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JORDAN VALLEY LOGISTICS STUDY

TRADE FACILITATION PROJECT

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1. INTRODUCTION AND SCOPE OF WORK

The West Bank and Gaza Trade Facilitation Project (TFP) engaged a logistics management consultant to carry out the following scope of work over nine days from December 12 to 23, 2008:

- Determine local demand for logistics center services
- Determine the feasibility of creating logistics centers
- Identify trade facilitation issues
- Identify Palestinian and Israeli companies interested in creating a logistics center

Specifically, the consultant carried out the following:

- Conducted meetings with Alpha International, the local company tasked with surveying West Bank and Jordan Valley companies, clarified results and agreed on the basic graphic presentation of the findings
- Prepared and submitted a PowerPoint presentation of the survey findings
- Prepared and delivered a draft survey report analyzing logistics, warehousing, transport, and trade facilitation issues
- Recommended survey dissemination to specific organizations
- Made recommendations for next steps to develop warehousing and logistics management skills and logistics centers
- Described risks and opportunities

2. STUDY METHODOLOGY

During the mission, the consultant and a local expert met with Jordan Valley transport and trading companies and other organizations (listed in the table below) to get information about their ability and willingness to develop transport and warehousing operations.

	Name	Type of Organization and Activity
1	Wassel Group	West Bank transport and warehousing company
2	The Jordan River Bridge	Israeli company owning land at several crossing points
3	National Beverage Company	West Bank bottler for Coca-Cola and distributor of drinks trying to use logistics best practice
4	Unipal General Trading Company	West Bank distributor for Philip Morris, Proctor & Gamble, Kraft, Kebler, Siniora, and Heinz and trying to use logistics best practice
5	Masrouji Co. Ltd.	West Bank warehousing and transport company for pharmaceuticals trying to use logistics best practice
6	Palestinian Agribusiness Partnership Activity (PAPA)	West Bank USAID agricultural technical assistance project
7	AL BARQ	West Bank transport company
8	Palestinian Shippers' Council (PSC)	Lobby group
9	Alpha International	West Bank research and survey company
10	Ankara Forum	Turkish group of investing companies interested in developing an industrial park
11	Sinokrot Global Group Palestine Garden Company	Palestinian company with a Jordan Valley packing shed for fresh vegetables
12	Turkish Ambassador to Israel	One of the main Ankara Forum focal points
13	Japan International Cooperation Agency (JICA)	Japanese donor organization that carried out a feasibility study and plans to build an agro-park in Jordan Valley
14	PALTRADE	Palestinian information gathering and research association publishing transport and other reports

The meetings with JICA, the Ankara Forum, and the Turkish Ambassador to Israel focused on their agro-park and industrial park initiatives. The consultant visited some of the crossings to get information about crossing land ownership and identify where logistic center or crossing center investors might come from. The consultant did not have an opportunity under this assignment to visit Jordanian transport and freight forwarding companies with logistics interests or Allenby Bridge crossing interests.

During the mission, the consultant met with Alpha International in Ramallah, to clarify and discuss survey results and agree on the graphic presentation method for findings. These were finalized by TFP and submitted to USAID separately.

3. JORDAN VALLEY SURVEY FINDINGS

3.1. Survey Method

Local polling company Alpha International carried out the survey using a sampling of 71 companies. Alpha as local contractor used a ‘snowball’ sampling technique—i.e. using one respondent to refer another respondent. The survey was carried out from November 16 to 18, 2008. Trained data collectors interviewed traders that exported or imported fruits and vegetables to and from Israel. Ten percent of the collected data was double-entered to ensure data entry quality. Data was transferred into the statistical program Statistical Package Social Sciences (SPSS) using the ‘Stat-Transfare’ program to ensure data transformation and accuracy.¹

3.2. Findings

International market. Only two traders were found that traded fruits and vegetables with the international market using Israeli marketing and logistics organizations. The two traders mainly traded cluster tomato and pimento. They also engaged with trading cherry tomato and eggplant. Exporting exits included the Jordan Allenby Bridge, Ashdod seaport, and the well-equipped Ben Gurion Airport logistics center.

Crossings used. The majority of Jordan Valley traders sent in-season fruit and vegetable shipments to the Israeli market using the skills of Israeli agricultural marketing and logistics companies. Most Jordan Valley fresh fruits and vegetables enter into Israel using the Jalameh and Bardala crossings. Some produce crosses into Israel using the Betounia, Bisan, and Sha’ar Ephraim crossings.

Transport usage. Seasonal transport and logistics usage includes 26 tons of produce using 43 trucks. No containers were used. Most produce took one day to travel from the Jordan Valley to destination and companies mainly used their own trucks. Produce sorting, boxing, and palletizing was carried out at the packing shed. Not surprisingly, each trader used its dedicated transport route from farm to crossing. The average distance traveled was 44.2 kilometers. The new Sinokrot Global Group Palestine Garden Company packing shed in the Jordan Valley was starting to clean, sort, and pack bell peppers for the Israeli market during December 2008, using skilled Israeli agricultural produce marketing and logistics companies.

Delays at crossings. Some traders reported long waits at crossings as a problem. Most traders use Israeli agricultural produce marketing and logistics companies with several years of experience arranging Israeli-registered transport and delivery to market, so delays at crossings should not be a problem. However, experience in other countries suggests best intentions sometimes do not translate into fast-track fruit and vegetable crossing arrangements. Many countries signed to the International Convention on the

¹ Annex 8, Article 3, Section 3, ECE/TRANS/55/Rev.1 Economic Commission for Europe Inland Transport Committee, United Nations.

Harmonization of Frontier Controls of Goods 1982, known simply as The Harmonization Convention, which includes provisions to give priority at crossings to perishable goods, although it is not always adhered to. Some countries sign bilateral crossing agreements for perishable produce, but they are not always adhered to. Implementing fast-track perishable goods crossing is a worldwide problem.

Import shipments. Most Jordan Valley traders import from Israel. They bring in chemical fertilizer, fruits and potatoes, and wrapping materials, mainly using the Jalameh crossing and also the Bardala crossing. Compared with 26 tons sent to the Israeli market, only 6 tons were brought into the Jordan Valley from Israel using eight truck loads on average each month. On average, an 'import' shipment might take 4.7 days, but some respondents reported shipments that might take 7 days to arrange. All Jordan Valley traders reported their goods were transshipped at a crossing, although the majority of traders reported they experienced no problems at crossings. A small number of traders reported problems, describing long crossing waiting times and short crossing working hours as the main ones. Long crossing times and short crossing working hours are often described in other parts of the world. Different countries try reducing waiting times and synchronizing crossing working hours using bilateral agreements as important trade facilitation initiatives.

Packing sheds. Most traders surveyed owned a packing shed of different sizes. Most packing sheds were less than 100 square meters in size, but a significant number were either 200 or 400 square meters. Only 10 packing sheds were larger than 400 square meters. Most packing sheds used their own transport, suggesting an integrated agricultural produce supply chain. Surprisingly, the majority of trucks were not chilled, sometimes referred to as 'reefer' trucks (insulated box body with a 'chiller' unit at the front of the truck or trailer). Many fruits and vegetables suffer deterioration during transport, but the economics of the agricultural market might not support transporting fresh produce at +4C or +6C degrees in purpose-built trucks. Europe and the United States have recommended road transport temperature charts for fresh produce trucking.

Nearly half of the Jordan Valley traders spend between 5 and 8 hours arranging transport, which seems high considering there is a fresh produce supply chain. The average amount of time spent arranging transport was 6.6 hours, which still seems high. Tracking export and import shipments seems a time-consuming exercise at 2.2 days. The majority of respondents replied they might use one logistics company for all services because management spent a lot of time arranging transport and tracking shipments.

Any company wishing to create a new fresh produce logistics supply chain should consider the reasons a majority of Jordan Valley respondents might use a new service, in order of importance:

- Facilitate the work of the fresh produce grower and trader
- Save work effort
- Preserve fresh produce from spoilage
- Lowering costs

- Saving time
- Transport fresh produce

Those Jordan Valley growers and trading companies who do not see an advantage in a new fresh produce logistics supply chain indicated the following reasons:

- Increasing costs
- No need because of limited production volume
- Depends on own efforts
- Might lack experience
- Do not want others interfering and knowing how they grow and market fresh produce

Value-added services that a new logistics supply chain provider might consider include, in order of importance:

- Reducing crossing times and problems
- Transport
- Palletizing and breaking bulk
- Chilled storage
- Sorting and grading
- Chilled reefer transport
- Export
- Shrink wrapping
- Packaging
- Order picking and accurate invoicing
- Warehousing and inventory management
- Import

Most companies surveyed did not understand the logistics center concept, which seems at variance with some of the companies that believe a logistics center can reduce storage and transport costs. Only 10 respondents indicated why they might use the services of a logistics center, and listed facilitating their work as the main reason. Most companies were not involved with the transport cost from company to seaport to Israel or to the Allenby Bridge because the Israeli agricultural produce marketing companies arranged transport.

4. RECOMMENDATIONS AND NEXT STEPS

The European Union plans to carry out transport corridor studies using PALTRADE as a local counterpart. JICA finished an agro-park feasibility study and plans to build an agro-park in the Jordan Valley. The agro-park will give users utilities, road access, and level ground for building construction. Therefore, there does not seem to be much scope to develop extra Jordan Valley logistics initiatives.

Recommended next steps are to disseminate the survey findings, and to prepare transport and logistics training as outlined in Annex II. Disseminating the survey findings should include the following:

- Prepare Jordan Valley survey findings press release and send press release to local and international media
- Prepare Jordan Valley survey findings leaflet and send electronically to Jordan Valley companies, Sinokrot, Palestinian Shippers Council (which might send an electronic copy to all members), PAPA, PALTRADE, universities, trade associations, donors, and leading trading companies in the West Bank
- Prepare a logistics and supply chain leaflet and send it to the organizations listed above

ANNEX I. LOGISTICS CENTERS

Logistics Definition

The USA Council of Logistics Management defines logistics as “the process of planning, implementing and controlling the efficient, effective flow and storage of goods, services and related information from the point of origin to the point of consumption for the purpose of conforming to customer requirements.” To this definition, the consultant adds “*complying with contractual obligations and at a profit.*”

A logistics center is part of a supply chain where client goods are received and dispatched. It helps clients reduce supply chain costs by sharing building, equipment, vehicle, staffing, and other resource costs between several clients. A logistics center collects goods on time, delivers on time, and gives value added services all at an agreed cost with clients and profitable for the center owner.

While the goods are stored or transiting, a center may provide value-added services such as the following:

- Tracking
- Warehousing
- Inventory management
- Customs bonding
- Break bulk and palletizing
- Order picking
- Added processing or amalgamating with parts made in another country of origin
- Sorting and packaging
- Shrink wrapping
- Tracking and tracing
- Invoicing

Logistic center buildings are designed to include pallet racking and accommodate forklifts and reach trucks. Logistics centers use modern IT hardware, warehousing, and materials handling software to help managers, supervisors, materials handling equipment operators, and order pickers accurately manage and meet contractual obligations with their clients.

A logistics center can range from the simple to the sophisticated.

Simple Logistics Center

- Uses pallets and forklifts under one roof in an old factory or vegetable processing shed
- Management relies on proven paper methods instead of IT
- Has several years of logistics experience and an excellent understanding of client needs

Sophisticated Logistics Center ('Class A' Warehousing)

- Includes air conditioning, IT inventory management, and automated reach trucks to store pallets into racking systems between 6 and 12 racks high
- Has automated carriers running on special rails in the warehouse floor carrying pallets to and from trucks
- Floor constructed to handle heavy loading weights
- Trucks are emptied into warehouses using motorized rollers on the container floor in about one minute, maximizing the number of truck trips each day
- Identifying pallet content technology includes bar coding using bar code readers linked to center IT inventory management methods and radio frequency identification using tags and tag readers

Different logistic center models satisfy different client needs—for example, chilled pharmaceutical and chilled and frozen food air conditioning because of large temperature variations. Seaports, railway terminals, and crossing points need multimodal handling equipment.

There is a fundamental difference between inventory holding centers and centers not holding inventory. Centers holding inventory are called transshipment centers while non-inventory centers are called cross-docking centers. The cross-docking center is increasingly used by companies wanting to reduce logistics costs and improve product to market time. Some logistics centers are also called hubs, terminals, warehouses, or packinghouses.

Logistics center management must find methods to reduce operating costs in order to maintain profitability while maintaining agreed client service levels.

ANNEX II. DRAFT LOGISTICS SKILLS CONCEPT FOR THE WEST BANK AND JORDAN VALLEY

Current Status

Several West Bank and Jordan Valley companies need skilled warehousing, transport, and logistics staff and managers to manage existing supply chains. One West Bank company plans in the future to build a new warehouse in which it might offer logistical services to other companies. New warehouses or logistics centers need skilled warehousing, transport and logistics staffs and managers. The West Bank and the Jordan Valley do not have warehousing, transport, and logistics courses of any type.

Two good resources for logistics courses are the City & Guilds and the Chartered Institute of Logistics and Transport accredited in the United Kingdom. They offer either full- or part-time courses. Many vocational education and training colleges deliver City & Guild logistics skills courses. The Chartered Institute of Logistics and Transport delivers certificate and diploma courses. Students and staff finishing courses receive accredited logistics qualifications that are recognized worldwide.

Concept

The Palestinian Shippers Council takes the lead organizing a Logistics Skills Working Group.

Logistics Skills Working Group membership might include the Palestinian Shippers Council, Masrouji Co. Ltd., National Beverage Company (Coca-Cola bottlers), Unipal (distributors for Proctor & Gamble, Philip Morris, and Heinz), Birzeit University, and other companies to be decided. The working group must be industry-led.

Working Group objectives might include the following:

- Create and deliver courses for company staff
- Create and deliver certification courses in a vocational education and training college
- Create and deliver courses in a university
- Measure Palestinian education institution ability to create and deliver logistics certification and diploma courses
- Study how logistics courses delivered at a vocational education and training college(s) and university(s) get accredited in the West Bank
- Study how the Palestinian Ministry of Education can approve logistics courses in the national education syllabus
- Estimate number of employees, supervisors, managers, and directors wanting training
- Estimate student, employee or company ability to pay for courses, and the size of the market
- Estimate the numbers of students that might be interested in taking transport and logistics certification and diploma courses