

GOVERNMENT OF ASSAM
ASSAM AGRICULTURE COMPETITIVENESS PROJECT (AACP)
Procurement of Centrifugal Pump set by The Communities
Detailed FLOATING OF ENQUIRY (FOE)

FOE No. **Agri/Engg/AACP/3159/Pt-FOE/Pt-I/2010-11/1(P)**

Dated May20, 2011

1. Government of India has received a Credit of US\$ 154 million equivalent from the International Development Association (under IDA Credit No: 4013) towards the Assam Agriculture Competitiveness Project (AACP) and intends to apply a portion of this Credit to eligible payments for procurement of 2 to 3 HP Electrically operated and 4 to 5 HP diesel engine operated Centrifugal Pump set
2. Irrigation component of AACP, currently involve procurement of Centrifugal Pumpset (about 13000 Nos) for Shallow Tube Well (STW) and (about 5000 Nos) for Low lift Pump (LLP) by Agro-Service groups (ASGs)].
3. Equipments will be procured by ASGs, over a period of time, as per their choice from the short listed brands/ models from the manufacturer's local outlets or authorized dealers, out of the short listed list of manufacturers to be published by the Director of Agriculture, Assam, following completion of evaluation of offers received in response to this FOE. This exercise is carried out as a Facilitation service to ASGs for ensuring products that meets acceptable standards are procured at reasonable prices.
4. ASGs are also allowed to run a competition of models / brands that are in the short listed FOE list.
5. The Chief Engineer Agriculture on behalf of Director of Agriculture, Assam, therefore, floats this enquiry seeking offers only from manufacturers, from reputed Centrifugal Pump set, for preparation of a short list of manufacturers (including their authorized dealers), for quality assurance, competitive pricing against a laid down technical specifications and after sales service support for the financial year 2011-12 for the procured STW & LLP Pump set, by the ASGs.
- 6 Interested Manufacturers or their duly authorized dealer may formally request to Chief Engineer Agriculture, Directorate of Agriculture, Assam for a copy of the detailed FOE during the period of May,24th to **June 6th, 2011** by paying non-refundable fee of **Rs 50/- (Rupees fifty only) in cash or in draft.**
- 7 Interested manufacturers may also contact the Chief Engineer, Agriculture, Assam for details terms & conditions or any clarification during office hours at Telephone No 0361-2134284.
- 8 The last date and time of submission of the Offers is **June, 7th, 2011, up to 11-00 AM** and the Offers will be opened publicly at **11-30 pm** of the same day.

1. TERMS AND CONDITIONS:-

- 1.1 All goods under this project should have their origin in eligible source of countries as defined under the *World Bank's Procurement Guidelines*.
- 1.2 The Short FOE published in newspaper & included in this document is an integral part of the detailed FOE.
- 1.3 As stated at pre-page, Equipments will be procured by ASGs as per their choice from the short listed brands/ models from manufacturer's local outlets or authorized dealers, out of a short listed list of manufacturers to be published by the Director of Agriculture, Assam.
- 1.4 All Offers against this FOE shall be in English language.
- 1.5 Offers should comprise the following, duly filled, stamped & signed at every page by an authorized person of the manufacturer.
 - a) Manufacturers' covering letter of the offer.

- b) Clause-by-Clause by Commentary to these laid down terms & conditions and technical specifications indicating deviations along with supporting Technical Brochures, Leaflets.
- c) Qualification information against the laid down requirements: Statement of Qualification information's along with certified copies of supporting documents
- d) The department reserves the right to accept or reject in public interest any or all of the offers received from the Manufacturer/ Companies etc. and to cancel the FOE process, at any time even during the operation of this FOE without any liability to the effected bidder or bidders
- e) Price Schedule: Price of the individual model of the Pump sets, including all accessories, taxes, duties, transportation cost, etc. must be quoted strictly as per the following format:-

Sl	Brief description of the items with Brand, Model & specification	Unit price without taxes			Taxes
		Rate for each	Transportation & other incidental services	Total (c+d)	
a	B	c	d	e	f
1	Pumpset for STW				
a	Model.....				
b	Model.....				
..				
2	Pumpset for LLP with accessories				
a	Model.....				
b	Model.....				
..				

1.6 Inspection & Test:

1.6.1. Prior to handing over, the goods will be tested, verified and commission at manufacturer's cost, jointly by a team comprising -

- (a) Representative of ASG,
- (b) Local Executive Engineer/ Assistant Executive Engineer, Agriculture, or his representative,
- (c) Manufacturer's / dealer's representative, whenever necessary.

1.6.2. The Team may reject the goods if found deficient from the prescribed specifications.

1.6.3. Goods are to be made available by the manufacturer through their local dealers to ASGs at site as per choice of brand & model by ASGs.

1.6.4. Delivery of goods shall be made no later than 20 days (barring Force Majeure conditions) from the date of intimation to the supplier, failing which the Director of Agriculture will be at liberty to de-list the manufacturer from the short list.

1.7 Warranty: Goods shall be under warranty for a period of 12 months from the date of delivery to the ASGs. Manufacturer shall furnish terms of warranty along with the offer. If, for reasons not attributable to ASGs, these warranty terms are not attained in whole or in part, the local agent of the manufacturer shall take appropriate steps to remedy the defects, and failing which replace the Pump set or accessories or any part thereof as may be necessary in order to attain the desired performance of the Pump set, at manufacturer's own cost, within a maximum period of 30 days from the date of receipt of such notice from the concerned ASG or the Executive Engineer/ Assistant Executive Engineer, Agriculture. If the local agent of the manufacturer, having been notified, fails to remedy the defects within the specified period, the Director of Agriculture may proceed to take such remedial action as may be necessary, along with de-listing of the manufacturer from the short list.

1.8 Payment & Funding Pattern will be made as under –

(a) Funding Pattern

i) For STW, AACP's share is 50% including standard cost of STW Boring with required materials for boring Plus the cost of Pumpset. The balance 50% of the total cost will be paid by the ASGs. For LLP, AACP's share is 50% including cost of Pumpset with required accessories. The balance 50% of the total cost will be paid by the ASGs.

ii) ASG will pay their share in the form of Bank Draft to the authorized dealer of the Manufacturer. The AACP share will be released by the Agriculture Department to the supplier upon submission of bill with necessary endorsement duly signed by the concerned Assistant Ex. Engineer (Agri) / Assistant Engineer (Agri) / Junior Engineer (Agri) under the concerned Executive Engineer of the Agriculture Dept. and Group leader of the ASG.

(b) Baring Force Majure conditions, every effort will be made to make payment promptly by the Director of Agriculture, Assam to the local agent / dealer, but in no case later than **30** (thirty) days from the date of certification regarding successful commissioning.

(c) Supplier shall be entirely responsible for all taxes including sales tax, VAT, duties, license fees, transportation cost etc. incurred until delivery of the goods.

1.9 Payment of taxes & duties will be as per applicable laws, rules and regulations of the Government.

1.10 QUALIFICATION REQUIREMENTS

1.10.1. The Manufacturer must be in the business of design and production of Pump set, since at least last 5 years. Towards fulfillment of this, supporting documents such as copies of manufacturers statutory registration certificates; principal place of business and location of factory/ factories; and copies of audited Profit And Loss statement with Balance Sheet of last 3 years shall be enclosed with the offer including year wise total production and sale of Centrifugal Pump sets of different HP during last 3 years.

1.10.2. Offer shall also contain a list of all Authorized dealers/ agents and existing service centers in Assam through whom the manufacturer intends to sell the product to ASGs and provide after sales services. Towards fulfillment of this - name, contact address, e-mail, telephone & fax number of all authorized dealers/ agents of manufacturer in Assam shall be furnished.

1.10.3. The Manufacturers/ companies whose product was not found satisfactory in the past supplies to the department/ farmers or whose quality / specification of the Pump set is under dispute / under litigation may not be included in the short list.

1.10.4. The department reserves the right to include /exclude any of the participants in the short list without assigning any reason thereof

2. **TECHNICAL SPECIFICATIONS** (Manufacturer's should furnish clause by clause commentary on the following Specification of all the models, in absence of which, the relevant may be disqualified.)

2.1 TECHNICAL SPECIFICATION FOR STW PUMPSET

Sl.	Technical Specification:
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General Technical Specification:

1. The bidder will continue to comment on the points where necessary

1.10 The pump set should be Centrifugal and capable of drawing water from Shallow Tube Well (STW) as shown below :-

1) For the 2 to 3 hp range of electrically operated pumpsets, the minimum discharge should be 8 lts. per second to 12 lts. per second at a head of 10 mt.

Sl.	Technical Specification:
	2) For the 4 hp range of diesel engine operated pump sets, the minimum discharge should be 8 lts. per second to 15 lts. per second at a head range of 14 mt. to 8 mt.
	3) For the 5 hp range of diesel engine operated pump sets, the minimum discharge should be 10 lts. per second to 18 lts. per second at a head range of 18 mt. to 12 mt
1.20	Both the Engine and Pump shall have ISI/BIS or equivalent International certification and the same have to be supplemented with documentary support from the appropriate authority
1.30	Quality of the product is always an essential criterion. The Manufacturer of the Pump Sets shall have high technical quality control system of recent days including metallurgical process check etc. system on the quality management. Requested to enclose a running commentary on the quality control procedure adopted while manufacturing the goods and even for collection of component parts if any from outside.
1.40	The original leaflets both for the engine and the pump proposed in the bid completed with all technical parameters including duty range, consumption etc. shall have to be enclosed.
2.	Prime Mover : A water/ air cooled, 4-stroke cycle operated diesel operated single cylinder, capable of developing 4HP to 5 HP OR Single/ three phase, electrical operated capable of developing 2 to 3 HP.
3.	Pump : A centrifugal pump compatible to couple with a Engine fitted with Brass/ Caste iron Impeller of appropriate dimension in a volute casing having a capacity to deliver as shown below - 1) For the 2 to 3 hp range of electrically operated pumpsets, the minimum discharge should be 8 lts. per second at a head of 10 mt 2) For the 4 hp range of diesel engine operated pump sets, the minimum discharge should be 8 lts. per second at a head of 10 mt. 3) For the 5 hp range of diesel engine operated pump sets, the minimum discharge should be 10 lts. per second at a head of 10 mt. The pump should be fitted with CI tail piece at the suction side and the delivery bend at the delivery side. Comment on the technical details.
4.	Coupling : Coupling is a device to fasten the Pump with the prime mover Engine. Very good quality flexible rubber/leather coupling is required to help the system with quality nuts and bolts having ISI.
5.	Cooling: The engine proposed is water or air cooled type and for water cool engine , the water is circulated through the water jacket of the engine by way of gravity feeding, Good quality rubber/ plastic cooling pipes arrangement both at suction and delivery with proper standard steel adjustable clamps needs to be enclosed.
6.	Bearing: The forged Crank shaft should either be mounted on Taper Roller Bearing, Bush type Bearing, Ball Bearing made of copper alloys.
7.	Trolley: The Pump Sets needs to be mounted on a trolley made of mostly by mild steel. The Trolley frame should be made of 5mm thick M.S. Angle and be mounted on two die casted trolley wheel of 20-22 cm O.D and 5 cm circumferential width. The trolley weight should not be less than 15 kg. In case of Mono Block Pump set the details of casing arrangement shall have to be furnished.
8.	Tools : For obtaining maintenance ease the Pump Sets would require the following tools: i) D.E. Spanner (Small set) = 1 Set. ii) Ring Spanner (Small Set) = 1 Set.

Sl.	Technical Specification:
	iii) Adjustable slide wrench (25cm) = 1 No.
	iv) Pliers (20 cm) = 1 No.
	v) Screw Driver (30 cm) = 1 No.
9.	Some Technical Parameters:
9.1	The overloading capacity at rated R.P.M. without overheating should not be less than 10% . Enclose comment.
9.2	In case of diesel engine, specific fuel consumption must be as per BIS norms. The same need to be supported by documentary evidence with properly drawn characteristic curve etc.
9.3	The Mechanical efficiency needs not be less than 70%
9.4	Name the make and the model No. for both the engine and the pump.
9.5	Name the major part like head, body, crank case, crank shaft and cam shaft and state the capability to withstand the tensile, compressive and the shear stress etc. with support.
9.6	The Engine and the pump shall have to be from the recent range of production having BIS or other International standard.
9.7	Enclose a brief note on the basic feature of testing etc. attended prior to release to the commercial outlet with support.
10.	Bidder shall furnish information to the following questionnaires:
	For diesel engine operated pump sets.
	a. Engine HP at rated RPM
	b. Rated RPM
	c. Fuel Tank Capacity in liters.
	d. Oil sump capacity in liters.
	e. Method of starting.
	f. Direction of rotation.
	g. Type of fuel injection and make.
	h. Type of governor used.
	i. Duty conditions at various head.
	j. Type of impeller and material used in the impeller.
	k. Dry weight of the Engine with all fittings excluding packaging.
	l. Dry weight of the Pump.
	m. Weight of tail piece.
	n. Weight of the Delivery Bend.
	For Electrically operated pump sets.
	a. Motor HP at rated RPM
	b. Rated RPM
	c. Maximum suction lift in meter
	d. Total head in meter
	e. Discharge in lit/sec.
	f. Minimum power requirement
	g. Power consumption
	h. Method of priming
	i. Inbuilt stabilization measure
	j. Total dry weight of the pump sets without packing

.2.2 TECHNICAL SPECIFICATION FOR LLP PUMPSET

Sl.	Technical Specification:
	General Technical Specification:
1.	The bidder will continue to comment on the points where necessary
1.10	The pump set should be Centrifugal and capable of drawing water from Shallow Tube Well (STW) as shown below :- 1) For the 2 to 3 hp range of electrically operated pumpsets, the minimum discharge should be 8 lts. per second at a head of 10 mt. 2) For the 4 hp range of diesel engine operated pump sets, the minimum discharge should be 8 lts. per second at a head of 10 mt. 3) For the 5 hp range of diesel engine operated pump sets, the minimum discharge should be 10 lts. per second at a head of 10 mt.
1.20	Both the Engine and Pump shall have ISI/BIS or equivalent International certification and the same have to be supplemented with documentary support from the appropriate authority
1.30	Quality of the product is always an essential criterion. The Manufacturer of the Pump Sets shall have high technical quality control system of recent days including metallurgical process check etc. system on the quality management. Requested to enclose a running commentary on the quality control procedure adopted while manufacturing the goods and even for collection of component parts if any from outside.
1.40	The original leaflets both for the engine and the pump proposed in the bid completed with all technical parameters including duty range, consumption etc. shall have to be enclosed.
2.	Prime Mover : A water/ air cooled, 4-stroke cycle operated diesel operated single cylinder, capable of developing 4HP to 5 HP OR Single/ three phase, electrical operated capable of developing 2 to 3 HP.
3.	Pump : A centrifugal pump compatible to couple with a Engine fitted with Brass/ Caste iron Impeller of appropriate dimension in a volute casing having a capacity to deliver as shown below - 1) For the 2 to 3 hp range of electrically operated pumpsets, the minimum discharge should be 8 lts. per second at a head of 10 mt 2) For the 4 hp range of diesel engine operated pump sets, the minimum discharge should be 8 lts. per second to 15 lts. per second at a head range of 14 mt. to 8 mt. 3) For the 5 hp range of diesel engine operated pump sets, the minimum discharge should be 10 lts. per second to 18 lts. per second at a head range of 18 mt. to 12 mt The pump should be fitted with CI tail piece at the suction side and the delivery bend at the delivery side. Comment on the technical details.
4.	Coupling : Coupling is a device to fasten the Pump with the prime mover Engine. Very good quality flexible rubber/leather coupling is required to help the system with quality nuts and bolts having ISI.
5.	Cooling: The engine proposed is water or air cooled type and for water cool engine , the water is circulated through the water jacket of the engine by way of gravity feeding, Good quality rubber/ plastic cooling pipes arrangement both at suction and delivery with proper standard steel adjustable clamps needs to be enclosed.
6.	Bearing: The forged Crank shaft should either be mounted on Taper Roller Bearing, Bush type Bearing, Ball Bearing made of copper alloys.

Sl.	Technical Specification:
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7. Trolley:
The Pump Sets needs to be mounted on a trolley made of mostly by mild steel. The Trolley frame should be made of 5mm thick M.S. Angle and be mounted on two die casted trolley wheel of 20-22 cm O.D and 5 cm circumferential width. The trolley weight should not be less than 15 kg. In case of Mono Block Pump set the details of casing arrangement shall have to be furnished.

8. Tools :
For obtaining maintenance ease the Pump Sets would require the following tools:
i) D.E. Spanner (Small set) = 1 Set.
ii) Ring Spanner (Small Set) = 1 Set.
iii) Adjustable slide wrench (25cm) = 1 No.
iv) Pliers (20 cm) = 1 No.
v) Screw Driver (30 cm) = 1 No.

9. Some Technical Parameters:

9.1 The overloading capacity at rated R.P.M. without overheating should not be less than 10% . Enclose comment.

9.2 In case of diesel engine, specific fuel consumption must be as per BIS norms. The same need to be supported by documentary evidence with properly drawn characteristic curve etc.

9.3 The Mechanical efficiency needs not be less than 70%

9.4 Name the make and the model No. for both the engine and the pump.

9.5 Name the major part like head, body, crank case, crank shaft and cam shaft and state the capability to withstand the tensile, compressive and the shear stress etc. with support.

9.6 The Engine and the pump shall have to be from the recent range of production having BIS or other International standard.

9.7 Enclose a brief note on the basic feature of testing etc. attended prior to release to the commercial outlet with support.

10. Bidder shall furnish information to the following questionnaires:

For diesel engine operated pump sets.

- a. Engine HP at rated RPM
- b. Rated RPM
- c. Fuel Tank Capacity in liters.
- d. Oil sump capacity in liters.
- e. Method of starting.
- f. Direction of rotation.
- g. Type of fuel injection and make.
- h. Type of governor used.
- i. Duty conditions at various head.
- j. Type of impeller and material used in the impeller.
- k. Dry weight of the Engine with all fittings excluding packaging.
- l. Dry weight of the Pump.
- m. Weight of tail piece.
- n. Weight of the Delivery Bend.
- o. Performance

HP	Head(m)	Discharge (Lps)
4	8	
4	12	
5	12	
5	18	

For Electrically operated pump sets.

- a. Motor HP at rated RPM
- b. Rated RPM
- c. Maximum suction lift in meter
- d. Total head in meter
- e. Discharge in lit/sec. at 10 m head = & at 4 m Head =

Sl.	Technical Specification:
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- f. Minimum power requirement
- g. Power consumption
- h. Method of priming
- i. Inbuilt stabilization measure
- j. Total dry weight of the pump sets without packing

Chief Engineer Agriculture
Assam, Khanapara, Guwahati-22

GOVERNMENT OF ASSAM
ASSAM AGRICULTURE COMPETITIVENESS PROJECT (AAP)
Procurement of Centrifugal Pump set by The Communities
FLOATING OF ENQUIRY (FOE)

CORRIGENDUM

Ref.- FOE No. Agri/Engg/AACP/3159/Pt-FOE/Pt-I/2010-11/1(P),

Dated May20, 2011

Please referred to the FOE for the said heading & reference and add the following in Technical specification of STW & LLP of the said FOE.

1) Add the following clause as 10 (o) after SI 10 (n) of the Technical specification of STW in page 5 of 8

(o) . Performance

HP	Head(m)	Discharge (Lps)
4	8	
4	12	
5	12	
5	18	

2) Add the following additional accessories after Tools under clause 8 of the Technical specification of LLP in page 7 of 8 . Following accessories to be supplied with LLP pump sets.

Accessories:-

- i) Matching suction PVC Hose 7.5 M length.
- ii) Matching Delivery PVC Hose 7.5 M length.
- iii) Matching foot valve with fixing clamp

Chief Engineer Agriculture
Assam, Khanapara, Guwahati-22

Copy to – M/S
For information & necessary action

Chief Engineer Agriculture
Assam, Khanapara, Guwahati-22