**CNFA-AMD Project**

**US-Pakistan Partnership for Agricultural Market Development**

**SCOPE OF WORK**

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| Project Name | CNFA-AMD/ Project Number AID-391-C-15-00003 |
| Consultancy Assignment | To conduct post shipment evaluation of the sea freight of mix vegetables in Dubai |
| Consultant Title | Technical Resource Person |
| Reports to | Chief technical Advisor - AMD |
| Place of Performance | Dubai, UAE |
| LOE: | 06 working days |
| Est. Period of Performance | February 22th to 28th, 2017 |

**Project Description:**

US-Pakistan Partnership for Agricultural Market Development (AMD) activity in Pakistan is a USAID funded activity implemented by CNFA with the goal of supporting the development of Pakistan’s commercial agriculture, particularly through improving the ability of Pakistan’s agriculture and livestock sectors to meet both international and domestic demand and requirements in targeted product lines in Citrus, Mango, High value/off season vegetable and livestock. AMD envisions transforming the four targeted product lines into efficient, private sector led value chains that deliver competitive products to domestic and export markets. AMD’s targeted training, matching grants, and technical assistance will leverage private sector investment and encourage innovation. Together these approaches will support upgrading, streamline supply chains, optimize profit margins, increase participation of women entrepreneurs, and ultimately make Pakistani mango, citrus, meat and HV/OSV more profitable and more competitive.

**Overview of HV/OSV Product Line / Problem Statement / Rationale**

All of the products exported from Pakistan are neither processed in the cool chain system nor transported to distant market in their optimum storage environment and hence they only possess a shelf life of few hours to few days depending on the perishability of crops. They reach to the destination in poor quality due to its inability to retain the product, the exporters are forced to sell the produce at the throw away prices. The produce which is processed satisfactory using cool chain facilities can be retained for 2-3 weeks without any problem. The introduction of cold chain system in the export of vegetables in reefer container will not only ensure maintaining quality, enhance shelf life but will turn out economically as well. It is anticipated that transportation cost shall be reduced several folds resulting in to direct benefit to exporters.

The exporters of fresh produce around the world are mainly dependent on air freight, because of the quickest and more reliable transportation methods for fresh produce. Capacity to transport and cost accrued while transporting fresh produce are the major bottleneck, in transporting fresh fruits and vegetables via air freight. The introduction of shipments via refrigerated sea containers holds the potential to significantly impact vegetable exports from Pakistan. AMD aims to strengthen the HVOSV product line by supporting the private sector investors to maximize their profit margin using inexpensive sea freight shipment for less perishable vegetables of winter crops. Through this intervention, winter vegetables with the same storage requirement and ethylene productivity/sensitivity will be shipped via refrigerated marine containers to middle east. Technical support will be provided by AMD technical team. Sea freight shipment of mix vegetables would be the first of its kind and selected exporters and processors will be briefed technically on handling and post-harvest handling of vegetables for export market. First consignment through 2040 feet reefer container will be shipped on trial basis and will be evaluated for quality.

**Benefits of the sea freight shipment:**

In Pakistan and around the world, air freight is the most common transport method that allow products to be transported quickly over a long distance. The short transit times allow producer/exporters to respond quickly to market needs. Air freight transportation also allows distributors to ship highly perishable products to distant markets that cannot be serviced by highway or marine transport.

Because air transport is considerably more expensive than land or sea transport, only a small proportion of perishable products that are shipped travel by air. The per unit cost for air freight can be up to ten times that of sea freight depending on destination, season of the years and market cycle.

A lack of temperature control is the most serious disadvantage when shipping perishable commodities by air. Cold storage is not dependably available at air ports, and even if it is present it may not be available for use by horticultural products. Before it is loaded on to plane, the cargo will be positioned outdoors, near the plane. Wait time at ambient conditions may be anything from high temperature to freezing conditions, wind or precipitation.

Similarly, local highway transport time to and from the originating and destination airports and wait times at both airports can add many hours or even days to the total transport time. Often, produce must be delivered to the airport 6 to 8 hours before the flight so it can be weighed, properly inspected by the relevant departments and loaded on to freight container or pallets. At the destination airport, internationally shipped product may have held for many hours before it can be cleared by local authorities.

With technological advancement and alternative to air freight, refrigerated marine transport can be used efficiently depending on the perishability of fresh produce, traveling times and optimum storage requirement.

**Objectives of the Technical Assistance**

The prime objective of this consultancy assignment is to evaluate the arrival quality of fresh vegetables shipped via marine reefer container at the final destination in Dubai, UAE and to assess buyers’ acceptance along with market acceptability.

This trial shipment has been organized by AMD in collaboration with vegetables exporters.

**Assignment Scope:**

The STTA’s tasks will include but not be limited to:

* Coordinate with AMD program team for development of engagement plans and strategies;
* Work with AMD VC Manager (HV/OSV) to specify the transportation requirements of certain fresh produce.
* Coordinate with AMD staff and vegetables exporters for Identification of key importers, especially engage in importing and marketing of vegetables in UAE;
* Develop an in-term and final report with recommendations on the sea freight shipment of mix vegetables;
* Any other tasks assigned by the COP and CTA relating to the evaluation of fresh vegetables via sea shipment at importing country.

**Deliverables:**

The specific deliverables of STTA are;

1. Evaluate the quality of vegetables delivered via sea freight shipment in Dubai, UAE. Parameters includes discoloration, disease/insect occurrence, shriveling, wilting, chilling/freezing injury, ethylene damage, physical and physiological damage etc.
2. Conduct a buyer/market acceptance survey of the produce imported from Pakistan via sea freight
3. Assess the container/vegetables handling procedures at arrival destination.
4. Record the methods of transportation from importers to distributors and retail out-let
5. Record the data from the temperature data logger. Temperature and humidity data would be of prime importance. Also, conduct a systematic sample check of product internal temperatures using probe thermometer.
6. Evaluate the strength and market acceptability of packaging materials used for shipment including onward to retail outlets.
7. Submit an interim rapid analysis report immediately after assessment of product arrival.
8. Submit a comprehensive Final Report of the above deliverables with recommendations within 7 days after the evaluation.
9. Any other task assigned by COP and CTA.

**Qualifications:**

The consultants should have:

* An advanced degree in the field of Agriculture, Agriculture marketing, Business Management and/or Food Engineering;
* 5-10 years’ experience of having worked with commercial agriculture traders or exporters as well as other players in the HV/OSV;
* Sound knowledge of cold chain and Good Agriculture Practices (GAP) in processing agricultural products and maintaining quality standards;
* Prior experience of working as a consultant with USAID or donor funded projects in Pakistan with Good Agriculture Practices, SPS, Post-harvest handling of fresh produce, pre-cooling, cold storage and international marketing;
* Excellent computer skills, in particular: Microsoft Word, Excel and Power Point;
* Demonstrable interpersonal and communication skills;
* Documented excellent writing skills in English;
* Oral fluency in English;