



**Expression of Interest (EOI)**  
**seeking**  
**Detailed Project Report**

*For*

**Establishment of Centre of a Floriculture Promotion and Entrepreneurship Development  
for Northern Part of West Bengal at *Uttar Banga Krishi Viswavidyalaya***

**FUNDED UNDER**  
**RASTRIYA KRISHI VIKASH YOJANA**

**UTTAR BANGA KRISHI VISWAVIDYALAYA**  
P.O. PUNDIBARI, DIST. COOCH BEHAR, WEST BENGAL- 736165

**ফোন/Phone: 03582-270143 (O)**

**ফ্যাক্স/Fax : 03582-270143**

**ইমেল/E-mail: registrarubkvv@gmail.com**

**ওয়েবসাইট/Website: www.ubkv.ac.in**

***Abridged Expression of Interest (EOI)***

EOI is hereby invited seeking proposal for Establishment and post commissioning maintenance of Centre of Floriculture Promotion and Entrepreneurship Development for Northern Part of West Bengal at *Uttar Banga Krishi Viswavidyalaya* from reputed and experienced Organisation / Agency having experience of handling / developing similar infrastructures at Govt. Organization / Institute of Higher Learning / Research Institute of repute/ any Agriculture Institute etc. Last date of submission of EOI is **31.07.2019**. For details log on to University website [www.ubkv.ac.in](http://www.ubkv.ac.in)

Sd/-  
Registrar (Actg.)  
UBKV

## **Detail Expression of Interest (EOI)**

**seeking**

### **Detailed Project Report**

EOI is hereby invited seeking proposal for Establishment of a Centre of Floriculture Promotion and Entrepreneurship Development for Northern Part of West Bengal at *Uttar Banga Krishi Viswavidyalaya* from reputed and experienced Organisation / Agency having experience of developing similar infrastructures at Govt. Organization / Institute of Higher Learning / Research Institute of repute. Last date of submission of EOI is **31.07.2019**. For details log on to University website [www.ubkv.ac.in](http://www.ubkv.ac.in)

### **DISCLAIMER:**

Uttar Banga Krishi Viswavidyalaya has prepared this document based on the sanction received under RKVY, Government of India to provide the background / information for the “Establishment of a Centre of Floriculture Promotion and Entrepreneurship Development for Northern Part of West Bengal at Uttar Banga Krishi Viswavidyalaya” hereafter referred as the “**Project**”.

This document is not an agreement, is not an offer or invitation to any other party. The purpose of this document is to provide interested parties with basic information to assist the formulation of their Proposal. The information is not intended to be exhaustive. Interested agencies are required to make their own enquiries and respondents will be required to confirm that they have done so and they do not rely solely on the information provided in this document.

The information is provided on the basis that it is non – binding on UBKV, any of their respective officers, employees. UBKV reserves the right not to proceed with the project or to change the configuration / lay-out of the project, to alter the timetable reflected in this document or to change the process or procedure to be applied. While UBKV have taken due care in the preparation of information contained herein and believe it to be accurate, neither UBKV nor any of their respective officers, employees gives any warranty or make any representations, express or implied as to the completeness or accuracy of the information contained in this document or any information which may be provided in association with it. **No reimbursement of cost of any type will be paid to persons or entities submitting their Detailed Project Report.**

### **BRIEF DESCRIPTION OF THE PROJECT**

Govt. of India has sanctioned the project entitled “Establishment of a Centre of a Floriculture Promotion and Entrepreneurship Development for Northern Part of West Bengal at Uttar Banga Krishi Viswavidyalaya” under the Rastriya Krishi Vikash Yojana (RKVY). The project shall be implemented at the Head Quarter of Uttar Banga Krishi Viswavidyalaya, Pundibari; District: Coochbehar; State: West Bengal.

Uttar Banga Krishi Viswavidyalaya wishes to implement the Project through the reputed organization / agency having sound knowledge and expertise in this arena based on the basic requirement of the project as set by the project implementing team of UBKV. The nature of services to be provided by the intending agencies will include, visiting site, carry out site survey, preparation of surveyed site plan, preparing Architectural Design and Details, Lay out plan, planning of all required components / services viz. irrigation arrangement, internal electrical connectivity, thorough fare, placing the necessary components based on the lay-out plan approved by the UBKV, preparation of Cost Estimates including detailed specification etc.

Any other services or work not specifically mentioned herein but required for the proper and successful implementation of the project may also be included.

**Brief Scope of Work of the proposed Centre of Floriculture:**

Location of the Unit: Instructional Farm, Faculty of Horticulture, Uttar Banga Krishi Viswavidyalaya, Pundibari, Cooch Behar, West Bengal, PIN - 736165

Total area under the Unit – **1.48 hectare (14,804.00 Sq. m.)**

- A deep peripheral Earthen Drain of 1.5mtr. width x 1.5 mtr. Depth will be laid out surrounding the proposed site.
- Concertina fencing with angled iron / PCC pole embedded into the ground up to sufficient depth shall be provided along the Earthen Drain to ensure protection against grazing, pilferage and theft.
- Alongside the boundary, in all the four inner sides a brick lined / brick built / cemented pathway of 1.5m wide to be developed. Flower bed of 1m width flanked enclosed by cemented wall will be provided beside the path as per layout which is also separated with dividers at places.
- Arrangement for light with post for illumination will be there as and where necessary within the unit.
- CCTV surveillance will be developed for the whole unit.
- A central road of 4.5m wide (metal / cement concrete) will divide the plot into two halves as shown in the lay-out plan.
- There will be a decorative gate (sliding / openable) at two entry points. A security point (brick cement made walls with cement concrete roof having a dimension of 8'X8') will be developed at the left side of the eastern entry point.
- In the right hand side of the central road, all the building infrastructure of the centre to be developed, that consists of an office (20'X20'), one store (20'X20'), one garage (20'X20') and the controlling unit of the irrigation and /or fertigation system and other automations of the centre (20'x40').
- A road of 4.5m needs to be constructed thereafter for smooth running of the vehicle / tractor driven farm implements with adequate curve and passing place.
- Central water treatment plant will be established covering an area of 314m<sup>2</sup> (r=10m) followed by open area for cultivation and protected seed beds (110m<sup>2</sup>).
- **Permanent seed bed for off-season seedling production:**  
11 number of cement concrete beds of 0.6 m high with GI framework having Polyacrylic / polycarbonate cladding with a central height of 3m covering a dimension of 10 m x 1 m (110m<sup>2</sup>). The plan is inclusive of growing media and filling.
- Next to the water treatment plant, commercial nursery unit containing a mist propagation unit of 200m<sup>2</sup>, shade house of 200m<sup>2</sup> and a packing and potting shed of 200m<sup>2</sup> (total 600m<sup>2</sup>) will be established. Side by side 3 protected structures for house plants and other ornamental crops will be developed each having a dimension of 200m<sup>2</sup> (total 600m<sup>2</sup>).

**Tentative commercial nursery unit:**

a. Mist propagation chamber:

Arch type hi-tech unit having a dimension of 8 m x 25 m (200m<sup>2</sup>) with central height of 5 m having cement concrete base, curtain wall and flooring with neat finish containing glass dividers. The structure will be made of ISI make GI pipe frame with Fan-pad evaporative cooling system along with misting unit all fitted with controlling devices (temperature controller, humidity controller and piltz timer). Propagation benches will be made of aluminum having dimensions of 7 m x 1 m at the rate of 3 benches per line with 5 such lines meaning 15 such tables fitted at a height of 1 m following moving bench system. Cladding will be done with made 200 micron five layered UV stabilized polyfilm

b. Shadehouse:

Rectangular shaped GI structure of 8 m x 25 m (200m<sup>2</sup>) with a central height of 5m covered with Ginegar made 200 micron five layered UV stabilized polyfilm and 50% green agro-shade-net fixed on GI structure of 76 mm OD column, 60 mm OD purlins and 48 mm OD supports. Shade net will be fixed with Aluminum profile and GI locking wire.

c. Potting cum packing shed with implement shed and store:

Dimension will be 8 m x 25 m (200m<sup>2</sup>) having RCC foundation with MS fabricated superstructure with Coloured GI roofing. The shed will be prepared including brick work, iron grill windows, plastering, painting, electrification, plumbing and staff toilet which will be completed in all respect.

The polyhouses will be developed as per the specification mentioned in case of Gerbera with a dimension of 8mx25m each. The plan is inclusive of bed design, land preparation, supply of planting material from an accredited house and planting of materials.

- A protected structure for orchids having a dimension of 2016m<sup>2</sup> will be established at the other side (left hand side)of the central road of 4.5m width.

Tentative protected structure for orchids:

Naturally ventilated Hi-tech polyhouse with a dimension of 2016 m<sup>2</sup> (48mx42m / 80.64mx25m) made of ISI make GI pipe frame ranging from 76mm OD to 21mm OD or Hollow square bar frame with Aluminium profile, GI clamps, GI nut and bolts etc.

Cladding will be done with imported made 200 micron five layered UV stabilized polyfilm or imported double layer polycarbonate panel along with 50% black agro-shade-net below the roof and also on side curtains all around. The structure may be of aerodynamic or Venlo type.

Sprinkler irrigation system together with control unit comprising of filtration system, fertilizer injector, anti-vacuum valve, GM valve, 2 HP monoblock pump and 2000 lit ISI make PVC water tank will be installed. The system will also contain overhead sprinklers with a spacing of 2 m x 2 m having 15 LPH discharge ability.

Fogging manifold will include four way foggers with discharge ability of 7 LPH and 40 micron droplet size to be fixed overhead at a spacing of 2m (centre to centre). Suitable flashing system will also be incorporated.

Suitable growing tables / frames made of GI pipes and angles apt to cultivation of all three types of orchids simultaneously will be established at a height of 1 m above GL to facilitate free movement of moist air. Suitable temperature controlling system (Air conditioner or fan-pad cooling system) will be there.

Plan inclusive of 32000 tissue cultured high yielding planting materials with coconut husk block at the rate of 4 plants per block of various colours and three different types namely - Dendrobium, Mokara and Vanda from an accredited house.

- At the same side, two protected structures for Gerbera each having a dimension of 2016m<sup>2</sup> (48mX42m / 80.64mx25m) will be established with same specification and construction of road (4.5m wide) in between will be done as per the layout.

Tentative protected structure for Gerbera:

Naturally ventilated Hi-tech polyhouse with a dimension of 2016 m<sup>2</sup> (48mx42m) made of ISI make GI pipe frame ranging from 76 mm OD to 21 mm OD or Hollow square bar frame with Aluminum profile, GI clamps, GI nut and bolts etc.

Cladding will be done with imported made 200 micron five layered UV stabilized polyfilm / or imported double layer polycarbonate panel along with 50% white agro-shade-net above the roof and 30% white agro-shade-net on side curtains all around. The structure may be of aerodynamic or Venlo type.

Drip irrigation systems will be installed for gerbera crop inclusive of control unit containing filtration system, fertilizer injector, anti-vacuum valve, GM valve, 2 HP monoblock pump and 2000 lit ISI make PVC water tank. System also includes pressure compensated drip lines having emitters at 0.3 m apart with 1.3 LPH capacity of 16mm single drip line on beds. Fogging manifold will include four way foggers with a discharge rate of 7 LPH and 40 micron droplet size to be fixed overhead at a spacing of 2m (centre to centre). Suitable flashing system will also be incorporated. Suitable temperature controlling system (Air conditioner or fan-pad cooling system) will be there.

Suitable bed preparation for gerbera cultivation including Cocopeat, FYM, Rice husk and coarse sand mixed in correct proportion along with soil fumigation.

Plan inclusive of 12000 tissue cultured high yielding planting materials of commercial varieties of various colours from an accredited house. The annual expected return is about 36 flowers per plant.

**REQUIRED BASIC CIVIL WORK**

**a) Earthen Drain "V" shaped** of top width 2.0m, depth 1.5m, & bottom width 0.5m should be provided along the outer periphery of the proposed land.

**b) Concertina Fencing** of Coil dia 980mm high density 8m stretch should be 'C' clipped with horizontal PBT (R) strands at 1/2m interval with M.S angle Post "Y" shaped 50mm x 50mm of approx height 1.5m from G.L & grouted 400mm below G.L, 3m apart in P.C.C(1:2:4)

**c) Concrete Pavement of 4.5m** width (Surface Layer).with a minimum sub-base thickness of 100 mm. Both longitudinal & transverse joints should be provided to the entire stretch of pavement. Tie bars should be provided to prevent adjacent slabs from separating, particularly on curves or at fills. Steel wire fabric may be used for construction of joints, joint filler.

**d) Concrete Pathway of 1.5m** width of minimum 100mm thickness above single brick flat soling should be provided along the periphery.

#### **REQUIRED BASIC ELECTRICAL WORK**

**a)** 3-Phase power supply to be provided from the generator room of Faculty of Horticulture Generator providing erection of small separate panel.

**b)** The Cable should be laid underground, cable size should be not less than 3.5 core, 70 sq.mm XLPE cable, length of cable approximate-500 mtr.

**c)** Street light should be 7m street tubular pole fixed on P.C.C foundation & 85 watt LED outdoor street light fittings.

**d)** Street light cable should be 4core, 10 sq.mm, XLPE cable.

#### **INSTRUCTION TO THE APPLICANTS BEFORE APPLY:**

- Intending applicants are required to submit their proposal (DPR) giving details about their organization, experience, technical personal in their organization, proven competence to handle similar major works, etc. in both hard and soft copies.
- The prospective applicant should visit the work site to understand the nature and scope of work with prior intimation to UBKV authority, Pundibari, Cooch Behar, West Bengal.
- The validity of the EOI shall be for a period of 120 days from last date of submission.

The complete documents is to be sent by POST to the undersigned super-scribing on the top of the envelop **“DPR for Establishment of a Centre of Floriculture Promotion and Entrepreneurship Development for Northern Part of West Bengal at Uttar Banga Krishi Viswavidyalaya”** and should reach on or before **July 31, 2019** to:

**The Registrar**

**Uttar Banga Krishi Viswavidyalaya**

**Pundibari, Cooch Behar**

**Pin: 736165**

**West Bengal**

For any other queries, please contact through mail to:

1. Dr. S. Moitra, Professor, Floriculture, Medicinal & Aromatic Plants UBKV and P.I. of the Project: **soumenmaitra@rediffmail.com**
2. Er. S. Dey, In-charge, Works Department, UBKV: **sdey1119@gmail.com**

Sd/-  
Registrar (Actg.)