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Rural Water Supply Handpumps Project

Draft Sample Bidding Documents for the Procurement of Handpumps

Rural Water Supply Handpumps Project Team



The World Bank — Water Supply and Urban Development Department



A Joint United Nations Development Programme and World Bank Contribution
to the International Drinking Water Supply and Sanitation Decade



232 2-86DR-6580

LIST OF PUBLICATIONS BY THE WORLD BANK/UNDP HANDPUMPS PROJECT

Progress Reports of the Handpumps Project, which appeared in the World Bank Technical Paper series:

- Report No. 1 Laboratory Tests on Hand-Operated Water Pumps for Use in Developing Countries: Interim Report. 1982
- Report No. 2 Laboratory Evaluation of Hand-Operated Water Pumps for Use in Developing Countries. 1983
(World Bank Technical Paper No. 6)
- Report No. 3 Laboratory Testing of Handpumps for Developing Countries: Final Technical Report. 1984
(World Bank Technical Paper No. 19)
- Report No. 4 Handpumps Testing and Development: Progress Report on Field and Laboratory Testing. 1984
(World Bank Technical Paper No. 29)
- Report No. 5 Handpumps Testing and Development: Proceedings of a Workshop in China. 1985
(World Bank Technical Paper No. 48)

Applied Research and Technology Notes of the Handpumps Project:

- Note No. 1 Sample Bidding Documents for the Procurement of Handpumps, 1986
- Note No. 2 Handpump Laboratory Test Results: GSW, Monarch, Monolift, Moyno, Pek, Tara and Volanta Pumps, 1986

APPLIED RESEARCH AND TECHNOLOGY (WUDAT)—NOTE NO. 1

Rural Water Supply Handpumps Project

WORLD BANK/UNDP INT/81/026

Draft Sample Bidding Documents for the Procurement of Handpumps

Rural Water Supply Handpumps Project Team

Based on the
SAMPLE BIDDING DOCUMENTS
FOR THE PROCUREMENT OF GOODS
developed by
INTER-AMERICAN DEVELOPMENT BANK
and
THE WORLD BANK

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and Development/THE WORLD BANK
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Washington, DC 20433, USA

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PREFACE

This publication is the first in the series of Applied Research and Technology Notes prepared by the World Bank/UNDP Interregional Project for Laboratory and Field Testing and Technological Development of Rural Water Supply Handpumps (UNDP/World Bank INT/81/026). The series is designed to provide the reader with Project findings on specific topics of interest. Annual Progress Reports on overall Project activities will continue to be published as World Bank Technical Papers.

The Handpumps Project was initiated in 1981 under the framework of the International Drinking Water Supply and Sanitation Decade. Project objectives are to reduce the capital and recurrent costs of rural and urban fringe water supply systems, provide wide-scale coverage to the approximately 1.5 billion people who lack this basic service, and bring about an overall improvement in rural water supplies for the millions of people in need throughout the world.

Handpumps installed in wells where groundwater is available are one of the simplest and least costly methods of providing the populations in need with an adequate supply of water in the immediate vicinity of their residences; however, serious technological and reliability problems have arisen with handpumps in the past. These problems are manifested in poor design, unsatisfactory performance, shortened working life and frequent failures. There has been a lack of reliable data on handpump performance, as well as on the comparative performance of different handpump designs. These data are required to facilitate selection from among the array of available handpumps and to provide the mechanism to lead towards improved designs and manufacturing practices. To achieve its objectives and overcome the problems encountered with handpumps in the past, the Project has been conducting systematic laboratory and field tests of a large number of handpumps, with the results provided to manufacturers, governments, aid agencies and other interested parties.

These Sample Bidding Documents for the Procurement of Handpumps are intended to (1) assist purchasers in specifying and selecting the most appropriate handpumps for their particular application; (2) provide guidance to manufacturers in their efforts to improve the reliability and suitability of their handpumps for community water supply; and (3) encourage purchasers to adopt uniform contractual requirements, thus establishing confidence among manufacturers that they are being treated fairly and equitably.

Comments on this report are most welcome. When substantive improvements are made in this document, an updated version will be published.

Saul Arlosoroff, Chief
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NOTES OF EXPLANATION FOR THE PURCHASER

(Not to be included in the Bidding Documents)

These Sample Bidding Documents for the Procurement of Handpumps are based on the more general Sample Bidding Documents for the Procurement of Goods prepared by the Inter-American Development Bank and The World Bank (2nd Edition, February 1986) which are used extensively for international competitive bidding.

The following parts of the Sample Bidding Documents for the Procurement of Goods have been modified or appended:

- 1) Merit point system (Section II, Clause 26)
- 2) Warranty (Section III, Clause 15)
- 3) Special conditions of contract (Section IV)
- 4) Schedule of requirements (Section V)
- 5) Technical specifications (Section VI)

The following points should be noted when preparing bidding documents:

- 1) Specific details should be furnished in the space provided, which is underlined and placed within parentheses.
- 2) Footnotes are not part of the text of the bidding documents, but rather contain instructions which the Purchaser should consider. The final documents should contain no footnotes.
- 3) Provisions in the Sample Bidding Documents for the Procurement of Goods which do not pertain to handpump procurement have been deleted. Nonetheless, provisions must often be selected from several options and inappropriate provisions must be deleted. In particular, the criteria for bid evaluation (para. 26.4) and the various methods of evaluation (para. 26.5) should be carefully reviewed.
- 4) Clause numbering remains consistent with the Sample Bidding Documents for the Procurement of Goods so that deletions and modifications can more easily be identified. It is suggested that this convention be followed when preparing bidding documents.
- 5) The Special Conditions of Contract included in the Sample Documents are only illustrative of the provisions that should be drafted specifically by the Purchaser for each procurement.
- 6) While the Sample Bidding Documents for the Procurement of Goods were developed through broad international experience, and while the present draft of the Sample Bidding Documents for the Procurement of Handpumps reflect comments made by interested agencies and manufacturers, the user is cautioned that the draft documents in their present form have not been tested in actual practice. A copy of the Sample Bidding Documents on a PC-DOS formatted diskette can be obtained by writing to the Handpumps Project. Comments and suggestions for their improvement are solicited.

Merit Point System

The use of a merit point system is recommended to permit substantially responsive bids to be evaluated and compared with consideration given to features superior to the minimum requirements, with the bidder being informed in advance of the weights to be given to each. The bidder receiving the highest number of merit points from among the substantially responsive bids will be considered the most advantageous to the purchaser and will be awarded the contract.

It is recommended that the following criteria and corresponding maximum number of merit points be used in the bid evaluation.

<u>Criteria</u>	<u>Maximum Points</u>
1) Evaluated price of goods and services	50
2) Price of common list of spare parts	10
3) Design adequacy	5
4) Reliability	10
5) Ease of maintenance and repair	10
6) Service and spare parts availability	10
7) Standardization	5
Total	<hr/> 100

In international competitive bidding a minimum of 60 points for price, at least 50 of which are for goods and services and the balance for spare parts, has been found to be suitable when a merit point system of evaluation is used. The other criteria listed above have been selected because of their importance to the success of rural water supply programs. The maximum points given to each criterion should be adjusted to reflect local conditions. Also, depending on local conditions it may be advisable to make certain minimum requirements (See Clause 4 of Technical Specifications) more stringent than used in these sample bidding documents. This is particularly important if pumps will be subjected to corrosive water, in which case corrosion resistant materials such as plastic or stainless steel for downhole components should be specified.

Bids determined to be substantially responsive, pursuant to para. 24.3 of the Instructions to Bidders, will have met the minimum requirements of Clause 4 in the Technical Specifications. These will be assigned points for criteria 1 and 2, and awarded merit points for criteria 3 through 7 if the pump offered exceeds the minimum requirements. Use of the merit point system for bid evaluation is likely to lead to better pump selection since it balances to some extent the price of the pump and spare parts against pump attributes which affect long term, successful operation.

Merit points should be able to be assigned on the sole basis of information submitted with the bid. However, claims should be verified by consulting others who have had experience with the pumps being offered in the bid. Also, purchasers will find it useful to refer to the UNDP/World Bank Handpumps Project's report on handpumps for community water supplies (in preparation), which contains extensive information about handpump selection, including field performance evaluations of many pumps.

Bidding Schedules

The range of pumping lifts over which pumps must operate has a major bearing on the type of pump which can provide high performance at the least cost. For example, if there is a wide range of pumping lifts, substantial savings and improved performance may be obtained by selecting more than one type of pump. Therefore, when selecting handpumps, it is important that the Purchaser determine how many pumps will be required to operate at different pumping lifts (e.g. how many from 0-7m, 7-12m, 12-25m, etc.), and then decide if a single type of pump or more than one type of pump will provide the best performance at the least cost. A minimum water delivery rate, corresponding to the range of pumping lifts that will be encountered, should be specified. It is recommended that, for the sake of convenience, pumping lifts be specified at 7 meters for suction pumps, 7 and/or 12 meters for direct action pumps, and 12, 25, and/or 45 meters for high lift pumps.

In the table below, recommended minimum water delivery rates for one person operation as a function of pumping lift are presented. Based on this table one might, for example, specify a minimum delivery rate of 16 lpm at a 12 meter pumping lift and 10 lpm at a 25 meter pumping lift for a pump that will be installed in an area where the pumping lifts will range between 10 and 30 meters.

Minimum Water Delivery Rates*

Maximum Pumping Lift (meters)	Minimum Delivery Rate (liters per minute)
7	19
12	16
25	10
45	7

* These have been set according to the delivery rates that typical adult women (that is, women weighing 45 to 55 kg) are able to achieve when operating pumps with their normal power input. Either field or laboratory testing can be used to determine these water delivery rates. When field testing is used, the water delivery rates achieved by small groups of women (4 to 6 persons) at varied pumping lifts over the range of lifts for which the pump is designed to be used should be measured and a best fit curve drawn through a plot of delivery rate versus pumping lift. The delivery rate given by this best fit curve should exceed the minimum requirement for each pumping lift specified in the bidding document. When laboratory test results are used, water delivery rates should be determined for power inputs of 50 watts at 7 meters, 65 watts at 12 meters, and 75 watts at 25 and 45 meters. A laboratory procedure for doing this is described in Annex A.

Where drilling is expensive, the wells will be the major cost component of a handpump-based water supply system. In addition, if the pumping lift is more than about 35 meters, the water delivery rate that can be achieved by a single person will be relatively low. In such situations, every effort should be made to reduce the number of wells that must be drilled. To achieve this, particular attention should be paid to maximize the capacity of a well. For example, it may be appropriate to specify that the pump be designed to be operated by more than one person or that two pumps be installed in a single well. The performance requirements should be modified to reflect this by doubling the minimum water delivery rate requirements listed in the above table and by specifying them in terms of delivery rate per well, thus requiring the efforts of two adults.

Bidding documents may contain one or more bidding schedules and one or more pump bidding items within each bidding schedule (See Section V, Schedule of Requirements). An individual supplier may provide quotations for one or more of the bidding schedules, but must provide quotations for all bidding items and for the full quantities specified in a given bidding schedule. The Purchaser will award the contract to the most advantageous bidder from each bidding schedule.

If the purchaser chooses to request bids for two different ranges of pumping lifts, he must decide if the pumps should be purchased under one bidding schedule, and consequently provided by a single bidder, or if it would be better to use separate bidding schedules so that different suppliers can be awarded the contract. The advantages of a single supplier (single bidding schedule) are 1) better standardization and limited spare parts; 2) potential savings because of reduced unit costs with increasing order sizes; and 3) the advantages of simpler logistics in acquiring, installing, and maintaining the pumps with less training of repair crews. The advantages of different suppliers (separate bidding schedules) are 1) optimum performance because of the selection of the type of pump best suited for the specified range of pumping lifts; 2) possible cost reductions because low-lift pumps may be relatively inexpensive, and 3) small pump manufacturers can participate for smaller quantities.

To help clarify this, three examples are given. In a case where 500 wells have lifts in the range of 0 to 7 meters and another 500 wells have lifts in the range of 7 to 12 meters, a purchaser could specify 500 pumps for lifts between 0 and 7 meters (suction pumps are operable up to 7 meters) and another 500 pumps with lifts between 7 and 12 meters (for example, direct action pumps), or 1000 pumps with lifts between 0 and 12 meters. In the interest of standardization it will generally be best to specify a single pump with a maximum 12 meter lift so that all 1000 pumps are identical. Thus a single bidding schedule with one bidding item in it would be most advantageous to the purchaser.

A case where it might be prudent to specify two different ranges of pumping lifts (bidding items) within one bidding schedule occurs where there is a wide range of medium to high lifts. If, for example, 500 pumps are needed for wells with medium lifts of 12 to 25 meters and 500 pumps are needed for wells with high lifts of 25 to 45 meters, the same type of pump supplied

by the same manufacturer may be offered for both ranges, but there may be minor differences in the specific model. For example, different handle lengths or cylinder diameters may provide significantly better performance than can be achieved by any one design. Thus a single manufacturer is likely to be able to supply a pump suitable for both pumping ranges with only minor differences, providing interchangeability of most parts and decreased cost due to a larger order size.

Finally, a case where it might be best to use two separate bidding schedules with one bidding item in each occurs where there is a wide range of low to medium lifts. If, for example, 500 pumps are needed for wells with lifts between 0 and 12 meters and 500 pumps are needed for wells with lifts of 12 to 25 meters, two different types of pumps, possibly made by different manufacturers, may be most economical.

Section I. INVITATION FOR BIDS (IFB)

Date (Issuance of Invitation)

Loan No. _____

IFB No. _____

1. The (Name of Borrower) has received¹ a loan from the (Name of Funds) of the (Name of International Financial Institution) in various currencies towards the cost of (Name of Project) and it is intended that part of the proceeds of this loan will be applied to eligible payments under the contract for (Title of Contract).

2. The (Name of the Purchaser) now invites sealed bids from eligible bidders for the supply of

Alternative for two bidding schedules with one bid item in each.

(quantity) handpumps including all downhole components. Bids will be accepted for either or both schedules, but no bid will be accepted for lesser quantities than specified for each schedule.

<u>Schedule</u>	<u>Number of pumps</u>	<u>Pumping lift</u>
A	()	() to () meters
B	()	() to () meters

Alternative for one bidding schedule with two bidding items.

(quantity) handpumps including all downhole components. Bids will be accepted only for the full quantities specified for each bid item.

<u>Bid Item</u>	<u>Number of pumps</u>	<u>Pumping lift</u>
1	()	() to () meters
2	()	() to () meters

1 Substitute "has applied for" if appropriate.

2 The office for enquiry and issuance of bidding documents and that for bid submission may or may not be the same.

3. Interested eligible bidders may obtain further information from and inspect the bidding documents at the office of (Name of Appropriate Purchasing Unit),² (Mailing Address of Appropriate Office for Enquiry and Issuance of Bidding Documents and Cable/Telex Numbers).
4. A complete set of bidding documents may be purchased by any interested eligible bidder on the submission of a written application to the above and upon payment of a non-refundable fee of (_____).³
5. All bids must be accompanied by a security of (Fixed Sum or Percentage of Bid Amount)⁴ and must be delivered to the above office⁵ on or before (Hours) on (Date).
6. Bids will be opened in the presence of bidders representatives who choose to attend at (time and date) at the office of (_____).⁶

3 The fee chargeable should only be nominal to defray reproduction and mailing costs and to ensure that only bona fide bidders will request bidding documents. An amount of between US\$50 and US\$200 is deemed appropriate.

4 Delete this paragraph if no bid security is required. Where large quantities are involved, bid security is a prudent requirement. If bid security is required, insert appropriate information from "Instructions to Bidders," Clause 15.

5 Substitute the Purchaser's address for bid submission if different from its address for enquiry and issuance of bid documents.

6 Where large quantities are purchased under international bidding the time between issuance of invitation and bid opening should be not less than 45 days.

Section II. INSTRUCTIONS TO BIDDERS

TABLE OF CLAUSES

Clause
Number

- A. Introduction
 - 1. Source of Funds
 - 2. Eligible Bidders
 - 3. Eligible Goods and Services
 - 4. Costs of Bidding
- B. Bidding Documents
 - 5. Content of Bidding Documents
 - 6. Clarification of Bidding Documents
 - 7. Amendment of Bidding Documents
- C. Preparation of Bids
 - 8. Language of Bid
 - 9. Documents Comprising the Bid
 - 10. Bid Form
 - 11. Bid Prices
 - 12. Bid Currencies
 - 13. Documents Establishing Bidder's Eligibility and Qualifications
 - 14. Documents Establishing Goods Eligibility and Conformity to Bid Documents
 - 15. Bid Security
 - 16. Period of Validity of Bids
 - 17. Format and Signing of Bid
- D. Submission of Bids
 - 18. Sealing and Marking of Bids
 - 19. Deadline for Submission of Bids
 - 20. Late Bids
 - 21. Modification and Withdrawal of Bids
- E. Bid Opening and Evaluation
 - 22. Opening of Bids by Purchaser
 - 23. Clarification of Bids
 - 24. Preliminary Examination
 - 25. Conversion to Single Currency
 - 26. Evaluation and Comparison of Bids
 - 27. Domestic Preference/Margin of Preference
 - 28. Contacting the Purchaser
- F. Award of Contract
 - 29. Postqualification
 - 30. Award Criteria
 - 31. Purchaser's Right to Vary Quantities at Time of Award
 - 32. Purchaser's Right to Accept Any Bid and to Reject Any or All Bids
 - 33. Notification of Award
 - 34. Signing of Contract
 - 35. Performance Security

Section II. INSTRUCTIONS TO BIDDERS

A. Introduction

1. Source of Funds

- 1.1 The (Name of Borrower) has received a loan⁷ from the (Name of Funds) of the (Name of the IFI), hereinafter referred to as "International Financial Institutions" (IFI), in various currencies equivalent to US dollars () towards the cost of the (Name of Project) and intends to apply part of the proceeds of this loan to eligible payments under the contract(s) for which this invitation for bid is issued. Payment by the IFI will be made only at the request of the (Name of Borrower) and upon approval by the IFI in accordance with the terms and conditions of the loan agreement and will be subject in all respects to the terms and conditions of that agreement. Except as the IFI may specifically otherwise agree, no party other than the (Name of Borrower) shall derive any rights from the loan agreement or have any claim to the loan proceeds.

2. Eligible Bidders

- 2.1 This invitation for bids is open to all suppliers from eligible source countries as defined under the Guidelines for Procurement of the IFI.

3. Eligible Goods and Services

- 3.1 All goods and ancillary services to be supplied under this contract shall have their origin in eligible source countries, defined under the Guidelines for Procurement of the IFI and all expenditures made under the contract will be limited to such goods and services.
- 3.2 For purposes of this clause, "origin" means the place where the Goods are mined, grown or produced or from which the ancillary services were supplied. Goods are produced when, through manufacturing, processing or substantial and major assembling of components, a commercially recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 3.3 The origin of goods and services is distinct from the nationality of the bidder.

4. Cost of Bidding

- 4.1 The bidder shall bear all costs associated with the preparation and submission of its bid, and the (Name of Purchaser), hereinafter referred to as "the Purchaser," will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

7 Substitute "has applied for" in place of "received" and "credit" in the place of "loan" as appropriate.

B. The Bidding Documents

5. Content of Bidding Documents

5.1 The Goods required, bidding procedures and contract terms are prescribed in the Bidding Documents. In addition to the Invitation for Bids, the Bidding Documents include:

- (a) Instructions to Bidders;
- (b) General Conditions of Contract;
- (c) Special Conditions of Contract;
- (d) Schedule of Requirements;
- (e) Technical Specifications;
- (f) Bid Form and Price Schedules;
- (g) Bid Security Form;
- (h) Contract Form; and
- (i) Performance Security Form.

5.2 The bidder is expected to examine all instructions, forms, terms and specifications in the Bidding Documents. Failure to furnish all information required by the Bidding Documents or submission of a bid not substantially responsive to the Bidding Documents in every respect will be at the bidder's risk and may result in the rejection of its bid.

6. Clarification of Bidding Documents

6.1 A prospective bidder requiring any clarification of the Bidding Documents may notify the Purchaser in writing or by telex or cable at the Purchaser's mailing address indicated in the Invitation for Bids. The Purchaser will respond in writing to any request for clarification of the Bidding Documents which it receives no later than 30 days prior to the deadline for the submission of bids prescribed by the Purchaser. Written copies of the Purchaser's response (including an explanation of the query but without identifying the source of the inquiry) will be sent to all prospective bidders which have received the Bidding Documents.

7. Amendment of Bidding Documents

7.1 At any time prior to the deadline for submission of bids, the Purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bidding Documents by amendment.

7.2 The amendment will be notified in writing or by telex or cable to all prospective bidders which have received the Bidding Documents and will be binding on them.

7.3 In order to afford prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the Purchaser may, at its discretion, extend the deadline for the submission of bids.

C. Preparation of Bids

8. Language of Bid

- 8.1 The Bid prepared by the bidder and all correspondence and documents relating to the bid exchanged by the bidder and the Purchaser, shall be written in the (_____) ⁸ language, provided that any printed literature furnished by the bidder may be written in another language so long as accompanied by a (_____) ⁸ translation of its pertinent passages in which case, for purposes of interpretation of the bid, the (_____) ⁸ translation shall govern.

9. Documents Comprising the Bid

- 9.1 The bid prepared by the bidder shall comprise the following components:

- (a) A Bid Form and a Price Schedule completed in accordance with Clauses 10, 11 and 12;
- (b) Documentary evidence established in accordance with Clause 13 that the bidder is eligible to bid and is qualified to perform the contract if its bid is accepted;
- (c) Documentary evidence established in accordance with Clause 14 that the goods and ancillary services to be supplied by the bidder are eligible goods and services and conform to the Bidding Documents; and
- (d) Bid security furnished in accordance with Clause 15.

10. Bid Form

- 10.1 The bidder shall complete the Bid Form and the appropriate Price Schedule furnished in the Bidding Documents, indicating for the Goods to be supplied, a brief description of the Goods, their country of origin, quantity, and prices.
- 10.2⁹ For the purpose of granting a margin of domestic preference pursuant to Clause 27, the Purchaser will classify the bid, when submitted, in one of three groups, as follows:
- (a) Group A: Bids offering goods manufactured in the Purchaser's country for which the domestic value added in the manufacturing cost is not less than 20%¹⁰ of the ex-factory price;

8 Hereinafter insert "English", "French", or "Spanish" in the case of the World Bank, or "English", "French", "Spanish" or "Portuguese" in the case of the Inter-American Development Bank.

9 Delete where a margin of domestic preference is not to be granted.

10 IDB requires a 40% domestic value added.

- (b) Group B: Bids offering goods manufactured in the Purchaser's country for which the domestic value added in the manufacturing cost is less than 20% of the ex-factory price, and for goods of foreign origin already located in the Purchaser's country;¹¹ and
- (c) Group C: Bids offering goods of foreign origin to be imported by the Purchaser directly from the supplier's local agent.

10.3⁹ To facilitate this classification by the Purchaser, the bidder shall complete whichever version of the Price Schedule furnished in the Bidding Documents is appropriate, provided however that the completion of an incorrect version of the Price Schedule by the bidder will not result in rejection of its bid but merely in the Purchaser's reclassification of the bid into its appropriate bid group.

11. Bid Prices

11.1 The bidder shall indicate on the appropriate Price Schedule attached to these documents the unit prices and total bid prices of the goods it proposes to supply under the Contract.

11.2 Prices indicated on the Price Schedule shall be entered separately in the following manner:

(a) For goods offered from within the Purchaser's country:

(i) the price of the goods, quoted ex-factory, ex-showroom, ex-warehouse or off-the-shelf, as applicable, including all customs duties and sales and other taxes already paid or payable:

a. on the components and raw material used in the manufacture or assembly of goods quoted ex-factory;
or

b. on the previously imported goods of foreign origin quoted ex-showroom, ex-warehouse or off-the-shelf.

(ii) any purchaser-country sales and other taxes which will be payable on the goods if this contract is awarded;

(iii) charges for inland transportation, insurance and other local costs incidental to delivery of the Goods to their point of delivery; and

(iv) the cost of incidental services listed in Clause 8 of the Special Conditions of Contract.

11 Delete the last phrase "and for goods of foreign origin already located in the Purchaser's country" for IDB financed projects.

(b) For goods offered from abroad.

- (i) the price of the goods quoted CIF port-of-entry in the Purchaser's country. In quoting the price, the bidder shall be free to use ocean transportation through vessels registered in any eligible source country, or through shipping conferences in which the majority of the shipping lines are from such eligible source countries. Similarly, the bidder may obtain insurance services from any eligible source country.
- (ii) the price of the goods quoted FOB port of shipment;¹²
- (iii) estimated charges for inland transportation, insurance and other local costs incidental to delivery of the goods from the port of entry to the point of delivery;¹³ and
- (iv) the cost of incidental services listed in Clause 8 of the Special Conditions of Contract.

Alternative for IDB-financed projects if domestic preference is applied.

11.2 Prices indicated on the Price Schedule shall be entered separately in the following manner:

(a) For goods offered from within the Purchaser's country:

- (i) the price of the goods, quoted ex-factory, ex-showroom, ex-warehouse or off-the-shelf, as applicable, excluding all import duties and sales and other taxes already paid or payable on the components and raw material used in the manufacture or assembly of goods quoted ex-factory.
- (ii) any purchaser-country sales, consumption and value-added taxes incorporated in the cost of the goods; and
- (iii) charges for inland transportation, insurance and other local costs incidental to delivery of the goods to their point of delivery.

(b) For goods offered from abroad:

- (i) the price of the goods quoted CIF port-of-entry in the Purchaser's country (excluding import duties, consular fees and port taxes);

12 Optional. This should be in addition to (i) and is for the purpose of contracting on an FOB basis if the Purchaser wishes to retain the option to arrange ocean transportation and insurance.

13 Optional subparagraph. Delete if inapplicable. Even if the bidder is not requested to include these estimated charges in its bid, the Purchaser may add the cost of inland transportation and other incidental costs for purposes of comparison of bids (see Clause 26).

- (ii) estimated charges for port handling, inland transportation, insurance and other local costs incidental to delivery of the Goods from the port of entry to their point of delivery; and
 - (iii) the cost of incidental services listed in Clause 8 of the Special Conditions of Contract.
- 11.3 The bidder's separation of price components in accordance with para. 11.2 above will be solely for the purpose of facilitating the comparison of bids by the Purchaser and will not in any way limit the Purchaser's right to contract on different terms.
- 11.4¹⁴ Fixed Price. Prices quoted by the bidder shall be fixed during the bidder's performance of the contract and not subject to variation on any account. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected, pursuant to Clause 24.
12. Bid Currencies
- 12.1 Prices shall be quoted in the following currencies:
- (a) For goods and services which the bidder will supply from within the Purchaser's country, the prices shall be quoted in the currency of the Purchaser's country;¹⁵ and
 - (b) For goods and services which the bidder will supply from outside the Purchaser's country, the prices shall be quoted either in the currency of the bidder's home country, or in (an international trading currency).¹⁶
- 12.2 Further, a bidder expecting to incur a portion of its expenditures in the performance of the contract in more than one currency, and wishing to be paid accordingly, shall so indicate in its bid. In such a case, either (i) the bid shall be expressed in different currencies and the respective amounts in each currency together making up the total price, or (ii) the total bid price shall be expressed in one currency and payments required in other currencies expressed as a percentage of the bid price along with the exchange rate used in such calculation.
13. Documents Establishing Bidder's Eligibility and Qualifications
- 13.1 Pursuant to Clause 9, the bidder shall furnish, as part of its bid, documents establishing the bidder's eligibility to bid and its qualifications to perform the contract if its bid is accepted.

14 Alternatives. Delete the inapplicable alternative.

15 Delete if local bidders offering goods from within the country can be permitted to quote and be paid in foreign currency and modify (b) suitably to cover all bidders and goods.

16 Insert a currency widely used in international trade.

- 13.2 The documentary evidence of the bidder's eligibility to bid shall establish to the Purchaser's satisfaction that the bidder, at the time of submission of its bid, is from an eligible source country as defined under Clause 2.
- 13.3 The documentary evidence of the bidder's qualifications to perform the contract if its bid is accepted, shall establish to the Purchaser's satisfaction:
- (a) that, in the case of a bidder offering to supply goods under the contract which the bidder did not manufacture or otherwise produce, the bidder has been duly authorized by the Goods' manufacturer or producer to supply the Goods to or in the Purchaser's country;
 - (b) that the bidder has the financial, technical and production capability necessary to perform the contract; and
 - (c) that, in the case of a bidder not doing business within the Purchaser's country, the bidder is or will be (if successful) represented by an agent in that country equipped and able to carry out the Supplier's maintenance, repair and spare parts-stocking obligations prescribed by the General Conditions of the Contract (Clause 14), Special Conditions of Contract (Clause 9), and the Technical Specifications (para 4.4).
- 14. Documents Establishing Goods' Eligibility and Conformity to Bid Documents**
- 14.1 Pursuant to Clause 9, the bidder shall furnish, as part of its bid, documents establishing the eligibility and conformity to the Bidding Documents of all goods and services which the bidder proposes to supply under the contract.
- 14.2 The documentary evidence of the Goods' and Services' eligibility shall consist of a statement in the Price Schedule on the country of origin of the goods and services offered which shall be confirmed by a certificate of origin issued at time of shipment.
- 14.3 The documentary evidence of the Goods' and Services' conformity to the Bidding Documents may be in the form of literature, drawings and data, and shall furnish:
- (a) a detailed description of the Goods' essential technical and performance characteristics;
 - (b) a list giving full particulars including available sources and current prices of all spare parts, special tools, etc., necessary for the proper and continuing functioning of the goods for a period of (three) years following commencement of the Goods' use by the Purchaser; and
 - (c) a clause-by-clause commentary on the Purchaser's Technical Specifications demonstrating the Goods' and Services' substantial responsiveness to those specifications or a statement of

deviations and exceptions to the provisions of the Technical Specifications.

- 14.4 For purposes of the commentary to be furnished pursuant to Clause 14.3(c) above, the bidder shall note that standards for workmanship, material and equipment, and references to brand names or catalog numbers designated by the Purchaser in its Technical Specifications are intended to be descriptive only and not restrictive. The bidder may substitute alternative standards, brand names and/or catalog numbers in its bid provided that it demonstrates to the Purchaser's satisfaction that the substitutions are substantially equivalent or superior to those designated in the Technical Specifications.
- 14.5 Design adequacy and reliability will be evaluated on the basis of field experience and/or laboratory test information submitted with the bid for the exact same make and model of pump as is being offered in the bid. All design modifications and materials changes made to the pump subsequent to the time that the field and laboratory test information was obtained, must be clearly described in writing and identified on the drawings. If the Purchaser in its sole judgment determines that the modifications could substantially affect the former test results, this may be reflected in the evaluation. If changes have been made, the supplier shall submit a statement with its bid explaining the reason for the changes and the impact the modifications are expected to have on former test results.

Failure to submit either field performance or laboratory test information whose content substantially meets the information requirements of this clause will result in the bid being declared non-responsive.

- (a) Field Experience: If the bidder wishes to substantiate design adequacy and reliability on the basis of field experience, information shall be supplied on the field experience of one or more purchasers of at least 20 pumps each of the same make and model as being offered. All pumps must have been in operation for a period of at least one year, pumping lifts must be similar to those specified in para. 4.1 of the Technical Specifications, water quality should be similar to or more severe than that noted in para. 2.2, and the average number of persons using each handpump should be similar to or greater than the number noted in para. 2.1.

The above field performance information shall be submitted with the bid and shall include the names and addresses of purchasers, contact persons, locations of pumps, range of pumping lifts, water quality in the project areas, average number of users per pump, types of maintenance systems, number of pumps which broke down or required repairs each year, and a list of parts which were replaced or major causes of failures and types of repairs. The former purchaser must (1) verify that the information supplied is accurate and (2) if laboratory test data is unavailable, that the minimum design adequacy specifications of para. 4.1 of the Technical Specifications are achieved.

- (b) Laboratory Testing: For pumps to be evaluated on the basis of laboratory test information, the following test results, in (language) obtained and certified by an internationally recognized, independent laboratory shall be provided with the bid.

Certified test results which demonstrate that the minimum design adequacy specifications (Section VI, para. 4.1) can be achieved by a typical user with the power input and applied force stated in para. 1.1. Data for delivery rates, pumping lifts, applied force, and handle speeds (strokes or revolutions per minute) shall also be provided.

Certified results of a 4,000 hour (or equivalent) laboratory endurance test conducted at a pumping lift equal to or greater than that specified in Section VI, para. 4.1. Data related to all breakdowns, parts wear, and water delivery rates over the entire period of the test shall be provided. For pumping lifts greater than 45 meters, results will be accepted if laboratory endurance tests were conducted within 15 meters of the specified pumping lift.

Certified test results of the effect of side impacts to the pumpstand and handle as well as the effect of repeated impacts of the handle against its stops shall be provided.

A full description of the laboratory test method which was used shall be provided. An example of an acceptable methodology is provided in Annex A. If alternative test procedures are used, the Purchaser in its sole judgment will determine their suitability and acceptability for evaluation purposes.

15. Bid Security¹⁷

- 15.1 Pursuant to Clause 9, the bidder shall furnish, as part of its bid, bid security in the amount of (_____).¹⁸
- 15.2 The bid security is required to protect the Purchaser against the risk of bidder's conduct which would warrant the security's forfeiture, pursuant to para 15.7.
- 15.3 The bid security shall be denominated in the currency of the bid or another freely convertible currency, and shall be in one of the following forms:

17 For small value purchases, bid security is not essential and may be dispensed with. If so, this Clause number and title should be retained followed by the words "not required."

18 Insert amount deemed appropriate by the Purchaser. The amount may be expressed either as a fixed amount or as an amount not less than a specified percentage of the bidder's bid price, preferably the former. Bid security shall be normally in the range of 2 to 5 percent of the bid amount.

- (a) A bank guarantee or irrevocable Letter of Credit issued by a Bank located in the Purchaser's country or abroad acceptable to the Purchaser, in the form provided in the Bid Documents or another form acceptable to the Purchaser and valid for 30 days beyond the validity of the bid; or
 - (b) A cashier's check, certified check, or cash.
- 15.4 Any bid not secured in accordance with paras. 15.1 and 15.3 will be rejected by the Purchaser as non-responsive, pursuant to Clause 24.
- 15.5 Unsuccessful bidder's bid security will be discharged/returned as promptly as possible but not later than 30 days after the expiration of the period of bid validity prescribed by the Purchaser, pursuant to Clause 16.
- 15.6 The successful bidder's bid security will be discharged upon the bidder's executing the Contract, pursuant to Clause 34, and furnishing the performance security, pursuant to Clause 35.
- 15.7 The bid security may be forfeited:
- (a) if a bidder withdraws its bid during the period of bid validity specified by the bidder on the Bid Form; or
 - (b) in the case of a successful bidder, if the bidder fails:
 - (i) to sign the Contract in accordance with Clause 34; or
 - (ii) to furnish performance security in accordance with Clause 35.
16. Period of Validity of Bids
- 16.1 Bid shall remain valid for (_____)¹⁹ days after the date of bid opening prescribed by the Purchaser, pursuant to Clause 19. A bid valid for a shorter period may be rejected by the Purchaser as non-responsive.
- 16.2 In exceptional circumstances the Purchaser may solicit the bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing (or by cable or telex). The bid security provided under Clause 15 shall also be suitably extended. A bidder may refuse the request without forfeiting its bid security. A bidder granting the request will not be required nor permitted to modify its bid.

19 Insert the number of days deemed appropriate by the Purchaser. The period should be sufficient to permit completion of evaluation and comparison of bids, review of the recommended selection with the financing agency (if so required), obtaining of all necessary approvals, and notifying of the award. Normally, the validity period should be 90 days. A realistic period should be specified in order to avoid the need for extensions.

17. Format and Signing of Bid

- 17.1 The bidder shall prepare (Number) copies of the bid, clearly marking each "Original Bid" and "Copy of Bid," as appropriate. In the event of any discrepancy between them, the original shall govern.
- 17.2 The original and all copies and the bid shall be typed or written in indelible ink and shall be signed by the bidder or a person or persons duly authorized to bind the bidder to the contract. The latter authorization shall be indicated by written power-of-attorney accompanying the bid. All pages of the bid, except for unamended printed literature, shall be initialed by the person or persons signing the bid.
- 17.3 The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the person or persons signing the bid.

D. Submission of Bids

18. Sealing and Marking of Bids

- 18.1 The bidders shall seal the original and each copy of the bid in an inner and an outer envelope, duly marking the envelopes as "original" and "copy."
- 18.2 The inner and outer envelopes shall be:
(a) addressed to the Purchaser at the following address:

(b) bear (the Project Name), the Invitation for Bids (IFB) number, and the words "DO NOT OPEN BEFORE _____".
- 18.3 The inner envelope shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared "late."
- 18.4 If the outer envelope is not sealed and marked as required by para. 18.2, the Purchaser will assume no responsibility for the bid's misplacement or premature opening.

19. Deadline for Submission of Bids

- 19.1 Bids must be received by the Purchaser at the address specified under para. 18.2 no later than (Hours) on (Date).
- 19.2 The Purchaser may, at its discretion, extend this deadline for the submission of bids by amending the Bidding Documents in accordance with Clause 7, in which case all rights and obligations of the Purchaser and bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

20. Late Bids

20.1 Any bid received by the Purchaser after the deadline for submission of bids prescribed by the Purchaser, pursuant to Clause 19, will be rejected and/or returned unopened to the bidder.

21. Modification and Withdrawal of Bids

21.1 The bidder may modify or withdraw its bid after the bid's submission, provided that written notice of the modification or withdrawal is received by the Purchaser prior to the deadline prescribed for submission of bids.

21.2 The bidder's modification or withdrawal notice shall be prepared, sealed, marked and dispatched in accordance with the provisions of Clause 18. A withdrawal notice may also be sent by telex or cable but followed by a signed confirmation copy.

21.3 No bid may be modified subsequent to the deadline for submission of bids.

21.4 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the bidder on the Bid Form. Withdrawal of a bid during this interval may result in the bidder's forfeiture of its bid security, pursuant to para. 15.7.

E. Bid Opening and Evaluation

22. Opening of Bids by Purchaser

22.1 The Purchaser will open bids, in the presence of bidders' representatives who choose to attend, at (Date and Time)²⁰ at the following location (Address). The bidder's representatives who are present shall sign a register evidencing their attendance.

22.2 The bidders' names, bid prices, modifications, bid withdrawals and the presence or absence of the requisite bid security and such other details as the Purchaser, at its discretion, may consider appropriate will be announced at the opening.

22.3 The Purchaser will prepare minutes of the bid opening.

23. Clarification of Bids

23.1 To assist in the examination, evaluation and comparison of bids the Purchaser may, at its discretion, ask the bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in the price or substance of the bid shall be sought, offered or permitted.

20 Should follow immediately or soon after bid closing.

24. Preliminary Examination

- 24.1 The Purchaser will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.
- 24.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If the supplier does not accept the correction of the errors, its bid will be rejected. If there is a discrepancy between words and figures, the amount in words will prevail.
- 24.3 Prior to the detailed evaluation, the Purchaser will determine the substantial responsiveness of each bid to the Bidding Documents. For purposes of these Clauses, a substantially responsive bid is one which conforms to all the terms, conditions, and specifications of the Bidding Documents without material deviation or reservation. A material deviation or reservation is one which affects in any substantial way the scope, quality, or performance of the Goods, or which limits in any substantial way, inconsistent with the Bidding Documents, the Purchaser's rights or the bidder's obligations under the Contract, and the rectification of which deviation or reservation would affect unfairly the competitive position of other bidders presenting substantially responsive bids.
- 24.4 A bid determined as not substantially responsive will be rejected by the Purchaser, and may not subsequently be made responsive by the bidder by correction of the non-conformity.
- 24.5 The Purchaser may waive any minor informality or non-conformity or irregularity in a bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative standing order of any bidder.

25. Conversion to Single Currency (World Bank)

- 25.1²¹ To facilitate evaluation and comparison, the Purchaser will convert all bid prices expressed in the amounts in various currencies in which bid price is payable, to the local currency²² of the Purchaser's country at the selling exchange rate established by the Central Bank or any other commercial Bank in the Purchaser's country, for similar transactions.

Alternative A:

on (insert a specific date not earlier than thirty (30) days prior to bid opening and not later than the expiry of the initial validity specified in Clause 16).

21 Alternative clauses; delete inapplicable clauses.

22 Substitute another currency if more convenient to the Purchaser.

Alternative B:

on the date of decision to award.²³ The bids may be initially converted to a common currency at the exchange rates on the date of bid opening to establish initial ranking. However, if there is a change in the value of the currencies prior to the decision on award, the bid prices will be re-evaluated at the exchange rates on the date of decision to award. If the decision is taken beyond the original date of the expiry of bid validity, the exchange rates on the date of expiry of the initial validity of bids, as specified in Clause 16, will be used.

Alternative (IDB)

25.1²⁴ To facilitate evaluation and comparison, the Purchaser will convert all bid prices expressed in the amounts in the various currencies in which bid price is payable, to the local currency of the Purchaser's country at the selling exchange rate published by an official source and applicable to similar transactions on the day bids are opened or at such later date (30 or 60 days after bid opening) as shall be specified in the call for bids.

26. Evaluation and Comparison of Bids

26.1 The Purchaser will evaluate and compare the bids previously determined to be substantially responsive, pursuant to Clause 24.

26.2 The Purchaser's evaluation of a bid will not take into account:

- (a) in the case of goods manufactured in the Purchaser's country or goods of foreign origin already located in the Purchaser's country, sales and other similar taxes which will be payable on the goods if a contract is awarded to the bidder;
- (b) in the case of goods of foreign origin offered from abroad, customs duties and other similar import taxes which will be payable on the goods if a contract is awarded to the bidder; and
- (c) any allowance for price adjustment during the period of execution of the contract if provided in the bid.

26.3 The comparison shall be of ex-factory/ex-warehouse/off-the-shelf price of the goods offered from within the Purchaser's country, such price to include all costs as well as duties and taxes paid or payable on components and raw material incorporated or to be incorporated in the goods, and the CIF port of entry price of the goods offered from outside the Purchaser's country.

23 Date of decision on award should be defined by the Purchaser as the date of tender board's decision or the date of Government approval.

24 Alternative clause; delete if inapplicable.

26.4²⁵ The Purchaser's evaluation of a bid will take into account, in addition to the bid price and the price of incidental services, the following factors, in the manner and to the extent indicated in paras. 26.5 and 26.6 and in the Technical Specifications:

- (a) Cost of inland transportation, insurance and other costs within the Purchaser's country incidental to delivery of the Goods to their point of delivery;
- (b) Delivery schedule offered in the bid;
- (c) Deviations in payment schedule from that specified in the Special Conditions of Contract;
- (d) The cost of goods and services as determined under Clause 27 if domestic preference is applied;
- (e) The cost of spare parts;
- (f) The availability in the Purchaser's country of spare parts and after-sales services for the equipment offered in the bid;
- (g) The suitability of the equipment to be maintained and repaired by village repairers, area mechanics, and mobile maintenance teams.
- (h) The reliability and productivity of the equipment offered; and
- (i) Standardization of pumps in the project area.

26.5²⁶ Pursuant to para 26.4 the following evaluation method will be followed:

- (a) Inland transportation, ex-factory/from port of entry, insurance and incidentals:
 - (i) Inland transportation, insurance and other incidental costs, for delivery of the Goods, from ex-factory/port of entry to the point of delivery will be computed for each bid by the Purchaser on the basis of published tariffs by the rail/road transport agencies, insurance companies and/or other appropriate sources. To facilitate such computation, bidders shall furnish the dimensions and shipping weight and the approximate ex-factory/CIF value of each package.
- OR

25 The list under items (a) to (h) is merely illustrative; only those factors which are intended to be evaluated should be retained and others should be deleted.

26 If paragraph 26.4 is retained, for the factors listed under that paragraph the evaluation method should be outlined by choosing from among the various sample provisions included under this paragraph. Only one paragraph under each sub-heading will be applicable and the inapplicable provisions should be deleted.

(ii) Bidder shall quote separately for inland transportation, insurance and other incidentals for delivery of goods to the point of delivery. These costs incurred in Purchaser's country shall be quoted in local currency.

OR

(iii) Inland transportation cost shall be computed on the following tariff:

- a. () per kg/ton per km
- b. () per cubic meter/cubic yard per km

The above costs will be added to the ex-factory/CIF bid price.

(b) Delivery Schedule:

(i) The purchaser desires to have delivery of the Goods covered under the invitation, at the time specified in the Schedule of Requirements. The estimated time of arrival of the Goods at the point of delivery should be calculated for each bid after allowing for reasonable ocean and inland transportation time. Treating the bid offering the scheduled time of arrival as the base, a delivery "adjustment" will be calculated for other bids at () percent²⁷ of the ex-factory/CIF price for each day of delay beyond the base and this will be added to the bid price for evaluation.

OR

(ii) The goods covered under this invitation are required to be shipped () days after signing of the contract and establishment of the Letter of Credit. No credit will be given to earlier deliveries and bids offering delivery beyond () days of signing the contract and establishment of the Letter of Credit will be treated as unresponsive. Within this acceptable range of () to () days, an adjustment of () percent per day will be added to bids offering deliveries later than () days.

OR

(iii) The goods under this invitation are required to be shipped in accordance with the following schedule, after establishment of Letter of Credit:

- ()% not earlier than 90 but not later than 180 days;
- ()% not earlier than 180 but not later than 270 days;
- ()% not earlier than 270 but not later than 360 days;
- ()% not earlier than 360 but not later than 450 days.

Bids offering deliveries earlier or later than the above schedule shall be adjusted in the evaluation by adding a factor of 0.1% of ex-factory/CIF value per day to the bid price.

27 Insert appropriate percentage figure. A value of 0.5% per week is reasonable. The liquidated damages under Clause 23 of the General Conditions of Contract should be equal or higher.

(d) Cost of Spare Parts:

(i) The Purchaser will estimate the cost of spare parts usage in the initial (three) year period of operation, based on information furnished by each bidder as well as on past experience of the Purchaser or other Purchasers similarly placed.

(e) Spare Parts and After Sales Service Facilities in the Purchaser's Country:

A list of spare parts expected to be needed for (three) years of operation will be drawn up by the Purchaser for each type of pump being offered. The list will be based on the recommended list of spare parts submitted by the bidders (Section IV, Clause 9), field performance and laboratory test data submitted with the bid, and other information available to the Purchaser. The Purchaser will then estimate the CIF price of the spare parts expected to be needed for (three) years of operation for each type of pump based on the spare parts requirements it has identified and on the unit CIF spare parts prices supplied by each bidder.

26.6 Merit Point System

Based on field performance and/or laboratory test information, as well as drawings, material specifications, and instruction manuals, the Purchaser will assign scores to each type of pump offered using the criteria and weights indicated below. The evaluation will be based on information submitted with the bid, without resorting to extrinsic evidence. The bid determined to have the greatest number of merit points will be deemed the lowest evaluated bid and will be awarded the contract.

Bids determined to be substantially responsive, pursuant to para. 24.3 of the Instructions to Bidders, will have met the minimum requirements stated in Clause 4 of the Technical Specifications. These will be assigned points for price (criteria 1 and 2), and will be awarded merit points for criteria 3 through 7 if the pump exceeds the minimum requirements.

	<u>Criteria</u>	<u>Maximum score</u>
1	Evaluated price of goods and services	50
2	Price of spare parts	10
3	Design adequacy	5
4	Reliability	10
5	Ease of maintenance and repair	10
6	Service and spare parts availability	10
7	Standardization	5

(a) Evaluated price of goods and services (maximum score = 50)

The evaluated price of goods and services used to assign points will be determined according to the procedure described in paras. 26.5(a)(b) and Clause 27. A score for price shall be assigned to each evaluated bid by dividing the lowest evaluated price among all substantially responsive bidders (P_L) by the evaluated price of each bid (P) and then multiplying the quotient by 50.

$$\text{Points} = \frac{P_L}{P} \times 50$$

(b) Price of spare parts (maximum score = 10)

The CIF price of spare parts will be determined by the procedure specified in para. 26.5(d). Points will be assigned to each bid by dividing the lowest evaluated CIF price of spare parts among all substantially responsive bidders by the CIF price of the spare parts of each bidder and then multiplying the quotient by 10.

(c) Design Adequacy (maximum score = 5)

A handpump must be able to deliver water at a minimum rate over the range of pumping lifts that will be encountered in the Project Area when operated by typical users. Therefore, for the bid to be responsive, the minimum requirements for water delivery rate specified in para. 4.1 of the Technical Specifications must be met. Merit points will then be awarded if documented field experience or laboratory test information supports a bidders' claim that substantially higher delivery rates can be achieved by typical users.

The following criteria will be used as a guide to assign merit points for reliability based on information supplied with the bid.

Score

- 5 The water delivery rate obtained by typical users is at least 50 percent greater than the minimum requirement specified in para. 4.1 of the Technical Specifications.
- 0 The pump meets but does not exceed the minimum requirements for design adequacy specified in para. 4.1 of the Technical Specifications.

(d) Reliability (maximum score = 10)

Merit points will be assigned on the basis of field experience and/or laboratory test information, where the number of merit points will reflect the proven reliability of the pump and the level of confidence which can be placed in the documentation. For example, higher merit point scores will be given to suppliers who support their claim of good reliability by means of detailed field

information which is presented for an extended use period, particularly if documentation shows that the claimed reliability is consistently achieved in diverse project areas. Similarly, higher merit point scores may be given to suppliers who provide both certified laboratory test data and field reliability information, if the combined information substantiates the reliability of the pump better than either field or laboratory test information alone. Accordingly, no more than 3 merit points will be given if only laboratory test information is provided. To obtain the maximum number of merit points, information must be included in the bid to document that the pump offered showed outstanding reliability over an extended period of field use by reports certified by independent owners.

The following criteria will be used as a guide to assign merit points for reliability based on information supplied with the bid. As used here, a necessary repair intervention is one which is required because a pump has broken down (will not deliver water), or whose operation is significantly impaired, as exhibited in reduced water delivery rates, increased handle force requirements, excessive handle play, etc.

Score

- 10 Pumps showed outstanding reliability over at least a 3 year period of field use, during which repair interventions were necessary no more than an average of 0.5 times per pump in any 12 consecutive months, all of which were able to be done by a village repairer or area mechanic.
- 5 Pumps showed good reliability over at least a 2 year period of field use, during which repair interventions were necessary no more than an average of 2 times per pump in any 12 consecutive months. No more than one of these interventions required the services of a central maintenance team and all other interventions were able to be done by a village repairer or area mechanic.
- 3 Water delivery rates were sustained throughout a 4000 hour laboratory endurance test during which no repair interventions were required and the mechanical efficiency did not decrease by more than 25 percent.
- 0 Pump meets but does not exceed the minimum requirements for reliability specified in para. 4.2 of the Technical Specifications.

(e) Ease of Maintenance and Repair (maximum score = 10)

While reliability is important, a pump must be able to be repaired, for sooner or later it will break down. Thus periodic repairs are expected for all pumps and the ease of maintenance and repair is important if a handpump-based water supply system is going to be sustained.

Repairs and preventive maintenance may be done by village repairers, area mechanics, central maintenance teams, by the service department of the manufacturer providing the pumps, or by various combinations of these. A village repairer is a resident of the community where the pump is located. He or she has limited training and very simple tools with which to make repairs. An area mechanic is a local resident who is better trained than the village repairer, is equipped with the tools needed to make all or most repairs, and typically uses a bicycle or other simple means of transport to repair pumps in surrounding villages. A central maintenance team is a team of well trained technicians equipped with a four-wheel vehicle, who have the tools (including lifting tackle) necessary to remove and reinstall all pump components in the field. The mobile maintenance team is supported by a workshop where all components can be rebuilt.

The disadvantages of reliance on a central maintenance system are that it is expensive mainly due to high transport costs, and there are often long periods of delay in which the pump is out of service. Village level and area maintenance and repair offers significant advantages both in terms of reduced cost and shortened down times. Therefore, in the merit point system scores are based on the ease of maintenance and repair and on the range of repairs which can be made by village repairers and area mechanics. Ideally a village repairer should be able to make all repairs quickly with a minimum of tools and he or she should be able to extract the foot valve and piston from the well without the use of lifting tackle.

The following criteria will be used as a guide to assign merit points for maintenance and repair.

Score

- 10 All parts requiring routine inspection and adjustment are easily accessible and all wearing parts are replaceable by a village repairer having minimal training and simple tools. Each part which is subject to wear should be replaceable in less than 2 hours by the village repairer, and individual replacement parts do not cost more than 1/20th of the total cost of the pump.
- 7 A village repairer can make most repairs but requires the assistance of an area mechanic for some.
- 4 The more advanced training and skills of an area mechanic are required to maintain and repair the pump.
- 0 Pump meets but does not exceed the minimum requirements for maintenance and repair specified in para. 4.3 of the Technical Specifications.

(f) Service and Spare Parts Availability (maximum score = 10)

Merit points for service and spare parts availability will be awarded on the basis of the proximity of service centers and spare parts outlets to the project site. Ideally, pump components (such as piston seals, bearings, pump rod and rising main sections, and bolts) which most commonly require replacement should be available at local retail outlets. A service center, where all parts are in stock and can be purchased and where all types of repairs can be made, should be located in or near the area where the pumps are to be installed.

The bidder shall submit a description of the services which are currently provided in the country at existing service centers and spare parts outlets. The number and location of such service centers should be provided. If services are not currently provided or the existing services will be upgraded, a description of the services, including trained mechanics and service charges, which the bidder guarantees to provide if he is awarded the contract shall be submitted with the bid.

The following criteria will be used as a guide to assign merit points for service and spare parts.

Score

- 10 Supplier meets all requirements of A, B, and C:
 - (A) Replacement parts for all components are in stock and available from service center(s) located in (specify one or more locations) or equivalent in terms of accessibility by residents in the Project Area.
 - (B) Service center(s) have equipment and personnel necessary to perform all types of repairs on the pump.
 - (C) Parts which commonly require replacement are available at local retail outlets in the Project Area.
- 6 Supplier meets all requirements of **any two** of the above (i.e. A and B, A and C, or B and C).
- 3 Supplier meets all requirements of either A, B, or C.
- 0 The minimum requirements for service and spare parts availability specified in para. 4.4 of the Technical Specifications are met but not exceeded.

(g) Standardization

In order to minimize the complexity of the maintenance system and spare parts supply within a region or country as well as to encourage local handpump manufacture and achieve reasonable quality control, it is advantageous for a country to use one, or a small number of standard pump designs. User acceptance of a pump

and repairer familiarity are also important considerations. Therefore, (5) merit points will be given to a pump if it is the standard model used in a region or country, or if the pump is commonly used in the area.

27. Domestic Preference (for World Bank) OR Margin of Preference (for IDB)²⁸

(World Bank)

- 27.1 In the comparison of evaluated bids, the Purchaser will grant a margin of preference to goods manufactured in the Purchaser's country, in accordance with the following procedures, provided the bidder shall have established to the satisfaction of the Purchaser and The World Bank that the manufacturing cost of such goods includes a domestic value added equal to at least 20% of the ex-factory bid price of such goods.
- 27.2 The Purchaser will first review the bids to confirm the appropriateness of, and to modify as necessary, the bid group classification to which bidders assigned their bids in preparing their Bid Forms and Price Schedule, pursuant to Clause 11.
- 27.3 All evaluated bids in each group will then be compared among themselves, to determine the lowest evaluated bid of each group. The lowest evaluated bid of each group will next be compared with the lowest evaluated bids of the other groups. If this comparison results in a bid from Group A or B being the lowest, it will be selected for the award of the contract.
- 27.4 If, as a result of the preceding comparison, the lowest bid is from Group C, all Group C bids will then be further compared with the lowest evaluated bid from Group A, after adding to the evaluated bid price of the imported goods offered in each Group C bid for the purpose of this further comparison only:
- (a) the amount of customs duties and other import taxes which a non-exempt importer would have to pay for the importation of the goods offered in each Group C bid; or
 - (b) 15% of the CIF Bid Price of such goods, if the customs duties and taxes exceed 15% of the CIF price of such goods.

If the Group A bid in the further comparison is the lowest, it will be selected for award. If not, the lowest evaluated bid from Group C as determined from the comparison under para. 27.3a. will be selected.

28 This clause is optional and ought to be included only where the Purchaser intends to grant a margin of domestic preference in the comparison of bids.

Alternative (IDB)

- 27.1 In the comparison of evaluated bids, local suppliers are entitled to a margin of preference according to the following criteria:
- (a) Goods shall be considered to be of local origin if the cost of the local materials, labor and services used to produce the item constitutes not less than 40% of the cost of the finished product;
 - (b) In comparing local and foreign bids, the bid or offered price of goods of local origin shall be the delivered price at the point of delivery, with deductions for:
 - (i) import duties paid on significant raw materials or manufactured components;
 - (ii) local sales, consumption and value added to taxes incorporated in the cost of the items being offered. Proof of the amounts to be deducted under (i) and (ii) shall be established by the local bidder. The offered price by foreign bidders shall be the CIF prices (less import taxes, consular and port fees) plus handling and local transportation expenses from the port to the point of delivery; and
 - (c) In adjudicating bids, a 15% margin of preference or the actual import duty, whichever is less, shall be added to the CIF price of the foreign offers expressed in their local currency equivalent.

28. Contacting the Purchaser

- 28.1 Subject to Clause 23, no bidder shall contact the Purchaser on any matter relating to its bid, from the time of the bid opening to the time the contract is awarded.
- 28.2 Any effort by a bidder to influence the Purchaser in the Purchaser's bid evaluation, bid comparison or contract award decisions may result in the rejection of the bidder's bid.

F. Award of Contract

29. Postqualification²⁹

- 29.1 In the absence of prequalification, the Purchaser will determine to its satisfaction whether the bidder selected as having submitted the lowest evaluated bid is qualified to satisfactorily perform the contract.

²⁹ Wherever practicable and appropriate, specify minimum qualification requirements to be met if a prequalification procedure was not used prior to bidding.

29.2 The determination will take into account the bidder's financial, technical and production capabilities. It will be based upon an examination of the documentary evidence of the bidder's qualifications submitted by the bidder, pursuant to Clause 13, as well as such other information as the Purchaser deems necessary and appropriate.

29.3 An affirmative determination will be a prerequisite for award of the contract to the bidder. A negative determination will result in rejection of the bid, in which event, the Purchaser will proceed to the next lowest evaluated bid to make a similar determination of that bidder's capabilities to perform the contract satisfactorily.

30. Award Criteria

30.1 Subject to Clause 32, the Purchaser will award the contract to the successful bidder whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid, provided further that the bidder is determined to be qualified to satisfactorily perform the contract.

31. Purchaser's Right to Vary Quantities at Time of Award

31.1 The Purchaser reserves the right at the time of award of contract to increase or decrease by up to (___) percent the quantity of goods and services specified in the Schedule of Requirements without any change in price or other terms and conditions. ³⁰

32. Purchaser's Right to Accept Any Bid and to Reject Any or All Bids

32.1 The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for the Purchaser's action.

33. Notification of Award

33.1 Prior to the expiration of the period of bid validity, the Purchaser will notify the successful bidder in writing by registered letter or by cable or telex, to be confirmed in writing by registered letter, that its bid has been accepted.

33.2 The notification of award will constitute the formation of the contract.

33.3 Upon the successful bidder's furnishing of performance security pursuant to Clause 35, the Purchaser will promptly notify each unsuccessful bidder and will discharge its bid security, pursuant to Clause 15.

30 Optional Clause to be used only where appropriate. Insert appropriate percentage figure. Normally should not exceed 15%.

34. Signing of Contract

- 34.1 At the same time as the Purchaser notifies the successful bidder that its bid has been accepted, the Purchaser will send the bidder the Contract Form provided in the Bidding Documents, incorporating all agreements between the parties.
- 34.2 Within 30 days of receipt of the Contract Form, the successful bidder shall sign and date the Contract and return it to the Purchaser.

35. Performance Security

- 35.1 Within 30 days of the receipt of notification of award from the Purchaser, the successful bidder shall furnish the performance security in accordance with the Conditions of Contract, in the Performance Security Form provided in the Bidding Documents or another form acceptable to the Purchaser.
- 35.2 Failure of the successful bidder to comply with the requirement of Clause 34 or Clause 35 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event the Purchaser may make the award to the next lowest evaluated bidder or call for new bids.

Section III. GENERAL CONDITIONS OF CONTRACT

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Section III. GENERAL CONDITIONS OF CONTRACT

1. Definitions

1.1 In this contract, the following terms shall be interpreted as indicated:

- (a) "The Contract" means the agreement entered into between the "The Purchaser and the Supplier, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein;
- (b) "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations;
- (c) "The Goods" means all of the equipment, machinery, and/or other materials which the Supplier is required to supply to the Purchaser under the Contract;
- (d) "Services" means services ancillary to the Supply of the Goods, such as transportation and insurance, and any other incidental services such as installation, commissioning, provision of technical assistance, training and other such obligations of the supplier covered under the contract;
- (e) "The Purchaser" means the Organization purchasing the goods;
- (f) "The Supplier" means the individual or firm supplying the Goods under this Contract;
- (g) IFI means the International Financial Institution and stands for the World Bank OR the International Development Association, OR the Inter-American Development Bank, as defined in the Special Conditions of Contract

2. Application

2.1 These General Conditions shall apply to the extent that they are not superceded by provisions in other parts of the Contract.

3. Country of Origin

3.1 All Goods and Services supplied under the Contract shall have their origin in the member countries and territories eligible under the rules of the IFI financing the Contract. These rules are explained under the Special Conditions of Contract.

3.2 For purposes of this Clause "origin" means the place where the goods were mined, grown or produced, or from which the Services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembling of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.

3.3 The origin of goods and services is distinct from the nationality of the supplier.

4. Standards

4.1 The Goods supplied under this contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned institution.

5. Use of Contract Documents and Information

5.1 The supplier shall not, without the Purchaser's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Supplier in the performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.

5.2 The supplier shall not, without the Purchaser's prior written consent, make use of any document or information enumerated in para. 5.1 except for purposes of performing the Contract.

5.3 Any document, other than the Contract itself, enumerated in para. 5.1 shall remain the property of the Purchaser and shall be returned (in all copies) to the Purchaser on completion of the Supplier's performance under the Contract if so required by the Purchaser.

6. Patent Rights

6.1 The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof in the Purchaser's country.

7. Performance Security

7.1 Within 30 days after the Supplier's receipt of notification of award of the Contract, the Supplier shall furnish performance security to the Purchaser in the amount specified in the Special Conditions of Contract.

7.2 The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its performance obligations under the Contract.

7.3 The performance security shall be denominated in the currency of the Contract or in a freely convertible currency acceptable to the Purchaser, and shall be in one of the following forms:

- (a) A bank guarantee or irrevocable Letter of Credit, issued by a bank located in the Purchaser's country or abroad acceptable to the Purchaser, and in the form provided in the Bidding Documents or another form acceptable to the Purchaser; or
- (b) A cashier's check, certified, or cash.

7.4 The performance security will be discharged by the Purchaser and returned to the Supplier not later than 30 days following the date of completion of the Supplier's obligations, including any warranty obligations, under the Contract.

8. Inspections and Tests

8.1 The Purchaser or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract. The Special Conditions of Contract and/or the Technical Specifications shall specify what inspections and tests the Purchaser requires and where they are to be conducted. The Purchaser shall notify the supplier in writing of the identity of any representatives retained for these purposes.

8.2 The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at the point of delivery and/or at the Goods' final destination. Where conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance--including access to drawings and production data--shall be furnished to the inspectors at no charge to the Purchaser.

8.3 Should any inspected or tested goods fail to conform to the Specifications, the Purchaser may reject them and the Supplier shall either replace the rejected goods or make all alterations necessary to meet Specification requirements free of cost to the Purchaser.

8.4 The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival in the Purchaser's country shall in no way be limited or waived by reason of the Goods' having previously been inspected, tested and passed by the Purchaser or its representative prior to the Goods' shipment from the country of origin.

8.5 Nothing in Clause 8 shall in any way release the Supplier from any Warranty or other obligations under this Contract.

9. Packing

9.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

9.2 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract and, subject to Clause 18, in any subsequent instructions ordered by the Purchaser.

10. Delivery and Documents

10.1 Delivery of the Goods shall be made by the Supplier in accordance with the terms specified by the Purchaser in its Schedule of Requirements and the Special Conditions of Contract, and the Goods shall remain at the risk of the Supplier until delivery has been completed.

10.2 Delivery shall be deemed to have been made:

- (a) in the case of FOB contracts, when the Goods have been put on board the export conveyance at the specified port of loading, and the invoice(s), together with all such other documentation as shall be specified in the Special Conditions of Contract, have been furnished to the Purchaser;
- (b) in the case of C&F and CIF contracts, when a clean bill of lading, together with all such documentation as shall be specified in the Special Conditions of Contract have been furnished to the Purchaser; and
- (c) in all other types of contracts, when evidence that delivery of the Goods has taken place in accordance with the terms of the Contract, together with the invoice(s) and all such other documentation as shall be specified in the Special Conditions of Contract have been submitted to the Purchaser.

10.3 For purposes of this Contract, "FOB," "C&F" and "CIF" have the meanings assigned to them by the current edition of the International Rules for the Interpretation of the Trade Terms published by the International Chamber of Commerce, Paris and commonly referred to as INCOTERMS.

11. Insurance

11.1 The goods supplied under the Contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the Special Conditions of Contract.

11.2 Where delivery of the Goods is required by the Purchaser on a CIF basis, the Supplier shall arrange and pay for marine insurance, naming the Purchaser as the beneficiary. Where delivery is on an FOB or C&F basis, marine insurance shall be the responsibility of the Purchaser.

12. Transportation

12.1 Where the Supplier is required under the Contract to deliver the Goods FOB, transport of the Goods up to and including the point of putting the Goods on board the vessel at the specified port of loading, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.

- 12.2 Where the Supplier is required under the Contract to deliver the Goods C&F, CIF or to a specified destination within the country, transport of the Goods to the port of discharge or such other point in the country of destination as shall be specified in the Contract shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.
- 12.3 Where the Supplier is required to effect delivery under any other terms, for example, by post or to another address in the source country, the Supplier shall be required to meet all transport and storage expenses until delivery.
- 12.4 In all of the above cases, transportation of the Goods after delivery shall be the responsibility of the Purchaser.
- 12.5 Where the Supplier is required under the Contract to deliver the Goods CIF, no further restriction shall be placed on the choice of the ocean carrier. Where the Supplier is required under the contract (i) to deliver the Goods FOB, and (ii) to arrange on behalf and at the expense of the Purchaser for ocean transportation on specified conference vessels or on national flag carriers of the Purchaser's country, the Supplier may arrange for such transportation on alternative carriers if the specified conference vessels or national flag carriers are not available to transport the Goods within the time period(s) specified in the Contract.

13. Incidental Services

- 13.1 As specified in the Special Conditions of Contract, the Supplier may be required to provide any or all of the following services:
- (a) Performance or supervision of on-site assembly and/or installation of the supplied goods;
 - (b) Furnishing of tools required for assembly and/or maintenance of the supplied goods;
 - (c) Furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;
 - (d) Performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any Warranty obligations under this Contract; and
 - (e) Conduct of training of the Purchaser's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance and/or repair of the supplied goods.
- 13.2 Prices charged by the Supplier for the preceding incidental services, if not included in the contract price for the Goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged other parties by the Supplier for similar services.

14. Spare Parts

- 14.1 As specified in the Special Conditions of Contract, the Supplier may be required to provide any or all of the following materials and notifications pertaining to spare parts manufactured or distributed by the Supplier:
- (a) Such spare parts as the Purchaser may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under the Contract; and
 - (b) In the event of termination of production of the spare parts:
 - (i) advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and
 - (ii) following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if and when requested.

15. Warranty

- 15.1 The Supplier warrants that all goods supplied under the Contract are new, unused, of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the contract. The Supplier further warrants that the Goods supplied under this Contract shall have no defect arising from design, materials or workmanship (except insofar as the design or material is required by the Purchaser's Specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied goods in the conditions obtaining in the country of final destination.
- 15.2 This warranty shall remain valid for (12 months)³¹ after each pump is commissioned at the final destination indicated in the Contract, or for (24 months) after the date of shipment from the port of loading in the source country, whichever period concludes earlier, unless specified otherwise in the Special Conditions of the Contract.
- 15.3 The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty.
- 15.4 Upon receipt of such notice, the Supplier shall, with all reasonable speed, replace the defective Goods or parts thereof, without costs to the Purchaser, including the cost of inland delivery of the repaired or replaced Goods or parts from the port of entry to the final destination.

31 Modify as appropriate.

15.5 If the supplier, having been notified, fails to remedy the defect(s) within a reasonable period, the Purchaser may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

16. Payment

16.1 The method and conditions of payment to be made to the supplier under the Contract shall be specified in the Special Conditions of Contract.

16.2 The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the goods delivered and services performed, and by shipping documents, submitted pursuant to Clause 10, and upon fulfillment of other obligations stipulated in the contract.

16.3 Payments shall be made promptly by the Purchaser within sixty days of submission of an invoice/claim by the Supplier.

16.4 The currency or currencies in which payment is made to the Supplier under this Contract shall be specified in the Special Conditions of Contract subject to the following general principles:

(a) Payment will be made in the currency or currencies in which the Contract Price has been stated in the Supplier's bid, as well as in other currencies in which the Supplier had indicated in its bid that it intends to incur expenditures in the performance of the Contract and wishes to be paid;

(b) The Purchaser may, at its option, effect payment in the currency of the country of origin of the goods, or the currency in which actual expenditure is incurred, in an equivalent amount, if the Contract Price is stated in a different currency. The amount payable will be calculated at the exchange rate applicable on the date of payment.

17. Prices

17.1 Prices charged by the Supplier for goods delivered and Services performed under the Contract shall not, with the exception of any price adjustments authorized by the Special Conditions of Contract, vary from the prices quoted by the Supplier in its bid.

18. Change Orders

18.1 The Purchaser may at any time, by a written order given to the Supplier pursuant to Clause 31, make changes within the general scope of the Contract in any one or more of the following:

(a) drawings, designs or specifications, where goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;

(b) the method of shipment or packing;

(c) the place of delivery; or

(d) the services to be provided by the Supplier.

18.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any part of the work under the Contract, whether changed or not changed by the order, an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within thirty days from the date of the Supplier's receipt of the Purchaser's change order.

19. Contract Amendments

19.1 Subject to Clause 18, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

20. Assignment

20.1 The Supplier shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Purchaser's prior written consent.

21. Subcontracts

21.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under the Contract if not already specified in its bid. Such notification, in its original bid or later, shall not relieve the Supplier from any liability or obligation under the Contract.

21.2 Subcontracts must comply with the provisions of Clause 3.

22. Delays in the Supplier's Performance

22.1 Delivery of the Goods and performance of services shall be made by the Supplier in accordance with the time schedule specified by the Purchaser in its Schedule of Requirements.

22.2 An unexcused delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to any or all of the following sanctions: forfeiture of its performance security, imposition of liquidated damages, and/or termination of the Contract for default.

22.3 If at any time during performance of the Contract, the Supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the Goods and performance of services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, in which case the extension shall be ratified by the parties by amendment of the Contract.

23. Liquidated Damages

23.1 Subject to Clause 25, if the Supplier fails to deliver any or all of the Goods or perform the Services within the time period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to (____)³² percent of the delivered price of the delayed goods or unperformed services for each week of delay until actual delivery or performance, up to a maximum deduction of (____)³³ percent of the delayed Goods or services contract price. Once the maximum is reached, the Purchaser may consider termination of the Contract.

24. Termination for Default

24.1 The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or in part:

- (a) if the Supplier fails to delivery any or all of the goods within the time period(s) specified in the Contract, or any extension thereof granted by the Purchaser pursuant to Clause 22; or
- (b) if the Supplier fails to perform any other obligation(s) under the Contract.

24.2 In the event the Purchaser terminated the Contract in whole or in part, pursuant to para. 24.1, the Purchaser may procure, upon such terms and in such manner as it deems appropriate, goods similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar goods. However, the Supplier shall continue performance of the Contract to the extent not terminated.

25. Force Majeure

25.1 Notwithstanding the provisions of Clauses 22, 23 and 24, the Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

25.2 For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

32 Insert appropriate figure and word. Normally 0.5% per week.

33 Normally does not exceed 10%

- 25.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
26. Termination for Insolvency
- 26.1 The Purchaser may at any time terminate the Contract by giving written notice to the Supplier, without compensation to the Supplier, if the Supplier becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Purchaser.
27. Termination for Convenience
- 27.1 The Purchaser, may by written notice sent to the Supplier, terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective.
- 27.2 The goods that are complete and ready for shipment within 30 days after the Supplier's receipt of notice of termination shall be purchased by the Purchaser at the Contract terms and prices. For the remaining goods, the Purchaser may elect:
- (a) to have any portion completed and delivered at the Contract terms and prices; and/or
 - (b) to cancel the remainder and pay to the Supplier an agreed amount for partially completed goods and for materials and parts previously procured by the Supplier.
28. Resolution of Disputes
- 28.1 The Purchaser and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.
- 28.2 If, after thirty days from the commencement of such informal negotiations, the Purchaser and the Supplier have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution to the mechanisms specified in the Special Conditions. These mechanisms may include, but are not restricted to, conciliation mediated by a third party, adjudication in an agreed national or international forum, and/or international arbitration. The mechanism shall be specified in the Special Conditions of Contract.

29. Governing Language

29.1 The Contract shall be written in the language of the bid, as specified by the Purchaser in the Instructions to Bidders. Subject to Clause 30, that language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in that same language.

30. Applicable Law

30.1 The Contract shall be interpreted in accordance with the laws of the Purchaser's country.

31. Notices

31.1 Any notice given by one party to the other pursuant to the Contract shall be sent in writing or by telegram or telex cable and confirmed in writing to the address specified for that purpose in the Special Conditions of Contract.

31.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

32. Taxes and Duties

32.1 A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the Purchaser's country.

32.2 A local supplier shall be entirely responsible for all taxes, duties, license fees, etc. incurred until delivery of the contracted goods to the Purchaser.

Section IV. SPECIAL CONDITIONS OF CONTRACT³⁴

1. The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract. The corresponding Clause number of the General Conditions is indicated in parentheses.

2. Definitions (Clause 1)

- (a) The Purchaser is (Name of Purchaser).
- (b) The Supplier is (Name of Supplier).
- (c) The IFI is (Name of IFI).

3. Country of Origin (Clause 3)

All member countries of the World Bank, Switzerland and Taiwan.

OR

All member countries of the Inter-American Development Bank.

4. Performance Security (Clause 7)

The Performance Security shall be in the amount of 10% of the contract price, valid throughout the warranty period

5. Inspection and Tests (Clause 8)

The following inspection procedures and tests are required by the Purchaser:

The Contractor shall furnish the Purchaser with the proposed manufacturing and delivery schedule so that the Purchaser or its authorized representative can arrange for factory visits to inspect the Goods at the time of manufacture, assembly, and/or shipment. No shipment shall be made without prior authorization by the Purchaser and issuance of a certificate of inspection or certificate of waiver of inspection. All components will be inspected to verify quantities and to check for finish and visual defects. Materials and dimensions may be checked for conformance to specifications, drawings, and other information submitted with the bid. The manufacturer may be required to substantiate claims, material specifications, and dimensions. Upon commissioning, selected pumps will be tested in the field to verify that the minimum delivery rate specified in the Technical Specifications is achieved.

34 As noted in the Instructions, these Special Conditions of Contract are only illustrative of the provisions that the borrower should draft specifically for each procurement.

6. Delivery and Documents (Clause 10)

(a) For Imported Goods. Upon shipment, the Supplier shall notify the Purchaser and the Insurance Company by cable or telex the full details of the shipment including contract number, description of goods, quantity, the vessel, the bill of lading number and date, port of loading, date of shipment, port of discharge, etc. The Supplier shall mail the following documents to the Purchaser, with a copy to the Insurance Company:

- (i) Copies of the Supplier's invoice showing goods description, quantity, unit price, total amount;
- (ii) Original and (____) copies of the negotiable, clean, on-board bill of lading marked freight prepaid and (____) copies of non-negotiable bill of lading;
- (iii) Copies of packing list identifying contents of each package;
- (iv) Insurance certificate;
- (v) Manufacturer's/supplier's guaranty certificate;
- (vi) Inspection certificate or an Inspection Certificate Waiver, issued by the nominated inspection agency and the supplier's factory inspection report; and
- (vii) Certificate of origin.

The above documents shall be received by the Purchaser at least one week before arrival of goods at the port and, if not received, the Supplier will be responsible for any consequent expenses.

(b) For Domestic Goods:

- (i) Copies of the Supplier invoice showing goods description, quantity, unit price, total amount;
- (ii) Delivery note/railway receipt/truck receipt;
- (iii) Manufacturer's/supplier's certificate;
- (iv) Inspection Certification or an Inspection Certificate Waiver issued by the nominated inspection agency, and the supplier's factory inspection report; and
- (v) Certificate of origin.

(c) All packages and crates shall be numbered serially and marked by distinctive color markings so as to be readily identified during shipment and unloading. Each package or crate shall contain a list of contents enclosed in a moisture-proof envelope attached to the outside of the package and a duplicate list shall be provided inside the container.

7. Insurance (Clause 11)

The marine insurance shall be in an amount equal to 110% of the CIF value of the Goods from "warehouse to warehouse" on "All Risks" basis including War Risks and Strike clauses.

8. Incidental Services (Clause 13)

The following services covered under Clause 13 (specify desired features) shall be furnished. The cost shall be included in the contract price.

8.1 The supplier shall arrange to have a qualified representative provide consultancy services for (15) work days over a (3) week period. The date of arrival and departure will be arranged between the Purchaser and the Supplier. The period shall commence not later than (three months) following arrival of the Goods at (the point of delivery). The bidder shall include the cost for consultancy services in the bid price and shall provide a breakdown in the Schedule of Prices for the following items: (1) air transportation fare, economy class by most direct route or equivalent from the manufacturer's plant to the point of delivery; (2) daily rate for per diem for food, lodging, and expenses; and (3) daily consultancy fee (to be paid for all days from date of departure from plant to day of return). Local transport after arrival at delivery point will be provided by the Purchaser.

8.2 As part of the consultancy service, the consultant shall render all services necessary to instruct the Purchaser or a designated installation contractor as to the correct manner of assembly, installation, and maintenance of the handpumps. This may include instruction at central offices and at installation sites. Instructions shall be in (language) with the purchaser furnishing an interpreter if required.

8.3 The Purchaser reserves the right to use a greater or lesser number of days of consultancy service to be provided by representatives of the Supplier. Scheduling of additional days will be mutually agreeable to both the Purchaser and the Supplier. The per diem rate, daily consultancy fee, and travel cost, as stated in the breakdown provided in the Schedule of Prices, shall be used as the basis of payment for additional or reduced services. Additional services may be required during the (two) year period following shipment of the Goods and the above rates shall be applicable.

9. Spare Parts (Clause 14)

9.1 The bidder shall furnish with its bid a complete list of spare parts including unit FOB and CIF prices valid for a period of (one) year following shipment of the Goods. The bidder shall also furnish with its bid a recommended list of the spare parts needed for (three) years of operation. Packaging shall be to the specifications set out in Clause 9 of the General Conditions of the Contract. The cost of such spare parts will not be included in the bid price. The Purchaser shall select its requirements and if selection is made at the time of award,

the spare parts specified by the Purchaser shall be delivered with the pumps at no higher prices than those quoted in the spare parts list. The bidder guarantees that he will provide spare parts for (five) years at its usual rates, not in excess of those charged others.

10. Warranty (Clause 15)

10.1 All like components shall be interchangeable and replacement parts shall be of equal or superior quality to the original components. Defective parts which must be replaced shall be shipped to the point of delivery of the original pumps without cost to the Purchaser, if brought to the attention of the Supplier within the warranty period. If during the warranty period any component requires replacement in excess of 10 percent of the total number of pumps purchased, the Supplier shall immediately provide a 100 percent replacement of such defective component for all pumps and equipment ordered, superior in performance to that being replaced. The warranty for the component replaced will then be extended for another year from the date the replacement parts arrive at the point of delivery. Such total replacements shall be shipped to the point of delivery of the original pumps without cost to the Purchaser.

11. Payment (Clause 16)

(a) Payment for Imported Goods. Payment of foreign currency portion shall be made in (US\$ or currency of the contract) in the following manner:

- (i) Advance Payment: 10% of the Contract Price shall be paid within 30 days of signing of Contract, on submission of claim and a bank guarantee for equivalent amount valid until the Goods are delivered.
- (ii) On Shipment: 80% of the Contract Price of the goods shipped shall be paid through irrevocable confirmed Letter of Credit established in favor of the Supplier in a Bank in its country, on submission of documents specified in Clause 10; and
- (iii) On Receipt of Goods: the balance of the Contract Price of goods received shall be paid within 30 days of receipt of Goods on submission of claim supported by the Acceptance Certificate issued by the Purchaser's representative.

Payment of the local currency portion shall be made in (currencies) within 30 days of presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been delivered and that all other contracted services have been performed.

(b) Payment for Domestic Goods and Services shall be made as follows:

- (i) Advance Payment: 10% of the total contract price shall be paid within 30 days of signing of Contract against a simple receipt and a bank guarantee for the equivalent amount;

(ii) On Delivery: 80% of the contract price shall be paid on receipt of goods and upon submission of the documents specified in Clause 10;

(iii) On Final Acceptance: the remaining 10% of the contract price shall be paid to the Contractor within 30 days after the date of the Acceptance Certificate for the respective delivery.

12. Prices (Clause 17)

Prices submitted with the bid shall remain firm and shall not be subject to any price adjustment during the life of the contract.

13. Resolution of Disputes (Clause 28)

13.1 The dispute resolution mechanism to be applied pursuant to Clause 28 of the General Conditions shall be as follows:

(a) in the case of a dispute between the Purchaser and a Supplier which is a national of the Purchaser's country the dispute shall be referred to adjudication/arbitration in accordance with the laws of the Purchaser's country; and

(b) in the case of a dispute between the Purchaser and a foreign Supplier, the dispute shall be settled by arbitration in accordance with the provisions of the UNCITRAL Arbitration Rules.³⁵

14. Notices (Clause 31)

For the purpose of all notices, the following shall be the addresses of the Purchaser and Supplier.

Purchaser: _____

Supplier: _____

(to be filled in at the time of the Contract signature)

SECTION V. SCHEDULE OF REQUIREMENTS³⁶

Schedule 1

Bid Item	Description	Quantity	Required Time (days)	Promised Time (days)
1	When operated by typical users each handpump shall have an output of up to () m ³ /day at pumping lifts between () and () meters, and shall deliver water at a rate equal to or greater than: () lpm at a () meter lift, and () lpm at a () meter lift.			
2	Same format as Bid Item 1.			

Schedule 2

Bid Item	Description	Quantity	Required Time (days)	Promised Time (days)
3	Same format as Bid Item 1.			
4	Same format as Bid Item 1.			

³⁶ Refer to the Notes of Explanation for the Purchaser when selecting the appropriate number of schedules and bid items. It is unlikely that more than two bid items will be needed.

SECTION VI. TECHNICAL SPECIFICATIONS

1. Objectives

1.1 Obtain reliable and maintainable handpumps which can deliver water at the rate and pumping lift specified in para. 4.1 of these Technical Specifications when operated by typical users with reasonable power input and applied force. Typical users are adult women, and, for pumping lifts of 10 meters and less, children weighing as little as 40 kg. Reasonable power inputs are 50 watts at a 7 m pumping lift, 65 watts at a 12 m pumping lift and 75 watts at pumping lifts of 15 meters or more.

2. Conditions of operation

2.1 It is expected that the pumps will be subject to heavy use; a single handpump may be used to provide water to an average of (200 people).

2.2 The pumps may be exposed to extremes of temperature (including freezing) and dust, and must perform reliably in a corrosive environment that may contain abrasive material. Groundwater that will be encountered in the field is expected to have the following characteristics

<u>Parameter</u>	<u>Range</u>
pH	___ to ___
Temperature	___ to ___ °C
Conductivity	___ to ___ micromhos/cm
Total dissolved solids	___ to ___ mg/l
Total hardness	___ to ___ mg/l as CaCO ₃
Suspended solids ³⁷	___ to ___ mg/l

3. Responsive bid

For the bid to be responsive, the pump being offered must meet the minimum requirements specified in Clause 4 of this section and must substantially conform to the material and design specifications of Clause 5.

4. ~~Minimum~~ Requirements

4.1 Design Adequacy

The pump shall be manually operated and shall meet the following minimum pumping specifications when operated by a typical user with reasonable power input and applied force.

37 Proper well design, construction, and development are necessary to minimize sand ingress into a well. Suspended sand particles in turn affect the reliability of a pump and the type of pumping element and seals which should be specified. The Purchaser should inform bidders about the expected sand content of the well water as this may effect the manufacturers warranty.

- (a) Schedule 1, Bid Item 1 handpumps shall be capable of delivering up to () cubic meters per day for pumping lifts between () and () meters. Each pump shall deliver not less than () liters per minute at a pumping lift of () meters and () liters per minute at a pumping lift of () meters when reasonable power is applied.
- (b) Schedule 1, Bid Item 2 handpumps... (same format as Bid Item 1).
- (c) Schedule 2, Bid Item 3 handpumps... (same format as Bid Item 1).
- (d) Schedule 2, Bid Item 4 handpumps... (same format as Bid Item 1).

4.2 Reliability

Pumps showed reasonable reliability over at least a one year period of field use under conditions similar to those described in Clause 2 and para. 4.1, during which repair interventions were necessary no more than an average of 4 times per pump in any 12 consecutive months. No more than two of these interventions required the services of a central maintenance team and all other interventions were able to be done by a village repairer or area mechanic. In the absence of field experience, an independent testing laboratory must certify that no more than one repair intervention was required during a 4000 hour (or equivalent) laboratory endurance test.

4.3 Ease of Maintenance and Repair

If a pump cannot be repaired by a village repairer or area mechanic, it must be designed such that defective parts or components can be replaced in the field by a central maintenance team, and major components can be rebuilt in a workshop.

4.4 Service and Spare Parts Availability

The bidder must have an authorized agent within the country who has a complete supply of spare parts on hand or appoint such an agent if awarded the contract.

5. Handpump features

5.1 General features

- (a) All materials (excluding well casings and the concrete base on which the pump is mounted) necessary to provide complete and workable pumps shall be provided by the bidder. Included shall be a supply of lubricants, sealants, adhesives, gaskets, fasteners, anchor bolts and plates, and all other materials and tools necessary for initial installation.³⁸

38 List items, such as the concrete base, which are not to be provided by the bidder, as well as special tools or lifting equipment that will be necessary if they are required for proper installation.

- (b) The handpump shall be durable, of robust construction, and easy to operate and maintain.
- (c) All components not included in the spare parts list supplied by the bidder shall have a life expectancy of at least 6 years under the operating conditions specified in Clause 2.
- (d) Materials used for all components including fasteners shall be new, free of defects, of suitable strength for the purpose intended, and either corrosion resistant or adequately protected against corrosion in the environment in which the pump is to be installed.³⁹ Joining of metals which are subject to bimetallic corrosion shall be avoided and all such connections shall be shown on the drawings. Metal parts subject to corrosion during shipment or storage shall be identified and given protective coatings or adequate packing so that all items may withstand covered storage for at least 24 months without damage.
- (e) All steel or iron to be galvanized shall, after the steel has been thoroughly cleaned of rust and scale, be galvanized in accordance with the "Specifications for Zinc (Hot-Galvanized) Coatings on Products Fabricated from Rolled, Pressed, and Forged Steel Shapes, Plates, Bars, and Strip" (ASTM A123 or equivalent). Any parts which become warped during the galvanizing operation shall be straightened without damage to the galvanizing. Nuts, bolts, anchor plates, and similar parts, after being properly cleaned, shall be galvanized in accordance with the "Specifications for Zinc Coating (Hot-Dip) on Iron and Steel Hardware" (ASTM A153 or equivalent).
- (f) All material potentially in contact with water must be suitable for potable water supply.

5.2 Pumpstand

- (a) The handle, crank, or foot pedal shall be designed for maximum convenience with respect to reach and ease of operation by typical users.
- (b) The spout height, location, and shape shall be designed for user convenience to fill a variety of container sizes, with water discharge suitable to fill narrow necked containers with minimal spillage.

39 If the well water will be particularly corrosive, for example if the pH is less than 6, galvanizing will not provide sufficient protection for below ground components. In such situations the Purchaser should specify that the pump rod, rising main, and pumping element shall be made of plastic, fiberglass, stainless steel, or other similarly corrosion resistant materials. Bidders should be required to submit field performance data and manufacturing specifications to substantiate the durability of the components being offered.

- (c) Above ground components shall be made of strong materials unlikely to be damaged during transport, installation, and use.
- (d) Design shall incorporate safety features to minimize hazards to users and bystanders, with a minimum of traps where fingers or toes can be injured, and no sharp projections.
- (e) To ensure sanitary conditions, design shall incorporate means to seal the well against surface contamination at the base of the pump. In addition, the design shall prevent objects from being inserted into the top of the pumphead, the spout, or elsewhere.
- (f) Packing glands or seals shall prevent seepage of lubricants which can contaminate the water, even after long periods of operation. When possible, gear boxes, drivehead assemblies and bearings shall be sealed or enclosed with pre-packed lubricant and not subject to intrusion of dirt, dust, or other abrasive material.
- (g) Gear box or shafting assemblies, if present, shall incorporate provision to prevent separation of pump rods due to wrong direction of rotation.
- (h) If counterweights are used they shall be an integral part of the handle.
- (i) All external fasteners, nuts, bolts, pins, etc. should be shrouded or provided with anti-tamper devices to prevent removal without special tools. All fasteners shall be provided with self locking nuts or other means to prevent loosening due to vibration or wear. Nut and bolt size variations shall be kept to a minimum to reduce the requirement for different size wrenches and tools. Fasteners shall be corrosion resistant or adequately protected against corrosion. Drawings shall be provided to illustrate the types of fasteners and anti-tamper devices used.
- (j) Galvanized or stainless steel anchor bolts with appropriate base plates or templates for fixing anchor bolts in a recommended concrete platform or base shall be provided. A drawing of the recommended platform or base shall be provided with the bid, showing the manner of fixing the pumphead to the base.⁴⁰

5.3 Rising main and pump rod

- (a) Rigid rising main and pump rods shall be provided in lengths of approximately (4) meters +/- 10mm with their relative lengths suitable for easy installation. Coiled lifting wires, plastic riser tubing and/or command pipe shall be supplied in approximately (___) meter lengths to be cut to size for each installation.

40 If more than one type of pump is used the Purchaser may wish to specify a standard base plate design.

- (b) Rising main and pump rod couplings shall be provided, one for each length, with an appropriate number of lock nuts. Also all extended couplings or short sections needed to install the cylinder to a setting of +/- () meters shall be provided.⁴¹
- (c) Suitable centralizers or spacers shall be provided where necessary to assure proper positioning of the rising main and pump rod.
- (d) Rising mains and pump rods shall be made of materials which are sufficiently durable and corrosion resistant to provide at least six years of service.⁴²
- (e) Rising main and pump rods shall be straight, couplings shall be concentric, and threads shall be made to standard dimensions.
- (f) Thread protectors shall be provided on all exposed male threads of both rising main pipe and pump rods for protection during shipment and handling.

5.4. Pumping element⁴³

- (a) The pump cylinder or pumping element assembly shall be capable of being placed in well casings having a minimum inside diameter of (100) mm.⁴⁴
- (b) The pump cylinder or pumping element shall be designed to permit dismantling and servicing with minimum use of special tools and simplicity of procedures to replace parts subject to wear.
- (c) Seals shall be easily replaceable and shall have adequate clearance to prevent excessive friction. Gravity return pistons shall return to the bottom of their flight without slack occurring along the rod length or in the chain.

5.5 Check valves

- (a) Foot valves and all other check valves shall provide long life and minimum leakage. Replacement of valves and valve seats shall be accomplished without specialized tools.

41 If pumps are installed on dug wells tolerance should be no more than +/- 0.5 meter.

42 Corrosion, particularly of downhole components, can have a major affect on water quality and user acceptance of handpumps. Where groundwaters are corrosive, stainless steel or plastic components should be specified.

43 Unless wells are designed and constructed properly, it may be necessary to select a handpump type which has high resistance to abrasion from sand particles. If this is a potential problem the Purchaser should specify nitrile or other plastic seals and valves, sealless pistons or designs without pistons.

44 Specify minimum clearance in well.

6. Maintenance and repair

6.1 Installation manuals and maintenance and repair manuals shall be printed on heavy weight paper stock or preferably damage resistant material, and shall be protected by a moisture resistant cover or a reusable heavy duty plastic package.

- (a) The installation manual shall be in (language). It shall be adequately illustrated to provide sufficient guidance on the unpacking, installation, and placing in operation of the specific handpump offered with only minimal text. All special design features which are necessary for proper operation and long working life of the pump shall be clearly identified. The recommended base or platform design shall be provided and shall include details showing the pump anchorage or connection to a base or platform. The features used to prevent contamination of well water by return flow of sullage water at the base of the pump shall be delineated. One installation manual shall be provided for every (___) handpumps.
- (b) The maintenance and repair manual shall be in (language). It shall provide ample guidance regarding routine maintenance procedures and repair of components subject to wear. The manual should be generously illustrated and designed to be understood by trained village repairers who may not be literate. Included shall be a spare parts list which is cross referenced to an exploded drawing of the pump. One maintenance and repair manual shall be provided with each pump unit.
- (c) If pumps are suitable to be repaired by village repairers, tool kits should be simple, preferably consisting of a single tool.

7. Summary of Goods and Services for Bid Item 1⁴⁵

7.1 The following goods and services are to provided under Bid Item 1. The unit price of each item shall be entered and submitted with the bid.

<u>Description</u>	<u>Quantity</u>	<u>Unit Price (ex-factory)</u>	<u>Total Price (ex-factory)</u>
1 Handpumps exclusive of rising main and pump rods	_____	_____ each	_____
2. Rising main or discharge hose	_____ m/pump	_____ per meter	_____
3 Pump rod or command hose	_____ m/pump	_____ per meter	_____
4 Installation manuals	_____	_____ each	_____
5 Maintenance and repair manuals	_____	_____ each	_____
6 Sets of repair tools required by a trained village caretaker	_____	_____ each	_____
7 Sets of repair tools required by mobile maintenance team or area mechanic	_____	_____ each	_____
8 Sets of special tools required for installation including lifting and pipe threading equipment	_____	_____ each	_____
9 Consultancy services	_____ days	_____ per day	_____
Per diem		_____ per day	_____
Round trip air fare		_____ per trip	_____
Total			_____

45 It is recommended that the Purchaser list the goods and services to be provided under each bid item in a format similar to the one presented here. Additional clauses should be added if there is more than one bid item.

8. List of Spare Parts

8.1 Bidders recommended list of spare parts pursuant to Clause 9 of the Special Conditions of Contract.

Item No.	Description and reference to spare parts catalog	Unit	Quantity recommended for three years	Unit Price FOB factory	Unit Price CIF (location)	Total Price CIF

Section VII. BID FORM AND PRICE SCHEDULES

Date _____
Loan No. _____
Contract No. _____

TO: (Name and Address of Purchaser)

Gentlemen:

Having examined the Bidding Documents including Addenda Nos. (Insert Numbers), the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply and deliver (Description of Goods and Services) in conformity with the said Bidding Documents for the sum of (Total Bid Amount in Words and Figures) or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this bid.

We undertake, if our bid is accepted, to commence delivery within (Number) days and to complete delivery of all the items specified in the Contract within (Number) days calculated from the date of receipt of your Notification of Award/Letter of Credit.

If our bid is accepted we will obtain the guarantee of a Bank in a sum not exceeding () % of the Contract Price for the due performance of the Contract.

We agree to abide by this bid for a period of (Number) days from the date fixed for bid opening under Clause 22 of the Instructions to Bidders and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal contract is prepared and executed, this bid, together with your written acceptance thereof in your notification of award shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive.

Dated this _____ day of _____ 19____.

Signature

(In the Capacity of)

Duly Authorized to sign bid for and on behalf of _____

**Price Schedule for Domestic Goods of Foreign Origin
Located Within the Purchaser's Country**

(To be completed by domestic bidders)⁴⁴

Name of Bidder _____ . IFB Number _____ . Page __ of __ .

1	2	3	4	5	6	7	8 ⁴⁵	9
Item	Description	Country of Origin	Quantity	UNIT PRICE ⁴⁶ ex factory_ ex warehouse_ ex showroom_ off the shelf_	Domestic Value added in the manufacturing cost as a percentage of the ex-factory price	Total cost per unit (col. 4 x 5)	Unit Cost of inland delivery to final destination	Sales and other taxes payable if contract is awarded

Signature of Bidder _____

Note: In case of discrepancy between unit price and total, the unit price shall prevail.

⁴⁴ World Bank Group A and B bids.

⁴⁵ Optional.

⁴⁶ Currencies to be used in accordance with Clause 12 of the Instruction to Bidders. The price shall include all customs duties and sales and other taxes already paid or payable on the components and raw material used in the manufacture or assembly of the item, or the customs duties and sales and other taxes paid on the previously imported item offered ex-warehouse, ex-showroom, or off-the-shelf. These factors should not be entered separately.

Price Schedule for Goods to be Imported

(To be completed by foreign suppliers or their local agents)⁴⁷

Name of Bidder _____ IFB Number _____ Page __ of __.

1	2	3	4	5 ⁴⁸	6	7	8 ⁴⁸
Item	Description	Country of Origin	Quantity	UNIT PRICE ⁴⁹ FOB Port of Loading (Specify Port)	UNIT PRICE ⁴⁹ CIF Port of Entry (Specify Port)	Total CIF Cost per item (col. 4 x 6)	Unit Cost of inland delivery to final destination

Signature of Bidder _____

Note: In case of discrepancy between unit price and total, the unit price shall prevail.

⁴⁷ World Bank Group C bids.

⁴⁸ Optional and should be required only in special circumstances.

⁴⁹ Currencies to be used in accordance with Clause 12 of the Instructions to Bidders.

Section VIII. BID SECURITY FORM

Whereas

(hereinafter called "the Bidder") has submitted its bid dated _____
for the supply of _____
(hereinafter called "the Bid").

KNOW ALL PERSONS by these presents that WE _____
of _____
having our registered office at _____
(hereinafter called "the Bank") are bound unto _____
(hereinafter called "the Purchaser") in the sum of _____
for which payment well and truly to be made to the said Purchaser, the Bank
binds itself, its successors and assigns by these presents. Sealed with the
Common Seal of the said Bank
this _____ day of _____, 19____.

THE CONDITIONS of this obligation are:

1. If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form; or
2. If the Bidder, having been notified of the acceptance of its bid by the Purchaser during the period of bid validity:
 - (a) fails or refuses to execute the Contract Form, if required; or
 - (b) fails or refuses to furnish the Performance Security, in accordance with the Instructions to Bidders;

we undertake to pay to the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including thirty (30) days after the period of bid validity, and any demand in respect thereof should reach the Bank not later than the above date.

(Signature of the Bank)

(Signature of the Witness)

Section II. CONTRACT FORM

THIS AGREEMENT made the _____ day of _____, 19____ between (Name of Purchaser) of (Country of Purchaser) (hereinafter "the Purchaser") of the one part and (Name of Supplier) of (City and Country of Supplier) (hereinafter "the Supplier") of the other part: WHEREAS the Purchaser is desirous that certain Goods and ancillary Services should be provided by the Supplier, viz., (Brief Description of Goods and Services) and has accepted a bid by the Supplier for the supply of those Goods and Services in the sum of (Contract Price in Words and Figures) (hereinafter "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - (a) the Bid Form and the Price Schedule submitted by the Bidder;
 - (b) the Schedule of Requirements;
 - (c) the Technical Specifications;
 - (d) the General Conditions of Contract;
 - (e) the Special Conditions of Contract; and
 - (f) the Purchaser's Notification of Award
3. In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
4. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner Prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.

Signed, Sealed and Delivered by the
said _____ (For the Purchaser)

in the presence of: _____

Signed, Sealed and Delivered by the
said _____ (For the Supplier)

in the presence of _____

Section X. PERFORMANCE SECURITY FORM

To: _____ (Name of Purchaser)

WHEREAS _____ (Name of Supplier)

hereinafter called "the Supplier" has undertaken, in pursuance of Contract No. _____ dated _____, 19 _____ to supply (Description of Goods and Services) hereinafter called "the Contract."

AND WHEREAS it has been stipulated by you in the said Contract that the Supplier shall furnish you with a Bank Guarantee by a recognized Bank for the sum specified therein as security for compliance with the Supplier's performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Supplier a Guarantee:

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of (Amount of the Guarantee in Words and Figures) and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the Contract and without cavil or argument, any sum or sums within the limits of (Amount of Guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid throughout the warranty period.

Signature and Seal of the Guarantors

Date _____

Address _____

ANNEX A

DESCRIPTION OF LABORATORY TEST PROCEDURES FOR HANDPUMPS⁵⁰

1. DESCRIPTION

The test samples should be representative of the manufacturer's normal output. Where possible, sample pumps should be obtained through independent procurement agencies.

1.1 Manufacturer or Agency

Name and address of pump manufacturer and/or supplying agency

1.2 Pump model and type

Manufacturer's model reference

Suction, direct action, lever operated force pump, etc.

Recommended range of pumping heads

2. INSPECTION

2.1 Condition of pumps

Whether in working order as received

Summary of defects on delivery

Method of Packing

The pumps should be dismantled and inspected for visible defects.

Additional defects may come to light in the course of testing the pump.

2.2 Manuals and Instructions

Whether supplied with pump or obtained from other sources.

Assessment of clarity, accuracy and usefulness. Literature should be more visual than verbal to minimize difficulties of translation.

3. WEIGHTS and MEASURES

3.1 Weights of principal components

Pumpstand

Cylinder

Rising main per meter length

Pump rods per meter length, including couplings

50 This annex is based on the standard procedure for testing handpumps that is used by the Consumers' Association Testing and Research Laboratories (CATR) in the United Kingdom. Some procedures have been simplified so that testing can be conducted with less sophisticated instrumentation than used by CATR.

3.2 Principal dimensions

Nominal bore and stroke
Nominal volume per stroke
Usable cylinder length

Comment on bore finish

3.3 Ergonomic measurements

Measurements of handle and spout heights, angular movement and velocity ratio of handle, and description of exit water pattern.

Where a pump is mounted on a plinth, some of the ergonomic measurements will depend on the height of the plinth. When such information is available, pumps will be installed at their manufacturer's recommended height. When it is not, the pump will be installed so that the midpoint of handle operation is as close as possible to 0.9 meters from floor level, subject to a maximum spout height of 0.6 meters.

4. ENGINEERING

The pumps should be dismantled. Each component should be examined and the material and method of manufacture assessed, together with the degree of skill demanded and the standard of workmanship. These, together with a judgment of the ease of installing and maintaining the pumps, form the basis of the overall assessment of suitability for manufacture in developing countries.

4.1 Materials and manufacturing methods

Identification of materials and manufacturing processes used for each component of the pump.

Assessment of fitness of chosen materials and processes for intended purpose.

4.2 Suitability for manufacture in developing countries.

Summary of manufacturing processes required, with assessments of the degree of skill demanded for each process.

4.3 Ease of installation, maintenance and repair.

Assessment of techniques, skills and equipment required.

The degree of technical competence demanded by the design and construction of the pump, and whether it could be repaired using indigenous materials should be considered.

4.4 Resistance to contamination and abuse.

Assessment of sanitary sealing of both pumpstand and wellhead.

5. PUMP PERFORMANCE

5.1 Test results shall be certified to the manufacturer.

5.2 Volume flow and handle forces

Measurements of volume flow, and corresponding handle forces can be combined in a single test procedure by attaching a force gauge to the handle at the normal operating position of typical users.

Suction pumps should be tested at a 7 meter pumping lift, direct action pumps at 7 and 12 meter pumping lifts, and high-lift pumps at 7, 12, and 25 meters or 12, 25 and 45 meters, depending on the manufacturer's specification.

For each head, the pump should be tested at three operating speeds, for example, 30, 40 and 50 strokes or revolutions per minute. The three stroke rates should be selected to achieve power inputs both above and below 50 watts when the pumping lift is 7 meters, 65 watts when the pumping lift is 12 meters, and 75 watts when the pumping lift is 25 or 45 meters. Water delivery rates which correspond to 50 watts for a 7 meter pumping lift, 65 watts for 12 meters, and 75 watts for 25 and 45 meter pumping lifts should be interpolated from a plot of water delivery rates versus power input.

For each test, the maximum and average applied force on the handle for both the up-stroke and down-stroke and volumetric flow rate should be recorded.

5.3 Leakage

The volume of water leaking past the foot valve should be measured for the same heads as the tests of volume flow. The leakage test should normally be carried out by removing the cylinder and bottom length of rising main. The cylinder and rising main are filled with water and the open end of the drop pipe blocked off. The various heads are then simulated by injecting compressed air above the cylinder.

6. USER TRIAL

A number of users should be recruited. Most should be women and children of various heights and ages.

Each user will be given an opportunity to familiarize him/herself with the pump and to find their preferred method of operation. They should be asked to fill a 20 litre container in their own time. The number of strokes or revolutions and time taken should be noted. Pumps should be set at the maximum pumping lift recommended by the manufacturer.

6.1 User Comments

Each user should be asked to fill out a short questionnaire to record their opinions of the ease of operation of the pump.

6.2 Observation of users

Methodical observations of the relationships between pumps and people should be made.

7. ENDURANCE TEST

Two stages of 2000 hours each with a check test of volume flow after the first stage constitute the endurance test. The pumps will be mechanically driven, normally at 40 strokes or revolutions per minute, or the speed most appropriate to the pump design. The handles of reciprocating pumps should be driven in simple harmonic motion imposing no shock loads. The simulated depth should be the maximum agreed with the manufacturer.

- 7.1 Stage 1 - Clean hard water containing no added suspended materials, approximately 7.2 pH.
- 7.2 Stage 2 - Hard water with one gram per litre of Kieselguhr with particle size maximum 7.5 micrometers and one gram per litre of fine, sharp quartz sand with particle size between 75 and 500 micrometers will be added. For stage 2 the water should be agitated and daily checks made to ensure the correct concentration of contaminants is maintained.
- 7.3 Failure Report. All failures should be examined and an assessment made of the probable cause, i.e. use of materials, design, bad quality control, or manufacture. Suggestions for design improvements for manufacturing changes should then be made to the manufacturer.

8. ABUSE TESTS

8.1 Handle Shock Loading

Controlled shocks should be applied to the handle stops using impacts determined by using a human operator where the handle is allowed to travel with the normal level of effort onto the stops.

Pumps will be tested at their lowest pumping lift, that is either 7 or 12 meters, because the handle is more likely to hit its stops when the pump is used at relatively shallow depths. The test should be carried out using the normal endurance stroke speed at a rate appropriate for the type of pump. The test should consist of 96,000 shocks for force pumps and 72,000 shocks for suction pumps, or until the pump fails.

8.2 Impacts on pumpstand

Using a pendulum, impacts in steps of 100 Joules to a maximum of 500 Joules should be applied on the center of the pumpstand.

8.3 Impacts on handle

Using a pendulum, impacts in steps of 50 Joules to a maximum of 200 Joules should be applied on the center of the pump handle.