



**REQUISITION FOR BIDS:  
ON - SITE DEMONSTRATION TRAINING ON  
CONSTRUCTION OF BIO-DIGESTER ADAPTED LATRINE  
(BAL), BORNO STATE**

**Country: Nigeria**

**Locations:** Maiduguri, Ngala, Monguno IDP settlements/camps

**Start date:** 24 February 2025

**Duration of the field work:** 30 days  
(24 February to 26 March 2025)

**Works Report:** 9<sup>th</sup> March 2025.

**Under the responsibility of:** SI WASH Program Manager NE

**Monitored by Country Office:** *WASH Coordinator*

**LOCATIONS OF INTERVENTION**

- MMC/Jere in Maiduguri Metropolitan Municipal Council -MMC
- Monguno Town in Monguno LGA

NOTE: Specific sites to be identified and assigned by SI

# ON-SITE DEMONSTRATION TRAINING ON CONSTRUCTION OF BIO-DIGESTER ADAPTED LATRINE (BAL), BORNO STATE

Thursday 23 January 2025

## 1. INVITATION TO BID

Solidarites International (SI) hereby invites offers from qualified businesses (Small and Medium Enterprises -SMEs or Individuals) with valid registration in Nigeria for on-site demonstration training on construction of Bio-Digester Adapted Latrine, BAL, commonly known as Biodigester. The facilities shall be installed in public institutions serving IDPs and affected hosts in and around Maiduguri and Jere Metropolitan Municipal Council (MMC) and Monguno Town. This activity is funded by European Civil Protection and Humanitarian Aid Affairs- ECHO during 2024/2025.

The activity entails installation of up to 12 biodigester adapted latrines, connection to existing waterborne sanitary facilities in institutions, and commissioning their operation. The Trainer shall provide all materials, equipment and labour (with the trainees contributing to labour) and training manuals related to the works. The SME/Individual business is expected to leverage on this opportunity to promote and market the BAL technology in Maiduguri and the Northeast generally, where it remains largely unexploited, despite household over-reliance on conventional off-grid excreta disposal methods: pit latrine, cess pit and septic tanks. This helps to trigger demand and entrench the technology and skills in the local community, while generating further business opportunities for the SME/Vendor.

Works are expected to commence in February 2025 and finish in March 2025. The successful bidder shall submit via email a proposal to SI comprising of a technical package (complete drawings of two sets of biodigesters of different volumes, complete with soakpits, description of construction methodology, activity calendar and training plan); along with financial package detailing costing for the two sets of biodigesters, logistics costs and cost of on - job training per trainee aggregated to 12 trainees). **The complete package should reach SI by 11.00 midnight Monday 3rd February 2025.**

### 1.1. Summary of Outputs

**1.1.1. Install up to 12 biodigester adapted latrine (BAL) units** at public institutions (Schools and Health facilities) within Maiduguri city and/or suburbs around the city with existing waterborne sanitary facilities and facing challenges of Fecal Sludge Management (FSM). Walling and cover slabs of the BAL units shall be -easy to -install and unassembled light precast concrete panels.

- i. Construct and commission 3no. small scale Biodigester Adapted Latrines (BAL) termed type BAL 20, (at least 2.0 m<sup>3</sup> effective space rectangular anaerobic chamber from precast

- lightweight concrete panels to serve up to 20 individuals) with soak pit, and connect to existing waterborne sanitary facilities.
- ii. Construct and commission 3no. small scale Biodigester Adapted Latrines (BAL) termed type BAL 20, (at least 2.0 m<sup>3</sup> effective space rectangular anaerobic chamber from in situ concrete slabs and sand and cement (sanscrete) blockwork walling to serve up to 20 individuals) with soak pit, and connect to existing waterborne sanitary facilities.
  - iii. Construct and commission 3no. small scale Biodigester Adapted Latrines (BAL) termed type BAL 140, (at least 5.0 m<sup>3</sup> effective space rectangular anaerobic chamber from precast lightweight concrete panels to serve up to 140 individuals) with soak pit, and connect to existing waterborne sanitary facilities.
  - iv. Construct and commission 3no. small scale Biodigester Adapted Latrines (BAL) termed type BAL 140, (at least 5.0 m<sup>3</sup> effective space rectangular anaerobic chamber from in situ concrete slabs and sand and cement (sanscrete) blockwork walling to serve up to 140 individuals) with soak pit and connect to existing waterborne sanitary facilities.
  - v. Conduct on site practical/demonstration skills training of 12 NGO and Govt sanitation technical staff through construction of the 12 BAL units. Trainees shall be issued with apprentice certificates.
  - vi. leverage on this opportunity to promote and market the BAL technology to institutional and private homeowners in and around Maiduguri MMC.

**1.1.2.The bidder shall provide all equipment, materials, labour and logistics required to deliver these works, as well as their medical cover and accident insurance**

**1.2.3.The successful bidder shall be paid 30% of contract sum upon mobilization to site and following inception and the balance upon successful completion of works**

**2. BACKGROUND TO THE HUMANITARIAN SITUATION AND SI INTERVENTION IN NORTH EAST NIGERIA**

**2.1. Humanitarian Situation in NE Nigeria**

The Humanitarian crisis in Northern Nigeria is now one decade since it first peaked in 2014, with humanitarian conditions remaining poor in many IDP locations. In 2025, **OCHA projects that 7.763 million** people will need assistance in BAY (Borno, Adamawa, Yobe) states in the Northeast, with **1.904 million or 25% being IDPs**, 1.525 million or 20% Returnees and 55% hosts. Nearly 40% of the IDPs in Northeast are still sheltering in formal camp sites and the rest in host communities or informal settlements. Dwindling donor funding since 2021 has led to deteriorating conditions especially in the camps and informal settlements, characterized by heightened malnutrition, reduced food rations, worsening access to health services, declining public health conditions (inadequate drinking water and sanitation, inadequate shelter and NFIs and poor drainage) and significant protection concerns impacting especially women and girls. Among the major sanitation challenges in IDP camps and host communities are high latrine filling rates leading to short desludging cycles. Owing to collapsing soil formations, latrines have to be lined with masonry, basically converting them into cess pits. Lining costs impose contribution to limitation on volume of latrine pits, hence heightening the rate of latrine filling and frequency of desludging. To address this challenge, SI as a member of the FSM Technical Working Group (TWG) has invested in piloting more climate friendly and lowcost methods focused on sludge containment and processing on site. These methods include Birkaroon pit latrine and Biodigester Adapted Latrine.

## 2.2. Solidarités International Presence in Northern Nigeria

Solidarités international (SI), with its global headquarters in Paris, France, had active missions in at least 24 countries around the world, including Nigeria. SI has been present in Nigeria for 8 years - since 2016 in Northeast Nigeria and 2020 in the Northwest. SI's country office is in Maiduguri, which is also the regional base for the NE program area, with a liaison office in Abuja and a regional base for the NW program area in Gusau town, with a satellite in Anka.

In the Northeast, SI operates mainly in Borno state. As at Mid-2024, SI operations in Borno were in 3 LGAs (Monguno, Ngala and Konduga) and in Maiduguri MMC and Jere. SI has also intervened in other LGAs including Dikwa, Gwoza and Bama. In the Northwest, SI was the pioneer international NGO to intervene, preceded only by MSF and UN agencies- Unicef, IOM and WFP. Along with these agencies, SI was an early advocate for humanitarian attention to the Northwest, with several international agencies progressively commencing operations in the Northwest from 2022. In 2024 SI intervened in at least 6 LGAs: Gusau, Anka, Talata Mafara, Zurmi, Bukkuyuni and Kaura Namoda. During 2024, SI targeted approximately 220,000 beneficiaries in Northeast and Northwest.

## 3. SCOPE OF WORKS

The works entail demonstration training to NGO and Government technical staff on **Biodigester latrine construction through field installation of up to 12 biodigester adapted latrine (BAL) units** at public institutions (Schools and Health facilities), 8 within Maiduguri city and/or suburbs around the city with existing waterborne sanitary facilities and facing challenges of Fecal Sludge Management (FSM), and 4 in Maiduguri Town identified Health and/or school facilities. Walling and slab cover for half of the units shall be -easy to -install and unassembled light precast concrete panels while half shall be concrete slab and sanscrete blocks cast/laid in situ.

### Deliverables -five number:

- i. Construct and commission 8no. small scale Biodigester Adapted Latrines (BAL) termed type BAL 20, (at least 1.8m<sup>3</sup> rectangular anaerobic chamber to serve up to 20 individuals) with soak pit and connect to existing waterborne sanitary facilities.
- ii. Construct and commission 4no. Biodigester Adapted Latrines (BAL) type BAL140 (at least 4.5m<sup>3</sup> rectangular anaerobic masonry chamber to serve up to 140 individuals) with soak pit and connect to existing waterborne sanitary facilities.
- iii. On site practical/demonstration skills training of at least 12 NGO and Govt sanitation technical staff through construction of 14 BAL units. Trainees shall be issued with apprentice certificates.
- iv. Compile a construction manual and report and submit to SI
- v. leverage on this opportunity to promote and market the BAL technology to institutional and private homeowners in and around Maiduguri MMC.

## 4. BIDDING PROCESS

### 4.1 Summary of bidding Timeline, 2025

The entire bidding process from the advertisement is summarized below.

#	Activity	Timeframe	Duration	REMARK
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1	Requisition for Bids	23 Jan 2025	12 days	
2	Querries from potential bidders	23rd Jan- 29th Jan		
3	Submission of bids	3rd Feb 2025		
4	Review proposals and select winner	4th -7 <sup>th</sup> Feb	4 days	
5	Contracting process	10th -14th Feb	4 days	
6	Mobilization to MMC Jere	24th Feb	8 days	
7	Inception meetings	25th Feb	1 day	
8	Field activities	26 <sup>th</sup> Feb-26 <sup>th</sup> March	30 days	
9	Final Reports	9th April	14 days	

**Table 2: summary of bidding timeline**

## 4.2 Submission of bids

Bids are invited from qualified and reputable and active private sector enterprises (individuals, SMEs, firms) who meet the following requirements.

### 4.2.1 Qualifications and experience levels

- i. Valid registration as private enterprise . (Female proprietors or female led enterprises are highly encouraged to apply)
- ii. The business should have at least 7 years active industry experience in building works with at least 4 years in installation of biodigesters.
- iii. Proof of a lead technical staff (engineer or technician level) with recognized certification in building works and over 5 years' experience in construction of sanitary facilities with minimum of 3 years in installation of biodigester systems in Nigeria or neighbouring countries in the region.
- iv. Working experience and good understanding of the humanitarian and security context in Northeast Nigeria (Borno, Adamawa, Yobe) is an added advantage.
- v. Language: Good spoken and written English language. Spoken Hausa or Kanuri language competency is added advantage.

### 4.2.2 Submission of bids

- The bids shall be in English language delivered electronically via email, and clearly marked in the email subject bar: **"APPLICATION FOR ON-SITE DEMONSTRATION TRAINING ON CONSTRUCTION OF BIO-DIGESTER ADAPTED LATRINE (BAL), BORNO STATE"**
- Bids shall be submitted by midnight Central West Africa/Nigeria time on Monday 3<sup>rd</sup> February 2025 indicating earliest availability for field deployment from Monday 24<sup>th</sup> February 2025. The expression of interest should contain:

(A) Technical proposition/offer.

(BQ) Financial & administrative offer:

#### A. Technical Proposition

- i. Narrative of the BAL construction methodology (maximum 12 pages Times New Roman font 11).
- ii. One separate set of technical drawings (plans, sections, elevations, details of reinforcement and filter media, etc for manholes; main chamber roof, walls and floor; soakpit, any other accessories) of BAL 20 in precast lightweight concrete. NOTE:

- Technical Drawings for successful bidders shall be compensated, those for unsuccessful bidders shall be at their own cost
- iii. One separate set of technical drawings (plans, sections, elevations, details of reinforcement and filter media, etc for manholes; main chamber roof, walls and floor; soakpit, any other accessories) of BAL 20 in situ concrete and cement-sand (sancrete) blockwork.
  - iv. One separate set of technical drawings (plans, sections, elevations, details of reinforcement and filter media, etc for manholes; main chamber roof, walls and floor; soakpit, any other accessories) of BAL 140 in precast lightweight concrete.
  - v. One separate set of technical drawings (plans, sections, elevations, details of reinforcement and filter media, etc for manholes; main chamber roof, walls and floor; soakpit, any other accessories) of BAL 140 in situ concrete and cement-sand (sancrete) blockwork.
  - vi. Photographs of recent Biodigester Installations -done within one year.
  - vii. List of 3 names and phone contacts of (one each) household, institutional and business clients for who you successfully installed BAL over 2 years ago, indicating Name, phone, LGA, month and year of installation.

## **B. Financial and Administrative Offer comprising:**

- i. A one-page cover letter affirming possession of the qualifications laid out in 4.2.1. above and showing contacts and Headquarters of the enterprise and gender of proprietor /or and principal Manager.
- ii. Attach valid registration documentation and tax for the SME.
- iii. One bill of quantities document (BOQ) in MS Word or Excel (see appendix 1) containing separate bill each corresponding with the four set of drawings A(ii)-A (v)
- iv. A summary budget within the BOQ sheet (iii above) that aggregates the costs of various models of BAL as outlined at A(vi) and a summation of costs of all 12 units, PLUS taxes and logistics (distant and local travel, accommodation, etc).
- v. Attach proof of accident insurance and medical cover scheme for staff assigned to works including self.

### **4.2.3: Queries and clarifications during proposal preparation stage**

Preliminary field visits to the proposed area if desired prior to presentation of proposal is not feasible, hence the bidder may rely on their claimed experience, conduct online or other mode of remote literature surveys at their own cost. Any questions for clarification on this call for bids or other relevant matter shall be submitted in English to SI to [dpt.log.coo@solidarites-nigeria.org](mailto:dpt.log.coo@solidarites-nigeria.org) citing the title of the bid in the subject matter before or on 29th January 2025 at 5PM Nigeria time and referencing the website from which the advert was accessed. SI's clarifying answers to such questions shall be posted on the referenced website accessible to all potential bidders. There shall be no further clarifications to queries reaching SI after the dateline of 29th January 2025.

### **4.2.4. SI Code of Conduct**

All employees and associates of SI, including consultants and contractors working for SI are required to comply with the Code of Conduct (*appendix 2*) and security protocols. The consultant should read and certify the CoC document before proceeding to respond to express interest in the call for bidding.

## **5.APPENDIX**

APPENDIX 1 - BILL OF QUANTITIES & BUDGET OFFER TEMPLATE  
APPENDIX 2 – SI CODE OF CONDUCT



ON-SITE DEMONSTRATION TRAINING ON CONSTRUCTION OF BIO-DIGESTER ADAPTED LATRINE (BAL), BORNO STATE						
5.1.2 BILLS OF QUANTITIES						
<b>1.1.1 (ii)</b> Construct and commission <b>3no.</b> small scale Biodigester Adapted Latrines (BAL) termed type BAL 20, (at least 2.0 m <sup>3</sup> effective space rectangular anaerobic chamber <u>from in situ concrete slabs and sand and cement (sanscrete) blockwork walling</u> to serve up to 20 individuals) with soak pit, and connect to existing waterborne sanitary facilities.						
S/N	Item Description	unit	Qty for 1 BAL 20	Qty for 3 BAL 20	Price NGN per unit	
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
	(Add rows as necessary)					
<b>TOTAL COST FOR ONE UNIT BAL 20 CONCRETE CAST IN SITU AND MASONRY</b>						

The last Column is the total cost of the 3 units in Naira"

ON-SITE DEMONSTRATION TRAINING ON CONSTRUCTION OF BIO-DIGESTER ADAPTED LATRINE (BAL), BORNO STATE						
5.1.3 BILLS OF QUANTITIES						



