

TERMS OF REFERENCE – SERVICES

1. Main Objective/Background:

Potato is cultivated in the state of Odisha with an average productivity of 12 tons per hectare which is less than half of the national average. Non-availability of quality seed is a serious issue in the state. There is great demand for quality seeds in both table and processing varieties in the state, where potato is primarily cultivated during rabi season.

To strengthen the formal seed system, the project will concentrate on low-cost technologies like Apical Rooted Cutting (ARC) technology to develop the local seed production system. The approach involves producing minituber (G0) seed, the first-generation seed tubers from *in vitro* plants using ARCs. In vitro plants are generated using the tissue culture and poly house facilities and produce the pre-basic seed (G0) from rooted cutting; the first generation (G1) seed from mini tubers in low-cost net houses and second and third generation (G2 and G3) seeds in the open fields.

In addition to insufficient quality seeds, there is a huge shortage of table potato for consumption in the state of Odisha. Due to a relatively larger potato area which can be further expanded, Odisha has high potential to supply not only seed but also table potato to other states. To exploit this opportunity, there is a need not only to increase productivity substantially but also to expand the area, particularly that under Winter potato. However, to achieve these objectives, there is a need to ensure the availability of quality seeds at affordable prices to the farmers.

2. Technical Specifications (3 Polyhouses and 2 Green Net Houses)

S. No.	Particulars	Size	Qty.	Location	Specifications
1.	Polyhouse – Fan & Pad system	1000 sq.m	1	Deras	Supply and installation of Polyhouse with fan pad system including control system of climatic factors, (e.g., temperature, humidity and maximum. Ideal temperature should be ± 25 °C and should not exceed 30 °C and photo period). Facilities should be inclusive of G.I Pipe, Nuts, Bolts, with G.I/Alumn. Profiles with plastic coated spring, 200 Micron Imported Poly Sheet etc 4 Mtr. to Gutter,

					6 Mtr. Top. 1 ft brick wall around 4 sides.
2	Green net house – 50% Combine with white (40 mess)	1000 sq.m	1	Deras	Construction of green net houses of about 1000 sq m with misting and sprinkler system with removable green shade net on roof for Potato.. Tunnel erection with HDPE pipe
3	Polyhouse – Fan & Pad system	1000 sq.m	1	Koraput	Supply and installation of Polyhouse with fan pad system including control of climatic factors, (e.g. temperature, humidity and photo period). Facilities should be inclusive of G.I Pipe, Nuts, Bolts, with G.I/Alumn. Profiles with plastic coated spring, 200 Micron Imported Poly Sheet etc 4 Mtr. to Gutter, 6 Mtr. Top. 1 ft brick wall around 4 sides.
4	Polyhouse – Naturally ventilated	2000 sq.m	1	Koraput	Supply and installation of Naturally Ventilated Polyhouse inclusive of G.I Pipe, Nuts, Bolts, with G.I/Alumn. Profiles with plastic coated spring, 200 Micron Imported Poly Sheet etc 4 Mtr. to Gutter, 6 Mtr.
5	Green net house – 50% Combine with white (40 mess)	1000 sq.m	1	Koraput	Construction of green net houses of about 1000 sq m with misting and sprinkler system with removable green shade net on roof. Tunnel erection with HDPE pipe

3.- Deliverables and dates for delivery (place): As described in above table should be delivered for the operation in 25 to 30 days after getting the order. Poly houses/nethouses/antiweed mat in Bhubaneswar/Koraput Odisha.

- Providing good quality work as per the quotation submitted without any deviations.
- Ensuring quality materials are supplied/used.
- Complying with safety regulations.
- Guarantee of minimum 1 year for installations and material
- Include a drawing/design in your quotations.
- Please include previous clients that you have provided similar/same requests and phone numbers.

- g) Include any certification that you company have (ISO, or similar accreditations).
h) Handed over all the net house and other items by May 30th 2023.

4.- Contract Coordinator: Dr. Sisir Srivastav

5.- Project: 1520-GOO0 / 1520-1000 / 1520-1000-10

6.- Distribution of the contract value by cost centre: 100 % - 1520-GOO0 / 1520-1000 / 1520-1000-10

7.- Duration of the contract (start and end date): 20th April 2023 to 30th May 2023

8.- Other comments: