Madan Bhandari University of Science and Technology Setopati, Sainbu, Lalitpur Metropolitan City Ward 18 Notice on Requirement for Services of Consultants Date of publication: Falgun 23, 2079 (March 7, 2023)

The University intends to hire services of the following consultants:

- 1. External Relations and Resource Mobilization Consultant 1
- 2. Lead Administrative Management Consultant- 1
- 3. Mycology Consultant -1
- 4. Biotechnology Consultant -1
- 5. Environmental Science Consultant -1
- 6. Plant Pathology Consultant 1
- 7. Horticulture Consultant 1
- 8. Civil Engineering Consultant 1

Interested individuals or eligible firms are invited to submit proposals within 4:00 pm of Chaitra 8, 2079 to the email address—info@mbustb.edu.np or to the office of the University. The TORs for the consultants are provided in Annex 1. The proposals should be completed with the documentation specified below.

Documents to be submitted

#### For firms

- 1. Copy of Company registration certificate of the firm
- 2. Copy of VAT/PAN registration certificate of the firm
- 3. Copy of Tax clearance certificate of the firm for the FY 2078/79
- 4. Suchi darta (vendor registration) application of the firm (Annex 2)
- 5. CV of the candidate
- 6. Commitment letter from the candidate
- 7. Technical proposals from candidates for consultants

#### For individuals

- 1. Copy of VAT/PAN registration certificate
- 2. Copy of Tax clearance certificate for the FY 2078/79
- 3. Suchi darta (vendor registration) application (Annex 2)
- 4. CV of the candidate
- 5. Commitment letter from the candidate
- 6. Technical proposal from candidates for consultants

# Madan Bhandari University of Science and Technology Terms of Reference and Scope of Services External Relations and Resource Mobilization Consultant Contract ID: MBUST/CS/13/2079/80

# **Background**

Madan Bhandari University of Science and Technology (MBUST), envisioned as a world-class university, was established in August 2022. Preparations are being made for enrolling first students towards the end of 2023. The MBUST is a public university and it is being financed so far through public resources alone. Public resources would not be enough to meet financial requirements of the University. Therefore, it has been raising funds. For this purpose, the University has established the Endowment Fund and formed a Fundraising Committee.

To develop the MBUST as a world-class university extensive partnership needs to be built with national and international universities, national and international enterprises and maintain good relationship with the Government and other agencies. An external relations and resource mobilization consultant is required for addressing the above needs.

The Academic Affairs Consultant of the University has not been available for some time. The consultant to be hired should be able to meet this gap till the Academic Affairs Consultant becomes available.

# **Scope of Work**

- To raise funds for the Endowment Funds and supervise it.
- To work on the Fundraising Committee.
- To identify collaboration partners for PG programs.
- To mentor experts working at the University.
- To support academic and research programs.
- To establish line of communication with national and international funding agencies.
- To identify potential faculty and establish communication with them.
- To support the University in various management and academic activities.
- To prepare courses and research proposals in the areas of competence.
- To provide technical advice in areas of expertise.
- To participate in institutional development activities of the University.

#### **Duration of Service**

This is a time-based contract. The consultant shall provide services for 230 person-days commencing from April 1, 2023 and continuing through August 31, 2024 or any other period as may be subsequently agreed by the parties in writing. The Contract can be extended on the same rate if agreed by both parties.

# **Expected Outputs**

Monthly report on tasks accomplished.

#### Reporting

The consulting firm shall report to the President of the University on a monthly basis.

### **Payments**

This is a TOR for time-based services. Payment shall be made on a monthly basis based on the time spent in days for the assignment.

# Eligibility of the consultant

The consulting firm or other eligible institution must be registered in the VAT/PAN in the concerned revenue office and must have tax clearance certificate of FY 2078/79.

# **Qualifications of consultants**

- PhD in relevant subjects.
- At least fifteen years of professional experience.
- Professor or expert with high academic and research credentials.
- Extensive managerial experience in academic positions of universities, such as dean, head of examinations.
- Experience of external relations and resource mobilization.
- Extensive experience of providing advisory services.

## **Selection Criteria**

The consultant shall be selected following selection based on Direct Procurement Method set forth in Public Procurement Act, 2007 and Public Procurement Regulations, 2007 on the basis of consultant's qualification, experiences and capability to carry out the assignment.

# Madan Bhandari University of Science and Technology Terms of Reference for the Consulting Service of **Lead Administrative Management Consultant**

**Contract ID: MBUST/CS/14/2079/80** 

# **Background**

Madan Bhandari University of Science and Technology (MBUST) has been established on August 3, 2022. This university is being envisioned as a world-class university designed to support Nepal in attaining peoples' aspirations for Prosperous Nepal. To support such an important mission a new type of institution would need to be developed. The University will leave no stone unturned to build an institution dedicated to the mission by evaluating its staff solely based on their competence and keeping it free from corruption, nepotism favoritism and discrimination based on gender, religion, ethnicity and political preferences. The University will strive to build absolute accountability and would not tolerate corruption.

The preparations for the establishment of the university was entrusted to Madan Bhandari University of Science and Technology Development Board, which has been dissolved following the promulgation of the University act. The Board was staffed entirely by consultants. An Operation and Management (O&M) survey needs to be carried out to define the structure of the University administration and staffing needs informed by the Madan Bhandari University of Science and Technology Act.

Owing to the expectation of the delivery of world-class teaching and research by MBUST articulated in the University act, the template for definition of the organizational structure, policies and regulations cannot be adopted from the existing universities. The departure of the governance and management principles of MBUST from other universities is obvious from the MBUST Act.

The O&M survey needs to be based on the road map for its development, the formulation of various policies of the university – such as service conditions of staff, financing of university, fee structure, student financial assistance and others as applicable.

A highly experienced individual with experience of administrative chief of a university is needed for the preparation of the O&M survey, formulation of various policies and regulations. This TOR is for a lead management consultant to undertake the tasks described under the scope of work.

# **Scope of Work**

- Prepare service conditions for staff administrative and faculty.
- Prepare a proposal for university funding by UGC/MOF.
- Prepare O&M report.
- Provide support to university management by providing advice as required to the President and administration.
- Provide inputs for the full-fledge use of the server and enhancing computerization of the office procedures.

- Other tasks as assigned by the President.
- The consultant shall work in close cooperation with consultants.
- The consultant shall hold consultations as required for delivery of outputs as per the TOR.

All tasks listed in the scope of work cannot be completed in during the assignment of the consultant. The list describes broadly tasks which are needed to be accomplished. The consultant is expected to prepare a plan for completing these tasks, guide other consultants in executing these task as well as undertaking some of the tasks within the time allocated for in the contract.

### Reporting

The consultant shall report to the President of the University.

#### **Duration of Service**

The Consultant shall be hired for 150 working days from April 1, 2023 to March 31, 2024. The Contract can be extended at the same rate if agreed by both parties.

#### **Deliverables**

Monthly reporting of tasks accomplished. The consultant is not supposed to deliver outputs related to all tasks outlined in the scope of work. The delivery of the consultant will be based on the time available and instructions from the university.

# **Payments**

This is a time-based contract. Payments shall be made on a monthly basis based on the approved time sheets.

#### **Eligibility of the consultant**

The consulting firm or other eligible institution must be registered in the VAT/PAN in the concerned revenue office and must have tax clearance certificate of FY 2078/79.

#### **Qualifications of consultants**

- At least master's degree.
- At least twenty years of professional experience.
- Served at the position administrator in universities (equivalent of the special class in the civil service).
- Ability to work independently, perform complex tasks and tackle challenges.

- Excellent track record of on the job performance evidenced by referees.
- Excellent IT skills.
- Good interpersonal skills.

# **Selection Criteria**

The consultant shall be selected following Selection based on Direct Procurement Method set forth in Public Procurement Act, 2007 and Public Procurement Regulations, 2007 on the basis of consultant's qualification, experiences and capability to carry out the assignment.

# Madan Bhandari University of Science and Technology Terms of Reference and Scope of Services Mycology Consultant

Contract ID: MBUST/CS/15/2079/80

# **Background**

Madan Bhandari University of Science and Technology, envisioned as a world-class university, was established in August 2022. Consistent with the aim of the University to directly contribute to the economic development of the country through the development of new knowledge and technology, it is engaged in activities directed towards identification of real-life problems of enterprises of various sizes and individual farmers and their solution by developing new technologies in mycology and agriculture.

The University is planning to enroll a small number of students in research-based master's and PhD programs towards the end of 2023. For this purpose, the university is planning to prepare research topics/areas for students, set up laboratories, hire faculty and identify collaborating universities and professor relevant to selected research areas.

One of the areas of engagement of the University has been and will continue to be mushrooms and Cordyceps including Yarsagumba. Mushroom farming though fairly recent has grown over the years. But it continues to face problems related to diseases, lack of the capacity to produce mushroom strains suited to climatic conditions, harvest processing, development of products and marketing and others. Because of these problems, Nepal continues to import mushrooms but unable to export them.

Nepal is one of the few countries where Yarsagumba grows in wild. Due to the poor management of Yarsagumba areas and lack of technology for processing it, Nepal is not benefitting from this valuable product as it could. In addition, if Yarsagumba could be grown in laboratories the production of Yarsagumba could be increased substantially.

To make significant impact on the growth of the economy through the production of new technology, the University plans to get engaged in research throughout the value chain in partnership with appropriate professors/researchers and universities.

A mycology consultant with experience of organic agriculture is required for research and development and academic program development in mycology and organic agriculture. The consultant will work in close cooperation with a team of experts working in the areas of fertilizer development, plant disease management, organic farming of vegetables and fruits, application of AI in management of diseases, post-harvest technology, food processing and other areas. The Consultant is to lead a team of consultants for preparation of PG programs and research in organic agriculture and mycology.

#### **Scope of Work**

- 1. Academic program development in Organic Agriculture
  - a. Master degree by research
    - i. Finalization of the courses and updating of course structure

- ii. Identification of resource persons for delivery of courses and guiding thesis work
- iii. Preparation of documentation for submission to the Academic Council
- iv. Identification of 10 research areas/topics for theses in cooperation with other experts, of which 4 in the areas of competence of the consultant.
- v. Detailed research proposals for 4 theses in the area of the competence of the consultant.
- vi. Preparation of list of equipment including specifications and facilities needed for work on 4 theses in the area of consultant's competence.
- vii. Coordination with and mentoring of other experts working in other 6 thesis.
- viii. Formulation of qualifications of students and preliminary identification of potential students, if possible.

#### b. PhD

- i. Finalization of the courses and updating of course structure
- ii. Identification of resource persons for delivery of courses and guiding thesis work
- iii. Preparation of documentation for submission to the Academic Council
- iv. Identification of 4 research areas/topics for theses in cooperation with other experts, of which 2 in the areas of competence of the consultant.
- v. Detailed research proposals for 2 theses in the area of the competence of the consultant.
- vi. Preparation of list of equipment including specifications and facilities needed for work on 4 theses in the area of consultant's competence.
- vii. Coordination with and mentoring of other experts working in other 2 theses.
- viii. Formulation of qualifications of students and preliminary identification of potential students, if possible.

# 2. Yarsagumba collection and culture

- a. Visit to northern alpine regions of Nepal (Dolpa, Manang etc.) from May-July 2023 to collect fresh samples of Yarsagumba
- b. To collect spores from fresh mature samples of Yarsagumba in the field
- c. To make culture from spores on agar plates and its confirmation/identification through microscopic observation and cultural characteristics (June-October 2023) a very crucial step
- d. To multiply and propagate pure cultures of Yarsagumba on agar media and liquid media
- e. Trial of Yarsagumba for fructification on grain media
- 3. Cordyceps mushroom collection from Kathmandu valley and Chitlang area
  - a. Collection of Cordyceps mushrooms from surrounding hills of Kathmandu Valley (Nagarkot, Shivapuri, Chandragiri, Godavari, Suryabinayak, Kakani) and Chitlang etc. in the rainy season (May-September 2023)
  - b. Spore isolation and inoculation from fresh samples of Cordyceps mushrooms
  - c. Culture development from spores on agar media
  - d. Trial of fructification of Cordyceps mushrooms on grain media
- 4. Disease identification in mushroom farms and their biological control
  - a. Collection of air-borne and substrate-borne molds in mushroom farms (oyster mushroom, white button mushroom, Shiitake mushroom etc.) and their identification through microscopic observation and cultural characteristics
  - b. In vitro study on antagonism of contaminating molds against mushrooms using dual culture
  - c. In vitro study on mode of action of pathogenic fungi against mushrooms, eg. toxicity, mycoparasitism etc.
  - d. In vitro study on inhibitory mechanism of botanical extracts and safe, non-pesticidal chemicals (eg. sodium carbonate, sodium bicarbonate, organic acid (acetic acid), calcium hydroxide etc) against mushrooms and mushroom pathogens

- 5. Field study on local/traditional and improved methods of mushroom drying in Nepal
- 6. Identification of research topics throughout the entire value chain of a mushroom products and identification of researchers in MBUST and collaborating institutions.
- 7. Development of a core course and one elective for PG programs.
- 8. Participation in organic agriculture research and extension services.
- 9. Participation in institutional activities.

Tasks outlined in items 2, 3 and 4 are of the long-term nature, which are not expected to be completed during the period of the Contract.

#### **Duration of Service**

This is an output-based lump sum contract. The consultant shall provide services for 204 person-days commencing from April 1, 2023 and continuing through March 31, 2024 or any other period as may be subsequently agreed by the parties in writing.

# **Expected Outputs**

Reports on each task outlined in the TOR.

# Reporting

The consultant shall report to the President of the University on a monthly basis on the progress made.

### **Payments**

Payments shall be made to the consulting firm on output basis as follows:

- 5% of the Contract amount after delivery of the report on Task 1 (a) (i) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (a) (ii) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (a) (iii) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (a) (iv) of the TOR.
- 20% of the Contract amount after delivery of the report on Task 1 (a) (v) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (b) (i) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (b) (ii) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (b) (iii) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (b) (iv) of the TOR.
- 20% of the Contract amount after delivery of the report on Task 1 (b) (v) of the TOR.
- 10% of the Contract amount after delivery of the report on Task 5 of the TOR.
- 10% of the Contract amount after delivery of the report on Task 6 of the TOR. This payment will be made after the delivery of reports on any four items in Tasks 1a and 1b.

# Eligibility requirement

The consulting firm or other eligible institution must be registered in the VAT/PAN in the concerned revenue office and must have tax clearance certificate of FY 2078/79.

# **Qualifications and Experience of the Key Expert**

- PhD in relevant subjects, preferably post doc.
- At least ten years of professional experience.
- Relevant research experience.
- Established researcher as evidenced by publications in peer reviewed journals. At least hindex of 15 from 2018 and at least citations of 3500 all time in Google Scholar.

# **Selection Criteria**

The consultant shall be selected following Selection based on Rule 72 of the Public Procurement Regulations, 2007 on the basis of consultant's qualification, experiences and capability to carry out the assignment.

# Madan Bhandari University of Science and Technology Terms of Reference and Scope of Services Biotechnology Consultant Contract ID: MRUST/CS/16/2079/80

Contract ID: MBUST/CS/16/2079/80

# **Background**

Madan Bhandari University of Science and Technology, envisioned as a world-class university, was established in August 2022. Consistent with the aim of the University to directly contribute to the economic development of the country through the development of new knowledge and technology, it is engaged in activities directed towards identification of real-life problems of enterprises of various sizes and their solution by developing new technologies in forest biomaterials.

The University is planning to enroll a small number of students in research-based master's and PhD programs towards the end of 2023. For this purpose, the university is planning to prepare research topics/areas for students, set up laboratories, hire faculty and identify collaborating universities and professor relevant to selected research areas.

One of the areas of engagement of the University has been and will continue to be forest biomaterials – timber products and non-timber forest products (NTFP). Although 45% of the land area of Nepal is covered by forest Nepal imports timber products while timber rots in the forest. Nepal has not developed confidence in that forest resources can be utilized without harming the forest conservation. Technological solutions and well as policy interventions would be needed for enabling Nepal to conserve the forest while utilizing its timber resources.

Non-timber forest products also hold promise for Nepal. Nepal has been able to export some NTFP products, particularly, Medicinal and Aromatic Plant (MAP) products. First, Nepal is far from fully utilizing the potential of MAP products and second, most of MAP products Nepal exports are is the raw form. There is scope of expanding the quantity of products as well as the increasing the share of processed products.

To make significant impact on the growth of the economy through the production of new technology, the University plans to get engaged in research throughout the value chain in partnership with appropriate professors/researchers and universities.

A biotechnology consultant with experience of MAP is required for research and development and academic program development in forest biomaterials. The consultant will work in close cooperation with a team of experts working in the areas of timber products, fertilizer development, plant disease management, organic farming of vegetables and fruits, application of AI in management of diseases, post-harvest technology, food processing and other areas. The Consultant is to lead a team of consultants for preparation of PG programs and research in forest biomaterials.

#### Scope of Work

- 1. Academic program development in Forest Biomaterials
  - a. Master degree by research

- i. Finalization of the courses and updating of course structure
- ii. Identification of resource persons for delivery of courses and guiding thesis work
- iii. Preparation of documentation for submission to the Academic Council
- iv. Identification of 10 research areas/topics for theses in cooperation with other experts, of which 4 in the areas of competence of the consultant.
- v. Detailed research proposals for 4 theses in the area of the competence of the consultant.
- vi. Preparation of list of equipment including specifications and facilities needed for work on 4 theses in the area of consultant's competence.
- vii. Coordination with and mentoring of other experts working in other 6 theses.
- viii. Formulation of qualifications of students and preliminary identification of potential students, if possible.

#### b. PhD

- i. Finalization of the courses and updating of course structure
- ii. Identification of resource persons for delivery of courses and guiding thesis work
- iii. Preparation of documentation for submission to the Academic Council
- iv. Identification of 4 research areas/topics for theses in cooperation with other experts, of which 2 in the areas of competence of the consultant.
- v. Detailed research proposals for 2 theses in the area of the competence of the consultant.
- vi. Preparation of list of equipment including specifications and facilities needed for work on 4 theses in the area of consultant's competence.
- vii. Coordination with and mentoring of other experts working in other 2 theses.
- viii. Formulation of qualifications of students and preliminary identification of potential students, if possible.
- 2. Characterization and utilization essential oils from herbal products of Nepal
  - a. Resource identification and characterization of native plants based essential oils for use in fragrance and medicinal materials.
  - b. Characterization of commercially important essential oils products of Nepal.
  - c. Pesticide residue analysis of commercially important essential oils.
  - d. Essential oil based biopesticide development.
- 3. Identification of research topics throughout the entire value chain of a MAP products and identification of researchers in MBUST and collaborating institutions.
- 4. Development of a core course and one elective for PG programs.
- 5. Participation in forest biomaterials research and extension services.
- 6. Participation in institutional activities.

Tasks outlined in items 2 (a), (b) and (c) are of the long-term nature, which are not expected to be completed during the period of the Contract.

#### **Duration of Service**

This is an output-based lump sum contract. The consultant shall provide services for 204 person-days commencing from April 1, 2023 and continuing through March 31, 2024 or any other period as may be subsequently agreed by the parties in writing.

# **Expected Outputs**

Reports on each task outlined in the TOR

# **Reporting**

The consultant shall report to the President of the University on a monthly basis on the progress made.

# **Payments**

This is an output-based lumpsum contract. Payments shall be made to the consulting firm on output basis as follows:

- 5% of the Contract amount after delivery of the report on Task 1 (a) (i) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (a) (ii) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (a) (iii) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (a) (iv) of the TOR.
- 20% of the Contract amount after delivery of the report on Task 1 (a) (v) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (b) (i) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (b) (ii) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (b) (iii) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (b) (iv) of the TOR.
- 20% of the Contract amount after delivery of the report on Task 1 (b) (v) of the TOR.
- 10% of the Contract amount after delivery of the report on Task 2 (c) of the TOR.
- 10% of the Contract amount after delivery of the report on Task 3 of the TOR. This payment will be made after the delivery of reports on all items in Tasks 1a and 1b.

# Eligibility requirement

The consulting firm or other eligible institution must be registered in the VAT/PAN in the concerned revenue office and must have tax clearance certificate of FY 2078/79.

# **Qualifications and Experience of the Key Expert**

- PhD in relevant subjects, preferably post doc.
- At least ten years of professional experience.
- Relevant research experience.

• Established researcher as evidenced by publications in peer reviewed journals. At least hindex of 15 and at least citations 600 in Google Scholar.

# **Selection Criteria**

The consultant shall be selected following Selection based on Rule 72 of the Public Procurement Regulations, 2007 on the basis of consultant's qualification, experiences and capability to carry out the assignment.

# Madan Bhandari University of Science and Technology Terms of Reference and Scope of Services Environmental Science Consultant Contract ID: MBUST/CS/17/2079/80

# **Background**

Madan Bhandari University of Science and Technology, envisioned as a world-class university, was established in August 2022. Consistent with the aim of the University to directly contribute to the economic development of the country through the development of new knowledge and technology, it is engaged in activities directed towards identification of real-life problems of enterprises of various sizes and their solution by developing new technologies in forest biomaterials.

The University is planning to enroll a small number of students in research-based master's and PhD programs towards the end of 2023. For this purpose, the university is planning to prepare research topics/areas for students, set up laboratories, hire faculty and identify collaborating universities and professor relevant to selected research areas.

One of the areas of engagement of the University has been and will continue to be forest biomaterials – timber products and non-timber forest products (NTFP). Although 45% of the land area of Nepal is covered by forest Nepal imports timber products while timber rots in the forest. Nepal has not developed confidence in that forest resources can be utilized without harming the forest conservation. Technological solutions and well as policy interventions would be needed for enabling Nepal to conserve the forest while utilizing its timber resources.

Non-timber forest products also hold promise for Nepal. Nepal has been able to export some NTFP products, particularly, Medicinal and Aromatic Plant (MAP) products. First, Nepal is far from fully utilizing the potential of MAP products and second, most of MAP products Nepal exports are is the raw form. There is scope of expanding the quantity of products as well as the increasing the share of processed products.

To make significant impact on the growth of the economy through the production of new technology, the University plans to get engaged in research throughout the value chain in partnership with appropriate professors/researchers and universities.

A environmental science consultant with experience of forest biomaterials science is required for research and development and academic program development in forest biomaterials. The consultant will work in close cooperation with a team of experts working in the areas of timber products, MAP, fertilizer development, plant disease management, organic farming of vegetables and fruits, application of AI in management of diseases, post-harvest technology, food processing and other areas. The Consultant is to a member of the team of consultants for preparation of PG programs and research in forest biomaterials.

## **Scope of Work**

1. Academic program development in Forest Biomaterials

- a. Master degree by research
  - i. Assist the Team Leader in finalization of the courses and updating of course structure
  - ii. Identification of resource persons for delivery of courses and guiding thesis work
  - iii. Assist in identification of 10 research areas/topics for theses in cooperation with other experts, of which 3 in the areas of competence of the consultant.
  - iv. Detailed research proposals for 3 theses in the area of the competence of the consultant.
  - v. Preparation of list of equipment including specifications and facilities needed for work on 3 theses in the area of consultant's competence.
  - vi. Preliminary identification of potential students, if possible.

#### b. PhD

- i. Assist the Team Leader in finalization of the courses and updating of course structure
- ii. Identification of resource persons for delivery of courses and guiding thesis work
- iii. Assist in identification of 10 research areas/topics for theses in cooperation with other experts, of which 3 in the area of competence of the consultant.
- iv. Detailed research proposals for 3 theses in the area of the competence of the consultant.
- v. Preparation of list of equipment including specifications and facilities needed for work on 3 theses in the area of consultant's competence.
- vi. Preliminary identification of potential students, if possible.
- 2. Treatment of Acidic soil by the application of Biochar made from forest waste.
- 3. Identification of important medicinal compounds from the tree bark of Bokre Kaulo (Machilus odoratissima Nees in Wall (Lauraceae), Chitlang, Nepal
- 4. Development of Laboratory safety protocol and working procedure for Natural product Laboratory
- 5. Review pesticide residue analysis and propose the most suitable methods along with detailed procedures for the forest biomaterials laboratory.
- 6. Identification of research topics throughout the entire value chain of a timber product and identification of researchers in MBUST and collaborating institutions.
- 7. Participation in forest biomaterials research and extension services.
- 8. Development of a core course and one elective for PG programs.
- 9. Participation in institutional activities.

Tasks outlined in items 2, 3, 4 and 5 are of the long-term nature, which are not expected to be completed during the period of the Contract.

# **Duration of Service**

This is an output-based lump sum contract. The consultant shall provide services for 204 person-days commencing from April 1, 2023 and continuing through March 31, 2024 or any other period as may be subsequently agreed by the parties in writing.

# **Expected Outputs**

Reports on each task outlined in the TOR

# Reporting

The consultant shall report to the President of the University on a monthly basis on the progress made.

# **Payments**

Payments shall be made to the consulting firm on output basis as follows:

- 5% of the Contract amount after delivery of the report on Task 1 (a) (i) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (a) (ii) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (a) (iii) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (a) (iv) of the TOR.
- 20% of the Contract amount after delivery of the report on Task 1 (a) (v) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (b) (i) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (b) (ii) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (b) (iii) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (b) (iv) of the TOR.
- 20% of the Contract amount after delivery of the report on Task 1 (b) (v) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 4 of the TOR.
- 5% of the Contract amount after delivery of the report on Task 5 of the TOR.
- 10% of the Contract amount after delivery of the report on Task 6 of the TOR. This payment will be made after the delivery of reports on all items in Tasks 1a and 1b.

# **Eligibility requirement**

The consulting firm or other eligible institution must be registered in the VAT/PAN in the concerned revenue office and must have tax clearance certificate for FY 2078/79.

# **Qualifications and Experience of the Key Expert**

- PhD in relevant subjects, preferably post doc.
- At least ten years of professional experience.
- Relevant research experience.

• Established researcher as evidenced by publications in peer reviewed journals. At least hindex of 6 and at least citations of 150 in Google Scholar.

# **Selection Criteria**

The consultant shall be selected following Selection based on Rule 72 of the Public Procurement Regulations, 2007 on the basis of consultant's qualification, experiences and capability to carry out the assignment.

# Madan Bhandari University of Science and Technology Terms of Reference and Scope of Services Plant Pathology Consultant

**Contract ID: MBUST/CS/18/2079/80** 

# **Background**

Madan Bhandari University of Science and Technology envisioned as a world-class university was established August 2022. Consistent with the aim of the university to directly contribute to the development of economy through development of new knowledge and technology, it is engaged in activities directed towards identification of real-life problems of enterprises of various sizes and individual farmers and their solution by developing new technology for organic agriculture.

The University is planning to enroll a small number of students in research-based master's and PhD programs towards the end of 2023. For this purpose, the University is planning to prepare research topics/areas for students, set up laboratories, hire faculty and identify collaborating universities and professors relevant to selected research areas.

One of the major areas of the engagement of the University is organic agriculture. In spite of the long efforts the organic agriculture sectors has not streamlined. The University aims at maturing the sector by providing multifaceted support needed for the growth of the sector.

To make significant impact on the growth of the economy through the production of new technology the University plans to get engaged in research throughout the value chain in partnership with appropriate professors/researchers and universities.

A plant pathology consultant with experience of organic agriculture is required for research and development and academic program development in plant pathology and organic agriculture. The consultant will work in close cooperation with a team of experts working in the areas of fertilizer development, mycology, plant disease management, organic farming of vegetables and fruits, application of AI in management of diseases, harvest technology, food processing and other areas. The Consultant is to be a member of a team of consultants preparing PG programs and research in Organic Agriculture.

# **Scope of Work**

- 1. Academic program development in Organic Agriculture
  - a. Master degree by research
    - i. Assist the Team Leader in finalization of the courses and updating of course structure
    - ii. Identification of resource persons for delivery of courses and guiding thesis work
    - iii. Assist in identification of 10 research areas/topics for theses in cooperation with other experts, of which 3 in the areas of competence of the consultant.
    - iv. Detailed research proposals for 3 theses in the area of the competence of the consultant.

- v. Preparation of list of equipment including specifications and facilities needed for work on 3 theses in the area of consultant's competence.
- vi. Preliminary identification of potential students, if possible.

#### b. PhD

- i. Assist the Team Leader in finalization of the courses and updating of course structure
- ii. Identification of resource persons for delivery of courses and guiding thesis work
- iii. Assist in identification of 10 research areas/topics for theses in cooperation with other experts, of which 3 in the area of competence of the consultant.
- iv. Detailed research proposals for 3 theses in the area of the competence of the consultant.
- v. Preparation of list of equipment including specifications and facilities needed for work on 3 theses in the area of consultant's competence.
- vi. Preliminary identification of potential students, if possible.
- 2. Set up an organic agriculture laboratory.
- 3. Providing extension services to farmers using digital technology in collaboration with Geokrishi and other partners.
- 4. Developing a model for organic agriculture using university's green house and open farm.
- 5. Conducting participatory research on organic farming at farmers' field.
- 6. Conducting research on organic fertilizers, biopesticides and biocontrol of pests.
- 7. Identification of research topics throughout the entire value chain of an organic vegetable and identification of researchers in MBUST and collaborating institutions.
- 8. Development of a core course and one elective for PG programs.
- 9. Participation in organic agriculture research and extension services.
- 10. Participation in institutional activities.

Tasks outlined in items 3, 4, 5 and 6 are of the long-term nature, which are not expected to be completed during the period of the Contract.

#### **Duration of Service**

The supervision consultant shall provide his/her services for 204 person-days on intermittent basis over the period commencing from June 19, 2023 and continuing through June 18, 2024 or any other period as may be subsequently agreed by the parties in writing.

### **Expected Outputs**

Reports on each task outlined in the TOR.

#### Reporting

The consultant shall report to the President of the University on a monthly basis on the progress made.

### **Payments**

This is an output-based lumpsum contract. Payments shall be made to the consulting firm on output basis as follows:

- 5% of the Contract amount after delivery of the report on Task 1 (a) (i) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (a) (ii) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (a) (iii) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (a) (iv) of the TOR.
- 20% of the Contract amount after delivery of the report on Task 1 (a) (v) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (b) (i) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (b) (ii) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (b) (iii) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (b) (iv) of the TOR.
- 20% of the Contract amount after delivery of the report on Task 1 (b) (v) of the TOR.
- 20% of the Contract amount after delivery of the report on Task 7 of the TOR. This payment will be made after the delivery of reports on any four items in Tasks 1a and 1b.

# **Eligibility requirement**

The consulting firm or other eligible institution must be registered in the VAT/PAN in the concerned revenue office and must have tax clearance certificate of FY2078/79.

#### Qualifications

- PhD degree in plant pathology or other relevant fields.
- All time google citations not less than 230 and h-index not less than 5.

#### **Selection Criteria**

The consultant shall be selected following Selection based on Direct Procurement Method set forth in Public Procurement Act, 2007 and Public Procurement Regulations, 2007 on the basis of consultant's qualification, experiences and capability to carry out the assignment.

# Madan Bhandari University of Science and Technology Terms of Reference and Scope of Services Horticulture Consultant

**Contract ID: MBUST/CS/19/2079/80** 

#### **Background**

Madan Bhandari University of Science and Technology envisioned as a world-class university was established August 2022. Consistent with the aim of the university to directly contribute to the development of economy through development of new knowledge and technology, it is engaged in activities directed towards identification of real-life problems of enterprises of various sizes and individual farmers and their solution by developing new technology for organic agriculture.

The University is planning to enroll a small number of students in research-based master's and PhD programs towards the end of 2023. For this purpose, the University is planning to prepare research topics/areas for students, set up laboratories, hire faculty and identify collaborating universities and professors relevant to selected research areas.

One of the major areas of the engagement of the University is organic agriculture. In spite of the long efforts the organic agriculture sectors has not streamlined. The University aims at maturing the sector by providing multifaceted support needed for the growth of the sector.

To make significant impact on the growth of the economy through the production of new technology the University plans to get engaged in research throughout the value chain in partnership with appropriate professors/researchers and universities.

A horticulture consultant with experience of organic agriculture is required for research and development and academic program development in horticulture and organic agriculture. The consultant will work in close cooperation with a team of experts working in the areas of fertilizer development, mycology, plant disease management, organic farming of vegetables and fruits, application of AI in management of diseases, harvest technology, food processing and other areas. The Consultant is to be a member of a team of consultants preparing PG programs and research in Organic Agriculture.

#### Scope of Work

- 1. Academic program development in Organic Agriculture
  - a. Master degree by research
    - i. Assist the Team Leader in finalization of the courses and updating of course structure
    - ii. Identification of resource persons for delivery of courses and guiding thesis work
    - iii. Assist in identification of 10 research areas/topics for theses in cooperation with other experts, of which 3 in the areas of competence of the consultant.

- iv. Detailed research proposals for 3 theses in the area of the competence of the consultant.
- v. Preparation of list of equipment including specifications and facilities needed for work on 3 theses in the area of consultant's competence.
- vi. Preliminary identification of potential students, if possible.

#### b. PhD

- i. Assist the Team Leader in finalization of the courses and updating of course structure
- ii. Identification of resource persons for delivery of courses and guiding thesis work
- iii. Assist in identification of 10 research areas/topics for theses in cooperation with other experts, of which 3 in the area of competence of the consultant.
- iv. Detailed research proposals for 3 theses in the area of the competence of the consultant.
- v. Preparation of list of equipment including specifications and facilities needed for work on 3 theses in the area of consultant's competence.
- vi. Preliminary identification of potential students, if possible.
- 2. Set up kiwi farm at the university.
- 3. Assist in developing a model for organic agriculture using university's green house and open farm.
- 4. Conducting participatory research on organic farming at farmers' field.
- 5. Development of indigenous tea cultivar in collaboration with partners.
- 6. Identification of research topics throughout the entire value chain of kiwi identification of researchers in MBUST and collaborating institutions.
- 7. Development of a core course and one elective for PG programs.
- 8. Participation in organic agriculture research and extension services.
- 9. Participation in institutional activities.

Tasks outlined in items 3, 4 and 5 are of the long-term nature, which are not expected to be completed during the period of the Contract.

#### **Duration of Service**

The supervision consultant shall provide his/her services for 204 person-days on intermittent basis over the period commencing from June 28, 2023 and continuing through June 27, 2024 or any other period as may be subsequently agreed by the parties in writing.

#### **Expected Outputs**

Reports on each task outlined in the TOR.

#### Reporting

The consultant shall report to the President of the University on a monthly basis on the progress made.

#### **Payments**

This is an output-based lumpsum contract. Payments shall be made to the consulting firm on output basis as follows:

- 5% of the Contract amount after delivery of the report on Task 1 (a) (i) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (a) (ii) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (a) (iii) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (a) (iv) of the TOR.
- 20% of the Contract amount after delivery of the report on Task 1 (a) (v) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (b) (i) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (b) (ii) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (b) (iii) of the TOR.
- 5% of the Contract amount after delivery of the report on Task 1 (b) (iv) of the TOR.
- 20% of the Contract amount after delivery of the report on Task 1 (b) (v) of the TOR.
- 10% of the Contract amount after delivery of the report on Task 2 of the TOR.
- 10% of the Contract amount after delivery of the report on Task 7 of the TOR. This payment will be made after the delivery of reports on any four items in Tasks 1a and 1b.

#### **Eligibility requirement**

The consulting firm or other eligible institution must be registered in the VAT/PAN in the concerned revenue office and must have tax clearance certificate of FY 2078/79.

#### Qualifications

- PhD degree in horticulture or other relevant fields.
- All time google citations not less than 30 and h-index not less than 4.

#### **Selection Criteria**

The consultant shall be selected following Selection based on Direct Procurement Method set forth in Public Procurement Act, 2007 and Public Procurement Regulations, 2007 on the basis of consultant's qualification, experiences and capability to carry out the assignment.

# Madan Bhandari University of Science and Technology Terms of Reference and Scope of Services Civil Engineering Consultant

Contract ID: MBUST/CS/20/2079/80

## **Background**

Madan Bhandari University of Science and Technology, envisioned as a world-class university, was established in August 2022. The University is planning to enroll a small number of students in research-based master's and PhD programs towards the end of 2023. Two buildings have been completed and a third building is under construction. A 500kWp solar PV plant is under construction. The bid for the fourth building is expected to be invited shortly. Consultants are updating the master plan of the University. Construction of physical facilities are expected to continue for a few years. At present the construction works are being supported from the University side by a site civil engineer, a civil engineer and an academic infrastructure development consultant. The contract with the civil engineer is ending. This TOR is for the civil engineer.

The University is seeking services from a civil engineer with experience in supervision of civil works construction and design, procurement of civil works and goods and handling PPMO portal.

#### **Scope of Work**

- To supervise works and services.
- To provide support to procurement of goods.
- To handle e-procurement through the PPMO portal.
- To prepare bid documents for works, goods and services.
- To undertake minor design of civil works.
- Other work within the competence of the consultant.

#### **Duration of Service**

The supervision consultant shall provide his/her services on intermittent basis for 200 days over the period commencing from April 1, 2023 and continuing through November 30, 2024 or any other period as may be subsequently agreed by the parties in writing. The Contract can be extended on the same rate if agreed by both parties.

#### **Expected Outputs**

To prepare documents and provide advice as described in the scope of work.

### Reporting

The consulting firm shall report to the President of the University.

## **Payments**

This is a TOR for time-based services. Payments shall be made on a monthly basis based on the time spent in days for the assignment.

# Eligibility of the consultant

The consulting firm or other eligible institution must be registered in the VAT/PAN in the concerned revenue office and must have tax clearance certificate of FY 2078/79.

# Qualifications of the expert the Consulting firm shall engage for the performance of the contract

- Master's degree in civil engineering preferably construction management.
- At least 10 years' experience of supervision of civil engineering projects including in public agencies.
- Experience of supervision of water supply and sanitary projects.
- Experience of e-procurement through PPMO portal.
- Good knowledge of procurement policies, guidelines and procedures.
- Experience of procurement of works, goods and services.
- Good IT skills.
- Ability to provide support online at a short notice.
- Excellent track record of performance.
- Good interpersonal skills.

#### **Selection Criteria**

The consultant shall be selected following Selection based on Direct Procurement Method set forth in Public Procurement Act, 2007 and Public Procurement Regulations, 2007 on the basis of consultant's qualification, experiences and capability to carry out the assignment.

मिति:

श्री मदन भण्डारी विज्ञान तथा प्रविधि विश्वविद्यालय सेतोपाटी, सैब्, ललितपुर

# विषयः **मौजुदा सूचीमा दर्ता गरी पाँउ**।

महोदय,

सार्वजनिक खरिद नियमावली, २०६४ को नियम १८ को उपनियम (१) बमोजिम तपसिलमा उल्लिखित विवरण अनुसारको पुष्ट्याँई गर्ने कागजात संलग्न गरी मौजुदा सूचीमा दर्ता हुन यो निबेदन पेश गरेको छु।

# तपसिल:

<ul><li>पौजुदा सूचीको लागि निबेदन दिने व्यक्ति विवरण:</li></ul>	, संस्था, आपूरि	र्तिकर्ता, निर्माण व्यवसायी, परामर्शदाता वा सेवा प्रदायकको				
(क) नाम:		(ख) ठेगाना:				
(ग) पत्राचार गर्ने ठेगानाः		(घ) मुख्य व्यक्तिको नाम:				
(ङ) टेलिफोन नं.		(च) मोवाईल नं.				
२. मौजुदा सूचीमा दर्ता हुनको लागि निम्न बमोजिमको प्रमाणपत्र संलग्न गर्नु होला ।						
(क) संस्था वा फर्म दर्ताको प्रमाणपत्र छ छैन						
(ख) निवकरण गरिएको छ छैन						
(ग) मूल्य अभिवृद्धि कर वा स्थायी लेखा नम्बरदर्ताको प्रमाणपत्र छ छैन						
(घ) कर चुक्ताको प्रमाणपत्र छ छैन						
(ङ) कुन खरिदको लागि मौजुदा सूचीमा दर्ता हुन निबेदन दिने हो, सो कामको लागि ईजाजतपत्र आबश्यक पर्ने भएमा सोको प्रतिलिपि छ छैन						
३. सार्वजनिक निकायबाट हुने खरिदको लागि दर्ता हुन चाहेको खरिदको प्रकृतिको विवरण:						
(क) मालसामान आपूर्तिः मालसामानको प्रकृति समेत उल्लेख गर्ने		(ख) निर्माण कार्य				
(ग) परामर्श सेवा:		(घ) अन्य सेवा:				
परामर्श सेवाको प्रकृति समेत उल्लेख गर्ने		(अन्य सेवाको प्रकृति समेत उल्लेख गर्ने				
निवेदन दिएको मिति:	फर्मको छापः	: निवेदकको नाम:				
		हस्ताक्षर:				