



ROYAL GOVERNMENT OF BHUTAN
Ministry of Agriculture and Forests
Department of Livestock

Tender Bidding Document for **“Supply of General Tools, Fishing Gears & Laboratory Equipment and Consumables”** at National Research and Development Centre for Riverine and Lake Fisheries (NRDCR&LF), Haa under Department of Livestock (DoL) of Ministry of Agriculture and Forests (MoAF)

National Research and Development Centre for Riverine and Lake Fisheries,
(NRDCR&LF), Haa
2020-2021

Cost of the Tender Documents: Nu. 00.00



BIDDING GUIDELINES		
Sl. No	Provisions	Description of Item/Activity/ Provision
1	Contract Title	This is the guidelines which potential bidders are required to understand toward offering competitive offers/ bids for the contract of “Supply of General Tools, Fishing Gears & Laboratory Equipment and Consumables” at National Research and Development Centre for Riverine and Lake Fisheries (NRDCR&LF), Haa under Department of Livestock (DoL) of Ministry of Agriculture and Forests (MoAF)
2	Addressing of the Bid	<p>i. Please address your bids to “The Program Director, National Research and Development Centre for Riverine and Lake Fisheries (NRDCR&LF), Haa”.</p> <p>ii. Please label your bid envelope clearly as “Confidential: Tender Bids for Supply of General Tools, Fishing Gears, and Laboratory Equipment and Consumables” at National Research and Development Centre for Riverine and Lake Fisheries (NRDCR&LF), Haa under Department of Livestock (DoL) of Ministry of Agriculture and Forests (MoAF).</p>
3	Location for “Supply of Fishing Gears, General Tools and Laboratory Consumables.	National Research and Development Centre for Riverine and Lake Fisheries (NRDCR&LF), Haa under Department of Livestock (DoL) of Ministry of Agriculture and Forests (MoAF).
4	Good Supplying Agency	The Successful bidder as will be determined through the current competitive procedure
5	Eligibility to participate in the Invitation for Bids (IFB)	<p>i. A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. Bidders may be considered to have a conflict of interest with one or more parties in this bidding process if they:</p> <p>(a) are associated, or have been associated in the past, with a firm or any of its affiliates which has been engaged by the Purchaser to provide consulting services for the</p>



		<p>preparation of the design, specifications and/or other documents to be used for the procurement of the Goods to be purchased pursuant to these Bidding Documents, or</p> <p>(b) Submit more than one Bid in this bidding process; however, this does not limit the participation of subcontractors in more than one Bid.</p> <p>(c) employ or otherwise engage, either directly or through any of their affiliates, a spouse, dependent or close relative of a public servant of the RGoB who either is employed by the NRDCR&LF or has an authority over it. For the purposes of this Sub-Clause a close relative is defined as immediate family which includes father, mother, brother, sister, spouse and own children.</p> <p>ii. Government-owned enterprises in Bhutan shall be eligible only if they can establish that they (i) are legally and financially autonomous, (ii) operate under commercial law, and (iii) are not a dependent agency (directly or indirectly) of the NRDCR&LF.</p> <p>iii. Bidders shall provide such evidence of their continued eligibility satisfactory to the Purchaser as the Purchaser shall reasonably request.</p> <p>iv. All national firms deemed/ certified eligible for supply of goods by a competent agency of the Royal Government of Bhutan (RGoB).</p> <p>v. The bidder is to provide with their bid proof of eligibility, such as valid Trade License, etc.</p> <p>vi. A bid unaccompanied by any such eligibility document(s) may be rejected by the Tender Opening Committee (TOC) at the time of Bid Opening.</p>
6	Last date to submit the Bid	The last date for the bid submission is on 17th August, 2020 at or before 10:00 AM and will be opened on the same day at 2:30 PM in the conference hall of NRDCR&LF .



8	Bid Validity Period	60 days from the last date of bid submission.
9	Earnest Money Deposit (Bid Security)	<p>i. The bidder must provide with their bid an Earnest Money Deposit (EMD)/ Bid Security equaling to 2% of the total value of good in the form of the followings</p> <ol style="list-style-type: none"> a. an Unconditional Bank Guarantee; or b. a Banker's Certified Cheque /Cash Warrant; or c. a Demand Draft. Be issued by a financial institution in Bhutan acceptable to the NRDCR&LF. <p>ii. All matters related to the EMD will be executed as deemed permissible by procurement rules and regulations of the RGoB. For example, a bidder withdrawing their bid before the expiration of the bid validity period expires will lead to the forfeiture of their EMD.</p>
10	Bid Conformity Checklist	<p>The bidder must ensure that their bids are :</p> <ol style="list-style-type: none"> i. Made in the Bid Form (BF) and Price Schedules Format (PSF); ii. Accompanied with the specified EMD; iii. Tax clearance certificate iv. Signed by the rightful authority of the bidding firm; v. Accompanied by the Contract Agreement Form (CAF) duly signed by the rightful authority of the bidding firm; vi. Submitted to the NRDCR&LF in a sealed and signed envelope; and vii. Confirm to any other criterion specified in the Bidding Guidelines.
11	Bid Submission Procedure	<p>Bids are to be submitted in duplicates and shall be delivered by hand, courier or registered post. The Bidder shall seal both the original and the duplicate copies of the Bid (hereinafter referred to as inner envelopes) and submit them packaged inside a single large envelope (hereinafter referred to as outer envelope). All envelopes shall be sealed with adhesive or other sealant to prevent reopening.</p> <p>i. The inner envelopes shall:</p> <ol style="list-style-type: none"> a) be signed across their seals by the person authorized to sign the Bid on behalf of the Bidder; and b) Be marked "ORIGINAL", and "COPIES."



		<p>ii. The outer envelope shall:</p> <p>a) be marked “Confidential”;</p> <p>b) be addressed to the NRDCR&LF at the address provided in the Bidding Guide;</p> <p>c) Bear the name of the Contract as defined in the Bidding Guidelines; and</p> <p>d) Provide a warning not to open before the specified time and date for Bid Opening.</p> <p>iii. In addition to the identification required, the inner envelopes shall indicate the name and address of the Bidder, to enable the Bid to be returned unopened in case it is declared late.</p> <p>iv. If the outer envelope is not sealed and marked as above, the NRDCR&LF shall assume no responsibility for the misplacement or premature opening of the Bid.</p>
12	Bid Form & Price Schedules Format	<p>i. Please fill up the necessary spaces in “Annexure: A” with your bids and other details.</p> <p>ii. Please indicate your bid/ offer for the supply of the specified items in all spaces in the BF and PSF provided along with this document as Annexure A.</p> <p>iii. Bids are to be made in Bhutanese currency, (i.e., Ngultrum)</p> <p>iv. Any bid made without indicating currency will be deemed to have been made in Ngultrum. For example, if a bid is made as 1000 or 1000/-, the Tender Evaluation Committee (TEC) will interpret it as “Ngultrum” 1000 only.</p> <p>v. Also the “Unit of measure “in Bid Form and Price Schedule Format mean the unit of the goods for which you have quoted. The unit could be anything depending on how you intent to bid. For example, if you are quoting for the goods in pieces, please put “Pieces” as unit of measure and the “Price/Unit of Measure “fill up your bid. Suppose you fill up 2000 in “Price/Unit of Measure”, we will understand that you are offering to supply that particular good in pieces and that you wish to charge us Nu.2000 for 1 Piece of the good. If you are confused, please call us at Tel No. 08-375611.</p>
13	Opening of Bids	<p>i. All bids received will be opened at the specified time and place. Changes if any shall be communicated to all bidders</p>



		<p>in advance.</p> <p>ii. All bidders are invited to the bid opening session at the specified time and place.</p> <p>iii. Bidders, their representatives and other attendees at the Bid Opening shall not be permitted to approach any members of the Bid Opening Committee or any RGoB officials.</p> <p>iv. The invitation to the bid opening session does not automatically translate into an invitation to the bid evaluation session.</p>
14	Bid Evaluation Criteria	<p>i. The price offered by the bidder shall be only one of the criteria for evaluation of bids. In addition to the price, the bids shall also be evaluated on the basis of (i) the origin of goods (Goods of Bhutanese origin shall receive preferential treatment to a maximum of 1 score point), (ii) date of delivery of goods (The NRDCR&LF will consider 45 days as base period for 'Good Delivery'. Hence, commitment to supply goods, every 1 day less from the base period shall receive additional score point of 0.25), (iii) After sales service and technical assistance, (iv) Quality and technical merits of the goods being offered, (v) Presence of catalogues/brochures/etc. of the goods being offered with the bid will be considered.</p>
15	Reject of Bids	<p>i. Any or all bid(s) may be rejected by the NRDCR&LF without the liability to offer any explanation if (i) the bid(s) is not found responsive in accordance with the Bid Submission List., (ii) the bid(s) is abnormally high, (iii) the bid(s) is abnormally low, (iv) the bid(s) is not accompanied by the Earnest Money Deposit (EMD) and other requested documents, & (v) the bid(s) deviated seriously from the provision of this Bidding Guide.</p>
16	Annulment of Bids	<p>i. National Research and Development Centre for Riverine and Lake Fisheries (NRDCR&LF), Department of Livestock (DoL), Ministry of Agriculture and Forests (MoAF), Royal Government of Bhutan (RGoB) reserves the right to annul the entire bidding procedure and float a renewed IFB without incurring the liability to offer any explanation to anyone.</p>
17	Amendment of	<p>i. At any time up to 1 week before Bid Submission deadline,</p>



	Bidding Guidelines (Issue of addendum)	<p>the NRDCR&LF may issue addendum to the Bidding Guidelines.</p> <p>ii. This may be done either on the NRDCR&LF's own initiative or in response to a clarification request from a prospective Bidder.</p> <p>iii. Any addendum thus issued shall be part of the Bidding Documents and shall be communicated in writing to all who have obtained the Bidding Documents directly from the NRDCR&LF. Such addendum shall be binding on the prospective Bidders, and shall require that prospective Bidders confirm receipt of it before the time established for the opening of Bids;</p> <p>iv. The NRDCR&LF may, at its discretion, extend the deadline for submission of Bids to allow prospective Bidders reasonable time in which to take the addendum into account in preparation of their Bids.</p>
18	Contract Agreement Form	<p>i. The bidder must submit their bid with the Contract Agreement Form (CAF) "Annexure B" duly sealed and signed by the rightful authority of the bidding firm.</p> <p>ii. After the bid evaluation is complete, upon the recommendations of the TEC, the Chairman of Tender Awarding Committee (TAC) shall also put their signature to the signed CAF of the successful bidder.</p> <p>iii. Only after the steps i and ii above are complete shall it be considered that the NRDCR&LF, DoL, MoAF, RGoB and the successful bidder have legally entered into a contract for the Fisheries (NRDCR&LF), Haa under Department of Livestock (DoL) of Ministry of Agriculture and Forests (MoAF)</p>
19	Contract Validity Period	<p>i. The contract for the "Tender for Supply of General Tools, Fishing Gears and Laboratory Equipment and Consumables" at National Research Centre for Riverine and Lake Fisheries (NRDCR&LF), Haa under Department of Livestock (DoL) of Ministry of Agriculture and Forests (MoAF) will be for 12 months (1 year).</p>
20	Performance Security Deposit	<p>i. Before the issuance of a supply order, the successful bidder will be required to deposit a Performance Security Deposit (PSD) of an amount calculated approximately to be 10 % of the value of the supply order.</p> <p>ii. Failure by the successful bidder to deposit the PSD within</p>



		<p>the stipulated time will result in the forfeiture of their EMD and the annulment of their contract with the NRDCR&LF.</p> <p>iii. If the EMD of the successful bidder happens to be greater than the calculated PSD, a PSD will not have to be deposited. The EMD will be retained with the (NRDCR&LF), in lieu of the PSD until the completion of work.</p> <p>iv. In this document, the successful bidder is being referred to as successful contractor only after they have successfully deposited the PSD.</p>
21	Goods Delivery Period	The successful bidder must specify in the bid the goods delivery time. Failure to do so shall be interpreted as the bidder agreeing to supply and install the goods within 45 days from the date of issue of the supply order.
22	Advance Payment	No Advance Payment will be made to the successful bidder
23	Payment for Goods Supplied	The payment for goods supplied shall be made to the supplier in full within 30 days from the date of receipt of the goods in full.
24	Late delivery penalty	Every additional /extra day from the Goods Delivery Period taken by the successful bidder to supply the goods shall invite a late penalty equaling to (Total Value*0.14*Number of days [late]) to be deducted from the final payment. Failure to still supply the goods shall result in the (i) forfeit of the Performance Security, and (ii) Termination of the contract with the supplier, and the NRDCR&LF may then explore other way of acquiring the goods, including which may be through awarding the contract to the next promising/ lowest bidder or retendering depending upon the convenience of NRDCR&LF.
25	Transportation cost for after sales service and technical assistance	If the bidder is based in a place other than Haa, they must provide free transportation for the goods later on, if and when the goods are subjected to after sales services/maintenance for as long as the warranty period is not exhausted.
26	Clarification on the Bidding Document	<p>i. Please direct any valid queries regarding the Bidding Guidelines to:</p> <p>a) Mrs. Zangmo, Sr, Livestock Production Supervisor- III of the NRDCR&LF @ 08375611 or 17928766</p>



		<p>b) Mrs. Pema Zangmo, Asst. ADM of the NRDCR&LF @08375611 or 17759113.</p> <p>c) Mr. Tenzin Tashi, Farm Manager of the NRDCR&LF@08375611 or 17625310.</p> <p>i. Please be advised that queries with the motive to entice any employee of the NRDCR&LF into any form of corrupt practice shall be viewed seriously and the concerned bidder shall be disqualified from participating in the bidding process.</p>
27	Settlement of Disputes	<p>i. For whatsoever reason if the NRDCR&LF and the bidder/ successful bidder get into a dispute regarding the contract for “Tender for Supply of General Tools, Fishing Gears and Laboratory Equipment and Consumables” at National Research and Development Centre for Riverine and Lake Fisheries (NRDCR&LF), Haa under Department of Livestock (DoL) of Ministry of Agriculture and Forests (MoAF), the same shall be treated as follows for arbitration:</p> <p>a) An attempt to resolve disputes shall first be made by the NRDCR&LF management and the bidder/ successful bidder/ successful contractor;</p> <p>b) If the dispute cannot be solved in (a) above, it shall then be submitted to the DoL, MoAF, for arbitration;</p> <p>c) If the dispute still remains unresolved after (b), it shall be submitted to a Royal Court of Justice for arbitration.</p>



Annexure B: Contract Agreement Form

CONTRACT AGREEMENT

We have fully understood the stipulation/provisions/terms and conditions in the Bidding Guidelines, and have done our best to make our bids conform to them. If we are selected to **“Tender for Supply of General Tools, Fishing Gears and Laboratory Equipment and Consumables”** at National Research and Development Centre for Riverine and Lake Fisheries (NRDCR&LF), Haa under Department of Livestock (DoL) of Ministry of Agriculture and Forests (MoAF) for which we have offered our best bids in the Bid form & Price Schedules Format, I, on behalf of the bidding firm, hereby vow to respect and strictly abide by the stipulations/provisions/terms and conditions of the contract, for which this would be the agreement once the procuring agency, National Research and Development Centre for Riverine and Lake Fisheries (NRDCR&LF), put their signature on it. I also understand that in putting my signature on this document, I am only expressing the willingness of my firm to enter into a contract for the.....

.....and that this document **SHALL NOT** become a **CONTRACT AGREEMENT** until the procuring agency, the NRDCR&LF put their signature to it. However, once the procuring agency, the NRDCR&LF, puts their signature to this document below, my firm shall have automatically entered into a formal contract with the procuring agency, the NRDCR&LF, on the strength of my signature put below, and shall be obligated to execute the contract activity within the confines of the stipulations/provision/terms and conditions of the Bidding Guidelines and its annexures.

On behalf of

(Bidding firm’s name and address), I put my signature on this document hereunder on this date.....

Contractor’s name: _____

(Affix Legal Stamp)

Contractor’s signature: _____

Contractor’s witness name: _____

Witness signature: _____

Witness Citizenship Identity Card Number (please provide a copy of the CID): _____



(For Procuring Agency's Use)

In awarding the contract to **“Tender for Supply of General Tools, Fishing Gears and Laboratory Equipment and Consumables”** as per the Bid Form & Price Schedules Format, I, on _____ behalf _____ of _____,

hereby put my signature to this document. Having done so, the.....and the firm above have now formally entered into a contract for the activity described in provision #1 titled “Contract Title” of the Bidding Guidelines. On the basis of the firm’s authorized signatory’s sign above, the.....shall hereafter hold the firm above responsible to honor their obligation by executing the contract activities as described in/ and with complete adherence to the provisions of the Bidding.

On behalf of the


PROGRAM DIRECTOR



FISHING GEARS AND EQUIPMENT

Sl. No.	Description of Good	Technical Specification and Standard	Country of Origin	Unit	Price	Remarks
1	Neoprene Stocking foot Chest Waders	Adjustable Velcro shoulder straps for highest comfort, Inside pocket with zipper, Hand warmer with front pocket, Triple welded seams, Unique Knee pads for excellent protection, High quality 4 mm neoprene with Artic Thermo , highly compressed 5mm neoprene sole for high durability, Anatomically shaped socks, Incl. neoprene gravel guards		No.		
2	Wader (PVC)	Good quality, boot foot nylon chest wader, 100 % waterproof, light, durable & should come with warranty and full money back option if found defective.		No.		
3	Freestone Wading Boot with Felt Sole	Very reliable and robust wading boot, Waterproof, abrasion-resistant synthetic leather, Scratch rubber upper for improved durability, Partial neoprene lining, Dual-density EVA midsole for shock absorption and superb wearing comfort, Strap for easy putting on, Either with Simms rubber outsole or with 12 mm felt outsole		Pair		
4	Kayak Paddle	Straight shaft paddle with mid-sized, low angled blades to fit the widest range of paddlers. Fiberglass reinforced, nylon, injection-molded blades for impact and water-resistant.		No.		
5	Raft Paddle	Lightweight anodized aluminum shaft with thick rubber sleeve. High impact ABS polymer blade polymer blade.		No.		
6	Tackle box case	Plastic case with adjustable compartments to fit fish lures; advanced Pro Watch locking system that offers added security to ensure lures and gear stay put, even if tossed around in transit or in use.		No.		

/s/



7	Fishing bag	2 shoulder strap waist bag fanny pack; made of water resistant nylon with breathable pads; should have least 3 separate pocket compartment.	No.		
8	Spin Fishing Rod & Reel Combo (Action: Medium)	Strong carbon composite frame, lightweight handle knob and stainless steel main shaft, 7 ft rod.	No.		
9	Fly Fishing Rod & Reel Combo (8 Weight)	Rod: 8 wt, 4 pcs fly rod made out of graphite with grade A cork grip and aluminum reel seat. Reel: 8 wt reel with large arbor spool with pre-loaded fly line, 9ft 2X tapered leader, 30 lb 80 yards backing.	No.		
10	Fly Fishing Rod & Reel Combo (5 Weight)	Rod: 5 wt, 4 pcs fly rod made out of graphite with grade A cork grip and aluminum reel seat. Reel: 5-6 wt reels with large arbor spool and pre-loaded fly line, 9 ft 2X tapered leader with pre-loaded backing.	No.		
11	Fish Spinners (Size - 0)	Treble hook in line spinners suitable for catching trout	Set		
12	Fish Spinners (Size - 1)	Treble hook in line spinners suitable for catching trout	Set		
13	Fish Spinners (Size - 2)	Treble hook in line spinners suitable for catching trout	Set		
14	Fish Spinners (Size - 3)	Treble hook in line spinners suitable for catching trout	Set		
15	Fish Spinners (Size - 4)	Treble hook in line spinners suitable for catching trout	Set		
16	Fish Spoon (1/2 Ounce)	Silver or chrome spoon with treble hook attached	Set		
17	Fish Spoon (1/3 Ounce)	Silver or chrome spoon with treble hook attached	Set		
18	Fish Spoon (1/8 Ounce)	Silver or chrome spoon with treble hook attached	Set		
19	Fish Spoon (3/4 Ounce)	Silver or chrome spoon with treble hook attached	Set		
20	Spinner bait (1/2 Ounce)	Flared gills and hard coat paint with wire alloy frames for maximum vibration	No.		



21	Fish Flies Assortment Pack/set	Made with high-quality hooks to make hooking and landing of fish easier. The assortment set should include different/various flies used for trout fishing. This may include but not be limited/restricted to Quill Gordon, Adams Parachute, Ausable Wulff, Griffiths Snat Size, Elkwing Caddis fly, Humpy Black, March Brown, and Blue Wing from size ranging from 12 to 18. RATES MUST BE SUBMITTED PER SET AND NOT FOR INDIVIDUAL FLIES.		Set		
22	Crank bait	High definition glossy body patterns with 3D simulated eyeballs, with barbed treble hooks.		No.		
23	Fluorocarbon Spin Fishing Line (10 lbs)	Made of 100 % fluorocarbon material; 100-yards spool size, resistant to ultra violet rays, strong and abrasion resistant.		Roll		
24	Fluorocarbon Spin Fishing Line (20 lbs)	Made of 100 % fluorocarbon material; 100-yards spool size, resistant to ultra violet rays, strong and abrasion resistant.		Roll		
25	Braided Fishing Line (30 lb)	30 lbs abrasion resistant braided fishing line, 150 yards		Roll		
26	Braided Fishing Line (20 lb)	20 lbs abrasion resistant braided fishing line, 150 yards		Roll		
27	Braided Fishing Line (10 lb)	10 lbs abrasion resistant braided fishing line, 150 yards		Roll		
28	Fly Line (5 Weight)	5 Wt, 100 ft, floating fly line		Roll		
29	Fly Line (8 Weight)	8 Wt, 100 ft, floating fly line		Roll		
30	Fly Fishing Leader	9 ft fly fishing tapered leader with loop, nylon copolymer material		No.		
31	Line Clippers	Retractable tether and stainless steel blades for cutting through monofilament, braid and fluorocarbon lines		No.		

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32	Fishing Pliers	Good quality fishing pliers made out of aluminum body featuring spring loaded mechanism for easy handling. Should cut through monofilament, fluorocarbon and braided lines. Should come with cover sheet and lanyard.	No.		
33	Water Proof Field Note	Weatherproof paper, 64 pages/32 sheets per side spiral notepad with tough impact-resistant wire-o binding	No.		
34	Snorkeling set	Good quality, durable and should include submersible snorkel with dry-top, Mask and fins with added travel bag easy storage and carrying.	Set		
35	Foldable Tripod Camp Stool	Steel frame polyester fabric, reinforced throughout, should be sturdy and durable to support up to 275 lbs weight. Should be portable, tripod style stool that folds for easy storage and carrying.	Set		
36	Foldable table (10 L Capacity)	Lightweight, durable collapsible buckets: made out of premium 500D tarpaulin with two side stripes for easy carrying. To be used for holding/carrying live fish in the field.	Set		
37	Kayak	Good quality, durable, constructed of UV-protected high-density Polyethylene. Multiple footrest positions for different size riders. Adjustable padded seat back and seat pad for comfort. Two flush mounted fishing rod holders. MUST INCLUDE PADDLES.	No.		
38	Cataraft	Inflatable pantoon boat/raft with seat mount and footrests, which adjusts to a wide range of leg lengths. Durable construction features such as brass oars locks, heavy-duty pontoons with abrasion resistant coated PVC bottoms and tough nylon tops and Steel tube frame with rugged two-piece aluminum oars.	No.		



[Handwritten signature]

39	Safety helmet with GoPro Mount	Good quality, durable water sports safety helmet with integrated universal GoPro mount plate and LED light twofer. ABS outer shell for impact protection, quick dry absorption liner. Removable ear protection pads and adjustable back of head dial.	No.		
40	Outdoor Heavy Duty Hiking Boots	Good quality, durable, ankle length boots, made out of water resistant synthetic material with rubber sole.	No.		
41	Life Jackets	100% Impermeable, light weight and durable with warranty and full money back options if found defective	No.		
42	Lineman's Safety Rubber Glove	Electrical & line man insulating glove, beaded, 14 inch long	No.		
43	Plastic Hand Gloves	LDPE, impermeable good quality durable and reusable.	No.		
44	Electric Shocker (big)	Electro Shocker ELT62-II D 3.0KW, Cathodes cable 5 m long, EL00063b, 3 m copper strip, Anode hoop, 30 cm, no net, with wire, EL 00051, Anode pole 2 m long, with 2 dead man switch, PU 14441, Cable reel 120 m, anode plus dead man, PU14593, Anode cable 10 m long, PU14493, Scoop net bows 50 cm with net 10 cm, angular KN50064, Fiberglass pole, 2m long KN 60053, divided/genteel	Set		
45	Electric Shocker (Small)	One ELT 60-IIH 1.3 KW, Cathodes cable 5 m long, EL00063b, 3 m copper strip, Anode hoop, 30 cm, no net, with wire, EL 00051, Anode pole 2 m long, with 2 dead man switch, PU 14441, Cable reel 120 m, anode plus dead man, PU14593, Anode cable 10 m long, PU14493, Scoop net bows 50 cm with net 10 cm, angular KN50064, Fiberglass pole, 2m long KN 60053, divided/genteel.	Set		



46	Flexible/Foldable bucket (Green Bucket)	Flexible/Foldable plastic bucket, cylindrical in shape with an overlying hinged lid. Lid closing option with zip lines and a side pocket on the outer rim for holding a portable box type aerator.	No.		
47	Go pro Camera	Underwater camera (Water Proof/ HD quality)	No.		
48	Cast net (7 kg)	Good quality with completed set (ready to use), preferably local made with lead sinker	No.		
49	Cast net (5 kg)	Good quality with completed set (ready to use), preferably local made with lead sinker	No.		
50	Fish Happa net	Nylon, HDPE, Polyester material, mesh size 0.01-2.55 mm, Rectangle shape (Width 4 m, Height 3 m, Length 6 m)	No.		
51	Fish drag net	Nylon, HDPE, Polyester material, mesh size 2.55-10 mm.	Meter		
52	Fish predator protection net	Nylon, HDPE, Polyester material, mesh size 2-5 cm.	Meter		
53	Fish scoop net	Dimension: 3328*4992 PX/28.2*42.3 cm/11.1*16.6 inches/300 DPI	No.		



GENERAL TOOLS AND EQUIPMENT 2020-2021

Sl. No.	Description of Good	Technical Specification and Standard	Country of Origin	Unit	Price	Remarks
1	Digital Electronic Balance (0-500 gm)	Digital electronic balance with LCD display with handle. Reads in gram up to 500gm with accuracy of ± 0.1 gram. Rechargeable with tare and beep function.		No.		
2	Digital Weighing Balance (0-5 kg)	High quality plastic construction, large reverse backlit LED display, reads in grams from 0 to 5000 gm with accuracy of ± 0.1 gram. Rechargeable with tare and beep function.		No.		
3	Digital Electronic Balance (0-50 kg)	Digital electronic balance with LCD display with handle. Reads in kg up to 50 kg with accuracy of ± 0.1 gram. Rechargeable with tare and beep function.		No.		
4	Fish Crate (Blue in color)	Rectangular non perforated plastic crate, durable, Capacity 27 Liters with inner handles on both sides (610mmx410mmx310mm)		No.		
5	Synthetic Leather Apron	Aprons are made of high quality synthetic PU leather with sew-on neck loop, waist tie, and waist pouch.		No.		
6	Hand Gloves	Impermeable good quality durable and reusable.		Pairs		
7	Fishing Gloves	Anti-Slip waterproof		Pairs		
8	Plastic sieve	Used to sieve flour, plastic and should be good quality.		No.		
9	Plastic sieves (Bowl type with handle)	Good quality and durable		No.		
10	Wheel barrow	Good quality and durable (metal type)		No.		
11	Plastic sealing machine	High capable of running multiple high pressure/high flow devices, good quality, durable and heavy duty and portable.		No.		



12	Grinder (Heavy duty)	Good quality for grinding for cereals and other dried products	No.		
13	Aquarium Air-Pump	Specification (minimum of 220 v, freq:50 Hz, Power :35W, Pressure :0.027MPa, Out Put: 65L/min	No.		
14	Water dispenser	Good quality with probation of dispensing both hot & cold water. Maximum water capacity of 20-30 liters	No.		
15	Vacuum Packing Plastic	Three side seal vacuum packaging bag, material: PET/VMPET/PE, three side seal, without printing. (1-2 kg capacity)	No.		
16	Portable and compact packaging machine	Product Specification: Power Supply: AC100-240V/50-60Hz Power: 90W Weight:0.8kg Dimensions:433*87*100mm Vacuum degree:-60Kpa With Vacuum.	No.		
17	Disposable packing plastic (Black color)	Good quality	kg		
18	Grass cutter	Back pack type, Fuel: Petrol with blades and accessories	No.		
19	GPS	Garmin 750T 3-Inch Touchscreen Handheld GPS with Topo U.S. 100K	No.		
20	Network IR PTZ outdoor dome camera	2 megapixel IR distance up to 200 m with pole mount bracket and power adapters. Max.2 megapixel(1920x1080)resolution real 4K 20x IR optical zoom, 16x digital zoom lens. Max.Preset 400 degree sec (pan), 350/190 degree sec tilt). Max.30fps@4k(H.265.H.264).Max.IR viewable length: 150 m day & night(ICR), WDR (120 db) Auto tracking, Intelligent video analytics IP66,IK 10	No		



21	Indoor IR Dome camera	2 megapixel - High performance CMOS IR distance up to 20 m - (1930 x 1088) lens 3.6 or 6mm optional , upto 1080p resolution with 30 fps, true day/night, smart IR	No		
22	Network Video recorder (NVR) 16 Channel	Recording 1920p, playback 1080p, record management, video & picture backup, SAT (upto btb HDD supported),RJ-45,RS485,2USB 2.0, network: TCP/IP,DHCP,UDP,SMTP.	Set		
23	Network Video recorder (NVR) 16 Channel	Recording 1920p, playback 1080p, record management, video & picture backup, SAT (upto btb HDD supported),RJ-45,RS485,2USB 2.0, network: TCP/IP,DHCP,UDP,SMTP.			
24	Surveillance hard disk(HDD) 4TB/4,000GB	Surveillance hard disk 7200RPM hot plug hard drive 24x7 reliability with future provision for 4TB(2000gb) hot plug hard drive, high performance, continuous through put,6GBPS & it is compatible with network video recorder from any brand	No.		
25	UTP CAT6 cable	CAT6 cable shield(outdoor) finolex/dlink cat6 outdoor UTP 23 AWG cable,CMR,FRPVC,600 unsheld twisted pair,category 6, TIA/EIA 568-c2 & ISO/IEC 11801 23 AWG solid bare copper MHZ, roll of 305m, Grey/back	No.		
26	Walkie Takie	BaoFeng UV-5R WP Dual Band Two Way Radio Waterproof Dustproof IP67 Walkie Talkie Transceiver	No.		
27	Telescopic Aluminium Multipurpose Ladder	5 Metre (150 kg) Capacity	No.		
28	Square Mesh net	Tuflex quality, The rate may be quoted for 5mm,10mm, 15mm 20mm, 30 mm	Met r		



29	Hexagonal Mesh net	Tuflex quality. The rate may be quoted for 5mm,10mm, 15mm 20mm, 30 mm		Meter		
30	Hand towel (big)	Good quality, excellent absorbent of water, (fabric) cotton material		No		
31	Hand towel (medium)	Good quality, excellent absorbent of water, (fabric) cotton material		No		
32	Aquarium biofilter (heavy duty)	Good quality, durability use for indoor aquarium purposes		No		
33	Microscope camera adapter	Compatible with Nikon SLR/DSLR cameras including D3400 & D60		Set		
34	Microscope camera with 20 Megapixel Exmor sensor	20 MegaPixel high quality still images High speed video at up to 60 FPS High resolution and crisp colors Sony Exmor Back illuminated sensor 1" Large sensor		Set		



LABORATORY EQUIPMENT AND CONSUMABLES, 2020-2021

Sl. No.	Description of Good	Technical Specification and Standard	Country of Origin	Unit	Price	Remarks
1	Dissolved Oxygen Data Logger	Optical DO sensor technology for long-lasting calibration with less maintenance, HOBO ware Pro's Dissolved Oxygen Assistant software corrects for measurement drift from fouling; provides salinity-adjusted DO concentrations and percent saturation, Optical USB interface for high-speed, reliable data offload Easy-to-replace DO sensor cap lasts six months		Set.		
2	Water Temperature Data Logger	Research-grade measurement at an affordable price. Waterproof to 120 meters (400 feet), Data readout in less than 30 seconds via fast optic USB interface.				
3	Thermometer	Type: Mercury-in-glass; Temperature range: 0-50 °C		No.		
4	pH meter	Good quality beeps at end point.		No.		
5	Digital DO Meter (Portable)	Rugged, portable dissolved oxygen (DO) meter suitable for aquaculture, wastewater treatment, environmental studies. DO range of 0.00 to 45.00 ppm (mg/L) with accuracy of $\pm 1.5\%$ F.S. or ± 1 digit, whichever is greater, temperature range of 0.0 to 50.0°C / 32.0 to 122.0°F and accuracy $\pm 0.2^\circ\text{C}$; $\pm 0.4^\circ\text{F}$ (excluding probe error). The equipment should be supplied with polar graphic probe, PTFE membrane caps, electrolyte fill solution, and rugged carrying case.		Set.		
6	Portable Temperature/pH meter	Compact, waterproof, portable pH/temperature meter that is supplied complete with a rugged carrying case, body pH electrode that has a built-in temperature sensor, a LCD display for temperature and pH viewing. Temperature range of -5.0 to 80.0°C / 23.0 to 176.0°F with accuracy of $\pm 0.5^\circ\text{C}$ and pH range of 1 to 14 pH and accuracy of ± 0.02 pH.		Set.		



7	Hensen-Stempel Pipette large (5ml and 10 ml)	For sub-sampling plankton samples with wide bore pipettes for accurately filling in Sedgwick-Rafter counting cell and Palmer counting cell. Large 5ml and 10 ml), each with two different, changeable Delran plastic spools - spool size determines sample size (5ml and 10 ml). Handy-Grip plastic handles, and stainless steel springs. Also known as Aliquot Transfer Pipettes.	No.		
8	Deep Freezer	Glass Top Deep Freezer, 400L (White, GT400)	No.		
9	Refrigerator	192 Liter capacity (Single Door System)	No.		
10	Oxygen cylinder (Large)	40 liters	No.		
11	Oxygen cylinder (Small)	10 liters	No.		
12	Reagents	Ammonia free Reagent, Range: 0.01 - 0.50 mg/L	Set		
13	Reagents	Aluminum Reagent, Range: 0.008-0.08mg/L	Set		
14	Reagents	Copper (Accu Vac), Range: 0.04-5.0mg/L	Set		
15	Reagents	Detergent, Range: 0.002-0.0.275mg/L	Set		
16	Reagents	COD LR, Range: 3 - 150mg/L	Set		
17	Reagents	Dissolved Oxygen (Accu Vac) Range: 0.3-15.0mg/L	Set		
18	Reagents	Lead TNT plus, Range: 0.1 - 2.0 mg/L	Set		
19	Reagents	Manganese, LR, Range: 0.005 - 0.5 mg/L	Set		
20	Reagents	Mercury Reagent, Range: 0.1-2.5mg/L	Set		
21	Reagents	Nitrogen (Total), TNT, LR, Range: 0.5 - 25.0 mg/L	Set		
22	Reagents	Nitrogen (Total), UHR, Range: 20-100 mg/L	Set		
23	Reagents	Phosphorus Reactive & Total TNT Plus, LR, Range: 0.15 - 4.5	Set		
24	Reagents	Phosphorus Reactive & Total TNT Plus, LR, Range: 1.5-15.0	Set		



25	Reagents	Zinc Reagent set, Range:0.01 - 3.0 mg/L		Set		
26	Reagents	Civette, SemiCro 50mm		Set		
27	Ethanol for the preservation of fish species	With concentration above 99%		Per/Bottle		
28	Multipara meter Waterproof Meter	HI-98194 Multipara meter Water proof Meter		Set		
29	Multipara meter Calibration solution	HI 98194		No.		
30	DO meter Calibration solution	HI 9146		No.		
31	Lab glass pipettes dropper with rubber head	30 ml and above		No.		
32	Laboratory pipette	30 ml and above		No.		
33	Cool Box (30 Liters)	Good quality with steel latches, drain valve design and with handle.		No.		
34	Cool Box (20 liters)	Good quality with steel latches, drain valve design and with handle.		No.		
35	Cool Box (15 liters)	Good quality with steel latches, drain valve design and with handle.		No.		
36	Cool Box (10 liters)	Good quality with steel latches, drain valve design and with handle.		No.		
37	Cool Box (5 liters)	Good quality with steel latches, drain valve design and with handle.		No.		
38	Compound microscope	Magnus, MSZ-BI, no: 13L1354, Olympus opto system.		No.		
39	Digital Vernier Caliper	8" Digital Caliper with Large LCD Display Button to switch from MM to Inches Stainless Steel Construction		No.		

