Benighat Rorang Rural Municipality
Office of the Municipal Executive
Bishaltar, Dhading
Supply, Delivery, Fitting and Testing of Agricultural Equipments and Tools

Technical Specifications of Agricultural Equipments and Tools

1) Mini-Tiller 5.5 HP Diesel Engine				
S.N.	**Criteria**	**Requirements**	**Offered Specification**	**Remarks**
1	Construction	Mini Tiller of standard design having gross weight not less than 85 Kg	Model:	
			Country of Origin:	
2	Engine	4 Stroke, Single Cylinder, Diesel Engine with air cooled cooling system	Model:	
			Type:	
3	Compliance	The emission standard of machine should be in compliance with or superior than the applicable standard by Nepal vehicle mass emission standard 2069 (Euro III).		
4	Power Output	**Not less than 5.5 HP**		
5	Starting Type	Manual/Recoil or Self Start		
6	Transmission	**Gear Driven with minimum 3 speed (1 reverse, 2 forward)**		
7	Tilling Depth	100mm or above		
8	Tilling Width	700mm or above		
9	Tank Capacity	Minimum of 2.5 Liters		
10	Tyres	Standard		
11	Blades	Minimum 24 Pieces		
12	Delivery	The supplier shall provide the tractor with all necessary lubricants and operating fluids, including **diesel fuel (Min. 2 Ltrs), engine oil (mobil), and gear oil as capacity,** duly filled to the manufacturer-recommended levels at the time of delivery.		
13	Tools	A set of tools as required for general maintenance shall be supplied within a lockable tool box.		
14	Warranty	Manufacturer shall provide a minimum of one year warranty after acceptance of vehicle.		
15	Service	At least three (3) times free service after delivery.		
2) Mini-Tiller 7 HP Diesel Engine				
S.N.	**Criteria**	**Requirements**	**Offered Specification**	
1	Engine Type	4-Stroke, single cylinder, forced air cooled	Model:	
			Type:	
2	Fuel Type	**Diesel**		
3	Maximum Power	**7 HP**		
4	Displacement	296 CC		
5	Engine Speed	3600 rpm		
6	Bore x Stroke	78 x 62 mm		
7	Starting System	Recoil / Manual		
8	Tilling Depth	150 mm or more		
9	Tiller Breadth	1050 mm or more		
10	Transmission System	Wet type, friction multi-plate clutch		
11	Driving Model	Gear drive		
12	Gearshift Speed	**2 Forward and 1 Reverse Gear**		
13	Blades Type	**4 pcs 4(3+1) groups (32pcs)**		
14	Steering Handle	UP-Down		
15	Fuel Tank Volume	3.5 L		
16	Engine Oil Capacity	1.2 L		
17	Gear Oil Capacity	2.6 L		
18	Lube Brand/Type	SAE10W-30		
19	Gross Weight	Not less than 120 kg		
20	Delivery	The supplier shall provide the tractor with all necessary lubricants and operating fluids, including **diesel fuel (Min. 2 Ltrs), engine oil (mobil), and gear oil as capacity,** duly filled to the manufacturer-recommended levels at the time of delivery.		
21	Tools	A set of tools as required for general maintenance shall be supplied within a lockable tool box.		
22	Warranty	Manufacturer shall provide a minimum of one year warranty after acceptance of vehicle.		
23	Service	At least three (3) times free service after delivery.		
3) Mini-Tiller 7 HP Petrol Engine				

S.N.	Criteria	Requirements	Offered Specification	Remarks
S.N.	Criteria	Requirements	Offered Specification	
1	Engine Type	**4 Stroke, single cylinder, forced air cooled**	Model: Type:	
2	Fuel Type	**Gasoline**		
3	Maximum Power	**7 HP**		
4	Displacement	208 CC		
5	Engine Speed	3600 rpm		
6	Bore x Stroke	70 x 54 mm		
7	Starting System	Recoil (Manual) Start		
8	Tilling Depth	150 mm or more		
9	Tiller Breadth	1050 mm or more		
10	Driving Model	Gear drive		
11	Gearshift Speed	**2 Forward and 1 Reverse Gear**		
12	Blades Type	**4 pcs 3(2+1) groups (24pcs)**		
13	Handle	Up-Down		
14	Fuel Tank Volume	3.5 L		
15	Lubrication Oil Volume	0.8 L		
16	Gear Oil Capacity	1.5 L		
17	Lube Brand/Type	SAE10W-30		
18	Gross Weight	Not less than 80 kg		
19	Delivery	The supplier shall provide the tractor with all necessary lubricants and operating fluids, including **petrol fuel (Min. 2 Ltrs), engine oil (mobil), and gear oil as capacity,** duly filled to the manufacturer-recommended levels at the time of delivery.		
20	Tools	A set of tools as required for general maintenance shall be supplied within a lockable tool box.		
21	Warranty	Manufacturer shall provide a minimum of one year warranty after acceptance of vehicle.		
22	Service	At least three (3) times free service after delivery.		
		4) Knapsack Sprayer		
S.N.	**Criteria**	**Requirements**	**Offered Specification**	
1	General	Spray liquids such as chemicals, fertilizers, pesticides, insecticide to kill weeds for better growth of plants	Model: Type:	
2	Mode	**2 in 1: Manual cum Battery**		
3	Tank Capacity	**At least 16 Liters**		
4	Motor Type	Single Motor		
5	Battery	12V, 8Ah, Rechargeable Lead Acid		
6	Working Pressure	90 PSI		
7	Nozzle	**Single and Biforate Nozzle Type**		
8	Tank Material	HDPE Tank		
9	Charger	1Amp		
10	Warranty	Manufacturer shall provide a minimum of one year warranty after delivery		
		5) Combined Mill (Kutani Pisani Mill)		
S.N.	**Criteria**	**Requirements**	**Offered Specification**	
1	Description	Combined Mill (Rice Milling/Husking and Flour Grinding)	Model: Country of origin:	
2	Motor Requirement	**3HP Electric Motor/1440RPM**		
3	Power Supply	Single Phase/220-240V/50Hz		
4	Roller Speed	Rice Mill:1500 rev/min, Grind Mill: 5500 rev/min		
5	Milling Capacity	**150-180 KG/hr**		
6	Grinding Capacity	**Not less than 200 KG/hr**		
7	Roller Size	Min. 40 mm Diameter		
8	Machine Weight	70 - 100 Kg		
9	Material of Contact Par	**Food-Grade Stainless Steel**		
10	Frame	Heavy duty Mild Steel/ Cast Iron Body		
11	Mill Type	**Disc/Hammer Type**		
12	Tools	A set of tools as required for general maintenance shall be supplied with lockable tool box.		
13	Accessories	Must provide separate screens/sieves for paddy threshing and maize milling.		
14	Warranty	Manufacturer shall provide a minimum of one year warranty on body parts and must provide a 2-year guaranty on motor.		

S.N.	Criteria	Requirements	Offered Specification	Remarks
6) Corn Sheller				
S.N.	**Criteria**	**Requirements**	**Offered Specification**	
1	Description	Single Tube Electric corn sheller	Model:	
2	Capacity	**Minimum of 500 KG/hr**		
3	Electric Source	Single Phase/220-240V/50Hz		
4	Motor Rated Power	**1 HP, Copper Coil**		
5	Body Material	Mild Steel		
6	Weight of Machine	**Minimum of 20 KG**		
7	Warranty	Manufacturer shall provide a minimum of one year warranty.		
7) Battery Operated Bush/Hedge Trimmer (ब्याट्रीबाट चल्ने झाडी/हेज काट्ने मेसिन)				
S.N.	**Criteria**	**Requirements**	**Offered Specification**	
1	General	Battery Operated, **handheld** Bush/Grass Trimmer **with grass collection box**	Model:	
2	Motor	Brushless/high efficiency electric motor		
3	Rated Voltage	**24V - 36 V DC**		
4	Power	Minimum 0.4 KW		
5	Blade Type	Hardened, precision-ground, **single sided reciprocating blade**		
6	Blade Length	Min. 46 cm		
8	Battery	**Rechargeable Lithium battery with minimum 10 Ah**		
9	Charger	**Compatible battery charger included**		
10	Weight	**Maximum 5 Kg including battery**		
9	Accessories	**2 sets of Battery**, charger, blade guard/scabbard, a pair of gloves, safety glasses, blade oil		
		Must provide a **collection box** for cut grass/hedge		
		Took kit and Manual kit		
10	Warranty	A one-year warranty on the machine		
8) Digital Weighing Machine				
S.N.	**Criteria**	**Requirements**	**Offered Specification**	
1	Weighing Capacity	**Minimum 100 KG**	Model:	
2	Type	**Rechargeable**		
3	Base Plate Materials	**Stainless Steel**		
4	Plate Size	340mm x 340mm		
5	Error Tolerance	± 10 gm		
6	Battery	Rechargeable Lead Acid		
7	Battery Specification	4 Volt, 2.5 Amp		
8	Warranty	As per company standard		
9	Screen	LED/LCD		
10	Power Source	Electric		
11	Voltage	220V/50Hz		
9) Plastic Pokhari (Pond Liner)				
S.N.	**Criteria**	**Requirements**	**Offered Specification**	
1	Description	HDPE Pond Liner for Farm Pond		
2	Size	8m x 10m		
3	Thickness	**Minimum 250 GSM**		
4	Color	**Blue**		
5	Standard	An **ISO 9001 certified** manufacturer or equivalent		
10) Multi-crop Thresher				
S.N.	**Criteria**	**Requirements**	**Offered Specification**	
1	General	**Mini Multi-Crop** Thresher	Model:	
2	Power	**Minimum 7 HP**		
3	Machine Weight	Not less than 80 Kg		
4	Engine	**Single Cylinder, 4-Stroke Petrol Engine**		
5	Capacity	**300-500 Kg/hr**		
6	Crops	Paddy, Wheat, Maize, Millet, Barley, Soybean, etc.		
7	Feeding System	**Direct bundle (मुठा) feeding arrangement**		
8	Feed hopper opening	**Minimum 400 mm x 400 mm (W x H)**		
9	Mobility	Fitted with wheels for easy transportation.		
10	Services	**At least three (3) times free service after delivery.**		
11	Machine Frame	Mild Steel or Cast Iron		
12	Grain Output Channel	Must have a **minimum of two outlet** arrangement for cleaned and wasted product.		
13	Accessories	Must be provided with a minimum of two (2) fans for efficient cleaning of product.		

S.N.	Criteria	Requirements	Offered Specification	Remarks
14	Warranty	Manufacturer shall provide a minimum of one year warranty after delivery.		
15	Tools	A set of tools as required for general maintenance shall be supplied with lockable tool box.		
		11) Post Hole Digger		
S.N.	**Criteria**	**Requirements**	**Offered Specification**	
1	Type	Single Blade type Earth Auger	Model:	
2	Blade Material	Alloy Tool Steel		
3	Engine Type	**2-Stroke, Single Cylinder Petrol, Air cooled**	Model:	
4	Engine Displacement	63CC		
5	Tank Capacity	**550ml to 1300ml**		
6	Engine Start Type	Manual/Recoil		
7	Auger Diameter	**8inch and 12inch**		
8	Auger Length (Digging	The auger length shall be not less than 0.4 meter and shall be well equipped with extension such that holes up to **1 meter depth could be made**.		
		12) Mulching Plastic		
S.N.	**Criteria**	**Requirements**	**Offered Specification**	
1	Description	Agricultural Mulching Plastic		
2	Material	LDPE		
3	Length	400-meter		
4	Width	1.2 meters		
5	Thickness	25 microns		
		13) Coffee Pulping Machine		
S.N.	**Criteria**	**Requirements**	**Offered Specification**	
1	Description	A machine to efficiently remove the outer skin of coffee beans while preserving bean quality.	Model:	
2	Operation	**Hand operated**		
3	Weight of the Machine	Minimum of 25 KG		
4	Capacity	**100 KG/Hr.**		
5	Hopper Capacity	**15-20 KG**		
6	Frame Material	Mild Steel Type with powder coatings		
7	Warranty	Manufacturer should provide a minimum of one year warranty		
		14) Fruit Harvesting Ladder, Aluminium Folding Type		
S.N.	**Criteria**	**Requirements**	**Offered Specification**	
1	Description	**Folding** Aluminum Multi-Step Ladder		
2	Type	Portable, self-supporting, **A- frame** folding ladder		
3	Application	Suitable for agricultural, horticultural, fruit harvesting, maintenance and general-purpose works		
4	Material	High-strength aluminum alloy		
5	Overall-Height	**Minimum 9 ft.**		
6	Number of Steps	**Minimum 7 steps**		
7	Step Spacing	**Approximately 250-300 mm**		
8	Top Platform	Suitable top standing platform/step for safe working		
9	Handrail	**Ergonomic handrail/handgrip** extending above the upper working area		
10	Load Capacity	**Minimum 120 Kg** safe working load		
11	Accessories	Complete with all necessary hinges, locking mechanism, support bars and **anti-slip feet**		
		15) Chaff Cutter		
S.N.	**Criteria**	**Requirements**	**Offered Specification**	
1	General	Conveyor Type electric chaff cutter suitable for cutting the grass, straw, maize stalk, etc., for animal feeds.	Model:	
2	Power Source	Electric, 220-240V/50Hz		
3	Motor	**3 HP, Single Phase,1440 rpm**		
4	Number of Cutting Blac	**At least 4 blades with blade protector**		
5	Cutting Blade Material	Special Alloy Steel		
6	Feeding Mouth Width	**Minimum of 7 inches**		
7	Capacity of Machine	A minimum of 250 KG/Hr.		
8	Belt	V-Belt Conveyor from Motor		
9	Machine Frame	Mild steel/Cast iron frame structure		
10	Weight of the Machine	Minimum 42 KG		
11	Others	Shall be fully equipped with accessories for efficient full load operation of chaff cutter with safety features		

S.N.	Criteria	Requirements	Offered Specification	Remarks
11	Others	Must have a handle to adjust different cut size of the plants		
		Must have a gear lever to adjust different cut speed		
12	Motor Position	At base of the machine		
13	Instructions	All instructions in the machine shall be in English/Nepali.		
14	Tools	**A set of tools as required for general maintenance shall be supplied.**		
15	Accessories	**Must provide minimum of 5 meters of electrical wire for connection extension.**		
16	Warranty	Manufacturer shall provide a minimum of one year warranty after delivery.		
17	Portability	Wheels are provided at the base of the frame for easy transportation and can be locked.		
16) Burdizzo Castrator				
S.N.	**Criteria**	**Requirements**	**Offered Specification**	
1	General	**Non-surgical**, scissor like castration design with two hinged arms used for Goat and Ox.	Model:	
2	Material	High-quality durable **stainless steel**		
3	Handle Length	**12 to 14 inches**		
4	Jaw Design	Curved, blunt, grooved jaws design to crush the spermatic cord without cutting		
17) Kodalo Blade (Agricultural Spade Blade)				
S.N.	**Criteria**	**Requirements**	**Offered Specification**	
1	General	Hoe/Kodalo used for soil digging, loosening, weeding, general agricultural work, **machine made**		
2	Material	High-quality durable **Carbon Steel**		
3	Weight	**Minimum 1.6 Kg**		
18) Secature (Pruning Shear)				
S.N.	**Criteria**	**Requirements**	**Offered Specification**	
1	General	Hand pruning secature/shear used for cutting of branches, shoots, twigs, and stems of fruit, vegetable and other plants	Model:	
2	Blade Material	High-carbon hardened **steel/SK5** equivalent		
3	Handle Material	**Reinforced Aluminium or high strength steel with ergonomic grip**		
4	Overall Length	Not less than **180mm**		
5	Weight	Not less than **250 g**		

Note: The major items are indicated by Bold and highlighted letters/alphabets/figures in the technical specifications. Non-compliance of these major items will result in no responsiveness of the bid.