

UNIDO**ONUDI**

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
ORGANISATION DES NATIONS UNIES POUR LE DEVELOPPEMENT INDUSTRIEL

Progress Report
(01 July 2018 – 30 June 2019)

Name of country Nigeria

Title¹	Scaling-up small hydro power (SHP) projects in Nigeria
GEF ID:	5375
UNIDO SAP ID:	120119
GEF Replenishment Cycle:	GEF-5
GEF Focal Area:	Climate Change Mitigation (CCM)
Integrated Approach Pilot (IAP) Programs²:	(select)
GEF Project Size:	Full-Sized Project (FSP)
UNIDO PTC Department:	Department of Energy (ENE)
UNIDO Project Manager:	Liu Heng

¹ As per approved CEO Endorsement document

² Only for **GEF-6 projects**, if applicable

I. Brief description of the project

I.1 Objective: The project focuses on creating a favourable environment for small hydro power (SHP) technology in Nigeria. The main objective is to promote investments in small hydro power (SHP) technology and strengthen local manufacturing of SHP turbines in the country.

Project Core Indicators		Expected at Endorsement/Approval stage
1	Incremental Co2 emission reduction	Cumulative capacity of 3.1MW of SHP established during the project (leading to an overall direct emission reduction of around 349,424t Co2)
2	Number of locally fabricated micro/mini hydropower equipment and accessories	Fabricate SHP equipment and accessories with capacity of 300 kw
3	Number of private sector/financial institutions developing SHP projects	At least 2 private investors developing the 3.1 MW cumulative SHP plants.
4	Number of micro/mini/small hydropower based power generation plants in operation	At least 2 SHP plants with cumulative capacity of 3.1 MW in operation.

[The answer to the question should include: (i) the project's objective consistent with the one introduced in the CEO Endorsement/Approval document and (ii) core indicators]

I.2 Baseline: The electricity supply is presently unreliable in the country with frequent shutdowns, load shedding and grid failures. The estimated electricity demand in the country is about 20,000MW; on the supply side, the total installed generating capacity is approximately 12,000MW, but only about 4,500MW is effectively operating. This has compelled many consumers (both industrial and households) to rely on inefficient diesel/petrol generators to meet their energy needs. As a result, the Nigerian economy has become fossil-fuel dependent leading to high CO2 emissions from the energy sector with serious environmental consequences and increased vulnerability to climate change.

Among various renewable energy (RE) options, small hydropower (SHP) holds great potential for Nigeria in addressing climate change and providing access to energy for the whole population. Recent government estimates suggest a potential of approximately 14,750 MW of hydropower, SHP alone is estimated to be around 3,500 MW.

The development of the hydro power sector is hampered by a number of barriers, such as:

a) lack of capacity in design, fabrication, installation and operation of SHP systems; b) lack of skills and know-how in developing SHP projects (planning, development and implementation); c) lack of information on potential sites (hydrological and geological data, etc.); d) lack of awareness, incentives and coordination among various stakeholders; and e) lack of a conducive environment for private sector participation in SHP development.

Target Results: The main outcomes and deliverables expected under the project are as follows:

- (i) Improve human and institutional capacity for continuous development of SHP projects;
- (ii) Upgrade the capacity for local fabrication of SHP turbines and control systems up to 300 kW;
- (iii) Establish standards and quality assurance for the fabricated equipment (iv) Demonstrate SHP projects on a private-public partnership (PPP) basis for a cumulative 3.1 MW installed capacity leading to an overall direct emission reduction of around 349,424 tCO₂e

[Project manager is encouraged to use the baseline description from the earlier PIRs, if applicable, unless changes to the project's baseline have occurred during the reporting period.

Example:

There is a significant gap with current international green hydropower development. Because the relevant incentive measures and expertise are lacking, the SHP plant owners are unwilling to take initial measures to upgrade to green hydropower construction. Without GEF intervention this situation is unlikely to change. GEF funding is needed to cover the incremental costs related to the greening of the SHPs to ensure additional environmental and social benefits such as delivering water demand downstream, flood control, irrigation, water quality, and to increase the financial viability of the plants. Furthermore, the knowledge base on environmentally sound SHP retrofitting needs to be built in China.]

II. Targeted results and progress to-date

II.1 Describe in tabular form the project's progress made in achieving its outputs against key performance indicator's targets in the project's **M&E Plan/Log-Frame at the time of CEO Endorsement/Approval**. Please expand the table as needed.

Project Strategy	KPIs/Indicators	Target level	Progress to-date
Component 1 – Component 1 – Human and institutional capacity building			
Outcome 1: Improved awareness, knowledge and capacity on SHP technology			
Output 1.1: Capacity of SHP technology centre in Nigeria strengthened	Trained personnel (men and women) manning the SHP technology Centre for more effective technical support on SHP project development and implementation in Nigeria.	Increase in number of competent personnel (men and women) in SHP technology at the end of the project	Engineers and science based personnel working in hydro power related sector to be trained on the use of acquired SHP equipment to carry out technical studies. Aide memoire has been prepared for the training.

Output 1.2: Capacity building of at least 100 policy makers	Number of trained personnel (men and women) from relevant Government institutions responsible for policy making.	Train at least 100 policy makers (men and women) on SHP development.	Aide memoire developed
Output 1.3: Capacity building of at least 50 project developers, relevant RE institutions including financial institutions	Number of personnel (men and women) trained from project development and financial sector.	At least 50 personnel (men and women) trained.	Developed aide memoire for capacity building
Component 2 – Upgrading the capacity for local fabrication of SHP turbines and control systems in Nigeria			
Outcome 2: Capabilities for locally fabricated SHP turbines and control equipment up to 300 kW capacity are available in the country			
Output 2.1: Enhanced local fabrication capacity for micro hydro turbines and control equipment from 125 to 300 kW	Capacity of fabricated turbine increased from 125 to 300 kW.	Increased capacity of the locally fabricated micro hydro turbine from 125 to 300 kW	Identified local technicians/entrepreneurs for training on electro-mechanical equipment fabrication
Output 2.2: National standards developed for SHP electromechanical equipment in Nigeria	Standard Organization Certificate (SON) Certificate	Standards accredited by SON for SHP equipment fabricated should be in place at the end of the project	Facilitated peer review by SON and other project stakeholders of technical standards for SHP development within ISO system.
Component 3 – Promoting investments in SHP sector			
Outcome 3: Conducive investment environment for scaling up of SHP projects available			
Output 3.1: Incentive systems designed for SHP projects	Increase in private investors developing SHP plants	Cumulative 3.1 MW SHP plants developed by private investors.	
Output 3.2: Detailed feasibility studies prepared for the replication SHP plants	Feasibility study and business plans for identified potential sites developed.	Potential sites should have business plan and feasibility report available for implementation at the end of the project.	Engagement with private investors who are interested in SHP development.
Output 3.3: SHP plant of	SHP plants	Cumulative of 3.1 MW	<ul style="list-style-type: none"> Construction of a site with complete

3.1 MW cumulative capacity established	with cumulative capacity of 3.1MW commissioned.	SHP plants to be established	plant design and verification (assessment of the design) has commenced.
Output 3.4: Promotion of replication projects	SHP plants with cumulative capacity of 2.4 MW commissioned.	SHP plant with cumulative capacity of 2.4 MW developed during the project implementation.	<ul style="list-style-type: none"> Second demo site also ready for construction.

III. Project Risk Management

III.1 Please indicate the overall risk management: (i) as identified in the CEO Endorsement document, and (ii) progress to-date.

[Describe in tabular form the priority activities undertaken during the reporting period in line with the project document. **Note** that risks, risk level and mitigations measures should be consistent with the ones identified in the CEO Endorsement/Approval document.]

	(i) Risks	(i) Risk level	(i) Mitigation measures	(ii) Progress to-date	New defined risk ³
1	There is no indigenous technology for SHP in Nigeria and the country currently depends upon the importation of components and peripherals from other countries.	Low risk (L)	UNIDO has transferred technology for fabrication of cross-flow turbines for MHP up to 125 kW. This has reduced the level of dependency on other countries to a certain extent. The training for local fabrication of SHP turbines and controls is planned as a part of the project. With UNIDO's prior experience, the technology can be transferred very effectively to the local manufacturers. Human and institutional capacity	Local engineering firms with equipped workshops have been identified for the training on turbine fabrication with capacity up to 300 kW.	<input type="checkbox"/>

³ New risk added in reporting period. Check only if applicable.

			will be built effectively. Hence, the acquired knowledge and skills will be used to mitigate against the technical risks		
2	No off-takers for the generated electricity.	Low risk (L)	The electricity generated will be supplied to the local communities and industries nearby the power plant. The demand and supply gap is wide and hence will not be any risk for electricity off-take.	Load survey has been conducted to identify the energy demand of the surrounding communities of the SHP site during the feasibility study.	<input type="checkbox"/>
3	Low market for SHP turbines and components.	Modest risk (M)	The replication potential for SHP is high (82 MW). Enabling environment for investment will be created at the end of the project. Therefore the market for SHP turbines and components will be mitigated.	Seminar on SHP development has been organized to create awareness on the potential of SHP and the locally fabricated turbines.	<input type="checkbox"/>
4	The general perception is that investments in SHP based plants do not provide enough (high) returns and hence investors will not be willing to invest in SHP replication projects.	Modest risk (M)	The project will create awareness about the benefits of SHP projects among private investors. It will also facilitate fund / financing scheme which would encourage and sustain SHP development. These activities will eliminate the perceptible risks of the project. The successful implementation of the proposed projects will enhance the stakeholders' participation, especially, the financial institutions. This will ensure successful replication of the project.	Proposed collaboration with Federal Ministry of Water Resources to provide necessary funds for the integration of SHP schemes to the existing irrigation dams in the country.	<input type="checkbox"/>

5	No specific policies on SHP to facilitate enhanced scaling up	Low risk (L)	The project proposes FiT specifically for SHP which, when in place, will significantly improve the development of SHP projects	Federal Ministry of Power in collaboration with the Nigeria Electricity Regulatory Commission have developed FiT for renewable energy technologies including SHP under the current RE Master Plan.	<input type="checkbox"/>
6	Change of RE policies due to change of Government.	Modest risk (M)	Electricity access is the key parameter essential for Nigerian economic growth. Even when the government changes, there is lesser possibility that the existing RE policies will be discontinued, as most of these policies were implemented by government ministries.	The current RE Master Plan is aligned with the government's EGRP	<input type="checkbox"/>
7	Co-financing not being committed by co-financiers.	Modest risk (M)	Consultations with the stakeholders to ensure their financing of the project.	Funds for the development of some the identified sites have been allocated.	<input type="checkbox"/>
8	Drought	Low risk (L)	Based on the feasibility study report, the demonstration sites are not vulnerable to drought.	No new progress to date. Risk mitigated as planned.	<input type="checkbox"/>
9	Risk of flooding	Low risk (L)	Nigeria is vulnerable to low flooding only. Proper spillways and diversion channels will be constructed to overcome this risk in flood prone sites.	No new progress to date. Risk mitigated as planned.	<input type="checkbox"/>
10		(select)			<input type="checkbox"/>

III.2 If the project received a sub-optimal risk rating (H, S) in the previous reporting period, please state the actions taken since then to mitigate the relevant risks.

N/A

IV Environmental and Social Safeguards (ESS) & Stakeholder Engagement

IV.1 As part of the requirements for **projects from GEF-6 onwards**, and based on the screening as per the UNIDO Environmental and Social Safeguards Policies and Procedures (ESSPP), which category is the project?

☐ Category A project

☐ Category B project

☐ Category C project

(By selecting Category C, I confirm that the E&S risks of the project have not been escalated to Category A or B).

[Notes on new risks:

- If **new risks** have been identified during implementation due to changes in, i.e. project design or context, these should also be listed in (ii) below.
- If these new/additional risks are related to Operational Safeguards # 2, 3, 5, 6, or 8, please consult with UNIDO GEF Coordination to discuss next steps.
- Please refer to the UNIDO Environmental and Social Safeguards Policies and Procedures (ESSPP) on how to report on E&S issues.]

	E & S risk	Mitigation measures undertaken during the reporting period	Monitoring methods and procedures used in the reporting period
(i) Risks identified in ESMP at time of CEO Endorsement	NA	NA	NA
(ii) New risks identified during project implementation (if not applicable, please insert 'NA' in each box)	NA	NA	NA

IV.2 Please provide any feedback submitted by co-financiers, and other Partners/Stakeholders of the project (e.g. private sector, CSOs, NGOs, etc.).

Feedback obtained via regular interactions with stakeholders are appropriately incorporated in meeting reports.

IV.3 Please provide any **relevant stakeholder consultation documents**:

[Examples: *Project Steering Committee minutes, Aide Memoire, Meeting Agenda, etc.*
All attachments are to be named as per the GEF required format, i.e.: “**GEFID_Document Title**”]

5375_Project_Steering_Committee_Meeting_Report.pdf
5375_Presentation_at_the_Project_Steering_Committee_Meeting.pdf

V Knowledge Management

V.1 Please provide any **relevant knowledge management mechanisms / tools** that the project has generated:

[Examples: *online information exchange/sharing platforms, relevant technical reports, UNIDO Indicator Tracking Tools, GEF Tracking Tools/Core Indicators, project websites, videos, publications, flyers, etc.*
All attachments are to be named as per the GEF required format, i.e.: “**GEFID_Document Title**”]

VI Financial report

VI.1 **Financial** implementation of the project:

[Provide a description of the main expenditures **as of 30 June 2019** (by major outputs and budget line, etc.) during the reporting - (attach copy of the latest FPCS report for more detailed information). Also describe the current status of funds mobilization activities and their implications for programme implementation.]




PROJECT DELIVERY REPORT

Project:	120119 - SCALING UP OF SMALL HYDRO POWER (SHP) FOR AUGMENTING RURAL ELECTRICITY ACCESS - NIGERIA	Project Manager:	Heng Liu	Project Validity:	24.03.2015 - 30.06.2020
Reporting Period:	24.01.2015 - 30.06.2019	Project Theme:	Energy and Environment	Country:	Nigeria
Sponsor Nr.	400150	Grant	2000003018	Grant Description	SCALING UP SMALL HYD
Sponsor	Global Environment Facility	Fund	GF	Currency	USD
		Grant Status	Authority to implement	Grant Validity	24.03.2015 - 30.06.2020

	Description	Released Budget Current Year (a)	Obligations Current Year (b)	Disbursements Current Year (c)	Expenditures Current Year (d=b+c)	Total Agreement Budget (e)	Released Budget (f)	Obligations + Disbursements (g)	Funds Available* (h=f-g)	Support Cost (i)	Total Expenditures (j=g+i)
2000003018											
120119-1-01-01	OP 1.1: Awareness and capacity improved	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
1100	Staff & Intern Consultants	15,714.09	0.00	0.00	0.00	71,479.73	71,479.73	55,765.64	15,714.09	0.00	55,765.64
1500	Local travel	10,786.46	(637.62)	1,065.40	427.78	19,745.80	19,745.80	9,387.12	10,358.68	0.00	9,387.12
1700	Nat.Consult./Staff	7,551.49	0.00	0.00	0.00	45,256.89	45,256.89	37,705.40	7,551.49	0.00	37,705.40
2100	Contractual Services	162.33	0.00	0.00	0.00	2,105.25	2,105.25	1,942.92	162.33	0.00	1,942.92
3000	Train/Fellowship/Study	53,126.57	0.00	0.00	0.00	55,000.00	55,000.00	1,873.43	53,126.57	0.00	1,873.43
3500	International Meetings	0.00	0.00	0.00	0.00	2,412.33	2,412.33	2,412.33	0.00	0.00	2,412.33
4300	Premises	(589.59)	0.00	577.44	577.44	0.00	0.00	1,167.03	(1,167.03)	0.00	1,167.03
5100	Other Direct Costs	(157.20)	1,387.97	4,541.16	5,929.13	4,000.00	4,000.00	10,086.33	(6,086.33)	0.00	10,086.33
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11,432.18	11,432.18
120119-1-01-01	Total	86,594.15	750.35	6,184.00	6,934.35	200,000.00	200,000.00	120,340.20	79,659.80	11,432.18	131,772.38
120119-1-02-01	OP 2.1: Local fabrication of MH turbines	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
1100	Staff & Intern Consultants	38,330.39	7,268.20	7,898.16	15,166.36	48,000.00	48,000.00	24,835.97	23,164.03	0.00	24,835.97
1500	Local travel	19,060.35	6,432.69	0.00	6,432.69	32,000.00	32,000.00	19,372.34	12,627.66	0.00	19,372.34
1700	Nat.Consult./Staff	8,000.00	0.00	0.00	0.00	8,000.00	8,000.00	0.00	8,000.00	0.00	0.00
3000	Train/Fellowship/Study	11,417.50	0.00	(6.19)	(6.19)	12,000.00	12,000.00	576.31	11,423.69	0.00	576.31
3500	International Meetings	(2,006.38)	(401.93)	200.96	(200.97)	5,000.00	5,000.00	6,805.41	(1,805.41)	0.00	6,805.41
4500	Equipment	85,336.32	0.00	0.00	0.00	194,000.00	194,000.00	108,663.68	85,336.32	0.00	108,663.68
5100	Other Direct Costs	772.84	0.00	0.00	0.00	1,000.00	1,000.00	227.16	772.84	0.00	227.16
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15,245.70	15,245.70
120119-1-02-01	Total	160,911.02	13,298.96	8,092.93	21,391.89	300,000.00	300,000.00	160,480.87	139,519.13	15,245.70	175,726.57


* Does not include Unapproved Obligations


		PROJECT DELIVERY REPORT				Project:	120119 - SCALING UP OF SMALL HYDRO POWER (SHP) FOR AUGMENTING RURAL ELECTRICITY ACCESS - NIGERIA		Project Manager:	Heng Liu	Project Validity: Status:	24.03.2015 - 30.06.2020 Implement	
Reporting Period:	24.01.2015 - 30.06.2019					Project Theme:	Energy and Environment		Country:	Nigeria	Region	Africa	
Sponsor Nr.	Sponsor					Grant	Grant Description		Fund	Currency	Grant Status		Grant Validity
400150	Global Environment Facility					2000003018	SCALING UP SMALL HYD		GF	USD	Authority to implement		24.03.2015 - 30.06.2020
	Description	Released Budget Current Year (a)	Obligations Current Year (b)	Disbursements Current Year (c)	Expenditures Current Year (d=b+c)	Total Agreement Budget (e)	Released Budget (f)	Obligations + Disbursements (g)	Funds Available* (h=f-g)	Support Cost (i)	Total Expenditures (j=g+i)		
120119-1-03-01	OP 3.1: Incentive systems designed	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD		
1100	Staff & Intern Consultants	124,963.48	0.00	0.00	0.00	198,000.00	198,000.00	18,036.52	179,963.48	0.00	18,036.52		
1500	Local travel	43,188.50	0.00	0.00	0.00	70,000.00	70,000.00	9,811.50	60,188.50	0.00	9,811.50		
1700	Nat.Consult./Staff	(4,031.71)	2,645.60	21,460.82	24,106.42	72,000.00	72,000.00	100,138.13	(28,138.13)	0.00	100,138.13		
2100	Contractual Services	2,708.13	0.00	0.00	0.00	7,000.00	7,000.00	4,291.87	2,708.13	0.00	4,291.87		
3000	Train/Fellowship/Study	44,000.00	0.00	0.00	0.00	64,000.00	64,000.00	0.00	64,000.00	0.00	0.00		
3500	International Meetings	10,000.00	0.00	0.00	0.00	10,000.00	10,000.00	0.00	10,000.00	0.00	0.00		
4300	Premises	426.95	0.00	0.00	0.00	1,000.00	1,000.00	573.05	426.95	0.00	573.05		
4500	Equipment	725,100.00	0.00	0.00	0.00	1,531,600.00	1,531,600.00	336,500.00	1,195,100.00	0.00	336,500.00		
5100	Other Direct Costs	1,819.96	0.00	(2.98)	(2.98)	28,000.00	28,000.00	26,177.06	1,822.94	0.00	26,177.06		
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47,075.27	47,075.27		
120119-1-03-01	Total	948,175.31	2,645.60	21,457.84	24,103.44	1,981,600.00	1,981,600.00	495,528.13	1,486,071.87	47,075.27	542,603.40		
120119-1-05-01	OP 4.1: Evaluation and Management	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD		
1100	Staff & Intern Consultants	42,000.00	2,574.00	7,799.22	10,373.22	42,000.00	42,000.00	10,373.22	31,626.78	0.00	10,373.22		
1500	Local travel	8,000.00	0.00	5,115.25	5,115.25	8,000.00	8,000.00	5,115.25	2,884.75	0.00	5,115.25		
5100	Other Direct Costs	20,000.00	0.00	0.00	0.00	30,000.00	30,000.00	0.00	30,000.00	0.00	0.00		
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,471.40	1,471.40		
120119-1-05-01	Total	70,000.00	2,574.00	12,914.47	15,488.47	80,000.00	80,000.00	15,488.47	64,511.53	1,471.40	16,959.87		
120119-1-51-01	OP 5.1: Project Management	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD		
1100	Staff & Intern Consultants	(14.48)	0.00	0.00	0.00	0.00	0.00	14.48	(14.48)	0.00	14.48		
1500	Local travel	7,917.36	0.00	204.69	204.69	12,000.00	12,000.00	1,287.33	10,712.67	0.00	1,287.33		
1700	Nat.Consult./Staff	32,265.01	8,130.62	13,639.77	21,770.39	115,080.00	115,080.00	54,585.38	60,494.62	0.00	54,585.38		
5100	Other Direct Costs	618.65	0.00	35.13	35.13	1,000.00	1,000.00	416.48	583.52	0.00	416.48		
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,348.96	5,348.96		
120119-1-51-01	Total	40,786.54	8,130.62	13,879.59	22,010.21	128,080.00	128,080.00	56,303.67	71,776.33	5,348.96	61,652.63		
2000003018	Total	1,306,467.02	27,399.53	62,528.83	89,928.36	2,689,680.00	2,689,680.00	848,141.34	1,841,538.66	80,573.51	928,714.85		
120119	USD Total	1,306,467.02	27,399.53	62,528.83	89,928.36	2,689,680.00	2,689,680.00	848,141.34	1,841,538.66	80,573.51	928,714.85		

* Does not include Unapproved Obligations

Report Prepared on: 01.08.2019

Page 2 of 4

 PROJECT DELIVERY REPORT		Project:	120119 - SCALING UP OF SMALL HYDRO POWER (SHP) FOR AUGMENTING RURAL ELECTRICITY ACCESS - NIGERIA	Project Manager:	Heng Liu	Project Validity: Status:	24.03.2015 - 30.06.2020 Implement
Reporting Period:	24.01.2015 - 30.06.2019	Project Theme:	Energy and Environment	Country:	Nigeria	Region	Africa
Sponsor Nr.	Sponsor	Grant	Grant Description	Fund	Currency	Grant Status	Grant Validity
400150	Global Environment Facility	2000003018	SCALING UP SMALL HYD	GF	USD	Authority to implement	24.03.2015 - 30.06.2020

 PROJECT DELIVERY REPORT		Project:	# -	Project Manager:	Not Assigned	Project Validity: Status:	- Not assigned
Reporting Period:	24.01.2015 - 30.06.2019	Project Theme:	Not assigned	Country:	n/a	Region	Not assigned
Sponsor Nr.	Sponsor	Grant	Grant Description	Fund	Currency	Grant Status	Grant Validity
400150	Global Environment Facility	2000003018	SCALING UP SMALL HYD	GF	USD	Authority to implement	24.03.2015 - 30.06.2020

	Description	Released Budget Current Year (a)	Obligations Current Year (b)	Disbursements Current Year (c)	Expenditures Current Year (d=b+c)	Total Agreement Budget (e)	Released Budget (f)	Obligations + Disbursements (g)	Funds Available* (h=f-g)	Support Cost (i)	Total Expenditures (j=g+i)
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* Does not include Unapproved Obligations

VII Work Plan and Budget

VII.1 Please provide **an updated project work plan and budget** for the remaining duration of the project, as per last approved project extension. Please expand/modify the table as needed.

Outputs by Project Component	Year 1				Year 2				Year 3				GEF Grant Budget Available (US\$)	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Component 1 – Human and institutional capacity building														
Outcome 1: Improved awareness, knowledge and capacity on SHP technology														
Output 1.1: <i>Awareness and Capacity Improved</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	79,659.80	
Output 1.2:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Component 2 – Upgrading the capacity for local fabrication of SHP turbines and control systems in Nigeria														
Outcome 2: Capabilities for locally fabricated SHP turbines and control equipment up to 300kW capacity are available in the country														
Output 2.1:Local fabrication of MH turbines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	139,159.13	
Output 2.2:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Component 3 – Promoting investments in SHP sector														
Outcome 3.1: Conducive investment environment for scaling up of SHP projects available														
Outcome 3.2: Technical and economic viability of SHP technology established														
Output 3.1:Incentive system designed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,486,071.87	
Output 3.2:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Component 4 – Monitoring and Evaluation														
Outcome 4.1: Effectiveness of the outputs assessed, corrective actions taken and experience documented.														
Outcome 4.2: Acceptance of technical and economic viability of SHP plants														
Output 4.1:Evaluation and Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	64,511.53	

VIII Synergies

VIII.1 Synergies achieved:

[Describe potential synergies arising out of closer integration of the service modules within the project or cooperation with (external) multilateral and bilateral projects/programmes.]