

**Environmental Impact Assessment
and
Environmental Management Plan**

08/03/2019

CEPF 103792

African Research Association managing Development in Nigeria(ARADIN)

Sustainable Actions for Conservation of Obudu Plateau (SACOP) Project

Cross River State, Nigeria

Grant Summary

1. Grantee organization.
African Research Association managing Development in Nigeria (ARADIN)
2. Grant title.
Sustainable Actions for Conservation of Obudu Plateau (SACOP) Project, Nigeria
3. Grant number.
CEPF – 103792
4. Grant amount (US dollars).
\$208,174.16
5. Proposed dates of grant.
1st May 2019 – 31st December 2020
6. Countries or territories where project will be undertaken.
Cross River State, Nigeria
7. Summary of the project.

The *Sustainable Actions for Conservation of Obudu Plateau (SACOP)* project will support 12 communities under Becheve Ward living on and around Obudu Plateau in Obanliku Local Government Areas (LGA) in Cross River State, Nigeria to carry out integrated sustainable forest management, biodiversity conservation and environmental friendly alternative livelihoods actions within 20 months. The project aims to build strong community driven commitments through increased awareness, capacity building and livelihood initiatives that would not result to negative environmental impacts and which can be adapted to improving living conditions of the inhabitants and at the same time restoring and protecting forest and its biodiversity in the selected KBA (Obudu Plateau, NGA9). The project will also support two communities regenerate degraded forest area and establish woodlots for sustainable firewood extraction. Lastly, the project would support traditional rulers and community leaders to take stringent collective actions and ownership to sustain the project through the use of traditional authority and building of synergy with relevant stakeholders (government authorities and NGOs/CBOs) working in the selected KBA.

8. Date of preparation of this document.
8th March, 2019
9. **Status of area to be impacted:** This section should describe the applicant's understanding of the site.

Obudu Plateau, covering an area of about 70,743 hectares, is a unique habitat (KBA, NGA9) widely recognized for its high level of endemic plant and animal species. Considering endemic and threatened bird species, Nigeria Conservation Foundation (NCF) in collaboration with Birdlife International and Royal Society for the Protection of Birds (RSPB), identified all the

areas covered with cloud forests in Nigeria as Important Bird Areas (IBAs). Ezealor (2002) revealed that some 52 of Nigeria's 550 most endangered plant and animal species are endemic to the Obudu Plateau. These plants and animals have their habitat in the Becheve Nature Reserve, the Rainforest of Okwangwo Division adjoining the Plateau and community forest patches/grassland. The Plateau, a montane-savannah transition habitat, plays important watershed protection functions, providing good quality water with less sediment and pollutants. It is the source of Afundu and Magbe Rivers supplying most part of the northern extension of the Okwangwo Division of the Cross River National Park (CRNP).

Villages on the Plateau and around the foothills are important contributors to increased pressure on the ecosystem and unsustainable environmental practices: massive fire wood extraction for domestic use and for income generation by youth and women; unsustainable agricultural activities like shifting cultivation for cultivation of cocoyam and banana; timber extraction; incessant rangeland bush burning by herdsmen and local hunters. Through this project, ARADIN will advocate for more sustainable forest use practices through promoting integrated traditional forest management and biodiversity conservation system, environmental friendly/sustainable agricultural livelihoods options suitable to the temperate climatic condition of the area and forest regeneration activities such as raising trees/woodlot nurseries and planting on degraded and fallow areas.

10. **Approach:**

- Participatory Stakeholders Engagement and Action: ARADIN will work with twelve (12) local communities: seven located on the Plateau (Okpazange, Okwamo, KejiUku, Apahjili, Kigol, Anape & Ranch Urban) and five located at the foot of the Plateau (Keyi, Old Ikvette, Ogbakoko, Emale and Oshonekpa) through a gender sensitive community-driven and participatory approach involving traditional leaders, community members and relevant stakeholders. The project will work in collaboration with relevant government institutions, private stakeholders and the NGOs on the Plateau, who already have established a form of system to avoid duplication, cover more grounds and ensure sustainability. We also plan to increase awareness and subsequently participation through the production and distribution of IEC materials to various stakeholders.
- Community Institutions Capacity Building: ARADIN also plans to achieve sustainability by engaging and training the existing local institutions such as Forest Management Committees (FMCs) and Community Town Council (CTC). ARADIN and its partner will facilitate the signing of a Memorandum of Agreement (MoA) with benefiting communities to spell out the role and responsibilities of the communities, the supervision and monitoring of the FMCs and CTC, the access and benefit sharing agreements, the integration in communities' bylaws, and the reinvestment into the activities for sustainability.
- Develop Strategy for Natural Resource Management: ARADIN will bring together community groups and relevant government authorities & NGOs/CBOs to dialogue and develop a Strategy for Natural Resource Management. This activity will incorporate conflict resolution and management plan in natural resource use to halt conflict between competing user groups, foster accountability, encourage biodiversity conservation and sustainable forest management.

- Sustainable Agricultural Livelihood Initiative: ARADIN's previous Livelihood Needs Assessment with youth's and women's groups and recent validation meeting at Obudu Plateau revealed that commercial investment in temperate vegetable production is viable and can adequately improve households income/living condition while reducing negative impacts of current practices on the environment.
- Forest Restoration, Management and Biodiversity Conservation: Given that the plateau is a grassland area and there is annual occurrence of fire outbreak, farmers benefiting from the project will also be trained on fire management practices including fire tracing techniques especially along their farms and the larger forest estates. In addition, because some forest areas are degraded, the project will support, via an extension to the reforestation program of Organization for Positive Sustainability Culture in Nigeria (OPSCN), the development of tree nurseries and subsequent replanting of 5 hectares of degraded areas in 4 targeted communities and establishment of a 3 hectares demonstration woodlot in one pilot community. The project will ensure that only ascertained degraded forest area will be selected for replanting and only native viable species will be promoted for usage, few examples are: Egaga(native name) - *Harungana madagascariensis*, Etesondo(native name) - *Carapa procera*, Agemba(native name) - *Ficus easperata*, Idacolana(native name) - *Uvaria cylindrical*.

OPSCN has technical expertise in nursery establishment and reforestation, the organization started working with local communities on the Obudu Plateau since 2015 to select viable native species, nurse and replant degraded sites; 20,000 tree seedlings nursery and replanted in 2 degraded community forest patches at Okpazange and Okwa-Amu covering 3.65hectares . In 2018, OPSCN provided technical support for Biodiversity Preservation Centre to establish a nursery for reforestation of degraded community forest at Esuk Mbat community in Akpabuyo. OPSCN experience on reforestation programme and particularly at the target KBA guarantees success on this component of the project. Also the forest management expert with proven years of experience in forest/land use, soil conservation and erosion management, watershed or catchment management planning and Environmental & Social Management Plan (ESMP) will in addition provide technical support to achieve the proposed reforestation objective and also assist in monitoring of the EMP and safety plan implementation.

11. **Anticipated impact:** this section will describe the impact and how this impact has been determined.

The Sustainable Actions for the Conservation of Obudu Plateau (SACOP) project is designed to drastically avoid or reduce to very minimal level activities that are likely to cause negative impacts that can trigger Environmental Operational Policies (OP) or Bank Policies (BP) as well as Health and Safety issues. In a similar previous project implemented, no environmental or social negative impacts were identified. However, few activities are anticipated to trigger policy issues:

Component 1. Community Organizing, and Stakeholders Engagement for Sustainable Management of KBA (Obudu Plateau, NGA9): No anticipated negative impact

Component 2. Community Institutions Capacity Building and Livelihood Initiative: Minimal anticipated negative impact

Activity	Anticipated Negative Impact	Likelihood of Occurrence
Activity 2.3.4 Cassava Value Addition – Installation of Semi mechanized cassava processing machine	Cassava generated waste during processing in the form of peels, chaffs and waste water are likely to constitute health hazards if not properly managed. Waste liquid/water drained away into the bush or communities can change aquatic ecology and affect plant, animal and human health. If the wastewater is used for irrigation, cyanide concentrations can have a negative impact on plant growth and development. Poor handling of waste water can cause health problems if it flows into surface water and neighbouring houses by providing breeding grounds for mosquitoes and contaminating soil, surface water and underground water.	Minimal
Activity 2.3.5A Temperate Vegetable Cultivation	Loss of natural habitat and exposure of land to soil erosion	Minima
	Use of synthetic fertilizers and pesticides cause health issues	Minimal

Component 3. Forest Management, Restoration and Biodiversity Conservation: Minimal anticipated negative impact

Activity	Anticipated Negative Impact	Likelihood of Occurrence
Activity: 3.3.6. Conduct fire tracing across forest patches/ranges in Obudu Plateau	Threat to health of workers; insect stings, snake bites, fire burnt and injuries	Minimal
Activity 3.4.2. Land	Loss of natural habitat and	Minimal

preparation, seeds collection, potting and establish nurseries	biodiversity, exposure of land to soil erosion during land preparation	
	Health risk due to use of synthetic fertilizer	Minimal
	Introduction of alien or invasive species	Minimal

Component 4: No anticipated negative impact

12. **Mitigation measures:** Describe measures that will be taken to mitigate negative impacts.

Mitigation and management of the aforementioned anticipated risks or negative impacts would be supported by the implementation of Health and Safety Plan designed for this project. Nevertheless, table below illustrate how the negative impacts would be adequately managed or mitigated.

Activity	Anticipated Negative Impact	Mitigation & Management
Activity 2.3.4 Cassava Value Addition – Installation of Semi mechanized cassava processing machine	Waste liquid/water drained away into the bush or communities can change aquatic ecology and affect plant, animal and human health. If the waste water is used for irrigation, cyanide concentrations can have a negative impact on plant growth and development. Poor handling of waste water can cause health problems if it flows into surface water and neighbouring houses by providing breeding grounds for mosquitoes and contaminating soil, surface water and underground water.	Farmers will be trained on integrated solid waste management. Cassava processing sites will be located at least 100 meters away from any water sources to avoid contamination. All excess solid waste will be disposed in a cesspit, where they decompose over time. Communities will be trained on proper disposal and use of decomposed waste as farm manure for crop production.
Activity 2.3.5A Temperate Vegetable Cultivation	Loss of natural habitat, biodiversity and exposure of land to soil erosion during land preparation	Farmers will be guided accordingly to ensure that only sites with low proximity and sensitivity to environmental impacts

will be selected. Also, farmers will be trained on sustainable farming practices such as reduced tillage, crop rotation, crop diversification and mulching

Use of synthetic fertilizers and pesticides would cause health issues

No synthetic fertilizers and pesticides will be purchased by the project. Only organic fertilizer (green and animal manure) will be used by farmers.

Farmers' capacity will be strengthened by the project to promote and support safe, effective and environmentally sound pest management practices, such as the cultural and physical methods of pest control which discourages use of chemicals but encourages environmental friendly methods which involves hand picking of pest; destroying crop residues which might harbour pests that could invade new crops; burying residues so deep that emergence from eggs or pupae is made impossible; plant spacing is also used to promote vigorous and strong plants, which in itself can be a good cultural control measure; destruction of volunteer plants which are very attractive to many insects and serve as the focal point for future

infestations; and management of alternate hosts, many insects reproduce on weeds or other alternate hosts and then attack the main crops. It is therefore usually desirable to destroy weeds around cultivated land to assist in the control of insects.

Activity: 3.3.6. Conduct fire tracing across forest patches/ranges in Obudu Plateau

Threat to health of farmers: insect stings, snake bites, fire burnt and injuries

Farmers will be trained by fire management experts on risk prevention, fire management and fire tracing techniques before carrying out fire tracing activities. First Aid Kits and Personal Protective Equipment (PPE) like safety boots, hand gloves and hats would be provided

Activity 3.4.2. Land preparation, seeds collection, potting and establish nurseries

Loss of natural habitat and biodiversity, exposure of land to soil erosion during land preparation

The project will ensure that only degraded area will be selected for this activity. Also soil collection and seed nursing will be done to ensure zero exposure to soil erosion. Synthetic fertilizer will not be used in the nursery only humus soil will be used for potting seedlings.

Health risk due to use of synthetic fertilizer

Introduction of invasive species

Only viable native species will be selected for planting

13. **Actions to ensure health and safety**: Describe actions that will be taken to ensure the health and safety of workers as well as the site. Include a description of waste management and/or disposal.

Actions to ensure health and safety as well as waste management and or disposal are described in details in the Health and Safety Plan.

14. **Monitoring and Evaluation**: This section aims to outline what steps the proponent will take to monitor and evaluate the impact of the proposed intervention.

A participatory monitoring and evaluation approach with gender, vulnerability, health and safety considerations will be embraced throughout project implementation. All stakeholders will be integral part of this process to collectively implement activities, assess project outcomes, identify problems, generate recommendations and implement change. This will include women and other marginalized groups in the community.

The project will engage three Community Liaison Assistants (CLAs), the CLAs will live within the targeted communities to assist in mobilization for community-based meetings and trainings, information dissemination, local dialect interpretation, data collection for reporting, routine monitoring of field activities and report any environmental and social safeguards issues. These Community Liaisons Assistants will report directly to the M&E Officer during monthly monitoring visits.

The Project Coordinator will develop monthly action plan and monthly progress reports with support from Project Officers, M&E Officer and Liaison Officers as well as coordinate field activities and conduct routine complementary monitoring visits to project locations to assess progress, ensure attainment of project targets and compliance with safeguards procedure.

Every six month there will be a community-based project review meeting with beneficiaries and community leaders to assess progress, identify gaps or challenges, participatory suggest solutions and take proactive actions or measures towards achieving project set objectives and compliance to safeguards procedures.

15. **Permission of the landowner**: Please verify permission of the landowner to undertake actions on the site, and verify that you have the required permits to undertake this work.

ARARDIN considers community consent very paramount prior to project implementation. Communities on and around the Plateau were first consulted in October 2017 during the preparatory and concept development phase of the “*Sustainable Actions for Conservation of Obudu Plateau (SACOP) Project, in Nigeria*”. Communities collectively gave their consent and permission for project implementation with willingness to allocate lands for livelihood and forest restoration activities. Their consent and endorsement were officially made through the Clan Head of Becheve wards in an official hand written and signed letter on the 25th of October 2017. The proponent organization has also developed a cordial relationship and trust with communities in Obudu Plateau since 1996 and therefore, there would be no issue of land disputes.

For the tree nursery, OPSCN will facilitate the signing of a Memorandum of Agreement (MoA) with the community to spell out the role of the communities including the provision of land in-kind for the tree nursery. The signature of MoA is a common practice under the ongoing reforestation program.

16. **Consultation**: This section aims to outline the range of informed consultations that the grantee has had both with experts to optimize the potential for success, and with stakeholders, particularly local communities, who are potentially affected by the proposed actions. Include dates of consultations.

This project was designed with absolute consideration of Free, Prior and Informed Consent (FPIC) of the people and applies to all planned activities that take place in or impact the land, resources or livelihoods of the people.

ARADIN had previously consulted community stakeholders to seek their inputs, get their consent and approval in October 2017. Communities consent and endorsement was officially made through the Clan Head of Becheve Ward in an official hand written and signed letter on the 25th of October 2017. Another meeting was held with village heads, women and youth leaders on the 29th January 2019 in Obudu Plateau to reaffirm their consent and preparedness for the CEPF project.

The Management of Obudu Ranch Resort also pledged their support after consultation through an official letter written on the 28th of October, 2017. A follow up visit was done recently to ascertain previous commitment.

We equally had consultations with:

- the Stakeholders' Engagement Specialist Cross River REDD + on the 13th and 17th October 2017 and another one recently on the 23rd January 2019;
- the Ranch Youth Movement in January 2019;
- Nigeria Conservation Foundation (NCF) on the 22nd January, 2019;
- Becheve Nature Reserve (BNR) on the 29th January 2019;
- Cross River National Park in September, 2018;
- Cross River State Ministry of Environment and Ministry of Climate Change & Forestry on 21st January and 29th January 2019 respectively;
- Organization for Positive Sustainability Culture in Nigeria (severally, October 2017 – April 2019);
- and Obanliku Local Government Area on 28th January, 2019.

17. **Disclosure**: *CEPF requires that safeguard documents are disclosed to affected local communities and stakeholders prior to project implementation. Please describe efforts to disclose this impact assessment and environmental management plan and provide dates.*

The project will disclose and explain all environmental and social safeguards documents during the project inception meetings most likely in May 2019; also will create opportunity for communities to freely present any observed gap or further environmental and social safeguards issues. Concerns raised during disclosure will be adequately integrated into the safeguards plan.

During disclosure we will ensure that all categories of community members are represented cutting across women, youth, vulnerable, Chiefs and Traditional Rulers Council. The safeguard

documents will be explained in Nigeria Pidgin English and local dialect by Community Liaison Assistants to achieve effective communication and enhance understanding.

Finally, a copy of the plan will be given to Clan Head, Community Chiefs, Women Leaders and Youth Leaders respectively.

18. Grievance mechanism: *All projects that trigger a safeguard must provide local communities and other relevant stakeholders with a means to raise a grievance with the grantee, the relevant Regional Implementation Team, the CEPF Secretariat or the World Bank.*

An individual or group of individuals' dissatisfaction is a possible source of problem, whether it is expressed or not. Concealed dissatisfaction grows and creates reactions that may be completely out of proportion to the original concerns. Therefore, it is important that dissatisfaction be given attention before it escalates. A complaint, which is merely an indication of a client dissatisfaction that has not been submitted in writing or spoken out, might degenerate. Grievance is a complaint that has been put in writing and thus made formal or known. Project management and community leaders should be concerned with both complaints and grievances, because both may be important indicators of potential problems within the project sites. Without grievance responsibility and a grievance procedure, management or leaders may be unable to respond to concerns/complaints and grievance because managers/leaders are unaware of them. Therefore, a formal grievance procedure is a valuable communication tool for the organization to ensure prompt redress of complaints/grievance. It is the responsibility of project managers and community leaders to handle grievances; they must accept the grievance as a possible constraint on some of their decisions or actions and recognize that a grievance is a behavioral expression of some underlying problem that requires urgent attention.

The grantee organization will explain in details the grievance mechanism and redress procedure during project inception meetings, and will provide complaints/grievance log books and boxes in each of the targeted communities. This is to enable aggrieved persons to register or submit their complaints. Complaints/opinion boxes will be constructed and kept in the community for submission of complaints by aggrieved persons and these boxes will have telephone numbers and email addresses of the grantee organization written on it to enable direct access to the office. Boxes will be locked, and the Community Liaison Assistants will be responsible for weekly opening, collection and forwarding of any registered grievance. Also any complaint registered in the log book will equally be forwarded to grantee office. Any grievance submitted will be addressed promptly at the community level, a grievance redress meeting will be organized and held with the aggrieved person(s) and representatives of community leadership. The meeting will create opportunity for dialogue on the issues responsible for the grievance as well as for settlement of the grievance.

Reports of the grievance redress process and resolution will be shared with CEPF Regional Implementation Team (RIT) and the Grant Director within 15 days. If the claimant is not satisfied following the response, he/she may submit the grievance directly to the CEPF Executive Director at cepfexecutive@conservation.org or by surface mail

Below are contacts for communities to raise grievance:

Email and telephone contact information for your organization

Email: aradinng@gmail.com

Tel: +234 (0)813 223 6282,

Email and telephone contact information for the CEPF Regional Implementation Team.

Email: cepf-gfwa-rit@birdlife.org,

Tel: +233 (0)302 255 015/ +233 (0) 261 737 101

CEPF Executive Director:

Email: cepfexecutive@conservation.org