA Chapter 5, Table 5.7, Section 6 (all) and Section 7.1)	CDAP Recommendations (Building on RAP1 and RAP2) (Joule Africa & Seli Hydro Power)	
1. Stakeholder Engagement			
7.1	<ul style="list-style-type: none"> Effective stakeholder engagement is required throughout the duration of the Project to ensure that the affected communities are fully informed, in order to identify impacts and mitigation measures. 	<ul style="list-style-type: none"> Effective stakeholder engagement in the potentially affected communities should be organized to discuss issues of relocation; this would reduce or mitigate the negative impacts of relocation or inundation. The people would decide their fate when it comes to relocating them and for other issues that are associated the Project (KII IBIS, Kabala). The only effective mitigation strategy to avoid these potential negative impacts is to have an effective consultation with the people that would be affected to hear their views regarding the relocation process (KII SNAP, Kabala). Joule Africa and the government of Sierra Leone should have dialogue with all stakeholders in the land to come to an agreement before starting the activities (KII landowner, Yarah). The community did not know about the Project (FGD women, Kasokira). 	<ul style="list-style-type: none"> Set up two field offices and employ 6 Community Liaison Assistants (CLAs) <ul style="list-style-type: none"> This is for Phase I, more CLAs will be appointed for Phase II. This will strengthen the company's interface and engagement with Stakeholders. Expansion of the capacity of the radio stations in Bumbuna and Kabala
2. Agricultural Development			
6.1	<ul style="list-style-type: none"> Support local communities with agricultural development 	<p>CDAP to build on the following RAP initiatives:</p> <ul style="list-style-type: none"> We would also like Joule Africa to provide money for us to buy livestock to rear in the village (FGD hunters, Badala). Assist the women with micro- finance, support them with seedlings and farming tools (FGD women, Kasokira). I think micro-finance should be the most important thing for the people in their new settlements. Providing loans for agricultural purposes will enable the farmers have income and improved productivity (KII Paramount Chief, Kondembaia). Households are provided with agricultural inputs and supported to work collaboratively in agriculture extension activities. Communities are assisted in the development of a crop protection and land management plan that addresses pest and disease management The community is trained in appropriate soil enrichment techniques 	

ESHIA Section	ESHIA Recommendations (ESHIA Chapter 5, Table 5.7, Section 6 (all) and Section 7.1)		CDAP Recommendations (Building on RAP1 and RAP2) (Joule Africa & Seli Hydro Power)
3. Rural Electrification			
6.2	<ul style="list-style-type: none"> Electrification in the new communities. 	<ul style="list-style-type: none"> If the village has to move will the new settlement benefiting from the light? (FGD hunters, Badala). Provide light at the health centre to enable a doctor to manage emergency cases / operations (KII health, Yarah). Provision of electricity (FGD men, Yarah). Electricity in the community (FGD men, Dain Sokurela-1). 	<ul style="list-style-type: none"> Support for additional lighting to enhance the lighting provided by the RAP. This would focus on social service/infrastructure (health centres, schools, community centres, markets) in Host communities and their catchment areas. (It is understood that UNOPS has a project providing solar lighting to health clinics in each chiefdom. They could be liaised with regarding this aspect and potentially supported to extend across Diang and the new chiefdom in Bumbuna EWA).
4. Social Infrastructure			
6.3	<ul style="list-style-type: none"> Support to increasing access to Social infrastructure eg schools and healthcare facilities. 	<ul style="list-style-type: none"> The community require a good school, hospital and good drinking water (FGD hunters, Kondembaia). Support to the health sector in terms of provision of drugs supply and improved the water facility in health centre (KII health, Kondembaia) e.g. for skills development and educational facilities/good schools (FGD men, Sawule 1&2) 	<ul style="list-style-type: none"> Enhance and expand the social infrastructure that is provided in the RAP Install additional water boreholes/hand pump wells Partner with NGO/Government organisations to support the improvement of health provisions Support and expand the skills training being provided in the RAP (It is anticipated that the Livelihood Restoration Plan for both RAPs can pilot these initiatives and the CDAP could roll them out)
5. Business Training			

ESHIA Section	ESHIA Recommendations (ESHIA Chapter 5, Table 5.7, Section 6 (all) and Section 7.1)		CDAP Recommendations (Building on RAP1 and RAP2) (Joule Africa & Seli Hydro Power)
6.4	<ul style="list-style-type: none"> Entrepreneur/business/vocational training and provision of scholarships for children. 	<ul style="list-style-type: none"> Entrepreneurial training would also be a great benefit for the community since most are engage in petty trading and they require improved business and financial skills (KII Paramount Chief, Kondembaia). Provide scholarships for their children (FGD men, Yarah). Most of the youth should be employed as apprentices in order for them to have the opportunity to learn skills which will help them in the future (FGD men, Gbenikoro). 	<p>CDAP to build on the following RAP and other NGO initiatives in the area (eg GIZ):</p> <ul style="list-style-type: none"> Assistance/Mentoring on the creation of new formal and informal enterprises Support in the increase of provision of the RAP livelihood restoration programme (with specific encouragement for the take-up by youth groups) Provision of scholarships for distance learning for teachers
6. WASH Programme ("Water, Sanitation and Hygiene")			
6.5	<ul style="list-style-type: none"> Sanitary drinking water for the new communities. 	<ul style="list-style-type: none"> Provision of a protected well and good drinking water for the community (KII health, Yarah). 	<ul style="list-style-type: none"> Determine whether further support for the provision of Water, Sanitation and Hygiene (WASH) programmes is needed in addition to what is covered in the RAP Provide if required
6.6	<ul style="list-style-type: none"> Improved access to sanitation and waste disposal facilities. 	<ul style="list-style-type: none"> Provision of safe disposal facility for better hygiene (FGD men, Badala). 	
7. Road Network			
6.7	<ul style="list-style-type: none"> Provision of a road network to communities. 	<ul style="list-style-type: none"> Access to a good road network as a result of the Project (FGD men, Yisaia). 	<ul style="list-style-type: none"> Determine whether further support (in addition to the RAP) for the rehabilitation of road network is required Provide if required

Table 2: Potential Coverage of the Seli Hydropower Community Development Action Plan Plus (CDAP+)

Community Development Action Plan Plus (CDAP+) Joule Africa & Seli Hydro Power	
8. Off-Grid Energy	
<ul style="list-style-type: none"> Provide off-grid energy solutions (e.g. solar panels) to the wider community 	
9. Reservoir Sustainability	
<ul style="list-style-type: none"> Create best in class sustainable reservoirs for both Yiben and Bumbuna I Develop ecologically appropriate sustainable aquaculture in the reservoirs Upskill men and women in sustainable and responsible fishing and fish processing practices Create an enabling environment for sale of fresh and processed fish 	

10. District Level Access/ Transportation

- District Level Access / Transportation
- Rehabilitation of Feeder Roads and Foot trails in the affected chiefdoms to improve:
 - Farm to market access
 - Access to social services (Health, Education) / Connecting communities to Social services.
 - Aiding Emergency Response in the event of flooding in downstream communities.

11. Micro-grants to at risk and vulnerable groups

- Micro Grants to at Risk & Vulnerable Groups:
 - Livelihood Grants for Agribusiness (Agricultural Business Units – ABU).
 - Micro Grants to Vulnerable Groups to be engaged in MSME development

12. Promotion of Environmental Conservation

- Promotion of Environmental conservation through the following:
 - Establishment of tree nurseries for valuable plants, including crop species, fruit trees and medicinal plants, for replanting on replacement plots, in communities and in household gardens;
 - Reduction of reliance on forest products, including the distribution of improved cooking stoves;
- Allocation of timber resources cleared for Company activities to local households.