



Ministry of Agriculture, Irrigation and Livestock Horticulture and Livestock Project GRAPE VALUE CHAIN PROJECT (GVCP)

FINAL REPORT

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This is the final report of the Grape Value Chain Project. The Value Chain Operations Manual, Case Study: Improving the Mir Bacha Kot Grape Value Chain, filed with the World Bank Horticulture and Livestock Project as one of the project Deliverables, provides a complete report of the activities and accomplishments of the project. The following text is the Summary taken from the “Operations Manual.”

Summary

This report describes the application of value chain analysis and improvement techniques to the grape value chain centered at Mir Bacha Kot village north of Kabul in the Shamali Plain. The report is designed to be used as a model to follow for the application of value chain analysis and improvement techniques to other value chains in Afghanistan. Future readers of the report will find a discussion of the theory of value chain analysis, a step-by-step guide for implementing value chain analysis and improvement and a step-by-step description of how value chain analysis and improvement was carried out in the Grape Value Chain. The Table of Contents shows the steps to follow.

The project was successful in demonstrating new production and marketing technologies that show how farmers and merchants can substantially increase the income they derive from the production and marketing of grapes. Application of Gibberellic Acid to improve the weight and size of fresh Kishmishi grapes can result in farm income increasing by more than 100%. Using grape grading, packaging and marketing techniques designed by GVCP staff and participating merchants can result in substantially higher prices for fresh grapes. The most striking increase

in farm-level fresh grape price (approximately 57%) was paid by a participating merchant who was shipping fresh grapes to Karachi in refrigerated shipping containers or “reefers” following instructions and training delivered by the GVCP staff. See page 8 (of the Manual). The discovery of the grape market opportunity in Karachi and the development of the techniques to reach it may be the most important result of the GVCP because this is the first stage in the development of a marketing channel for Shamali grapes to the port at Karachi and, via the port, to the world market.

At project initiation, the major effort was directed toward testing changed marketing practices including grading, packaging and delivery to “new” markets in the interior of northern Pakistan, “past or beyond” Peshawar. The idea was to change the marketing system to better reward Afghan farmers and merchants for higher-quality fresh grapes. The effort was successful in that products marketing using the recommended marketing practices fetched higher prices and marketing margins than the traditionally marketing products. See the table on page 16 (of the Manual).

The process used in implementing the project was to design production and marketing interventions in collaboration with the farmers and merchants and then to assist them to carry out tests of the interventions. The GVCP staff provided training to the participants to assist them implement the tests. See the Annex table on page 33 (of the Manual) for a list of the major training sessions. We assisted the merchants to market grapes as part of the tests of new marketing ideas. As part of the tests, merchants exported 695mt of fresh grapes. See the Annex table on page 33 (of the Manual) for a list of the merchants, associated markets and volumes.

Participating farmers and merchants praised the project’s accomplishments and requested an expansion of the services in a follow-on project. Farmers requested more assistance with production, specifically, asking for more demonstration plots in their areas. Merchants supported the farmers’ requests, saying that a development agency should work with farmers linked to merchants as the GVCP attempted to do to assure quality grape production and marketing. The merchants also asked for expanded assistance with marketing, especially marketing assistance that will allow them to fully exploit the newly discovered market in Karachi for Shamali grapes and to test the Dubai market. A list of the farmers’ and merchants’ requests is provided in the Annex on page 36 (of the Manual) and the following page.

The GVCP staff and consultants have the following additional recommendations:

- Initiate pest (Powdery Mildew) management and other cultural practices (pruning and culling) early. GVCP activities started too late in the season last year (the project started in June) to make an impact on grape quality.
- Continue efforts to solidify the use of the marketing techniques and marketing channels to Karachi, Islamabad and Lahore.
- Begin marketing grapes to Dubai via 40’refrigerated containers shipped by sea.
- Continue efforts to establish a marketing channel to the international military in Afghanistan. This will require high-level assistance from within the military and government.
- Construct an evaporative cooling room at MBK pack house for use in partially cooling grapes before packing.
- Construct and test a raisin-drying structure (rack) in cooperation with a raisin merchant. This will allow demonstration and testing of the benefits of drying raisins off the ground. The cleaner raisins may fetch prices that are high enough to pay for the additional investment and care.

Four supporting manuals have been developed under funding from the GVCP:

1. Production for Quality, by Andrew Teubes, describes the technical aspects of grape production in the area around Mir Bacha Kot in the Shamali Plain.
2. Harvesting for Quality, by Andrew Teubes, describes the procedures used to harvest quality grapes.
3. Post-Harvest Handling Manual, by Louw Theron, describes the process of packing grapes in the Shamali Plain.
4. HACCP for Afghan Grape Packing Houses, by Louw Theron, describes the HACCP methodology for assuring that grapes packed in a properly designed and prepared pack house will be safe for human consumption.

To access these and other GVCP documents, see the Roots of Peace webpage: www.rootsofpeace.org/resources/project-reports.

Results Monitoring Matrix

The following table provides a succinct report of the planned project deliverables and associated accomplishments.

Grape Value Chain Tasks Per Contract	Accomplishments
Task 1: Grape Value Chain Action Plan	
Identify key stakeholders for developing the GVC Action Plan	Completed. Identified farmers and Horticulture Interest Groups (HIG) near Focus Center of Mirbachakot. Identified export merchants sourcing from the target areas and merchants in the target markets of Pakistan. See lists in Attachment 4 of June monthly report
Conduct an assessment of on-going programs being implemented in the GVC by other national and international organizations.	Completed. See Action Plan submitted to HLP.
Conduct an assessment of the current GVC in cooperation with grape merchants and producers, to better understand and document current marketing practices, constraints and opportunities, costs and returns.	Completed. See Action Plan submitted to HLP.
Identify the most suitable grape varieties for various export markets (including Pakistan, India and potentially Dubai and the Russian Federation)	Completed. See Action Plan submitted to HLP.
Define the size of the potential higher value national and/or export markets for fresh and dried grapes of these varieties	Completed.
Review current planting details for these varieties	Completed. See Action Plan. Typical planting of Kishmishi grapes is on 2.5m x 2.5m grid without trellising. Trend is to install trellising and to shift from Kishmishi to Taiffee and Shundulkhani grapes.
Define the type of value addition and infrastructure currently being employed to market grapes, recognizing the current strengths of the marketing system	Completed. Kishmishi grapes are processed into raisins by drying on the bare ground. Fresh grapes are

	traditionally packed in the field without trimming, without shade, scales, or other infrastructure.
Identify and assess additional service providers operating in the MBK Focus Cluster, including micro-finance institutions (MFI).	Completed. See Operations Manual.
Within three months of project start-up, the FP will organize a workshop to share the results of the NHUDA feasibility study and the consultant's additional assessment with key stakeholders and to then finalize the Grape Value Chain Action Plan.	Completed. See Action Plan. Stakeholder's meetings were held: June 14 and 16; Aug 30.
Task 2: Provision of Improved Market Information	
Set up and maintain a market information service (MIS) that provides market information to processors and traders/exporters and identifies additional market linkages.	Project ended. Prices were collected via telephone or email from Pakistan, Kabul and Shamali. Prices were announced via billboard at MBK market center. See photo of billboard in Attachment in Aug Monthly Report.
Organize buyer-seller meetings, market study tours, and dissemination of product information to buyers and producers.	Completed.
Provide market information, in particular fresh grape quality standards of major export markets to HFP and IPM FP for translating them into extension messages and support programs related to the production of grapes	Quality Standards have been developed. See main text of Aug monthly report.
Assist the cluster organization to sell fresh grapes to the market linkages identified at the beginning of implementing the GVC pilot.	Completed. See GVC Operations Manual
Task 3: Capacity Building of Stakeholders	
Provide skills training in simple value addition at village and cluster levels, which would include quality control, grading, sorting, packing, etc.	Completed. Farmers and merchants were given training (Aug 30) on applying the quality standards during harvest. 200 plastic harvest baskets have been purchased for demonstrating proper harvesting of grapes. Farmers received harvest shears (cutters) and shown proper grape harvesting procedure. See photos in Attachment 4 of Aug monthly report.
Assist the cluster organization to develop a quality control mechanism at the cluster level, which will include development of a collection point at village and cluster levels, providing information on quality (size, timing of picking), etc.	Completed. Tents have been purchased for the use as collection points and packing grape under shade. Farmers and merchants were given training (Aug 30) on applying the quality standards during harvest. See main text and photos of Aug monthly report.
Provide emerging private sector players with training in grading, sorting and processing of fresh table grapes.	Completed. Provided training Aug 30. Newly joining participants have been given training on harvesting and

	packaging procedures.
In close cooperation with NUHDA, the GVC FP should establish/strengthen associations of processors and traders/exporters to a level allowing them to continue the marketing of quality grapes after the end of the GVC demonstration pilot.	Completed. HLP funding for NUHDA has been stopped. ROP is working with established associations of traders/exporters and with the Focus Group and HIGs.
Task 4: Infrastructure Development	
Assist the cluster organization to develop a proposal for the development of value addition infrastructure, including site selection, technical specifications, investment proposals, financial management etc.	Simple infrastructure for field packing (tents for the use of collection points and packing grape under shade) was put in operation this season. Experience during the Project did not indicate the advisability of developing additional infrastructure for the cluster organization due to its lack of organizational maturity. Recommendations were made to construct an evaporative cooling room at MBK pack house for use in partially cooling grapes before packing and to construct and test a raisin-drying structure (rack) in cooperation with a raisin merchant. This will allow demonstration and testing of the costs and benefits of drying raisins off the ground.
Proposals for improvements in transportation and storage facilities, including options for cold storage/chilling facilities operating independently from electricity supply at MBK, as well as the need for a cold storage/chilling facility at the airport.	Completed. Flexible cold storage is available in the form of refrigerated 40' shipping containers or "reefers" that can be rented for short periods of time.
The GVC FP will support the cluster organization to implement the technical aspects of operating the infrastructure installed by the project.	Completed. Simple infrastructure for field packing (tents for the use of collection points and packing grape under shade) was designed and put in place this season.
FODSC will provide training to the cluster organization in financial management, accounting, procurement, and management of the infrastructure.	Completed. GVCP staff met (Aug 25) with FOD staff to discuss the need for training and process to do so. FOD informed that training manuals were being completed.
For facilities that are feasible, the proposal is to be forwarded to HLP for approval and financing.	Experience during the Project did not indicate the advisability of developing additional infrastructure for the cluster organization due to its lack of organizational maturity.
Task 5: Preparation and Dissemination of Information Materials	
Production for Quality Manual	Completed.
Harvesting for Quality Manual	Completed.
Post Harvest Handling Manual	Completed.
HACCP Manual for Pack Houses	Completed.

Operation Manual for replicating the GVC model in other regions.	Completed.
Outputs and Outcomes (Deliverables)	
Grape Value Chain Action Plan developed and documented.	Completed. Submitted to HLP July 15.
Marketing activities recommended by the Action Plan implemented.	Completed. See Operations Manual for details.
Markets and quality standards identified, and corresponding extension messages formulated and disseminated.	Completed. See Operations Manual for details.
Quality control mechanisms developed and implemented.	Same as above.
Value addition infrastructure, recommended by the Action Plan, developed, managed and maintained by the Focus Cluster organization.	Completed. The infrastructure was simple structures, equipment, tables, etc required for improved (shaded) field packing.
Quarterly meetings of the GVC stakeholders held.	Completed. Initial meetings held in June. Aug 30 meeting held for training purposes. Meetings have been held with selected stakeholders regularly throughout the harvest season. Final stakeholders meetings held in December 2009. See Operations Manual for details.
Quality control mechanisms and value addition infrastructure evaluated.	Completed.
Preparation of Quality Manuals for members of the GVC	Completed.
GVC Improvement Operational Manual drafted, and a set of recommendations formulated for further developing and replicating the GVC improvement program.	Completed.
Final Report	Completed.