

**Ministry of Planning  
Ministry of National Economy  
Palestinian National Authority (PNA)**

**Feasibility Study  
on  
Agro-industrial Park Development  
in  
the Jordan River Rift Valley (Phase I)**

**Summary**

**September 2007**

**JAPAN INTERNATIONAL COOPERATION AGENCY**

**KRI INTERNATIONAL CORP.**

**NIPPON KOEI CO., LTD.**

**Exchange Rate**

**USD 1= NIS 4.32= JPY 119**

**as of August 2007**

*(unless otherwise specified)*

## PREFACE

In response to a request from the Palestinian National Authority, the Government of Japan decided to conduct a feasibility study on Agro-industrial Park Development in the Jordan River Rift Valley in two phases and entrusted the study to the Japan International Cooperation Agency (JICA). This is the final report of the Phase I.

JICA dispatched a study team to Palestine over the period from March 2007 to August 2007. The Study team consists of KRI International Corp. and Nippon Koei Co., Ltd., headed by Mr. TADA Munenori as Team Leader.

The Study team held a series of discussions with the officials concerned of the Palestinian National Authority and other parties concerned, and conducted field surveys at the study area. Upon returning to Japan, the Study team made further studies and compiled the final results in this report.

It is hoped that this report will contribute to the promotion of the Agro-industrial Park and to enhancement of friendly relationship between Palestine and Japan.

I wish to express my sincere appreciation to the officials concerned of the Palestinian National Authority and all the people involved in the course of the Study for their close cooperation extended to the Study.

September 2007

IZAWA Tadashi,  
Deputy Vice President  
Japan International Cooperation Agency

September 2007

Mr. IZAWA Tadashi  
Deputy Vice President  
Japan International Cooperation Agency (JICA)

### **LETTER OF TRANSMITTAL**

Dear Sir,

We are pleased to submit to you the Final Report for “The Feasibility Study on Agro-industrial Park Development in the Jordan River Rift Valley (Phase I)”.

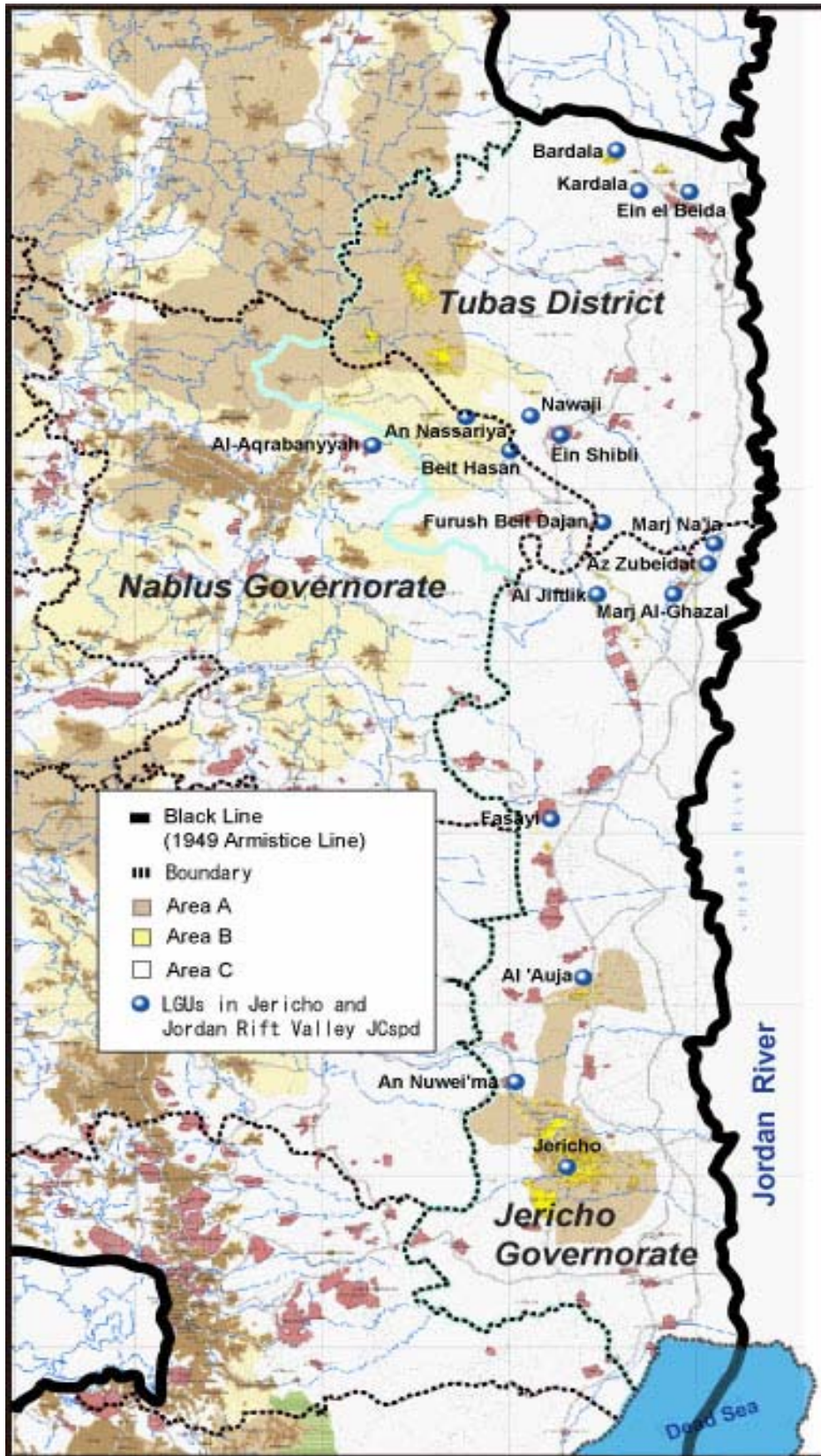
This Study has been conducted by the Study Team organized by KRI International Corp. and Nippon Koei Co., Ltd during the period from March 2007 to August 2007, in collaboration with counterpart experts assigned by the Ministry of National Economy and Ministry of Planning of Palestine.

The objectives of the Study are i) to select potential industries/products in Palestine, ii) to identify issues on investment environment, and iii) to study concept of the Agro-industrial Park Development, as a pre-feasibility level study. There were a series of discussions and exchange of views with the officials concerned of Palestinian National Authority and the private sector people of the Palestine and its surrounding countries in the course of the Study, in order to define the expected roles of the Park.

The Study Team wishes to express its heartfelt gratitude for the valuable assistance and cooperation received from the counterpart experts and public and private institutions during the execution of the field study in Palestine. The Final Report is the fruit of cooperation and collaboration of all the personnel that joined the Study.

Very truly yours,

TADA Munenori  
Study Team Leader



Note: JICA Study Team arranged the map based on that originally prepared by OCHA

## Study Area Map

**FEASIBILITY STUDY  
ON  
AGRO-INDUSTRIAL PARK DEVELOPMENT  
IN  
THE JORDAN RIVER RIFT VALLEY  
(PHASE I)**

**Summary**

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## SUMMARY

### ***Introduction***

The “Feasibility Study on Agro-industrial Park Development in the Jordan River Rift Valley” (hereinafter referred to as “*the Study*”) commenced with the initiative of the “*Corridor for Peace and Prosperity*” proposed by the Japanese Government on the occasion of the visit of then Prime Minister Koizumi to Palestine in July 2006. Under the initiative, a governmental consultation platform called the Four-Party Consultative Unit was set up involving Palestine, Israel, Jordan and Japan for the purpose of promoting confidence-building through economic cooperation.

The objective of this Pre-feasibility Study (Phase I) is to formulate an industrial development strategy and to conduct a pre-feasibility level study for industrial park development. The former focuses on priority industries and improvements in the investment environment while the latter addresses a set of essential factors for agro-industrial park development, such as development concept, functions, land use, on-site and off-site infrastructure and so forth.

The overall study consists of two phases, this Pre-Feasibility Study (Phase I) and the subsequent Feasibility Study (Phase II). This Final Report is prepared for Phase I to present the results of the study activities since the end of March 2007. In the course of the Study, the First Technical Level Meeting of the Four-Party Consultative Unit was held on 27 June 2007 for the purpose of discussing regional cooperation issues, where Palestine and Israel expressed different views on the site selection, especially relating to the issue of areas of jurisdiction<sup>1</sup>. The site selection was still under negotiation between the two parties as of July 2007.



**1st Technical Level Meeting of the Four-Party  
Consultative Meeting  
by the Dead Sea, 27<sup>th</sup> June 2007**

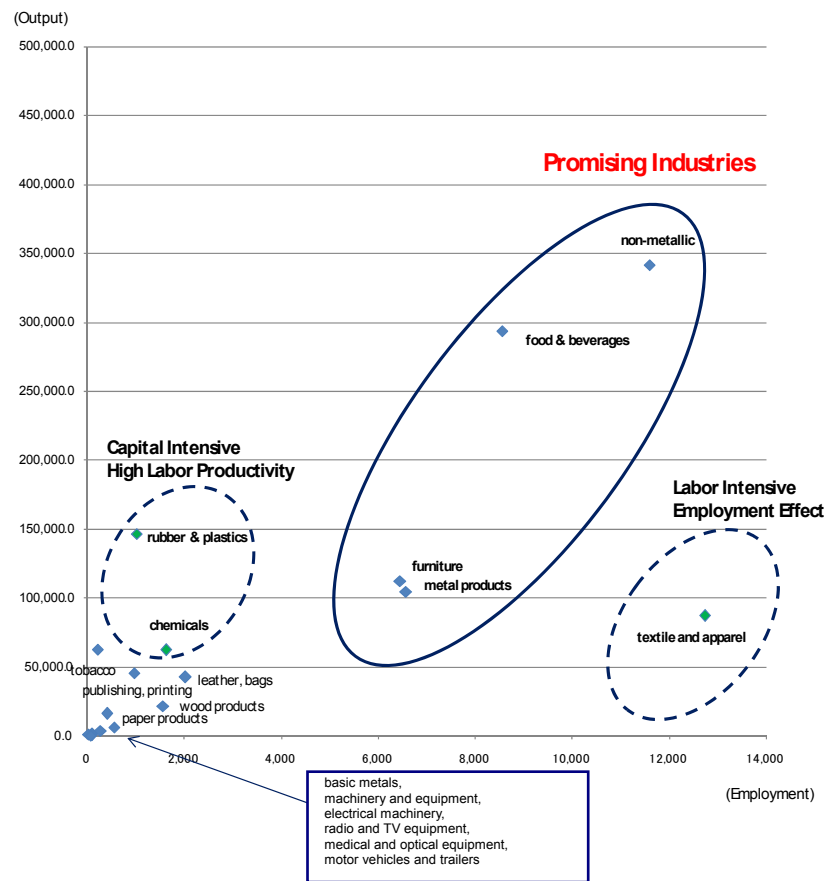
### ***Potential Industries in Palestine***

The primary objective of the industrial sector study is identification of potential industries which would contribute to the development of Palestinian industry by means of export promotion. Export promotion is an appropriate means in Palestine since the local market is too small, while diversification of export destinations has been progressing. In this regard, the Study focuses on potential export-oriented industries. In addition, due to the prolonged stagnation of the economy, unemployment has been a serious issue to be tackled in an effective way. Therefore, it is also expected that the export promotion will help to substantially alleviate the unemployment issue.

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<sup>1</sup> There are three types of area, i.e. Area A, B and C, under the area jurisdiction. Area A is “Full Palestinian civil and military control”. Area B is “Full Palestinian civil control and joint Israeli-Palestinian military control”. Area C is “Full Israeli civil and military control”. (Ref. UN Office for the Coordination of Humanitarian Affairs: OCHA)

After a series of data and information analyses, the Study tentatively identified seven (7) sub-sectors of the manufacturing sector as potential industries. They are classified into categories as follows, in accordance with their economic characteristics: i) promising industries, ii) labor intensive industries, and iii) capital intensive industries.



**Figure 1 Criteria to Identify Potential Industries**

Promising industries are characterized by high potential both in industrial output as well as in employment effect. Food processing, stone and marble, metal and furniture belong to the category of promising industry. The stone and marble industry is highly promising in terms of industrial output and employment creation, followed by the food processing industry. In addition, diversification of external markets has been achieved so far in food processing, stone and marble, and metal industries. While the furniture industry is heavily dependent on the Israeli market, a growth of export to Jordan has been observed in the recent two years.

Labor intensive industries contribute significantly to employment creation, though their economic output is relatively small. Textile and apparel is a typical labor intensive industry and the Palestinian textile and apparel industry has been largely dependent on the Israeli market. Most of the firms undertake subletting work from Israeli companies. Despite the employment effect, considering the higher level of wages in Palestine, this industry is losing its comparative strength.



Capital intensive industries produce large economic output, but make a limited contribution to employment. Rubber/plastics and pharmaceutical industries are typically capital intensive industries. The potential for growth of these industries is dynamic in terms of export performance and exploration of new markets overseas. The pharmaceutical industry has been successful in exporting generic drugs to the countries in North Africa, CIS (former Soviet Union), etc. On the other hand, despite the dependence on the Israeli economy, a high level of technology and availability of skilled labor sustains the rubber and plastic industry.

Agriculture shall be strategically prioritized in the light of total Gross Regional Domestic Product (GRDP) and its potential for employment creation, in addition to the seven (7) manufacturing sub-sectors. Although Palestine has relatively abundant production of fresh fruit, vegetables and field crops, its export of agricultural primary products has been negligible. Despite the limited export volume, high value-added (high market value) products, such as strawberries and cut flowers from Gaza and cherry tomatoes and sweet peppers from the West Bank are potential commodities to be promoted for export to the EU and Gulf countries.

### ***Investment Environment***

Before the second *Intifada* in September 2000, foreign direct investment was active enough and triggered off the increase in domestic direct investment during 1995-1999. Overseas Palestinians represented the biggest share of investment. After the second *Intifada*, the degradation in the investment environment seriously affected the flow of foreign direct investment. Nevertheless, domestic direct investment remains positive in the fields of industry, tourism and services. In the year 2005, US\$400 million were invested in industrial projects like cement, construction, food, paper and packaging industries.

The Study has identified several issues and challenges for investment promotion based on the investment survey (106 samples) and the workshop where potential investors and stakeholders exchanged their views. As a result, issues and challenges are broadly classified into four (4) categories. They are i) legal issues, ii) financial sector, iii) impediments to investment promotion, and iv) free zone. These issues and challenges for the investment environment could be summarized as follows:



**Workshop on Investment Environment  
at Amman, 26<sup>th</sup> July 2007**

#### Legal issues

Despite the substantial effort to create a sound legislative framework, development and revision of legislation are required with respect to laws applicable to private sectors such as Civil Law, Commercial Law, Competition Law and the Foreign Trade Act. In addition, further text improvement is necessary since existing legislation suffers from overlap without referring to the cancellation of previous laws or provisions.

Financial sector

Banks are characterized by high liquidity and provide a number of financial products ranging from deposits to trade finance and mortgages. In spite of the relatively developed banking sector, most enterprises do not have bank credit, primarily because of high interest rates and high collateral requirements. In addition, free movement of capital and profits in areas such as full capital repatriation, unrestricted movement of foreign exchange, and free transfers of foreign currency, is also important.

Impediments to investment promotion

Political instability and movement restrictions have been highlighted as the major obstacles in the investment survey of the Study. About 90% of the survey samples (106) report political instability as the biggest obstacle, while about 70% of them report movement restrictions as the second biggest obstacle. Both impediments give rise to high cost in terms of risk and transaction cost.

Free zone

Free trade agreements with various countries make Palestine an attractive investment destination, in particular with its duty free market access. For encouraging local and foreign investment, having a free zone is an ideal, which guarantees the facilitation of transport to neighboring and international markets.

***Industrial Development Strategy***

Palestine needs a set of strategies for export promotion and investment promotion towards industrial development. Export promotion requires a practical market strategy for potential products and the enhancement of quality and product development on the supply side. Investment is a driving force of industrial development, so improvements in the investment environment will be vital for growth of potential industries. The Study proposes the industrial development strategy and expected missions of the agro-industrial park as follows.

Priority industries promotion

Palestine needs diversification of external market. Priority industries implicate those having export performance or potential in Jordan, the Gulf countries and the EU. The export strategy and promotion initiatives for the priority industries are summarized below.

**Table 1 Export Strategy and Promotion Initiatives for Priority Industries**

<b>Priority industries</b>	<b>Export strategy</b>	<b>Promotion Initiatives</b>
1) Agriculture	High price or value-added products	<ul style="list-style-type: none"> <li>- EurepGap certificate</li> <li>- Distribution &amp; logistics Center (sorting/packaging)</li> <li>- Association for export promotion</li> <li>- Agricultural Standard for primary commodities</li> </ul>

2) Processed foods	<ul style="list-style-type: none"> <li>- High quality of products (e.g. extra virgin olive oil)</li> <li>- <i>Halal</i> products matching Arab food requirements</li> <li>- Organic foods aiming at potential markets of healthy foods</li> </ul>	<ul style="list-style-type: none"> <li>- Public support for experimental laboratories for <i>Halal</i> or organic foods</li> <li>- Product development in quality and packaging</li> </ul>
3) Stone & marble	Products with unique and custom-made design	<ul style="list-style-type: none"> <li>- Vocational training for stone processing</li> <li>- Incentives to keep skilled labor</li> </ul>
4) Pharmaceutical	Nutrient supplements	- A joint venture company for R&D
5) Metal Rubber/Plastics	Strengthening vertical linkages with Jordanian/GCC companies	- Certification of PS mark to enter Arab market as quality assured products

Source: JICA Study Team

The export strategies attach importance to high value-added commodities, new product segments and strengthening of linkages with foreign companies. Existing export products are generally less competitive in price because of the dependence on imported raw materials and relatively high wages and transportation costs. While new product segments and high value-added commodities are not generally competitive in price, these products are required to meet a high standard of quality and to adopt certain production methods as well as production technology.

Therefore, the promotion strategies emphasize quality standard, laboratory/pilot farm for product development, technical assistance and private sector cooperation for R&D. Establishment of an Agricultural Standard and improvement of Palestine Standards will be an indispensable step for exploring new export markets. Laboratory facilities are to be increasingly required for product development, which would be suitably supported by donors' technical assistance.

#### Investment promotion

The existing laws offer favorable incentives to investors, and the banking sector is relatively well developed. Thus, improvement in the investment environment shall be carried out in two (2) areas. One is free movement of goods and people and the other is a comprehensive strategy for investment promotion consisting of investment guarantee, possibility of a free zone and establishment of an "*Investment Promotion Unit*".

A practical approach to lessen movement restrictions would be a special agreement on free movement of goods applicable to industrial estates. A special agreement on free movement of goods implies relaxation of passage control on cargo at internal and international crossing points. To do so, a third party's involvement in security services would be essential in order to clear security concerns for Israel.

The high political risk in Palestine requires investment guarantees with sufficient coverage for foreign investors. There would also need to be an investment guarantee for domestic investors against political risk. Introduction of a free zone needs an agreement on various issues such as customs duties between Palestine and Israel.

To encourage foreign investors to invest in Palestine, the current promotion activities should be strengthened. Establishment of an “*Investment Promotion Unit*” attached to the Ministry of National Economy would be taken into consideration.

Missions of the agro-industrial park

The Study proposes that the agro-industrial park would have the following missions for the purpose of the promotion of export as well as investment in Palestine.

- 1) The park primarily aims at the promotion of priority industries that develop/produce new and high value-added products for regional and global markets. In addition, the park is expected to provide trade and logistics services functions so as to encourage private sector business opportunities abroad.
- 2) The park will be a flagship project to attract investors by providing a new investment environment. In this regard, periodical monitoring and feed-back will be necessary for the improvement of the park’s operation and the creation of a preferable investment environment.
- 3) The park will be designed to trigger facilitation of regional cooperation among neighboring countries at different stages, such as business cooperation, product development, human resources development and free movement of goods and people.

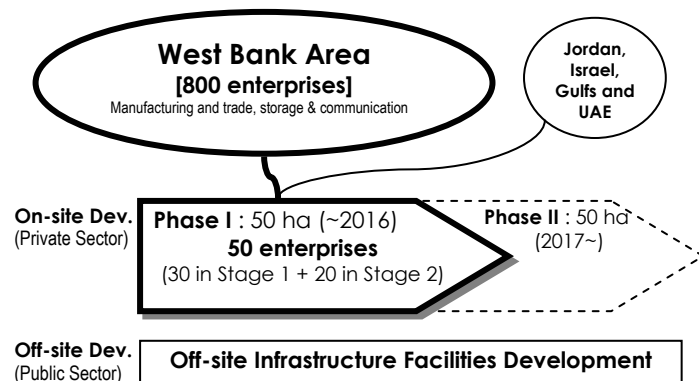
**Industrial Park Development**

Assumption

The agro-industrial park is one of the major elements of the Japanese initiative of a “*Corridor for Peace and Prosperity*”. The basic criteria for the agro-industrial park are given below.

- Location : Southern or eastern area of Jericho City
- Land Area : 50 ha for short to medium term, and another 50 ha for long term development
- No conflict in present land use (such as permanent land use and/or valuable buildings)
- Easy access to major arterial road
- Basic infrastructure attainable/ securable

Based on the result of the *Investment Demand Survey*, it is estimated that about 50 enterprises from inside/outside of the West Bank Area would invest in the Park, and they would be accommodated in an area of 50 ha (gross) in Phase I of the Park development.

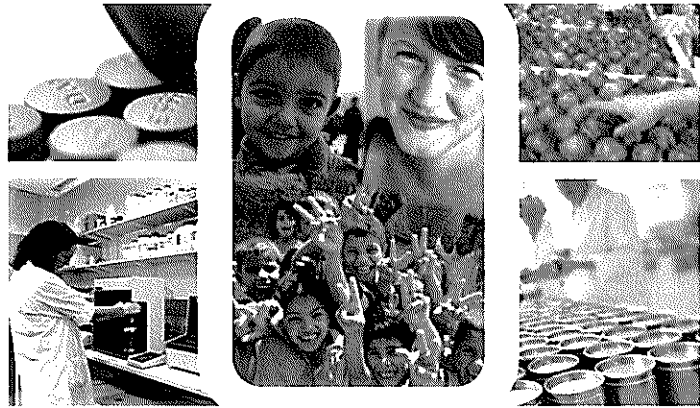


**Figure 1 Principles for Scale, Stage and Actors of Development**

**Overall Concept**

The overall concept of the agro-industrial park is “Human Well-being”, and thus the park will deal in fresh agricultural produce, agro-industries, food processing and pharmaceutical industries.

The agro-industry park will be a thematic industrial park, where people have a variety of productive activities related to human well-being, including production and shipping, research and development, business and marketing, and life and leisure.

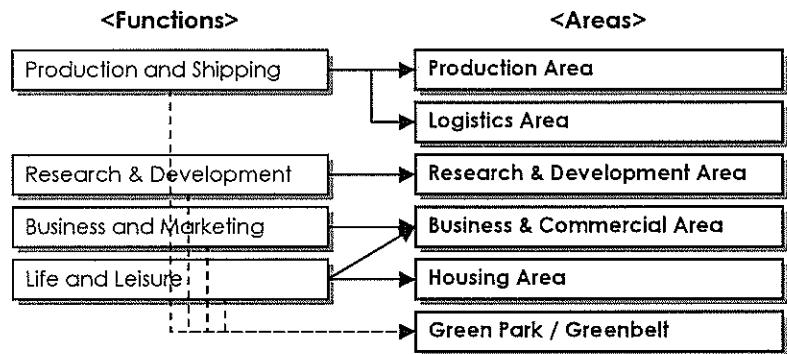


**A thematic Industrial Park, where people have a variety of productive activities related to “Human Well-Being”**

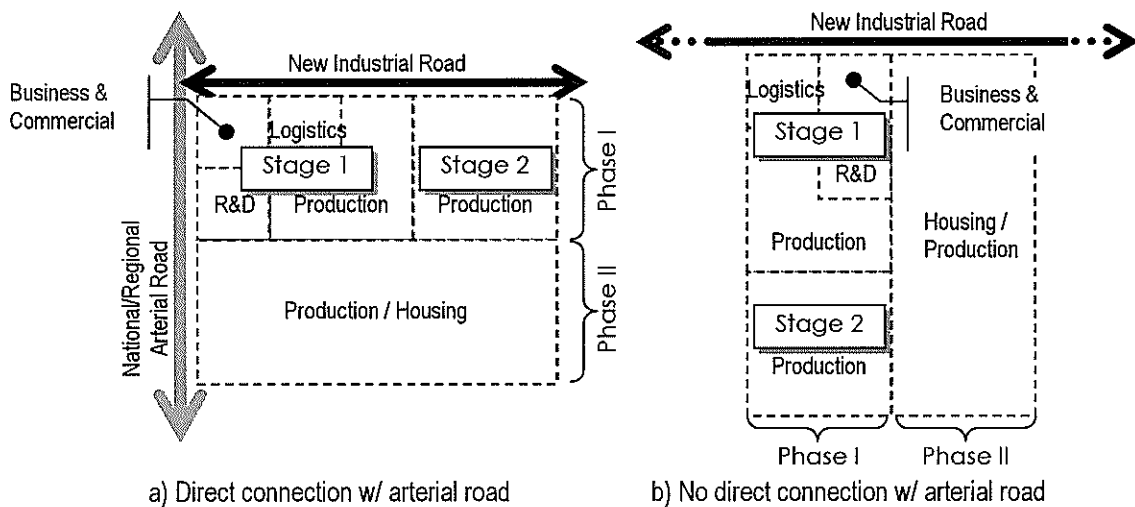
**Figure 2 A Visual Image of Overall Concept**

While a detail land use plan (site plan) needs to be formulated after the site is officially selected, a preliminary plan has been formulated as a reference.

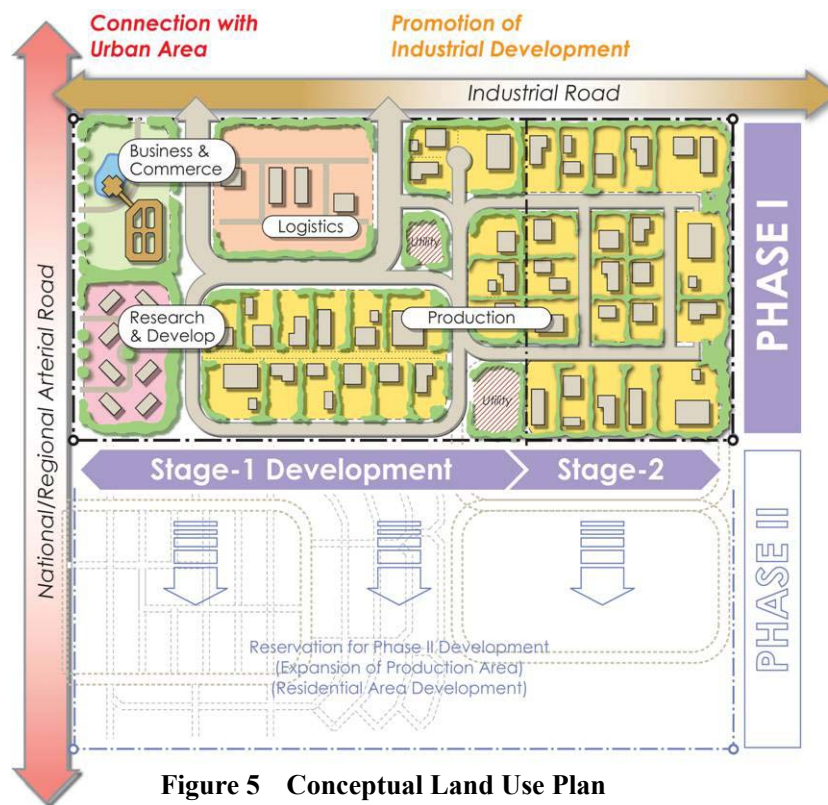
The agro-industrial park shall have a parallel industrial road for exclusive use that connects to the existing national/regional arterial road, so that the additional traffic would not affect the existing local road network.



**Figure 3 Four Functions and Six Areas of the Park**



**Figure 4 Area Layout Patterns**



**Figure 5 Conceptual Land Use Plan**  
[direct connection with arterial road]

On-site and Off-site Infrastructure

Engineering requirements have been preliminarily considered for the on-site and off-site infrastructure facilities at this stage, assuming the site shall be in the southern or eastern area of Jericho City.

**Table 2 Engineering Requirements for On-site and Off-site Infrastructure**

Infra. Item	On-site Infrastructure	Off-site Infrastructure
Road	✓ Two lanes for vehicular traffic with parking lanes on both sides, sidewalks, drains and greenbelts are proposed -20 m	✓ New road construction plan in the southern part of Jericho city. ✓ Access road from/to Route 90, Route 1 and Allenby Bridge need to be considered.
Water Supply	✓ Water demand of 1,200 m <sup>3</sup> /day (0.45 MCM/yr.) could not be covered by the water from the Ein-El Sultan spring.	✓ Possibility to secure water from another water source (e.g. <i>Wadi Qilt</i> ).
Power Supply	✓ Approximately 10 MVA of power is required for 50 firms/factories.	✓ The present capacity of 25 MVA plus additional 20 MVA from Jordan (JDECO).
Waste Water	✓ Individual treatment equipment shall be installed by tenants themselves, so that the effluent quality could meet the Palestinian Standard for discharge to public sewers.	✓ Jericho Municipality has a plan to develop the sewage network, which was proposed to the Japanese government as a grant-aid-project in 2005.
Solid Waste	✓ Needs coordination with the Municipality.	✓ Jericho dumping site has been improved since the middle of January 2007, with the technical assistance provided by JICA.
Storm Water Drainage	✓ On-site retention pond is a probable countermeasure.	✓ Needs to pay attention to <i>Wadis</i> .

Expected Social Impacts

The expected social impacts of the agro-industrial park are predominantly positive. The generated new employment is expected to be 2,700 of direct employment and 4,000 of indirect. The average wage from the new employment (direct and indirect) will be US\$37 million annually, which would contribute to the local economy substantially. The total export of the park is estimated to be US\$110 – 130 million annually, or 15 to 20% of the total PNA export, which would contribute to the enhancement of the export capacity of PNA.

Implementation Schedule

After this Phase I of the Feasibility Study, the 2<sup>nd</sup> Four-Party Consultative Meeting is scheduled to be held in October 2007, where the land selection issue is expected to be concluded so that Phase II, a full-scale feasibility study, could follow promptly. The Phase II Study would cover more detailed engineering aspects after Phase I. Environmental Impact Assessment (EIA) shall also be conducted by the responsible authorities with basic design of the Park.

After a series of further studies, the first phase of the entire Park would be developed physically in a staged implementation after 2011, of which the first opening (30 ha) is scheduled to be by 2013 and the second opening by 2016.

For the smooth materialization of the Park, the parties and authorities concerned are requested to make prompt and appropriate decisions and coordinate with one another.

PPP for Implementation and O&M

In order for the agro-industrial park to be attractive, operational and sustainable, involvement of the private sector for the development and operation would be essential.

Basically the on-site development will be entrusted to a private sector developer, while the off-site infrastructure will be done by the public sector.

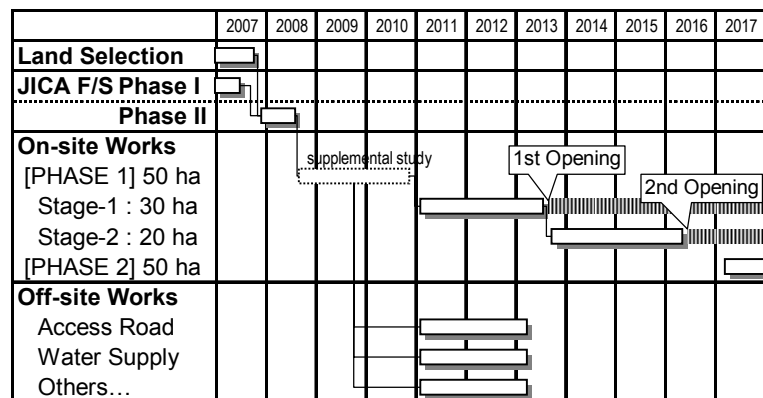


Figure 6 Project Implementation Schedule (tentative)

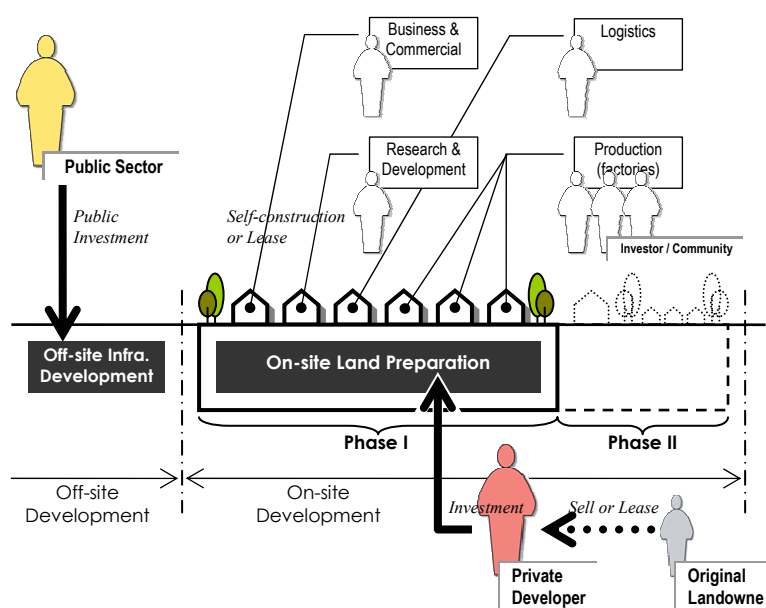


Figure 7 Schematic Image of PPP for the Park (Phase I)

As the political situation today is very complex and unpredictable, strong supportive measures from the public sector and international community will be essential.

### ***Further Issues***

Further issues will need to be addressed as necessary measures or actions for the subsequent step, the Feasibility Study (Phase II). Strengthening of the linkage between agro-industry and agriculture is also relevant to the agro-industrial park development. The Park will primarily focus on high value-added or new products using local resources. Market study and technical assistance for small farmers will be needed to fulfil the missions of the agro-industrial park. PNA would need to set up a new organizational framework to primarily negotiate regional cooperation issues with Israel.

### ***Conclusions and Recommendations***

The Study (Phase I) concludes that the agro-industrial park development will be the significant project to fulfill its missions in line with the industrial development strategy and the Japanese initiative of a “*Corridor for Peace and Prosperity*”. Since regional cooperation issues definitely affect feasibility of the project in terms of investment demand and development cost, improvements in dealing with the issues will be vital for successful implementation of the agro-industrial park. Prior to the subsequent stage of the Study (Phase II), improvements in the following issues need to be discussed in the next Four-Party Consultative Meeting.

#### **Improvements in movement restrictions**

It is recommended that both Palestine and Israel resume discussion about a special agreement on free movement of goods and people applicable to an industrial park, which can be traced back to the ministerial agreement made in 1999 between the two parties. A third party’s involvement in security services at the industrial park would soften Israeli security concerns and be vital to realize such a special agreement. An agreement should include relaxation of passage control on goods and people at commercial crossing points between the West Bank and Israel, which would propose delivery of goods without transshipment.

Transportation of goods at the Allenby Bridge (international crossing point) has been the matter of security<sup>2</sup> between Israel and Jordan. Cargo passage is currently controlled under the back-to-back system. High transportation costs are considered to be attributable primarily to the system. Therefore, an alternative method, such as the door-to-door system, shall be taken into account instead of the back-to-back system.

#### **Site selection and access road**

Site selection and an access road are the urgent matters necessary to be agreed between Palestine and Israel. Palestine, for the time being, has proposed an area adjacent to the iron factory as the development site, which is located in the southern part of Jericho City. This proposed site comprises Areas A and C, and Palestine

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<sup>2</sup> There were several bridges on the Jordan River between Israel and Jordan, which had been in operation up until several years ago, but at present only Allenby Bridge (on the Israeli-Jordanian border to the east of Jericho) and Sheikh Hussein Bridge (on the Israeli-Jordanian border to the east of Beit She’an) are in service. The former bridge allows Palestinian to pass through during the daytime, while it is closed at night time for security reasons. On the other hand, the latter bridge is open for 24 hours a day, but only for non-Palestinian.



needs Israeli agreement on Area C where the industrial park could be further expanded. An access road connecting to Route 90 could be the most cost-effective way<sup>3</sup>, but it would be a matter of concern to the Israeli security control. The access-road issue also needs to be discussed, together with improvements in movement restrictions.

The investment demand survey identified impediments to investment promotion. While the Four-Party Consultative Meeting is directed to improving the investment environment (improvement of ease of movement and establishment of a free-zone), the following actions will be necessary to sustain feasibility of the agro-industrial park project.

### **Investment Promotion**

It is recommended that PNA create an “*Investment Promotion Unit*” attached to a minister of the Ministry of National Economy. The Unit will provide investors with a set of necessary information including land, financial incentives, local investor as a partner, legal consultation and so on. It is also recommended that the Feasibility Study (Phase II) includes investment promotion as part of its scope of work, which assists PNA in establishment of the Unit and appointment of competent staff from the relevant stakeholders like MoNE, PIPA, PIEFZA and the private sector. Preliminary investment promotion activity shall be undertaken in the Phase II Study in cooperation with the Unit.

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<sup>3</sup> Suppose a land in the southern or eastern part in the suburbs of Jericho City is selected for the Project site, a new access road directly connecting the land to Route 90, which runs to north and south along the Jordan River in the east of Jericho City, would be the shortest path.