Beyond Aid: A Palestinian Private Sector Initiative for Investment, Growth and Employment



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The Challenge

23% unemployment in 2012 and 39% youth unemployment, the highest in the region

50% slowdown in GDP growth in 2012, following annual average growth of 8.2% between 2006 and 2011

1,000,000 new jobs needed to reduce unemployment to 10% by 2030

Addressing the Challenge

5 Sectors prioritised as cornerstones of a private sector action plan: Agriculture, IT & Digital Entrepreneurship, Tourism, Construction, and Energy

More than $50\ projects$ identified across these five sectors as potential growth catalysts

The Potential Impact

Over **\$8 billion** in GDP, more than **150,000** new direct jobs and around **220,000** indirect jobs can be created by 2030 through these projects

Foreword from the Coordinating Committee

The Palestinian economy faces a number of challenges. Restrictions resulting from the political situation continue to be the most significant impediment to economic growth. Uncertainty and lack of hope in progress, together with internal constraints, have also contributed to economic stagnation. Although it is true that the economy has grown between 2006 and 2011, this has been significantly driven by inflows of aid from the international donor community, and is therefore unsustainable in the long-term.

In particular, growth has not translated into sustainable employment generation and the longstanding need to create jobs remains. At the same time, cuts in foreign aid and other external and internal factors have led to a deepening fiscal crisis, which has undermined financial stability.

However, recently renewed peace talks between Palestine and Israel bring hope for an end to occupation as part of a definitive political settlement. Only such a solution can create the necessary conditions for the Palestinian economy to realise its full potential. As Palestinian private sector businesses we cannot sit idle. We need to support political efforts by taking greater responsibility for and command of our economic future. **Private sector companies must help increase the resilience of the economy, contributing to its growth in a sustainable manner that creates long-term employment.** This has also been recognised by the Palestinian National Authority. Its 2008-2010 *Reform and Development Plan* and the subsequent *National Development* and *State Building* programmes all emphasise the importance of the private sector as an engine for development. More recently, the government has included the diversification of the economy and the development of an enabling business and investment environment amongst its strategic priorities.

As the largest employer in the economy **the private sector needs to direct its efforts towards creating sustainable growth and jobs.** We launched this private sector-led initiative with the support of The Portland Trust in January 2013 to define a long-term vision and create a practical plan of action. We have engaged a substantial number of partners along the way, and we hope we can continue to expand engagement and drive implementation of this plan together with colleagues across the wider private sector, the public sector, civil society and the Palestinian diaspora. Our efforts focus on a set of investment opportunities that can be implemented to advance our economy and enhance its resilience, reducing its dependence on external support. **This report identifies projects that can be undertaken by investors, businesses and entrepreneurs.** It presents an initiative in motion, therefore we expect projects to be enhanced and expanded as we progress.

This initiative is different from, but complementary to, the work currently being undertaken by the Office of the Quartet Representative (OQR). Efforts by the OQR aim to dramatically increase GDP and reduce unemployment over a three year period through measures, focused on eight economic sectors, which include increasing international investment, boosting institutional capacity and lifting of restrictions by the Israeli government. This private sector-led initiative will both support the OQR work and undoubtedly be enhanced, should progress be seen on the political front.

We hope the action plan described in this report will provide inspiration for the private sector to take tangible steps towards a more sustainable period of growth and economic progress for Palestine.

Dr Samir Abdullah, Palestine Economic Policy Research Institute Ammar Aker, Paltel Group Samir Hulileh, PADICO Holding Bashar Masri, Massar International Dr Mohammad Mustafa, Palestine Investment Fund Hashim Shawa, Bank of Palestine

Preface: The Portland Trust

The Portland Trust is a British non-profit 'action tank' with offices in London, Ramallah and Tel Aviv. It was established in 2003 with the mission of promoting peace and stability between Palestinians and Israelis through economic development.

We focus on identifying and launching initiatives to assist in the development of the Palestinian private sector and to reduce poverty in Israel through social investment and social entrepreneurship. Activities have included programmes to promote affordable housing, develop private sector pension funds, and enhance credit to small and medium-sized Palestinian enterprises through the creation of loan guarantee schemes.

The Portland Trust has continually highlighted the need for a 'triple helix' approach to conflict resolution – involving politics, economics and security. To support this argument periodic research has been undertaken. This includes case studies on Northern Ireland (2007), Bosnia and Herzegovina (2009), and a publication examining the important peacemaking role of business in Cyprus, Northern Ireland, South Africa and the South Caucasus (2013).

Following the recent slowdown in growth and the associated rise in unemployment in Palestine, The Portland Trust has concentrated its efforts on identifying a set of specific high-impact initiatives that the private sector can undertake to promote sustainable economic growth and job creation. Recently this has focused on boosting agriculture, developing the renewable energy sector, and providing access to training and expertise for Palestinian business executives.

Much of the existing research on the Palestinian economy attempts to estimate the potential for growth under assumptions of a final political settlement. Such a solution, including the formation of a Palestinian State, is unquestionably necessary to enable sustainable economic development. However, there are several actions that the Palestinian private sector can undertake to create jobs and stimulate growth despite existing constraints (such as restrictions on movement and access and lack of control over natural resources). The 'Beyond Aid' initiative aims to help improve the Palestinian economy's resilience, promote sustainable development, and catalyse long-term growth and job creation. It includes a set of short, medium and long-term investment opportunities which can be undertaken by the private sector. These will ultimately support renewed peacemaking efforts sponsored by the US administration. The tangible private sector-led plan presented in this report is also aligned with the Palestinian Government's mid-term development strategy, as well as with the 'Palestinian Economic Initiative', led by the Office of the Quartet Representative.

This report draws on multiple sources, which have greatly contributed to its conclusions. This includes economic analysis carried out for The Portland Trust by McKinsey & Company, to whom we are indebted for its valuable support. We are also proud to have partnered with more than 250 local private sector stakeholders, who have continuously expressed their enthusiasm and support for what they identified as a 'first of its kind initiative in Palestine.'

Sir Ronald Cohen, Chairman Sir Harry Solomon, Vice Chairman Nicola Cobbold, Chief Executive Officer

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Executive Summary

From 2006 to 2011, the Palestinian economy grew at an annual average rate of 8.2%, and by 2012 it employed approximately 860,000 people.¹ Growth over this period was partly fuelled by high levels of aid (around \$2.2bn in 2008, more than 30% of that year's GDP), which led to a rapid expansion of the public sector.

This expansion, however, proved to be unsustainable and vulnerable to external shocks. As international aid declined in the years running up to 2012², the government struggled to meet its financial obligations. This resulted in a deep fiscal crisis, during which delays in the payment of civil servants' salaries were not uncommon. In 2012 GDP growth fell to 5.9% (the lowest level since 2008), nominal GDP reached \$10.3bn and unemployment stood at 23%.³

With limited options for further public sector growth, the private sector has a critical role to play in rebalancing the Palestinian economy to become less reliant on external support. Extensive consultation with, and analysis of, the private sector suggests that targeted initiatives in five high-potential sectors could add up to around \$8bn in incremental GDP⁴, more than 150,000 direct jobs and around 220,000 indirect jobs by 2030.⁵ This level of sustainable growth and job creation would in turn result in increased resilience and greater economic independence.

This report differentiates itself from previous work by exploring concrete investment opportunities that the private sector can pursue to promote growth and create jobs.

THE EMPLOYMENT CHALLENGE

The Palestinian population is growing at an annual rate of 2.9%⁶, with young people (under the age of 25) comprising 58% of the total population. The resulting expansion of the labour force has led to a growing need for new and sustainable job creation.

Despite strong GDP growth since 2006, the overall unemployment rate has remained structurally high. Efforts by the government to stem rising unemployment by expanding the public sector workforce over the last decade resulted in a wage bill equivalent to 17% of GDP.⁷ This rate, much higher than that in Egypt (8%) or Jordan (5%), indicates that scope for further expansion of the public sector as a job creator is limited.

The scale of the challenge is such that over 750,000 jobs must be created simply to maintain the current unemployment rate of 23% through to 2030. To reduce unemployment to 10% by 2030, 1 million new jobs will be required.⁸ This is equivalent to more than doubling the number of workers currently employed.

- 1 PCBS, Labour Force Survey, 2012. Includes underemployed (around 77,000)
- 2 In 2011, donor aid to the government fell to less than \$700m, down from \$1.1bn in 2010 and less than half the \$1.4bn received in 2009
- 3 PCBS, Performance of the Palestinian Economy, 2012. Unless stated otherwise, figures in this report are expressed in current 2012 US Dollars. Where figures are not available, they have been converted from constant 2004 Dollars to 2012 Dollars based on PCBS's overall GDP deflator. Time series data is represented in constant 2004 Dollars
- 4 Expressed as additional growth to 2012 current GDP of \$10.3bn. Average annual growth of the (entire) private sector between 2000 and 2012 was 3.8%. Projecting this rate to 2030 would result in a GDP contribution for the five sectors of just under \$5bn

- 6 Growth rate based on average annual population growth rate from 2000 to 2012
- 7 IMF (July 2013), IMF Urges the Palestinian Authority and Donors to Reassess Priorities, (IMF)
- 8 Estimates produced by team analysis. Implies overall annual economic growth of 8.2%. The 23% unemployment scenario implies annual growth of only 6.6%

⁵ Figures based on team analysis

While history shows that this is achievable (it took only 12 years after the signing of the Oslo Accords to double total employment in the West Bank and Gaza), achieving a similar growth rate in the next 17 years is a significant challenge given the more mature state of the Palestinian labour market today.⁹

THE PRIVATE SECTOR HAS A CRITICAL ROLE TO PLAY

Through discussions with hundreds of stakeholders, it has become clear that the Palestinian private sector has the potential to create a large number of sustainable jobs in the long term. Since 2006, private companies and entrepreneurs have been responsible for more than 65% of net jobs created. More recently, in a difficult context, the private sector achieved impressive double-digit growth of 13.5% and 10.1% in 2011 and 2012 respectively. This is an important building block, but there is still potential for further progress.

A strong private sector has the potential to lead the way to increased economic resilience by directing investment in a way that prioritises economic growth and job creation, while achieving sound economic returns. This in turn can help to define and enhance policy to improve public welfare.

AN INITIATIVE IN MOTION

This report aims to address the question of how the recent private sector growth could, with support from the government, be enhanced and translated into sustainable long-term job creation and broad-based economic growth. It identifies a set of readily implementable and longer term investment opportunities to be pursued by the private sector. These are the result of extensive analysis and consultation with stakeholders across a wide range of economic sectors. A platform for private sector-led implementation is also proposed. As this initiative progresses and more businesses engage in the process, the investment opportunities identified throughout the report are expected to be enhanced, expanded and refined. This report should therefore be seen as the fundamental basis of a living programme, an initiative in motion.

FIVE HIGH-POTENTIAL SECTORS

Analysis suggests that the private sector can most effectively contribute by focusing its efforts on the five sectors with the greatest potential: Agriculture, Information Technology (IT) & Digital Entrepreneurship, Tourism, Construction, and Energy.

To identify these high priority sectors, over 20 areas of the Palestinian economy were assessed for their potential contribution to GDP growth and job creation over the long term. They were also evaluated for readiness, existing momentum and export potential.¹⁰ While there are important opportunities for initiatives to drive growth in many of the 20 sectors (including in important sectors like manufacturing), the five prioritised sectors were found to have the capacity to maximise immediate and long-term opportunities as well as positive externalities.

In each of the five sectors, a set of initiatives and specific projects was evaluated. Certain projects were found to have the capacity to catalyse job creation and long-term growth (both directly and indirectly). These catalytic projects, which are not exhaustive, are summarised in the table below.

⁹ PCBS, Labour Force Survey, 2012. Labour force participation grew by around 70% in that same period (1995-2007)

¹⁰ PCBS, Performance of the Palestinian Economy, 2011, pg. 30. In 2011 total exports, 86% of which were to Israel, reached only \$0.72 bn. As imports amounted to \$4.2bn, there was a negative trade balance of \$3.5bn (around 35% of GDP). This emphasizes the need to enhance exports overall and, at the same time, diversify export markets to reduce the heavy dependence on Israel

Overview of catalytic projects¹

	Short term	Medium term	Long term
Agriculture	 Invest in wastewater treatment plants (WWTP) Investment in high-value crops Develop export hub in Dubai Launch model farm in Jericho Mobile desalination units 	 Expand number of WWTPs Replicate model farm in other regions Develop further export hubs (e.g. EU) Branding campaign for GCC Intensify transition to high value crops Establish cooperative structure 	 Contract farming for agribusiness MNCs Agriculture research institute Expand export basket Modernisation of water tech/resources Funding options for agriculture
IT and Digital Entrepreneurship	 Engage multi-national companies (MNC) for R&D and niche Business Process Outsourcing (BPO) Launch education pilot Launch angel investment fund and reconcile incubators 	 Develop technology hub along with a co-working space Improve educational offerings by enhancing teaching methods Launch e-government initiative Garner government support for risk 	 Embed best-in-class technical education Attract additional MNCs for offshoring Promote R&D between private sector and universities Launch 'Fibre-to-the-Home' plan
Tourism	 Implement Jericho and Bethlehem development plans Launch outreach initiatives to attract key segments (e.g. churches) Establish world-class hotel school Create Tourism Board 	 Bethlehem and Jericho branding campaigns Launch destination development plans, e.g. East Jerusalem, Nablus Expand diaspora outreach initiatives Expand direct sales channels 	 Upgrade tourism facilities Develop 2-3 major sites (e.g. Gaza Seaside, Hebron) Expand niche offerings (e.g. eco-tourism) Pursue broader regional partnerships
Construction	 Create a private sector association Conduct feasibility studies on building materials Formulate private sector-led affordable housing plan 	 Create 25k+ affordable housing units in North and South West Bank & Gaza Capture segments of value chain Conduct cooperative procurement Improve land registration 	 Incorporate new technologies and production methods Expand affordable and social housing Achieve scale in building materials manufacturing
Energy	 Install solar PV panels for residential, commercial, and industrial use Launch Jenin gas power plant Provide 'Green Loans' to SMEs Establish net metering 	 Build power stations in West Bank and Gaza (WB&G) Expand solar and wind production Transform village into 'green village' Increase awareness of renewables via alternative energy education park 	 Further expand renewables production Convert Gaza power plant to gas Create comprehensive system of incentives to promote renewables

1 Not comprehensive. See individual chapters

These five sectors have the potential to generate around 40% of the jobs needed to reduce unemployment to 10% by 2030. Each sector and a number of high-impact initiatives, which are supported by extensive analysis, are outlined below and further detailed in the following pages.

Agriculture

Agriculture contributed \$502m (around 5%) to Palestinian GDP in 2012 and employed nearly 12% of all workers in the West Bank and Gaza.¹¹ Despite the area having a climate conducive to production all year round, Palestinians are still highly dependent on food imports. Yet Israel, with similar land and climate conditions, sources the majority of its food needs locally.¹² Moreover, calculations by the World Bank show that agricultural productivity, measured by output per worker, halved between 1995 and 2011.¹³

¹¹ The World Bank (March 2013), Fiscal Challenges and Long Term Economic Costs - Economic Monitoring Report to the Ad Hoc Liaison Committee, (The World Bank). Agriculture's contribution to GDP declined from 13% in 1995 to 6% in 2011

¹² The World Bank, *ibid*. The World Bank attributes this partly to 'restrictions on imports of agricultural inputs such as fertilizers, lack of access to water and infrastructure for irrigation, and restrictions on exports... and access to land', which it says has resulted in insufficient investment in the sector

Currently only 20% of West Bank cultivated land is dedicated to high-value production. Profitable opportunities in high-value and high productivity crops should be pursued by expanding total agricultural land. As only 12% of cultivated land in the West Bank is irrigated (compared to 78% in Gaza) new water technologies, especially desalination, irrigation and wastewater treatment, could help increase the area under cultivation. It could also help transition the sector to a higher-value crop portfolio (including, for example, dates, herbs or vegetables). Although treated wastewater can only be used safely for certain crops (such as fruit trees and fodder crops) its use will release fresh water for use in other high-value produce. Progress in this direction could begin immediately through projects such as the creation of a high-tech commercially-run model farm or the launch of wastewater treatment plants (under different private sector engagement models).

Over time the Palestinian economy has the potential to emerge as a new Middle East agricultural hub and a leading exporter of select high-value crops. By 2030, agriculture could account for up to \$350m of exports and could more than double its output to over \$1.4bn and add as many as 36,000 new jobs.¹⁴

Strategic pillars:

- Transition to a higher value crop portfolio.
- Boost sector productivity and exports.
- Increase irrigated land.

IT & Digital Entrepreneurship

The IT & Digital Entrepreneurship sector is in its infancy. It currently accounts for around 1% of GDP (estimated at around \$105m in 2012) and employs an estimated 1,500 people. Its foundation is in Research and Development (R&D) software outsourcing, providing complex solutions to large multinational customers. While the work is low in volume, experts suggest that the quality, level of value-add, and complexity of the work is noteworthy and at competitive cost.

However, a coordinated branding effort for the outsourcing sub-sector does not yet exist and there is an insufficient supply of human capital to meet the high requirements of IT firms (employers cite a broad capability gap in critical thinking and problem solving as well as cutting edge technical skills, i.e. coding and engineering). Software engineering and broader digitally-oriented educational offerings are lacking, particularly at primary and secondary levels. Stakeholders suggest there are also shortcomings in universities and postgraduate training programmes.

There is a promising digital innovation and entrepreneurship scene, with a recently launched technology focused venture capital fund, a newly developed accelerator, and a number of programmes in place to help grow the entrepreneurial ecosystem (e.g. Startup Weekend).

Education is a critical enabler for a successful IT sector, most notably enhanced technical training at all levels. In the long term, the Palestinian IT sector can better position itself in the regional information and digital technology market by further developing an educated and innovative workforce.

In the short term, there are opportunities to expand R&D (e.g. software development for international IT companies) and high-end niche business process outsourcing (e.g. bi-lingual English/Arabic language support for banks with security requirements). In the medium term, incorporating IT into other sectors and developing a strong entrepreneurial environment for technology start-ups would drive growth in the digital economy, potentially further catalysed by public sector e-government initiatives. All this could happen quickly, for example, through short-term initiatives that seek to secure R&D outsourcing contracts from five to ten multinational companies.

14 Team analysis

The next decade could see significant advances in IT and digital entrepreneurship. By 2030 the sector could expand as much as nine-fold, to approximately \$960m in output and directly employ up to 20,000 people in high-skilled jobs.¹⁵

Strategic pillars:

- Expand IT outsourcing through R&D and high-end niche business process outsourcing (BPO) offerings.
- Develop and enhance technology education at all levels.
- Establish an entrepreneurial ecosystem.

Tourism

In 2012 the tourism sector contributed almost 2.5% to Palestinian GDP (\$250m) and generated around 2% of all jobs (around 17,000). After a period of sharp decline between 2000 and 2006 (following violence in the region) the sector has experienced a strong rebound. This is demonstrated, for example, by 23% annual growth in gross contribution to GDP by hotel activities. Religious and historical sites currently attract more than 1 million international visitors and account for more than 3 million domestic tourist visits annually.

The sector's activities are partially hindered by a number of external constraints (mainly restrictions on movement and access). However, tourism is additionally constrained by internal gaps such as underdevelopment of key sites and ancillary activities, a lack of diversified high-quality products (accommodation and dining), weak branding, underdeveloped promotion and sales channels, and poor service quality. As a result the number of international visitors remains well below the almost three million tourists that visit Israel each year. In 2011 visitors to the West Bank and Gaza stayed for an equivalent of 1.2 million guest nights in local hotels, less than 6% of total guest nights recorded in Israel (21.8 million). Moreover, average room occupancy, at 26%, remained well below the 66% registered in Israel.¹⁶

Thousands of new jobs could be created by encouraging visitors to extend their stay from a day-trip to a few nights. To achieve this, the sector would need to develop the additional facilities required for longer stays. Our analysis suggests that four tourist segments offer the highest potential: (i) religious tourists (ii) cultural tourists (iii) Arab-Israeli leisure tourists and (iv) the Palestinian diaspora.

Over time, developing and branding city destinations, such as Jericho and Bethlehem, into distinctive 'tourism hubs' has the potential to help create a world-class destination with year-round religious, historical, cultural, and leisure experiences. Additional initiatives in each hub (e.g. a museum in Jericho), international partnerships, and investment in training would help to further promote activity growth.

There is long-term potential to attract up to 5.5 million tourist visits annually, each staying an average of three nights and spending up to 25% more per day than current average levels. This would bring significant and sustainable benefits to the Palestinian economy, potentially contributing up to around \$750m to GDP and providing more than 19,000 new jobs in the sector.¹⁷

Strategic pillars:

- Develop 'must-visit' city destinations.
- Expand facilities and offerings for high-potential tourist segments.
- Broaden diaspora engagement.

15 Team analysis

17 Team analysis

¹⁶ Israel Central Bureau of Statistics (CBS) and PCBS

Construction

Construction currently represents around 14% of GDP (\$1.4bn) and around 15% of total employment, making the sector an important contributor to the economy.¹⁸ However, there is a notable lack of affordable housing for the middle and lower income categories: population density per housing unit is six people and increasing. High costs, together with long-standing land registration issues, remain two of the greatest challenges for the sector's development.¹⁹

A large proportion of the sector's activities are unregistered, involve informal workers and employ old technology, resulting in low productivity and production inefficiencies. In addition, because high-end demand has been strong, little attempt has been made to capture a greater part of the value chain to reduce construction costs. There have been some recent moves in this direction. For example, the Rawabi city project (5,000 units) has reduced costs by 25% by purchasing more from local manufacturers (e.g. steel bending, doors, block lines). However, further work is required in this area. A construction sector consortium could be formed to launch feasibility studies to assess the economic potential of local production.

The sector could lower its cost structure and profitably address the affordable housing market. To capture a larger part of the value chain in materials/manufacturing, construction firms could create a cooperative procurement strategy and seek to expand affordable housing projects to multiple cities. This would be supported by major infrastructure projects.

If the value chain was better captured and costs were lowered the construction sector could grow to \$2.8bn and employ more than 175,000 workers by 2030.²⁰

Strategic pillars:

- Improve sectorial coordination and enhance cost performance.
- Expand affordable housing.
- Increase overall sector productivity.

Energy

The Palestinian economy is currently highly dependent on imports to satisfy its energy needs, with 95% of imported electricity coming from Israel. The overall cost of energy is also relatively high: energy makes up 6.4% of Palestinian household expenditure, compared to 2.7% in Israel.²¹ At the same time, low energy consumption levels in the industrial sector suggest that the limited availability of (expensive) energy is stifling potential industrial development and growth. In 2010 total electricity need in the West Bank and Gaza was estimated to be around 6,200GWh, against a supply of around 4,300GWh. In 2008, as a result of structural supply shortages, the majority of Gazan households suffered power cuts of at least eight hours per day, with some having no electricity for up to 12 hours a day.²²

There is an opportunity to decrease dependence on energy imports by 2030 by increasing domestic production through affordable renewable energy sources, particularly solar.

This could be initiated by installing solar photovoltaic (PV) panels on residential, commercial, industrial, and public building rooftops. Efforts are also needed to improve the efficiency of energy consumption in both new and existing households, commercial buildings and infrastructure. Over the long term, our analysis suggests that 70% of total Palestinian electricity requirements could be supplied domestically, with up to 50% of domestic production coming from

¹⁸ PCBS, Labour Force Survey, 2012. Construction activities are particularly relevant in Gaza, where they contributed 23.4% of GDP in 2012 and employed 7.4% of local workers. In the West Bank, construction accounted for 10.8% of GDP and employed around 17.2% of the local labour force in 2012. In that same year, around 40% of Palestinian construction workers worked in Israel and Israeli settlements

¹⁹ Only 30% of the land in the West Bank is registered. The registration process is complex and lengthy, taking up to fifty days and involving four institutions

²⁰ Team analysis

²¹ Israel CBS and PCBS

²² UN Office for the Coordination of Humanitarian Affairs (UN-OCHA)

renewable sources, thus liberating cash for consumption by households and capital for investment by companies. This could result in more than 17,000 new jobs (from less than 1,000 in 2012) and directly add up to \$2.2bn to GDP by 2030.

Strategic pillars:

- Expand domestic energy production through renewables.
- Develop energy infrastructure.
- Broaden the energy supply base.

IMPLEMENTATION: ORGANISING FOR SUCCESS

Successful implementation of the initiatives discussed in this report will be challenging. It will require focused organisation, robust design and adequate oversight as well as broad support from the public sector.

Discussions about delivery mechanisms with Palestinian stakeholders during this project highlighted five elements that will be central to an implementation strategy:

- (i) A Coordinating Committee of business leaders, including diaspora members, to review progress in each sector²³;
- (ii) Regular discussion among sector leaders and other private and public sector stakeholders to maintain momentum and anticipate the impact of ongoing projects;
- (iii) 'Champions' (individuals or organisations) for each catalytic project, to assume ownership of the project, solicit support from others and provide updates on progress;
- (iv) A General Secretariat, to facilitate meetings and prepare related materials, and lead on the execution of tasks arising from meetings and projects;
- (v) Investor conferences targeting a limited number of investors with interest in the sectors and projects proposed. A wide range of private and public sector figures and institutions have already expressed interest in participating in such conferences.

These core elements, adequately supported by collective and coordinated action by the government, diaspora and international partners, can help to ensure sector initiatives are effectively designed, funded, operated and replicated.

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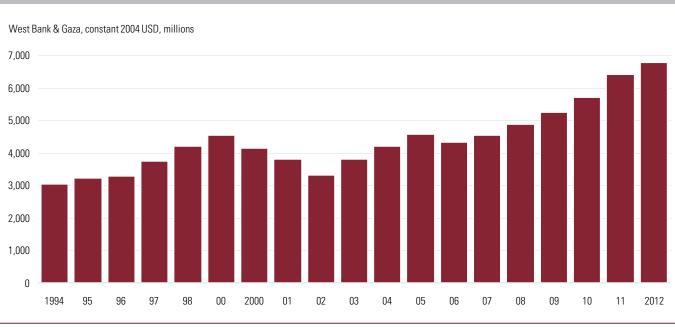
The challenges faced by the Palestinian economy are significant and structural. The private sector has a central role to play in addressing these challenges. Our analysis suggests that targeted initiatives in just five sectors, driven by the private sector and with support from the Palestinian National Authority, could generate a substantial proportion of the new jobs needed to bridge the long-standing employment gap. This, in turn, will contribute to the long-term sustainable growth of the Palestinian economy, making it more resilient to external shocks.

²³ As this report went to print, the following business leaders had joined the Coordinating Committee: Sami Abu Dayyeh (Net Tours Co.); Tareq Aggad (Arab Palestinian Investment Co. - APIC); Fadi Ghandour (Aramex); Riad Kamal (Arab Tech Construction Company); Zahi Khouri (Palestine National Beverage Co.); Samer Khoury (Consolidated Contractors Co. - CCC) and Khaled Ossaily (Ossaily Contracting & Construction)

Macroeconomic Outlook: A Picture of Unsustainable Growth

Following the signing of the Oslo Accords in September 1993, the growth path of the Palestinian economy fluctuated for the next 12 years. It then followed a period of rapid economic expansion between 2006 and 2011, when GDP grew by an annual average rate of 8.2% – reaching over 12% at its peak in 2011. Figure 1 below shows the real GDP series between 1994 and 2012, expressed in constant 2004 USD (2012 nominal GDP was \$10.4 billion, equivalent to \$6.4 billion in 2004 constant USD).

However, in 2012, when current GDP reached \$10.3bn²⁴, annual growth dropped to less than 5.9%. This has raised concerns for the sustainability of the growth process and stressed the need to ensure greater resilience against economic shocks.



Source: PCBS

Figure 1 Real GDP

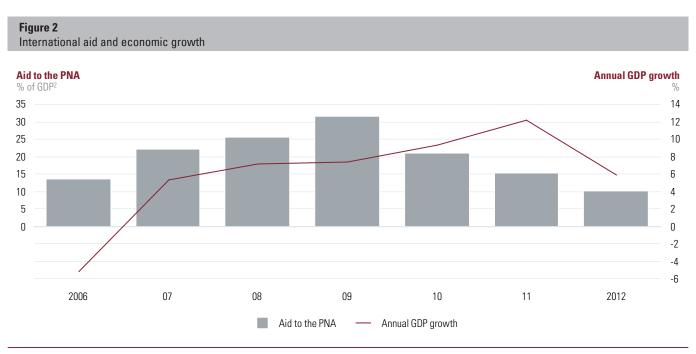
LIMITATIONS TO PUBLIC SECTOR DRIVEN GROWTH

High growth between 2006 and 2011 was partly fuelled by high inflows of aid from the international donor community. Between 2006 and 2010, annual aid to the Palestinian National Authority (PNA) was never lower than \$1bn. In 2008, it reached a peak of nearly \$2bn (more than 30% of that year's GDP).

²⁴ PCBS, Performance of the Palestinian Economy, 2012. Unless stated otherwise, figures in this report are expressed in current 2012 US Dollars. Where figures are not available, they have been converted from constant 2004 Dollars to 2012 Dollars based on PCBS's overall GDP deflator. Time series data is represented in constant 2004 Dollars

This led to a rapid expansion of the public sector, which boosted overall economic growth (mainly through high government expenditure and investment, and high levels of consumption by public sector employees). In 2008, the number of public sector employees increased by more than 30% relative to 2004 (from 111,000 to 146,000). In 2012, as many as 177,000 workers were on the public sector's payroll (60% more than in 2004 and 21% more than in 2008).²⁵

In 2011, as the international financial crisis affected donors' budgets, aid dropped to less than \$700m, down from \$1.1bn in 2010, and less than half the \$1.4bn received in 2009. As a consequence the PNA increasingly struggled to meet its financial obligations while GDP growth halved to 5.9% by the end of 2012 (Figure 2).



1 Aid lagged by one year to illustrate its effect on the following years' growth, e.g. 2012 growth rate mapped to 2011 aid 2 Aid to the PNA comprises external budgetary support and external financing for development projects Source: PCBS and PMA

The structurally weak financial situation of the PNA worsened during 2012. The World Bank noted that the public recurrent deficit was well above the budgeted target and suggested the imbalance was the result of higher than expected expenditure, lower than forecasted revenue and declining donor aid. The domestic banking sector subsequently provided a large degree of financing to support the government's recurrent budget, with lending climbing to \$127m in 2012 – a 37% increase on the previous year.²⁶ The PNA also partly financed its fiscal deficit by accumulating arrears with the private sector: the Palestine Economic Policy Research Institute (MAS) estimates these to be currently between \$400m and \$600m.

With local public debt almost at the banking sector's sustainable limit²⁷, the World Bank anticipated the PNA would be forced to 'finance the gap through accumulating additional arrears to the pension system and cutting some of

²⁵ PCBS, Labour Force Survey, 2004-2012. Calculations based on a 22.7% of total employed (781,000 – excludes underemployment) reported to be working for the public sector in 2012. The 177,000 figure includes people working directly for the central government as well as in local government entities, universities and other public sector bodies

²⁶ The World Bank (March 2013), Fiscal Challenges and Long Term Economic Costs – Economic Monitoring Report to the Ad Hoc Liaison Committee, (The World Bank)

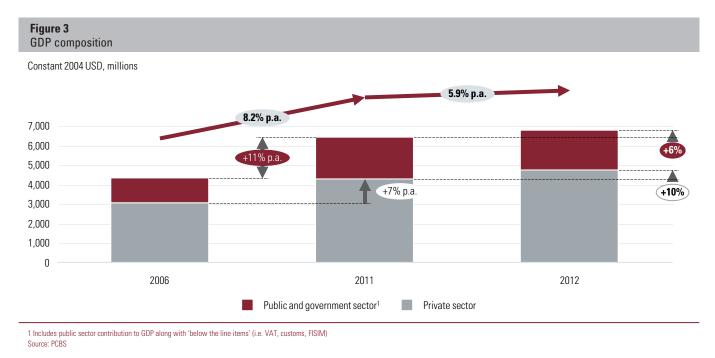
²⁷ Domestic banks' credit facilities to the PNA, which were around \$0.5bn in 2008, increased to approximately US\$1.4bn as of December 2012 (a 180% increment). The current debt figure represents about 14% of the banking sector's total assets and 112% of its equity

its basic spending, which could have severe social impacts. In fact, the PNA's ability to guarantee the provision of basic services, including activities in hospitals and schools, was seriously hindered.

Finally, increased political instability towards the second half of 2012 put additional pressure on public finances. In December 2012, the Government of Israel decided to withhold tax revenues collected on behalf of the PNA, forcing the Palestinian government to delay payment of salaries to public employees. The situation was not fully normalised until the first quarter of 2013.²⁸ Clearance revenues account for around 65% of the government's total gross revenues, constitute more than 40% of recurrent expenditure and are equivalent to around 80% of the public wage bill.²⁹ According to then Prime Minister Salam Fayyad, the PNA was pushed 'close to bankruptcy.'³⁰

In contrast, private sector performance showed resilience during the same period. Although private sector output grew at a relatively slower average pace of 7% between 2006 and 2011 (a highly expansionary period for government expenditure), it achieved 10% growth in 2012 (Figure 3). Since this did not fully offset the contraction in the public sector, overall GDP growth slowed substantially.

Given the structural weakness of public sector driven growth and its already significant proportion of the economy, the private sector needs to lead the way to sustainable long-term income generation.



THE SCALE OF THE UNEMPLOYMENT CHALLENGE

Public sector driven growth between 2006 and 2011 had little effect on unemployment rates (Figure 4). There are currently just over 1.1 million people in the Palestinian labour force, approximately 256,000 of whom are

²⁸ As established in the 1993 Oslo Accords, Israel collects VAT, customs and income tax from Palestinians working in Israel and in Israeli settlements, on behalf of the Palestinian National Authority

²⁹ IMF and Ministry of Finance

³⁰ The Portland Trust, Palestinian Economic Bulletin, December 2012 and January 2013

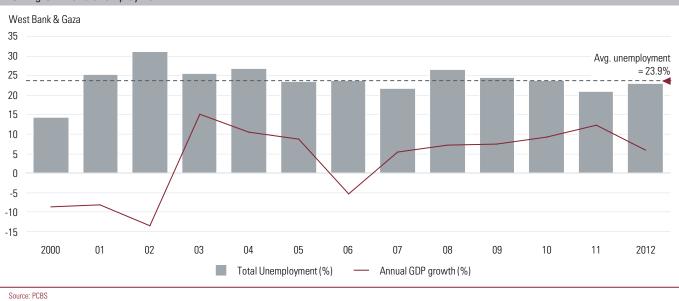


Figure 4 GDP growth and unemployment

unemployed. Total unemployment has remained structurally high (over 20%) since 2001, reaching 23% in 2012. This is due, in part, to both the inability of the public sector to keep absorbing new labour market entrants and the private sector to fill the resultant gap. Youth unemployment, the highest in the MENA region, increased from nearly 36% to nearly 39% between 2011 and 2012.³¹

Efforts by the PNA to respond to rising unemployment by expanding the public sector workforce over the last decade resulted in the wage bill of its 177,000³² employees reaching 17% of GDP in 2012. This rate, more than double that of Egypt (8%) and more than triple that of Jordan (5%)³³, indicates that scope for further expansion of employment in the public sector is limited.

While the public sector accounted for a sizeable share of GDP growth between 2006 and 2011, the private sector created 66% of the 230,000 net jobs added during this period. Following a net-hiring freeze by the PNA in 2012, the public sector added 30% net fewer jobs than the annual average number of positions it created between 2006 and 2009.

Population growth and an increase in labour force participation are likely to continue to place pressure on the labour market. The Palestinian population has grown by 2.9% annually since 2000 and total labour force participation increased from 41% in 2006 to 44% in 2012, largely due to a 19% rise in female participation.³⁴

The scale of the challenge is such that over 750,000 jobs will need to be created simply to maintain the current unemployment rate of 23% through to 2030. To reduce unemployment to 10% by 2030, 1 million new jobs will be required.³⁵ This is equivalent to more than doubling the number of workers currently employed (Figure 5).

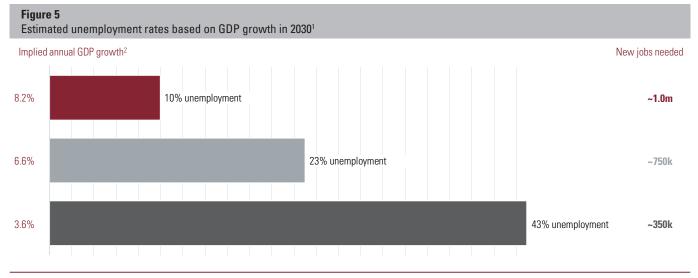
31 PCBS, *Labour Force Survey*, 2004-2012

³² Ibid, 2012

³³ IMF (July 2013), IMF Urges the Palestinian Authority and Donors to Reassess Priorities, (IMF)

³⁴ PCBS, Labour Force Survey, 2004-2012

³⁵ Team analysis. Implies overall annual economic growth of 8.2%. The 23% unemployment scenario implies annual growth of only 6.6%



1 Natural economic expansion of 3.8% (4.0% for private sector); Employment elasticity of .65x in the short term through 2017 (historic Palestinian private sector trend); linear reduction of GDP/jobs elasticity ratio to .45x (Jordan's 10 years, with a continuing linear trend

2 As private sector is likely to drive growth, assumed public sector growth of 1% from 2013 to 2014, around 1.5% to 2020, and around 2% to 2030; This yields 9.3% private sector growth required for 1m jobs and 7.5% private sector growth required for around 750, 000 jobs Source: PCRS

While history shows that this is achievable (it took only 12 years, after the signing of the Oslo Accords for total employment figures in the West Bank and Gaza to double³⁶), achieving a similar growth rate in the next 17 years is a significant challenge given the relatively more mature state of the Palestinian labour market.

INCREASING PRODUCTIVITY AND REAL WAGES

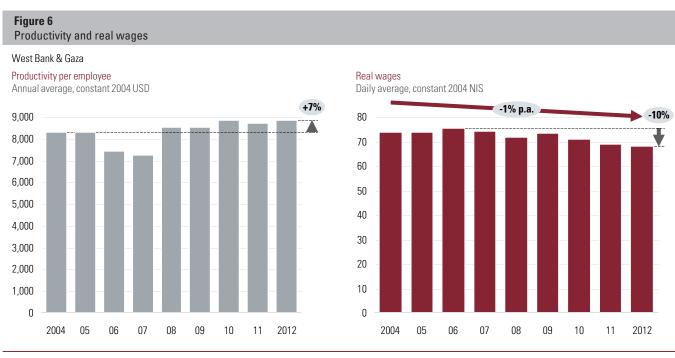
Despite the nearly 230,000 jobs created between 2006 and 2012, the average real wage fell by 10% in the same period, damaging workers' purchasing power. It is important, therefore, for new jobs created to be sufficiently well paid.

To achieve a reasonable rate of real wage growth in the long run, high real GDP growth together with consistent productivity gains are required. A simulation exercise conducted by the IMF in December 2012 (as part of a broader evaluation of the structural characteristics of the Palestinian labour market) concluded that to attain an annual real wage increase of 1.5% and achieve an ambitious target unemployment of 7% by 2020, real GDP and total factor productivity need to grow annually by 8% and 3% respectively.³⁷

With productivity per worker only 7% higher in 2012 than in 2004, the challenge of increasing real wages indicates a need to enhance productivity. This is especially relevant as real wages have fallen at an average rate of 1% per year since 2004, and declined 10% in total between 2006 and 2012 (Figure 6).³⁸

As total poverty continues to be high in both the West Bank (18%) and Gaza (39%)³⁹, creating quality jobs with higher real wages is of core importance to improving living standards. During the second half of 2012 around 40%

- **36** PCBS, *Labour Force Survey*, 2012. Labour force participation grew by around 70% in that same period (1995-2007)
- 37 IMF (2012), West Bank and Gaza: Labour Market Trends, Growth and Unemployment, (IMF)
- 38 PCBS (May 2013), Performance of the Palestinian Economy, 2012, (PCBS)
- 39 PCBS (2011), Total Poverty Rates Among Individuals According to Household Monthly Consumption, (PCBS). The overall poverty rate for the West Bank & Gaza stood at 25.8%



of Palestinian households received welfare assistance (23% in the West Bank and 74% in Gaza). Almost 20% of all households are entirely dependent on this type of support.⁴⁰

Source: PCBS

The structural weakness inherent in the public sector driven growth between 2006 and 2011, together with relatively strong performance by the private sector in the same period, suggests there is potential for the private sector to lead the way towards sustainable long-term growth.

The scale of the challenge facing the private sector is daunting. A reduction in structural unemployment to 10% (less than half its current rate) by 2030 would require the overall economy to grow at an annual average rate of 8.2% over 17 years. In this context, the private sector would have to achieve and sustain at least 9% growth.⁴¹

The remainder of this report examines how targeted efforts in five high-potential sectors could boost existing momentum so that the private sector can meet this challenge. "The private sector must play a central role in strengthening the resilience of the Palestinian economy, reducing its aid dependence and generating jobs. This rigorous report offers analysis and ideas that can help the Palestinian private sector drive economic growth and job creation"

Dr Udo Kock Resident Representative for West Bank and Gaza International Monetary Fund

40 PCBS (2012), Economic and Social Conditions Survey, (PCBS)

⁴¹ This scenario assumes that private sector contribution to growth (annual average of 9% to 2030) based on 'below the line' items will continue to comprise 11.2% of GDP. Public sector growth is assumed at 1% per year from 2013 to 2014, 1.5% per year to 2020, and 2% per year to 2030, resulting in 8.2% average annual growth

Background: Economies of the West Bank and Gaza

The West Bank and Gaza have both experienced economic progress since the Oslo Accords but structural differences between the two areas remain.

In 2009 West Bank GDP reached double the value of its first recording in 1994 but the Gazan economy has yet to achieve a similar growth trajectory. Following a long-term trend, Gazan nominal GDP per capita in 2012, at \$1,565, remains around half that of the West Bank (\$3,196).

While there are a number of common factors constraining development in both areas (e.g. limited access to water and energy, restrictions on movement and access, and poor infrastructure), such factors are significantly amplified in Gaza. Partly due to these restrictions, the slowdown in economic activity observed in 2012 was stronger in Gaza, where GDP growth fell from 21% in 2011 to less than 7% in 2012.

UNCTAD suggests that 'As a result of the economic blockade of Gaza, its share in the [Palestinian] economy... fell from one third to about one fourth between 2004 and 2012. Had Gaza maintained its 2004 share..., its 2012 GDP would have increased by almost 40 per cent to reach \$2.5 billion, instead of the observed \$1.8 billion. During the same period, the real GDP per capita in Gaza relative to that of the West Bank fell from 75 per cent to a mere 50 per cent.'⁴²

42 UNCTAD (2013), Report on UNCTAD assistance to the Palestinian people: developments in the economy of the Occupied Palestinian Territory, (UNCTAD)

Methodology and Main Findings

The primary approach in our analysis was to identify sectors with the highest potential for economic impact, based on the inherent strengths and comparative advantages of the Palestinian economy: (i) a skilled workforce with competitive wages (over 50% of the population has completed upper secondary education, and wages are significantly lower than in Israel and Turkey and slightly lower than in Jordan) (ii) inherent location advantages (in terms of climate and tourism sites) and (iii) emerging global networks (a large diaspora and trade agreements with countries in the region and globally).

A set of immediately implementable projects was then evaluated in each of the sectors, taking into account existing internal and external constraints. In a first cut, more than 20 sectors and sub-sectors were assessed and compared in terms of their potential to promote growth and create sustainable jobs.

The analysis also focused on identifying potential efficiencies within each sector that could further drive growth. For most sectors, benchmarks were used to identify opportunities for expansion and to estimate job creation potential. For some sectors, revenue and growth projections were based on international examples as well as discussions with Palestinian business leaders. The sectors were evaluated for export potential, investment readiness and existing momentum.⁴³

FIVE HIGH-POTENTIAL SECTORS IDENTIFIED

Our analysis suggests that five sectors have the highest potential for sustainable economic growth and job creation: Agriculture, Information Technology (IT) & Digital Entrepreneurship, Tourism, Construction, and Energy.

While our analysis identified important initiatives to drive growth in many of the 20 sectors, the five prioritised sectors were selected because analysis revealed that they have the greatest capacity to maximise immediate and long-term opportunities as well as positive externalities. Telecommunications, for example, was not included as a high priority sector despite making a substantial contribution to the economy in terms of GDP and employment. This is because there appeared to be limited private sector control over potential future expansion. Opportunities in other significant sectors, such as manufacturing (the third largest economic sector, contributing \$992m to GDP and employing around 75,000 workers in 2012)⁴⁴ should be explored at later stages of implementation. More broadly, identified projects will have knock-on effects on other sectors – for example, projects in the energy sector will likely support industrial growth. Likewise, expansion in the agriculture sector could result in enhanced opportunities in food processing, and growth in construction could boost the manufacturing of building materials.

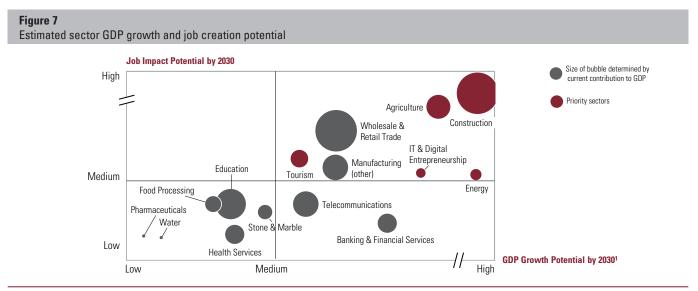
Figure 7 shows that, whilst the five high-potential sectors are not all of the same scale in terms of their possible future contribution to total GDP, each could have a significant impact on job creation.

Each of the five prioritised sectors were analysed to determine: (i) their current contribution to the economy (ii) the composition and fluidity of their value chain (iii) constraints that could hinder growth and (iv) their key stakeholders. They were further analysed along four dimensions:

⁴³ PCBS, *Performance of Palestinian Economy*, 2011, pg. 30. In 2011 total exports, 86% of which were to Israel, reached only \$0.72bn. As imports amounted to \$4.2bn, there was a negative trade balance of \$3.5bn - around 35% of GDP). This emphasizes the need to enhance exports overall and, at the same time, diversify exports markets to reduce the heavy dependence on Israel

⁴⁴ PCBS Labour Force Survey and National Accounts, 2012

- 1. The potential for GDP growth and job creation in the sector;
- 2. The most appropriate business approach for the sector's development;
- 3. The areas within the sector to which investment could be directed in order to achieve maximum results;
- 4. The potential of specific catalytic projects and initiatives in the sector to have a multiplier effect.



1 GDP growth potential determined by development and execution of strategies

Local, regional, and global best practices were benchmarked and global sector experts helped identify the best opportunities and forecast potential growth. Local stakeholders from each sector were consulted individually and in groups, through sector 'roundtables', to confirm the analysis and help select sectorial priorities. Finally, implementation and operational design strategies were outlined for each catalytic project.

The order in which the prioritised sectors are discussed in this report is based on a qualitative assessment of: (i) the ease with which the private sector could begin implementing the projects outlined and (ii) the potential for broader positive effects in the Palestinian economy in the short to medium term. Following this assessment, sectors in which a number of initiatives have already begun and/or where 'quick wins' are more likely in the short term, are discussed first. For instance, in agriculture many of the projects outlined here are already planned or have begun. In the IT sector, the projects discussed are likely to build on existing progress and be driven by a commercial effort. Whilst more structural support would be needed from the government to implement tourism initiatives, a strong foundation exists and some projects have already been launched.

Sectors with high potential but which, due to their nature and structure, need more time and greater efforts to develop, are presented last. In this sense, while construction has the potential to continue contributing to job creation and growth through affordable housing, the sector must better understand the market and seek to capture more of the value chain. Finally, energy offers extensive opportunities and would likely have a cross-cutting impact throughout the economy, but, at the same time, it is the sector that would require most government support to achieve its potential.

Figure 8

Overview of potential impact of initiatives in the five sectors

Sector	Initiatives	Potential 2030 GDP ¹ (USD M)	Potential additional direct jobs (2030)	Estimated short-term investment (USD M)
Agriculture	 Increase irrigated land through new water technologies Transition to a higher value crop portfolio Build strong international market channels 	Direct: 1,400	36,000	300
IT & Digital Entrepreneurship	 Expand R&D, high-end niche BPO outsourcing Create an eco-system and platform for digital entrepreneurship, beginning by focusing on Arabic content and software solutions Enhance regional position in software via best-in-class educational offerings 	Direct: 960	18,500	30
Tourism	 Focus on religious and cultural tourists Attract Palestinians locally, in Israel, and from the broader diaspora Brand and develop distinct city destinations into 'tourism hubs' (e.g., Jericho, Bethlehem) 	Direct: 750	19,000	100
Construction	 Expand affordable housing offerings in multiple cities/areas Capture a larger part of the value chain in building materials domestically Create a cooperative procurement strategy 	Direct: 2,800	64,000	N/A ²
Energy	 Increase domestic production of electricity Diversify energy production across fossil fuels and renewable sources, with focus on solar 	Direct: 2,200	17,000	175
		~\$8bn	~155k Indirect jobs: ~2	~\$600m 220k ³

1 Indirect impact exists for each sector based on multiplier effects that compound and overlap

2 All construction initiatives require feasibility studies. The cost of building 10k affordable units is estimated at ~\$500m

3 Direct job impact brings multiplier effect of 1.4x, through creation of indirect jobs (as an average proxy across sectors; e.g. creation of jobs in wholesale/ retail trade)

OVERVIEW OF POTENTIAL CATALYTIC PROJECTS IN HIGH-POTENTIAL SECTORS

The sections that follow look at potential initiatives and catalytic projects for each sector that could have substantial impact on growth and job creation. Whilst they are intended to be implementable under current conditions, their impact would be greater with the lifting of external restrictions and progress towards a political solution.

There is definite scope to evaluate several project alternatives in each of the sectors, as well as variants within the proposed options. Therefore, the set of selected projects should be regarded as an initial configuration which is likely to be adjusted as organic progress is made in the implementation of the overall programme.

The selected catalytic projects are summarised in Figure 9 below. Projects in the 'short-term' column are those that can be readily implemented (details about the projects are included in the 'implementation' sections of the following chapters). 'Medium-term' projects are generally intended to enhance or complement the immediately implementable short-term efforts. Projects described as 'long term' belong to a mature stage of development in each sector and typically aim to consolidate short- and medium-term initiatives. Further background information and detailed analysis on each of the initiatives recommended is available.

	Short term	Medium term	Long term
Agriculture	 Invest in wastewater treatment plants (WWTP) Investment in high-value crops Develop export hub in Dubai Launch model farm in Jericho Mobile desalination units 	 Expand number of WWTPs Replicate model farm in other regions Develop further export hubs (e.g. EU) Branding campaign for GCC Intensify transition to high value crops Establish cooperative structure 	 Contract farming for agribusiness MNCs Agriculture research institute Expand export basket Modernisation of water tech/resources Funding options for agriculture
IT and Digital Entrepreneurship	 Engage multi-national companies (MNC) for R&D and niche Business Process Outsourcing (BPO) Launch education pilot Launch angel investment fund and reconcile incubators 	 Develop technology hub along with a co-working space Improve educational offerings by enhancing teaching methods Launch e-government initiative Garner government support for risk 	 g • Embed best-in-class technical education Attract additional MNCs for offshoring Promote R&D between private sector and universities Launch 'Fibre-to-the-Home' plan
Tourism	 Implement Jericho and Bethlehem development plans Launch outreach initiatives to attract key segments (e.g. churches) Establish world-class hotel school Create Tourism Board 	 Bethlehem and Jericho branding campaigns Launch destination development plans, e.g. East Jerusalem, Nablus Expand diaspora outreach initiatives Expand direct sales channels 	 Upgrade tourism facilities Develop 2-3 major sites (e.g. Gaza Seaside, Hebron) Expand niche offerings (e.g. eco-tourism) Pursue broader regional partnerships
Construction	 Create a private sector association Conduct feasibility studies on building materials Formulate private sector-led affordable housing plan 	 Create 25k+ affordable housing units in North and South West Bank & Gaza Capture segments of value chain Conduct cooperative procurement Improve land registration 	 Incorporate new technologies and production methods Expand affordable and social housing Achieve scale in building materials manufacturing
Energy	 Install solar PV panels for residential, commercial, and industrial use Launch Jenin gas power plant Provide 'Green Loans' to SMEs Establish net metering 	 Build power stations in WB&G Expand solar and wind production Transform village into 'green village' Increase awareness of renewables via alternative energy education park 	 Further expand renewables production Convert Gaza power plant to gas Create comprehensive system of incentives to promote renewables

1 Not comprehensive. See individual chapters

Agriculture

Strategic pillars: Transition to a higher value crop portfolio; boost sector productivity and exports; and increase irrigated land

Regarded as particularly important due to its high potential and social and cultural significance, agriculture was the fifth largest sector of the Palestinian economy in 2012 (\$502m output, or 4.9% of GDP).⁴⁵ Yet, although growth has averaged 5% per year since 2005, total output in 2012 remained below output in 2000 (in real terms).⁴⁶ Agricultural exports constituted 25% of total exports in 2012 but remain small in absolute terms (\$120m).

Crops constitute around 75% of total sectorial production, in terms of value. Livestock comprises the majority of the remaining 25%, while forestry and fishery make a negligible contribution to output. Agriculture is a major activity in the governorates of Jenin, Jericho, Hebron, Tubas, Tulkarm, Qalqiliya, Nablus, and the Gaza Strip. In the West Bank, roughly 930,000 dunums⁴⁷ are actively cultivated, with more than half dedicated to olive groves.

Agriculture's contribution to employment is significant. Nearly 100,000 Palestinians were employed in the agriculture sector in 2012. In the preceding decade, agricultural employment as a percentage of total employment ranged between 11% and 17%. Currently, more than 1 in 10 working Palestinians is employed in the agriculture sector. Agricultural activities employ more than a fifth of working women (Figure 10).

However the employment of large numbers of people is not necessarily indicative of progress in the sector. As agricultural productivity⁴⁸ halved between 1995 and 2011, The World Bank suggests that, 'the growth of sector employment merely may reflect the absence of better jobs elsewhere and the spread of subsistence agriculture, as a means of economic survival.'⁴⁹

The sector is dominated by small-scale farmers and herders who farm either on a purely subsistence basis or sell their products with low margins in the domestic market. Although a few large farms exist, agriculture has remained mostly stagnant over the last few years, partly due to the predominance of traditional cultivation methods and low value crops.

CONSTRAINTS ON THE SECTOR LIMIT PRODUCTIVITY...

Beyond external constraints, four main internal gaps hinder the growth of the Palestinian agricultural sector and limit its ability to capitalise on its potential: insufficient water for irrigation, sub-optimal crop allocation, little realisation of economies of scale, and underdeveloped distribution channels.⁵⁰

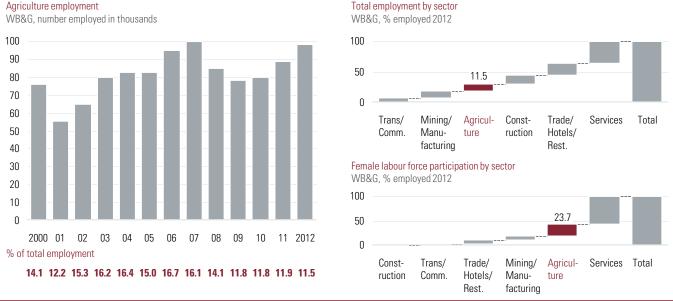
- 47 1 dunum = 0.1 Hectares
- 48 Measured by output per worker
- 49 The World Bank (2013), Fiscal Challenges and Long Term Economic Costs: Economic Monitoring Report to the Ad Hoc Liaison Committee, (The World Bank)
- 50 The World Bank, *ibid*. The World Bank attributes this partly to 'restrictions on imports of agricultural inputs such as fertilizers, lack of access to water and infrastructure for irrigation, and restrictions on exports... and access to land', which it says has resulted in insufficient investment in the sector

⁴⁵ The World Bank (2013), Fiscal Challenges and Long Term Economic Costs: Economic Monitoring Report to the Ad Hoc Liaison Committee, (The World Bank). The share of the sector in the economy declined from 13% in 1995 to 6% in 2011

⁴⁶ PCBS, Performance of Palestinian Economy, 2012. Agricultural output was \$332.6m in 2012 and \$356m in 2000 (constant 2004 USD)

Figure 10 Employment in the agriculture sector

Agriculture employment



Source: PCBS

Insufficient irrigation is by far the largest constraint on the sector. Only 12% of cultivated land in the West Bank is irrigated, compared to a much higher 78% in Gaza. Dependence on rain-fed agriculture in the West Bank, coupled with other constraints, can result in yields one-twentieth the size of irrigated land of a similar nature. As one West Bank farmer put it: "Insufficient water resources prevents us from reaching higher yields with our current crop mix and from growing more profitable, exportable crops such as vegetables and herbs...'

In the West Bank, crop allocation is not optimised for high-value production. Over 50% of cultivated land is dedicated to olive production, yet on a side-by-side comparison, vegetable production, comprising just 12% of cultivated land, is up to 20 times more profitable. Given the economic, historic and cultural importance of olives to the Palestinian economy, their production is likely to

"We need to provide farmers with the foundations and they will move to what is profitable"

West Bank farmer

be sustained in the long term. This therefore means that profitable opportunities in alternative high-value and high productivity crops should be pursued by expanding total agricultural land. In addition, a lack of water resources reduces the ability of farmers to cultivate marginal land, which could be used for agriculture.⁵¹

Furthermore fragmentation of the sector leaves little room to realise economies of scale. Around 93% of farms are smaller than 40 dunums in size⁵² and there are over 200 cooperatives operating across the West Bank. This not only limits the ability of the sector to benefit from discounts in purchasing inputs, but also prevents it from moving higher up the value chain into activities such as processing and large-scale distribution. Livestock activities

⁵¹ PCBS and Ministry of Agriculture (2010)

⁵² PCBS, Agricultural Statistics 2010/2011, pg 13. West Bank and Gaza

are particularly affected by the high price of inputs as costly animal feed and medication severely cuts farmers' profitability.

Fragmentation and small farm size also prevent the sector from tapping international markets, as small-scale farmers typically do not have the means to develop relationships with international buyers or the capacity to finance export logistics.

Finally, despite recently increased efforts, international distribution channels are still limited. This reduces farmers' ability to achieve higher prices for their produce.

...BUT AGRICULTURE HAS STRONG POTENTIAL

Despite the existence of significant constraints, the Palestinian agriculture sector can be regarded as having strong potential for further expansion in the coming years. There is room to enhance current low productivity conditions in the sector by leveraging a number of comparative advantages:

- (i) A favourable, temperate climate, which allows for cultivation all year round and offers farmers the chance to obtain higher profit margins by exporting during the European and Asian winter;
- (ii) Proximity to emerging markets, which could be engaged in trade partnerships;
- (iii) Conditions well suited to the production of select, high-value, niche crops (such as dates and herbs).

Innovative technologies in wastewater treatment and desalination could help overcome limited access to fresh water resources.

POTENTIAL TO EMERGE AS A HIGH-VALUE CROP EXPORTER

Our analysis suggests that the Palestinian economy has the potential to become a leading exporter of select highvalue crops. As one farmer said: "Palestinian farmers are not ideologically motivated to grow lower-value field crops or olives." He added that farmers will move to produce what's profitable if they are "provided with the foundations, such as more water and strong and stable connections with export markets."

There is potential for average yields per dunum to increase 2.5 times and for the amount of irrigated land in the West Bank to nearly triple. This could result in the sector's contribution to GDP reaching around \$1.4 billion and employment increasing to 134,000 people by 2030 (up from just over 98,000 in 2012).

There is potential to increase the proportion of higher-value fruits, vegetables and herbs in the West Bank's crop mix. Eight crops have been identified as offering the greatest potential (dates, oranges, grapes, peppers, squash, tomatoes, herbs and cucumbers).⁵³ This could be achieved by increasing the proportion of land dedicated to fruit trees two-fold (to around 140,000 dunums, or 15% of total cultivated land); doubling the proportion dedicated to vegetables (to around 260,000 dunums, 25%); tripling the proportion dedicated to herbs (to around 6,000 dunums, 0.5%); and beginning seed production (on around 3,000 dunums by 2030). There is also growing interest among sector stakeholders to expand current small-scale plantations of almonds and pomegranates and explore further opportunities in other high-potential products, such as quinoa. Figure 12 illustrates how Israel increased agricultural revenues through increasing the production of higher value crops.

⁵³ Based on an assessment of 75 crops (under different cultivation methods) in terms of their profitability, labour intensity, and water efficiency. Although eight crops were identified as a result of our assessment the range of high-potential crops is certainly not limited to this basket

Lessons from Gaza

Agricultural performance in Gaza demonstrates the potential opportunity from increased irrigation. With access to water Gazan farmers have been able to optimise their production towards highvalue products despite facing similar constraints to those in the West Bank. (Figure 11)

Half of cultivated land in Gaza is dedicated to highvalue fruit and vegetable production. This is made possible because agricultural water resources are available to cultivate water-intensive high-value crops and fresh vegetables. As a result, despite possessing only 11% of total cultivated land, Gaza contributes nearly 30% of total agricultural valueadded. Gaza's agriculture sector is also strongly export oriented thanks to coordinated action of four large and efficient local cooperatives. Originally organised with assistance from an Israeli company and other international organisations, these cooperatives remain heavily involved in ancillary activities that increase the value of agricultural exports, such as processing, packaging, distribution and marketing.

Figure 11

Gaza comprises only ~10% of cultivated land but contributes over a quarter of agriculture GDP

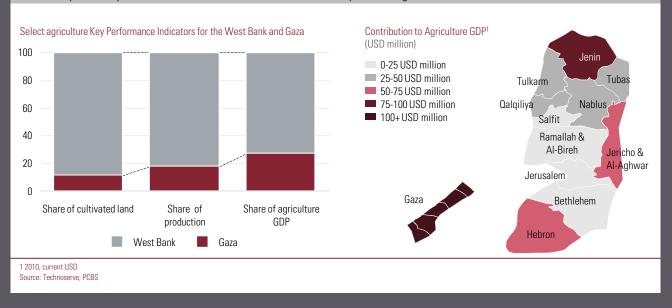
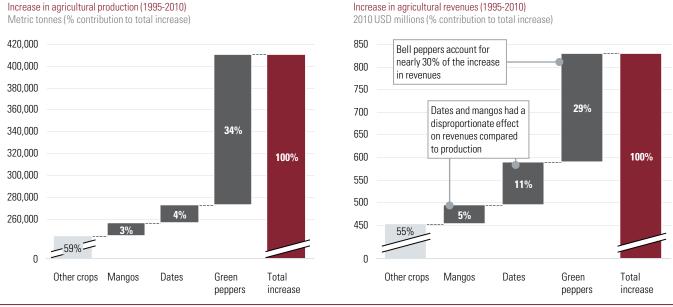


Figure 12

Increased production of three high value crops accounted for 45% of Israel's increased agricultural revenues between 1995 and 2010



Source: FAO

A number of small-scale projects, such as the distribution of high-value crop toolkits, could help facilitate a transition to a more profitable crop portfolio. More importantly, large-scale, structural improvements in the enabling environment would be needed to catalyse change.

Analysis suggests four strategic enablers could underpin opportunities for substantial improvement:

- (i) Maximise the use of unconventional water resources to increase the amount of water available for agriculture;
- (ii) Aggregate small farmers' production to realise greater efficiencies of scale;
- (iii) Promote greater use of modern agricultural technologies and practices;
- (iv) Modernise sales and distribution channels to facilitate export logistics.

(i) Increasing water resources from non-conventional sources

Analysis, consultation with local stakeholders, and experience in other markets suggest that increasing the supply of agricultural water is a critical enabler to the agriculture sector. To increase total cultivated land by 10% in the West Bank (incorporating 300,000 dunums of irrigated land, up from current 110,000) an additional 150-200mm³ of water will be required.

Unconventional water resources and increased use of innovative technologies may be able to provide this additional supply. Wastewater, treated to levels of purity necessary for agricultural purposes, could be one such source. Although treated wastewater can only be used safely for certain crops (such as fruit trees and fodder crops) its use will release fresh water for use in other high-value produce. Using treated wastewater for animal

fodder could also increase domestic fodder production (reducing reliance on imports) and therefore increase the livestock sector's profitability. Options other than wastewater treatment include desalination (of brackish wells) and rainwater harvesting.⁵⁴

In addition to increasing the volume and range of water resources available to the agriculture sector, investment in public infrastructure will be needed to increase water supply efficiency.

(ii) Achieving greater scale and efficiency in production

Greater scale and efficiency in production can be achieved through better coordination between stakeholders, aggregation of small farm production, and the expansion of large commercial farms.

Encouraging coordination between farmers, through enhancing the role of cooperatives across the entire value chain, could help lower the price of inputs and increase profit margins. Training and capacity building in the West Bank cooperatives would enable their entry into upstream activities such as processing and packaging. This could also include cooperative distribution and marketing to increase domestic and international market penetration. The activities of the cooperatives could be further consolidated by sharing centralised processing, packaging, and distribution centres (within a defined area of governance). These cooperative services could facilitate aggregation and increase the value of produce and its export potential.

The sector could also improve economies of scale by increasing farm size and creating large commercial entities. However, in order for this to be a realistic option, an effective system of land registration would first be necessary. Currently, only 30% of land in the West Bank is registered, the registration process is lengthy and complicated, and stakeholders report that dispute resolution processes are inefficient. Effective land titling would facilitate the purchase of land and an increase in average farm size.

(iii) Promoting new technologies and technical approaches

Adopting and expanding the use of up-to-date agricultural technologies and techniques can drive further improvements in productivity and profitability. It could increase the quality of agricultural produce, ensuring greater market competitiveness, and promote a more efficient use of available water resources.

Experts suggest that up to 25% of high-value vegetables and herbs could be grown in greenhouses (65,000 dunums) and drip irrigation could be used on up to 25% of irrigated land (or around 28,000 dunums) by 2030.

Wastewater Treatment

Using treated wastewater for agriculture is now a well-established practice. There are a number of such programmes in the region. For instance, the Doha West project in Qatar, a joint venture between Degrémont of France and Marubeni Corp of Japan, produces treated effluent to irrigate green areas and agricultural land. As part of the project, treated wastewater is being increasingly used to irrigate forage crops. Similarly, the Sulaibiya project in Kuwait, a joint venture between the country's Kharafi group and Iconics of the US, treats wastewater for nonpotable use in agriculture, industry and aquifer recharge.

Potential projects to further this aim include creating a 'farm incubator' and developing a model farm (discussed in greater detail in the implementation section below). Both of these projects would seek to upgrade agricultural productivity by the hands-on transfer of modern agricultural practices.

⁵⁴ Ministry of Agriculture, FAO and climatedata.eu. The average rainfall in Ramallah is 615.2 mm. For comparison, average rainfall in Paris is 585mm, in London is 754mm and in Tel Aviv is 532mm

(iv) Improving sales and distribution channels

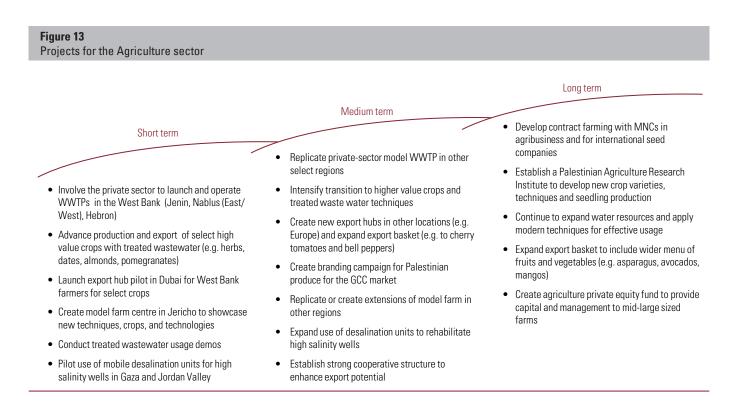
Modernisation of sales and distribution channels can help facilitate export logistics and improve domestic distribution, potentially enabling agricultural exports to increase by \$500m by 2030.

The sector should explore international markets to identify higher profit margins for its produce (premium quality Medjool dates can sell in the British or the French market for more than double the price in the domestic market). This would incentivise farmers to improve the quality of their produce to meet the standards of international customers. At the same time, it would enable them to overcome the effects of an informal domestic market, where prices for their produce are typically lower. Projects that could help facilitate increased export volumes include:

- Setting up an international export hub to encourage trade in high-potential markets;
- Creating an international branding campaign for the sector;
- Expanding the Ministry of Agriculture's export certification programme.

IMPLEMENTATION

Implementation of agricultural projects could be driven by a small but growing number of commercial farms and agricultural investors. Support from public sector institutions such as the Ministry of Agriculture and the Palestinian Water Authority (PWA), as well as sector associations such as Palestine Agriculture Relief Committee and PALTRADE, is likely to be critical.



Potential short-term projects

Analysis suggests effective short-term efforts could begin with small-scale wastewater treatment plants (WWTP) and desalination projects, an export hub for Palestinian agricultural produce, and a model farm (to transfer skills and share best practice, both between Palestinian farmers and those from other countries). The government could support these efforts by modernising water infrastructure to increase efficiency, utilising mobile desalination units to refurbish wells.

An existing investment opportunity in the village of Fasayel (in the Jordan Valley) constitutes an archetype of the broader sector strategy. It consists of a farm of up to 3,000 dunums with an availability of over 500,000 m³ of spring water per year. There is also potential to produce an additional 1 million m³ of water via desalination of brackish water, to be allocated to the irrigation of high-value crops, which can be grown for domestic consumption and export.

 Wastewater treatment plants: There is positive momentum regarding the potential of treated wastewater for agricultural use. USAID, through its 'Compete' programme, has recently included 14 Palestinian farmers in a study tour to Jordan.⁵⁵ Through field visits and peer-to-peer exchange, farmers raised their awareness of the environmental and economic importance of using treated wastewater in agriculture. A series of complementary field trips have been made to plant protection laboratories, water treatment plants and farms in the Jordan Valley, Aqaba and Wadi Mousa. In a separate initiative, pilot projects for the use of mobile desalination units (for high salinity wells) are underway in Gaza and the Jordan Valley.

The private sector can immediately help upgrade the existing WWTP project in Jenin and play an increased role in its operation, including selling the treated water to farmers. The role of private sector investors and operators in this venture could offer an excellent model for private sector participation in similar projects in other governorates. The PWA has begun an extensive programme to construct WWTPs to treat effluent to the standard required for agricultural purposes. This programme aims to set up WWTPs in Hebron, Nablus, Tubas, Jericho, Ramallah, Gaza, North Gaza, and Khan Yunis.

Although construction of such plants is typically largely dependent on donor and government support as well as international technical expertise⁵⁶, the Palestinian private sector is currently exploring concrete opportunities for developments in Jenin, Nablus and Hebron. A range of models for private sector involvement in waste water treatment plants could be explored (Figure 14). A government official said: *"Water is the sector most ready for greater private sector involvement. We are very open to working with the private sector on WWTP projects across the West Bank and Gaza."*

- Introducing an export hub: Creating an export hub for Palestinian agricultural products in Dubai could help increase export volumes (estimated at between 15,000 and 20,000 tonnes on opening of the hub). The export hub would act as a distribution centre for produce to be sorted and processed. Farm-specific export managers could facilitate relationships with wholesalers, supermarket chains, and seek opportunities to export to other markets. Dubai is itself an appealing market for exports given its established network of supermarkets, restaurants, and wholesalers, its business-friendly environment for foreign enterprises, and its abundance of consumers with relatively high purchasing power.⁵⁷ Dubai's connectivity to other markets, such as the European Union, Gulf Cooperation Council (GCC) countries, and South Asia also adds to its strengths as a potential location for a hub.
- Creating a model farm: Successful experience in other countries (such as Morocco) suggests that establishing a
 model farm (utilising rented or donated land) would provide a mechanism to transfer modern farming practices to
 a broad group of farmers. A large commercially-run model farm, potentially situated in Jericho, could showcase

⁵⁵ www.competeproject.ps

⁵⁶ Due to large capital expenditure requirements with long payback period, and a lack of domestic technical know-how

⁵⁷ Local media and The World Bank (2013), Doing Business 2013, (International Bank for Reconstruction and Development and The World Bank)

Figure 14 Potential models for private se	ctor involvement in wastewater treatment plants
Design-Build-Operate	Private firm or consortium of firms builds and operates the plant for specific period of time
(DBO)	 Government or public utility owns the plant and undertakes to finance the investment. Private sector responsible for commercial risk of operation
	 Private sector actor usually receives payment on a m³ basis dependent on successful operation of plant and meeting effluent standards
Build-Own-Operate-Transfer	Private partner builds, owns, and operates the WWTP
(BOOT)	• Transfers ownership of the plant after 20-30 years free of charge and in good operating condition
	 Objective to make the operation and management of the plant efficient, attract new ideas and technologies which could lower costs, and finance the investment without public guarantees of any form
	• Private partner normally recovers investment and operating through price per m ³ basis over course of agreement
Build-Own-Operate	Private partner builds, owns, and operates the WWTP
(BOO)	Private sector owns and operates plant indefinitely

Source: World Bank: Improving Wastewater Use in Agriculture

the use of modern greenhouses and irrigation techniques in the production of high-value fruits, vegetables, herbs and dates. At the same time it could help small farms leverage the larger farm's processing and distribution capacities, as well as its relationships with international buyers. The model farm could also seek out small- to mid-sized farms with which to partner, bearing the cost of the upfront investment required to upgrade their systems and production in return for a portion of the profit.

Potential medium-term projects

In the medium term, there is potential to increase the number and capacity of WWTPs across the West Bank and Gaza, expand the size of the Palestinian export basket, increase the number and scale of international market channels, and aggregate small-scale farm production. Potential projects include:

• Expanding the use of treated wastewater: The first wave of WWTPs could be expanded by increasing the volumes of water treated through upgrading and expanding the sewage systems, the number of transmission lines from the plants to areas of cultivated land, and the total number of plants. In the medium term, public sector owned WWTPs could be transferred to private operation, which would likely help increase their efficiency and level of technical expertise.

Such ventures, together with an expanded use of desalination units to rehabilitate high salinity wells, will help intensify and consolidate the transition to a higher value crop portfolio.

• Creating additional export hubs and model farms: In the medium term, the export hub model could be replicated in other high-potential geographies, such as Moscow (and other European hubs), Singapore, and Riyadh. The volumes of new crops being handled by the hub could be expanded to include larger quantities and a wider range of higher-value produce such as bell peppers and cherry tomatoes. The model farm could be replicated in locations such as Jenin and Nablus, where agriculture makes a large contribution to economic activity.

- **Branding campaign for Palestinian produce:** A branding campaign, targeting specific export markets such as the GCC or the EU, can be driven by a Public-Private Partnership between the Ministry of Agriculture, commercial farms and agribusinesses.
- Establishing a private sector livestock service centre: There may also be an opportunity to establish a commercial livestock service centre which could provide artificial insemination, veterinary services, and medicine. The livestock centre could also help aggregate milk production from small-scale dairy farms in dairy distribution centres, which would ensure onward sale to dairy processors.

Potential long-term projects

In the long term, the agricultural sector will need to find ways to expand its capacity and capabilities, potentially through contract farming and establishing an agricultural research centre.

- **Developing contract farming:** Long-term development of the Palestinian agriculture sector will likely provide opportunities to develop contract farming for multinational agribusinesses, in particular international seed companies. Such contracts could involve multinational corporations providing inputs to farmers, instructing them in cultivation techniques, and aggregating their production either as inputs for other goods or for sale in international markets.
- Establish an Agricultural Research Institute: An Agricultural Research Institute could be established to develop domestic seedling production and experiment in new crop varieties and irrigation practices.
- Establishing a strong cooperative structure in the West Bank: West Bank farmers could follow the lessons from Gaza and promote coordination between cooperatives as a way of enhancing efficiency and adding ancillary activities (such as processing, packaging, distribution and marketing) that increase the value of agricultural exports.
- Improving access to capital for farms seeking expansion: An agriculture private-equity fund could be set up to provide capital and management to mid-to-large sized farms seeking to venture into ancillary activities or transition to higher-value crops.

IT & Digital Entrepreneurship

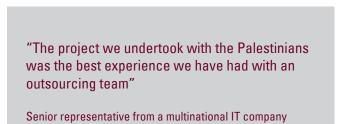
Strategic pillars: Expand IT outsourcing through R&D and high-end niche business process outsourcing (BPO) offerings; develop and enhance technology education at all levels; and establish an entrepreneurial ecosystem

IT & Digital Entrepreneurship is an emerging sector in the Palestinian economy with strong potential for growth and job creation. In 2012, the sector contributed around \$105m to GDP (around 1%) and employed an estimated 1,500 people.

Over the last few years the technology sector has begun to establish a strong value proposition. The IT industry has expanded mainly through software development, providing outsourced R&D for large multinational technology companies (e.g. Cisco, Microsoft, Intel and HP). In part, this is the result of an effort initially launched as a corporate social responsibility initiative by Cisco in 2008. The initiative quickly transformed into tangible opportunities for Palestinian IT firms to showcase their competitive capabilities and sign contracts with major multinational companies.

BPO work (the bulk of which is focused on serving domestic companies in their need for call centre support, data entry, and other IT services) has provided additional support to the sector's development and currently employs around 1,000 people. Reach, the first Palestinian contact-centre, employs over 600 people full-time and services 70,000 calls per day.

Finally, a vibrant digital entrepreneurship scene is emerging and initiatives have been put in place to help launch and support the segment. Some, such as Peeks and Ramallah Open Coffee Club, are helping to foster a sense of community. Others provide funding and mentorship to technology start-ups through accelerator-style programmes (such as FastForward and programmes by MercyCorps).⁵⁸ These initiatives have been coupled with the creation of the first technology-focused venture capital fund to target early stage investments, Sadara Ventures. The fund



has \$30m in capital to invest in the coming years. More recently USAID's 'Compete' programme launched a \$2.5m seed fund for entrepreneurs in in a number of sectors, including technology.

58 The Portland Trust, Palestinian Economic Bulletin, August 2013

BUILDING ON THE SECTOR'S STRENGTHS

These developments provide a solid foundation from which the sector can expand. IT has the potential to provide high value-added services by leveraging key inputs such as human capital and innovation capabilities. There is currently an extensive and well qualified talent pool of IT workers, which has demonstrated remarkable capacity to adapt to the requirements of companies. A summary of our assessment of these and other strengths of the Palestinian IT sector is shown in Figure 15 below.

Figure 15

Illustrative assessment of strengths of the Palestinian IT sector

Assessment areas		Extremely favourable	Favourable	Some difficulties	Not ready
Talent	 Availability in quantity and quality, language, continuous improvement, and work ethic Speed of ramp-up and ease to hire and train Sustainability of employment conditions: attrition, social laws, and unions Capacity and willingness to adapt to company's culture and expectations 	•	•	•	
Environment	 Location appeal to expats Travel accessibility to/from key customers Acceptability of predictable risks: geographic and data/IP protection Level of certainty of business continuity: Govt./regulation stability, expats ease of entry/exit 		•	•	•
Infrastructure	 Technical supply reliability, quality, and resilience Real estate opportunities Availability, reliability and choice of suppliers 		•	•	
Start-up and operating model	 Appetite of vendors to embed local operations Start-up costs in line with expectations Process proven by measures like skills, efforts, time to market, flexibility 		•	•	
Costs	 Current costs structure (productivity, drivers) Future costs structure (trend, evolution) 		•		
	People 🔳 Functional				

Source: Stakeholder interviews

Our analysis suggests that through sustained investment and a focus on developing human capital, the sector could expand its contribution to GDP to up to \$960m and employ more than 18,000 people in high-skilled jobs by 2030.

Opportunities lie mainly in expanding IT outsourcing in high-value niche offerings in business process outsourcing (BPO) and R&D, where comparative advantages exist. Progress on this front could help enable a strong and healthy entrepreneurial environment to support digital and technological innovation.

With a strong human capital base, positive momentum and competitive cost structures for high end services, as noted above, the Palestinian technology sector has the potential to better position itself in the Arab market. The pan-Arab digital media market has grown significantly in recent years (for example, digital advertising expenditure grew approximately 27% per year between 2007 and 2011). Even if this growth rate were to halve, to around 15% per year, the market could as much as double in size by 2030 (Figure 16).

By developing its software development capabilities, with a focus on innovation in programming, the Palestinian digital technology sector could position itself to capture a portion of this market. While countries such as Lebanon, and others in the GCC, are heavily invested in media, the Palestinian digital sector has the potential to provide software solutions to supply the growing demand of the pan-Arab market.

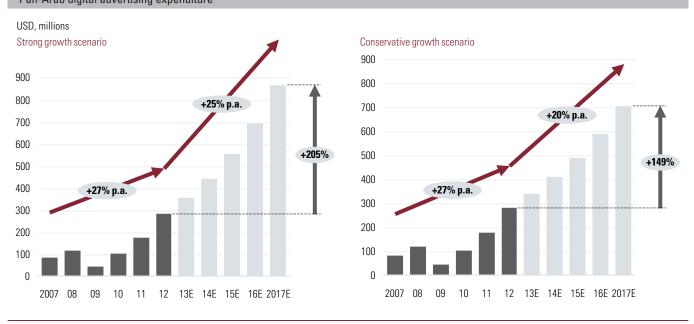


Figure 16 Pan-Arab digital advertising expenditure

Source: Arab Media Outlook 2011-15

Looking more closely at R&D outsourcing, while the work is not high in volume, its quality, level of value-added and cost competitiveness are noteworthy.⁵⁹ However, there is no coordinated branding strategy for the outsourcing sub-sector and awareness is therefore low (in 2012 more than 50% of international customers were unaware of Palestinian IT outsourcing services). Business development remains a key area to ignite growth in the sector. In contrast to many countries both in the region (e.g. Jordan, Egypt, Morocco) and globally (e.g. Poland), the Palestinian government does not have a programme to attract international companies nor does it provide strong incentives for growth in the technology sector.⁶⁰

There are significant local and regional opportunities. Regionally, the sector has been dominated by BPO and IT outsourcing services in countries that offer lower wages than those in the West Bank and Gaza.⁶¹ This indicates that the potential for the Palestinian market lies in R&D outsourcing and high-end offerings in the BPO segment, eventually contributing to the sustainable development of innovative software companies led by highly skilled entrepreneurs (Figure 17).

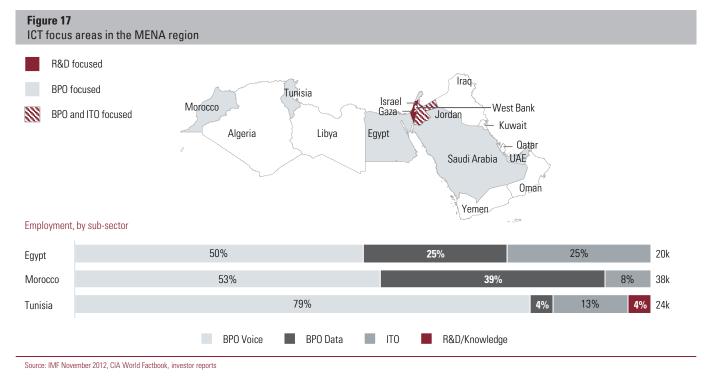
BPO, in particular, needs to focus on higher value added services as it is not able to capitalize on relatively low wages. However, the initial level of skill required is not as high as for other activities (such as software development) and training employees can be done in a relatively short amount of time (six to nine months).

Additionally, Palestinian IT businesses can leverage and improve a strong human capital base and take advantage of the technology sector in Israel, which has focused historically on innovation and high-end solutions. For example, the Palestinian IT sector could continue to work with R&D offshoring centres of multinational companies in Israel, leveraging their high-end skills and Arab-Israeli talent (e.g. a company such as ProGineer, which has offices in Jerusalem and Ramallah).

⁵⁹ Wages for R&D outsourcing for entry level hires are about 30% lower than in India, and 40-50% that of major outsourcing/off-shoring hubs for R&D such as Israel and Poland

⁶⁰ Cisco (2012), Pioneers Market Development Approach in Palestine, (Cisco)

⁶¹ BPO wages (for high volumes of work) are 25% lower than wages in Egypt, and over 30% higher than wages in the Philippines, for similar type of work



Short-term potential

In the short term, IT firms can expand their outsourcing offering by focusing on software development and R&D, providing outsourced business development for local firms (Figure 18). In addition, expansion into niche, high-end BPO offerings (e.g. Arabic language support and customers requiring high-security, such as banks) could roughly triple the number of jobs in the BPO segment over the next five years as these areas require less intensive training.

Moreover, while training programmes can fill short-term gaps in human capital readiness, long-term investments in education are also required. Many countries in the region have launched education programmes to support nationwide IT initiatives. Examples include the Jordan Education Initiative, a Public-Private Partnership (PPP) to restructure IT education; the Egyptian Education Initiative, launched in conjunction with Cisco's Networking Academy; and others less formalised such as The World Bank, Microsoft, and Apple's support for education in Tunisia.

Including technology in primary and secondary school curricula, along with enhancing IT and digital education at universities, will help prepare a wave of graduates to bolster the sector in the future.

Medium-term potential

In the medium term, the digital sector could expand further as IT is incorporated into other segments of the economy (including larger companies/conglomerates, the banking sector, services firms, and the government) alongside the development of a strong entrepreneurial ecosystem. Outsourcing for international clients will likely accelerate the modernisation of local companies. It would also provide a larger domestic market for digital start-ups to test their ideas and take their businesses to market. Additionally, the sector could develop software outsourcing (focused initially on the Arabic speaking world) and international branding to ensure Palestinian firms are considered by major companies seeking out such services.

Poland's R&D Value Proposition	Krakow's transformation towards R&D
 Providing a large, high quality labour force at a low cost with locational advantages 427 higher education institutions, 123 are state owned Through the 'BTU' programme, outsourcing providers collaborate with educational institutions Young workers speak a variety of European languages and have a location advantage Currently houses 200 R&D centres across industries with 100,000 workers Government subsidies provided to attract MNCs R&D centres in Poland for technology companies Gdansk Uarge Wroclaw Katowice Krakow 	 Began as a BPO offshoring hub with major companies across sectors setting up operation CapGemini, Microsoft, UBS, Shell, etc. These companies expanded into R&D and helped build Krakow's brand internationally With growth in human capital and the establishment of a large tech ecosystem, it has become a destination for R&D software 8 universities in Krakow offering IT degrees 8,000 IT sciences and 5,000 mechanical engineers graduate each year Horestment support EU and government subsidies promote job creation, with tax exemptions attracting companies to offshore Marketing campaigns Launched 'We are developing outsourcing' in 2008 Led to 'Krakow to Business' (KRK2B) for business development R&D centres for software companies Google's Research Lab: 'When we saw these trends, of people from Eastern Europe winning [coding] contests, we decided to take a closer look. People have a huge interest in software, and there's a much deeper grounding in mathematics in the curriculum in these countries'' Google's head of international engineering operation

Source: Poland-Indian Chamber of Commerce, EconStar, press clippings

Entrepreneurial employees are also likely to establish new IT firms (and potentially digitally focused start-ups). In this sense, one venture capitalist operating in the sector said: *"The culture of entrepreneurship is just being developed, but young Palestinians do not understand how to succeed as an entrepreneur... for start-ups to really take off, more needs to be done."*

As the education system improves, innovative ideas are likely to become more common, paving the way for venture capital investment into new companies.

Long-term potential

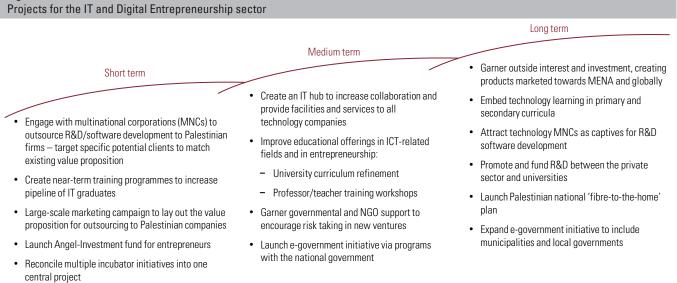
Our research suggests that in the long term, the sector has the potential to better position itself in the regional information and digital technology market by further developing its educated and innovative workforce. Improvements in IT and digital education should produce graduates with strong critical thinking skills, innovative habits, and a foundation of core computer programming skills.

As IT education improves and customer awareness of the offering increases, the Palestinian IT sector could start to generate new business in software development, providing innovative solutions for major multinational companies.

Finally, with a growing number of experienced technology professionals and an improving workforce, the digital entrepreneurship and innovation clusters in the Palestinian economy can become a part of a strong ecosystem that produces new companies with regional and potentially global reach.

IMPLEMENTATION

Our analysis suggests that to reach its potential, the IT sector should focus on two specific areas: expanding outsourcing through niche offerings, and building an entrepreneurial ecosystem to support innovation. These would be supported by five further initiatives aimed at improving the enabling environment.



Outsourcing and software development: Palestinian IT businesses could seek opportunities to engage with potential international customers. The CEO of a local IT company said: *"We're trying to grow as companies... but we need to develop deep partnerships with international companies."* By attracting ten multinational companies to outsource their R&D/software development to Palestinian firms, our analysis suggests that total revenue could grow to as much as \$250m in 2030 (from a 2012 base of \$25m), could contribute up to \$330m to GDP, and could generate 7,000 additional jobs.⁶² Initiatives to support the development of this segment include:

- Branding and business development: A large scale marketing campaign, to brand the Palestinian IT industry
 as a major R&D outsourcing destination, would support engagement with multinational software development
 companies. A set of target companies would be defined on the basis of the existing value proposition of
 outsourcing firms currently operating. Likewise, businesses could provide full-service outsourcing and Arabic
 language services for companies within the MENA region. In the long term, multinational companies could be
 attracted to set up R&D operations in the West Bank or Gaza.
- IT Hub: Building a technology park to house and provide facilities for Palestinian IT firms would support the
 marketing campaign and would help attract business from international companies looking to outsource R&D.
 Opportunities for the development of such project in the city of Rawabi are currently being evaluated. Such a
 hub could also provide real estate and virtual infrastructure incentives, and would benefit from government
 support through policies that promote growth in the IT sector.
- E-Government: An e-government initiative to provide meaningful work to software development firms can help bolster the sector in the near term and provide valuable experience to test products in the domestic market. Opportunities exist to create software solutions for e-services such as registrations (e.g. land, permits, and businesses) and taxes. Improvements in government accessibility could be further expanded to municipalities in the medium term.

Digital Entrepreneurship: Initiatives to support the development of this segment include:

First, companies could construct a co-working space for digital entrepreneurs within a high-tech hub to provide
office space, virtual infrastructure and an environment that promotes collaboration.

⁶² Based on the segment capturing 3% of the R&D outsourcing and offshoring market in 2030, which is expected to reach \$100bn in revenue. Software companies currently capture 7.8% of the total revenue

- Second, a seed fund that provides angel capital investment to entrepreneurs could help start-ups become eligible for further investment and growth. Efforts could build on the recently launched fund from USAID, and should be increasingly focused on technology and digital start-ups.
- Third, an incubator or accelerator could be put in place for technology and digital start-ups, to coordinate and
 potentially consolidate a number of initiatives that already exist (e.g. FastForward, PICTI, MercyCorps). This
 project could provide both mentorship and the formal support of angel investors for budding digital entrepreneurs
 (Figure 20).

Case study: Boulder, Colorado developed a booming start-up scene through entrepreneur-led efforts

How Boulder, CO became an innovation hub

- Self-driven talent: A university town of 100,000 people in 1995, with a high concentration of PhDs and computer science students
 - A handful of companies were started between 1995 and 2001, with some former successful entrepreneurs
 providing venture capital funding
- No public sector intervention: Without tax-incentives and without investment in technical education, a set of like-minded entrepreneurs invested their time in energy into building a software-community, with a high degree of collaboration
- In 2006, a venture capital (VC) firm and incubator were founded: The Foundry Group and TechStars an
 incubator that provides support to early entrepreneurs

'The Boulder Thesis' - Brad Feld (founder of Foundry Group)

- Entrepreneurs as leaders. A start up community is divided into two groups: Leaders (entrepreneurs) and feeders (everyone else). "The feeders have very important roles, they become part of the fabric of the start-up community. But the feeders can't be leaders. The leaders have to be entrepreneurs"
- A long-term view. A successful start-up community must be filled with people who are making a long-term commitment of 20-plus years and are able to weather the successes and failures of entrepreneurs in the community
- A philosophy of inclusiveness. It takes all kinds of people to make a start-up community. "If everybody
 contributes energy into the start-up community, it will get bigger and grow faster and be more successful and be
 more fun"
- Events that engage the entire entrepreneurial stack. Events like TechStars and Startup Weekend, which
 are more substantive than awards dinners or cocktail parties, as vital to allowing the entire community to help
 start-ups

Success stories

- Kerpoof children's educational website
- Verio online business solutions
- Rally Software cloud computing
- Socialthing social media
- MXLogic IT security
- Ball Aerospace

Notable facts

- In 2011, \$375m was raised for new companies
- By 2012, Boulder became home to 200 start ups and 7 investor groups
- The Foundry Group launched with \$225m and has grown to \$675m in 6 years
 - Invested in 70 companies as an early stage VC
- Invested in 50 companies as angel investors
 Named one of the top global cities to start a company

Source: Press clippings, FastCompany, FeldThoughts

IMPROVING THE ENABLING ENVIRONMENT

Human capital is the most important input for the IT sector and the education system is vital to the creation of a suitable enabling environment. Currently, over 4,000 students study computer science or engineering related courses at Palestinian universities.⁶³ However, the number of qualified candidates for high-end software development jobs is low. Employers cite difficulties finding students who are ready to work and instead have to invest an average of six months in training before a new hire has the requisite skills to do their job effectively.

Businesses said the most significant issue in the education system is the focus on rote learning rather than problem solving and critical thinking – approaches that fuel innovation for high-end software development. Project management along with core skills in computer programming have also been mentioned as areas for improvement.

Education providers, with public sector support, can make five important interventions to improve the enabling environment for the IT sector: improve tertiary education, adopt a critical thinking approach to technology

⁶³ This figure represents around 2% of total Palestinian university students. While at the Palestine Polytechnic University this ratio reaches a high 24%, in other leading institutions such as Al-Najah and Bir Zeit Universities the proportion of students enrolled in computer science or engineering related courses is much lower (3% and 4%, respectively)

education, embed technology learning in primary and secondary education, improve access to technology, and provide broad public support for the IT sector.

• Improve tertiary technology education: Our research indicates that three areas of tertiary education could be improved.

First, the education system should address the current mismatch in job skills, putting in place a training programme that provides skills for immediate employability (e.g. by introducing one month programmes to meet BPO requirements, and a six-nine month programme with on-the-job training for R&D software engineers).

Second, best practice in education and employment systems around the world indicates the importance of better coordination between universities and employers to increase employability.⁶⁴ The joint development of teaching programmes for engineering and computer science students, for example, could be cemented by creating a council to design project-based curricula that are relevant to the developing needs of the software industry.

In the long term, research and development partnerships with the private sector would provide a stronger link between academia and the business sector. These partnerships could result in opportunities for students to work on research projects with real-world applications during their period of study, further enhancing their skill-set upon graduation.

Finally, technology-based curricula could incorporate modules on business management and entrepreneurship. These could include the development of soft skills, as well as marketing, business planning, and finance.

- Improve problem-solving skills: Adopting a critical thinking based approach to technology education would help raise standards in universities. Critical thinking could be inculcated through workshops for professors and teachers that would bring entrepreneurs and leaders in technology, computer science and engineering to train the educators. These workshops would be focused on transferring successful teaching methods and approaches to instil innovation in coursework. Palestinian universities could benefit from the approaches of leading international universities such as MIT and Stanford and by leveraging published online curricula.
- Embed technology learning in primary and secondary education: This could be achieved both within and beyond school hours. A host of established programmes are available for primary and secondary stages (Figure 21). For instance, a pilot programme providing after-school coding skills for software development could be developed in partnership with training providers (such as CodeAcademy). Technology and programming could be embedded into the curricula throughout primary and secondary (K-12) education. This could include trialling a MIT-based programme for eleventh and twelfth grades in five local schools. If this approach proved successful, it could then be rolled out throughout the Palestinian education system.
- Improve access to technology: This includes improving infrastructure and raising the general public's awareness about technology use. Although fibre infrastructure coverage is extensive, home internet access remained low at 30% (in 2010). In the long term, broadband connectivity could be improved through a national 'fibre-to-the-home' programme to increase household penetration to a level comparable to that in EU economies (61% in 2010).⁶⁵ An initiative would also be needed to educate various segments (including young students and small business owners) about the opportunities provided by technology and online access.
- Gear up public sector support: The private and public sectors could work together to prioritise IT and digital education and the use of technology at all levels and across all sectors of the economy. Public efforts might also

65 Paltel and OECD

⁶⁴ McKinsey Center for Government (2012), Education to Employment: Designing a System that Works, (McKinsey Center for Government)

include incentives to encourage technology companies, such as tax breaks and subsidies on real estate. It could also strive to ensure that the regulatory system is user-friendly from a compliance perspective. The company registration process could be streamlined to reduce the time and cost required to start a business – currently amongst the highest in the MENA region (Figure 22).

Figure 21

Example primary and secondary coding education programmes

Programmes for primary school

- Alice 3D programming educational software
- Object oriented programming to create animated movies and simple games
- Production oriented languages (e.g., Java, C++, C#)
- Full curriculum, workshops, textbooks, and other teaching resources available online at alice.org

Kodu – visual programming for PC games

- Visual programming to teach creativity, problem solving, and storytelling through coding (piloted in Australia)
- Introduces logic, conditions and sequencing, and critical thinking in programming
 No coding experience required for educators, full teaching resources available kodugamelab.com

Scratch - MIT based programming language to create and share content

- · Java based language to create interactive multi-media
- Self-direction philosophy to encourage collaboration and sharing (over 1 million programmes on the web)
- Promotes 'tinkerability' to let users experiment with commands and code snippits
- Wealth of online resources for educators to employ

Source: Company/organisation websites

Programmes for middle and secondary school

CodeHS – Stanford based organisation aims to introduce programming to beginners

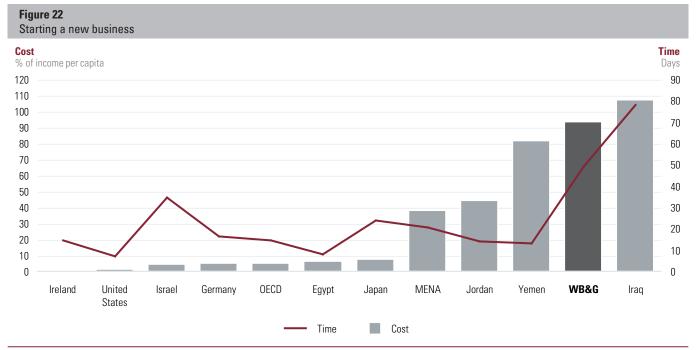
- Library of online content that introduces the fundamentals of computer science to those with no experience
- Begin with Karel and progress JavaScript, and eventually simple graphics and animations
- · Provides online support to schools and educators

CodeAcademy – afterschool programme based on self-direction

- 14 week after-school programme focused on Web and JavaScript (HTML, CSS, and JavaScript basics)
- Online lessons and curriculum guide for teachers who have no experience; can be used at earlier age levels
- Renowned and leading after-school programme due to interactive nature and no prior experience required

MEET - MIT sponsored programme in Jerusalem for youth

- Three year, afterschool and summer program for high-school students to learn
 project based programming and entrepreneurship
- Live teachers, with high level of engagement, and real project assignments with local firms
- · Local alumni along with MIT support help to teach



Source: World Bank

Tourism

Strategic pillars: Develop 'must-visit' city destinations; expand facilities and offerings for high-potential tourist segments; and broaden diaspora engagement

The Palestinian tourism sector has enormous potential, yet much of it remains untapped. The private sector can unlock growth across the sector, even with only limited assistance from the government. The current situation indicates promising scope to increase the absolute number of visitors, average visitor length of stay, and average spend per day. Improving these three indicators would stimulate job creation in the sector and support a diverse range of local businesses.

THE TOURISM SECTOR SHOWS RESILIENCE BUT IS CURRENTLY NOT MEETING ITS FULL POTENTIAL

The potential of the Palestinian tourism sector is reflected in four characteristics: (i) its historical and religious sites (ii) its proximity to other well-developed destinations with complementary tourism offerings (iii) its current immaturity in terms of institutional and business development and (iv) its resilience demonstrated by its quick recovery following periods of instability.

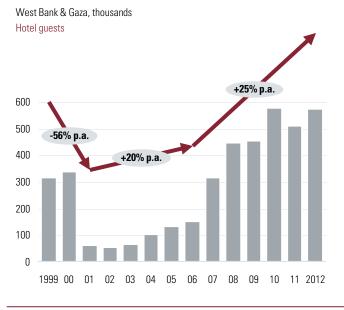
In the early 2000s, the Palestinian tourism sector contracted following violence in the region (principally the second intifada and the Lebanon war). Sector-wide output and employment shrank by nearly 75% and 50%, respectively. However since 2006 tourism has rebounded with the number of hotel guests increasing at an average annual rate of 25% and hotel employment increasing at 11% between 2006 and 2012 (Figure 23). Following this period of growth, in 2012 the tourism sector accounted for around 2% of total employment (or around 17,000 jobs), just under 2.5% of direct GDP (around \$250m), and an additional 1% of employment and around 1.5% of GDP through indirect impact.⁶⁶

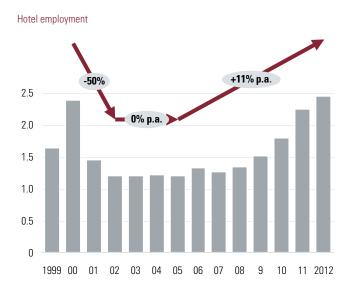
A core competitive advantage underpinning the sector is the area's deep religious and historical significance. The West Bank and Gaza are home to some of the world's most important religious and historical sites, including the Church of the Nativity in Bethlehem, the Ibrahimi Mosque in Hebron⁶⁷, the Dome of the Rock in East Jerusalem, and a number of different attractions in Jericho (said to be the oldest continually inhabited city in the world), such as Hisham's Palace, the Mount of Temptation and Elisha's Spring. This heritage places the Palestinian tourism industry in a good position to attract visitors from several distinct tourist segments. In addition to drawing local Palestinian visitors and members of the diaspora, attractions in Bethlehem and Jericho hold perennial appeal for international religious pilgrims, and are of profound interest to historical and cultural tourists from around the world (Figure 24).

⁶⁶ PCBS, Tourism Activities Report, 2010, pg. 15-16

⁶⁷ Also known as the 'Sanctuary of Abraham'

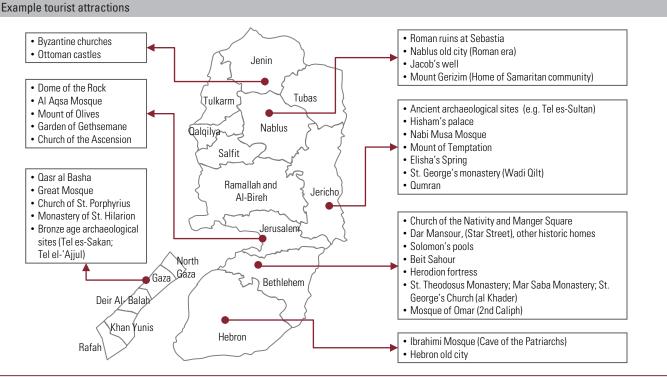
Figure 23 Hotel trends





Source: PCBS

Figure 24



Source: PCBS, stakeholder interviews, VisitPalestine.ps, Travelpalestine.ps

Furthermore, the West Bank is an immediate neighbour to Israel and Jordan, two relatively well-developed tourist markets with highly compatible tourism offerings. Attracting over 2.8 million and 4.5 million overnight visitors respectively, with 7% and 8% five-year average annual growth, these markets are driving increasing religious and historical/cultural tourist traffic to the region.⁶⁸ The Palestinian tourism sector could benefit more from these regional inflows by proactively developing and promoting cross-border destination concepts and tour packages with Israeli and Jordanian operators.

As well as indicating opportunities for mutually beneficial collaboration, the Jordanian and Israeli tourism sectors also serve as illuminating benchmarks for evaluating the performance of the Palestinian tourism sector relative to its potential. While around 55% of visitors to Jordan and around 80% of visitors to Israel stay for at least one night, only 11% of visitors stay overnight in Palestinian hotels.⁶⁹ The average occupancy rate in 2012 was 30% compared with more than 55% in both Jordan and Israel.⁷⁰

In combination with lower prices, the Palestinian tourism sector's underperformance in attracting overnight visitors is a major driver of low overall tourist spending. Average receipts per tourist are estimated at less than \$80 in the West Bank and Gaza, compared to over \$400 in Jordan.⁷¹

This underperformance can largely be attributed to a number of constraints. Flagship attractions and offerings, including historical sites, remain underdeveloped; in some cases lacking informational signs, museums, and basic tourism infrastructure. Core tourism businesses such as outdoor and cultural activities, accommodation, and dining are insufficiently diversified in terms of both quality and style. Finally, there is extensive room to improve a variety of sector-wide enablers, such as coordinated promotion and marketing and vocational training, which have proved to be critical factors in the growth of tourism around the world.

INTERNAL CONSTRAINTS CAN BE ADDRESSED

Although the development of the Palestinian tourism industry is affected by several external factors (such as restrictions on movement and access, and limited control over some sites), research indicates that four important constraints hindering the sector's performance could be tackled internally in a joint effort by the private and public sectors (Figure 25).

First, **underdeveloped tourism infrastructure and products** undermine the performance of the sector. For example, a number of high-potential sites, such as Nablus' Old City and the Mount of Temptation in Jericho, lack adequate navigational and explanatory signage as well as basic tourist infrastructure, such as sanitary public toilets and adequate pavements. According to a local tourism expert: *"People go to Bethlehem expecting to have a sacred experience, but instead they find a chaotic environment."*

Some improvements could be made relatively easily, such as improving waste collection, pedestrianizing scenic urban locations (e.g. historic markets and squares), and providing free tourist maps. Others, such as architectural and utility system renovations in city centres will require substantial coordination and investment. In addition to infrastructure gaps, stakeholders report that insufficient activities and events (such as cultural festivals and outdoor sports and recreation) and weak differentiation in hotels and restaurants are major obstacles that must be addressed to unlock growth.

Second, the **West Bank is still perceived as highly unsafe**, in spite of major improvements in security compared to the early 2000s. Enhanced branding and promotion could help overcome negative perceptions (for example, as the Colombian destination branding campaign did to reverse negative perceptions linked to the drug trade – Figure

68 Israel CBS and Jordan Department of Statistics. Average annual growth calculated for years 2005-2010

⁶⁹ Based on 2010 estimates for Israel and Jordan, and 2012 estimates for the West Bank and Gaza (CBS, Jordan Tourism Board, PCBS)

⁷⁰ PCBS, CBS, and Ernst & Young (2012), Middle East Hotel Benchmark Survey, (PCBS)

⁷¹ Palestinian estimate is based on 2012 visitor data and 2010 gross sector output data extrapolated at an assumed 3% growth rate; Jordanian estimate is based on 2010 visitor and tourism receipts data (PCBS, Jordan Tourism Board)

25). These and other best-practice efforts are typically driven by a private sector-led industry institution, such as a Tourism Board. However, there is currently no such body with a mandate to lead a branding and promotional campaign for Palestinian destinations. The Tourism and Antiquities Ministry has historically focused on business-to-business promotion (e.g. through trade fairs), which is commercially focused rather than aimed at reshaping perceptions on a mass scale.

Figure 25

Overcoming constraints – examples from tourism sectors around the world

		Example catalytic projects and initiatives	
Infrastructure & products	Morocco	 Developed infrastructure and secondary activities ensuring synergies with core attractions; upgraded/expand hotel stock 	
	Lourdes (France)	• Diversified offering for religious pilgrims through creating events and festivals and ancillary outdoor activities	
Branding & promotion	Bhutan	• Brand campaign and narrow-cast promotion positioned Bhutan as exclusive destination for high-end spirituality and well-being tourists	
South Africa • Promo		• Promoted brand through channels catering to cosmopolitan, politically and historically savvy target segments	
	Colombia	 Developed targeted brand campaign to address travel security concerns head-on, with the slogan 'The only risk is wanting to stay' 	
Distribution & sales	Israel	Builds steady pipeline of diaspora tourists through 'Birthright' trips	
	Jordan	• Created international sales offices, and virtual 'Visit Jordan Academy' to inform travel agents about offerings	
Multi-stakeholder coordination	Jordan	• Established PPP (but highly private sector-driven) Tourism Board to develop mutli-year sector strategy, and lead coordinated destination promotion	
	Morocco	• Established annual planning cycle to coordinate public and private sector planning and development activities across the tourism sector	

Source: Expert interviews

Third, the Palestinian tourism sector is **heavily dependent on foreign travel agents** as the primary sales channel for its offerings. Direct sales channels, such as online portals or relationship management programmes with institutional customers (e.g. business divisions of major international churches), are still nascent.

Finally, there is **little coordination among Palestinian tourism stakeholders at a sector-wide level.** Despite there being three sub-sector-level industry associations and multiple related public sector institutions, the sector lacks an institutional framework to facilitate broader cooperation. This hinders strategic planning as well as promotional activities. In this area, the Palestinian tourism sector could learn from comparable destinations such as Jordan and Morocco. These countries have achieved major gains in the number of visitors, average spending, and total sector revenues through coordinating institutions that foster alignment and collective action amongst diverse private and public sector stakeholders. In Jordan this took the form of a tourism board while Morocco established an annual tourism convention. Tourism boards are a particularly popular and effective way to pool sector resources, coordinate capability building, and drive centralised marketing. They have played critical roles in putting emerging destinations such as Costa Rica, Tanzania, and Nepal 'on the map' for mainstream tourists.

THE POTENTIAL IN NUMBERS

The tourism sector has the potential to grow substantially by 2030. Our analysis suggests that sectorial contribution to GDP could increase from \$250m in 2012 to around \$750m by 2030 and the number of workers employed could grow from 17,000 to around 38,000. The total number of inbound visits could increase to up to 5.5 million annually

(including around 3.7 million visits from international tourists and around 1.7 million from Arab-Israelis). There is also the potential to extend visitors' average stay to three nights from the current 2.3 nights, and to increase average daily spend by up to 25%.⁷²

This potential could be realised by targeting four high-potential tourism segments through a number of broad strategic initiatives and enablers: (i) develop a portfolio of attractive 'city destinations', positioned within a broader regional offering (ii) improve sector-wide coordination and centralised promotion through a Tourism Board (iii) improve cross-cutting enablers such as sales and distribution channels, hospitality vocational training, and access to finance.

Targeting four high-potential segments

Four tourist segments have the greatest potential to rapidly increase the number of visitors and boost sectorial revenues: (i) religious pilgrims (ii) historical/cultural tourists (iii) Arab-Israeli tourists (iv) Palestinian diaspora tourists.

- (i) Religious pilgrims: Although estimates suggest that over 1 million Christian pilgrims visited Bethlehem in 2012, surveys by the Palestinian Central Bureau of Statistics (PCBS) and stakeholder interviews suggest that less than one in four spent a night in Bethlehem. Furthermore, fewer than 25% of visitors to Bethlehem currently visit other important Christian sites in Jericho, Nablus, and the northern West Bank. This suggests an opportunity to improve 'overnight conversion' amongst Christian pilgrims and extend their average stay by developing and promoting holistic pilgrimage packages. Islamic tourists are estimated to represent less than 10% of total visitors to the West Bank despite a variety of Islamic sites (such as the Ibrahimi and Nabi Mousa Mosques) and more importantly, the convenience of the West Bank's position as a hub for pilgrimage to the Al-Aqsa Mosque and the Dome of the Rock. While a large proportion of visitors from this segment may face restrictions on travel, the segment could still be developed by targeting Islamic tourists from geographies that have relatively easier access to visas, such as UK, US and EU citizens.
- (ii) Historical and cultural tourists: Palestinian cities host a large number of archaeological and historical sites, dating from the Neolithic period to the time of the Patriarchs, the Caliphate and the Ottoman Empire. Many of these sites complement related ruins and artefacts in Jordan and Israel. With improved amenities and ancillary activities, an extended number of sites could become high-quality attractions, forming the basis for city destination clusters. They might then be marketed within broader, high-end historical and cultural offerings, through partnerships with Israeli and Jordanian tourism operators, to attract a share of existing visitor flows to those markets and raise overall numbers of tourists to the region.
- (iii) Arab-Israeli leisure tourists: Arab-Israeli tourists constitute a rapidly growing tourism segment (around 67,000 visitors in 2012, up from 31,000 in 2000) and currently represent about 30% of all inbound tourists. This segment is both relatively high spending and resilient, since Arab visitors from Israel frequently visit for weekend shopping and leisure trips, and are typically less susceptible to security concerns than international tourists. Continuing to expand accommodation and activities tailored to the preferences and purchasing power of this fast-growing and highly networked segment could bolster sector stability and growth without requiring heavy investment in mass direct promotion.
- (iv) Palestinian diaspora tourists: Although the diaspora represents a relatively small tourist segment (estimated at less than 100,000 visitors annually), promoting tourism within this group could nonetheless be a promising investment. In other markets with large international diaspora communities, such as Israel, Ireland, and Lebanon, proactive efforts to attract diaspora tourists (e.g. through subsidised visits or heritage-oriented tour packages) have generated positive externalities beyond the direct benefit to tourism businesses. Potential

⁷² The total visits figures reflect number of visits, not unique visitors (following PCBS conventions)

indirect benefits of targeting this segment might include building and extending Palestinian social and business networks and creating opportunities to encourage investment.

Developing city destinations

Experience in other markets (such as Amsterdam or Dubai) indicates that developing and promoting 'city destinations' (rather than national destination brands) can be an effective way to spur growth within specific visitor segments. "Every Palestinian city has its own identity. Bethlehem means religion, Jericho is history, Nablus is food and Palestinian life"

Local tourism operator

Developing world-class city destinations is critical in order to enable the Palestinian tourism sector to attract more overnight visitors for longer stays. The vast majority of Palestinian religious and historical attractions can be reached from Israeli and/or Jordanian cities within less than two hours of driving. This proximity to more mature markets can be beneficial, yet it also has the potential to generate greater competition for Palestinian hotels and restaurants. Launching holistic city destination plans, involving tourism infrastructure improvements, creating and publicising 'city calendars' of activities and events (such as seasonal festivals), and developing distinctive hotels and restaurants (e.g. within renovated historic buildings) could differentiate Palestinian destinations in the minds of visitors and establish Palestinian cities, rather than merely Palestinian sites, as 'must-visit' tourist hubs.

Potential city-destination projects include:

• **Destination Jericho Plan:** This project might be structured around rebranding Jericho as 'the oldest city in the world', renovating historic buildings (such asthe Winter Palace Hotel) for a variety of commercial uses and identifying priority investments required in infrastructure, accommodation, restaurants, and retail developments. Developing new tourist "Jericho still has a special place in the minds of the people, but we need to bring the reality of the city back in line with that"

Local tourism operator

attractions, such as a museum focused on the history of the civilisations that have inhabited Jericho, could further establish Jericho's cultural identity in the eyes of potential visitors.

- East Jerusalem Hotel Renovation Fund: A specific investment fund might be started to help expand the range of hotel offerings and ensure that East Jerusalem provides visitors with unique and attractive places to stay. This could help encourage visitors to extend their planned stay in the city.
- Bethlehem Development Initiative: This project, currently under development, involves rebranding Bethlehem as a city destination, with an emphasis on the city's significance as the birthplace of Jesus. The project will revamp Manger Square and the city centre, to create an attractive pedestrian environment and several walking paths for visitors, and to overhaul basic city infrastructure. The project

"Bethlehem should be the premium place for pilgrims to stay"

Local tourism operator

is designed to expand the city's aesthetic appeal as well as the range of facilities and activities within Bethlehem and in the neighbouring area.

• Nablus' Old City Development Plan: This project would focus on restoring and developing Nablus' extensive Old City complex. Restoration projects could include developing unique hotel options within the Old City walls, revitalising the city centre, and expanding signage and information in order to bring religious and cultural heritage

to life. Although potentially attractive to the religious tourist segment (due to the presence of Jacob's well and the Samaritan community), 'Destination Nablus' could also be developed to target historical and cultural tourists, as well as 'heritage' tourists from the Palestinian diaspora.

Creating a Tourism Board as an enabler to drive branding and promotion

Building on the city destination plans, the tourism sector could leverage positive association with wellknown city names such as Bethlehem and Jericho. Launching direct promotional campaigns will require broad stakeholder coordination across the private and public sectors, marketing and branding expertise, and extensive capital and/or fundraising capabilities. Creating a central Tourism Board, led by the private sector with strong public support (for instance under a PPP structure), could help to provide all three of these requirements. In addition, it could establish a clear sector champion to partner with counterparts in Jordan, Israel, and other markets, to promote 'regional circuit' packages.

Improving additional cross-cutting enablers

Three cross-cutting enablers are likely to be important to the development of the Palestinian tourism sector:

- Sales and Distribution channels: Expanding online booking capabilities to attract more Free Independent Travellers (FIT) and creating a relationship management programme for important institutional customers (such as the organisers of church pilgrimage tours).
- Service quality: Creating a new, world class hospitality school in partnership with a best-inclass international provider would serve as a means to drive service quality improvements in Palestinian tourism establishments.

How Dubai restored the Bastakiya neighbourhood

In 2006, Dubai Municipality restored the historic neighbourhood of Bastakiya, former residences of wealthy 19th century pearl traders and merchants, through:

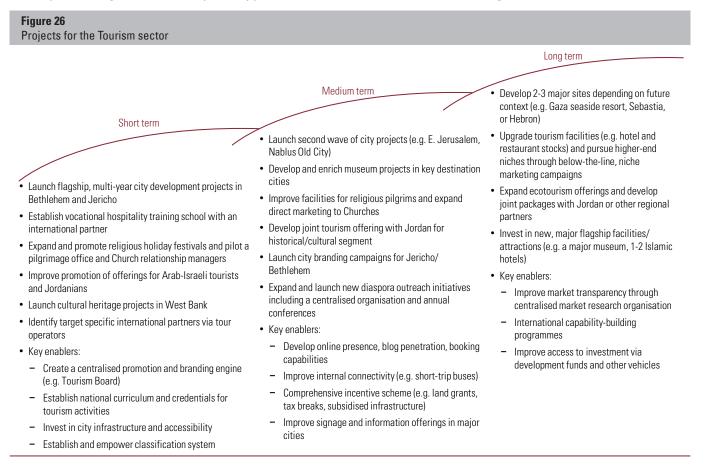
- Beautification and restoration of Old City streets;
- Restoration of historic homes in traditional architectural style, featuring barjeel (wind towers) and traditional building materials;
- Multiple small niche museums with historical information and interpretation throughout the Old City;
- Printed and downloadable maps with selfguided walking tours, and/or guided walking tour packages available for individual and/or group tourists.

Tourists are led through historic buildings that have been converted to high-end commercial premises, including:

- Art galleries;
- Cafés and restaurants;
- Boutique hotel.
- Financial access and business viability: Improving access to finance and information by tourism businesses will help boost the sector's growth. PPP and/or private equity tourism funds will be key enablers for the city destination plans, and could be set up and coordinated by private sector 'champions' with limited individual investment or risk. Additional improvements could include enhancing market transparency by putting in place a small market observatory team to publish key sector metrics and trends that could enable better strategic planning. Finally, the sector could host regular international conferences to promote investment (potentially under the auspices of the Tourism Board or a collection of city development funds).

IMPLEMENTATION

Implementation of the initiatives discussed above could be organised around a number of catalytic projects and developed in stages to better capture opportunities in the short, medium, and long terms.



Potential short-term projects

Palestinian businesses could immediately seek to promote international partnerships to improve the tourism infrastructure and provide events and activities in some of the highest potential destinations. Our analysis identified a number of readily implementable projects, including:

- Developing events for religious pilgrims: Putting together and marketing religious holiday festivals and events
 as major attractions and launching a pilgrimage and church relationship management office could help extract
 additional value from existing visitors.
- Improving promotion of tourism offering for Arab-Israeli visitors: Improving the calendar of local events (e.g. concerts and theatre, street fairs, or football matches) specifically targeting this segment and by starting a city destination branding and promotion campaign in Jericho, a hub for Arab-Israeli tourists.

- Launching cultural activities and festivals: Attract a broad spectrum of tourists from all high-potential segments by designing a set of activities aimed at celebrating local culture within the West Bank and Gaza. These may include festivals centred on local dance and music, the promotion of Palestinian produce, film festivals, or festivities around major holidays (e.g. Christmas, Easter, Eid, Ramadan), both at a local and national scale.
- Opening a hospitality school to offer vocational training: Given the immediate need to improve service
 offerings in the tourism sector, a hospitality school focused on vocational training could be both a vital
 enabler and a sound investment opportunity. A training hotel could be created as a commercially-run
 institution, providing hands-on training under faculty and management in major tourism hubs. Opportunities
 in hospitality training are currently being explored by the Bethlehem University (in Bethlehem) and by the
 Arab Hotel Association in conjunction with the Holy Land Incoming Tour Operators Association (in Jericho).

International experience suggests that hospitality schools could operate as small or mid-sized hotels offering a full service restaurant, where students constitute the majority of the staff, thus providing hands-on training as part of a top-level curriculum. An international partner could be brought in to help design the curriculum and ensure high educational standards.

- **Multi-year city revitalisation and site infrastructure development:** Focusing on some of the highest priority areas, such as the first stages of the Bethlehem development initiative, the Jericho destination plan, and the launch of the East Jerusalem hotel renovation fund.
- Jericho Gate: The project, an integral part of the Jericho Destination Plan mentioned above, will consist of a mix of residential, commercial, recreational (e.g. a museum), and nature offerings to enhance the overall tourism draw in Jericho. Planned for 3,000 dunums of land, the project aims to develop Jericho as an international destination.
- **Developing diaspora outreach initiatives:** Local stakeholders are currently exploring possibilities of increasingly engaging the Palestinian diaspora in Jordan, an important market with relatively easier access to the West Bank. Further efforts could be oriented towards expanding existing programmes, such as the 'Know Thy Heritage' youth trip initiative or investment conferences.
- Identifying overseas international markets: Tour operators could conduct research and identify niche opportunities in overseas markets (e.g. third generation of diaspora in select Latin American countries, partnership with the Catholic Church in Chile).

Enablers for short-term projects: Coordinated public and private sector action should be oriented towards forming a Palestinian Tourism Board, establishing a standardised classification and rating system (for hotels and restaurants), and defining unified curricula and credentials for tourism activities (to support vocational training initiatives). In addition, investment would be required to finance new infrastructure of city destinations, particularly water and electricity supply, to support additional visitors.

Potential medium-term projects

In the medium term, emphasis should shift to leveraging the new city destination brands through improved promotion and distribution channels. This would go hand-in-hand with an expansion of joint international tour packages and promotion of Islamic religious pilgrimage tourism. In addition, a number of secondary sites could be developed and new niche tourist segments could be identified. The government could also explore the feasibility of expanding sectorial incentives. High-potential medium-term projects include:

- Improving facilities for religious pilgrims: To increase visitor numbers significant improvements to facilities would be needed. This might include developing high-quality activities around religious sites, such as new or improved museums, which would need to be supported by the expansion of vocational training. Palestinian business could also seek to expand and improve the number of hotels in city destinations, such as Nablus, Bethlehem and Jericho, as well as scaling-up pilgrimage offices and direct marketing to churches.
- Bethlehem and Jericho branding campaigns: The volume of historical and cultural visitors could be increased through flagship city brand campaigns for Bethlehem and Jericho. Expanding boutique hotels and Bed and Breakfasts in Nablus, Hebron, and Jenin could help to attract such visitors.
- Building 'Moon Light City': An expansion of the offerings in Jericho, 'Moon Light' is a newly planned city of up to 4,200 dunums to the north of Jericho that will also provide a recreational and tourism centre over a planned 200 dunums. It will host various facilities targeted at both domestic and international tourists including a water park, a lagoon, and hotels.
- Launching high-quality diaspora outreach initiatives: In addition to projects launched in the short term, a diaspora outreach organisation could be launched with three or four foreign offices, e.g. in Chile, Jordan, and the GCC. Existing diaspora initiatives could be optimised and replicated at a large scale.
- Developing joint tourism products with Jordan to attract historical and cultural tourists: Launching two or three tourism products jointly developed with Jordan, and leveraging Jordan's promotion and sales channels could help both markets attract higher volumes of tourists. Joint packages might include: an Islamic tourism package, featuring the AI-Aqsa Mosque and the Dome of the Rock, the Nabi Mousa Mosque and the Ibrahimi Mosque as well as Jordanian sites such as Jebel Mousa (Mount Nebo); or an archaeological site package, including Hisham's Palace and Nablus' Old City, as well as Jordan's Petra and Jerash.

Enablers for medium-term projects: Further improvement to core enablers will be required in the medium term. By this stage, there will likely be a need for a centralised promotion and branding organisation (organised perhaps through the Tourism Board). Improvements might include enhancing the online presence of Palestinian tourism businesses on travel websites, increasing penetration in top travel blogs, and expanding online booking capabilities. In addition, improvements to internal connectivity will be needed, for example, through better organisation of the taxi system and short-haul buses. Also, a comprehensive incentive scheme (building on international benchmarks and including land grants and tax incentives designed to stimulate investment), would be desirable. Finally, signage and information offerings in core cities need to be improved.

Potential long-term projects

Long-term improvements should focus on two aspects: increasing the number of high-spending visitors and improving international connectivity to enable greater visitor inflows from nearby countries, such as the GCC. High-potential projects might include:

- **Developing further city destinations:** Depending on the future political context, this might include, for example, developing a major Gaza or Dead Sea seaside resort, or developments at historic sites in Sebastia or Hebron Old City.
- **Pursuing higher-end niche markets within all core segments:** This could include upgrading and renovating existing hotels and restaurants and selecting developments tailored to the preferences of high-end segments. In addition, the sector could pursue niche marketing campaigns focused on high-end channels, develop high-quality events, and facilitate the destination wedding industry by leveraging historic churches and other sites.

- **Expanding ecotourism packages:** Ecotourism offerings could be expanded and joint packages with Jordan and Israel (where the segment is still nascent but growing) could be developed.
- Growing regional tourism segments: The sector might develop one or two luxury Islamic hotels with facilities specifically focused on tourists from GCC countries.

Enablers for long-term projects: In the long term, the sector will need to improve market transparency through organisations such as a centralised market-research body. The sector might also consider introducing international capability-building programmes in areas such as destination marketing and promotion (where experience from Jordan's Tourism Board could be helpful). Finally, greater access to investment should be promoted (e.g. through the creation of tourism development funds).

Construction

Strategic pillars: Improve sectorial coordination and enhance cost performance; expand affordable housing; and increase overall sector productivity

Construction is one of the largest sectors in the Palestinian economy and an important driver of job creation. The sector has grown at an annual rate of 20.5% and made the largest sectorial contribution to overall GDP growth since 2006.

AN IMPORTANT, YET VOLATILE SECTOR

While construction contributed over \$1.4bn to the Palestinian economy in 2012 (roughly 14% of total GDP) – and nearly \$2bn if real estate is included – the sector remains one of the most volatile, greatly affected by political instability. The growth in the sector since 2007 was driven in part by donor aid for development projects.

The relative importance of the sector also varies between the economies of the West Bank and Gaza (Figure 27). Construction activities in Gaza are relatively more important, in terms of growth and employment generation, but the sector is affected by restrictions on the import of raw materials and other inputs. The pick-up in construction in Gaza after 2008 was mainly due to reconstruction activities following the conflict in that year.

In spite of the volatility, construction remains important for employment, with the sector employing 14.4% of Palestinian workers. However, despite steady growth since 2001/2 (reaching over 112,000 formal workers in 2012), the number of people currently employed is not significantly larger than in 2000 (around 103,000 – Figure 28).⁷³

In 2012, the number of workers employed in construction activities grew by almost 30% in Gaza, but by only around 3% in the West Bank. Also, around 40% of all Palestinian construction employees worked in Israel or in a settlement (accounting for more than 57% of Palestinian employment in Israel and the settlements).⁷⁴

The construction sector can be segmented into commercial and residential real estate, and infrastructure. Projecting the long-term growth of the sector as a whole is made difficult by the significant role of development aid in developing infrastructure and external constraints beyond the control of private business.

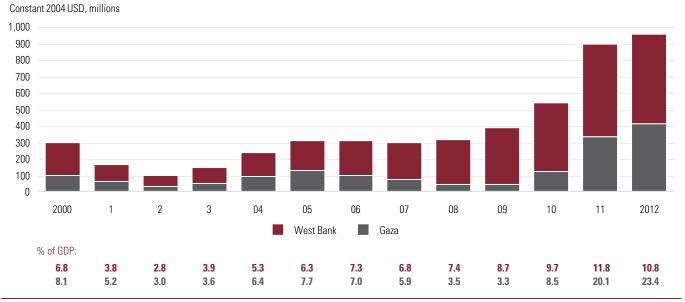
As such, the focus of this report is on the residential real estate segment. Of the \$900m spent on construction activities in 2012, around \$380m was for residential buildings. Only about \$110m was spent on pure commercial buildings while another \$320m was uncategorised and \$90m was spent on mixed buildings.⁷⁵ In this context, our analysis focuses particularly on opportunities in affordable housing. Further analysis and feasibility studies will be needed to determine the full scope for the construction sector as a whole. It should also be noted that a number of

⁷³ PCBS, Labour Force Survey, 2000-2012. Does not include under-employed

⁷⁴ PCBS, Labour Force Survey, 2012. In 2012, 57.4% of Palestinians employed in Israel and the settlements worked in construction

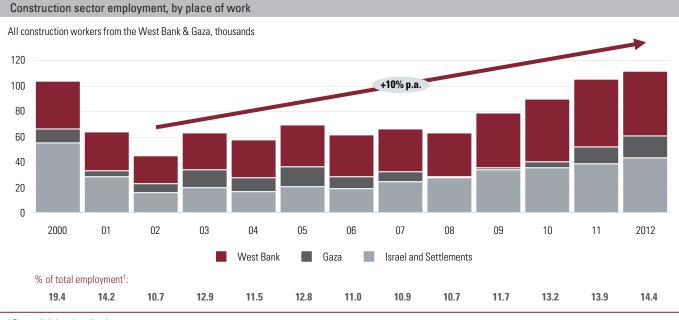
⁷⁵ PCBS (2012), Construction Statistics - Existing Buildings Survey, (PCBS)

Figure 27 Construction sector contribution to GDP



Source: PCBS

Figure 28



1 Does not include underemployed

Source: PCBS, Labour Force Survey, 2000-2012

projects in other prioritised sectors would result in additional jobs in construction (e.g. building new hotels, energy infrastructure projects).

It is assumed that construction work in Israel will continue to make up a sizeable proportion of employment for Palestinian construction workers over the long term. It is also assumed that the value-added of construction as a sector will continue to grow in both the West Bank and Gaza.⁷⁶ This suggests there is potential for the sector to create as many as 64,000 new jobs and contribute up to \$2.8bn to GDP by 2030.⁷⁷

GROWING THE SECTOR BY ADDRESSING LOW-COST HOUSING NEEDS

Demand for housing is increasing dramatically. In 2012, there were an estimated 920,000 housing units in the West Bank and Gaza. Despite new housing developments, such as the city of Rawabi and the neighbourhoods of Al-Reehan (in Ramallah) and Al-

"Our population is growing, there is going to be a need for more housing, especially for younger couples. We need to get affordable housing right"

CEO of a Major Housing Development firm

Jinan (outside Jenin), the PNA estimates there will be a deficit of over 200,000 residential units by 2020.⁷⁸ A large part of the expected incremental demand is driven by the projected 3% annual growth in the Palestinian population for the coming years.

While there has been growth in housing construction over the past five years⁷⁹, the current standard housing offering costs too much (between \$100,000 and \$130,000) for lower income groups⁸⁰ and developers do not believe mass housing projects (e.g. 5-10,000 units) can be undertaken feasibly at an affordable price, except through cross-subsidies from more expensive units in the same development.

Developers state that current offerings of housing units in different price segments partly reflect local cultural preferences: buyers' predilection for larger units with higher-end features ultimately drives prices upwards. Developers also observed that many Palestinians look to purchase a home as a life-long or multi-generational investment. In 2010 only 14% of all housing units in the West Bank and Gaza were smaller than 80m² and a vast majority of homes are built by small contractors who typically cannot achieve the scale required to offer lower priced units.

However, our analysis suggests that by re-engineering the supply chain, developers could provide affordable housing alternatives and build infrastructure for the future needs of the economy, whilst still achieving attractive profits. Additionally, there are opportunities for the industry to systematically capture parts of the materials value chain through small-scale domestic manufacturing and production of construction inputs (e.g. gypsum boards, cement clinker crushing, finishings) – which would result in reduced costs and job creation in the manufacturing sector. A coordinated procurement strategy (focused on providing affordable housing) would also allow a better realisation of the value chain.

Interviews with stakeholders revealed that pilots to sell units in the 80-100m² range at lower prices have performed extremely well, particularly amongst newlywed couples. These units are being offered at \$50-\$70,000. The General Manager of another local housing development company said: *"When we began to offer smaller units at lower prices, we were shocked as to how quickly they sold out. This is a cultural shift in Palestinian housing preferences."*

77 Team analysis

⁷⁶ Assumptions based on (i) observation of past and recent sustained growth in the number of building licenses issued in the West Bank and Gaza (ii) the likelihood that the levels of donor aid for development projects (usually involving construction and infrastructure) will be sustained - if not increased (iii) natural growth in the sector as a response to the construction needs created by the expected expansion of other activities and the economy as a whole

⁷⁸ Ministry of Planning and Administrative Development (2011), Palestinian National Plan 2011-13, Housing Sector Strategic Plan Summary, (Palestinian National Authority)

⁷⁹ PCBS, Housing Sector Strategic Plan Summary, 2011-2013

⁸⁰ Based on an assumption that a maximum of 30% of total household income is allocated to home mortgage payments. For the majority of households, it is increasingly difficult to access units currently on offer

Despite signs of this important shift in demand, the pace of change across the West Bank and Gaza is unlikely to be quick enough to address mismatches in supply. This therefore creates a need to help educate the public and shift cultural perceptions further.

CHALLENGES IN THE RESIDENTIAL REAL ESTATE SEGMENT

The residential real estate segment faces a number of challenges and opportunities. Interviews suggest that, where the informal sector is active (typically in smaller-scale projects), the absolute margins of projects by registered developers can be up to 15% lower. Promoting wide-spread formalisation of the sector's activities would ultimately raise profit margins and, at the same time, help to control the quality and security conditions of building developments. Project management skills are also said to be insufficient, as measured by timelines and other market-based factors, or by use of modern construction technologies. These factors create inefficiencies. According to local developers, when contracted labour is unutilised, or inefficient construction methods are used, projects typically take 50-100% longer to complete than in markets where more efficient conditions prevail.

Additionally, the vast majority of raw materials are imported, including major cost drivers such as cement and steel. This results in higher than necessary costs and potential construction delays due to supply constraints. For instance, in the first quarter of 2013 cement imports were severely limited due to supply shortages in Israel, which effectively halted construction in the West Bank for a short period of time. While attempts have been made to produce or manufacture materials domestically, our analysis suggests this could be an important area of focus for the sector in the coming years.

There are also opportunities to promote PPPs in the construction sector. They could be used to support projects in affordable housing as well as in infrastructure and projects connected to the large-scale waste management systems and power needed for the agriculture and energy sectors.

Affordability for median buyer	Unit size (m²)	Key features	Unit price (USD)
Low	300	Custom design, all high-end stoneHigh-end finishingsBest materials used throughout	200,000+
Majority of current offerings	150	 Standard design, stone throughout Marble floors, high-end doors, etc. Multi-room/bathroom, extra space 	130,000
	130	 Standard design, stone throughout Marble floors, high-end doors, etc. Multi-room/bathroom, extra space 	100,000
	100	 Stone surface, with drywall used Medium finishings, fewer features Smaller space, fewer bathrooms 	75,000
segment	80	 Stone surface with drywall Medium finishings, fewer features Smaller space, fewer bathrooms 	65,000
High	50	 N/A in current Palestinian context Would require new technologies, less stone usage, fewer features 	50,000

Source: Stakeholder interviews, sanitised development plans

Short-term potential

In the short term, coordination between companies operating on the supply and demand sides of the real estate market needs to be improved. Demand requirements by region should be studied and understood in detail. It is also important to conduct an in-depth assessment of the building materials value chain to understand where immediate opportunities lie.

As large-scale projects and new developments offering more affordable alternatives increase, it is likely that domestic production of materials will begin to grow. The aforementioned demand surveys would further help the private sector understand the latent potential for investment.

Shifting cultural perceptions and addressing financing needs will also be vital to catalyse growth in the housing sector. Additionally, pilot projects that are primed for development should explore affordable housing options as part of larger residential projects.

Medium-term potential

A cooperative strategy for procurement would benefit the entire sector as better opportunities arise for collective price negotiations with suppliers. Improving sectorial data collection and performing feasibility studies would help developers better assess the needs of specific demand segments, particularly in affordable housing.

Further assessments of market conditions will be required in the medium term to underpin the development of the sector. However, it is already clear that private sector players should consider targeting underserved housing segments and look to provide affordable solutions in all geographic areas. While major housing developments have emerged in the central West Bank, these models could be replicated elsewhere (including the Gaza Strip), tailored to the cultural requirements and preferences of each area.

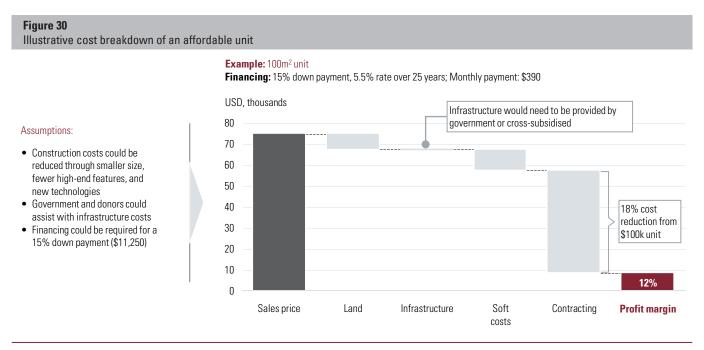
As mentioned above, pilot programmes to offer smaller, more affordable units have exceeded expectations. Our analysis suggests that construction costs could be reduced and affordable homes built with a profit margin of around 12%, by building smaller units with fewer high-end features (amongst other levers). Such projects would require the government to provide infrastructure, or cross-subsidisation by more profitable units as part of large developments (Figure 30). This in turn would help secure the business case for establishing new manufacturing enterprises and providing the foundations for the scale likely required to locally produce materials at a lower cost than imports.

It is also worth noting that interviews with stakeholders suggest that, due to cultural perceptions, there is no market for large housing developments that solely provide lower-end affordable units. Nor is this good practice for new community development. The best opportunities seem to lie in the development of housing communities with a wide range of offerings.

Beyond residential projects, further opportunities could be opened up by exploring PPP options for infrastructure projects that will likely be required to meet the transport, energy and waste requirements of the Palestinian population and an expanding industry. Projects could be supported directly by the government or through facilitated external aid.

Long-term potential

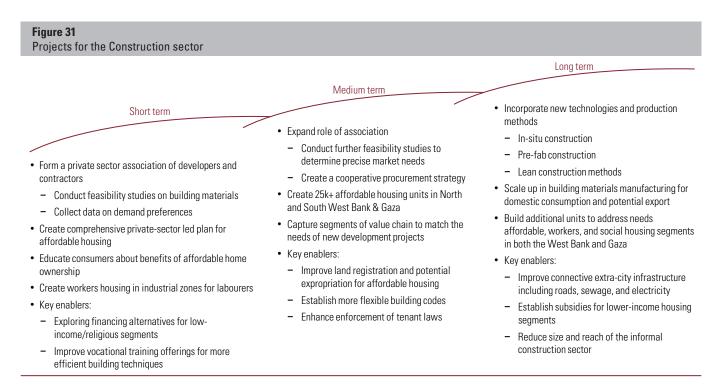
In the long term, as the economy grows, the sector will likely continue to expand and become more efficient. To a large degree, these improvements will entail the introduction of new technologies that can lower costs and increase overall productivity across the sector. Moreover, building materials could begin to be exported as technology improves and domestic production consolidates. The sector should aim to address the full breadth of housing needs including affordable and social housing, across all regions in the West Bank and Gaza.



1 Based on interviews, assuming the higher end average for affordable housing cost breakdown for \$1,000-\$1,500 household income group Source: Stakeholder interviews

IMPLEMENTATION

Over the short-, medium- and long-term, two broad initiatives could catalyse growth in construction and help to address the challenges facing the sector: creating a private sector construction association and enhancing the desirability and offering of affordable housing.



Increasing coordination and efficiency

Coordination between private sector companies needs to be improved. By forming a private sector construction association of major developers and their contracting counterparts, the sector stands to benefit from improved efficiencies and the identification of market opportunities.

Short-term: A first step to address these improvements would be to form a construction sector association, which at the outset would: (i) collect data and conduct feasibility studies on the potential production of building materials such as clinker crushing, gypsum board/drywall, construction blocks and finishings (e.g. doors, windows, sanitary fittings) (ii) collect survey data on demand preferences to more accurately define the need for housing and its related sub-sectors, namely commercial real estate.⁸¹

Additionally, vocational training programmes could be expanded and improved to offer short training courses for workers and project managers. These would be focused on improving execution and incorporating newer building techniques to increase efficiency in construction, while improving the timelines of projects.

• **Medium-term:** After conducting preliminary studies, the association could begin to implement some of the findings on construction and building materials, in order to capture more of the value chain. This is also likely

81 The latest such survey was conducted by the PCBS in 2009

to boost growth in the manufacturing sector. At the same time, as the construction segment continues to grow, association members could cooperate to develop a procurement strategy that could help lower the cost of key imports and prevent shortages. This is particularly relevant in the context of affordable housing initiatives that may be taken on by a variety of developers across different areas concurrently, as discussed below. Additionally, the association could lobby for enhanced regulation in key issues such as (flexible) building codes, enforcement of tenant laws, and promotion of investment in the real estate sector.

• Long-term: Large projects could take advantages of new technologies to help reduce the costs of construction materials. This could include pre-cast fabrication (in factories or mobile on-site units), which has been used successfully in India, Thailand, and Mexico – among other countries. Another example is on-site construction, which can reduce costs by 10-20% and speed up construction by 30-50% (e.g. by using aluminium formworks). As the building materials segment develops, scaling up in production to supply large projects could also result in enhanced export opportunities.

Finally, the association could work to help reduce the size and reach of the informal construction sector as a means to ensure all solutions meet high-standards, are adequately regulated, and offered at affordable prices across the entire construction spectrum.

Improving perceptions of affordable housing

Housing demand is currently focused on a narrow band of options. Coordinated efforts by the private sector should aim to expand the sector to address affordable housing needs. A number of private sector-led projects could be launched over the short, medium, and long term, taking advantage of any progress in data collection, procurement, and construction methods.

With the intention of consolidating demand for affordable housing, developers could seek to educate consumers (particularly young families) about the underlying opportunities offered by smaller, less sophisticated homes. They could articulate the case for families to move into a smaller home initially, to sell at a later date as the family grows and needs to move into a bigger property (currently, this is relatively rare).

• **Short-term:** A private-sector led affordable housing plan would assess and take into account affordable housing needs across all of the West Bank and Gaza and explore methods to tackle constraints that may exist (e.g. continuous plots of land, infrastructure support).

Small pilot programmes in affordable housing at large housing developments in the central West Bank can pave the way to increase the offer of housing units at affordable prices (between \$50,000 and \$75,000). The Rawabi project has the potential to add 1,000 units priced at \$50,000. At the same time, the Al-Ghadeer development could provide nearly 400 units targeting a slightly higher segment but maintaining sizes above 100 square meters, while another residential project, Al-Reehan, could add another 300 units. For each of these initiatives, crosssubsidies from more expensive units in the development are likely to play an important role. Further support to lower infrastructure costs (e.g. roads connectivity) and improve the investment climate would also enhance viability.

Beyond the aforementioned small pilot programmes, further opportunities may lay in the development of housing solutions tailored to the needs of lower-income families, for example, housing units for workers in associations and unions. Projects currently being analysed in the Nablus area and in the Jericho industrial zone can serve as pilots to develop efficient and affordable concepts for labourers and their families. The concept project for the Al-Banafsaj Neighbourhood in the North West Bank is a \$120 million investment designed to offer 1,000 units at a price of \$60,000-\$70,000. It is being evaluated as a joint-project with the Labour Union of Palestine, which

offered to provide the land with the intention of offering affordable housing to its members. These projects will also require support for physical and social infrastructure (e.g. schools, religious institutions and training centres).

In conjunction with this planning effort, an initiative to educate consumers about the benefits of home ownership, affordable options, and variety in home preferences is vital. This would support the demand side of the affordable housing equation and gradually help to shift preferences towards sustainable solutions that could address the looming housing crisis.

Furthermore, additional financing mechanisms will be needed to target lower-income segments of the population who, in particular, cannot afford expensive down-payments. At the same time, tailored financial solutions could be evaluated to target religious communities, who are typically not comfortable with standard loans and prefer Islamic financing alternatives. These should be developed through increased coordination between the construction and banking sectors, as key partners for the development of housing initiatives.

 Medium-term: The private sector should aim to address the expected housing needs by creating 25,000 or more affordable housing units in the medium term, primarily through improving and expanding existing pilots and concepts. Ensuring that the proper infrastructure is in place – road networks, sewage, electricity – will be crucial to maintain the affordability of new units as cross-subsidies are expected to reach a threshold level – particularly as housing continues to move farther away from large cities, and hence, from existing infrastructure developments.

An example project is the Moon Light City, to the north of Jericho, where residential units are planned for nearly 3,000 dunums of land. The intent is to house 21,000 residents (at full capacity) to support the expanding population and, at the same time, provide communal facilities including green areas, walkways and agricultural areas along with schools and public buildings (to reach a total size of up to 4,000 dunums). The residential segment will take cultural considerations into account and will mix affordable housing with villas to create a vibrant community.

Improvements in land registration will be vital in enabling large-scale developments that involve the purchase of continuous plots of land. Further government support may also be necessary to facilitate the purchase of particular sections of land in order to satisfy the growing needs in affordable housing.

• Long-term: To meet expected growth in housing demand across the West Bank and Gaza continued expansion of affordable housing offerings will be required, along with social housing projects for the lowest income segments of the population. With the incorporation of new, more efficient technologies and building methods, house prices can be kept low while still providing a profit to developers.

Continued expansion and improvement of infrastructure will continue to be important in order to foster sustainability. Support for these programmes might come in the form of incentives for developers and real estate companies along with subsidies for low-income households who face difficulties in entering the housing market.

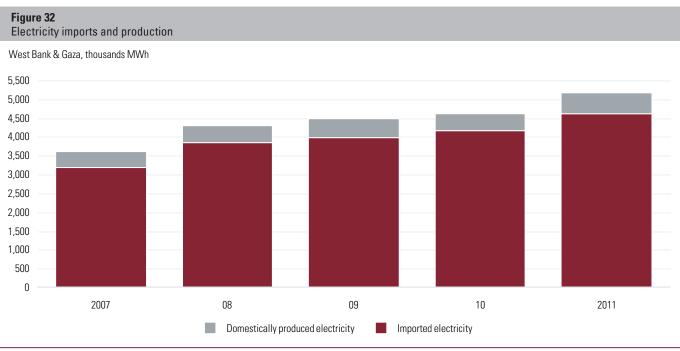
Energy

Strategic pillars: Expand domestic energy production through renewables; develop energy infrastructure; and broaden the energy supply base

The energy sector acts as a key enabler across all industries. Access to a stable and reasonably priced energy supply is an important driver of economic growth: wastewater treatment plants, manufacturing sites, high-tech hubs, hotels, and many other facilities require reliable power in order to operate effectively. In addition, households require electricity for families to lead a comfortable life, schools need it to create a functional learning environment, and hospitals depend on it to provide a consistent quality of care for patients.

ENERGY SUPPLY GAPS ARE CONSTRAINING ECONOMIC GROWTH

The Palestinian economy is heavily dependent on energy imports with 90% of electricity currently imported (Figure 32). The remainder is generated by the Gaza Power Plant (GPP), which is fuelled by imported gasoil. The majority of the imported electricity comes from Israel.



Source: World Bank

The GPP operates at roughly half its capacity. It currently produces about 70 MW compared to its potential of around 140 MW, largely due to limitations on transmission capacity and the deterioration of its facilities. Moreover, expensive gasoil is used to fuel the power plant, resulting in domestically produced electricity being even more expensive than imported electricity (which is generated from natural gas).⁸²

Dependence on imports combined with the high cost of domestic production has led to a significant gap between supply and demand.⁸³ According to interviews, in 2010, the annual electricity needed in the West Bank and Gaza was estimated to be around 6,200 GWh, while supply was only 4,300 GWh. As a result of structural supply shortages in 2008 the majority of Gazan households suffered power cuts of at least eight hours per day, with some having no electricity for up to 12 hours per day. While less of an issue in the West Bank, major energy supply issues continue to affect Gaza.⁸⁴

A second problem is inadequate infrastructure. The World Bank estimates losses during distribution to be around 25%: Jordan experiences half this rate of loss and Israel's losses are around 3%.⁸⁵ Interviews suggest the costs of such losses are transferred to the end consumer, which drives up the already high price of electricity. This potentially contributes to the high incidence of electricity theft and high default rates in the payment of electricity bills – about 30% of electricity consumption goes unpaid. The PNA is left to reimburse the distribution companies for these losses.

As a result of high prices, people in the West Bank and Gaza have the lowest per-capita consumption of electricity in the region. Despite this, the cost of electricity impacts on disposable income at the household level: energy makes up 6.4% of Palestinian household expenditure, compared to 2.7% in Israel.⁸⁶ Industrial growth may also be stifled by the limited quantity and high price of electricity; the industrial sector consumes a significantly smaller proportion of total energy (around 6%), compared to much higher rates in Israel (10%), Jordan (21%) and Egypt (27%).⁸⁷

THE POTENTIAL FOR THE SECTOR

By reducing dependence on energy imports and increasing utilisation of renewable energy, ensuring resilient and sustainable energy supply, our analysis suggests that the Palestinian economy has an opportunity to produce up to 70% of its electricity needs domestically, with as much as 50% of production coming from renewable sources by 2030. If achieved, this could result in more than 17,000 new jobs (from less than 1,000 in 2012) and directly add up to \$2.2bn to GDP.

To lead this effort private sector companies, with the support of the government, would need to address four internal constraints on the sector and implement initiatives around renewables and energy infrastructure. "Solar power is everywhere, and we do not have to depend on anyone to access it"

Local renewable energy expert

ADDRESSING CONSTRAINTS ON GROWTH OF THE SECTOR

Many external constraints on the economy affecting the sector are beyond Palestinian control. Such restrictions limit, for example, the import of fossil fuels for electricity generation and the extent to which improvements can be made to infrastructure.

- 85 The World Bank (2007), West Bank and Gaza Energy Sector Review, (The World Bank)
- 86 Israel CBS and PCBS
- 87 US Energy Information Administration, PRB, World Bank, Enerdata

⁸² A 2011 report by the Ministry of National Economy & the Applied Research Institute Jerusalem reported the cost of producing electricity using imported fuel in the Gaza Power Plant was 0.506 NIS per kWh while importing it from Israel was 0.33 NIS per kWh

⁸³ In 2008, Palestinian households supplied by JDECO paid \$0.129/kWh compared to households in Jordan which paid \$0.107/kWh; in Egypt, \$0.029/kWh, and: in Saudi Arabia, \$0.013/kWh. Prices from other Palestinian distributors were higher; up to \$0.175/kWh in Nablus. JDECO industrial prices were \$0.134/kWh compared to \$0.067/kWh in Jordan, \$0.032/kWh in Saudi Arabia, and \$0.025/kWh in Egypt

⁸⁴ OCHA (2008), Electricity Shortages in the Gaza Strip: Situation Report, (OCHA)

However, there are four internal constraints that are largely within Palestinian control, which could therefore be feasibly addressed:

- Insufficient energy storage and domestic electricity production facilities, such as gas-fired power plants. This
 results in the high level of dependence on imports.
- High rates of electricity theft, transmission losses and poor billing can result in extra costs being passed on to consumers who do regularly pay, driving up their prices. As a consequence, they might face increasing difficulties to pay their bills, which can ultimately increase the financial burden on the PNA to pay distribution companies' debts to suppliers.
- A lack of incentives to encourage investment in renewable energy. Although environmental conditions are favourable for renewables, because these investments require high capital expenditure (capex) and yield slow returns, low levels of incentives mean renewable sources attract few investors. Subsidies could help mitigate the risk for investors and signal that renewable energy is a priority for the Palestinian economy.
- Electricity policies do not encourage small-scale generation. Allowing net metering or surplus electricity storage, for example, would encourage individuals and small companies to generate their own electricity through renewable means.

STRENGTHS OF THE SECTOR

Although there are significant constraints, both internal and external, the sector has significant strengths that should be leveraged to create further opportunities. These include: accessible renewable energy sources, existing success stories, positive momentum and high levels of public awareness of energy issues.

- Accessible renewable resources: The region has some of the highest levels of solar insolation⁸⁸ in the world, with an annual average of 5.15 kWh/m². In comparison, in Germany, which is the global leader in solar electricity generation and which provides extensive public sector support to renewable generation, the insolation level is only 2.71 kWh/m².⁸⁹ Yet, one Palestinian stakeholder said: *"All I want to do is install PV panels on my roof, but the paperwork and approval takes so long it is so frustrating."* Experience in Israel shows that with public sector support, solar photovoltaic (PV) panel installation could increase dramatically (Figure 33). Some Palestinian cities, for instance South Hebron, also have strong wind power potential.
- Success stories: High electricity prices have made traditional water heating systems very costly. As a result, about 80% of new buildings now use solar water heaters on their rooftops to capture the sun's natural heat, rather than paying for electricity.
- **Positive momentum:** Over the past few years there has been significant growth in the sector. The number of companies dedicated to solar power, for instance, has increased from just a few to more than 20 in the last 2-3 years. In 2012 the first renewable energy training centre for Palestinian electrical engineers was launched and there are several businesses and organisations exploring projects and holding conferences in the energy sector.

⁸⁸ Insolation is the standard measure of the energy received from solar radiation over a given area in a given time. It is used to assess the power potential of the available sunlight. It is expressed either in mega joules per square metre (MJ/m²) or in kilowatt-hours per square metre (kWh/m²)

⁸⁹ Germany incentivises renewable electricity production through feed-in-tariff policies and streamlined permitting

Case study: Israel - a strong focus on renewables led to increased solar PV installation

Solar energy has become a large focus for Israel's energy strategy Status quo

- Population of 7.7 million is growing ~2% annually, with aggregate demand of electricity growing ~3.6% annually from 1999-2009
- · No oil reserves, limited relations with oil-rich neighbours
- More than 99% electricity provided by Israel Electric Corporation (IEC), produced from imported coal and natural gas
- Solar water heaters used in >90% of Israeli homes

Renewable energy initiative

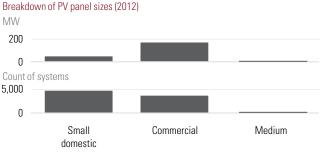
- Government resolved to have renewable sources make up 5% of electricity needs by 2014; 10% by 2020
- Solar presents large opportunity; >100 solar companies in Israel, serving domestic and international markets
- Approved feed in tariff in 2008 for up to 50MW during 7 years (15kWp for residential, 50kWp for commercial)
- Solar initiative has led to solar plants, increase in residential/commercial projects, and the development of an internationally renowned solar research and development industry

Solar panel PV installation increased after the 2008 FIT policy Installed solar PV capacity



2004 05 06 07 08 09 10 11 12 Most of the PV systems are small in size, indicating that solar PV panels

could be leveraged in small areas



Source: International Energy Agency

Public awareness of energy issues: High electricity prices affect the entire population, from individual
households to SMEs, and from public offices to large companies. The public is well aware of the importance
of stable electricity supply and pricing, and the need to improve this sector if there is to be an increase in the
standard of living.

Net Metering

By permitting feeding of power produced from renewable energy sources directly into the grid, net metering enables consumers to benefit from the installation of domestic solar panels or wind generators. The monetary value of the generated power is directly credited to the consumer's account. If, after a predetermined period, the power consumed is less than the power generated, the net difference is paid to the consumer as profit.

The renewable energy source is connected to an electrical inverter that converts the direct electrical current into an alternating current. This, in turn, is connected to a two-way meter, which is connected to the grid: the meter is able to monitor both outflow and inflow.

This local approach to power production can help consumers reduce their electricity bills substantially and benefits both the economy and the environment. Such schemes have already proved both popular and successful in many countries around the world.

IMPLEMENTATION

As mentioned above, stakeholders believe there will be three important pillars for the growth of the energy sector:

- Renewable energy: Develop renewable sources of electricity (mostly solar) to increase energy independence and supply resilience.
- Power infrastructure: Improve existing infrastructure in order to reduce losses and improve production and distribution efficiencies.
- Enabling environment: Improvements in the underlying enabling environment would impact all aspects of the energy sector and support the implementation of initiatives to help its growth.

		Long term
	Medium term	
 Short term Install small and medium solar PV panels, partnering with residential, commercial, and public institutions Bethlehem Solar Project (600 kW) Launch Jenin Natural Gas Power Plant (200 MW) Provide 'Green Loans' to SMEs for specific projects Develop small wind farms in high wind potential areas Key enablers: Expand Palestinian Solar Initiative for higher enrolment Establish net metering system and regulation for renewables Provide comprehensive framework for PPPs 	 Build power stations in South West Bank and Gaza Expand solar and wind production on small and medium scales Build small biomass plants to leverage agricultural waste Build storage facilities for fossil fuel derivatives to respond to demand fluctuations Transform an existing village into a 'green village' as a proof of concept for scaled use of PV panels Key enablers: Increase public awareness of renewables by creation of a green education park supported by alternate energy infrastructure Rationalise demand by improving the efficiencies of current energy infrastructure 	 Expand renewable power production to produce half of domestic supply Convert GPP to natural gas and expand transmission capacity Diversify gas supply sources for domestic power plants Key enablers: Create a comprehensive incentive system to promote the adoption of renewable energy solutions by the private sector and households Install smart grid to decrease losses and enable efficient consumption

Potential short-term projects

Several private sector projects could potentially deliver significant impact in the short term. These include: developing a model green village, small-scale solar plants in industrial parks, wind farms, and constructing a green education park.

• Small-scale solar plants: Our analysis suggests that building small solar plants (around 0.5-1 MW capacity) in industrial sites would be an economically feasible way of providing the industrial sector with a source of electricity. The plants would be best placed on unproductive land or on rooftops, in order not to take up valuable land. The Bethlehem Multipurpose Industrial Park is currently developing a project that consists of building a 0.6MW solar farm within the park's premises, to partially supply the needs of its industries. Extensive feasibility and business analysis have been conducted and financing opportunities with an international investor are being explored. Success of this project would provide the inspiration and act as a benchmark for similar developments in several other industrial and agricultural zones and establishments.

- Wind farms and biomass plants: Sector experts suggest small wind farms could be developed in areas where there is a prevailing wind, such as South Hebron. Although wind technology is capital-intensive, a successful small wind farm could serve as a proof of the concept for using wind as a renewable energy source. These small successes might then attract further investment in wind technology. Sector experts also suggest testing the concept of biomass generation, using agricultural waste, by constructing a small number of biomass plants.
- Jenin Natural Gas Power Plant: The Palestine Power Generating Company (PPGC) and the Palestine Energy and Natural Resources Authority (PENRA) are currently conducting feasibility studies for a project aimed at developing a 200MW combined cycle power plant run on natural gas in the northern West Bank area of Jenin. Negotiations for the PPGC to obtain its license as a supplier and to sign the correspondent power purchase agreements are also underway.

PPGC has gathered together a group of founding shareholders from the finance, banking, insurance and property development sectors, which are expected to bring not only financial support, but also business and technical expertise to the project. PPGC is drawing on the experience of its largest shareholder, the Palestine Electric Company (PEC), which built and operates the GPP.

Green loans for small-scale projects: The Bank of Palestine has recently launched a 'green loans' programme. A
first wave of \$10m in soft loans (partially subsidised by the bank) aims to finance small- and medium-sized solar
energy generation, wastewater treatment and recycling projects. This and other similar initiatives have the
potential to result in positive impacts for the local renewable energy businesses, raise awareness and gradually
help progress towards greater energy independence.

Potential medium-term projects

In order to build on momentum already created, a number of additional projects are likely to be required in the medium term. These include:

- **Expand solar and wind production:** As renewable energy infrastructure and technology costs fall over time (due to an expected decrease in capex costs), investors could leverage the momentum already created to expand and develop solar and wind production. These would be small- or medium-scale projects.
- Build storage facilities: Constructing warehouses and storage facilities for fossil fuel derivatives would increase
 the resilience of the energy distribution system and enable the power plant(s) to respond to fluctuations in
 demand. The current lack of storage facilities results in fuel being imported on a semi-daily basis to meet
 changing needs, which places great stress on the distribution system.
- **Rationalise demand:** Losses in the system could be reduced substantially by improving the efficiency of electric power infrastructure. Simple cost-reduction measures, such as sealing leaks around air-conditioning units, windows and doors are a potentially easy gain. More advanced and cost-intensive initiatives could involve retrofitting current buildings with more efficient technologies in lighting, insulation, heating and cooling.
- **Model village:** A consortium of investors could transform a village into a 'green village' by installing PV panels on rooftops and bi-directional meters to facilitate net metering. An appropriate village could be selected based on criteria such as: the prevailing solar insolation levels, potential social impact (e.g. villages where households spend a high percentage of their income on electricity bills), the availability of suitable rooftops, and any potential cultural impact. A successful green village would serve as proof of concept for the use of rooftop PV panels. If successful, this could help encourage the government to develop policies to facilitate large scale roll-out of net metering.

• **Gas-fired power plants:** Private investors could consider participating in the construction and operation of two or three additional small or medium-sized gas power plants (~200MW), using either imported or locally-produced natural gas (as domestic fields are exploited). Such plants are likely to be needed despite the availability of renewable energy resources because storing electricity produced from these sources continues to be expensive. Relying on such storage would drive electricity prices up by around \$0.1/kWh. It is also important to diversify the power generation sources in order to ensure resilience in the electricity supply.

Potential long-term projects

Energy supply and efficiency is likely to continue to be a major issue for most countries around the world for some time to come and there will be a need to further improve the resilience of the power supply over the long term. Potential long-term projects include:

- **Convert the Gaza Power Plant (GPP) to natural gas:** The current GPP operates using gasoil, which is an expensive fuel source and at only half capacity. Converting the plant to natural gas and simultaneously expanding the transmission capacity would decrease the cost of domestically produced electricity, while increasing the share of domestic production. Our analysis suggests the payback period for this investment would likely be less than a year.
- **Expand renewable power production:** Even without government incentives, there is a good business case for private companies to expand investment in renewable resources. These investments would be reinforced by growth in the size of the market, as the domestic solar, wind and gas industries expand.
- Widen sources of imports: Further resilience could be assured by diversifying sources of fuel imports, from fossil fuel rich countries. Diversifying supplies could also lower the cost of natural gas for any domestic power plants.

Changes to the enabling environment

- **Regulatory and public policy framework:** Because of its cross-sectorial impact, the energy sector requires particular support from the public sector and appropriate regulation. As one stakeholder said: *"The sector cannot make significant and meaningful progress without the right public sector policies and support."* It will be important for regulation to support the changes in the sector's strategy, particularly regarding increasing domestic production and developing renewable resources (at the household and industrial scales). In this context short term efforts could include expanding the Palestinian Solar Initiative (to increase enrolment) and establishing adequate regulation to allow net metering. Also a comprehensive framework for the development of PPPs needs to be established. In the longer term a broad scheme of incentives for the adoption of household and industrial renewable energy solutions could be put in place. Figure 35 shows international examples of how governments can provide additional incentives by developing policies that help the private sector mitigate risk and attract investment.
- Infrastructure: Smart grids should be installed to decrease losses and enable efficient consumption. The current level of losses is driving up costs and wasting precious resources. Installing a smart grid so usage can be tracked would decrease losses while improving the efficiency, reliability, economics and sustainability of electricity production and distribution.
- **Public awareness and education:** Policies that help consumers through, for instance, enabling net metering and feed-in-tariffs would be supported by increased public awareness of the benefits of rooftop PV generation. A

Examples of government incentives for solar PV power generation

Туре	China	Malaysia	Taiwan
Feed-in-tariffs	1 RMB/kWh for projects after 2012 while 1.15 RMB/kWh for ones before 2012	Effective in 21 yrs: Basic FIT 0.85-1.23 RM/kWh + Bonus FIT 0.55 RM/kWh	 Roof type: 7.33-9.46 NT\$/kWh Ground type: 6.90 NT\$/kWh
Generation based incentives	Subsidise gap between FIT and coal power on-grid price	Cash rebate on a portion of grid-connected RE system costs	 NT\$ 1000-3000/m² for installation NT\$ 2/kWh for purchase
Fiscal/Financial Incentives	 Subsidise CAPEX in Golden Sun and BIPV initiatives without FIT 3 yrs' CIT¹ exemption and another 3 yrs' 50% reduction of CIT 	Exemption from income tax for 10 years and import duty	 13% tax credit Low interest loans 2-year accelerated depreciation
Non financial incentives	Priority to go on grid	 Net Metering Mandatory portion of grid-connected RE Entry Point Project 10 	 Legislation Government purchases Voluntary programmes²
Others (RPO's, green certificates)	Carbon trade profit in CDM	Technical and Financial ConsultancyRE Purchase Agreement	 Green pricing³ Kyoto Protocol

1 Corporate Income Tax

2 Voluntary programmes refer to institutions that create incentives for firms to incur the costs of taking progressive action beyond what is required by law in exchange for benefits

that nonmembers do not enjoy 3 Green pricing is an optional utility service to support a greater level of utility company investment in renewable energy technologies

Source: NDRC; SERC, Bureau of Energy, Ministry of Economics Affairs, Department of Investment Services

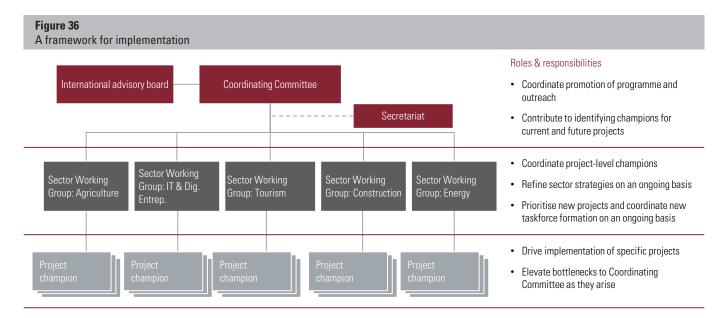
green-education public park would help create further awareness about energy issues, such as energy security and the use of renewables. The park would be supported by 100% green infrastructure and could help mobilise the population to push for improved public sector policies.

- Project financing: Beyond private sector efforts to help finance projects at the household and small firm level, the sector needs to seek out potentially interested parties who might be willing to invest in high-capex energy projects (that will have relatively slow payback periods). In order to do this, companies would need to develop solid business plans, show strong risk mitigation mechanisms, and focus on opportunities that could be developed within existing constraints. The search for financing opportunities should not be limited to the domestic sphere; the international community can be engaged as well. Donor support, channelled through instruments such as a grant leveraging facility (see chapter 9) could also be of great relevance.
- Technical training and skilled labour supply: Extra training would help develop a skilled labour force capable of creating and maintaining the electricity production and distribution infrastructure. This training could be carried out by vocational training schools, local universities and colleges, as well as by private sector companies.
- Access to cost-effective, high-quality technology: Successful investments in the energy sector will require distribution channels for high-quality, reliable and cost-effective technology: this will enable the development of projects that produce a positive business case for investors.

Implementation: Organising for Success

As well as broad support from the public sector, successful implementation of the initiatives discussed in the chapters above will require an effective implementation strategy and clear ownership of projects. While we expect action by the private sector to develop in an organic way, investors may have an interest in taking advantage of the analysis and opportunities for coordination identified in this report. As such part of the effort includes the development of an efficient organisational framework with clear roles and responsibilities to help ensure effective project and performance management, transparency, and credibility for those involved. Advantages from such a framework may include assistance in the assessment of the business case(s) proposed and access to prospective investors, among other possibilities.

The framework outlined below (Figure 36) incorporates five elements: (i) a Coordinating Committee to oversee implementation and coordination with other private and public sector stakeholders (ii) sector working groups to support the sector initiatives (iii) project champions who would own and drive individual projects (iv) a secretariat to support the Coordinating Committee's work (v) an international advisory board to provide guidance and direction on best practice.



This framework builds on experience from other economies and the expertise of the Coordinating Committee formed for this project. It would involve the private sector leading initiatives, working closely with government and other stakeholders.

I. COORDINATING COMMITTEE

The Coordinating Committee will oversee the programme to ensure the implementation of the initiatives. The committee will consist of 8-12 representatives from the Palestinian private sector, diaspora, and international business community.⁹⁰ Its primary role will be to coordinate and promote the initiatives with local and international stakeholders and potential investors.

⁹⁰ As this report went to print, the following the following business leaders had joined the Coordinating Committee: Sami Abu Dayyeh (Net Tours Co.); Tareq Aggad (Arab Palestinian Investment Co. - APIC); Fadi Ghandour (Aramex); Riad Kamal (Arab Tech Construction Company); Zahi Khouri (Palestine National Beverage Co.); Samer Khoury (Consolidated Contractors Co. - CCC) and Khaled Ossaily (Ossaily Contracting & Construction)

The committee will meet on a monthly basis to review overall progress and provide support and guidance to the sector working groups and project champions.

II. SECTOR WORKING GROUPS

Sector-specific working groups will be responsible for supporting their respective sector projects. Each sector working group will comprise 3-6 experts, who will meet on a monthly basis. These groups will be responsible for coordinating the project champions (defined below), refining the projects on an ongoing basis, prioritising and presenting new projects, forecasting impact, and reviewing project progress. Each of the working groups will have a representative on the general Coordinating Committee to provide guidance regarding that sector.

III. PROJECT CHAMPIONS

Each of the projects and initiatives are either already being, or will be, driven by one or more private sector companies or individuals. These 'project champions' and their teams will be responsible for promoting, driving and/or implementing the specific projects. The Coordinating Committee and sector working groups will provide support and track and report project progress. Project champions are not necessarily expected to finance or invest in projects, though they may do so in many cases.

IV. SECRETARIAT

A secretariat, provided by The Portland Trust, will administer the work of the Coordinating Committee, and provide high-level support.

V. INTERNATIONAL ADVISORY BOARD

In addition to the governance structures described above, there will be an international Advisory Board, composed of private sector leaders from the international community. The advisory board will help engage international partners to leverage global best practice and identify, attract and secure sources of funding. It will also play an important role in the organisation of investor conferences. The international Advisory Board would aim to convene semi-annually.

Conclusion

This report is intended to share a summary of the core findings from our analysis. We hope these will serve as inspiration and provide the basis to move the Palestinian economy into a new period of growth and resilience. We aim to drive implementation of the initiatives described in this report together with colleagues from across the private sector, public sector, broader civil society and the Palestinian diaspora. To this effect we welcome businesses and investors to address common challenges and maximise synergies through coordinated action.

Business can direct investment to support economic growth and create sustainable jobs, while achieving sound economic returns. An initial set of concrete opportunities for investors, businesses and entrepreneurs has been identified. We expect this to be enhanced and expanded as the private sector makes progress in implementing the programme.

With successful implementation of the initiatives outlined in this report, just five sectors of the economy could contribute over \$8bn to Palestinian GDP by 2030. They could create more than 150,000 direct and around 220,000 indirect new jobs (around 40% of the number needed to reduce unemployment to 10% in the long term) and call for approximately \$600m in investment in the short term.

The Agriculture sector could become a leading exporter of select high-value crops and, as a result, contribute nearly \$1.4bn to GDP (up from \$502m in 2012) and create around 36,000 new jobs by 2030.

Palestinian IT businesses and digital entrepreneurs could drive the nascent information technology industry to increase its direct annual contribution to GDP as much as eight-fold to \$960m (from around \$105m in 2012) and generate more than 18,000 additional high-quality jobs by 2030.

The Palestinian Tourism sector has the potential to grow substantially by 2030, increasing its contribution to GDP from around \$250m in 2012 to an estimated \$750m and the number of workers it employs from around 17,000 to approximately 38,000 by 2030.

Construction, already an important economic sector, has the potential to nearly double its annual contribution to GDP to \$2.8bn and create up to 64,000 new jobs through to 2030.

Finally, reduced reliance on Energy imports and greater utilisation of renewables could add up to 17,000 new jobs and up to \$2.2bn to GDP by 2030. Additionally, implementing projects in the energy sector has the potential to reduce the cost of electricity for households and industries, freeing up income and capital, which could have a significant indirect impact on GDP.

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A strong Palestinian private sector, supported by the public sector, can lead the way to increased economic resilience. The road ahead will be challenging. It will require intense cooperation between private and public stakeholders and concerted action over many years. At stake is the future of the Palestinian economy, its resilience and independence.

Appendix A: Cross-cutting Enablers

The initiatives outlined in this report cannot be fully implemented unless the private and public sectors work together to improve the enabling environment in the economy. In particular, achieving the growth and job creation opportunities identified for the prioritised sectors will be greatly supported by expanding, enhancing, and/or reforming five enablers: human capital development, infrastructure, regulation and land registration, access to capital, and branding.

Whilst specific enablers for individual sectors are outlined in preceding chapters of this report, the five enablers discussed in this section cut across the entire economy.

HUMAN CAPITAL

The majority of the initiatives outlined in this report will require intense investment in human capital development. For instance, in the tourism sector, attracting more international visitors and extending the length of their stays will depend upon the availability of top quality hospitality workers, which will in turn depend on the development of world-class vocational training institutes (most likely privately run). Similarly, in IT & Digital Entrepreneurship, the demands and quality standards of international software companies for specific contracts will require near-term private investment in training programmes.

Expanding the supply of IT and digital sector workers and entrepreneurs to support long-term, sustainable growth will depend on investment to modernise and expand the coding languages taught, and technology education/ training programmes in general, in public institutions. *"There is a lot of talent in Palestine, we've seen it,"* said the CEO of a Ramallah-based IT firm, *"but we have a lot to catch up on in terms of education and producing more top-level graduates in computer science and technical fields."*

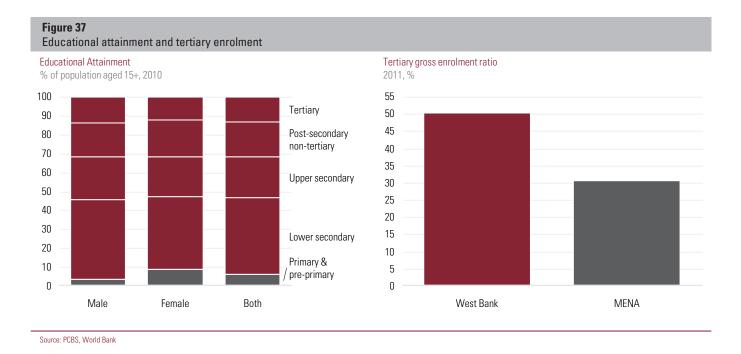
More broadly, the private sector can help modernise education through vocational training programmes and cooperation with public sector officials to design curricula focused on future employment needs that address jobskills mismatches. The private sector might also help design and provide teacher training to support these revised curricula.

Student education and enrolment rates are relatively high (around 95% of the population has completed secondary school, and over 50% enrol in tertiary education, compared to an average of 30% in MENA).⁹¹ Maintaining current successes and creating further opportunities will present a challenge to the education system, in terms of improving both the quantity and quality of services (Figure 37).

Despite the high enrolment rate observed in secondary education, a wide range of stakeholders (including education providers, employers, and students) consider that the quality of the Palestinian education system has decreased over the past 10 years. Many identified outdated courses, curricula, and pedagogical methods as the main issues, while a few observed that the current system prioritises the wrong educational objectives and approaches. One interviewee in the education sector summarised: "...our teacher training, curricula, and materials still focus on rote memorisation, with no problem-solving."

Negative perceptions also prevail among a variety of stakeholders regarding both the quality of vocational education programmes and the calibre of students they attract. One interviewee noted that *"vocational students*"

⁹¹ The World Bank (2011), Gross Tertiary Enrolment Ratio, (The World Bank). Total is the total enrolment in tertiary education (ISCED 5 and 6), regardless of age, expressed as a percentage of the total population of the five-year age group following on from secondary school leaving



aren't learning the most relevant and up-to-date skills", adding that vocational programmes only "...attract the students who are struggling the most."

Achieving the much needed improvement in vocational training will require not only increasing the number of high-quality programmes on offer, but also diminishing or eradicating the stigma associated with them (i.e. these alternatives continue to be perceived as inferior to traditional academic careers). Partnerships with private providers would enhance access to innovative, practical-learning-based instruction, and could help 're-brand' vocational education. If education providers are to achieve such a breakthrough they will need to clarify the benefits of new offerings and differentiate themselves from lower quality institutions.

The private sector might also help expand access to affordable education by offering online alternatives, which could be provided in partnership with international schools. 'Blended learning' formats, involving a combination of self-paced online work, classroom-based lessons, mentoring, and student working groups, can allow students to benefit from world-class educational materials and in-person teaching.

INFRASTRUCTURE

Renovating and upgrading physical infrastructure is crucial to economic growth (particularly in the five highpotential sectors identified) and will require large-scale joint efforts between the public and private sectors. In particular, infrastructure improvements are needed in sewage and waste collection/disposal, water supply, transportation, IT and power supply.

Fragmented and outdated sewage and waste collection and disposal systems have a notably negative effect on tourism due to the prevalence of litter in the streets and disposal through burning of rubbish. Stakeholders reported that this detracts from the appeal of some of the cities identified above as key tourism destinations, such as Jericho and Bethlehem. Upgrading water supply infrastructure will be critical for the agricultural sector given that current pipelines are not watertight. Interviews with experts suggest farmers often pay a premium for water they do not receive because water metering is done on a time rather than on a volume basis.

Upgrading transport infrastructure will be equally important to facilitate growth in tourism, agriculture and construction.

There is also room for improvement in IT infrastructure, especially internet connectivity: collectively, Palestinian internet, mobile, and household mainline penetration trails most other MENA countries. Mobile penetration, despite limitations to the spectrum⁹², reaches 95%, yet household internet penetration remains at a low 30%. Developing a national 'fibre-to-the-home' programme (see chapter 5) could help extend access to IT services, building on the existing high-quality fixed broadband infrastructure. Improved IT connectivity is likely to have a positive impact on productivity in sectors with high transaction costs, such as financial services, as well as sectors with high labour intensity, such as tourism. It could also facilitate the adoption of more efficient business practices among SMEs and spur growth in the wholesale and retail trade sectors, through e-commerce.

The power supply infrastructure also requires upgrading: this might include putting in place a smart electricity grid and strategically located fossil fuel storage facilities. Storage facilities are also likely to be of vital importance to the development of the renewable energy segment.

Though the public sector will need to be largely responsible for driving required improvements in infrastructure, there could be opportunities for private sector involvement through PPPs. For instance, the government might contract private sector companies to build, upgrade, and renovate physical infrastructure (see WWTPs business model alternatives in Figure 14 – chapter 4). Such an approach would leverage the technical expertise of international firms and building capacity amongst local companies.

REGULATORY ENVIRONMENT AND LAND REGISTRATION

As reported by various stakeholders in all five prioritised sectors, the business environment is currently hampered by outdated legislation (inherited from the time of the British Mandate and from Jordanian law). For example, The World Bank highlights the Companies Law as stifling the growth of private enterprises, particularly foreign-owned businesses and SMEs.⁹³ One local investor said: *"The difficulty of launching a start-up deters many young people from even trying."*

A broad supportive policy environment will be needed to facilitate private sector expansion. Incentives to promote growth should impact the ease of operating businesses and adequate investment laws, among others. This could not only accelerate private sector investment but also attract international parties for joint ventures. Specific considerations to promote prioritised sectors can spark further development, following the examples of different countries in the MENA region (e.g. Jordan with IT, Morocco with Tourism).

Interviewees agree that there are significant ways in which the government could improve the business environment through new regulation, such as removing minimal capital requirements for the integration of a business or establishing legal permission for sole proprietorship.

Furthermore, land registration is also a critical enabler. Only 30% of land in the West Bank is currently registered, making it difficult for companies or individuals to structure contracts. The land registration process is complex and

⁹² Israeli restrictions prevent Palestinian telecom firms from offering 3G services in the West Bank and Gaza

⁹³ The World Bank (2012), West Bank and Gaza: Towards Economic Sustainability of a Future: Promoting Private Sector-Led Growth, (The World Bank)

lengthy, taking nearly 50 days to complete and involving four different institutions: the municipal government, the Ministry of Finance, a commercial bank, and the Land Registry.

The opaque and complex land registration process de-motivates Palestinians from registering their ownership of land and makes it difficult and expensive for investors to acquire large tracts of land. This, in turn, limits growth possibilities in the construction sector and imposes particular constraints on the affordable housing segment. Improvements in this respect would also contribute to growth in the agriculture sector. In the short term, simplification of the land registration process, in conjunction with a large-scale campaign to promote registration, should help make significant progress.

ACCESS TO CAPITAL

Restricted access to capital is broadly recognised as one of the main factors hampering private sector growth, especially in the SME segment . In 2010, nearly two-thirds of SMEs reported that they needed external financing to increase and develop their activities.⁹⁴

"Our SMEs need to be able to raise capital, come together, and access markets abroad"

Local investor

According to stakeholders, current barriers to

accessing credit by SMEs include: (i) the lack of proper accounting practices that result in inadequate performance records and credit assessments (ii) the predominant share of bank lending flowing to retail consumption, real estate, large companies, and government (iii) the requirement for hard assets as collateral for loans (mainly land, where registration continues to be a major issue) (iv) the risk-averse attitude of banks, which typically refuse to support unproven SMEs in the present volatile business environment. As a result, in the first quarter of 2013, following a long-term trend, 98% of Palestinian businesses did not even apply for bank credit.⁹⁵ According to a Palestine Economic Policy Research Institute (MAS) survey, in 2010, 80% of businesses relied instead on personal funds.⁹⁶

There are a number of potential alternative ways to address these issues. For instance, creating a land registry could increase access to financing by allowing an extended number of companies and individuals to offer land as a collateral asset for bank loans.

In the construction sector, direct lease-to-own financing schemes could help provide housing finance to the 'unbankable' segment of the population. Such a scheme would remove the requirement for potential house buyers to provide down-payments when taking out a loan from a bank. For many, these are unaffordable. Islamic financing options might also be developed for some portions of the population.

At the same time, a Private Sector Grant Facility (PSGF), established by a consortium of donors, could encourage the development of private sector projects.⁹⁷ In light of pressure on aid budgets and contraction in credit markets, increasing difficulties by large projects to secure finance will require donors to play a new role in private sector growth. A PSGF can boost the private sector's ability to attract finance by making available, at the outset of a project, a grant equivalent to a percentage of the total investment. If the grant portion was equivalent to 15%, for example, \$100m of aid used in this way would attract close to \$700m of investment from the private sector. Efforts by The Portland Trust to design and launch such a facility have included several rounds of consultation with international entities, the Palestinian private sector and the PNA. As broad support has been identified, an initial pipeline of projects could be developed based on the initiatives identified throughout this report.

96 MAS, ibid

⁹⁴ MAS (2010), Towards Policies that Stimulate Adequate Financing to Small and Medium Size Enterprises, (MAS)

⁹⁵ PCBS (April 2013), Survey of the Perceptions of Owners/Managers of Active Industrial Enterprises Regarding the Economic Situation First Quarter 2013, (PCBS)

⁹⁷ The Portland Trust (2010), Proposal for the Creation of a Palestinian Private Sector Grant Facility (PSGF), (The Portland Trust)

In addition, Development Impact Bonds could be explored as a financing mechanism in various sectors.⁹⁸

BRANDING

A final cross-cutting enabler relates to improving perceptions of the 'Palestinian brand.' This is most relevant to export-oriented sectors such as agriculture and IT & Digital Entrepreneurship, where positive perceptions of quality and reliability are likely to open new markets and increase exports. It is also a key enabler for the tourism sector, given the influence of perceptions on tourists' choice of travel destination.

Current perceptions of the regional security situation negatively affect the tourism industry, despite periods of relative calm and the fact that some Palestinian cities have been largely unaffected by violence. More broadly, negative perceptions of the quality of Palestinian goods and services are not only an issue in international markets: local consumers and businesses are said to prefer imported products despite some being more expensive than local alternatives.

Reversing these perceptions will take time and require sustained investment. The government might lead such efforts by creating an international platform built on 'flagship' high quality exported goods and services. This could enhance perceptions of other Palestinian offerings in international markets. Well-targeted regional and international branding campaigns could also capitalise on historical and religious sentiment to help promote Palestinian tourism and agriculture.

98 Social Finance UK, www.socialfinance.org.uk/work/developmentimpactbonds

Appendix B: Interviews

General

Hasan Abdel-Jabar, Ministry of the National Economy Tareg Abbas, APIC Fadi Abdellatif, USAID Nadim Asfour, Frensh Consulate Dr Fathi Abu Moghli, Palestine Institute for Research and Development Studies Hadi M. Abu Shahla, Office of the Quartet Representative Maha Abu Shosheh, Palestinien Exporter Council Ziad Abuzayyad, Blogger Mohammad Al Abed, Reema Dr Samih Al-Abid, Palestine Investment Fund Abed Al Abwah, Palestine Investment Fund Khaled Al-Arja, Arja Textile Company Elis Al Arja, Palestinian Hotels Association Dr Jihad Al Jebrini, Al Jebrini Dairy Dr Mohammad Almbaid, International Youth Foundation Zahi Anabtawi, Al Arz Ice Cream Co. Anan Anabtawi, Napco Kingsley Atkins, Diaspora Matters Ahmad Aweidah, Palestine Exchange Dr Ohan Balian, Ministry of the National Economy Ibrahim Barham, Paltrade John B. Crihfield, USAID Yousef Dajani, JDECO Dahouk H. A. Dawoudi, BeirZait University Taher Dwayat, Al Rayan Talal Nasser Eldin, Birzeit Pharmaceutical Huda El Jack, Siraj Fund Mustafa Hasasn, Hulul Solutions Salah Hidmi, Arab Bank Marwan Hirbawi, Paper Industries Co. Nafez Hirbawi, Palestinian Business Forum Hebron Stephanie Holden, MBC Ventures Favez Husseini, Wataniya Mobile Dania Ismail, MBC Ventures Iyad Joudeh, Solutions for Development Consulting Co. Bashar Jubran, Star (Arab Industrial) Louai Kaddumi, Hdvision Nabil Khatib, MBC Ventures Suzan Khoury, Bank of Palestine Amal Daraghmeh Masri, Ogarit group Iyad Masrouji, Jerusalem Pharmaceuticals

Maen Melhem, Jawwal Ibrahim Najjar, Palcircless Firas Neiroukh, Neiroukh Scales and Metallic Furniture Co. Dr Mohamed Nasr, Birzeit University Mohammed Nimer Al-Amleh, Super Nimer Nassim Nour, Office of the Quartet Representative Khaled Osaily, Osaily Group Sahar Othman, Sharek Youth Foundation Firas Raad, Office of the Quartet Representative Suzy Rasul, Ma'an Khalili Riziq, Ramallah Chambre of Commerce Sami Saidi, Arab Islamic Bank Raya Sbitany, Bank of Palestine Anwar Shanti, Trust International Insurance Kareem Shehadeh, Palestine American Chamber of Commerce Katja Silva-Leander, DAI Mark Singleton, Office of the Quartet Representative Mazen Sinokrot, Al Quds Holding Hanan Taha, Paltrade Manar Tamimi, Alzein PR Marwan Tarazi, Birzeit University Ziad Toame, Ministry of the National Economy Bassam Walweel, Golden Wheat Mills. Co Waleed Zaru, DAI Monther Zghier, Royal Industrial Trading Co.

Agriculture

Dr Walid Abed Rabboh, Horizon for Sustainable Development Dr Mohammed Abdellatif, PARC Osama Abu Ali, PalTrade Issam Abu Khaizaran, Compete Project Tarek Abu Laban, Ministry of Agriculture Mohammad Abu Khaizaran, Zadona Agri-Industrial Company Ahmed Al-Haj Qasem, Nakheel Palestine Riyad Al-Shahed, Ministry of Agriculture Samir Al Junaidy, Al Junaidy Company Dr Saleh Alkafri, PCBS Amjad S. Almughayyar, Ministry of Agriculture Dr John Ashley, Horizon for Sustainable Development Samir Barghouthi, ACAD Alexandre Dahan, Compete Project Ismail D'eig, VTCO

Abed Hakim Fugaha, Palestine Poultry Co. Ihab Jabari, Compete Project David Job, Moon Valley Enterprises Imad Kamhawi, Compete Project Amer Khilfeh, Harvest Export Abdullah Q. Lahlouh, Ministry of Agriculture Maisa Manasrah, Nakheel Palestine Amid Masri, Talem Zuhair Manasrah, Nakheel Palestine Kamel Mujahed, Investor in Agriculture Issam Nofal, Ministry of Agriculture Imad Nussiebeh, Thimar lyad Nussiebeh, Thimar Mohammad Sawafta, Oxfam Abdulla Sharawi, Padico Khalil Shiha, PARC Younes Yameen, Moon Valley Enterprises

IT & Digital Entrepreneurship

Zika Abzuk, Cisco Ghassan Anabtawi, REACH Mustafa Deeb, Compete Abeer Hazboun, PITA Sam Husseini, Lionheart **Omar Kamal**, **ProGineer** Hassan Kassem, PITA George Khadder, PEEKs Tareq Mayyah, Exalt Saed Nashef, Sadara Ventures Dalia Othman, Souktel Yahya Salgan, Jaffa.net Tova Scherr, MercyCorps Nizar Shaath, Paltel. Rami Shamshoum, Hadara Murad Tahboub, ASAL Mahmoud Yassin, PITS Faris Zaher, Yamsafar

Tourism

Kareem Abdul Hadi, PADICO Tourism Sami Abu Dayyeh, Net Tour Operators, Ambassador Hotel Yousef Daher, Daher Tourist Agency Chris Faisander, Bethlehem University Dr Samir Hazboun, Bethlehem Chamber of Commerce & Industry Mazen Karam, Bethlehem Development Foundation Zahi Khouri, PADICO Tourism Sami Khoury, Visitpalestine.ps Musa Jarjoui, George Garabedian Company Nabil Mofdi, Bethlehem University Fahmi Nashashibi, Golden Walls Hotel Jamal Nimer, Arab Hotels Association Joseph Sahouri, Ministry of Tourism and Antiquities Salim Sakakini, Orjuwan Abdullah Sharawi, PADICO Hamdan Taha, MOTA Mohammad Taweel, Compete Munif Treish, Amaar Group Rami Zeidan, Holy Land Incoming Tour Operators Mohammed Zumlot, Grand Park Hotel

Construction

Ala'a Abu Ein, Royal Group for Construction. Lana Abu-Hijleh, CHF Nidal Abu Lawi, PRICO Khaled Al Sabawi, Union Construction and Investment Ahmad Alhai-Hasan, The National Bank Arafat Asfour, Nassar Group Amir Dajani, Bayti Real Estate (Massar, Rawabi) Omar Hannon, PRICO Sulaiman Hanzineh, Arab Bank Jamal Hurani, Arab Bank Omar Jayousi, Palestine Contractor's Union Issa Kassis, Palestine Mortgage and Housing Corp. Mohammad Khateeb, Bridge Development Group Omar Khufash, Palestinian Housing Council Ahmad Malik, PMHC Adel Odeh, Palestine Contractor's Union Naser Osaily, Osaily Trading Construction Badawi Qawasmi, PIF Sami Saidi, Arab Islamic Bank Munif Treish, Ammar Group Jamal Yahya, CCC

Energy

Mohammad Abu Gharbeye, Al Ahly Hospital Mohammad Al Helu, Alsun For Solar Energy Co Ltd Abed Alro'uf Al Sheikh, Hebron Electricity Co (HEPCO) Yousef Dajani, JDECO Imad Ghunaim, Energy Engineering Co. Bernard Haider, PWC Moayyad Hamad, Ayava Solar Dr Riyad Hodali, Birzeit University Mansour Mansour, PalSolar Firas Qwasmi, JDECO Dr Ibrahim Yehia, The Triangle R&D Center

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