Roots of Peace, implementing an Afghan Ministry of Agriculture, Irrigation and Livestock (MAIL) project with funding from the World Bank Horticulture and Livestock Program (HLP), completed exports of fresh grapes from the Shamali to India and Pakistan. The shipments were special for many reasons:

1. Project matched producers with traders. Integrated project worked with producers to increase quality for traders to export to higher markets.
2. The grapes were sorted and graded before packing. Branding was applied.
3. Higher quality grapes shipped in improved packaging in refrigerated trucks to Karachi: an important first step in reaching world markets through the port at Karachi

Results: Improved Production Techniques + Improved Post-harvest techniques + New Export Markets = higher farm gate prices for farmers and new, profitable markets for traders.

Total shipped this season through this project was 684mt through November 10th with shipments continuing. 5 Afghan traders participated in the project. The project provided technical assistance on grading, packing and refrigerated shipments. The traders paid all their costs, except ROP provided use of field harvest baskets for harvesting and ROP pack house for packing, chilling and storage prior to shipment. Traders received subsidies on a portion of the improved packaging.

The exports were part of a coordinated effort to work with farmers to improve the quality of their grapes and connect them with traders who graded the grapes, and shipped the best quality fruit to markets that paid higher prices for the top quality. Lower quality fruit was sold in the normal fashion to local markets or shipped to Peshawar, a market that does not pay higher prices for higher quality, or lower prices for lower quality. The coordinated effort paid off for the farmers who earned increased income from their higher yields and higher prices. The traders earned higher prices in Karachi, Lahore, Islamabad, Delhi and Dubai.

The objective of this project is to demonstrate and document the value chain approach to improving agricultural industries. We are focusing on the grape industry centered at Mir Bacha Kot, Kabul Province as the test case. The value chain approach is to lead the industry actors in a study of the process of producing

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<th>KEY FACTS</th>
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<td>684mt grapes shipped</td>
<td>Roots of Peace, implementing an Afghan Ministry of Agriculture,</td>
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<td>5 Afghan Traders</td>
<td>Irrigation and Livestock (MAIL) project with funding from the</td>
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<td>Use of GIB leads to +100%</td>
<td>World Bank Horticulture and Livestock Program (HLP), completed</td>
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<td>Increase in Kishmish Grape</td>
<td>exports of fresh grapes from the Shamali to India and Pakistan.</td>
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<td>Farmer Income</td>
<td>The shipments were special for many reasons:</td>
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<td>Field Graded &amp; Packed</td>
<td>1. Project matched producers with traders. Integrated project</td>
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<td>Grapes</td>
<td>worked with producers to increase quality for traders to export</td>
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<td>Shipments to:</td>
<td>to higher markets.</td>
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<td>Karachi</td>
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<td>Lahore</td>
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<td>Islamabad</td>
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<td>Delhi</td>
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<td>Air Freight to Delhi</td>
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<td>Refrigerated 40’</td>
<td>Results: Improved Production Techniques + Improved Post-</td>
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<td>containers to Karachi</td>
<td>harvest techniques + New Export Markets = higher farm gate</td>
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<td>prices for farmers and new, profitable markets for traders.</td>
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and marketing the product and to assist them to design and test improvements to the production and marketing of the product. MAIL-HLP contractor Roots of Peace, grape producers and marketers have implemented the following tests:

**Production Tests**
- Pruning low-value grape clusters from vines early in the season
- Applying Gibberellin to Kishmishi grapes
- Applying dipping oil to grapes to speed drying into raisins
- Testing solar-tent drying of raisins

**Production Results**
- Participating farmers were convinced of benefit of pruning secondary bunches
- Farmers were convinced of the benefits of Gibberellin: significant increase in marketable weight of fresh grapes and raisins and increased quality.
  - Quantity Increase: 61% yield increase\(^1\)
  - Quality Increase: 57% price increase on grapes with Gib applied.
    Farmgate price of $0.32/kg versus $0.20/kg without Gib.
- Farmers were convinced of the benefit of dipping oil: faster drying and increased market price of yellow raisins

**Marketing Tests**
- Establishing profitable trade routes for large scale export
- Marketing to high-value Pakistani buyers beyond the traditional Peshawar auction market.
- Test two new types of packaging of grapes in the Pakistani markets. The new, branded packages contain less quantity, but higher-grade grapes than the traditional packages. The new packaging is designed for buyers willing to pay for the highest-quality Afghan grapes.
- Test of air transport of grapes to buyers in India.
- Test of refrigerated land transport of grapes to Karachi (first step to transporting grapes to Dubai and Mumbai by sea)

**Marketing Results – 654mt grapes shipped profitably**
- Merchants convinced of the benefit of marketing beyond Peshawar to more profitable markets with graded fruits
  - 180mt shipped to Islamabad & Lahore
  - 40mt shipped by air transport to India. 11% margin for exporter with extremely high airport and handling costs in India.
  - 434mt shipped via refrigerated land transport to Karachi. Business is continuing. 16% margin for exporter.
  - Improved packaging earned prices 50% higher than plastic bag sales in Pakistan

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\(^1\) Gibberellin Application on Keshmeshi Table Grape Shamali Pain, Kabul, Afghanistan 2008 by European Community, Perennial Horticultural Program
- Test of new packaging incomplete. 7kg hybrid wooden box and 7kg cardboard box need further testing.

**Future Actions**

- Promote improved grape production methods (pruning secondary bunches, Gib) to all Shamali grape farmers
- Ship thousands of metric tons to these new markets with graded fruit next harvest season
- Develop new Land & Sea route through Karachi to Mumbai and Dubai
- Continued testing of alternate packaging
- Test end of season cold storage potential
- Test up-graded raisin production
- Pakistani import taxes need to be addressed in Af-Pak Trade discussions
- Indian airport and handling fees need to be addressed.

For detailed information on these tests, see Roots of Peace website for the project reports at [www.rootsofpeace.org/resources/project-reports/](http://www.rootsofpeace.org/resources/project-reports/).

For more information on the World Bank Horticulture and Livestock Program, contact Stuart Pettigrew at [stuart.pettigrew@gtz.de](mailto:stuart.pettigrew@gtz.de).