A Joint Virtual Advanced Technology Incubator - A New Pattern of Israeli-Palestinian Economic Cooperation

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A Joint Virtual Advanced Technology Incubator - A New Pattern of Israeli-Palestinian Economic Cooperation*

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Abstract

This article proposes a new and unique framework for the promotion of cooperation between Israel and the Palestinian Authority in the fields of innovation and advanced technology development. The goal is to strengthen the Palestinian Authority’s economic basic structure, using the experience and know-how gained by Israel in these fields. We consider the development of a new project: a Palestine-Israel Virtual Incubator (PIVI). This project suggests a new Israeli-Palestinian cooperation pattern, in sectors and types of economic activity that are not based mostly on unskilled workers but are based instead on relatively advanced technology, including innovation, upgrading of old technologies, and high-tech activities, using the skilled workforce that already exists or is in the process of being formed in the Palestinian Authority. This project may provide a long-term catalyst for a new type of economic and scientific cooperation between Israel and Palestine, involving the US and other countries. The basic concept in our proposal is that the virtual incubator will allow high-tech and innovative firms to benefit from the expertise and professional networks of the different existing incubators, thus increasing the array of services available and exposing the companies to greater business opportunities.

KEYWORDS: cooperation, Israel Palestine collaboration, advanced technology, innovation, virtual incubators, networks, regional development, peace

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INTRODUCTION

The purpose of this article is to propose a framework for the promotion of cooperation between Israel and the Palestinian Authority (PA) in the fields of innovation and advanced technology development. The goal is to strengthen the PA’s basic economic structure, using the experience and know-how gained by Israel in these fields. The broad underlying assumption is that economic cooperation and the diminution of poverty are efficient instruments for the alleviation of conflicts and the reduction of terrorism (Bar-El and Schwartz, 2003; Isard, 2004; Isard and An, 2004; Isard and Hara, 2002).

Over the last two decades the importance of entrepreneurship, innovation, and advanced technology activities (including high-tech projects as well as technology development in more traditional sectors) to sustainable development growth, job creation, and social cohesion has been recognized by most Western economies. Israel's economy was adapted to this new era and experienced rapid growth in the high-tech sector, particularly in areas marked by high levels of entrepreneurship and innovation. In contrast, the PA has not managed to join in these economic trends, despite the increase in the share of educated labor. The gross secondary school enrollment ratio in the PA has reached more than 90% in the last few years, and is much higher than the ratio in other Middle Eastern or North African countries. According to the Palestinian Bureau of Statistics (website, 2008), the number of students in the PA has increased by about 50% in the past five years. Still, the unemployment rate of the Palestinian labor force with higher education (13 years or more) has steadily increased, reaching about 20% (in 2002). The following table shows the huge gaps between the Israeli and the Palestinian economy, based on data for 2006 (some relate to 2003) from the Israeli and the Palestinian Central Bureaus of Statistics. (Israel Central Bureau of Statistics, 2008; Palestinian Authority, Central Bureau of Statistics website, 2008)

<table>
<thead>
<tr>
<th>ISRAEL</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP (billions of US$)</td>
<td>170.0</td>
</tr>
<tr>
<td>GDP per capita (PPP: purchasing power parity), US$</td>
<td>26,800</td>
</tr>
<tr>
<td>Employed in ICT – information and communication technology (thousands)</td>
<td>120</td>
</tr>
</tbody>
</table>

Although the data for the PA suffer from heavy fluctuations as a consequence of changing political conditions, the gaps between both parties are very clear. The economic structure in the PA remains primarily based on
traditional industry and services, with limited, if any, growth potential. For example, data of the Palestinian Bureau of Statistics (Palestinian Authority, Central Bureau of Statistics website, 2008; Palestinian National Authority, Ministry of Planning website, 2008) show a continuous decrease in the share of manufacturing, mining and quarrying in employment, reaching about 13% in the last few years. Palestinian workers employed in Israel have always been mostly unskilled, working mostly in construction or other traditional activities. While this may be an efficient response to the serious unemployment problems of the Palestinians, this is a response to an acute problem but not to the needs for a dynamic growth of the Palestinian economy (Bar-El and Sagi, 2005). Such a strategy also does not respond to the requirements of a growing population of skilled and academic workers, who are capable of leading innovative ventures which potentially have high multiplier effects and are an efficient engine for economic development in the future.

Cooperation in advanced technology projects that would provide more employment opportunities for the higher skilled Palestinian labor force does not necessarily imply a focus on pure high-tech sectors. Such sectors should certainly not be excluded from consideration, but at the given present situation of the Palestinian economy, cooperation could primarily focus on improving technology in more traditional sectors, such as textiles, food, or construction, and on innovation projects that do not necessarily require advanced technology processes. Such an approach has been tested and proved to be efficient in cases of less developed economies (Bar-El and Schwartz, 2006).

This article presents both a new approach and a unique strategy for cooperation between the Israeli and Palestinian economies that will enable the Palestinian economy to leverage existing Israeli experience and infrastructures in developing activities in the field of advanced technology, innovation and even high-tech activities.

A major obstacle for such collaboration may be the political tension and instability in the relations between Israelis and Palestinians. The benefits from such technological cooperation are generally based on long term prospects due to the basic characteristics of technology development, while the future of the political situation remains extremely unclear. Still, such cooperation may be extremely valuable, in both economic and non-economic terms, and justifies the involvement of public policy. Some examples are:

a. Short-term benefits for the Palestinian labor market may result from the increased availability of new employment opportunities for a skilled labor force, which previously had to accept employment in unskilled jobs, therefore decreasing their contribution to economic growth.

b. Short-term benefits for Israeli business due to the easier access to competitive labor force, replacing outsourcing to other countries.
c. Increasing the "cost of war" by creating long-term benefits from cooperation may contribute to the diminution of the probability of a violent conflict. Furthermore, cooperation may create an atmosphere of confidence between the parties, increasing chances for a peaceful solution to the Palestinian-Israeli conflict. These non-economic long term benefits justify the involvement of policy makers in providing economic incentives for such projects.

THE CURRENT SITUATION

Since the beginning of the 1990s Israel has experienced a rapid growth in knowledge-based economy activities, particularly in the high-tech sector, reaching a share of 9% of the total employment in 2004 as compared to 6% in 1995. This is a higher share than in most European countries. This process has been characterized by a rapid increase in the number of start-ups and growth in the venture capital (VC) investor industry; Israel has even been called "the world's most vital place for entrepreneurship" (Haour, 2005). The emergence of the venture investment industry in Israel is considered to be the most successful instance of diffusion of the Silicon Valley model of VC outside of North America (Avnimelech and Teubal, 2004a, b; Bresnahan et al., 2001; Carmel and de Fontenay, 2004). The portion of venture investments as a share of GNP in Israel is very high (OECD, 2003) – an average of 1.4% during 1999-2004, which is much higher than the US and EU countries' averages for this period (Avnimelech and Teubal, 2004a, b). Israel is currently the world leader in VC investment as a share of GDP (OECD, 2004), and has among the highest absolute levels of VC investment, with a sum of $1,620M (excluding private equity investments) in Israeli startups in 2006 (IVC on-line, 2007).

Advanced technology development has not focused solely on new high-tech sectors: technological progress and innovation has also been achieved in more traditional sectors such as agriculture (irrigation technology, new species), food processing, etc.

This is not the case in the PA. The PA’s economy has continued to concentrate primarily on basic services and agricultural activities, such as fishing, with their negligible high-tech and innovation activities. The industrial sector is based primarily on small establishments that produce agricultural products, shoes, and clothing. The Palestinian economy enjoys a considerable volume of remittances from expatriates and companies operating abroad. The PA also has a promising tourism sector (AFII - ANIMA).

This economic structure is not adequate for creating the engine for rapid growth, and does not address the needs and expectations of the growing number of graduates who are looking for jobs that can provide them with higher salaries and greater business opportunities.
To develop activities in the fields of innovation, entrepreneurship in traditional activities and/or high-tech in the PA, specific preconditions must be met. These include developed physical infrastructures, particularly in communications and information technologies, a developed scientific infrastructure, experienced human capital – particularly in technology and entrepreneurship – with business experience in global markets, existence of a developed VC industry, support services such as patent offices, specialized law firms, expert labs, and product testing facilities, and an infrastructure for a network connected to the global network. A significant portion of these conditions do not currently exist in the PA or exist at a very basic level, making the development of innovative activity and high-tech activity difficult.

One of the ways to overcome the lack of these conditions is to rely on the experience and know-how Israel has accumulated over the years in traditional activities as well as in innovative high-tech sectors, and to develop a network with Israeli industry in order to increase access to the financial, managerial, and networking resources that they lack.

THE ROLE OF THE NETWORK

The importance of the creation of an Israeli-Palestinian network for innovation activity relies on an existing general consensus, as described in previous studies (e.g., Harmaakorpi and Melkas, 2005; Kaufmann et al., 2003; Kaufmann and Schwartz, 2008; Sternberg, 2000), that networks are important to business success, particularly in innovative and high-tech firms. As a general rule, high-tech and innovation economies tend to develop a network of innovation, with ongoing interaction and communication among the various economic actors (Cooke and Schwartz, 2008; Schwartz, 2006; Schwartz and Bar-El, 2007). The main factors behind this process include knowledge accumulation and knowledge spillovers, relational capital, tacit knowledge, external learning and processes of knowledge acquisition, accessibility to resources, and reducing transaction costs, as described briefly in this section.

Knowledge accumulation and knowledge spillovers (Quah, 2002) refer to the positive externalities firms receive in term of knowledge from the environment in which they operate. Relational capital (Capello and Faggian, 2005) refers to the relationships established among firms, institutions, and people. Tacit knowledge (Howells, 2002; Maskell and Malmberg, 1999) refers to the knowledge that is not coded and is for the most part embedded into the nature of the economic activity. It is primarily transferred through close, ongoing contacts. When such embedded tacit knowledge is codified it can be more easily transferred, and therefore becomes “tradable”, leading to a decrease in the importance of ongoing formal or informal contact with other firms.
The process of knowledge acquisition refers to channels of knowledge acquisition to the firm from external sources. Zellner and Fornahl (2002) identify three kinds of knowledge acquisition channels: recruitment of personnel, external information networks of employees, and formal cooperation between the firm and other institutional agents. A study on mechanisms of external learning by Almeida et al. (2003) reveals that external learning actually increases with start-up size, but this may be offset by the lower motivation for informal learning. Smaller firms use more informal mechanisms for external learning, and therefore there is a higher expectation for them to locate closer to other, related firms. Moreover, network interaction is embedded in social settings, allowing the development of trust.

Innovation networks (Collinson and Gregson, 2003; Cooke, 2004a, b) provide firms with accessibility to external resources – financial and non-financial. This is particularly important for small and medium firms, as it helps them overcome some of the disadvantages of their limited size (Havnes and Senneseth, 2001), as well as for firms in high-tech sectors such as biotechnology (Powell et al., 1996; Prevezer, 2000; Saxenian, 1994). Networks enable firms to cross traditional boundaries, and to gain access to different types of assets (tangible and intangible) which do not involve costs typical for the use of those assets through standard market mechanisms (Cooke, et al., 2006).

Networks help reduce transaction costs and increase exposure to tacit as well as codified knowledge, thus affecting the knowledge-creation process (Nowak and Grantham, 2000). They enable better access to the research infrastructure and help the firm identify its boundaries, while classifying which assets should be integrated into the firm and which should be accessed through contractual agreements.

For firms that are attempting to enter a new market, networks are of crucial importance. They assist in accessing knowledge resources, locating strategic partners, gaining an understanding of the local business culture, identifying the target markets, and carrying out overseas activities such as fundraising, research and development, links to strategic partners, and marketing.

The contribution of networking is significant both to the Palestinians and to the Israelis, although the type and the level of the contribution may differ. For firms located in the PA, similar to firms located in other less developed economies where the infrastructure resources required to develop advanced technologies are still lacking, connecting to innovation networks can help overcome these limitations. The Palestinian economy may benefit from many of the advantages of networking, such as knowledge accumulation, accessibility to external financial and non-financial resources, and reduction of transaction costs. The Israeli economy will probably benefit less directly from such factors, but assuming that the networks are not limited to bilateral relations and include
additional partners, the benefits may be quite substantive. Direct involvement of third countries in such collaboration is generally attractive for the political agendas of governments that want to contribute to the solution of the Israeli-Palestinian conflict, and it will surely benefit all parties involved.

In addition, such a network may bring significant benefits to the Israeli economy through the opening of the access to the wide markets of the Arab world. Finally, Israel has an interest in providing technological support to less developed countries, mostly in the fields of agriculture and rural development. This has already been done in many countries in Asia, Africa, Latin America, as well as in some Middle East countries, including the PA. Expected benefits include non-economic rewards such as political support, but also economic gains through the development of business relationships (such as Israel's marketing of their advanced irrigation equipment).

THE POTENTIAL FOR PALESTINIAN-ISRAELI COOPERATION IN INNOVATION AND HIGH-TECH ACTIVITIES

In a recent exploratory study (Malul et al., 2007), we attempted to evaluate the potential for Palestinian-Israeli cooperation in high-tech activities. A sample of Israeli and Palestine practitioners, institutional representatives, and theoreticians, with or without previous experience in high-tech, were interviewed (38 Israelis and 38 Palestinians).

Questions addressed to the participants were:
What are the barriers or inhibiting factors to cooperation with Israel or with Palestine in the field of higher technology activities?
- What are the potential models for cooperation that may bring down such barriers?
- What benefits can be expected from such cooperation?
- What policy measures should be taken by the governments?

The main conclusions of this research were:
- A basis exists for the possibility of Palestinian-Israeli cooperation in high-tech activities.
- Inhibiting factors exist, mainly technical barriers, such as movement of people, movement of goods, difficulties in meeting together, different taxation laws, and technological disparities.
- The Palestinians are more sensitive to inhibiting factors, but show more openness to all models of cooperation (see also Bar-El, 2006; Malul and Shoham, 2006), with a preference to virtual models that are less dependent on the inhibiting factors, specifically technical barriers.
- There is high potential of benefits from the collaboration, as evaluated by the participants. Direct economic benefits (reducing unemployment and raising income) are important mostly to the Palestinians. Israelis also attach importance to economic benefits, such as easing access to new markets in the Arab world, but they attach equal importance to non-economic benefits such as increasing mutual respect or opening the way for dialogue. Most Israelis and Palestinians who had any contacts with the other side claim that such experiences made a positive contribution to the personal relations and to their perception of the other side. It may be too far-reaching to expect a full process of trust building as a consequence of such cooperation, especially in the case of a virtual incubator where personal contacts are almost nonexistent. Still, intensive joint activity based on mutual interests may be a first step towards trust-building, especially if meetings, conferences, or presentations are held in the same physical space. This may be facilitated by the participation of a partner from a third country in the joint project.

- Regarding public intervention, public support is important but not necessarily considered the major instrument for cooperation, especially not by high-tech people. Joint projects are viewed as a more efficient cooperation pattern. Universities can also play a major role in supporting cooperation patterns that are less sensitive to inhibiting factors.

    Given the evaluation of both sides that economic cooperation may bring substantive benefits, and given on the other hand the recognition of quite severe factors that may inhibit such cooperation, the question now is how to achieve maximum cooperation gains under the constraints of inhibiting factors. The factors which were considered as most critical, mainly by the Palestinians, are related to the technical barriers, specifically the difficulty in crossing borders and maintaining physical contacts. For the Palestinians such difficulties are the result of the existence of multiple check points, the need for permits to move from one place to another, etc. From the Israeli perspective, the difficulties are related to security fears stemming from violence towards Israeli based activities in the Palestinian territory, legal constraints to entry into certain areas, etc. Consequently, most Israeli businesses refrain from joint economic activities in Palestinian territories, and most Palestinian businesses are precluded from engaging in joint projects that would require their presence in Israeli territory. The option of permanent or almost permanent presence of Palestinian skilled workers in advanced technology projects in Israel does not exist, due to regulations that require all workers to commute back every day to their place of residence. Such an option would also harm the efforts of the Palestinian authorities to promote locally-based economic development.

    The concept of a virtual incubator is mainly intended to solve such problems and enable cooperation between the parties, with a minimal need for
physical direct interaction. In a regular incubator, in most cases firms are physically located in the same place, and together enjoy the services provided by the incubator and the benefits of interaction between them. A virtual incubator does not require a joint physical location; each firm may be located in its own country, and all incubator's services and interactions are provided through electronic communication. Both Israelis and Palestinians consider this approach as an appropriate response to most of the technical barriers.

TECHNOLOGICAL AND BUSINESS INCUBATORS

In order to support their high-tech activities and to promote innovation and entrepreneurship activities, many countries have implemented different versions of technological/business incubators (Avnimelech et al., 2007; Hughes et al., 2007; Roper, 1999). Their aim is to assist entrepreneurs with their first steps in the business world, taking into consideration the characteristics of the high-tech activities and the specific needs of the young innovative firms. Previous studies have demonstrated the success of these schemes and their contribution to start-ups (e.g., Shefer and Frenkel, 2003).

Business incubation, as defined by the National Business Incubator Association (NBIA) web site, is "a business support process that accelerates the successful development of start-up and fledgling companies by providing entrepreneurs with an array of targeted resources and services. These services are usually developed or orchestrated by incubator management and offered both in the business incubator and through its network of contacts. A business incubator’s main goal is to produce successful firms that will leave the program financially viable and freestanding"…."Critical to the definition of an incubator is the provision of management guidance, technical assistance and consulting tailored to young growing companies. Incubators usually also provide clients access to appropriate rental space and flexible leases, shared basic business services and equipment, technology support services and assistance in obtaining the financing necessary for company growth".

Incubators vary in the way they deliver their services, in their organizational structure, and in the types of clients they serve. Zedtwitz (2003, 2006) classifies the various archetypes of incubators into five categories: the university incubator, the independent commercial incubator, the regional business incubator, the company-internal incubator, and the virtual incubator. He shows that there are differences among the various archetypes in competitive scope (industry, geography, and segment focus) and in strategic objectives (profit versus not-for-profit) that influence the nature, quality, and implementation of incubation services and the way they are managed (Zedtwitz, 2006).
The manager of the incubator should have managerial leadership and skills, as his or her qualifications are crucial for the success of the incubator (see Shefer and Frenkel, 2003 for the Israeli case), and important as well for the screening process of tenants accepted to the incubator (see Aerts et al., 2007 for European business incubators).

A new type of incubator that has developed in recent years is the virtual incubator. This is an incubator without walls that endeavors to deliver business assistance services to clients not co-located within the incubator (Hackett and Dilts, 2004a, b). Developments in technology have encouraged this business model and enable it to be used as a platform for further services. New developments in the communication and information sectors (ICT) play an important role in fostering entrepreneurship by improving speed and ease of communication and interaction among the various economic actors involved in the productive cycle (Carayannis et al., 2006).

As described by Gullander and Macfarlane (2006), a virtual incubator could be achieved by operating through a web-based portal without the presence of a physical location or an office or a physical incubator. Alternatively, the virtual incubator could be connected to an office that is contacted or visited by the tenants, or related to a physical incubator that has tenants and management personnel.

Nowak and Grantham focus on flows of knowledge in the software industry. They contend that because leading-edge knowledge in the software industry is geographically distributed and embedded within practices, a virtual incubator is needed for fostering the development of new information-intensive software ventures through information dissemination. Research by Shahidi (1998) tests the hypothesis that there are more networking opportunities for technology incubator client firms than for similar non-incubated firms, and that networks enhance the performance of technology incubator client firms. Shahidi concludes that networks have a demonstrable positive impact on client firms, and that the opportunity to access customer networks offers incubated firms more informal sales contacts. In addition, the range of consultants and advisors associated with incubators provides an advantage to the client firms. These benefits lead to statistically higher rates of equity capital, grants, and seed fund financing for incubated firms than for similar non-incubated firms.

SUGGESTED FRAMEWORK FOR COLLABORATION IN HIGH-TECH AND INNOVATIVE ACTIVITIES

The risk level associated with high-tech projects, especially in young innovative companies (start-ups), is relatively high, but these risks are generally worth taking when there is a high profit potential.
In the case at hand – of high-tech and innovative firms from Israel that are considering collaborating with firms from the Palestine Authority or vice versa, the risk level is even higher, due to security and political issues, and due to lack of experience, insufficient information and knowledge on the side of the firms in the PA, lack of trust between actors from both sides, the shortage of support institutions that can assist in this process, and lack of networks that could assist in overcoming these problems.

In addition, the Israeli and the PA innovation systems are presently at completely different stages of development. While Israel’s innovation system is entering the consolidation phase (Avnimelech and Teubal, 2005), the PA innovation system is mostly in its creation phase. This introduces a new challenge to the development of networks between two innovation systems that are not at the same stage of development. A major challenge is the provision by the Palestinian administration of basic, critical infrastructures for this kind of activity. An activity that is based purely on communication and high quality electronic devices is quite intolerant of failures in such infrastructures. The establishment of such projects therefore requires a commitment of policy makers to supply the minimal basic requirements of appropriate infrastructures.

The increase in new technology has ushered in a period in which there is a significant development of new models of doing business and managing organizations. Developments in Information Technology are actually enabling, if not driving, enterprises to adopt new work practices, new organizational structures, and even new management styles for extending their businesses both domestically and abroad.

It is therefore suggested that a virtual incubator be established to provide an avenue for interaction between Israel and the PA. It is proposed that a virtual scheme be established, co-managed by the two sides, that will provide information, knowledge, and assistance, and will serve as a bridge between the actors in Israel and the PA by connecting their local networks – to be known as the PIVI (Palestinian-Israeli Virtual Incubator) project.

THE PIVI PROJECT

The incubator will offer a package of services that can be accessed by both parties, primarily online. These services will provide support for collaboration between Israeli and Palestinian innovative companies. They will include: training courses – standard or tailor-made courses, including courses for bridging business/cultural gaps; consultancy and mentoring; access to data bases; providing information and useful business links; establishing a forum of users for exchange of information and business ideas; assistance in recruiting investors; and setting up the incubator as a "one-stop shop" for potential investors and strategic
partners. In addition, the PIVI will initiate workshops and conferences, virtual or non-virtual, for the professional enrichment of users, with the participation of experts.

The services will be provided by experts from both Israel and the PA, with the option of expansion to experts from the US and EU. The services will be delivered in the relevant language: Arabic, Hebrew, or English. Services delivered through the website could be followed up by personal meetings.

We suggest two options for utilizing the incubator: as a visitor or as a registered user. Those who sign on as visitors will have access to limited information and resources. Those who become registered users will have a higher access level, and will be entitled to the full range of services. This level is for those Palestinians or Israelis who have serious business ideas and are ready to start a new activity or to explore the potential for technological or business relationships with Israel or with the PA.

We also suggest that the PIVI be organized as a nonprofit organization, managed by a consortium of a number of universities and business organizations from Israel and the Palestine Authority, with the option of expanding it to European and US universities. We recommend that the PIVI be operated under the umbrella of universities, since academic institutions are considered to be relatively apolitical. A university incubator may also have the advantage of human capital promotion, as well as direct economic benefits.

The PIVI may be financed initially by public resources, but gradually create its own resources through membership fees and charges for its services. It could in the future serve as a training center for other organizations (e.g., business parks, etc.) or serve as a platform for other business initiatives, such as advertising.

The PIVI should attempt to establish its own VC Fund for investing through equity in selected initiatives.

The PIVI would have a small permanent staff, including two local directors, one from Israel and the other from the PA. The courses, consultancy services, and other activities may be conducted through outsourcing, with the ultimate aim of involving local professional experts and entities from both sides.

Similar projects have been supported by the European Commission, such as the ISTER project supported by the PAXIS pilot action for the development of start ups in the trilateral region of Slovakia-Austria-Hungary (PAXIS information web site). Another project is the European Virtual Incubator (EVI), sponsored by the Leonardo da Vinci Program, to support entrepreneurs and start ups who want to enhance synergy for the development of their business (EVI project website).

We believe that this project is compatible with the conclusions derived from our research. PIVI could assist in encouraging collaboration between high-
tech or innovative firms in Israel and those in the PA. The PIVI project could also serve as a platform for other joint business initiatives.

CONCLUSIONS AND EXPECTED BENEFITS OF THE PROJECT

Based on the discussion presented above, taking into consideration the constraints on collaboration between high-tech firms from Israel and from the Palestine Authority on one hand but considering on the other hand the capabilities that the new technology offers, we hereby propose the establishment of a Palestine-Israel Virtual Incubator (PIVI).

Establishing a joint Israeli-Palestinian project presents a very serious challenge because of the many barriers inhibiting such cooperation. The PIVI project has a very promising future because of the externalities it produces for both sides, as well as because of the potential high economic and non-economic gains in the long run. This justifies heavy governmental involvement (Israeli, Palestinian, and even foreign) for the support of such a project. However, the survival of any cooperative project depends to a large extent on the short term direct benefits it brings to the participating populations. Assuring long-term benefits therefore requires responding to short term needs. Consequently, focus should be placed on the immediate potential of the project to provide income and employment to the skilled labor force in the PA, to make available appropriate competitive partners to Israeli entrepreneurs, etc.

Such a "co-incubation" model, with the support of both sides, is expected to foster the collaboration of high-tech and innovative activities from both parties by exposing them to new markets, by linking them to new potential partners and investors, and by assisting existing companies to expand their activities to other neighboring markets. This model allows companies that are supported by the incubator to access the expertise, networks, and competencies of the other side. It also facilitates the operation of early-stage companies as well as established companies by enhancing the scope of support mechanisms available to them.

This project offers a new Israeli-Palestinian cooperation pattern, in sectors that are not based on unskilled workers but are based instead on high-tech, using the skilled workforce that exists and is in the process of being formed in the PA. In addition, it may provide a long-term catalyst for a new type of economic and scientific cooperation between Israel and Palestine, involving other countries.

The basic concept in our proposal is that a virtual incubator allows high-tech and innovative firms to benefit from the expertise and professional networks of the different existing incubators, thus increasing the array of services available and exposing the companies to greater business opportunities. These include exposing the firms, including start ups, to potential strategic partners and to leading VC Funds or other financing sources, and facilitating access and exposure
to leading scientists and experts, to potential clients, to leading IP and regulatory consultants, etc. Such a structure could also be a platform for cooperation between other entities, including academic and business entities, by serving as a focal point for meetings, exchange of information, and knowledge. Moreover, such a project is expected to stimulate innovation and the establishment of mid/high-tech industries in the Palestinian economy and therefore generate a multiplier effect that would increase the demand for mid/high-tech workers, and in later stages also the demand for workers in the low-tech industries. In addition, concrete economic cooperation between the PA and Israel can induce political change and mitigate the existing conflict.

Such interactions between institutional entities, companies, and individuals from all sides will assist in building an invaluable reservoir of experience, skills, good business practices, valuable case studies, and expertise which can be developed into "tool kits" and programs for widespread use in the future.

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