UNCTAD Multiyear Expert Meeting on Transport, Trade Logistics and Trade Facilitation
21-23 November 2018, Geneva

"Sustainable freight transport in support of the 2030 Agenda for Sustainable Development"

The Hashemite Kingdom of Jordan (HKJ)

Transport and Trade Facilitation

by

Fares Abudayyeh
Ministry of Transport

MINISTRY OF TRANSPORT

The Hashemite Kingdom of Jordan (HKJ)

Transport and Trade Facilitation

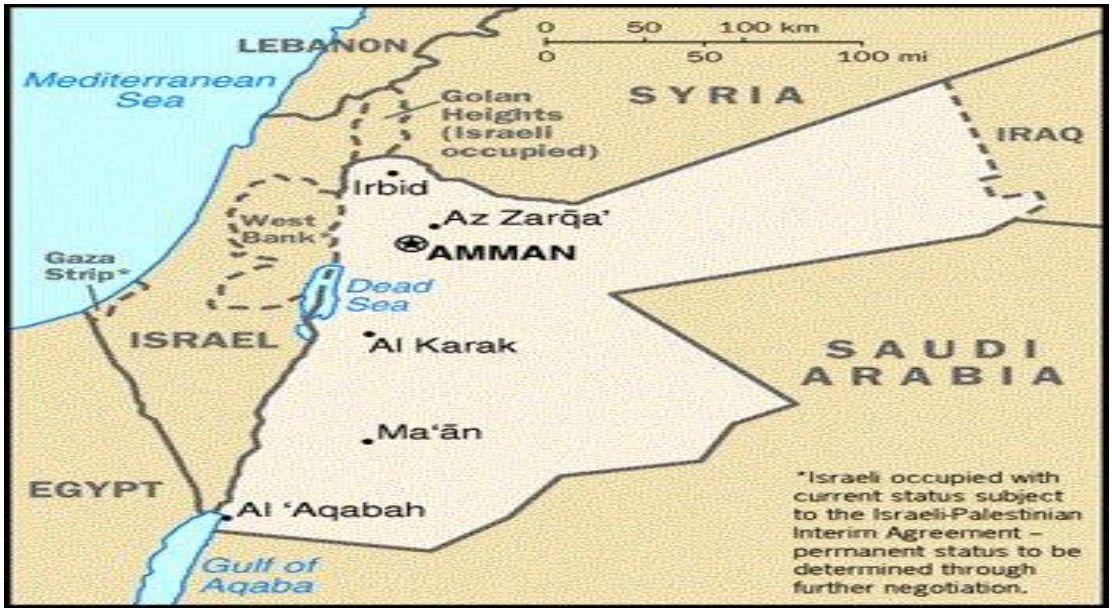
Fares Abudayyeh

11/20/2018

Cotenant **Page**

Introduction:

The Hashemite Kingdom of Jordan is an Arab country in the Middle East, bordered by Syria to the north, Iraq to the northeast, Saudi Arabia to the east and south and Israel, Palestine to the west.



Population

Population is about 9,978,224 as for 18/11/2018. population density ranges from 112 person / km² (289 people / mi²)

Geography and Topography of Jordan

Jordan covers about 91,880 square kilometers, mostly desert plateau in the east, highland area in the west; the Great Rift Valley separates East and West Banks of the Jordan River. Jordan is landlocked except at its southern extremity, where nearly twenty-six kilometers of shoreline along the Gulf of Aqaba provide access to the Red Sea. On the other hand, the main topographical feature of Jordan is a dry plateau running from north to south, it rises steeply from the eastern shores of the Jordan River up to the Dead Sea, and it reaches a height of between 610 and 915 meters which means that most of Jordan's main cities and towns are reducing the efficiency of natural ventilation. While, the Jordan Valley, the Wadi Araba and the Dead Sea are formed by a deep depression in the west runs of the Great Rift Valley, the Dead Sea is marked the world's lowest point, at 395m below sea level

Transportation of Jordan:

Transportation sector is of crucial importance to Jordan's further economic development. GDP From Transport in Jordan increased to 616.42 JOD Million in the second quarter of 2018 from 573.27 JOD Million in the first quarter of 2018. GDP From Transport in Jordan averaged 369.31 JOD Million from 2003 until 2018, reaching an all-time high of 632.72 JOD Million in the fourth quarter of 2017 and a record low of 221.80 JOD Million in the second quarter of 2003.

Due to security fears and no safe alternative routes Jordan closed its border crossing with Syria, that severed its most important trade route to the outside. the damage is heavily to the import-reliant Jordan , and severely affected exports of fruits and vegetables, expressing hope that the government will find to resume exports of agricultural produce and goods. The borders were reopened in 14/10/2018.
The closure of the Jordanian-Iraqi border causes a weakness of the commercial movement or stops it completely. The borders were reopened AUG 2017.
In order to enhance Aqaba's competitiveness in the Iraqi market, ACT provided a 40% discount on handling fees to the Iraqi market. The container terminal, in cooperation with Jordanian Customs and the competent inspection authorities, will be able to deliver the transit cargo to the Trebil crossing within 36 hours from the moment it is unloaded and unloaded in Aqaba, thanks to the use of a new process for clearing the goods before arrival.

Logistics Investments in Aqaba

Jordan has a single seaport at Aqaba in the far south. Port of Aqaba which is owned by Aqaba Development corporation (ADC). It has 12 terminals operated by 5 operators: the Aqaba company for port management and operation , Aqaba Container Terminal, Industrial Port Company, Phosphate Company, National Electricity Power Company, and the Pilotage operated by Aqaba Port Marine Services Company.

1) Aqaba Railway : BOT /Financing

Description: Aqaba Development Corporation (ADC) is in the final stages of relocating Aqaba main Port to the southern Industrial Zone (SIZ), and has already completed relocating the Phosphate Terminal to the south of Aqaba, which will have great impact on the transportation of phosphate by railway. The National Railway is planned to reach Aqaba New Ports, in order to transport the phosphate, general cargo,

oil and other commodities. The Ministry of Transportation (MOT) is working to secure the funding for this new railway. ADC and MOT, have found a new route through the new route, the railway will pass directly through Aqaba Container Terminal (ACT) and the containers will be directly loaded on the train. This will reduce the incurred cost and increase the ROI for the project. Aqaba link will be constructed taking into consideration that it will handle both standard and narrow gage, as it will be used for narrow railway in the short term and standard railway on the long term. The estimated cost for Aqaba Link is JD173 million for a length of 23km, where the major part of this link will be utilized as part of the National Railway Project. Abortive work of a 7km-track, including 4km of structures upon connecting with the National Railway
will cost an estimated JD2 million. Based on all of the above, ADC and MOT have decided to start with the Aqaba Link of the railway.

Justification :

- Continue transporting phosphate to Aqaba New Phosphate Terminal on railway • Transport empty containers to ACT.
- Transport containers, which are labeled to Iraq, Ma'an and then by trucks to Iraq.
- Save cost by constructing the National Railway, when the section extending from the New Ports (final dept.) to the Container Terminal becomes ready.
- Prevent double handling of containers
- Minimize cars and truck accidents • Minimize environmental effects caused by Wadi Elyoutom unloading station and spare its construction cost.
- Be ready for the National Railway project.

Location: New alignment will start from Shallaleh area through a tunnel at the backside of Marsa Zayed project parallel to the coastal road until it meets at the Aqaba Container Port leading to the phosphate storage area, then to the New Port. 4. Planning Regulations: The horizontal and the vertical alignment of the line will be studied for approval of the ASEZA Board of Commissioners, as the a higher planning counsel within the ASEZ. 5.Propsed Functions: Transport of containers, bulk phosphate,

- other commodities, and passengers between Aqaba and the Land port in Maan and vice versa. When the National Railway network is accomplished the Aqaba stretch will be part of it and will extend its services to the entier country and neighboring countries . 6. Infrastructure Status: Partially existing 7. Land Value: The land is totally owned by ASEZA and ADC and it will be granted for the project. 8. Contact Format: Grant, BOT or Loan. 9. Estimated Project Value: 170 Million JD 10.

Partners: ASEZA through ADC , Jordan Phosphate Mine Company, Aqaba Railway Company, ACT Aqaba Container Terminal and Potash Company.

2) Containers Customs Yard Facility Management, Operation

Description: The project facilitates customs requirements for clearance and inspection for containerized cargo and all the required services.

Justification: Based on the strategic plan for the Aqaba Container Terminal, the handling size will increase since the available storage space in the Aqaba Container Terminal is limited, thus, there was a need for this new project

Location: Directly located on the Back Road. The project enjoys a relatively smooth topography.

Proposed Functions:

• Containerized cargo logistic hub
• Container freight station
• Dry port
• Custom clearance and inspection
• Short term storage Containers Customs Yard Facility Management, Operation

Infrastructure: Land Area: 140,000 sq.m 7.2 Land Value: JD 5 Million 8. Contract Type: Facility management and operation

Investment value: JD 20 Million 10.

Partners: ASEZA through ADC

Project Components: • Inspection decks , Quarantine hanger ,Customs head offices, Food and drugs office, Standards and metrology, Agricultural control office, Clearing agencies offices, Banks, land agents and offices, General Services Utilities, Gates and yards.

3) Miscellaneous Liquid Terminal Project: Facility Management and Operation

Project Description :The Project shall include the following:

1. Executing all necessary works required to construct the Multipurpose liquids Terminal at the port of Aqaba (the "Terminal"), in accordance with the technical specifications to be agreed upon by the parties .

2. To use best practices and methods to complete the project in light of the outcome of the technical, legal and financial studies conducted for the purposes of the project. This will be achieved by either: a. Entering into a partnership agreement between the first party and the second party for the purposes of incorporating an SPV (Special

Purpose Vehicle) that will complete the project. In the event such a choice is undertaken, the parties agree that the percentage of the private sector in the company shall be 70%, while the percentage of the Aqaba Development Corporation shall be 30%, or b. Through a BOT project, whereby the second party shall assume the role of constructing, developing and managing the project, and thereafter transferring the ownership of the project to the first party following the expiry of the development and operating agreement.

3. The Terminal shall be available for use as a public utility for handling allowed products by any importer or exporter.

4. The SPV operating and managing the Terminal shall be responsible for managing the Terminal and the handling facilities on a common use basis (Common User Terminal), whereby the SPV shall allow any company that has been granted a license from the competent authority to produce, transport, or trade of the allowed Products (if any) to use the Terminal, provided that a Terminal User Agreement shall be concluded with the new users.

5. That the said terminal shall be available for handling the following products "allowed products": A. Chemical Liquid Bulk. B. Liquid Petroleum Gas LPG. C. White Products (oil derivatives), e.g. benzene and diesel. D. Liquid substances of mineral and vegetable oils.

6. The initial handling volume through the Terminal shall be 1.250 million ton per annum.

7. The Internal Revenue Rate (IRR) against the investment in the Project shall not be less than 18.5%.

8. The duration of the Project shall be 30 years renewable upon the agreement of the parties according to the terms and conditions agreed upon.

9. The prompt commencement for constructing the said Project as of the time of signing the development and operation agreement, due to the importance of the Project that can be summarized in the following points:

a. Creating an alternative for handling the oil derivatives in case of any damage or malfunctioning at the oil Terminal. **b.** Creating an alternative for handling the oil derivatives during the maintenance period of the oil terminal while maintaining the handling performance and capacity. **c.** Saving substantial amount of money for the Jordanian economy resulted from demurrages related to ship handling operations. **d.** To separate the clean oil derivatives handling operation from crude oil as the same is essential for the environment and general safety. **e.** Finding new possibilities for handling the transit goods whether outgoing or incoming as the same shall generate more revenues to the Jordanian economy and Aqaba port

4) Development of the Middle Port

The Middle Port is located north of the existing Aqaba Container Terminal at the Middle Coast around 15KM to the south of the Aqaba city center. As part of ADC's ports development plans, ADC is looking into developing the middle port to maximize its usage for handling additional commodities aside with current handled commodities such as cement and rice. ADC is currently tendering the consultancy services inviting specialized international firms to submit a proposal for providing the services of updating the master plan and defining suitable development alternatives. ADC tries to maximize the use of the naturally deep water of the middle port area, the bathymetry of the area shows sufficient depth which can be utilized to serve the large vessels in the trade industry Meanwhile, a full environmental impact assessment will be implemented in the area, followed with an environmental management, monitoring and mitigation plan shall be implemented all over the construction and operation stages of the terminal.

Middle Port Current Situation.

There are two berths in the middle port area:

• Mo'ta berth which is currently used by the adjacent rice terminal for the import of rice and grain. In addition livestock is unloaded at the berth, this berth is a floating one, purchased in 1979 from Japan and is 150m long, 35m wide and 6m deep with an average draught of approximately 3m.

• Cement berth which is used by the adjacent cement terminal for the import and export of cement. In addition vegetable oil and occasionally livestock are unloaded at the berth, The berth comprises two dolphins designed for 120,000dwt vessels with two floating pontoons moored between the dolphins. The berth length between berthing dolphins is 121m.

Future Development: In addition to currently handled commodities in the middle port area, ADC instigate to maximize the use of the port, by studying additional commodities to be imported such as different kinds of Coal (peat, Lignite, Black coal) which is vital for different types of industry and any other potentially important goods for the Kingdom's economy. Such developments (based on its nature) will relay on a state of the art terminal empowered with suitable and reliable equipment and functional in a heavy duty berths, ADC will investigate the most economical and suitable type of berths to be constructed in the area taking into account the environmental sensitivity and constrains.

5) Construction of Aqaba New Port Phase Two Expansion

In year 2001, a master plan for ASEZ was developed in which the current main port land use has been altered to be for touristic uses which requires the relocation of all ports operations to the far southern area. This process aims toward extending the coastal front of the city, allow for natural growth of economical and touristic development of the city, establishing a logistically served port supported by industries in order to increase the handling volumes, enhance the handling and storage efficiency and reduce the cost in addition to improving the environmental conditions of the city and developing the southern zone in accordance with Master plan's objectives.

In order to insure the most effective implementation of the new port development, ADC divided the implementation into construction phases reflecting the growth of economy and packages to accelerate the construction in the following manner:

Package 1 : Marine Works Package / 1 A: Earth Works

Package 2 : Grain Terminal

Package 3: Infrastructure, buildings, yards and sheds

Project Status: ADC has awarded the consultancy services to the joint venture of Moffatt and Nichol and Mostaqbal Engineering and Environmental Consultants. The prequalification of contractors were released in march 2015, in order to short list qualified Joint ventures to participate in the construction bid, meanwhile ADC with the consultant are preparing the tender documents and employer requirements.

Project Components: Aqaba New Port phase two marine works contains the following elements: Additional two berths in the port basin with 250m long each and the anticipated draft will be -15m ACD (Aqaba Chart datum), capable to receive two large vessels up to 120,000 DWT. Such capacity will increase the new port capacity to handle general cargo, roll on roll off (Ro-Ro), and other different cargos. In addition it will enable offloading two grain vessels at the same time and decrease the offloading time and waiting of the vessels. Increase the total length of berths 3and 4 in line with deepening the draft up to -13m, will increase the port capability to receive medium size vessels, and increase the through put of the port.

6) Aqaba Grain Terminal (Phase 2)

Project Components: The project aimed to increase the storage and unloading capacity of the terminal, by construct new silos with a total capacity of 100,000 ton, such capacity shall be added to the existing under construction capacity of 100,000 ton . Ultimately Aqaba New Port Silos will be capable to store 200,000 ton of different grains. In line with the marine works expansion, and increase the unloading vessel capabilities, the grain terminal phase two will increase the silos unloading capacity by adding a further unloading station to the terminal.

Main Logistic Centers

Located within the ASEZ are four main Industrial and logistics centers serving different locations in the Zone. The business deals of these centers differ from one to another, mainly based on lease, and ownership transfer in some of the cases. The details of each center will be availed upon request. Such centers are fully serviced by road network, infrastructure and solid waste collection and disposal. Additionally, they are fully secured as gated communities. ADC has allocated additional land parcels for investment in the industrial and/ or logistics sectors in both north and south of Aqaba. The major operational centers are:

- Aqaba International Industrial Estate (PBI Aqaba): This industrial estate also has the QIZ status.
- Aqaba National Real-estate Projects Company (ANREPCO- South).
- Aqaba Logistics Village (ALV): This logistics center is located adjacent to the Middle Port and provides LCL services, sorting and packaging services in addition to other typical services.

Aqaba Container Terminal (ACT)

Aqaba Container Terminal (ACT) is the gateway for import and export cargo trading between the Levant region and the rest of the world. As one of the most politically stable countries in the region, Jordan provides a secure corridor for trade with surrounding countries.

Aqaba Container Terminal Pvt. Co. (ACT) is a transit and cargo terminal located on the Red Sea in Aqaba, Jordan. As Jordan's only container terminal, ACT plays a vital role in supporting the national and regional economies through the import and export of goods. Our Location: Aqaba terminal is located in the city of Aqaba, in the Hashemite Kingdom of Jordan at the crossroads of three continents and four countries.

ACT has demonstrated its readiness to serve the wider Levant Region despite the turbulent geopolitical environment. ACT has the capacity, the infrastructure and the resources to support the Jordanian export industry, as demonstrated since the Syrian border closure, and to serve the historical Iraq and Syria import markets which are expected to experience a strong growth when the reconstruction will start. Taking advantage of Aqaba's natural deep waters and ACT's consistent strong operational performance, all major global Shipping Lines call the Jordanian terminal today on a weekly basis with large vessels, thus connecting the Levant to the World. In April 2015, the Jordanian government closed the border to Syria in response to the on-

going conflict in the region, blocking the road used for Jordanian exports to access the markets of Syria, Lebanon, Turkey, and beyond. Consequently, this export traffic has had to be redirected to ACT to be shipped through the Suez and the Mediterranean Sea. Without prior notice, ACT managed to handle this sudden and impressive surge of export containers (46% increase) at the busiest time of the year, thus demonstrating its strong support to Jordan's industries and affirming its status as the most sustainable gateway to the Levant. In 2017, the full container exports yet another increase (up by 6% from 2016).

While recent conflicts in neighboring countries have led to the closure of their borders such as Iraq and Syria, Jordan's stability remains exemplary and ACT's role only more crucial to support the Jordanian people and their businesses. The restricted access by road to neighboring markets redirected cargo to ACT to be shipped by sea. Consequently, the full container exports witnessed an increase of close to %6 compared to 2015 and a staggering %45 increase compared to 2014.

Container Movements (TEU)

	2013	2014	2015	2016	2017
Total Throughput*	872,812	781,291	758,218	792,841	796,087
Full Export	77,343	86,940	111,241	118,912	125,767
Transit	92,094	51,850	19,546	9,282	6,281
Full Import	439,433	393,962	377,995	398,914	401,759

* Total throughput contains both full and empty containers, while export, transit and import performance represent full containers only

Most Sustainable Port Development Award:

In 2017, ACT received the Most Sustainable Port Development Award from the panel of judges of the Transport Arabia Excellence Awards.

Nominated finalist for Lloyd's List "HPH Environment" Award

For three years in a row, Lloyd's List has nominated ACT as finalist for the Middle East and Indian Subcontinent "Hutchinson Ports Holding (HPH) Environment" Award. ACT is recognised for promoting a conscious environmental friendly approach to its business operations.

Nominated finalist for Lloyd's List "Safety" Award:

For three years, Lloyd's List has nominated ACT as finalist for the Middle East and Indian Subcontinent "Safety" Award. ACT is recognised for its dedication to upholding the highest standards of safety.

Nominated finalist for Lloyd's List "Port Operator" Award:

For three years, Lloyd's List has nominated ACT as finalist for the Middle East and Indian Subcontinent "Port Operator" Award. ACT is recognised for its unconditional support to the export industry in critical times.

Workplace Safety and Health Award:

In 2016, ACT was once again recognised by the Jordanian Social Security Corporation for its achievement in exceeding all health and safety standards and benchmarks.

APM Terminals Global Safety Performance Award:

In 2016, ACT received the APM Terminals Global Safety Performance Award at APM Terminals' Global Leadership Conference in Rotterdam, in competition with the global APMT network of more than 72 port terminals.

Operational Efficiency:

In 2017, ACT continuous process improvement programme delivered positive results. Gross crane productivity has increased by %19 between 2013 and 2017. The truck turnaround time has improved by %71 since 2013. Even though ACT's operational cost intensity has increased operational cost intensity by %23.5 since 2015.

	2013	2014	2015	2016	2017	-5Year Trend
Total Throughput*	872,812	291 ,781	758,218	792,841	796,087	%9-
Gross Crane Productivity*	29.31	26.92	30.32	33.8	34.67	%18
Truck Turnaround Time (Hours)	1.96	0.89	0.86	0.63	0.56	%71-
Dwell Time for Full Import (Days) **	10	11.7	11.9	10.14	8.99	%10-
Operational Cost Intensity (JOD/Move)	90	122	149	125	114	%27

* The Gantry Crane Moves Per Hour (GMPH) for the terminal has been impacted over the years due to external influences. The reported number is the gross value prior to any adjustments for Force Majeure events, despite this, the performance of the terminal is still improving.

** We report a dwell time value, but it is not a measure of ACT performance. Rather it is an indicator as to the use of the terminal as a storage facility due to inefficient clearance processes and customer choice. Higher dwell times lead to higher utilisation of the terminal, reducing efficiency and limiting throughput capacity of the terminal.

Continuous Improvement : ACT is dedicated to increasing the effectiveness of its business operations, while at the same time reducing its negative environmental impact. These improvements range from simple changes in our day-to-day work approach to major shifts in focus and procedures across ACT .

Berth Plan Automation:

Berth planning is the process of determining the berthing position and time of each vessel and the deployment of QCs to the vessel to maximize the service level for container vessels. In 2017, ACT converted the working mechanism from manual to automatic. The berth plan automation project will reduce the time and effort needed to prepare the berth plan manually, ensure availability of information at any time, increase information accuracy, and speed up the handover will process between shifts.

Process between shifts.

ACT's operations are versatile with many systems and processes in place to plan, schedule and manage, along with other considerations to increase throughput and exceed customer service targets. Bringing clear visibility on ACT's day-to-day operations, by building comparisons of real-time events with historic performance is an essential step for ACT to improve its decision-making process. In 2017, ACT created a business intelligence dashboard to provide decision makers immediate visibility on critical data to analyses terminal performance. This dashboard combined with the set KPIs helps achieve continuous improvement, obtain quality and timely reports, and make strategic decisions faster.

Business Intelligence (BI) Reporting Analytics :

ACT's operations are versatile with many systems and processes in place to plan, schedule and manage, along with other considerations to increase throughput and

exceed customer service targets. Bringing clear visibility on ACT's day-to-day operations, by building comparisons of real-time events with historic performance is an essential step for ACT to improve its decision-making process. In 2017, ACT created a business intelligence dashboard to provide decision makers immediate visibility on critical data to analyses terminal performance. This dashboard combined with the set KPIs helps achieve continuous improvement, obtain quality and timely reports, and make strategic decisions faster.

Improving Equipment Reporting Process :

In 2017, ACT implemented a new Failure Reporting, Analysis and Corrective Action system. The new system helps collect, record and analyses equipment failures. The resulting analysis identifies corrective actions that should be implemented and verified to prevent such failures from recurring. Also, ACT designed and implemented a new program to monitor oil in equipment gears. Improved reporting helps ACT predict and prevent major damage to machinery through regular maintenance.

Improving Road Access

ACT continuously seeks to implement measures to enhance the fluidity of movement and reduce the implement of truck traffic. This in turn will also minimize the risk of the accidents and delayed work flow.

Implementing New GIZMO incident Reporting Tool

In 2017, ACT successfully implemented APMT's new incident reporting tool 'GIZMO' to replace the CMO. The new system promotes a positive safety culture through its easy to use features and its stepped process starting from reporting to filling corrective actions . the new system encourages incidents reporting in a 'no-blame' context and focuses on taking actions. Looking forward, ACT plans to align GIZMO to ACT's updated risk matrix to classify incidents and determine their severity level. The risk matrix is yet to be launched in 2018/2019.

Environmental Compliance : ACT continues to be the only port running on the ISO 14001:2015-certified Environmental Management System (EMS) in Jordan and the first terminal in the Middle East, and only second outside of Europe to operate under the coveted Eco Port label with an effective Port Environmental Review System. In 2017, ACT received the ASEZA certification of environmental compliance with zero violations.

Oil Spills Prevention ACT implements strict measures to prevent oil spills and has contingency plans for handling spillages if they occur. The company continuously trains its employees, monitors the integrity of its facility, and strives to reduce the risk of oil spills and improve its ability to respond to oil spills. As part of ACT's

environmental drill plan, leakage prevention, control and response procedures are required to be implemented and regularly tested for all the terminal's facilities and operations. Throughout the year, ACT conducted 6 scheduled drills to test ACT's response plan, the available response equipment, and the capabilities of ACT's response team. In 2017, the total number and volume of spills dropped by %21 and %64, respectively.

Trade and Transport Facilitation (TTF) Programme

Trade and Transport Facilitation (TTF) is a program that has been adopted by the Jordanian government to bring together all concerned stakeholders in the private and public sectors to address the problems and obstacles encountered by the trade and transport sectors. It aims to improve exporters' competitiveness and attract foreign investments to grow the economy . And to contribute to Jordan's integration into the global economy by reducing trade-related costs and developing a multi-modal transport sector that maximizes efficiency and is, at the same time, environmentally sustainable .

Full implementation of TTF will bring about more efficient movement across borders and expanded trade through regional cooperation, both by clarifying the rules and regulations, trading procedures and protocols, that make up the country's trade policy to potential trading partners and by consolidating them from the various documents and departments into one procedure from one location. Further, TTF will mean greater harmonization of trade agreements, information flows, and documentation related to the trade and transport sectors, as well as greater improvement of its infrastructure, building capacity in it, and augmenting fruitful exchange and cooperation among all stakeholders .

As a means of supporting the Jordanian government's policy on economic development and growth, the European Union (EU) has provided the TTF program with a grant, in which an amount have been devoted to providing Technical Assistance (TA) to the Ministry of Transport (MoT) to address issues and needs associated with restructuring and strengthening the Ministry, to assist in formulating a national strategy for the transport sector, to enhance capacity building and establish an Executive Secretariat to support two committees that were created to implement the TTF .

Trade and Transport Facilitation in Jordan stands to improve the transit cargo process and support multi-modal transport capabilities. A regional mechanism to harmonize and plan trade logistics development is being established. Harmonization of infrastructure and regulations on international road freight transport, e.g. harmonization of axle road limits and vehicle dimensions, is also being pursued.

TTF Unit

- Preparing reports concerning Transport & Trade (Transit flow, borders procurers)
- Preparing studies regarding reducing transport and logistics services cost .
- Discussing with stockholders from Public and Private sectors issues related to improving facilitating Transport and Trade (Transit).
- Studying the possibility of opening new trade markets and transport Routes Especially to Africa and Russia.
- Analyzing Jordan's rank in both : the Logistic performance Index and the Competitiveness report