

Hortex Foundation
As Strategic Partner of Department of Agricultural Extension (DAE)
Under
National Agricultural Technology Program-Phase II Project (NATP-2)
Sech Bhaban (3rd Floor), 22 Manik Mia Avenue, Sher-e-Bangla Nagar
Dhaka- 1207, Website: www.hortex.org

Request for Expressions of Interest (EOI) for Selection of Individual Consultants/Experts

Memo No. NATP-2/Hortex-SP-DAE/SC/2017-201

Date: 05 September 2017

The Government of the People's Republic of Bangladesh has received credit (IDA Credit No. 5665-BD and IFAD Loan No. 2000000721) respectively from the International Development Association (IDA) and International Fund for Agricultural Development (IFAD) towards the cost of National Agricultural Technology Program – Phase II Project (NATP-2) and intends to apply a part of the proceeds for the provision of consultancy services for the Hortex Foundation as Strategic Partner of DAE by hiring of 04 (Four) individual consultants/experts.

Position, qualification & experiences, duration and scope of work/duties and responsibilities of 04 (four) individual consultants/experts are given below:

Sl. No.	Name of Position, No. of Position and Duration	Qualifications & Experiences	Scope of services/Duties and Responsibilities
1	<p>Name of Position: Post Harvest Management Expert</p> <p>No. of Position: 01 (One)</p> <p>Service Package # SD/Hortex-NATP2/01</p> <p>Duration: Duration of the consultancy services will be 60 man months or up to project period which one comes earlier. It will be renewed in every year on satisfactory annual performance of the individual consultant/expert.</p>	<p>a. Academic:</p> <ul style="list-style-type: none"> - Minimum Master Degree in Horticulture/relevant field. - Candidates having Ph. D in Horticulture may have an added advantage. <p>b. Experience:</p> <ul style="list-style-type: none"> - Minimum 15 years working experience in horticultural research / post harvest management of horticultural crops in Government / Autonomous / Semi Autonomous organizations / Universities / International organizations. - Minimum 03 years working experience in donor / IDA funded / development projects. - Scientific publications are desirable. - High level of proficiency in written and spoken English and report writing. - Working experience in national & international food quality and safety standards would be an added qualification. - Computer literacy (MS Word, Excel and PowerPoint etc.) is essential. 	<ul style="list-style-type: none"> - Responsible to Managing Director, Hortex Foundation; - Assess the knowledge gap of stakeholders in post harvest management of horticultural / agricultural crops and identify constraints and develop an action plan in resolving the constraints and reduce post harvest losses; - Assist in supervising all aspects of production, harvesting and post harvest management activities in project sites, farmer fields, collection points, commodity collection & marketing centers (CCMCs); - Prepare detailed work plan on the basis of the project activities for interventions in post harvest management and quality assurance areas; - Prepare post harvest technology packages of horticultural/agricultural crops including maturity indices of specific crops; - Check regularly the produces both in the collection points, CCMCs and the developed markets to ensure produce quality; - Supervise harvest practices and post harvest handling, grading, sorting, washing, packaging, storage and transportation; - Develop training modules and materials on post harvest management and organize training for stakeholders; - Collaborate in establishing collection points, CCMCs and market infrastructure/renovation; - Provide technical assistance in agro-product processing, value addition, food safety, packaging, storage, cool chain transport etc; - Organize training, workshop, seminar and field days relating to post harvest management of horticultural produce; - Submit technical reports (monthly, half yearly, yearly, terminal reports, PCR) timely; - Work independently and maintain all related files and documents and - Any others tasks as assigned by the Authority.


Sl. No.	Name of Position, No. of Position and Duration	Qualifications & Experiences	Scope of services/Duties and Responsibilities
2.	<p>Name of Position: Supply Chain Integration and Marketing Expert</p> <p>No. of Position: 01 (One)</p> <p>Service Package # SD/Hortex-NATP2/02</p> <p>Duration: Duration of the consultancy services will be 60 man months or up to project period which one comes earlier. It will be renewed in every year on satisfactory annual performance of the individual consultant/expert.</p>	<p>a. Academic:</p> <ul style="list-style-type: none"> - Minimum Master Degree in Agriculture/ Agricultural Economics/ Agricultural Marketing/ MBA major in Marketing/ relevant field. - Candidates having Ph. D in relevant field may have an added advantage. <p>b. Experience:</p> <ul style="list-style-type: none"> - Minimum 15 years working experience in contract farming, group marketing, business development, market linkage development, supply & value chain management of horticultural / agricultural produce. - Minimum 03 years working experience in donor / IDA funded / development projects. - Scientific publications are desirable. - High level of proficiency in written and spoken English and report writing. - Computer literacy (MS Word, Excel and Power Points etc.) is essential. 	<ul style="list-style-type: none"> - Responsible to Managing Director, Hortex Foundation; - Identify opportunities and constraints affecting the supply chains and formulate appropriate interventions strategies for resource mobilization; - Suggest appropriate methods for selection of sub-sectors, different actors and potential buyers and compile data for supply chain analysis; - Prepare plan for specific interventions and activities that promote equitable growth through supply chain development; - Design and develop a computerized information database for the supply chain knowledge development with information on regulations/codes for safe and clean food with the help of relevant consultant(s); - Formulate training courses on the supply chain management oriented information packages for farmers, exporters, traders, entrepreneurs and processors; - Organize training, workshop, seminar, field-days, fairs relating to supply chain integration & market management of horticultural / agricultural produce; - Develop and design appropriate strategy with guidelines for farmers led (POs) Marketing Association with the assistance of Private Sectors for channelizing high value produces at markets; - Develop training modules and resource materials for building capacity of the project stakeholders and beneficiaries on supply & value chain management, marketing and agribusiness; - Conduct a feasibility study on marketing of processed agro-products at home and abroad; - Conduct studies, surveys on existing markets for identifying potential niche markets; - Prepare guidelines and MOU's for contract farming based on most appropriate model; - Assist CIGs, POs, MMC, input sellers, traders, exporters, processors and entrepreneurs in developing market linkages; - Organize value chain analysis in clusters for horizontal and vertical expansion of high value crops; - Suggest improved market management practices for increasing marketing capacity of the project beneficiaries; - Organize exposure visits, foreign tours for the project stakeholders and beneficiaries; - Work independently and maintain all related files and documents; - Write and submit different periodical reports as per project requirements and as assigned by the Authority and - Any others tasks as assigned by the Authority.

Sl. No.	Name of Position, No. of Position and Duration	Qualifications & Experiences	Scope of services/Duties and Responsibilities
3.	<p>Name of Position: Training Management Expert</p> <p>No. of Position: 01 (One)</p> <p>Service Package # SD/Hortex-NATP2/03</p> <p>Duration: Duration of the consultancy services will be 24 man months. It will be renewed in every year on satisfactory annual performance of the individual consultant/expert.</p>	<p>a. Academic:</p> <ul style="list-style-type: none"> - Minimum Master Degree in any discipline of agricultural science or related field. <p>b. Experience:</p> <ul style="list-style-type: none"> - Minimum 15 years working experience in Agricultural Research / Agricultural Extension / Training & Communication. - Must have minimum 5 years working experience in planning, organizing & managing training and communication activities, workshop etc. in any research / extension / International organization. - Minimum 03 years working experience in donor / IDA funded / development projects. - High level of proficiency in written and spoken English and report writing ability. - Computer literacy (MS Word, Excel and Power Point etc.) is essential. 	<ul style="list-style-type: none"> - Responsible to Managing Director, Hortex Foundation; - Develop training, ToT, workshop, seminar, exposure visit and overseas study visit programs and ensure their implementation in time; - Assist in hiring consulting firm for execution of foreign training programs; - Perform all project related training and communication activities; - Implement training and communication activities of Hortex Foundation in a timely manner; - Prepare training manuals/modules on all events in Hortex under NATP-2; - Prepare timely progress report on training and communication; - Prepare and maintain database on training and workshop programs; - Work independently and maintain all relevant files and documents of the project; - Work closely with Training & Communication Specialist of DAE; - Prepare periodical and annual reports including PCR and - Any other related tasks as assigned by the Authority.
4	<p>Name of Position: M & E Expert</p> <p>No. of Position: 01 (One)</p> <p>Service Package # SD/Hortex-NATP2/04</p> <p>Duration: Duration of the consultancy services will be 60 man months or up to project period which one comes earlier. It will be renewed in every year on satisfactory annual performance of the individual consultant/expert.</p>	<p>a. Academic:</p> <ul style="list-style-type: none"> - Minimum Master Degree in Agricultural science/ Economics / Statistics or related fields. <p>b. Experience:</p> <ul style="list-style-type: none"> - Minimum 15 years working experience in planning and organizing monitoring & evaluation programs in government/ autonomous / private / international organization. - Minimum 3 years working experience in M & E and related activities in donor / IDA funded / development projects. - Must have experience log-frame, impact, output and outcomes indicators, monitoring format development, other strategic approaches of M & E. - Should have experience in preparing Terms of Reference (ToR) for relevant activities. - Well experienced in database management and strong analytical skills. - High level of proficiency in written and spoken English and report writing. - Computer literacy (MS Word, Excel, Power Point, SPSS and other statistical software) is essential. 	<ul style="list-style-type: none"> - Responsible to Managing Director, Hortex Foundation; - Design result based monitoring & evaluation plan and implementation; - Ensure monitoring and evaluation of overall project activities including the field offices as per results framework; - Collect data on the key performance indicators and prepare relevant reports; - Maintain database of all field activities including CIGs, POs, MMC & CCMCs; - Work independently and maintain all relevant files and documents; - Monitor regularly project input, output/outcome/impact; - Monitor CIGs through balanced score card; - Maintain close link with Monitoring & Evaluation Specialist of DAE, PMU & other PIUs; - Prepare and published all monthly, quarterly, half yearly, annual reports and PCR in time and - Any other related tasks as assigned by the Authority.

Now, Managing Director (MD), Hortex Foundation invites eligible applicants to express their Expression of Interest (EOI) in providing the services. Interested applicants are invited to provide information indicating that they are qualified to perform the said services. The individual consultants/experts will be hired following PPR-2008 and the method of Selection of Individual Consultant (SIC) of the World Bank Consultant Guidelines, 2014. The detailed TOR and scope of services of the individual consultants/experts, application form and CV format will be available in the websites of Hortex Foundation www.hortex.org. Applicants may obtain further information and collect the TOR and application format from the office of the undersigned during office hours (9:00 am-5:00 pm) on all working days up to 21 September 2017.

Interested applicants are requested to submit their Expression of Interest (one original and two copies in sealed envelope along with a soft copy) on or before 28 September 2017 by 1:00 pm either by hand delivery or by post to the address below along with documentary evidences to support the required criteria. Please clearly mark **“Request for Expression of Interest”** for selection of individual consultant/expert with the name of the position. Any application submitted later than the specified date and time will not be entertained.

The procuring entity reserves the right to accept or reject any or all EOIs without showing any reason whatsoever. No TA/DA will be provided for attending interviews.


05.09.2017

Managing Director

Hortex Foundation
Sech Bhaban (3rd floor), 22 Manik Mia Avenue
Sher-e-Bangla Nagar, Dhaka-1207
E-mail: hortex@hortex.org
Telephone: +8802-9125181

**Hortex Foundation as Strategic Partner of DAE
Under
National Agricultural Technology Program-Phase II Project (NATP-2)**

**A. Terms of Reference (TOR) for Consultant/Expert Services:
Individual Expert: Post Harvest Management Expert
Package No. SD/Hortex-NATP2/01**

Assignment title	Post Harvest Management Expert
Assignment duration	60 Man Months, 1 (one) person
Primary assignment location	Hortex Foundation, Dhaka
Funding source (s)	IDA & IFAD Credit
Contracting entity	Managing Director, Hortex Foundation

B. Context of the Assignment

Agriculture in Bangladesh comprises crops, livestock and fisheries. It provides food, feed, fiber and fuel to its citizens and animals, and plays a key role in economic development of Bangladesh. For achieving the set goal of SDG and turning Bangladesh into a middle income country by the 2021, the GDP has to grow by 7.4% per year. To attain the rate and to keep pace with the population growth, agriculture must grow at a constant rate of minimum 3-3.5% per year. Reaching technologies to the farmers requires technology generation and dissemination through the research and extension systems. National Agricultural Research System (NARS) is responsible for generating agricultural related technologies and Department of Agricultural Extension (DAE), Department of Fisheries (DOF) and Department of Livestock Services (DLS) are responsible for extension of generated technology to the farmers. Both research and extensions have made an impressive contribution to food security in the country. In Bangladesh, private investment in research and extension is low. The NGOs, local government and community organizations are coming up but very slowly.

Bangladesh agriculture faces many challenges today. Major challenges are to raise productivity and profitability, reduce high production costs, increase price of products and resource-use efficiency, halt declining and degradation of soil resources and declining of animal and fisheries resources, adaptation to climate change vulnerability, providing consumers safe food, yield gap minimization, expansion of irrigation facilities & farm mechanization, production & distribution of quality seeds/varieties/breeds/fingerlings, quality production of horticultural crop, popularization of good agricultural & IPM practices, weak linkage of farm-produces with market, low investment in agriculture and inadequate credit support to the farmers. These challenges have stagnated the agricultural productivity and production. Further, nutrition outcomes and food safety have not kept pace with the progress achieved with most social and economic indicators. Thus, in order to produce more food for an ever increasing population, raw materials for agro-industries and higher income for farming communities from the decreasing resources (land, water, animal and fisheries), it is necessary to develop existing agricultural production system into a more dynamic, market oriented and sustainable commercial sector by higher productivity and profitability through efficient natural resources management, irrigation expansion, agricultural intensification and diversification, mechanization, value addition and effective market linkages.

To that effect, the Government of Bangladesh (GoB) gives top priority to the development of agriculture sector through its increased productivity, production, supply chains, value addition and market linkages. GoB sought the support of development partners such as the World Bank to provide technical and financial support to activities aimed at boosting agricultural production through productivity enhancement, and increasing smallholders' income. In order to improve agricultural productivity and farm income, on the request of the Government of Bangladesh, the

World Bank agreed to support a long term agricultural development program over a period of 15 years to be implemented in three phases of five years each with the first phase beginning in July 2007. IFAD also agreed to co-finance the program with the World Bank. Accordingly, the National Agricultural Technology Project (NATP): Phase-I (NATP-1) was designed with the development objective of improving the effectiveness of national agricultural technology system (including agricultural research, extension and development of supply chains) and increasing agricultural productivity and farm income in Bangladesh. NATP-1 was initiated in July 2007 and closed in December 2014. NATP-1 has significant achievements in generating technologies, increasing the effectiveness of extension and research systems, development of supply chains and broadening linkages between research-extension-farmers across the project areas. Based on the experience of NATP-1, the World Bank, jointly with IFAD and USAID, decided to provide financial support to the GoB for National Agricultural Technology Program- Phase II Project (NATP-2). The duration of the project is 01 October 2015 to 30 September 2021.

C. Project Development Objective

Project Development Objective (PDO) of National Agricultural Technology Program-Phase II Project (NATP-2) is to increase agricultural productivity of smallholder farms and improve smallholder farmers' access to markets in selected districts. PDO will be achieved through: a) strengthening the capacity of research, extension services and farmers to generate, diffuse and adopt agricultural technologies aimed at increasing farm productivity and reducing post-harvest losses; and b) promoting the sustainability of existing and newly created farmer groups and producer organizations by facilitating their stronger participation in commodity value chain, market-linkages and improving their knowledge and skill base. Thus, the PDO will be achieved through the generation and release of more productive and locally adapted technologies, enhancing availability of quality seeds/breeds/fingerlings/breeding materials at the small farm level and providing relevant production, value addition, food safety and marketing support.

D. Project Components

NATP-2 project will have the following 5 components:

Component-1 (Enhancing Agricultural Technology Generation): To be implemented by the Project Implementing Unit of Bangladesh Agricultural Research Council (PIU-BARC), MOA;

Component-2 (Supporting Crop Development): To be implemented by the Project Implementing Unit of Department of Agricultural Extension (PIU-DAE), MOA and Hortex Foundation as Strategic Partner of DAE;

Component-3 (Supporting Fisheries Development): To be Implemented by the Project Implementing Unit of Department of Fisheries (PIU-DOF), MOFL;

Component-4 (Supporting Livestock Development): To be implemented by the Project Implementing Unit of Department of Livestock Services (PIU-DLS), MOFL;

Component-5 (Project Management): To be implemented by the Project Management Unit (PMU), NATP-2, MOA.

E. Development of Value Chains in Crop/Horticulture

Strategic Partner:

NATP-2 will support the Hortex Foundation as the Strategic Partner to Department of Agricultural Extension (DAE) under a Strategic Partner Agreement for providing technical services on value chain development with an agreed contract value of US\$ 3.50 million. The strategic partner would assist DAE's Common Interest Groups (CIGs) and Producer Organizations (POs), and private entrepreneurs in: i) organizing programs for horizontal expansion of best practices in selected 30 old and new generation upazilas and ii) mapping and

organizing the vertical expansion of selected six crops like brinjal, bitter gourd, sweet gourd, tomato/summer tomato, banana and aromatic rice; iii) undertake value chain analysis, market studies and surveys; iv) undertake marketing capacity building for CIG, POs and DAE staff/officials on value chain management, organize and assist POs in establishing the Commodity Collection & Marketing Centers (CCMCs) and renovation of existing markets with good post-harvest management and short term storing facilities where producers (CIGs and non-CIG farmers), processors and traders come together and are doing business; v) develop market linkages and contractual arrangements between CIGs/POs with traders, supermarkets, processor and exporter; vi) provide financial advisory services to CIG/POs and entrepreneurs to apply for matching grants from Agricultural Innovation Funds (AIF-2, technology adoption and AIF-3 for market and enterprises development); and vii) organize communication campaign on food safety, SPS etc.

Modalities of Strategic Partnership between PIU-DAE and Hortex Foundation

- A Strategic Partner Contract between DAE and Hortex Foundation will be signed detailing activity plan and its execution responsibilities and fund management modalities.
- A partnership between PIU-DAE and Hortex Foundation as strategic partner to DAE will be established based on mutual understanding and respect keeping in view the mandate of the respective organizations to perform the assigned task jointly.
- Hortex Foundation will be one of the cost centers of PIU-DAE like upazila and district level Office of DAE regarding financial allocation and expenditure.
- Hortex Foundation will develop annual work plan with budget and submit it to PIU-DAE for consideration of PIC. After recommendation by the PIC fund will be released to Hortex Foundation based on agreed work plan.
- All expenditure shall be incurred following Govt. financial rules, DPP provision and donor agencies (IDA & IFAD) guidelines as applicable.
- Hortex will be treated a DAE cost center for financial transaction.
- Hortex Foundation will be responsible for preserving and maintaining all records of expenditure for future audit during and after the project period.
- Hortex Foundation will submit SOE, monthly with Bank statements by last working day to PIU-DAE for further submission to PMU.
- All value chain activities including CCMC and marketing facility improvement will be carried out by Hortex Foundation having cooperation from field level DAE officials. Hortex Foundation will inform PIU-DAE well ahead of time regarding field program for better support and execution.
- For AIF-3, Hortex Foundation will assist DAE in recipient selection and grant monitoring; and provide technical assistance in this regard. AIF-3 guidelines will be followed in implementation of the grant sub-projects.
- Hortex Foundation will submit monthly and periodic progress report to DAE & PMU and other reports as required by PIU-DAE and PMU.

Value Chain Mapping

Under the strategic partner contract, project will support horizontal and vertical expansion of high value crops and large scale production of six selected crops (brinjal, bitter gourd, sweet gourd, tomato/summer tomato, banana and aromatic rice) covering 30 clusters in 30 upazilas of 22 districts. The strategic partner in association of DAE will organize farmers into value chain cluster based production and marketing chains to avoid over supply to markets during the peak production season, organize contract farming, production planning, and renovation and establishment of CCMC and collection points with good post-harvest management, packaging

and transportation. Inclusion of specific crops in a cluster in horizontal or vertical expansion programs would be based on demand in local and export markets, comparative advantage of specific crop (s) in a cluster, marginal and small farmer's preference of the specific crop in the cluster, availability of technology and inputs for crop, transport/communication (road, rail, water) facility to urban markets and large scale production potentiality of a crop in a given cluster. In early years, there will be a strong emphasis on bridging the 'know-how' gap in the field on cluster based mapping and value chain analysis of selected crops.

F. Over all objectives of the Assignment

The Expert will be responsible to assess the knowledge gap of the stakeholders on post harvest management and quality assurance of horticultural crops/agricultural crops and identify the constraints and develop an action plan in resolving the constraints. He will develop training modules and resource materials on post harvest management & quality assurance as well as arrange necessary training, seminar, workshop for the stakeholders. He will prepare post harvest technology packages of horticultural/agricultural crops and also provided technical assistance in agro-product processing, value addition, food safety etc. to the stakeholders. He will check regularly the produce both in the CCMC and the developed markets to ensure produce quality.

G. Scope of the Assignment

- Responsible to Managing Director, Hortex Foundation;
- Assess the knowledge gap of stakeholders in post harvest management of horticultural / agricultural crops and identify constraints and develop an action plan in resolving the constraints and reduce post harvest losses;
- Assist in supervising all aspects of production, harvesting and post harvest management activities in project sites, farmer fields, collection points, commodity collection & marketing centers (CCMCs);
- Prepare detailed work plan on the basis of the project activities for interventions in post harvest management and quality assurance areas;
- Prepare post harvest technology packages of horticultural/agricultural crops including maturity indices of specific crops;
- Check regularly the produces both in the collection points, CCMCs and the developed markets to ensure produce quality;
- Supervise harvest practices and post harvest handling, grading, sorting, washing, packaging, storage and transportation;
- Develop training modules and resources materials on post harvest management and organize training for stakeholders;
- Collaborate in establishing collection points, CCMCs and market infrastructure/renovation;
- Provide technical assistance in agro-product processing, value addition, food safety, packaging, storage, cool chain transport etc;
- Organize training, workshop, seminar and field days relating to post harvest management of horticultural produce;
- Submit technical reports (monthly, half yearly, yearly, terminal reports, PCR) timely;
- Work independently and maintain all related files and documents and
- Any others tasks as assigned by the Authority.

H. Expert qualifications and expertise required

a. Academic:

- Minimum Master Degree in Horticulture/ relevant field.
- Candidates having Ph. D in Horticulture may have an added advantage.

b. Experience:

- Minimum 15 years working experience in horticultural research / post harvest management of horticultural crops in Government / Autonomous / Semi Autonomous organizations / Universities / International organizations.
- Minimum 03 years working experience in donor / IDA funded / development projects.
- Scientific publications are desirable.
- High level of proficiency in written and spoken English and report writing.
- Working experience in national & international quality and safety standards would be an added qualification.
- Computer literacy (MS Word, Excel and PowerPoint etc.) is essential.

I. Reporting and Supervision arrangements

The Expert will report to the Managing Director of Hortex Foundation and will be responsible to him for all activities. The Expert will submit progress report to Managing Director, Hortex Foundation quarterly describing progress of implementation with constraints faced and recommendation for measures to be taken to address/overcome them. The Expert shall submit Draft Final Report to Managing Director, Hortex Foundation one month before the completion of the assignment. MD, Hortex Foundation, if required, will provide the Expert with comments to the draft report and the Expert shall submit the final report within time frame specified by Managing Director, Hortex Foundation.

J. Responsibilities of the contracting party

MD, Hortex Foundation will provide the following inputs and facilities:

- i) Office space and other logistic support as per project provision;
- ii) All available documents, papers and information relevant to the assignment will be provided/made accessible to the Expert.

K. Duration of the assignment

Duration of the expert services will be 60 man months or up to project period which one comes earlier. It will be renewed in every year on satisfactory annual performance of the individual consultant/expert.

**Hortex Foundation as Strategic Partner of DAE
Under
National Agricultural Technology Program-Phase II Project (NATP-2)**

**A. Terms of Reference (TOR) for Consultant/Expert Services:
Individual Expert: Supply Chain Integration and Marketing Expert
Package No. SD/Hortex-NATP2/02**

Assignment title	Supply Chain Integration and Marketing Expert
Assignment duration	60 Man Months, 1 (one) person
Primary assignment location	Hortex Foundation, Dhaka
Funding source (s)	IDA & IFAD Credit
Contracting entity	Managing Director, Hortex Foundation

B. Context of the Assignment

Agriculture in Bangladesh comprises crops, livestock and fisheries. It provides food, feed, fiber and fuel to its citizens and animals, and plays a key role in economic development of Bangladesh. For achieving the set goal of SDG and turning Bangladesh into a middle income country by the 2021, the GDP has to grow by 7.4% per year. To attain the rate and to keep pace with the population growth, agriculture must grow at a constant rate of minimum 3-3.5% per year. Reaching technologies to the farmers requires technology generation and dissemination through the research and extension systems. National Agricultural Research System (NARS) is responsible for generating agricultural related technologies and Department of Agricultural Extension (DAE), Department of Fisheries (DOF) and Department of Livestock Services (DLS) are responsible for extension of generated technology to the farmers. Both research and extension have made an impressive contribution to food security in the country. In Bangladesh, private investment in research and extension is low. The NGOs, local government and community organizations are coming up but very slowly.

Bangladesh agriculture faces many challenges today. Major challenges are to raise productivity and profitability, reduce high production costs, increase price of products and resource-use efficiency, halt declining and degradation of soil resources and declining of animal and fisheries resources, adaptation to climate change vulnerability, providing consumers safe food, yield gap minimization, expansion of irrigation facilities & farm mechanization, production & distribution of quality seeds/varieties/ breeds/fingerlings, quality production of horticultural crop, popularization of good agricultural & IPM practices, weak linkage of farm-produces with market, low investment in agriculture and inadequate credit support to the farmers. These challenges have stagnated the agricultural productivity and production. Further, nutrition outcomes and food safety have not kept pace with the progress achieved with most social and economic indicators. Thus, in order to produce more food for an ever increasing population, raw materials for agro-industries and higher income for farming communities from the decreasing resources (land, water, animal and fisheries), it is necessary to develop existing agricultural production system into a more dynamic, market oriented and sustainable commercial sector by higher productivity and profitability through efficient natural resources management, irrigation expansion, agricultural intensification and diversification, mechanization, value addition and effective market linkages.

To that effect, the Government of Bangladesh (GoB) gives top priority to the development of agriculture sector through its increased productivity, production, supply chains, value addition and market linkages. GoB sought the support of development partners such as the World Bank to provide technical and financial support to activities aimed at boosting agricultural production through productivity enhancement, and increasing smallholders' income. In order to improve agricultural productivity and farm income, on the request of the Government of Bangladesh, the

World Bank agreed to support a long term agricultural development program over a period of 15 years to be implemented in three phases of five years each with the first phase beginning in July 2007. IFAD also agreed to co-finance the program with the World Bank. Accordingly, the National Agricultural Technology Project (NATP): Phase-I (NATP-1) was designed with the development objective of improving the effectiveness of national agricultural technology system (including agricultural research, extension and development of supply chains) and increasing agricultural productivity and farm income in Bangladesh. NATP-1 was initiated in July 2007 and closed in December 2014. NATP-1 has significant achievements in generating technologies, increasing the effectiveness of extension and research systems, development of supply chains and broadening linkages between research-extension-farmers across the project areas. Based on the experience of NATP-1, the World Bank, jointly with IFAD and USAID, decided to provide financial support to the GoB for National Agricultural Technology Program- Phase II Project (NATP-2). The duration of the project is 01 October 2015 to 30 September 2021.

C. Project Development Objective

Project Development Objective (PDO) of National Agricultural Technology Program-Phase II Project (NATP-2) is to increase agricultural productivity of smallholder farms and improve smallholder farmers' access to markets in selected districts. PDO will be achieved through: a) strengthening the capacity of research, extension services and farmers to generate, diffuse and adopt agricultural technologies aimed at increasing farm productivity and reducing post-harvest losses; and b) promoting the sustainability of existing and newly created farmer groups and producer organizations by facilitating their stronger participation in commodity value chain, market-linkages, and improving their knowledge and skill base. Thus, the PDO will be achieved through the generation and release of more productive and locally adapted technologies, enhancing availability of quality seeds/breeds/fingerlings/breeding materials at the small farm level and providing relevant production, value addition, food safety and marketing support.

D. Project Components

NATP-2 project will have the following 5 components:

Component-1 (Enhancing Agricultural Technology Generation): To be implemented by the Project Implementing Unit of Bangladesh Agricultural Research Council (PIU-BARC), MOA;

Component-2 (Supporting Crop Development): To be implemented by the Project Implementing Unit of Department of Agricultural Extension (PIU-DAE), MOA and Hortex Foundation as Strategic Partner of DAE;

Component-3 (Supporting Fisheries Development): To be Implemented by the Project Implementing Unit of Department of Fisheries (PIU-DOF), MOFL;

Component-4 (Supporting Livestock Development): To be implemented by the Project Implementing Unit of Department of Livestock Services (PIU-DLS), MOFL;

Component-5 (Project Management): To be implemented by the Project Management Unit (PMU), NATP-2, MOA.

E. Development of Value Chains in Crop/Horticulture

Strategic Partner:

NATP-2 will support the Hortex Foundation as the Strategic Partner to Department of Agricultural Extension (DAE) under a Strategic Partner Agreement for providing technical services on value chain development with an agreed contract value of US\$ 3.50 million. The strategic partner would assist DAE's Common Interest Groups (CIGs) and Producer Organizations (POs), and private entrepreneurs in: i) organizing programs for horizontal expansion of best practices in selected 30 old and new generation upazilas and ii) mapping and organizing the vertical expansion of selected six crops like brinjal, bitter gourd, sweet gourd, tomato/summer tomato, banana and aromatic rice;

iii) undertake value chain analysis, market studies and surveys; iv) undertake marketing capacity building for CIG, POs and DAE staff/officials on value chain management, organize and assist POs in establishing the Commodity Collection & Marketing Centers (CCMCs) and renovation of existing markets with good post-harvest management and short term storing facilities where producers (CIGs and non-CIG farmers), processors and traders come together and are doing business; v) develop market linkages and contractual arrangements between CIGs/POs with traders, supermarkets, processor and exporter; vi) provide financial advisory services to CIG/POs and entrepreneurs to apply for matching grants from Agricultural Innovation Funds (AIF-2, technology adoption and AIF-3 for market and enterprises development); and vii) organize communication campaign on food safety, SPS etc.

Modalities of Strategic Partnership between PIU-DAE and Hortex Foundation

- A Strategic Partner Contract between DAE and Hortex Foundation will be signed detailing activity plan and its execution responsibilities and fund management modalities.
- A partnership between PIU-DAE and Hortex Foundation as strategic partner to DAE will be established based on mutual understanding and respect keeping in view the mandate of the respective organizations to perform the assigned task jointly.
- Hortex Foundation will be one of the cost centers of PIU-DAE like upazila and district level Office of DAE regarding financial allocation and expenditure.
- Hortex Foundation will develop annual work plan with budget and submit it to PIU-DAE for consideration of PIC. After recommendation by the PIC fund will be released to Hortex Foundation based on agreed work plan.
- All expenditure shall be incurred following Govt. financial rules, DPP provision and donor agencies (IDA & IFAD) guidelines as applicable.
- Hortex will be treated a DAE cost center for financial transaction.
- Hortex Foundation will be responsible for preserving and maintaining all records of expenditure for future audit during and after the project period.
- Hortex Foundation will submit SOE, monthly with Bank statements by last working day to PIU-DAE for further submission to PMU.
- All value chain activities including CCMC and marketing facility improvement will be carried out by Hortex Foundation having cooperation from field level DAE officials. Hortex Foundation will inform PIU-DAE well ahead of time regarding field program for better support and execution.
- For AIF-3, Hortex Foundation will assist DAE in recipient selection and grant monitoring; and provide technical assistance in this regard. AIF-3 guidelines will be followed in implementation of the grant sub-projects.
- Hortex Foundation will submit monthly and periodic progress report to DAE & PMU and other reports as required by PIU-DAE and PMU.

Value Chain Mapping

Under the strategic partner contract, project will support horizontal and vertical expansion of high value crops and large scale production of six selected crops (brinjal, bitter gourd, sweet gourd, tomato/summer tomato, banana and aromatic rice) covering 30 clusters in 30 upazilas of 22 districts. The strategic partner in association of DAE will organize farmers into value chain cluster based production and marketing chains to avoid over supply to markets during the peak production season, organize contract farming, production planning, and renovation and establishment of CCMC and collection points with good post-harvest management, packaging and transportation. Inclusion of specific crops in a cluster in horizontal or vertical expansion programs would be based on demand in local and export markets, comparative advantage of specific crop (s) in a cluster,

marginal and small farmer's preference of the specific crop in the cluster, availability of technology and inputs for crop, transport/communication (road, rail, water) facility to urban markets and large scale production potentiality of a crop in a given cluster. In early years, there will be a strong emphasis on bridging the 'know-how' gap in the field on cluster based mapping and value chain analysis of selected crops.

F. Over all objectives of the Assignment

The Expert will be responsible to identify the opportunities and constraints affecting the supply chain and formulate appropriate intervention strategies for resource mobilization. He will conduct feasibility study on marketing of processed agro-products at home and abroad, value chain analysis, market studies and surveys. The expert is also responsible to undertake marketing capacity building for CIGs, POs, and DAE Staff/Official on value chain management, organize and assist POs in establishing the CCMCs, and renovation of existing markets with good post harvest management practices and short term storing facilities where produce, processors and traders come together and are doing business. He will develop market linkages and contractual arrangements between CIG's/POs with traders, super markets, processors and exporters. Provide financial advisory services to CIGs/POs and entrepreneurs to apply matching grants from Agricultural Innovation Funds. He will develop training modules and resource materials as well as organize training, workshop, seminar, field days, fairs relating to supply chain integration and market management of agro-commodities.

G. Scope of the Assignment

- Responsible to Managing Director, Hortex Foundation;
- Identify opportunities and constraints affecting the supply chains and formulate appropriate intervention strategies for resource mobilization;
- Suggest appropriate methods for selection of sub-sectors, different actors and potential buyers and compile data for supply chain analysis;
- Prepare plan for specific interventions and activities that promote equitable growth through supply chain development;
- Design and develop a computerized information database for the supply chain knowledge development with information on regulations/codes for safe and clean food with the help of relevant consultant (s);
- Formulate training courses on the supply chain management oriented information packages for farmers, exporters, traders, entrepreneurs and processors;
- Organize training, workshop, seminar, field-days, fairs relating to supply chain integration & market management of horticultural/agricultural produce;
- Develop and design appropriate strategy with guidelines for farmers led (POs) Marketing Association with the assistance of Private Sectors for channelizing high value produces at markets;
- Develop training modules and resource materials for building capacity of the project stakeholders and beneficiaries on supply & value chain management, marketing and agribusiness;
- Conduct a feasibility study on marketing of processed agro-products at home and abroad;
- Conduct studies, surveys on existing markets for identifying potential niche markets;
- Prepare guidelines and MOU's for contract farming based on most appropriate model;
- Assist CIGs, POs, MMC, input sellers, traders, exporters, processors and entrepreneurs in developing market linkages;

- Organize value chain analysis in clusters for horizontal and vertical expansion of high value crops;
- Suggest improved market management practices for increasing marketing capacity of the project beneficiaries;
- Organize exposure visits, foreign tours for the project stakeholders and beneficiaries;
- Work independently and maintain all related files and documents;
- Write and submit different periodical reports as per project requirements and as assigned by the Authority and
- Any others tasks as assigned by the Authority.

H. Expert qualifications and expertise required

a. Academic:

- Minimum Master Degree in Agriculture/Agricultural Economics/Agricultural Marketing/ MBA major in Marketing/relevant field.
- Candidates having Ph. D in relevant field may have an added advantage.

b. Experience:

- Minimum 15 years working experience in contract farming, group marketing, business development, market linkage development, supply & value chain management of horticultural/agricultural produce.
- Minimum 03 years working experience in donor / IDA funded / development projects.
- Scientific publications are desirable.
- High level of proficiency in written and spoken English and report writing.
- Computer literacy (MS Word, Excel and Power Points etc.) is essential.

I. Reporting and Supervision arrangements

The Expert will report to the Managing Director of Hortex Foundation and will be responsible to him for all activities. The Expert will submit progress report to Managing Director, Hortex Foundation quarterly describing progress of implementation with constraints faced and recommendation for measures to be taken to address/overcome them. The Expert shall submit Draft Final Report to Managing Director, Hortex Foundation one month before the completion of the assignment. MD, Hortex Foundation, if required, will provide the Expert with comments to the draft report and the Expert shall submit the final report within time frame specified by Managing Director, Hortex Foundation.

J. Responsibilities of the contracting party

MD, Hortex Foundation will provide the following inputs and facilities:

- i) Office space and other logistic support as per project provision;
- ii) All available documents, papers and information relevant to the assignment will be provided/made accessible to the Expert.

K. Duration of the assignment

Duration of the expert services will be 60 man months or up to project period which one comes earlier. It will be renewed in every year on satisfactory annual performance of the individual consultant/expert.

**Hortex Foundation as Strategic Partner of DAE
Under
National Agricultural Technology Program-Phase II Project (NATP-2)**

**A. Terms of Reference (TOR) for Consultant/Expert Services:
Individual Expert: Training Management Expert
Package No. SD/Hortex-NATP2/03**

Assignment title	Training Management Expert
Assignment duration	24 Man Months, 1 (one) person
Primary assignment location	Hortex Foundation, Dhaka
Funding source (s)	IDA & IFAD Credit
Contracting entity	Managing Director, Hortex Foundation

B. Context of the Assignment

Agriculture in Bangladesh comprises crops, livestock and fisheries. It provides food, feed, fiber and fuel to its citizens and animals, and plays a key role in economic development of Bangladesh. For achieving the set goal of SDG and turning Bangladesh into a middle income country by the 2021, the GDP has to grow by 7.4% per year. To attain the rate and to keep pace with the population growth, agriculture must grow at a constant rate of minimum 3-3.5% per year. Reaching technologies to the farmers requires technology generation and dissemination through the research and extension systems. National Agricultural Research System (NARS) is responsible for generating agricultural related technologies and Department of Agricultural Extension (DAE), Department of Fisheries (DOF) and Department of Livestock Services (DLS) are responsible for extension of generated technology to the farmers. Both research and extension have made an impressive contribution to food security in the country. In Bangladesh, private investment in research and extension is low. The NGOs, local government and community organizations are coming up but very slowly.

Bangladesh agriculture faces many challenges today. Major challenges are to raise productivity and profitability, reduce high production costs, increase price of products and resource-use efficiency, halt declining and degradation of soil resources and declining of animal and fisheries resources, adaptation to climate change vulnerability, providing consumers safe food, yield gap minimization, expansion of irrigation facilities & farm mechanization, production & distribution of quality seeds/varieties/ breeds/fingerlings, quality production of horticultural crop, popularization of good agricultural & IPM practices, weak linkage of farm-produces with market, low investment in agriculture and inadequate credit support to the farmers. These challenges have stagnated the agricultural productivity and production. Further, nutrition outcomes and food safety have not kept pace with the progress achieved with most social and economic indicators. Thus, in order to produce more food for an ever increasing population, raw materials for agro-industries and higher income for farming communities from the decreasing resources (land, water, animal and fisheries), it is necessary to develop existing agricultural production system into a more dynamic, market oriented and sustainable commercial sector by higher productivity and profitability through efficient natural resources management, irrigation expansion, agricultural intensification and diversification, mechanization, value addition and effective market linkages.

To that effect, the Government of Bangladesh (GoB) gives top priority to the development of agriculture sector through its increased productivity, production, supply chains, value addition and market linkages. GoB sought the support of development partners such as the World Bank to provide technical and financial support to activities aimed at boosting agricultural production through productivity enhancement and increasing smallholders'

income. In order to improve agricultural productivity and farm income, on the request of the Government of Bangladesh, the World Bank agreed to support a long term agricultural development program over a period of 15 years to be implemented in three phases of five years each with the first phase beginning in July 2007. IFAD also agreed to co-finance the program with the World Bank. Accordingly, the National Agricultural Technology Project (NATP): Phase-I (NATP-1) was designed with the development objective of improving the effectiveness of national agricultural technology system (including agricultural research, extension and development of supply chains) and increasing agricultural productivity and farm income in Bangladesh. NATP-1 was initiated in July 2007 and closed in December 2014. NATP-1 has significant achievements in generating technologies, increasing the effectiveness of extension and research systems, development of supply chains and broadening linkages between research-extension-farmers across the project areas. Based on the experience of NATP-1, the World Bank, jointly with IFAD and USAID, decided to provide financial support to the GoB for National Agricultural Technology Program- Phase II Project (NATP-2). The duration of the project is 01 October 2015 to 30 September 2021.

C. Project Development Objective

Project Development Objective (PDO) of National Agricultural Technology Program-Phase II Project (NATP-2) is to increase agricultural productivity of smallholder farms and improve smallholder farmers' access to markets in selected districts. PDO will be achieved through: a) strengthening the capacity of research, extension services and farmers to generate, diffuse and adopt agricultural technologies aimed at increasing farm productivity and reducing post-harvest losses; and b) promoting the sustainability of existing and newly created farmer groups and producer organizations by facilitating their stronger participation in commodity value chain, market-linkages, and improving their knowledge and skill base. Thus, the PDO will be achieved through the generation and release of more productive and locally adapted technologies, enhancing availability of quality seeds/breeds/fingerlings/breeding materials at the small farm level and providing relevant production, value addition, food safety and marketing support.

D. Project Components

NATP-2 project will have the following 5 components:

Component-1 (Enhancing Agricultural Technology Generation): To be implemented by the Project Implementing Unit of Bangladesh Agricultural Research Council (PIU-BARC), MOA;

Component-2 (Supporting Crop Development): To be implemented by the Project Implementing Unit of Department of Agricultural Extension (PIU-DAE), MOA and Hortex Foundation as Strategic Partner of DAE;

Component-3 (Supporting Fisheries Development): To be Implemented by the Project Implementing Unit of Department of Fisheries (PIU-DOF), MOFL;

Component-4 (Supporting Livestock Development): To be implemented by the Project Implementing Unit of Department of Livestock Services (PIU-DLS), MOFL;

Component-5 (Project Management): To be implemented by the Project Management Unit (PMU), NATP-2, MOA.

E. Development of Value Chains in Crop/Horticulture

Strategic Partner:

NATP-2 will support the Hortex Foundation as the Strategic Partner to Department of Agricultural Extension (DAE) under a Strategic Partner Agreement for providing technical services on value chain development with an agreed contract value of US\$ 3.50 million. The strategic partner would assist DAE's Common Interest Groups (CIGs) and Producer

Organizations (POs), and private entrepreneurs in: i) organizing programs for horizontal expansion of best practices in selected 30 old and new generation upazilas and ii) mapping and organizing the vertical expansion of selected six crops, brinjal, bitter gourd, sweet gourd, tomato/summer tomato, banana and aromatic rice; iii) undertake value chain analysis, market studies and surveys; iv) undertake marketing capacity building for CIG, POs and DAE staff/officials on value chain management, organize and assist POs in establishing the Commodity Collection & Marketing Centers (CCMCs) and renovation of existing markets with good post-harvest management and short term storing facilities where producers (CIGs and non-CIG farmers), processors and traders come together and are doing business; v) develop market linkages and contractual arrangements between CIGs/POs with traders, supermarkets, processor and exporter; vi) provide financial advisory services to CIG/POs and entrepreneurs to apply for matching grants from Agricultural Innovation Funds (AIF-2, technology adoption and AIF-3 for market and enterprises development); and vii) organize communication campaign on food safety, SPS etc.

Modalities of Strategic Partnership between PIU-DAE and Hortex Foundation

- A Strategic Partner Contract between DAE and Hortex Foundation will be signed detailing activity plan and its execution responsibilities and fund management modalities.
- A partnership between PIU-DAE and Hortex Foundation as strategic partner to DAE will be established based on mutual understanding and respect keeping in view the mandate of the respective organizations to perform the assigned task jointly.
- Hortex Foundation will be one of the cost centers of PIU-DAE like upazila and district level Office of DAE regarding financial allocation and expenditure.
- Hortex Foundation will develop annual work plan with budget and submit it to PIU-DAE for consideration of PIC. After recommendation by the PIC fund will be released to Hortex Foundation based on agreed work plan.
- All expenditure shall be incurred following Govt. financial rules, DPP provision and donor agencies (IDA & IFAD) guidelines as applicable.
- Hortex will be treated a DAE cost center for financial transaction.
- Hortex Foundation will be responsible for preserving and maintaining all records of expenditure for future audit during and after the project period.
- Hortex Foundation will submit SOE, monthly with Bank statements by last working day to PIU-DAE for further submission to PMU.
- All value chain activities including CCMC and marketing facility improvement will be carried out by Hortex Foundation having cooperation from field level DAE officials. Hortex Foundation will inform PIU-DAE well ahead of time regarding field program for better support and execution.
- For AIF-3, Hortex Foundation will assist DAE in recipient selection and grant monitoring; and provide technical assistance in this regard. AIF-3 guidelines will be followed in implementation of the grant sub-projects.
- Hortex Foundation will submit monthly and periodic progress report to DAE & PMU and other reports as required by PIU-DAE and PMU.

Value Chain Mapping

Under the strategic partner contract, project will support horizontal and vertical expansion of high value crops and large scale production of six selected crops (brinjal, bitter gourd, sweet gourd, tomato/summer tomato, banana and aromatic rice) covering 30 clusters in 30 upazilas of 22 districts. The strategic partner in association of DAE will organize farmers into value chain cluster based production and marketing chains to avoid over supply to markets during the peak production season, organize contract farming, production planning, and renovation and establishment of CCMC and collection points with good post-harvest management, packaging and transportation. Inclusion of specific crops in a cluster in horizontal or vertical expansion programs would be based on demand in local and export markets, comparative advantage of specific crop (s) in a cluster, marginal and small farmer's preference of the specific crop in the cluster, availability of technology and inputs for crop, transport/communication (road, rail, water) facility to urban markets and large scale production potentiality of a crop in a given cluster. In early years, there will be a strong emphasis on bridging the 'know-how' gap in the field on cluster based mapping and value chain analysis of selected crops.

F. Over all objectives of the Assignment

To contribute to the Project objectives and help in scaling up, NATP-2 implementation will rely on a comprehensive program of training activities; this will be implemented at various levels and cover skill development, knowledge sharing and learning of different stakeholders. He will responsible for developing training modules and manuals as well as conducting training, workshop, seminar, exposure visit, overseas study visit programs and ensure their implementation. He will also perform all project related training and communication activities in a timely manner.

G. Scope of the Assignment

- Responsible to Managing Director, Hortex Foundation;
- Develop training, ToT, workshop, seminar, exposure visit and overseas study visit programs and ensure their implementation in time;
- Assist in hiring consulting firm for execution of foreign training programs;
- Perform all project related training and communication activities;
- Implement training and communication activities of Hortex Foundation in a timely manner;
- Prepare training manuals/ modules on all events in Hortex under NATP-2;
- Prepare timely progress report on training and communication;
- Prepare and maintain database on training and workshop programs;
- Work independently and maintain all relevant files and documents of the project;
- Work closely with Training & Communication Specialist of DAE;
- Prepare periodical and annual reports including PCR and
- Any other related tasks as assigned by the Authority.

H. Expert qualifications and expertise required

a. Academic:

- Minimum Master Degree in any discipline of agricultural science or related field.

b. Experience:

- Minimum 15 years working experience in agricultural Research / Agricultural Extension / Training & Communication;
- Must have minimum 5 years working experience in planning, organizing & managing training and communication activities, workshop etc. in any research / extension / International organization;
- Minimum 03 years working experience in donor / IDA funded / development projects;
- High level of proficiency in written and spoken English and report writing ability;
- Computer literacy (MS Word, Excel and Power Point etc.) is essential.

I. Reporting and Supervision arrangements

The Expert will report to the Managing Director of Hortex Foundation and will be responsible to him for all activities. The Expert will submit progress report to Managing Director, Hortex Foundation quarterly describing progress of implementation with constraints faced and recommendation for measures to be taken to address/overcome them. The Expert shall submit Draft Final Report to Managing Director, Hortex Foundation one month before the completion of the assignment. MD, Hortex Foundation, if required, will provide the Expert with comments to the draft report and the Expert shall submit the final report within time frame specified by Managing Director, Hortex Foundation.

J. Responsibilities of the contracting party

MD, Hortex Foundation will provide the following inputs and facilities:

- i) Office space and other logistic support as per project provision;
- ii) All available documents, papers and information relevant to the assignment will be provided/made accessible to the Expert.

K. Duration of the assignment

Duration of the expert services will be 24 man months. It will be renewed in every year on satisfactory annual performance of the individual consultant/expert.

**Hortex Foundation as Strategic Partner of DAE
Under
National Agricultural Technology Program-Phase II Project (NATP-2)**

**A. Terms of Reference (TOR) for Consultant/Expert Services:
Individual Expert: M & E Expert
Package No. SD/Hortex-NATP2/04**

Assignment title	M & E Expert
Assignment duration	60 Man Months, 1 (one) person
Primary assignment location	Hortex Foundation, Dhaka
Funding source (s)	IDA & IFAD Credit
Contracting entity	Managing Director, Hortex Foundation

B. Context of the Assignment

Agriculture in Bangladesh comprises crops, livestock and fisheries. It provides food, feed, fiber and fuel to its citizens and animals and plays a key role in economic development of Bangladesh. For achieving the set goal of SDG and turning Bangladesh into a middle income country by the 2021, the GDP has to grow by 7.4% per year. To attain the rate and to keep pace with the population growth, agriculture must grow at a constant rate of minimum 3-3.5% per year. Reaching technologies to the farmers requires technology generation and dissemination through the research and extension systems. National Agricultural Research System (NARS) is responsible for generating agricultural related technologies and Department of Agricultural Extension (DAE), Department of Fisheries (DOF) and Department of Livestock Services (DLS) are responsible for extension of generated technology to the farmers. Both research and extension have made an impressive contribution to food security in the country. In Bangladesh, private investment in research and extension is low. The NGOs, local government and community organizations are coming up but very slowly.

Bangladesh agriculture faces many challenges today. Major challenges are to raise productivity and profitability, reduce high production costs, increase price of products and resource-use efficiency, halt declining and degradation of soil resources and declining of animal and fisheries resources, adaptation to climate change vulnerability, providing consumers safe food, yield gap minimization, expansion of irrigation facilities & farm mechanization, production & distribution of quality seeds/varieties/breeds/fingerlings, quality production of horticultural crop, popularization of good agricultural & IPM practices, weak linkage of farm-produces with market, low investment in agriculture and inadequate credit support to farmers. These challenges have stagnated the agricultural productivity and production. Further, nutrition outcomes and food safety have not kept pace with the progress achieved with most social and economic indicators. Thus, in order to produce more food for an ever increasing population, raw materials for agro-industries and higher income for farming communities from the decreasing resources (land, water, animal and fisheries), it is necessary to develop existing agricultural production system into a more dynamic, market oriented and sustainable commercial sector by higher productivity and profitability through efficient natural resources management, irrigation expansion, agricultural intensification and diversification, mechanization, value addition and effective market linkages.

To that effect, the Government of Bangladesh (GoB) gives top priority to the development of agriculture sector through its increased productivity, production, supply chains, value addition and market linkages. GoB sought the support of development partners such as the World Bank to provide technical and financial support to activities aimed at boosting agricultural production through productivity enhancement and increasing smallholders' income. In order to improve agricultural productivity and farm income, on the request of the Government of Bangladesh, the World Bank agreed to support a long term agricultural development program over a period of 15 years to be implemented in three phases of five years each with the first phase beginning in July 2007. IFAD also agreed to co-finance the program with the World Bank. Accordingly, the National Agricultural Technology Project (NATP): Phase-I (NATP-1) was designed with the development objective of improving the effectiveness of national agricultural technology system (including agricultural research, extension and development of supply chains) and increasing agricultural productivity and farm income in Bangladesh. NATP-1 was initiated in July 2007 and closed in December 2014. NATP-1 has significant achievements in generating technologies, increasing the effectiveness of extension and research systems, development of supply chains and broadening linkages between research-extension-farmers across the project areas. Based on the experience of NATP-1, the World Bank, jointly with IFAD and USAID, decided to provide financial support to the GoB for National Agricultural Technology Program- Phase II Project (NATP-2). The duration of the project is 01 October 2015 to 30 September 2021.

C. Project Development Objective

Project Development Objective (PDO) of National Agricultural Technology Program-Phase II Project (NATP-2) is to increase agricultural productivity of smallholder farms and improve smallholder farmers' access to markets in selected districts. PDO will be achieved through: a) strengthening the capacity of research, extension services and farmers to generate, diffuse and adopt agricultural technologies aimed at increasing farm productivity and reducing post-harvest losses; and b) promoting the sustainability of existing and newly created farmer groups and producer organizations by facilitating their stronger participation in commodity value chain, market-linkages, and improving their knowledge and skill base. Thus, the PDO will be achieved through the generation and release of more productive and locally adapted technologies, enhancing availability of quality seeds/breeds/fingerlings/breeding materials at the small farm level and providing relevant production, value addition, food safety and marketing support.

D. Project Components

NATP-2 project will have the following 5 components:

Component-1 (Enhancing Agricultural Technology Generation): To be implemented by the Project Implementing Unit of Bangladesh Agricultural Research Council (PIU-BARC), MOA;

Component-2 (Supporting Crop Development): To be implemented by the Project Implementing Unit of Department of Agricultural Extension (PIU-DAE), MOA and Hortex Foundation as Strategic Partner of DAE;

Component-3 (Supporting Fisheries Development): To be Implemented by the Project Implementing Unit of Department of Fisheries (PIU-DOF), MOFL;

Component-4 (Supporting Livestock Development): To be implemented by the Project Implementing Unit of Department of Livestock Services (PIU-DLS), MOFL;

Component-5 (Project Management): To be implemented by the Project Management Unit (PMU), NATP-2, MOA.

E. Development of Value Chains in Crop/Horticulture

Strategic Partner:

NATP-2 will support the Hortex Foundation as the Strategic Partner to Department of Agricultural Extension (DAE) under a Strategic Partner Agreement for providing technical services on value chain development with an agreed contract value of US\$ 3.50 million. The strategic partner would assist DAE's Common Interest Groups (CIGs) and Producer Organizations (POs), and private entrepreneurs in: i) organizing programs for horizontal expansion of best practices in selected 30 old and new generation upazilas and ii) mapping and organizing the vertical expansion of selected six crops, brinjal, bitter gourd, sweet gourd, tomato/summer tomato, banana and aromatic rice; iii) undertake value chain analysis, market studies and surveys; iv) undertake marketing capacity building for CIG, POs and DAE staff/officials on value chain management, organize and assist POs in establishing the Commodity Collection & Marketing Centers (CCMCs) and renovation of existing markets with good post-harvest management and short term storing facilities where producers (CIGs and non-CIG farmers), processors and traders come together and are doing business; v) develop market linkages and contractual arrangements between CIGs/POs with traders, supermarkets, processor and exporter; vi) provide financial advisory services to CIG/POs and entrepreneurs to apply for matching grants from Agricultural Innovation Funds (AIF-2, technology adoption and AIF-3 for market and enterprises development); and vii) organize communication campaign on food safety, SPS etc.

Modalities of Strategic Partnership between PIU-DAE and Hortex Foundation

- A Strategic Partner Contract between DAE and Hortex Foundation will be signed detailing activity plan and its execution responsibilities and fund management modalities.
- A partnership between PIU-DAE and Hortex Foundation as strategic partner to DAE will be established based on mutual understanding and respect keeping in view the mandate of the respective organizations to perform the assigned task jointly.
- Hortex Foundation will be one of the cost centers of PIU-DAE like upazila and district level Office of DAE regarding financial allocation and expenditure.
- Hortex Foundation will develop annual work plan with budget and submit it to PIU-DAE for consideration of PIC. After recommendation by the PIC fund will be released to Hortex Foundation based on agreed work plan.
- All expenditure shall be incurred following Govt. financial rules, DPP provision and donor agencies (IDA & IFAD) guidelines as applicable.
- Hortex will be treated a DAE cost center for financial transaction.
- Hortex Foundation will be responsible for preserving and maintaining all records of expenditure for future audit during and after the project period.
- Hortex Foundation will submit SOE, monthly with Bank statements by last working day to PIU-DAE for further submission to PMU.
- All value chain activities including CCMC and marketing facility improvement will be carried out by Hortex Foundation having cooperation from field level DAE officials. Hortex Foundation will inform PIU-DAE well ahead of time regarding field program for better support and execution.
- For AIF-3, Hortex Foundation will assist DAE in recipient selection and grant monitoring; and provide technical assistance in this regard. AIF-3 guidelines will be followed in implementation of the grant sub-projects.
- Hortex Foundation will submit monthly and periodic progress report to DAE & PMU and other reports as required by PIU-DAE and PMU.

Value Chain Mapping

Under the strategic partner contract, project will support horizontal and vertical expansion of high value crops and large scale production of six selected crops (brinjal, bitter melon, sweet melon, tomato/summer melon, banana and aromatic rice) covering 30 clusters in 30 upazilas of 22 districts. The strategic partner in association of DAE will organize farmers into value chain cluster based production and marketing chains to avoid over supply to markets during the peak production season, organize contract farming, production planning, and renovation and establishment of CCMC and collection points with good post-harvest management, packaging and transportation. Inclusion of specific crops in a cluster in horizontal or vertical expansion programs would be based on demand in local and export markets, comparative advantage of specific crop (s) in a cluster, marginal and small farmer's preference of the specific crop in the cluster, availability of technology and inputs for crop, transport/communication (road, rail, water) facility to urban markets and large scale production potentiality of a crop in a given cluster. In early years, there will be a strong emphasis on bridging the 'know-how' gap in the field on cluster based mapping and value chain analysis of selected crops.

F. Over all objectives of the Assignment

The Expert will monitor project outputs, outcomes and impacts. The project management and the World Bank supervision mission will use the M & E findings to guide implementation decisions.

The NATP-2 project has a number of activities which necessitates a well-designed and carefully articulated results-based M&E system capable of tracking project program outputs, outcomes and results. The M & E system will be based on a number of cornerstones: (i) continuous monitoring of a number of key quantitative and qualitative indicators (increased productivity, marketing and income, livelihood increased, quality food availability enhanced etc.) and (ii) active participation of all stakeholders in monitoring and evaluation, including small, marginal and women farmers on a participatory approach and (iii) decentralized extension system established.

A basic framework for concurrent monitoring and evaluation has been developed during the project appraisal consisting of well-defined results framework based on clearly defined goals, objective, outcomes, outputs, impacts and activities, with corresponding key performance indicators. The comprehensive M&E Framework aims to carry out outcome-based monitoring and evaluation system, particularly to monitor the resources invested, the activities implemented, and services delivered as well as to evaluate outcomes achieved and long-term impact made; and to create a feedback process for results, to promote participation of stakeholders and to build capacity for M&E. The framework will be adjusted, as necessary, during project implementation period.

G. Scope of the Assignment

- Responsible to Managing Director, Hortex Foundation;
- Design result based monitoring & evaluation plan and implementation;
- Ensure monitoring and evaluation of overall project activities including the field offices as per results framework;
- Collect data on the key performance indicators and prepare relevant reports;
- Maintain database of all field activities including CIGs, POs, MMC & CCMCs;
- Work independently and maintain all relevant files and documents;
- Monitor regularly project input, output/outcome/impact;
- Monitor CIGs through balanced score card;

- Maintain close link with Monitoring & Evaluation Specialist of DAE, PMU & other PIUs;
- Prepare and published all monthly, quarterly, half yearly, annual reports and PCR in time and
- Any other related tasks as assigned by the Authority.

H. Expert qualifications and expertise required

a. Academic:

- Minimum Master Degree in Agricultural Science/Economics/Statistics or related fields.

b. Experience:

- i. Minimum 15 years working experience in planning and organizing monitoring & evaluation programs in government/autonomous/private/international organization.
- ii. Minimum 3 years work experience in M&E and related activities in donor/IDA funded/ development projects.
- iii. Must have experience in log-frame, output and outcomes indicators; monitoring format development and other strategic approach of M&E.
- iv. Should have experience in preparing Terms of Reference for relevant activities.
- v. Well experienced in Database Management and strong analytical skill.
- vi. High level of proficiency in written and spoken English and report writing.
- vii. Computer literacy skills (MS Word, Excel, Power Point, SPSS and other statistical software) is essential.

I. Reporting and Supervision arrangements

The Expert will report to the Managing Director of Hortex Foundation and will be responsible to him for all activities. The Expert will submit progress report to Managing Director, Hortex Foundation quarterly describing progress of implementation with constraints faced and recommendation for measures to be taken to address/overcome them. The Expert shall submit Draft Final Report to Managing Director, Hortex Foundation one month before the completion of the assignment. MD, Hortex Foundation, if required, will provide the Expert with comments to the draft report and the Expert shall submit the final report within time frame specified by Managing Director, Hortex Foundation.

J. Responsibilities of the contracting party

MD, Hortex Foundation will provide the following inputs and facilities:

- i) Office space and other logistic support as per project provision;
- ii) All available documents, papers and information relevant to the assignment will be provided/made accessible to the Expert.

K. Duration of the assignment

Duration of the expert services will be 60 man months or up to project period which one comes earlier. It will be renewed in every year on satisfactory annual performance of the individual consultant/expert.

Application Forms

Form A : Application Submission Form

Form B : CV of the Applicant

Form C : Remuneration and Reimbursable

Form A. Application Submission

[Location: dd/mm/yy]

To:

Managing Director
Hortex Foundation
Sech Bhaban (3rd floor)
22 Manik Mia Avenue
Sher-e-Bangla Nagar, Dhaka-1207

Dear Sir:

I am hereby submitting my Application to provide the consulting/expert Services for [Insert title of assignment] in strict accordance with your Request for Expression of Interest dated [dd/mm/yy].

I undertake, if I am selected, to commence the consulting/expert Services for the assignment not later than 15 (Fifteen) days after negotiating the contract.

I understand that you are not bound to accept any Application that you may receive.

I remain,

Yours sincerely,

Signature

Print name

Address:

Tel:

Attachment:

Form B. Curriculum Vitae (CV) of the Applicant

1	PROPOSED POSITION FOR THIS PROJECT :	<i>[From the Terms of Reference, state the position for which the Consultant/Expert will be engaged.]</i>												
2	NAME OF PERSON :	<i>[state full name]</i>												
3	DATE OF BIRTH :	<i>[dd/mm/yy]</i>												
4	NATIONALITY :	Bangladeshi.												
5	MEMBERSHIP IN PROFESSIONAL SOCIETIES	<i>[state rank and name of society and year of attaining that rank].</i>												
6	EDUCATION	<i>[list all the colleges/universities which the Applicant attended, stating degrees obtained, and dates, and list any other specialised education of the Applicant].</i>												
7	OTHER TRAINING	<i>[indicate significant training since degrees under EDUCATION were obtained, which is pertinent to the proposed tasks of the Consultant/Expert].</i>												
8	LANGUAGES & DEGREE OF PROFICIENCY	<table style="width: 100%; border: none;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;"><u>Language</u></th> <th style="text-align: left; border-bottom: 1px solid black;"><u>Speaking</u></th> <th style="text-align: left; border-bottom: 1px solid black;"><u>Reading</u></th> <th style="text-align: left; border-bottom: 1px solid black;"><u>Writing</u></th> </tr> </thead> <tbody> <tr> <td style="padding-left: 20px;"><i>e.g. English</i></td> <td style="padding-left: 20px;"><i>Fluent</i></td> <td style="padding-left: 20px;"><i>Excellent</i></td> <td style="padding-left: 20px;"><i>Excellent</i></td> </tr> </tbody> </table>	<u>Language</u>	<u>Speaking</u>	<u>Reading</u>	<u>Writing</u>	<i>e.g. English</i>	<i>Fluent</i>	<i>Excellent</i>	<i>Excellent</i>				
<u>Language</u>	<u>Speaking</u>	<u>Reading</u>	<u>Writing</u>											
<i>e.g. English</i>	<i>Fluent</i>	<i>Excellent</i>	<i>Excellent</i>											
9	COUNTRIES OF WORK EXPERIENCE													
10	EMPLOYMENT RECORD <i>[starting with present/recent position list in reverse order [every employment held and state the start and end dates of each employment]</i>	<p><i>[The Applicant should clearly distinguish whether as an “employee” or as a “Consultant” or “Advisor”].</i></p> <p><i>[The Applicant should clearly indicate the Position held and give a brief description of the duties in which the Applicant was involved].</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 35%;">EMPLOYER 1</td> <td style="width: 30%;">FROM: <i>[e.g. January 1999]</i></td> <td style="width: 35%;">TO: <i>[e.g. December 2001]</i></td> </tr> <tr> <td>EMPLOYER 2</td> <td>FROM:</td> <td>TO:</td> </tr> <tr> <td>EMPLOYER 3</td> <td>FROM:</td> <td>TO:</td> </tr> <tr> <td>EMPLOYER 4 (etc)</td> <td>FROM:</td> <td>TO:</td> </tr> </table>	EMPLOYER 1	FROM: <i>[e.g. January 1999]</i>	TO: <i>[e.g. December 2001]</i>	EMPLOYER 2	FROM:	TO:	EMPLOYER 3	FROM:	TO:	EMPLOYER 4 (etc)	FROM:	TO:
EMPLOYER 1	FROM: <i>[e.g. January 1999]</i>	TO: <i>[e.g. December 2001]</i>												
EMPLOYER 2	FROM:	TO:												
EMPLOYER 3	FROM:	TO:												
EMPLOYER 4 (etc)	FROM:	TO:												

11	COMPUTER LITERACY AND SKILL	
12	LIST OF PUBLICATIONS	
13	WORK UNDERTAKEN THAT BEST ILLUSTRATES THE CAPABILITY TO HANDLE THIS ASSIGNMENT	<i>[Give an outline of experience and training most pertinent to tasks on this assignment, with degree of responsibility held. Use about one of a page A4].</i>
14	ADDRESS (PERMANENT AND MAILING INCLUDING MOBILE, TELEPHONE AND E-MAIL)	
15	REFERENCES	

CERTIFICATION

[Do not amend this Certification].

I, the undersigned, certify that (i) I was not a former employee of the Client immediately before the submission of this proposal, and (ii) to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

Signature			
Print name			
Date of Signing			
dd / mm / yyyy			

Form C. Indicative Remuneration & Expenses

The Consultant should provide an indication of the remuneration as per the format shown below. This will not be used for evaluation of the Consultant's Application but solely for the purposes of Application Negotiations.

(1) Remuneration

Rate (per month / day / hour in Tk)	Staff Time (No. month / day / hour)	Total (Tk)

Note: A month consists of 30 calendar days.

(2) Reimbursable (as applicable)

	Rate per unit	Total unit	Total Amount (Tk)
(a) Per Diem Allowance			
(b) Air Travel Costs			
(c) Other Travel Costs (state mode of travel)			
(d) Communication charges			
(e) Reproduction of Reports			
(f) Other Expenses (<i>to be listed</i>)			
		Sub-total	

CONTRACT CEILING (1) + (2)	
----------------------------	--

[**Download Form**](#)