TERMS OF REFERENCE FOR CONSULTANTS

I. Summary of Consulting Services Requirements

1. The Asian Development Bank (ADB) will engage the consultants following the ADB Procurement Policy (2017, as amended from time to time) and its associated project administration and/or staff instructions. A consulting firm will be engaged for capacity development and policy support on post-harvest management and promotion of high-level and innovative technologies in agribusiness and agriculture value chain (Outputs 1–3). An individual consultant will be recruited for capacity development of asset management (Output 4).

II. Consulting Firm

A. Objective and Purpose of the Assignment

a. Project Background

2. Maharashtra is the leading contributor to India’s economy, accounting for 14.3% of the national gross domestic product in FY2020. However, the state is also ranked among the highest in the income and development inequalities as economic development is concentrated only in major cities. The central and state governments target to raise farmers’ incomes by promoting agribusiness development and aggregating crops of small and marginal landholding farmers through organized farmer producer organizations (FPOs). Horticulture crops such as fruits, vegetables, and flowers have higher values but are highly perishable. Almost 40% are lost or wasted in different stages of the agriculture value chains. The losses can be reduced by proper post-harvest practices and agriculture value chain facility.

3. The proposed Maharashtra Agribusiness Network Project (MAGNET) will support the state government of Maharashtra through a holistic approach combining a project loan and financial intermediation loan modalities. A transaction technical assistance (TRTA) is also attached to the project. The project is aligned with the following impacts: achieve average agriculture sector growth rate of 5 per cent; promote agriculture produce export; and establish fair, competitive, and accessible agriculture markets. The project’s outcome is: Maharashtra’s horticultural production values and FPOs’ profits increased. The outputs comprise (i) institutional capacities of agribusiness institutions and FPOs strengthened, (ii) financial and agribusiness capacities of FPOs and value chain operators (VCOs) strengthened, and (iii) agriculture value chain infrastructure improved and operational. The project is estimated to cost $142.9 million, of which $100.0 million will be funded by ADB’s ordinary capital resources (regular loan).

4. The project has the following finance-plus elements, which this TRTA will support to deliver.

   (i) **High-level technology.** Based on a list of innovative and high-level technologies identified during the project preparation, the project will (a) directly apply some to facility improvements, (b) give guidance to FPOs and VCOs, and (c) promote their application through financial support. These technologies cover various stages of agribusiness such as aggregation, storage, processing, logistics, and marketing.

   (ii) **Centers of excellence network.** Capacity development activities will be linked to research and development activities of National Institute of Post-Harvest Technology (NIPHT) and associated research centers. A network of institutions
will be developed to holistically provide hand-holding support to FPOs and farmers on good agricultural practices, new crop varieties, and other technical innovations.

(iii) **Value chain acceleration.** The newly established MAGNET Society will be developed to be a value chain accelerator, which will offer crop-based support to develop FPOs and collectively market their products with higher brand values.

(iv) **Gender mainstreaming and social inclusion.** Mahila Arthik Vikas Mahamandal (MAVIM) will depute staff and work with MAGNET Society to ensure that women and women-owned or -led FPOs and VCOs will be promoted and given priorities in capacity development and financial support. The gender equality and social inclusive (GESI) action plan will enhance inclusive project benefits to women and other vulnerable groups.

b. **Objectives of the Assignment**

5. ADB is providing the TRTA to enhance the project results and ADB’s value addition in horticulture agribusiness networking. The TRTA should bring in international best practices in the areas of post-harvest management and marketing and agriculture technologies. The TRTA consultant should coordinate with a project implementation support consultant (PISC) being engaged by MAGNET Society through the loan project to enhance synergies and avoid duplications. The PISC’s implementation periods are longer, and the outputs of the TRTA can be utilized by their services such as continued handholding capacity development in ensuing years.

c. **Implementation Arrangements**

6. The TRTA will be implemented in 3 years, and the TRTA consulting firm will be engaged for 30 months. The executing agency is the State of Maharashtra, acting through the MAGNET Society. ADB through its Environment, Natural Resources and Agriculture Division of South Asia Department (SAER) will implement and administrate the TRTA.

7. The TRTA will be jointly funded by Japan Fund for Poverty Reduction (JFPR) and ADB’s TA resources. The consultants are requested to (i) collaborate, as appropriate, with Japan International Cooperation Agency, Japanese non-governmental organizations, private sector, and academic institutions and (ii) ensure that various activities such as workshops and trainings will enhance Japanese visibility as indicated in the *Guidance Note on Japanese Visibility* (as amended from time to time).

d. **Scope of Work**

8. The scope of the consulting services is to enhance finance-plus elements of the project. Major outputs and activities of the consulting firm are summarized in Table 1 (Output 4 of the TRTA will be delivered by an individual consultant to be engaged separately).

<table>
<thead>
<tr>
<th>Table 1: Summary of Major Outputs and Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Major Outputs</strong></td>
</tr>
<tr>
<td>ADB. Japan Fund for Poverty Reduction.</td>
</tr>
</tbody>
</table>
| 1. Crop-based centers of excellence networks created and capacity development on value chain acceleration conducted | Q2 2024 | 1.1 Identify anchor FPOs and potential FPOs (including at least 20% women-owned and -led FPOs) for each of the target horticulture crops to be supported under the TA in 6 months.  
1.2 Identify crop-wise centers of excellence network for capacity development activities comprising the NIPHT, anchor FPOs, and other relevant agencies and organizations in 6 months.  
1.3 Develop crop-wise assessment and proposals on (a) market access and expansion for both domestic and export markets including branding concepts; (b) trade volume and price projections and targets; (c) quality requirements of key customers and markets and existing gaps; (d) facility requirements, utilization, and gaps; (e) capacity development plans of FPOs to enhance their business, financial, and technical capacity and utilize high-level and innovative agriculture technologies and women members in 6 months.  
1.4 Prepare crop-wise mid-term (3–5 years) action plans based on above to accelerate value chain activities and enhance market linkages in 8 months and update the plans in a rolling manner at the beginning of each fiscal-year by validating all business assumptions, developing annual plans, and defining key performance indicators.  
1.5 Organize and conduct market promotion events such as buyer-seller meets and e-marketing promotion annually from the 8th month (5,000 or more participants in total, of which at least 15% are women).  
1.6 Develop training materials and train the trainers through the centers of excellence network based on the action plans continuously from the 9th month (100 or more trainers to be trained, of which at least 20% are women).  
1.7 Coordinate trainings to FPOs to be conducted by the trainers and organized by the PISC from the 9th month continuously throughout the TA implementation period (35,000 or more participants in total, of which at least 20% are women).  
1.8 Prepare knowledge products to be used for replication of the project experience and expertise. |
|---|---|---|
| 2. High-level and innovative technologies in agribusiness and agriculture value chain promoted | Q2 2024 | 2.1 Review outputs of high-level technology consultants and project preparatory consulting firm and other relevant documents in 1 month.  
2.2 Develop training material and train the trainers, anchor FPOs and other interested FPOs through the center of excellence network from the 8th month and thereafter (100 or more trainers to be trained, of which at least 20% are women).  
2.3 Promote application of relevant high-level and innovative technologies through project activities in collaboration with the PISC throughout the TA implementation period.  
2.4 Prepare knowledge products to be used for replication of the project experience and expertise. |
3. Capacity development on post-harvest management conducted  

<table>
<thead>
<tr>
<th></th>
<th>Q2 2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Review outputs of post-harvest management and direct marketing studies and other relevant documents in 1 month.</td>
</tr>
<tr>
<td>3.2</td>
<td>Enhance the centers of excellence network on horticulture post-harvest management and marketing with NIPHT as the hub within 12 months.</td>
</tr>
<tr>
<td>3.3</td>
<td>Conduct capacity development including training of trainers on post-harvest management and marketing to MAGNET Society staff, anchor FPOs, and other stake holders within 24 months.</td>
</tr>
<tr>
<td>3.4</td>
<td>Prepare knowledge products to be used for replication of the project experience and expertise.</td>
</tr>
</tbody>
</table>

a The target crops are: banana, custard apple, green and red chili, guava, okra, orange, pomegranate, sapota, strawberry, sweet lime, and flowers.


*Conducted through ADB. 2015. Technical Assistance for Building Sustainable Food and Nutrition Security in Asia and the Pacific (Phase 1)*. Manila.

FPO = farmer producer organization, MAGNET = Maharashtra Agribusiness Network Project, NIPHT = National Institute of Post-Harvest Technology, PISC = project implementation support consultant, Q = quarter, TA = technical assistance, VCO = value chain operator.


B. Deliverables and Reporting Requirements

9. The consulting firm will prepare the following reports in addition to any necessary working papers or reports required for the implementation of the TA. All the reports are to be submitted in e-copies, but hard copies will be submitted especially to the executing agency staff as required.

The consulting firm is requested to enhance Japanese visibility when delivering events as indicated in para. 7 above.

(i) Inception report (within 20 days): will be prepared based on initial discussions with the executing agency and other stakeholders. The consultant shall review the existing information, identify gaps, and elaborate on its work plan, tasks, methods, milestones, and other implementation matters.

(ii) Quarterly reports (quarterly). After the Inception Report, progress reports should be submitted every quarter describing briefly the progress on the activities carried out including any issues.

(iii) Training materials and reports (as required) will be prepared for training events and workshops. The reports should include assessment of participants’ learning experience with disaggregated data especially on vulnerable groups such as women, scheduled castes and scheduled tribes, and the poor. Trainings may be conducted by the TA consultant itself, PISC, ADB’s capacity development resource center in India Resident Mission, and others.

(iv) Replication strategy report. The consultants will identify project's demonstrative elements and their potential replication in other states of India and ADB’s other developing member countries. The strategy will also propose dissemination methods (e.g. study tours, workshops, manuals, publication, policy dialogues) and implement some of them through the TA.

(v) Technical notes and presentations for replication (as required): will be prepared to disseminate the TA’s acquired knowledge, expertise, and experience to wider audience for replication in and outside India. Such notes and presentations will be used in, for example, ADB’s Rural Development and Food Security Forum.
Enhancing Market Linkages for Farmer Producer Organizations (TRTA IND 53264)

(vi) Interim report (within 10 months).
(vii) Draft publication/technical notes (within 30 months): will be prepared as a draft to ADB’s publication to be disclosed to public to highlight and disseminate the best practices and lessons from the TRTA activities.
(viii) Draft final report (within 30 months).
(ix) Final report (within 33 months): should incorporate all the comments received from ADB and the executing agency on the draft final report and be in the format that can be disclosed in ADB’s website.

C. Workshops, Training, Seminars, and Conferences

10. The following events are expected as part of the consultant team’s activities.

<table>
<thead>
<tr>
<th>Title</th>
<th>Number of Participants</th>
<th>Venue and Location</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPO training (train the trainers)</td>
<td>100</td>
<td>Pune, India</td>
<td>2 days</td>
</tr>
<tr>
<td>Buyer-seller meets</td>
<td>5,000</td>
<td>Pune, India</td>
<td>1 day x 3</td>
</tr>
<tr>
<td>Agri-technology workshop</td>
<td>100</td>
<td>Pune, India</td>
<td>1 day</td>
</tr>
</tbody>
</table>

FPO = farmer producer organization.

D. Key Positions Needed

11. The following key positions will be required and evaluated.

<table>
<thead>
<tr>
<th>No.</th>
<th>Position</th>
<th>Person-months</th>
<th>Primary Place</th>
<th>IT/Legal</th>
<th>Required in Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>International Consultants</td>
<td>49.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Agribusiness and Market Linkage Specialist/Team Leader</td>
<td>12.0</td>
<td>Pune, India</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>Value Chain and Quality Assurance Specialist</td>
<td>10.0</td>
<td>Pune, India</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>3</td>
<td>Business Development Specialist</td>
<td>10.0</td>
<td>Pune, India</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>4</td>
<td>Horticulture Post-harvest Management Specialist</td>
<td>6.0</td>
<td>Pune, India</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>5</td>
<td>Agriculture Technology Specialist</td>
<td>6.0</td>
<td>Pune, India</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>6</td>
<td>Incubation Support Specialist</td>
<td>5.0</td>
<td>Pune, India</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>b.</td>
<td>National Consultants</td>
<td>119.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Agribusiness and Market Linkage Specialist/Deputy Team Leader</td>
<td>27.0</td>
<td>Pune, India</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>Value Chain and Quality Assurance Specialist</td>
<td>23.0</td>
<td>Pune, India</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>3</td>
<td>Business Development Specialist</td>
<td>23.0</td>
<td>Pune, India</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>4</td>
<td>Horticulture Post-harvest Management Specialist</td>
<td>16.0</td>
<td>Pune, India</td>
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<td>Yes</td>
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<tr>
<td>5</td>
<td>Agriculture Technology Specialist</td>
<td>16.0</td>
<td>Pune, India</td>
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<tr>
<td>6</td>
<td>Incubation Support Specialist</td>
<td>14.0</td>
<td>Pune, India</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

E. Tasks and Qualification Requirements

a. International Consultants
1. **Agribusiness and Market Linkage Specialist** (International, 12.0 person-months)

12. **Detailed tasks and/or expected outputs.** The consultant will be responsible for overall scope of the TA as the team leader and will make the following specific tasks and any other relevant matters:

   (i) assume the overall responsibility for the preparation, coordination, and other activities of all reports, documents, and other deliverables;
   
   (ii) work closely with ADB project team, MAGNET Society and other government staff, PISC, and other relevant stakeholders throughout the TA implementation;
   
   (iii) review MAGNET project documents and outputs of high-level technology consultants, project preparatory consulting firm, post-harvest management and direct marketing studies, and other relevant documents;
   
   (iv) develop outlines of the TA progress, final, and other reports, assign work to team members, compile inputs, and finalize all the deliverables;
   
   (v) manage and ensure the timely implementation of TA activities including (a) organizing project trainings and workshops, (b) supporting the executing agency and other government counterparts, (c) organizing tripartite meetings and discussions among ADB, government and TA consultant teams, (d) preparing knowledge products and presentations to promote replication of the project features in and outside India through workshops and ADB forums;
   
   (vi) identify and create crop-wise lists of anchor FPOs and other beneficiary FPOs (including at least 20% women-owned and -led FPOs) and keep them updated from time to time;
   
   (vii) work with NIPHT, anchor FPOs (including key farmer producer companies [FPCs]), and other relevant institutions in Maharashtra and create crop-wise networks of centers of excellence for capacity development activities and keep them updated from time to time;
   
   (viii) lead the team in assessment of the current status and gaps of target crops’ value chains, aggregation, and formation of FPOs in Maharashtra;
   
   (ix) based on the assessment, prepare (a) crop-wise proposals on market access and expansion for both domestic and export markets including branding concepts and (b) capacity development plans of FPOs to enhance their business, financial, and technical capacity and utilize high-level and innovative agriculture technologies and women members;
   
   (x) prepare crop-wise mid-term (3–5 years) action plans to accelerate value chain activities and enhance market linkages and update the plans in a rolling manner at the beginning of each fiscal-year by validating all business assumptions, developing annual plans, and defining key performance indicators;
   
   (xi) develop training materials and train the trainers through the centers of excellence network based on the action plans continuously (100 or more trainers to be trained, of which at least 20% are women);
   
   (xii) coordinate trainings to FPOs to be conducted by the trainers and organized by the PISC (35,000 or more participants in total, of which at least 20% are women);
   
   (xiii) prepare knowledge products (presentation slides, publications, etc.) to be used for replication of the project experience and expertise; and
   
   (xiv) promote application of relevant high-level and innovative technologies through project activities in collaboration with the PISC.

13. **Minimum qualification requirements.**
2. **Value Chain and Quality Assurance Specialist** (International, 10.0 person-months)

14. **Detailed tasks and/or expected outputs.** The consultant will be responsible for the following specific tasks and any other relevant matters:

   (i) work closely with ADB project team, MAGNET Society and other government staff, PISC, and other relevant stakeholders throughout the TA implementation;
   
   (ii) review MAGNET project documents and outputs of high-level technology consultants, project preparatory consulting firm, post-harvest management and direct marketing studies, and other relevant documents;
   
   (iii) assess, from value chain and quality assurance perspective, the current status and gaps of target crops’ value chains, aggregation, and formation of FPOs in Maharashtra;
   
   (iv) develop crop-wise assessment and proposals on quality requirements of key customers and markets and existing gaps; and
   
   (v) contribute to development of training material and implementation of capacity development activities from value chain and quality assurance perspectives.

15. **Minimum qualification requirements.**

   (i) Required qualification: degree in agriculture, agricultural economics, or a relevant discipline
   
   (ii) Minimum general experience: 15 years
   
   (iii) Minimum specific experience (relevant to assignment): 10 years
   
   (iv) Regional/country experience: preferred

3. **Business Development Specialist** (International, 10.0 person-months)

16. **Detailed tasks and/or expected outputs.** The consultant will be responsible for the following specific tasks and any other relevant matters:

   (i) work closely with ADB project team, MAGNET Society and other government staff, PISC, and other relevant stakeholders throughout the TA implementation;
   
   (ii) review MAGNET project documents and outputs of high-level technology consultants, project preparatory consulting firm, post-harvest management and direct marketing studies, and other relevant documents;
   
   (iii) assess, from business development perspective, the current status and gaps of target crops’ value chains, aggregation, and formation of FPOs in Maharashtra;
   
   (iv) develop crop-wise assessment and proposals on trade volume and price projections and targets;
   
   (v) contribute to development crop-wise assessment and proposals on market access and expansion for both domestic and export markets including branding concepts; and capacity development plans of FPOs to enhance their business, financial, and technical capacity and utilize high-level and innovative agriculture technologies and women members; and
(vi) promote use of high-level and innovative technologies in agribusiness and agriculture value chains of the target crops through various means especially with anchor FPOs and leading VCOs;
(vii) contribute to development of training material and implementation of capacity development activities from business development perspectives.

17. **Minimum qualification requirements.**
   (i) Required qualification: degree in agriculture, agricultural economics, or a relevant discipline
   (ii) Minimum general experience: 15 years
   (iii) Minimum specific experience (relevant to assignment): 10 years
   (iv) Regional/country experience: preferred

4. **Horticulture Post-harvest Management Specialist** (International, 6.0 person-months)

18. **Detailed tasks and/or expected outputs.** The consultant will be responsible for the following specific tasks and any other relevant matters:
   (i) work closely with ADB project team, MAGNET Society and other government staff, PISC, and other relevant stakeholders throughout the TA implementation;
   (ii) review MAGNET project documents and outputs of high-level technology consultants, project preparatory consulting firm, post-harvest management and direct marketing studies, and other relevant documents;
   (iii) assess, from post-harvest management perspective, the current status and gaps of target crops’ value chains, aggregation, and formation of FPOs in Maharashtra;
   (iv) develop crop-wise assessment and proposals on post-harvest and value chain facility requirements, utilization, and gaps;
   (v) contribute to development of crop-wise assessment and proposals on (a) market access and expansion for both domestic and export markets including branding concepts and (b) capacity development plans of FPOs to enhance their business, financial, and technical capacity and utilize high-level and innovative agriculture technologies and women members; and
   (vi) work with the agriculture technology specialists and PISC to guide the FPOs and VCOs through trainings and subproject identification activities to adopt technically and economically sound facility plan and design with incorporation of sufficient climate and disaster-risk mitigation, energy-saving, gender mainstreaming, social inclusiveness, and other measures.

19. **Minimum qualification requirements.**
   (i) Required qualification: degree in agriculture, agricultural engineering, agricultural economics, or a relevant discipline
   (ii) Minimum general experience: 15 years
   (iii) Minimum specific experience (relevant to assignment): 10 years
   (iv) Regional/country experience: preferred

5. **Agriculture Technology Specialist** (International, 6.0 person-months)

20. **Detailed tasks and/or expected outputs.** The consultant will be responsible for the following specific tasks and any other relevant matters:
   (i) work closely with ADB project team, MAGNET Society and other government staff, PISC, and other relevant stakeholders throughout the TA implementation;
(ii) review outputs of high-level technology consultants, project preparatory consulting firm, post-harvest management and direct marketing studies, and other relevant documents;
(iii) develop crop-wise assessment and proposals on facility requirements, utilization, and gaps;
(iv) contribute to development of crop-wise assessment and proposals on quality requirements of key customers and markets and existing gaps; and
(v) work with the horticulture post-harvest management specialists and PISC to guide the FPOs and VCOs through trainings and subproject identification activities to adopt technically and economically sound facility plan and design with incorporation of sufficient climate and disaster-risk mitigation, energy-saving, gender and social inclusiveness, and other measures.

21. **Minimum qualification requirements.**
   (i) Required qualification: degree in agriculture, agricultural engineering, or a relevant discipline
   (ii) Minimum general experience: 15 years
   (iii) Minimum specific experience (relevant to assignment): 10 years
   (iv) Regional/country experience: preferred

22. **Detailed tasks and/or expected outputs.** The consultant will be responsible for the following specific tasks and any other relevant matters:
   (i) review MAGNET project documents and outputs of high-level technology consultants, project preparatory consulting firm, post-harvest management and direct marketing studies, and other relevant documents;
   (ii) assess, from business development perspective, the current status and gaps of target crops’ value chains, aggregation, and formation of FPOs in Maharashtra;
   (iii) develop crop-wise assessment and proposals on;
   (iv) contribute to development crop-wise assessment and proposals on (a) trade volume and price projections and targets; (b) market access and expansion for both domestic and export markets including branding concepts; and (c) capacity development plans of FPOs to enhance their business, financial, and technical capacity and utilize high-level and innovative agriculture technologies and women members; and
   (v) enhance capacities especially of start-up and immature FPOs to enable their active aggregation and value-addition activities and participation in MAGNET project activities such as development of post-harvest facilities through matching grants and financial intermediation loans;
   (vi) contribute to development of tailor-made training material targeted to various stages of FPO development and their typical building blocks to be used in handholding capacity development activities conducted by the TA consultants, PISC, and others.

23. **Minimum qualification requirements.**
   (i) Required qualification: degree in agriculture, agricultural economics, or a relevant discipline
   (ii) Minimum general experience: 15 years
   (iii) Minimum specific experience (relevant to assignment): 10 years
   (iv) Regional/country experience: preferred
b. National Consultants

1. **Agribusiness and Market Linkage Specialist /Deputy Team Leader** (National, 27.0 person-months)

24. **Detailed tasks and/or expected outputs.** The consultant will deliver what is described for the international agribusiness and market linkage specialist/team leader together with him/her and be responsible for coordinating with the rest of the national consultants as the deputy team leader.

25. **Minimum qualification requirements.**
   (i) Required qualification: degree in agriculture, agricultural economics, or a relevant discipline
   (ii) Minimum general experience: 15 years
   (iii) Minimum specific experience (relevant to assignment): 10 years
   (iv) International experience: preferred

2. **Value Chain and Quality Assurance Specialist** (National, 23.0 person-months)

26. **Detailed tasks and/or expected outputs.** The consultant will deliver what is described for the international agribusiness and market linkage specialist together with him/her.

27. **Minimum qualification requirements.**
   (i) Required qualification: degree in agriculture, agricultural economics, supply chain management, logistics, or a relevant discipline
   (ii) Minimum general experience: 10 years
   (iii) Minimum specific experience (relevant to assignment): 8 years
   (iv) International experience: preferred

3. **Business Development Specialist** (National, 23.0 person-months)

28. **Detailed tasks and/or expected outputs.** The consultant will deliver what is described for the international business development specialist together with him/her.

29. **Minimum qualification requirements.**
   (i) Required qualification: degree in agriculture, agricultural economics, or a relevant discipline
   (ii) Minimum general experience: 15 years
   (iii) Minimum specific experience (relevant to assignment): 10 years
   (iv) International experience: preferred

4. **Horticulture Post-harvest Management Specialist** (National, 16.0 person-months)

30. **Detailed tasks and/or expected outputs.** The consultant will deliver what is described for the international horticulture post-harvest management specialist together with him/her.

31. **Minimum qualification requirements.**
   (i) Required qualification: degree in agriculture, agricultural economics, or a relevant discipline
(ii) Minimum general experience: 15 years
(iii) Minimum specific experience (relevant to assignment): 10 years
(iv) International experience: preferred

5. **Agriculture Technology Specialist** (National, 16.0 person-months)

32. **Detailed tasks and/or expected outputs.** The consultant will deliver what is described for the *international agriculture technology specialist* together with him/her.

33. **Minimum qualification requirements.**
   (i) Required qualification: degree in agriculture, agricultural engineering, or a relevant discipline
   (ii) Minimum general experience: 10 years
   (iii) Minimum specific experience (relevant to assignment): 8 years
   (iv) International experience: preferred

6. **Incubation Support Specialist** (National, 14.0 person-months)

34. **Detailed tasks and/or expected outputs.** The consultant will deliver what is described for the *international incubation support specialist* together with him/her.

35. **Minimum qualification requirements.**
   (i) Required qualification: degree in agriculture, agricultural engineering, or a relevant discipline
   (ii) Minimum general experience: 10 years
   (iii) Minimum specific experience (relevant to assignment): 8 years
   (iv) International experience: preferred

III. **Individual Consultant**

A. **Facility Management and Maintenance Specialist** (National, 4.5 person-months)

a. **Objective and Purpose of the Assignment**

36. The consultant is responsible for Output 4 of the TRTA. The consultant will carry out an assessment of MSAMB’s asset management and maintenance practices, procedures, and systems in place in the various facilities leased and operated by MSAMB. Based on the assessment, the consultant will develop solutions to improve MSAMB’s asset management and maintenance capacity to:
   (i) generate accurate and real time information on the facilities and their respective maintenance needs, and
   (ii) allocate and spend adequate funds for the required operation and maintenance (O&M) activities.

b. **Tasks**

37. As part of the assignment, the consultant/firm will undertake the following tasks:
   (i) assess the efficiency and effectiveness of existing asset management and maintenance policy and practices (if any) and its implementation in ensuring that adequate O&M is provided to the facilities and training centers;
(ii) review the adequacy of O&M related budgeting practices in place including the methods of estimating the required maintenance needs of the facilities and training centers;

(iii) assess effectiveness and efficiency of manual and computerized asset management systems in place in MSAMB, including fixed asset register, inventory and inspection practices, reporting practices and their adequacy to generate useful information to assess the O&M needs of facilities; and

(iv) assess the scope for adopting or improving the use of computerized asset management systems, including capturing the location, condition, normative annual O&M needs, O&M history and ongoing maintenance practices/contracts etc.

c. Deliverables

38. The following deliverables are expected:

(i) written report summarizing the key findings and recommendations on how to develop an efficient and modern asset management and maintenance policy (or how to improve the existing policies) to improve the operation and maintenance of MSAMB’s network of facilities and training centers;

(ii) written guidance on how to accurately estimate for O&M needs for the facilities and training centers and to include these estimates in the annual budget;

(iii) practical recommendations and solutions for improving the asset management practices and systems with regards to MSAMB’s facilities and training centers in order to provide MSAMB with real time information on the asset location, asset condition, operation maintenance needs, and maintenance history including maintenance backlog (if any);

(iv) practical recommendations on how to adopt suitable computerized asset management solutions suitable for MSAMB and in a cost efficient manner as well as a road map on how to roll it out; and

(v) a 2–3 day workshop (and its presentation material and report including a sex-disaggregated participants’ list and assessment of participants’ understanding) to the relevant staff of the MSAMB on (a) modern asset management practices and systems and (b) facilitation for developing a timebound action plan for MSAMB to strengthen and modernize its O&M policies, practices, and asset management systems.

d. Qualifications

39. The expert is expected to have finance/accounting experience including:

(i) a bachelor’s degree in accounting, auditing or finance; master’s degree is a plus, CPA/ACCA/CA required;

(ii) at least 10 years’ relevant accounting and auditing experience with professional firms, government agencies, facility management companies or equivalent;

(iii) experience in financial management and asset management and maintenance preferably in the agriculture sector;

(iv) experience with computerized asset management system and solutions;

(v) suitability to undertake the responsibilities mentioned above at the required level;

(vi) sound communication skills in English and Hindi (in both writing and speaking), and understanding of Marathi is preferred; and

(vii) being a fast learner, independent and self-motivated.