



Forging New Strategies in Protracted Refugee Crises: Syrian Refugees and the Host State Economy

"Knowledge from the region, action for the region"



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Operating under the chairmanship of His Royal Highness Prince El Hassan bin Talal, the Institute works to promote a transition to evidence-based policy and programming to combat the development and humanitarian challenges facing West Asia and North Africa.

The WANA Institute aspires to be a trusted source of knowledge, evidence and opinion, and to provide a forum for open debate for leading researchers and policy makers in the region.

We undertake research, host conferences and conduct training workshops in the areas of social justice, green economy and human security. We believe these three areas represent both the most pressing issues facing our region and the greatest opportunity for our work to create vital impact.

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Jordan Case Study

Table of Contents

Introduction	2
1: An Overview of Jordan's Economy	4
2: Economic and Security Impacts of Hosting Syrian Refugees	13
3: Forging New Strategies in Protracted Host Situations	22
Annex 1: Identifying Direct and Indirect Costs and Benefits of Hosting Syrian Refugees in Jordan	31
Annex 2: Detailed Examination of Direct and Indirect Costs and Benefits	33
Annex 3: Quantifying Direct and Indirect Costs and Benefits	40
Annex 4: Major Companies Forced to Leave Syria	47
Annex 5: Viablity Assesment for Establishing an Industrial Zone Along the Jordanian - Syrian Border	48
Annex 6: Feasibility of Mainstreaming Additional Agricultural Products in Northern Jordan	56

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Introduction

The civil conflict in Syria poses the most complex and immediate humanitarian challenge to the West Asia-North Africa (WANA) region. It is estimated that over half of the Syrian population has now been forcibly displaced, with several million having fled across the borders into neighbouring states. More than 1.7 million Syrians are currently registered in Turkey and Lebanon has become the highest ranking country globally in terms of numbers of refugees per capita, closely followed by Jordan. There are over 249,000 Syrian refugees in the Kurdistan region of Iraq, representing just one of myriad displacement challenges affecting this country, and over 134,000 in Egypt.¹ The scale of displacement and the increasingly protracted nature of the Syrian crisis are having a dramatic impact on the ability of host states and international actors alike to respond effectively. Jordan, with its long history of refugee hosting, represents a topical starting point for beginning to understand some of these impacts in greater detail and for conceptualising more effective policy measures.

Jordan has repeatedly played host to large numbers of displaced people, as reflected in its contemporary demographic composition. Circassian, Chechen and Armenian communities left the Caucasus region in the late Nineteenth and early Twentieth centuries and settled in the Ottoman vilayet that would become part of the Emirate of Transjordan in 1921.² Palestinians fled to Jordan following the Arab-Israeli war of 1948, the June war of 1967, and then again from Kuwait after the Second Gulf War in 1991. This same war caused a huge outflow of Iraqi citizens to Jordan as refugees, followed by an additional several hundred thousand following the sectarian violence of 2006-2007. Today, the most salient refugee population in the Kingdom is the Syrian population; there are approximately 630,000 Syrians registered with UNHCR in Jordan.³ The Ministry of Planning and International Cooperation (MOPIC) estimate the total number of Syrians in the country to be closer to 1.4 million.⁴ The Government has established refugee camps in Zaatari, Azrag and Zarga, which accommodate approximately 83,000, 18,000 and 5,700 refugees respectively.⁵ However, the majority (around 84 percent) of Syrians reside in host communities: approximately 175,000 in Amman, 143,000 in Irbid and 158,000 in Mafraq.⁶ This situation means the country has one of the highest refugee-to-citizen ratios in the world.

The history of refugee hosting in Jordan elaborates the orthodox approach under which refugee crises are managed around the globe: host states, overwhelmingly in the so-called 'global south' provide a protection space while the costs of refugee hosting are borne by the international community. There is a serious flaw with this model, namely: whereas the existence of the peremptory norm of non-refoulement obliges host states not to return a refugee to territory where they fear a genuine threat of persecution, there is no equivalent onus of responsibility on the international community in the processes of burden-sharing. When a crisis becomes protracted, host states and humanitarian agencies routinely face the difficult situation of having to continue to support a displaced population but in a context of diminishing donor contributions. This dynamic is being witnessed in Jordan today. The Government's Jordan Response Plan has received around 34 percent of the required funding and UNHCR's 2015 appeal

has received just 20 percent.⁷ Similarly, the World Food Programme had to reduce its levels of service in April by removing 34,000 refugees from its food voucher program and continues to struggle with chronic uncertainty over the longevity of its funding.

This imbalance between protection and burden-sharing is compounded by the fact that, in most host states in the global south, there are restrictions on refugees' ability to enter the workforce, except in very specific cases. Refugees predominantly rely on savings and assistance from humanitarian agencies. As these resources wain, more refugees may seek work in the informal sector, where they are exposed to exploitation, unsafe working conditions and other risks. Growth of the informal sector also has negative implications on the economic development of the host state, by undermining the tax base, distorting spending and compromising the rule of law. This situation feeds the perception of refugees as inherently burdensome on host states. In recognising these factors, the WANA Institute has sought to re-frame the problem and propose new, more innovative approaches to refugee management. For instance, how might the presence of a large refugee population come to be reconceived as a genuine opportunity for the host state? What scope is there for greater inclusion of refugees in the economic development of host states in ways that would also yield tangible benefits to refugees themselves? Might it even be possible to harness refugees' skills and expertise on a larger scale to effect transformational change vis-à-vis the host state's macroeconomic development goals?

In the following three chapters, we provide an overview of the Jordanian economy and an analysis of the impacts of Syrian refugees on Jordan, and proposals for conceptualising new ways of approaching protracted refugee crises.

¹ UNHCR et al, 3RP Regional Progress Report (2015) < http://reliefweb.int/report/syrian-arab-republic/3rp-regionalprogress-report-june-2015> at 28 July 2015.

² W. L. Ochsenwald, 'The Vilayet of Syria, 1901-1914: A Re-Examination of Diplomatic Documents as Sources' (1968), Middle East Journal, vol. 22 (1), pp. 73-87.

³ UNHCR, Syrian Refugees; Inter-Agency Regional Update 25 April 2015.

⁴ MOPIC, Jordan Response Plan for the Syria Crisis 2015, Report of the Jordan Response Platform (2014).

⁵ While the initial waves of Syrian refugees were absorbed into communities, in August 2012 steadily increasing numbers, lack of available housing and the strains created on public services led to a change of Government policy whereby new arrivals were directed into camps.

⁶ UNHCR, Syrian Regional Refugee Response, Inter-agency Information Sharing Portal (2015) < http://data.unhcr.org/ syrianrefugees/country.php?id=107> at 3 June 2015.

⁷ UNHCR internal data; email from H Daubelcour to S Thomas, 22nd June 2015.

1: An Overview of Jordan's Economy

Jordan is an upper-middle income economy with a population of 6.5 million and a per-capita GDP of US\$ 5,214 as of 2013.8 Jordan's economy is among the smallest in the Middle East, meaning that it has to rely on limited sources of income. Inadequate supplies of water, oil and other natural resources mean that Jordan has traditionally relied on foreign aid, public debt, remittances and — more recently — foreign direct investment to support its finances and generate productive economic activity. This reliance on what is known as 'external rents', has led some economists to argue that Jordan's economy is more rentoriented than growth-oriented. Resource scarcity, and consequent dependence on imports, also means that the economy is highly shaped by exogenous events.

In response, under the patronage of His Majesty King Hussein, the Government commenced vigorous liberalisation reforms aimed at overhauling the economy in the early 1990s, many of which continue today. Such efforts started with a series of structural adjustments to open up strategic sectors to private investors and move away from Jordan's rentierist legacy. Like many of its Arab counterparts, the Government was traditionally a central source of employment, welfare, and subsidies on basic consumer goods. However, the oil recession and massive budget deficit that ensued in the late 1980s provided the impetus to significantly cut back social spending and subsidies on consumer goods, and state-owned enterprises were opened up to private ownership. Jordan's economic reforms created previously unattainable business opportunities in the country, which marked a serious intent to leap away from the rentier model and into a productive, more economically viable future. Such moves have placed Jordan at the forefront of many regional indicators including human capital, market-friendly policies and innovation. These strengths are an important aspect of Jordan's development-friendly ethos that reflects a push towards a knowledge-based economy. However, a combination of factors including repeated cycles of economic slowdown, high poverty rates, and a bloated public sector have left Jordan's economic liberalisation project incomplete. Economic realities such as a chronic dependency on foreign aid and remittances, vulnerability to external shocks, a large informal economy and staggering public debt have necessitated State interference, complicating efforts to withdraw from its role as a main driver of economic outcomes.

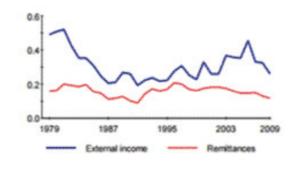
Today, Jordan's principal economic challenge is leveraging adequate economic activity to cover spending in the context of the country's weak natural resources, small size and proximity to neighbours in conflict. The difficulty is that Jordan's primary sources of economic activity are either economically problematic (rents), in decline (tourism) or inadequate (taxation), whereas there is little mobility in spending patterns because they are driven by factors (natural endowments and neighbourhood) largely outside of Jordan's control. These dynamics are explored in greater detail below.

Today, Jordan's principal economic challenge is leveraging adequate economic activity to cover spending in the context of the country's weak natural resources. small size and proximity to neighbours in conflict.

1.1.1 Remittances and Aid

Foreign aid and remittances, especially from Gulf States, are among the most significant contributors to Jordan's economy. Remittances averaged JOD 469.93 million from 2000-2015⁹ and are expected to reach JOD 2.6 billion or 10 percent of Jordan's GDP by the end of 2015.¹⁰ Jordan is also one of the world's top aid recipients on a per capita basis.¹¹ In 2014, Jordan received JOD 1.2 billion worth of foreign aid, accounting for 9-10 percent of GDP.¹² Jordan's traditional and most significant aid donors (both in the form of grants and soft loans) are the United States, Gulf States, European Union, International Monetary Fund and the World Bank. Both historically and today, Jordan's relationship with members of the Gulf Cooperation Council (GCC) has resulted in extensive aid flows.¹³ This relationship became more prominent in the aftermath of the Arab Spring. In 2012, when Jordan was at a point of financial 'distress' due to the fuel crisis and the sudden and massive influx of Syrian refugees, the GCC intervened with a US\$ 5 billion aid package. The aim of this grant, as well as the aid provided to Jordan in general, has been to spur economic activity, ease fiscal pressures, and finance infrastructure and development projects. It is critical to highlight that remittances and aid operate in the same way as 'rents'; they cause local currency appreciations, making other exports uncompetitive (as the money earned is worth less in terms of local currency).¹⁴ This retards the growth of labour intensive exports that otherwise have the potential to grow rapidly and further technological progress.¹⁵

Figure 1: Iordan's External Income and Remittances in relation to GDP¹⁶



¹⁹ The Arab Spring was linked to a 17 percent decline in tourist numbers in 2011, and further drop of 7 percent in 2012; World Bank, Moderate Economic Activity with Significant Downside Risk, Jordan Economic Monitor (2013) 7. ²⁰ K Melkawi, 'Jordan Remains Medical Tourism Hub Despite Regional Unrest', The Jordan Times (Amman) 18 March 2012.

¹¹ R Callaway and E Mathews, Strategic US Foreign Assistance: The Battle Between Human Rights and National Security (2008)

¹² O Obeidat, 'Jordan Receives JD 1.2 billion foreign aid in 11 months', *The Jordan Times*, (Amman) 8 December 2014.

^{1.1} Insufficient drivers of economic activity

^{145.}

¹³ For example, during the years between 1967-1986, GCC aid flows came to represent 82.5 percent of the total aid received by Jordan; F Khatib, 'Foreign aid and economic development in Jordan: an empirical investigation,' in R Wilson (ed), Politics and the Economy in Jordan (1991) 65.

¹⁴ P Collier, The Bottom Billion: Why the Poorest Countries are Failing and What Can Be Done About It (2007), 39-40. ¹⁵ ibid 121, 162.

¹⁶ K Mohaddes and M Raissi, above n 10, 6.

¹⁷ Jordan is targeting US\$ 3.5 billion worth of tourism revenues in 2015; The Jordan Times, 'Kingdom Eyeing JD3.5 billion in Tourism Revenues this Year', The Jordan Times (Amman), 5 May 2015. ¹⁸ Jordan Inbound Tour Operators Association, Visit Jordan; Land of Treasures (2011) JITOA http://www.jitoa.org/application/ uploads/assets/file_1296722012_1538.pdf> at 1 May 2015.

⁸ Department of Statistics, Jordan in Figures, (2013) 3.

⁹ See Figure 1.

¹⁰ K Mohaddes and M Raissi, Oil Prices, External Income, and Growth: Lessons from Jordan, IMF Working Paper, 2011.

1.1.3 Foreign Direct Investment (FDI)

The negative impact of rents is somewhat offset by increasing FDIs, which represented 5.3 percent of GDP at the end of 2013. Besides supporting the balance sheet, they facilitate technology and skills transfer, create employment opportunities and finance development projects. Jordan's top investors are Kuwait, Saudi Arabia, non-resident Jordanians, Syria, France, the United Kingdom and the United States.

1.1.4 Taxation

Tax system deficiency is among the major challenges facing the Jordanian economy. International benchmarks suggest that collected tax revenues should account for at least 8 percent of GDP; Jordan's have never exceeded 4 percent.²¹ This deficiency stems from weak tax collection and enforcement mechanisms. It is estimated that around JOD 1 billion worth of Government revenue is foregone due to tax evasion.²² Evasion has prompted Jordan to impose higher consumer taxes including a 16 percent general sales tax on a wide range of items including basic commodities and services, a 'special state tax' of 50 percent on mobile and telecommunications services and 23 percent and 46 percent on 90-Octan gasoline and 95-Octan gasoline respectively.²³ High tax rates lower sales and elevate prices, leading to higher living costs. Moreover, because such taxes are mildly regressive, vulnerable groups living in persistent or transient poverty are particularly affected.

1.2 Over-Reliance on Volatile Imports

Jordan's financial resources are strained, not only because it has limited sources of income, but because of a large list of imported items that appear on its balance sheet. The country's weak natural resources base (principally a lack of oil and water) necessitates high spending on energy and food imports, and chronic regional instability makes Jordan a high military spender.²⁴

In 2011, Jordan's primary energy consumption stood at 7.46 tonnes of oil equivalent (toe), 7 million toe of which (97 percent) was imported.²⁵ Similarly, Jordan imports around 87 percent of its food requirements; in 2012, the Kingdom's food import bill stood at JOD 2.2 billion.²⁶ Energy consumption and food imports thus account for 20 percent and 17.5 percent of GDP respectively.²⁷

Such heavy reliance on food and energy imports has several negative economic impacts. Principally, volatility in commodities prices distorts public investment,²⁸ inhibits proper fiscal planning and renders the economy vulnerable to external shocks. It also drives prices upwards. In some cases, these costs are passed on to consumers — on average Jordanians spend 41 percent of their income on food. In other

²⁸ P Collier, above n 14, 40.

cases, the Government absorbs the cost through subsidisation. At around 8 percent of GDP, subsidies have been identified as a principal cause of Jordan's high and persistent budget deficit.²⁹ Subsidies also drive overconsumption and are broadly ineffective: subsidy benefits 'leak' to rich households whereby the wealthy benefit more than the poor.³⁰ Jordan has now halted all fuel subsidies, electricity subsidies are set to be eliminated by 2017 and the only significant food commodity supported by the State today is flour for bread.³¹ In terms of non-food products, Jordan provides subsides for water and cooking gas cylinders.

3.1 Macroeconomic Implications

1.3.1 Budget deficit

Jordan's inability to generate sufficient value-added economic activity to cover its local spending and imports has resulted a 'twin deficit' composed of a long-running budget deficit and consequent public debt — the country's most frequently cited and politicised economic indicator. Having widened over the last seven years, the budget deficit is projected to stand at JOD 688 million for 2015.³² An accumulating public debt is dangerous to the economy because it means that the state often has to direct its financial resources towards closing the deficit, usually at high interest rates, creating a drag on growth.³³

1.3.2 Volatile growth

The GDP annual growth rate, reported by the Central Bank, averaged 4.86 percent between 1994-2014.³⁴ As shown in Figure 2, Jordan consistently outperforms other (non-oil producing) WANA economies.³⁵ The problem is that Jordan's growth is volatile and vulnerable to external shocks. Table 1 and Figure 2 highlight the dip in economic performance around the time of the Arab Spring and Syria refugee crisis, and the fall in real growth from a high of 10.58 percent in the first quarter of 2007 to 5 percent in the

Period/Year	Real growth rate (in percent)
2005-2007	8.24 (period average)
2008-2010	4.96 (period average)
2011	2.6
2012	2.7
2013	2.8
2014	3
2015	3.4 (projected)
2016	3.6 (projected)

³⁰ C Sdralevich et al, Subsidy Reform in the Middle East and North Africa: Recent Progress and Challenges Ahead, Report of the

³¹ Ministry of Energy and Mineral Resources, above n 27; The Jordan Times, 'Cost of bread estimated at 290 million', The Jordan

²¹ A Awad, 'Jordan's Economy in 2015: Challenges and Opportunities', Phenix Center for Economic and Informatics Studies (2015). It should be highlighted, however, that the data is conflicting. For example, the World Bank indicates that 15 percent of GDP is related to taxes in 2013. http://data.worldbank.org/indicator/GC.tax.TOTL.GD.ZS ²² ibid.

²³ ibid.

²⁴ Military spending accounts for approximately 4.65 percent of GDP, significantly higher than the global average of 2 percent; The World Factbook, Country Comparison: Military Expenditures https://www.cia.gov/library/publications/the-world- factbook/rankorder/2034rank.html> at 5 May 2015.

²⁵ Oxford Business Group, Into the limelight: Reducing Energy Dependence by Tapping into Oil Shale Reserves (2013) http://www.energy.org oxfordbusiness group.com/overview/limelight-reducing-energy-dependence-tapping-oil-shale-reserves> at 10 May 2015. ²⁶ The Jordan Times, 'Jordan Imports 87 percent of its Food', *The Jordan Times*, (Amman) 8 July 2013.

²⁷ Ministry of Energy and Mineral Resources, National Strategic Plan for Dealing with NEPCO's Losses (2013) < http://www. memr.gov.jo> at 5 May 2015.

²⁹ International Monetary Fund, Costly Mideast Subsidies Need Better Targeting (2012) IMF Survey Online http://www.imf.org/ external/pubs/ft/survey/so/2012/car051412b.htm> at 19 August 2015.

International Monetary Fund (2014) 14.

Times, (Amman) 7 March 2013.

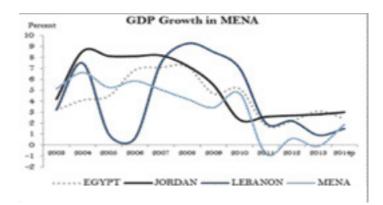
³² 'Cabinet endorses draft 2015 budget with JOD 688m deficit', The Jordan Times, (Amman) 1 November 2014 ³³ Further borrowing has been a common mechanism used to 'close' the deficit leading to a public debt that stood at around US\$32.6 billon (90.6 percent) at the end of 2014 compared to US\$29.1 billion (86.7 percent) at the end of 2013, surpassing the legal 60 percent mark. This has meant that Jordan's broader public sector has continued to register deficits. Instances when the deficit has relatively eased have been attributable to a reduced energy bill or a surge in grants from members of the Gulf Cooperation Council (GCC); Obeidat, above n 12, 3.

³⁴ Trading Economics (2015) < http://www.tradingeconomics.com/jordan/gdp-growth-annual> at 17 April 2015.

³⁵ World Bank, Jordan Economic Monitor: Steady and Moderate Growth Continues, (2014) 1.

³⁶ Figures were compiled from Al-Wazani's (go to n 73) and announcements made by Jordan's central bank and the World Bank.

Figure 2: Jordan's economic growth in relation to MENA³⁷



1.3.3. Unemployment

The Jordanian economy does not generate sufficient internal productive capacity to keep all those able and willing to work employed. By the end of 2014, unemployment stood at around 11.4 percent, reaching 9.2 percent among men and 22 percent among women.³⁸ Jordan also experiences a low labour force participation rate at 32.4 percent in 2013 (50 percent for males and 14 percent for females) resulting in a large intellectual capital loss.³⁹ This has been attributed to a mismatch between education and labour market needs and cultural stigma surrounding certain vocational and male-dominated professions.

High unemployment has resulted into two distinct trends. First, the State has should red the burden by acting as a major job provider, further draining its limited financing and inflating the public sector; over 60 percent of Jordan's formal employment is in the public sector.⁴⁰ Second, widespread unemployment has created a fertile environment for the growth of informal employment, with the informal economy representing 44 percent of total economic activity in 2010.41

The country's unemployed are mostly youth and women; in 2010, unemployment affected over 22 percent of young men and 45 percent of young women.⁴² Youth unemployment is particularly pronounced in the southern part of the Kingdom: Tafileh, Karak, Maan and Aqaba.⁴³ The problem also appears to disproportionately affect the educated; over half of unemployed Jordanians in their early 20s have completed at least secondary education. High post-secondary education rates have translated into a shortage in vocational and technical training participation, where enrolment stands at around 8-10 percent, leaving a shortage in low-skilled labour.

1.4 Jordan's Economy: The Way Forward

Jordan's economic shortcomings are well documented. Its small size, weak natural resource base and neighbourhood all complicate steady economic growth and full employment, which today are driving increases in poverty⁴⁴ and inequality.⁴⁵ The more difficult task lies in viewing the economy through a positive lens that can identify where avenues for growth lie and the means to pursue it.

Jordan's potential might be best likened to Singapore — also a small state with no natural resources, but one that has made the leap to become a highly prosperous, technology-driven innovation leader. Jordan's first step has been steady and high levels of investment in education.⁴⁶ Structural reforms buttressed the development of a high-quality, comprehensive and accessible education sector and the country is now identified as having "one of the most advanced and sophisticated educational systems in the Middle East."⁴⁷ Today, Jordan's human capital endowment consists of a young and educated workforce, where more than 70 percent of the population under the age of 30⁴⁸ and 89.9 percent of women aged 15 and above are educated.49

This modern human resource base, coupled with investor-friendly policies, in addition to relative stability and a functioning Government and administration, seem to have provided Jordan with the beginnings of an economic competitive edge. The 2011 Global Innovation Index (GII) ranked Jordan 41st worldwide (out of 125 countries) and 4th among the regional countries covered by the index. Its place in the chart is particularly noteworthy because it is more than 25 positions ahead of its closest competitor in the region and income group, Tunisia, which came 66th. Although Jordan ranked only 8th in the region on innovation inputs, it was 3rd in terms of output. Jordan's strengths come from its creative output base, with a strong dynamism at the level of residents' trademark registrations (where it is placed first in the region) and a relatively high level of exports of creative goods.⁵⁰ Information and Communication

⁴⁴ According to a recent World Bank study, 18.6 percent of Jordan's population live below the poverty line at least one quarter of the year, experiencing what is known as 'transient poverty' while 6.3 percent live in permanent poverty: N Mryyan, Demographics, Labor Force Participation and Unemployment in Jordan, Economic Research Forum (2012), 4. Based on an "actual food pattern" calculation, Jordan's poverty line is set at JOD 468 per capita per year, or JOD 39 per month. An actual food pattern calculation is based on an amount of spending one requires to achieve a certain level of calories intake: United Nations Economic and Social Council for Western Asia (ESCWA), Measurement and Analysis of Poverty in Jordan (2014), 8. Transient poverty, as opposed to persistent or chronic poverty, is temporary in the sense that those affected are impoverished for at least one quarter of the year, despite being officially considered as non-poor because their annual per capita consumption exceeds the annual poverty line on average, as opposed to those experiencing persistent poverty: Obeidat, Omar. 'Third of Jordan's population lives below poverty line at some point of one year', The Jordan Times (Amman), 2 July 2014. ⁴⁵ As at 2013, Jordan's Gini coefficient (which measures and assesses income distribution) stood at 36 percent.(United Nations Relief and Works Agency, Jordan at a Glance (2015) < http://www.unrwa.org/where-we-work/jordan> at 7 May 2015.) The Gini coefficient is the most commonly used measure of income inequality, measures and assesses income distribution in a population. The closer the coefficient is to 1 (or 100 percent), the more pronounced economic inequality. Across the globe the Gini Coefficient is commonly found in the range of 0.3 to 0.5 for per capita expenditures. It has been suggested, however, that the Gini coefficient may understate income inequality in Jordan due to a failure to fully capture the wealthiest households in surveys: UNDP above n 2, 40. Besides its grave social consequences, economic inequality is also problematic because it is proven to have a negative effect on economic growth: Organization for Economic and Social Development, 'Inequality hurts economic growth, finds OECD research' (Press Release, 12 September 2014) < http://www.oecd.org/newsroom/inequalityhurts-economic-growth.htm> at 8 May 2015. 46 ibid.

⁴⁷ D Roy and W Ireland, 'Educational Policy and Human Resource Development in Jordan' Middle Eastern Studies, 28(1) (1992) 178.

⁴⁸ International Labour Organization, Jordan's country profile, http://www.ilo.org/beirut/countries/jordan/lang--en/index. htm> at 15 March, 2015.

⁴⁹ R Husseini 'Amost 90% of women over 15 educated', The Jordan Times, (Amman) 4 March, 2015. ⁵⁰ INSEAD, The Global Innovation Index 2011: Accelerating Growth and Development (2011) 55.

³⁷ World Bank Global Economic Prospects, June 2014.

³⁸ 'Unemployment Rate Drops to 11.4% in Third Quarter', The Jordan Times, (Amman) 1 November 2014; Note however that these figures might be artificially high as pushed up by the informal economy and those who choose to be unemployed

³⁹ N Mryyan, Demographics, Labor Force Participation and Unemployment in Jordan, Economic Research Forum (2012), 4.

⁴⁰ O Karasapan, 'Jordan's Syrian Refugees', Brookings (2015) http://www.brookings.edu/blogs/future-development/ posts/2015/02/25-syrian-refugees-jordan-karasapan> at 7 April 2015.

⁴¹ United Nations Development Program, *The Panoramic Study of the Informal Economy in Jordan* (2012), 4.

⁴² A Abuqudairi, 'Youth Unemployment Remains a Major Challenge for Jordan', The Jordan Times (Amman) 22 April 2015. ⁴³ ibid.

Technology (ICT)-based industries such as business process outsourcing and call centres are also areas in which Jordan has a comparative advantage due to the widespread use of English and history of links with foreign investors.⁵¹

The challenge has been to match lordan's young and educated workforce to the needs of the economy. At present there are insufficient jobs at the level that educated workers aspire to hold; it is well established that more than 100,000 jobs need to be created annually to accommodate newcomers to the market.⁵² Moreover, despite Jordan's research and development infrastructure and scientific research production being relatively high, the competencies available in the Jordanian economy do not link closely enough to the needs of the labour market. In some cases companies still need to reach to the international market to find managers with the required skill sets and experience.

Another ramification of the skill-job incongruity has been a net outflow of talent. A World Bank survey found that 13,000 young Jordanians studying abroad (mostly in the United Kingdom or the United States) do not plan to repatriate after completing their studies.⁵³ In the same survey, only five percent of Jordanian academics abroad intended to return given the low availability of good job opportunities and poor salary competitiveness on the part of Jordanian universities.⁵⁴

This combination of an outflow of the country's educated, poor labor force participation and the inflow of low-skilled labour, constitute a serious setback for advancing a knowledge-based and technologydriven economy. In short, there are too many educated people, and insufficient jobs to employ them. At the same time, the absence of a labor force willing to undertake low and semi-skilled jobs has led to a reliance on imported foreign labor. According to the Ministry of Labour, by the end of 2014, there were nearly 325,000 migrant workers with labour permits⁵⁵ or 19 percent of Jordan's 1.7 million total workforce.56

Jordan's dilemma has been described by some economists as a manifestation of the 'middle-income trap'. This term was coined by Michael Spence to describe economies — usually latecomers to development - that "grow to middle-income levels [then] slow down, and [...] even stop growing."⁵⁷ Like Jordan, they are unable to compete with low-income countries in terms of providing low-wage labour for producing labour-intensive products, but have not developed the capabilities to compete with advanced economies in terms of exporting technological know-how and knowledge-based goods and services.

The way forward for such economies, Jordan included, is taking the "high road to economic development [that] involves a process of structural change where production shifts increasingly towards activities with greater value added and knowledge-intensity".⁵⁸ Jordan must move away from services (which currently account for over 70 percent of GDP and more than 75 percent of jobs)⁵⁹ and towards activities that generate value-added economic activity. At the same time Jordan needs to navigate a positive shift in the economic landscape by attracting large-scale capital investments. Jordan needs to identify the sectors and projects in which this developmental potential lies and direct factors of production toward it.

⁵⁶ World Bank, Labor Force (2014) <http://data.worldbank.org/indicator/SL.TLF.TOTL.IN> at 23 August 2015.

One sector that holds long-term developmental potential, and currently suffers from underinvestment, is manufacturing. Establishing and operating a productive, sustainable industrial base has been long hailed for creating jobs, transferring developmental know-how, expanding a state's export base, and offering an invitation into the competitive global economy.

As discussed above, Jordan already enjoys many of the comparative advantages needed to attract foreign capital investment, including in manufacturing. The country has also taken deliberate steps to open up this sector. Jordan's Investment Promotion Law (IPL), passed in 1995, was specifically designed to attract investors to 13 'vital' sectors, including agriculture, education, pharmaceuticals and tourism. Incentives are provided to reduce the asset costs incurred by investors, while also supporting sector growth through cross industry links and clustering.⁶⁰ The Kingdom's national investment promotion agency, the Jordan Investment Board (JIB), offers a 'one-stop-shop' that enables investors to carry out all licensing and registration services under one roof and in an expedited manner.

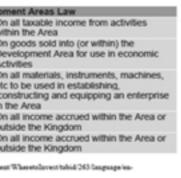
A critical part of Jordan's investment promotion framework has been the allocation of public land to create Qualified Industrial Zones, Development Areas, Free Zones and the Agaba Special Economic Zone. Again, the aim is to attract foreign investment, increase employment, advance high-value economies like manufacturing, and facilitate the transfer of technology and skills. A further aim is to more equitably distribute economic activity; around 80 percent of Jordan's economic activity is concentrated in Amman despite it housing only 40 percent of population, creating skewed opportunities and living standards.⁶¹ Special laws and regulations are applied in these zones, including exemptions (alleviating customs and taxes) and incentives relating to capital ownership and facilities (see further Table 2).⁶² The laws also offer equal treatment to both Jordanian and non-Jordanian investors, thus allowing foreign investors to own any project in full or part, or to engage in any economic activity in the Kingdom, with the exception of some trade and contracting services which require a Jordanian partner.

Table 2: Exemptions provided by Jordan's Development Areas Law

	Under the De	evelops
Income Tax	5%	Or
Sales Tax	0%	Or De Ac
Import Duties	0%	Or etc cc in
Social Services Tax	0%	Or
Dividends Tax	0%	Or
Environ The Inndex Inco.	man Road's subse	

http://www.joodaniavestment.com/Busines US-Default.aspn

Jordan needs to navigate a positive shift in the economic landscape by attracting largescale capital investments.



⁶⁰ 'Investment Promotion Law', Jordan Investment Board (2013) http://www.jib.jo/AboutJIB/InvestmentPromotionLaw/

⁵¹ World Bank, above n 28, 27.

⁵² K Melkawi, 'Young Jordanians look Abroad for Better Jobs, Higher Pay,' *The Jordan Times* (Amman) 12 August, 2013. ⁵³ A Awad, above n 21, 23.

⁵⁴ ibid 24.

⁵⁵ Global Detention Project, Jordan Detention Profile (2015) http://www.globaldetentionproject.org/countries/middle-east/ jordan/introduction.html ction.html> at 23 August 2015.

⁵⁷ S Michael, The Next Convergence: The Future of Economic Growth in a Multispeed World (2012), 100.

⁵⁸ United Nations Economic and Social Council for Western Asia (ESCWA), Measurement and Analysis of Poverty in Jordan (2014), 25.

⁵⁹ United Nations Development Program. Jordan Poverty Reduction Strategy, Final Report (2013), 31.

tabid/207/language/en-US/Default.aspx> at March 10 2015. ⁶¹B Al-Zu'bi, 'Investment Mapping and SMEs attraction' Jordan Investment Board (2013), 4. 62 'Free Zones', Jordan Investment Board 2015 at <http://www.jib.jo/BusinessandInvestment/WheretoInvest/FreeZones/ tabid/270/language/en-US/Default.aspx?SkinSrc=%5BL%5DSkins/jiben/printableSkin&ContainerSrc=%5BG%5DContaine rs/_default/No%20Container> at 20 April 2015.

Despite these serious attempts to open up Jordan as a manufacturing hub, the gains anticipated have not come to fruition. While the Aqaba Special Economic Zone has enjoyed fast and steady growth, the other industrial parks — particularly in the north of the country — operate well below capacity. There are several explanations for weak foreign capital investment, including the conflicts in neighbouring Syria and Iraq, Jordan's small coastal access, and lack of access to fresh water. Another reason is the absence of a large, willing and low-cost labor force.⁶³ As explained above, Jordan's education investments have resulted in a workforce that is not inclined to engage in low and semi-skilled labor. Even if it was, Jordanian labour costs may be too high to make manufacturing sufficiently competitive to attract investment.

At this point, it is important to highlight the enormity of the challenge faced. To develop a manufacturing hub, Jordan must be able to compete with Asian economies, which enjoy stability, plentiful natural resources, coastal access and, most importantly, a very large, appropriately skilled and low-cost workforce. On top of this, in the globalised market, manufacturing clusters geographically (a process called spatial economies of scale in manufacturing, or economies of agglomeration). Once businesses are established, there is a range of economic incentives for other businesses locate proximately. This process leads to large manufacturing 'clusters', such as the Pearl River Delta in Guangdong province, China.

.... if other firms are producing manufactures in the same location, that tends to lower the cost for your firm. For example, with lots of firms doing the same thing, there will be a pool of workers with the skills that your firm needs. And there will be plenty of firms producing the services and inputs that you need to function efficiently. Try moving to someplace where there are no other firms, and these costs are going to be much higher even if the raw labour is much cheaper.⁶⁴

The flipside is that establishing a new manufacturing cluster is very difficult. The cost on investors to enter a new geographic space are extremely high; these costs relate to risk, establishing new market access, workforce and access to business chain support. Jordan needs to offer investors something more or something different. However, if such markets can be tapped into, the possibilities are enormous:

.... in order to break into global markets for manufactures, it is necessary to get over a threshold of cost-competitiveness. If only a country can get over the threshold, it enjoys virtually infinite possibilities of expansion: if the first firm is profitable, so are its imitators. This expansion creates jobs, especially for youth.⁶⁵

Jordan thus finds itself at a cross-road. Its aspiration to become a tech-led innovation hub is logical given its asset base. But its heavy investment in education, coupled with other factors beyond its control, has blocked another potential opportunity to break free of the middle income trap. There is also some degree of policies operating at cross-purposes that further complicates the rise of a manufacturing sector. Reducing unemployment is at the top of the Government's policy agenda. This is understandable high unemployment drives reduced living standards, civic discontent and imposes a huge cost in terms of national productivity potential. One of the aims of the National Employment Strategy⁶⁶ is to reduce unemployment by replacing migrant workers with Jordanians in key sectors. This does not bode well for the manufacturing sector as it cuts off the main labour stream currently suitable to feed this market. The transformation in norms and values needed for Jordanians to be receptive to such employment, and the development of a pool of workers with vocational expertise, will take time and be complicated. Even then, it is unlikely that Jordanians would accept the wage levels needed to make manufacturing sufficiently competitive to break into the international market; living costs are simply too high. This dilemma will be revisited in chapter three, where a set of policy recommendations for how Jordan might solve these multi-faceted challenges will be presented.

2: Economic and Security Impacts of Hosting **Syrian Refugees**

The impact of the Syrian refugee crisis on the Jordanian economy has become a politically charged question at both the domestic and foreign policy levels. While it seems reasonable to surmise that the Syrian crisis and consequent refugee influx has contributed to weakened macroeconomic performance, such a conclusion is difficult to draw from an evidential base due to primary data shortages and the methodological difficulties establishing causation. Some proxy indicators reveal negative changes to the national economy since 2011. For example, labour participation rates among Jordanians have remained constant, but the rate of unemployment has increased from 14.5 percent in 2011 to 22.1 percent in 2015.⁶⁷ Second, rising imports — mainly foodstuffs and oil products (the latter principally due to the break in the Egyptian gas pipeline) — have contributed to a worsened trade balance deficit; the deficit grew from JOD6.8 billion in 2010 to JOD11.6 billion in the 2014 forecast.⁶⁸ Likewise, net public debt has grown from around US\$ 32.6 billon (90.6 percent) at the end of 2014 compared to US\$ 29.1 billion (86.7 percent) at the end of 2013, surpassing the legal 60 percent mark.⁶⁹ In June 2013, the ratings agency Moody's downgraded Jordan's credit rating to B1, an action largely driven by Jordan's increased sovereign debt to GDP ratio. Other indicators are more positive. Jordan enjoyed 3.5 percent GDP growth in 2014, despite a decreased competitive rating, wars on two borders and cuts to major trade routes.

The extent to which these indicators can be attributed to the deterioration in regional security, regional economic performance in the wake of the global financial crisis or specifically to the increased presence of Syrians requires specific correlation-regression analysis beyond the scope of this paper. In what follows, we outline the most salient direct and indirect costs related to hosting Syrian refugees before analyzing the key economic and security challenges facing the Kingdom in the context of the Syria crisis.

2.1 Direct and Indirect Costs of Hosting

The Syrian presence in host communities has become synonymous with terms like overcrowding, stolen jobs, and unequal burden sharing. Such statements are not necessarily misplaced; however, they almost certainly obscure the full reality of certain benefits as well as costs. It is not contested that Jordan's policy to greatly stem the flow of refugees into the country since mid-May 2013 is at least somewhat connected to the costs assumed by the local economy, public discontent and security concerns.⁷⁰ But from the perspective of the thousands of displaced Syrians facing violence, poverty and rights abrogation, there is an urgent need to shift the debate away from rhetoric and towards an objective, evidence-based investigation that can facilitate informed policy-making, targeted programming and requisite donor support. This discussion must be grounded in an objective and comprehensive analysis that takes into account both the costs and benefits associated with the refugee population.

As noted previously, Jordan is currently home to around 628,000 Syrian refugees registered with the United Nations. After taking into account Syrian guest workers who were living and working in Jordan

⁶⁷S E Stave and S Hillesund, Impact of Syrian refugees on the Jordanian labour market, International Labour Organisation & FAFO

⁶⁸ MOPIC, Needs Assessment Review of the Impact of the Syrian Crisis on Jordan, Report of the Host Community Support Platform

⁶³ The northern industrial parks have also suffered as a result of the remoteness of site locations, high costs of production (such as expensive electricity bills) and red tape concerning the legal aspects of investment.

⁶⁴ Collier, above n 14, 82.

⁶⁵ ibid, 83.

⁶⁶ The MoP and the Ministry of Agriculture (MoA) jointly launched in 2011 the National Employment Strategy (NES) with the aim of setting practical strategies for the development of Jordanian human resources to eventually create jobs for nationals.

^{(2015).}

^{(2013).}

⁶⁹ 'Cabinet endorses draft 2015 budget with JOD 688m deficit', *The Jordan Times*, (Amman) 1 November 2014. ⁷⁰ T al-Samadi, Jordan Shuts Down Border Crossings From Syria (2013), Al Monitor http://www.al-monitor.com/pulse/ security/2013/06/jordan-closes-border-crossings-syria.html> at 10 May 2015.

prior to 2011, the total number may be as high as 1.4 million.⁷¹ The bourgeoning population has cost the Government and the international community an unprecedented amount in direct monetary payments, food and non-food items, and essential infrastructure. But the refugee crisis has raised other important externalities, or spillover effects, that are more difficult to quantify. The crisis has had a significant impact on the demographic makeup of the State, compounding existing pressures such as high unemployment, weak institutions and natural resource deficits, as well as modifying social norms and customs. Overcrowding is a serious problem in hospitals and schools, and the pressure on public resources such as water, electricity and waste management may have long-term implications on food and water security.

Existential direct costs are relatively simple to articulate and calculate. What is more complex is the indirect costs; quantifying the increased pressure on public service provision and infrastructure, such as roads, telecommunications and sanitation.⁷² And even more difficult is the intangible social factors: the cost to a child of having their lesson time reduced to accommodate a split shift of class time, increased tension at the community level, or the impact of demographic shifts that challenge social norms.

At the same time, it must be acknowledged that refugees contribute to local economies by bringing new skills and resources, as well as increasing production capacity and consumption demand. Such forces can stimulate an expansion of the host economy. Hence any accurate calculation of the refugee impact must take into account the positive impacts at both the macro-economic level

Refugees contribute to local economies by bringing new skills and resources, as well as increasing production capacity and consumption demand.

(GDP growth, public revenues, foreign assistance, foreign reserves and the flow of Syrian investments to Jordan) and the micro-economic level (changes in retail, trade and other consumer sectors).

There have been few serious attempts to quantify the costs of the refugee influx. This has not, however, prevented speculation that has been widely reported in the media. In 2012, the Jordan Times reported that each refugee was costing the Government JOD2,500 a year in terms of social, educational, and medical care.⁷³ Another international study estimated the financial burden on Jordan at around US\$ 2.1 billion in 2013, and predicted this to rise to US\$ 3.2 billion in 2014.⁷⁴ Yet another study estimated the cost at over JOD 4 billion.⁷⁵ These studies stand in contrast to a World Bank report from 2013 that assessed the aggregate impact of Syria's conflict as having been modest.⁷⁶ But quantification is important and no entity — the Government, host communities nor refugees themselves — benefits from exaggeration or underestimation. In response, this paper provides a framework for conceptualising the impacts arising from the refugee influx comprising direct and indirect costs and benefits in four areas: economics, environment, social justice and human security (see Annexes 1 and 2). It also considers the efficacy of studies that have attempted quantification, where the gaps lie and what methodologies might provide appropriate responses (see Annex 3). Below, we analyse some of the key economic and security challenges extending from the Syria crisis as a platform from which to conceptualise the kinds of policy approaches required to buttress the current situation.

2.2 Risk Implications of the Status Quo

2.2.1 The expanding informal economy

The 'informal economy' is often taken to be synonymous with terms such as: underground economy, informal sector, hidden economy, parallel economy and shadow economy, to name but a few,⁷⁷ Such an abundance of terms can lead to obfuscation in the discourse, making a clear definition somewhat elusive. This paper employs the term informal economy⁷⁸ and follows the International Labour Organisation (ILO) definition: "all economic activities by workers and economic units that are — in law or in practice not covered or insufficiently covered by formal arrangements."⁷⁹

It is almost impossible to provide an accurate quantification of the size of the informal economy in Jordan or the wider region. In 2010, Jordan's informal economy was estimated to constitute 20-25 percent of total economic activity in the country.⁸⁰ What can be discerned with greater certainty is that the informal economy in Jordan is growing; moreover, there is a direct connection between this growth and the current approach to refugee working rights at the policy level. Jordan is not party to the 1951 Refugee Convention and its 1998 Memorandum of Understanding with UNHCR, while highlighting the need for refugees to be able to work, does not include provisions for the protection of formal working rights. The implication is that "only about 10 percent of employed Syrians have obtained formal work permits, and practically all Syrian refugees working outside camps do not have work permits and are as such employed in the informal economy and outside the bounds of Jordanian labour law."81 This situation is likely to be further exacerbated as the onset of international donor fatigue becomes more pronounced and refugees have no alternative but to resort to informal income-generating activities.

Syrians working in Jordan prior to the onset of The informal economy in Jordan is conflict were mainly engaged in construction, growing; moreover, there is a direct wholesale and retail trade, manufacturing, agriculture, connection between this growth forestry and fishing and transportation and and the current approach to refugee storage. Employment of Jordanian workers in these working rights at the policy level. sectors in 2011 was low, with approximately seven percent working in construction and two percent in agriculture, forestry and fishing, for example. Most Jordanians were employed in public administration and defence (see Figure 1). This is supported by survey evidence that shows higher levels of unemployment among Jordanian youth, who are able to afford to wait until the right type of position (in public administration or defence) arises.⁸² Today, the distribution of employment of Jordanian nationals across the same industries is almost exactly the same as in early 2011. For Syrians living outside of camps, however, employment in the construction sector has risen significantly and now represents the principal location of employment for this demographic (see Figure 2).

14

⁷¹ MOPIC, above n 4.

⁷² The World Bank, Jordan Economic Monitor, Spring 2013.

⁷³ O Obeidat, Syrian refugees costs Jordan JOD590 million up to last November (2013), The Jordan Times http://jordantimes. com/article/syrian-refugees-cost-jordan-jd590-million-up-to-last-november> at 20 April 2015.

⁷⁴ Al Wazani, above n 36.

⁷⁵ Issnaad Consultancy, The Impact of Popular Movement in the Region and in Jordan on Macroeconomic Indicators in Jordan (2012) (Arabic only)

⁷⁶ The World Bank, Jordan Economic Monitor, Spring 2013.

⁷⁷ F. Schneider and D. H. Enste, *The Shadow Economy; An International Survey* (2003), Cambridge: Cambridge University Press. ⁷⁸ Ministry of Planning & International Cooperation, The Informal Sector in the Jordanian Economy (2010), http://www.mop. gov.jo/echobusv3.0/SystemAssets/pdf/Reports/informal percent20sector percent20 study.pdf> At 13 May 2015. ⁷⁹ There are a number of justifications for this usage; for example, "informal economy" is more accurate than "informal sector" because the businesses and employees under scrutiny do not necessarily correspond to any particular sector of economic activity; indeed they often cut across many sectors. Likewise, "informal economy" is preferable to "illicit sector" because the legality or illegality of the activity can be highly case-specific. Additionally, we find "informal economy" more appropriate than "parallel economy" since the latter implies that the formal and the informal economies can be more or less clearly separated. In fact, the complexity of overlap and interaction between them means that we can only really refer to them as distinct categories for the sake of analysis; ILO, Resolution concerning decent work and the informal economy, Meeting Report (2002) http://www.economy.com ilo.org/public/english/standards/relm/ilc/ilc90/pdf/pr-25res.pdf> At 4 April 2015 ⁸⁰ UNDP, The Panoramic Study of the Informal Economy in Jordan (2013), <http://www.jo.undp.org/ content/dam/jordan/docs/ Governance> at 18 November 2014.

⁸¹S Stave and S Hillesund, above n. 67.

⁸² ibid, p. 53.

Employment of Syrian refugees has also increased in other areas, such as accommodation and food services. Such increased economic activity has prompted accusations that Syrians are filling positions that would otherwise have gone to Jordanian nationals. A recent report conducted by the ILO and Fafo suggests that there may be some truth to this:

[T]he share of total Syrian refugee workers in the construction industry has increased quite substantially, indicating that Jordanians might have been crowded out of this industry by Syrians to some extent. Similar signs of out-crowing can be found in the wholesale and retail trade industry [...].⁸³

On the other hand, it is important to recognise that other factors, for example reduced cross-border trade owing to the difficulties around former trade routes through Syria, have also impacted the labour market in complex ways. Causality, therefore, cannot be attributed to refugees without further research.

Figure 1: Employment by industry in March 2011 by community⁸⁴

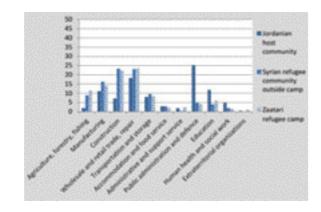
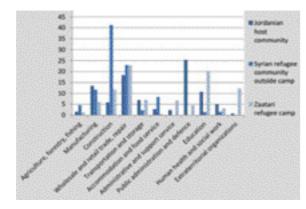


Figure 2: Current employment by industry by community⁸⁵



It is important to recognize that the informal economy is not simply a site of illegal activity. There are positive features of an informal economy that can be overlooked for reasons of political interest or social stigma. For example, the additional supply of goods and services and intensified competition can be a positive factor from the perspective of the consumer.⁸⁶ Equally, the informal economy is a site of vital livelihood activities for many of the poorest and most disadvantaged people in wealthy and developing states alike. However, there are also significant risks for individuals, businesses and the state that are associated with a large informal economy, some of which are already visible in Jordan. Moreover, there are serious implications for the state, a decreased tax yield and the concomitant effects on social welfare systems being among the most salient. As Schneider puts it:

The fact that necessary public investment (e.g., infrastructure) cannot be carried out because of a lack of finances resulting from tax evasion, results in negative official economic growth. Public goods cannot be supplied to the desired quantity, and the aggregate supply of the economy falls. As the financial situation deteriorates, [informal] economic activity is viewed increasingly negatively.87

A further risk associated with an expanding informal economy is the impact it can have on public sector spending. This can lead to a situation where the level of welfare expenditure cannot be upheld without raising taxes, thereby resulting in further increases in the informal economy because such work becomes more attractive. This can create a "vicious circle of further increase in the budget deficit or tax rates, additional growth of the shadow economy, and gradual weakening of the economic and social foundation of collective arrangements."88

2.2.2 Threats to inter-community relations

The potential for increased competition over resources (broadly defined) to undermine refugee-host community relations is a risk associated with all large scale, protracted displacement situations.⁸⁹ The geography of Syrian displacement means that host communities in Jordan's northern governorates, particularly in Mafraq and Irbid, have been disproportionately affected by the presence of large numbers of refugees. Many municipalities in these governorates were struggling to provide basic services such as solid waste management and water and sanitation services prior to the onset of the Syrian crisis. The arrival of refugees has exacerbated these challenges: in some cases the number of Syrian refugees now living in the municipality is equal to the number of Jordanian residents.⁹⁰ Further, the north of Jordan is characterised by a prevalence of 'high' and 'severe' levels of vulnerability among refugee households.⁹¹ This, in combination with the fact that many locals are also living in vulnerable circumstances, has put relations between Syrians and Jordanians under considerable strain.

There have been no significant instances of violence or social unrest between Syrian refugees and their host communities in Jordan and this is testament to both communities' stoicism and generosity. There is, however, evidence of tensions between the two

The north of Jordan is characterised by a prevalence of 'high' and 'severe' levels of vulnerability among refugee households.

⁸⁹ G Loescher et al (eds.), Protracted Refugee Situations; Political, Human Rights and Security Implications (2008); J Milner,

⁸³ ibid, p 6.

⁸⁴ ibid.

⁸⁵ ibid.

⁸⁶ Schneider and Enste, above n 77.

⁸⁷ ibid, 160.

⁸⁸ ibid, 2.

Refugees, the State and the Politics of Asylum in Africa (2009).

⁹⁰ UNDP, Municipal Needs Assessment Report (2014).

⁹¹UNHCR, Vulnerability Assessment Framework; Baseline Survey (2015), 15.

communities and on occasion this has led to isolated incidents; for example, street protests and tire burnings by Jordanians in Mafraq.⁹² In Lebanon, stigma has occasionally given way to threats, such as in the form of posters warning Syrians to leave the area, and violent attacks against refugees.⁹³ As the crisis becomes more protracted it is important to acknowledge the possibility of security risks emerging in the context of increasing social discontent, as explored below.94

2.2.3 Employment competition

As discussed earlier, there is some indication that Syrian refugees are 'crowding out' Jordanian workers in certain sectors, although there is also evidence that Syrians are competing more with other migrant workers as opposed to nationals. Nonetheless, the perception that Syrians are taking jobs from Jordanians is widespread, and this is particularly pertinent in the context of social cohesion; 95 percent of Jordanian workers surveyed by ILO-Fafo deemed that either to some extent or to a great extent Syrians are engaging in work that would otherwise have gone to Jordanians.⁹⁵ This is complemented by the widely held perception, among both refugees and nationals, that Syrian refugee workers are being exploited by their employers because they have little choice but to accept longer hours and lower wages. This is perceived by a majority of Jordanians to be exerting downward pressure on wage levels, thus undermining refugee-host community trust.⁹⁶ For example, 29 percent of Syrian refugees in employment outside of the camps feel that they have to 'watch out' for Jordanians. Likewise, over 40 percent of Jordanian workers believe that Syrians do not contribute to the Jordanian economy or to local communities, and 80 percent perceive Syrian refugees as a "threat to national security and stability".⁹⁷ In a study conducted by REACH, a majority of respondents (from both Syrian and Jordanian communities) agreed or strongly agreed that access to livelihoods was causing tension in the community.⁹⁸

2.2.4 Increased cost of living

Alongside intensified competition for jobs, increases in living costs has been identified as one of the most prominent changes in the northern governorates since the onset of the Syrian crisis.⁹⁹ In particular, there is a significant shortfall in available housing units; the Norwegian Refugee Council estimates that 90,000 new housing units are required

While there is some indication that Syrian refugees are 'crowding out' Jordanian workers in certain sectors, although there is also evidence that Syrians are competing more with other migrant workers as opposed to nationals.

to adequately accommodate Syrian refugees outside of camps and that 78 percent of unmet shelter demand is located in the Irbid, Mafraq and Amman governorates.¹⁰⁰ This shortage has led to competition for affordable housing between vulnerable Syrians and Jordanians; the price of rented accommodation

2.2.5 Water, Sanitation and Hygiene

Although Jordan was experiencing difficulties relating to the availability of water prior to 2011, the presence of Syrian refugees has undoubtedly exacerbated the situation. Ninety-four percent of Jordanians surveyed by ILO-Fafo believed that Syrian refugees exert pressure on Jordan's water and energy resources.¹⁰³ In the case of water at least, there is some evidence to support this. REACH reports that 40 percent of Jordanian households and 29 percent of Syrian households identified increased shortages in water as the most prominent change experienced in the community since the beginning of the crisis.¹⁰⁴

Water shortages are compounded by a lack of capacity at the municipal level to deal with the increased demand for sanitation and hygiene services. Solid waste management is a principal concern for local municipalities. Shortages of and quality depreciation in vital equipment, such as garbage trucks and compressors, are preventing authorities from providing acceptable levels of service. In parts of Irbid, daily waste collection was approximately 300 tonnes prior to the Syria conflict, increasing to approximately 500 tonnes daily today. In Mafraq, the municipality was forced to request assistance from the army to deal with additional waste.¹⁰⁵ This has had a negative impact on the frequency of waste collection in municipalities, which in turn poses risks to public health and community relations.¹⁰⁶

Other sources of stress on refugee-host community relations include diminishing levels of healthcare Water shortages are compounded by service provision and the spread of new diseases, as a lack of capacity at the municipal well as those previously eradicated.¹⁰⁷ Perceptions level to deal with the increased relating to disease are connected to other vectors demand for sanitation and hygiene of social tension, such as overcrowded schools, services. water shortages and insufficient municipal capacity to deal with increases in solid waste.¹⁰⁸ Similarly, the emphasis on refugees in the early stages of the operation, rather than approaching assistance in parallel with the needs of vulnerable Jordanians, had a divisive effect that can still be seen today.¹⁰⁹ The implication is that although many of the challenges outlined above pre-date the Syrian crisis, it is easy to connect the refugee population with hardships currently being experiences — a feeling that is particularly discernible among young Jordanian men.¹¹⁰

⁹² MercyCorps, Analysis of Host Community-Refugee Tensions in Mafrag, Jordan (October 2012). In Jordan, there have been cases of media outlets, such as morning radio chat shows, promulgating hate speech about Syrian refugees in Jordan; Amman Net, Arabic language-only website, see: http://ammannet.net/sy/; see also A Su, The Mighty Pen (2014), Columbia Journalism Review <http://www.cjr.org/feature/the_mighty_pen.php> at 16 August 2015. It has also been suggested that the exaggeration of information presented on such forums has precipitated the outbreak of small scale violence in the past; Chatham House, below n 41.

⁹³ K Watkins and S Zyck, *Living on hope, hoping for education; The failed response to the Syrian refugee crisis,* Overseas Development Institute Report (2014).

⁹⁴ REACH, Social Cohesion in Host Communities in Northern Jordan, Assessment Report (May 2015).

⁹⁵ S Stave and S Hillesund, above n 69, 110 – 112.

⁹⁶ MercyCorps, Mapping of Host Community-Refugee Tensions in Mafrag and Ramtha, Jordan (May 2013); REACH, Understanding Social Cohesion and Resilience in Jordanian Host Communities, Assessment Report (June 2014).

⁹⁷ S Stave and S Hillesund, above n 67.

⁹⁸ REACH, Understanding Social Cohesion and Resilience in Jordanian Host Communities, Assessment Report (June 2014). 99 REACH, above n 94.

¹⁰⁰ Norwegian Refugee Council, In Search of a Home: Access to Adequate Housing in Jordan (2015).

¹⁰¹ MOPIC, above n 5, 20.

¹⁰² REACH, above n 94, 5.

¹⁰³ Moreover, 79 percent of Jordanians and 60 percent of Syrians "agreed that water shortages have led to discontent in their community"; REACH, above n 27, 3-4; S Stave and S Hillesund, above n 69, 112. ¹⁰⁴ REACH, above n 28, 3-4.

¹⁰⁵ UNDP, above n 90, 31.

¹⁰⁶ A large majority of households surveyed (69 percent) agreed or strongly agreed that the build-up of municipal waste has caused discontent in their community; REACH, above n 94, 4. ¹⁰⁷ Discussions with municipal representatives during Chatham House consultation meetings in Amman, Jordan, entitled: The Role of Local Government in Addressing the Impact of Syrian Refugees, subject to the Chatham House Rule (2-3 June 2015). ¹⁰⁸ REACH, above n 94.

¹⁰⁹ S Stave and S Hillesund, above n 67, 112-113.

¹¹⁰ MercyCorps, above n 92.

It is also important to reference the linkages made by some commentators between refugee scenarios and a higher risk of conflict in the host state.¹¹¹ For Jordan and Lebanon, the historical experience of Palestinian militias cannot be ignored, if only insofar as this feeds into the perception of risk. At least in the case of Jordan, this must be balanced against anecdotal evidence suggesting that the likelihood of conflict contagion may be lower because of the tribal and familial connections between refugees in communities in the north of Jordan and south of Syria.¹¹²

2.3 Violent Extremism in the Context of the Syrian Crisis

There is an emerging body of literature highlighting the risk that terrorist organisations may seek to exploit (particularly protracted) refugee situations.¹¹³ The rise of violent extremist groups, such as the so-called Islamic State organisation (hereafter Daesh) and Jabhat al-Nusra, amidst the turmoil in Syria and Western Iraq is generating fears of radicalisation in neighbouring states, both among nationals and displaced populations. Such organisations often have access to significant resources that they can mobilise to gain the trust and support of vulnerable communities. For example, in Lebanon, Jabhat al-Nusra provided aid and support to refugees in response to shortfalls in international aid, which resulted in increased interaction between refugees and violent extremists, and an increase in radicalisation amongst the former.¹¹⁴ In August 2014, there was a battle between the Lebanese Armed Forces (LAF) and Jabhat al-Nusra, also supported by Daesh fighters. During the battle several hundred refugees were mobilised and fought against the LAF alongside Jabhat al-Nusra.¹¹⁵

It is clear that one of the principal ways Daesh has been able to recruit so heavily and quickly is because it can afford to pay generous salaries.¹¹⁶ While there is no inherent link between poverty and radicalisation, it is important to acknowledge that destitution can be a factor in certain contexts.¹¹⁷ Limited socioeconomic opportunities, combined with trauma, personal and community grievances and isolationism are established push factors, all of which can be discerned to varying degrees within Syrian refugee communities.118

2.4 Conclusion

In summary, Jordan faces a complex mix of economic and security challenges related to the increasingly protracted refugee situation. Increased growth of the informal economy undermines Jordan's economic resilience and poses risks to both Jordanians and Syrians. While it is unlikely that tensions between Syrian and Jordanian communities in the northern governorates will lead to any kind of widespread violence in the immediate term, there is evidence that inter-community relations are deteriorating as a result of competition for employment and affordable housing, and diminished levels of basic services such as waste management. Likewise, it is important to acknowledge the discourse that links displacement with domestic and regional instability, and with broader risks of extremist violence. Against these challenges, it is clear that bold and innovative policy measures need to be developed. Such thinking must take into account Jordan's need to bolster economic development, the protection needs of the Syrian refugee population, as well as the imperative of domestic conflict containment and peace consolidation at the regional level. How to begin to conceptualise such policy measures is the subject of the third chapter.

¹¹¹I Salehyan and KS Gleditsch, 'Refugees and the Spread of Civil War' (2006), International Organization, 60 (spring), 336-366. ¹¹² Note however that less than 50 percent of Syrians in Jordan are from the south of Syria (Dara'a and Al-Suwayda) and many have settled in areas of Jordan other than the northern region; Chatham House above n 107.

¹¹³ P Kagwanja and M Juma, 'Somali refugees: Protracted exile and shifting security frontiers' in G Loescher et al (eds), Protracted Refugee Situations; Political, Human Rights and Security Implications (2008), 214; D Milton, M Spence and M Findley, 'Radicalism of the Hopeless: Refugee Flows and Transnational Terrorism' (2013), International Interactions: Empirical and Theoretical Research in International Relations, 39 (5), 621-645.

¹¹⁴M Abou Zeid et al, Youth Marginalisation and Radicalisation Amid the Syrian Crisis (2015), audio recording at 2 August 2015.

¹¹⁵ M Abou Zeid, A Time Bomb in Lebanon: The Syrian Refugee Crisis (2014), Carnegie Endowment for International Peace <a>http://carnegieendowment.org/syriaincrisis/?fa=56857> at 5 August 2015.

¹¹⁶ In 2014, Daesh was forecasted to be mobilising up to US\$ 6 million per day from oil sales, other criminal enterprise (including the sale of artefacts) and private donations. 'Jihadis with money to burn; inside the Isis financial empire', Newsweek, 14 November 2014, vol. 162 (46); the Economist, Where Islamic State gets its money (2015), <http://www.economist.com/blogs/ economist-explains/2015/01/economist-explains> at 10 August 2015.

¹¹⁷ D Sterman, 'Don't Dismiss Poverty's Role in Terrorism Yet', Time, 4 February 2015; D Milton, M Spence and M Findley, 'Radicalism of the Hopeless: Refugee Flows and Transnational Terrorism' (2013), International Interactions: Empirical and Theoretical Research in International Relations, 39 (5), 621-645.

¹¹⁸ Letter from the Permanent Representative of Jordan to the United Nations to the Secretary General of the United Nations Security Council, 27 March 2015<http://www.refworld.org/docid/552b706c4.html>At 1 June 2015; K Shaheen, 'Food aid cuts 'making refugees targets for Isis recruitment", The Guardian, (London) 13 August 2015.

3: Forging New Strategies in Protracted Host Situations

The year 2014 saw the number of asylum-seekers, refugees and internally displaced persons exceed 50 million globally — more than at any point since the end of the Second World War.¹¹⁹ The international refugee regime (the norms and institutions that have evolved to coordinate international responses to refugee crises) is arguably not equipped to deal with the scale and complexity of such displacement. This regime was established in the wake of the Second World War as states grappled to address mass displacement in Europe. Likewise, the UN refugee agency was created with a temporary and short-term mandate "to address the situation of a particular group of people at a particular juncture of history."¹²⁰ While UNHCR will no doubt continue to exist for the foreseeable future, it is increasingly recognised that certain norms and practices will need to evolve to address displacement in the world today.

The framework for addressing refugee crises can largely be seen as a partnership whereby "[d]onors write cheques to support humanitarian relief and host countries of first asylum are expected to provide the territory on the refugees are hosted."¹²¹ In practice, however, the lack of binding rules on burden sharing to balance the peremptory norm of non-refoulement means that this model is inadequate, particularly in protracted situations.¹²²

In the case of asylum, the refugee regime sets out a strong normative and legal framework, underpinned by the principle of non-refoulement, whereby states must refrain from sending a refugee back to a state in which he or she faces a well-founded fear of persecution. In contrast, in the case of burden-sharing, the regime provides a very weak normative and legal framework, setting out few clear norms, rules, principles, or decision-making procedures.¹²³

The situation might be best understood as host states proving a global public good.¹²⁴ Like other public goods, some states are able to 'free ride' on the provision of refugee protection by host countries, but are not compelled to adequately share the associated burdens. Today, this is manifesting in a "north-south impasse",¹²⁵ whereby wealthy developed states (predominantly in the so-called 'global north') are inclined to scale-back aid once the urgency of

The situation might be best understood as host states proving a global public good.Like other public goods, some states are able to 'free ride' on the provision of refugee protection by host countries, but are not compelled to adequately share the associated burdens.

an emergency situation has worn off. Host states (in the so-called 'global south') are left to struggle on alone as the crisis becomes more entrenched.

Today, more than half of refugees globally live in protracted refugee situations.¹²⁶ In the WANA region, the Afghan, Iraqi and Palestinian refugee crises in particular remain without durable solutions, posing longterm challenges for host states, donors, the wider region, but particularly for the displaced themselves. It is looking increasingly likely that the Syrian refugee crisis will also develop into a protracted refugee situation as the five-year anniversary approaches. The prevalence of protracted refugee situaitons is testing the resolve of international donors and host states around the world, as well as the capacity of humanitarian agencies to respond effectively. Funding shortfalls are increasingly common. The Jordan Response Plan (JRP) has received approximately 34 percent of its required funding,¹²⁷ while UNHCR is also experiencing a notable shortfall with just US\$ 58 million, or 20 percent, of its US\$ 289 million 2015 appeal having been received.¹²⁸

It is clear that new ways of conceptualising refugee management need to be devised that respond to the priorities of host states, the international community and refugees. Countries such as Jordan are conspicuously aware of the importance of offering shelter to individuals fleeing conflict – it is a bedrock principle of the Hashemite tradition that they have exercised for more than 65 years, accommodating large numbers of Palestinians, Iraqis and most recently, Syrians. Host states need more and better options to encourage them to keep their borders open. Phrased another way, if refugees are unable to return home, and the international community is unwilling to host them in large numbers or finance the cost of hosting (at least over the long-term), then states must be offered solutions that work for, or are at minimum not contrary to their national interest. This implores a transition to approaches that look more closely at host state needs and priorities in the first instance, and that create space to craft responsive solutions.

In the case of Jordan, these interests include maintaining security, offsetting the cost of refugee New thinking is crucial to give way hosting born by the Government and other sectors, to more sustainable responses that and ensuring that existing economic challenges are draw upon refugees' capacities for not exacerbated. Moreover, if the starting point is self-sufficiency. host state interest, refugee management must be approached through the lens of future repatriation. Jordan's comonne and demographic prome means that long-term integration is not a policy option, save in exceptional circumstances. From a practical standpoint, this is also the most likely scenario. Statistically, conflicts in middle-income countries (like pre-war Syria) do not last much longer than a decade and the Syrian conflict is now in its fifth year.¹²⁹ The evidence indicates that a minority of refugees locally integrate, and even fewer are resettled; the vast majority return. Between 1998-2008, for every one resettled refugee, fourteen were repatriated. This is also consistent with the aspirations of the displaced; data indicates that refugees overwhelmingly preference returning to Syria when security conditions improve.¹³⁰

There might even be scenarios under which a large refugee population can contribute to national interests.

3.1 Broadening the Protection-Centric Policy Framework

Policy initiatives should be evaluated on their potential to respond to chronic as well as existential challenges.

¹¹⁹ UNHCR, Global forced displacement tops 50 million for first time in post-World War II era (2014), News Stories at 16 August 2015.

¹²⁰ G Loescher, A Betts and J Milner, UNHCR: The Politics and Practice of Refugee Protection (2013), 133.

¹²¹ P Collier and A Betts, 'Rethinking Refugees: Syrian Refugees as an Opportunity for Development and Security', International Affairs, forthcoming autumn 2015.

¹²² G Loescher et al (eds.) Protracted Refugee Situations; Political, Human Rights and Security Implications (2008).

¹²³ A Betts, Forced Migration and Global Politics (2009), 87.

¹²⁴ A Suhrke, 'Burden-Sharing During Refugee Emergencies: The Logic of Collective Action Versus National Action' (1998), Journal of Refugee Studies, 11 (4), 396-415.

¹²⁵ A Betts and G Loescher (eds), *Refugees in International Relations* (2011), 61.

¹²⁶ P Collier and A Betts above n 121; G Loescher et al above n 120. ¹²⁷ MOPIC, Jordan Response Plan 2015 Funding Update (2015). ¹²⁸ UNHCR internal data; email from H Daubelcour to S Thomas, 22nd June 2015. ¹²⁹ P Collier, 'If you really want to help refugees, look beyond the Mediterranean', *The Spectator*, (London) 8 August 2015. ¹³⁰ R Al Jazairi, 'Transitional Justice in Syria: The Role and Contribution of Syrian Refugees and Displaced Persons', Middle East Law and Governance, forthcoming 2015.

It is often taken for granted that refugees are, by definition, dependent on the host state and international humanitarian aid, which in turn drives the perception of them as a burden. The debate over the phenomenon of dependency and whether refugees constitute a burden or a boon is not new.¹³¹ But political discourse in host states is typically inclined towards the burden narrative. As a result, policies that restrict refugees' freedom of movement and freedom to seek employment, based on fears for national security and stability, is the norm rather than the exception. In the WANA region in particular, the Palestinian experience has led to considerable social stigma and sensitivity concerning the label of 'refugee'. But this relationship of dependency between refugees and their host state and donors is not necessarily accurate or inevitable. While all require protection, and some do need comprehensive material and other forms of support, refugee communities also bring with them a diversity of education, wealth, skills and expertise and entrepreneurship, which is often neglected under traditional responses to refugee crises.¹³² The question thus becomes: how might Jordan raise policies to mitigate the negative impacts associated with refugee hosting, whilst simultaneously supporting its long-term security and economic policy goals, as articulated in the Jordan 2025 National Vision and Strategy?

One clear option is to view refugees as a structural economic opportunity; to harness their skills and expertise as an asset for private sector growth, with a view to creating both a self-sufficient population and effecting macroeconomic policy goals.

3.2 Towards New Opportunities

In Chapter 1, it was explained that Jordan's economic strategy has been to invest in a strong education sector geared towards it becoming a hub for technology-driven innovation. Having become caught in what is known as the 'middle income trap', economists have proffered the establishment of largescale manufacturing. Significant progress has been made; economic and industrial zones have been established throughout the country, complemented by investment-friendly policies and a clear legislative and regulatory framework. There are still, however, obstacles to overcoming the entry barriers to global trade markets. Jordan must compete, for example, with Asia, which enjoys stability, market access (through its coastlines), plentiful natural resources and a large, low-cost labour force. Jordan cannot do much to improve its geographic market access (although this is becoming less important in the globalised economy), the stability of its neighbours, or its natural resource base. It needs something more or something different to generate the conditions to establish a manufacturing cluster. But Jordan does have two important assets. First, the country represents a beacon of stability in a very unfriendly neighbourhood. The strategic importance of this, both to the region and the West, cannot be understated. There are great incentives in play to promote Jordan's stability, and these include investing in its economic potential. Second, Jordan is providing a global public good in terms of refugee hosting. No country wants to see refugees suffering; donor Governments do not, however, want to have refugees on their soil in large numbers.

From a humanitarian perspective and in terms of global stability, this state of affairs is highly disconcerting. But it does bode well for Jordan breaking into and establishing a manufacturing cluster. As discussed in chapter 1, a principal reason attributed to the under-utilisation of some of Jordan's development areas is the lack

The refugee population, which is concentrated in Mafraq, constitutes an immediately available, affordable and appropriate skilled set of workers.

of complementarity between the labour force required and local labour market dynamics. The refugee

population, which is concentrated in Mafraq, constitutes an immediately available, affordable and appropriate skilled set of workers. UNHCR registration data indicates at least 21,208 Syrian refugee builders and the ILO has identified that around 25 percent of refugees residing outside of camps are working in the Jordanian construction industry.¹³³ Within the Syrian refugee community there is also a range of transferable skillsets that could be attractive to light manufacturing and related industries, including electronics, mechanics, mechanised construction, handicrafts and carpentry.

Would this overcome the issues of neighbourhood. natural resources and market access for businesses Investing in Jordan may also be seen to invest in Jordan? The answer is possibly yes, as a profit opportunity to companies if it was perceived as a sufficiently good profit looking to position themselves prior to a reconstruction boom in a post-conflict opportunity. Returning to the idea of Jordan Syria. providing a global public good by hosting refugees, there may be a strong market for the sale of 'safe' products — products that are manufactured by refugees, therefore providing them with a livelihood while they are sheltering from conflict. Effective marketing would capitalise on consumers' complex feelings towards refugees — their desire to assist, but at the same time not wanting to host them at the same rates as countries like Jordan.

Investing in Jordan may also be seen as a profit opportunity to companies looking to position themselves prior to a reconstruction boom in a post-conflict Syria, or for companies forced to leave Syria and that wish to resume operations, as elaborated in the box below.

- Svrian refugee and host community labour. Such opportunity is most likely to resonate with companies with active Corporate Social Responsibility programming (such as IKEA, UNIQLO, Benneton, and French Bel Group) and with markets in European countries where public dissatisfaction towards Government refugee containment policies is rising (annex 4).
- Energy, manufacturing and pharmaceutical companies forced to leave Syria that might view reestablishing in a similar but stable operating environment as strategically attractive (annex 4)
- Reconstruction industries seeking to secure a foothold in a post-conflict Syria. This particularly relates to semi-refined and refined raw materials industry, but may extend to research and development; the scale of Syria's reconstructive needs coupled with water and energy scarcity will call for new technologies

• Manufacturing companies that identify a marketing opportunity in goods produced using 'safe'

¹³³ S Stave and S Hillesund, above n 7, pp.53; while the employment of Syrians in the manufacturing sector has displaced

¹³¹G Kibreab, 'The Myth of Dependency among Camp Refugees in Somalia 1979-1989', Journal of Refugee Studies, (1993), vol. 6 (4), pp. 321-349; R Zetter, 'Are Refugees an economic burden or benefit?' (2012), Forced Migration Review, Issue 41. ¹³² Betts et al, *Refugee Economies; Rethinking Popular Assumptions*, Report of the Humanitarian Innovation Project (2014).

Jordanians (up to 30% of Jordanians in the sector according to the ILO) there has been less displacement in, for example, the manufacturing sector where migrant workers predominately work. Identifying the sectors where Syrian involvement leads to minimal Jordanian labour displacement, like manufacturing, is crucial to mitigating the negative impacts of informal employment.

If such incentives were still not sufficient to encourage firms to establish operations in Jordan, others vested stakeholders might be encouraged to play a role. Donor Governments need to address the humanitarian situation, but would prefer for this to be in the form of something more constructive and sustainable than continuing aid. As part of a renegotiated aid package, they might offer more

attractive free trade or market access agreements, increasing the appeal of Jordan to investors.¹³⁴ Europe, who is battling its own refugee crisis, is an obvious stakeholder in this regard.¹³⁵

International financial institutions (IFI) - the World Bank and International Monetary Fund — might also play a role through loans to offset manufacturing development or subsidise plant establishment costs. Accessing such loans and financial development assistance has long been problematic for Jordan due to its middle-income status. There is increasing recognition among donors, however, of pursuing links between development support for peacebuilding and post-conflict peace maintenance. It is empirically well established that conflicts As part of a renegotiated aid package, they might offer more attractive free trade or market access agreements, increasing the appeal of Jordan to investors.134

Efforts to foster a post-conflict Syrian economy, including by supporting the establishment of industrial and manufacturing plants that could easily and quickly decant into Syria with a trained workforce of repatriating refugees, is thus likely to be seen by IFIs as strategic investment.

reoccur at alarming regularity; around 40 percent of countries relapse into conflict within the first decade of post-conflict peace.¹³⁶ Conflict economists have positively linked a lower risk of post-conflict relapse to sustained economic recovery in the years immediately following a cessation of hostilities.¹³⁷ Efforts to foster a post-conflict Syrian economy, including by supporting the establishment of industrial and manufacturing plants that could easily and quickly decant into Syria with a trained workforce of repatriating refugees, is thus likely to be seen by IFIs as strategic investment.¹³⁸

It is important to highlight what this would mean for host states in terms of broader manifestations of regional instability. Investing in the economic stability of a post-conflict Syria not only serves the interests of Syrians, it also reduces its neighbors' risk of future conflict. That the presence of a civil war in an adjacent country increases the probability of conflict outbreak domestically is well known: "conflicts cluster geographically, possibly suggesting a diffusion mechanism or a spatial contagion effect".¹³⁹ This 'neighborhood' impact may even be more acute in Arab states, because of their shared history, the multiplicity and intensity of transmission channels, and the regional dimension of contemporary events.¹⁴⁰ In constructive terms, this positive correlation between continuing instability in Syria and host state conflict vulnerability means that all states in the region have a vested interest in supporting economic stability in Syria.

While the economics of the situation may appear simple, there are still important questions that need to be answered, mainly of a political nature.

First, how can such a strategy be reconciled with the imperative of creating jobs for Jordanians, and specifically the goal of the National Employment Strategy (2012) to replace migrant workers with Jordanians in key sectors?¹⁴¹ In fact, this scheme would create jobs for both Syrians and Jordanians, particularly workers in host communities. Moreover, manufacturing and industrial opportunities would establish new white-collar positions — the kinds of jobs to which Jordanian workers are more likely to aspire. Such opportunities might hence begin to address a longstanding tension in the Jordanian economy: the disconnect between the skills sets and ambitions of the bourgeoning youth population, and the number and type of available jobs. It must also be recognised that Syrians are currently operating in the informal labour market. Providing a means to transfer from the informal to the formal labour market responds to the externalities stemming from a large informal economy, increases worker safety

¹³⁴ P Collier, The Bottom Billion: Why the Poorest Countries are Failing and What Can Be Done About It (2007), 58.

¹³⁵ Free market access is also made possible by the fact that Jordan is the only Arab state to have signed an Association Agreement with the European Union, aimed at establishing free trade over the next 12 years, in conformity with World Trade Organization rules. For such a model to work, the Association Agreement between Jordan and the EU mentioned above would need to be upgraded. The existing agreement focuses mostly on bilateral trade. While the free export of goods is a key component of economic integration, Jordan's economy is also in need of private investment flows. A legal framework that facilitates such flows and protects all involved must be put in place to minimize the risks for participating companies. Importantly, the EU's rules of origin requirement need to be reconsidered in order to allow for Syrian labour to take part in Jordan's industrial sectors and for their exports to freely reach European markets. Also, given that Jordan is resource-scarce, it requires access to raw materials required for manufacturing from other markets, which it could not do under the current rules of origin. While the EU's rules of origin are universal and have been in place for a long time, such a concession is necessary from a humanitarian perspective in order to allow Syrian laborers to undertake legal employment in Jordan. In addition to this, an Agreement on Conformity Assessment and Acceptance of industrial products (ACAA) has long been recommended and would enable Jordanian products of selected sectors to enter the EU market without additional technical controls (see EEAS, The EU's relations with the Hashemite Kingdom of Jordan <http://eeas.europa.eu/jordan/index _en.htm> at 20 June 2015). Jordan has chosen electrical products, toys, gas appliances and pressure equipment as priority sectors, but negotiations are yet to be launched. Other products that would potentially result from manufacturing endeavors that harness the skillset of Syrian refugees need to be considered. Part of the incentive for the EU to expand the Association Agreement in these ways would be its representation as a commitment by the EU to pursuing more sustainable solutions to the challenges of refugee crises and as a way of beginning to address the policy failures vis-à-vis migrant deaths in the Mediterranean at the source of the problem.

¹³⁶ P Collier, A Hoeffler and M Söderbom, 'Post-Conflict Risks' (2008), Journal of Peace Research, vol. 45 (4), pp. 461-478. ¹³⁷ ibid.

¹³⁸ Such sectors include: construction, manufacturing, electricity and telecommunications. These connections are increasingly being understood by and reflected in the policies of institutions such as the World Bank and International Monetary Fund.

¹³⁹ Recent research suggests that these linkages may be broader than originally thought. The 'neighborhood effect' theory suggests that conflict events in one country have indirect but strong impacts on states that are, not only geographically linked, but culturally, ideologically or economically connected. Y Chaitani and F Cantu, Beyond governance and conflict: measuring the impact of the neighborhood effect in the Arab region, Economic and Social Council for Western Asia (October 2014), < http:// www.escwa.un.org/divisions/ecri_editor/Download. asp?table_name=ecri _documents&field_name=id&FileID=272> at 3 June 2015.

¹⁴⁰ ibid; Examples include the Arab-Israeli and Iraq conflicts; the high incidence of conflict-driven displacement; policies of ultra-securitization; disproportionate incidences of terrorism and illegal arms trafficking, and international and regional power politics that translates into polarization and proxy wars.41% of all Arab countries have experienced at least one internal conflict in the past five years (2009-2013). This had led to a population displacement of unprecedented dimensions, with an equivalent of 2.1% of the population registered as refugees and another 2.9% as displaced inside their country of origin. In addition, the region suffers one of the worst rates of terrorist activities in the world. ¹⁴¹ The NES adopts strategic goals to be achieved over the short-term, medium term, and long-term based on the following overarching ambitions: (i) Gradually replacing foreign workers with Jordanians, (ii) Supporting employment projects and programs, (iii) Enhanced training of Jordanians according to the needs of the labor market, (iv) Supporting vocational education and training, (v) Enhancing investment in employment, (vi) Supporting an entrepreneurship culture, (vii) Supporting people with special needs, (viii) Decreasing restructured employment, (ix) Supporting labor market employment projects, (x) Supporting workers' rights (social security, insurance, etc.), (xi) Supporting tripartite dialogue. The incorporation of Syrian labour into the Jordanian labour market would either have a neutral or positive effect on the aforementioned goals. The main perceived threat lies in the first goal of gradually replacing foreign workers with Jordanians. However, what is important to bear in mind is that the proposed project relies on directing private investment and foreign aid towards free zones. This would serve to generate further economic activity while increasing employment opportunities for Jordanians and non-Jordanians alike. Moreover, the Jordan 2025 national vision states that the "private sector must be the primary engine for growth and job creation". The idea of attracting large-scale, private investors is therefore a key requirement for achieving the goals of the NES. The NES also recognizes a genuine need to address preexisting challenges in the Jordanian labour market through reforming industrial policies, increasing vocational training, matching educational outcomes with labour market demand, and enhancing access to credit for small to medium-sized enterprises. Fulfilling these ambitions requires large-scale strategic partners. A proposal to attract investors and companies that identify a marketing opportunity in goods produced using yrian refugee and host community labour thus complements the NES' vision to enhance overall investment in employment and push forward employment projects. See further Ministry of Labor, Jordan's National Employment Strategy 2011-2020, Inform http:// inform.gov.jo/en-us/By-Date/Report-Details/ArticleId/36/National-Employment-Strategy> At 30 July 2015.

by curtailing opportunities for exploitation, and creates revenues for the Government by way of work permits and income tax. Humanitarian agencies might also find it more constructive and economic to offset the cost of work permits for refugees rather than provide food and non-food items. Livelihoods opportunities also provide dignity and autonomy, eliminating some of the criticisms associated with food vouchers and direct assistance.

A second question is whether such opportunities would increase the likelihood of Syrians remaining in-country indefinitely, or encourage more to seek refuge. As stated at the beginning of this chapter, any policy decision that will support the sheltering of refugees needs to be consistent with Jordan's national interests, including the imperative of protection being seen as temporary. A critical element of the model proposed is that investment would come from so-called 'footloose industry' (denoting Providing a means to transfer from the informal to the formal labour market responds to the externalities stemming from a large informal economy, increases worker safety by curtailing opportunities for exploitation, and creates revenues for the Government by way of work permits and income tax.

industry where the costs of production remain unchanged regardless of location). Following a cessation in hostilities, such companies would have the opportunity to expand their operations to Syria, taking advantage of a new market and utilising an existing, trained repatriating worker population.¹⁴² Existing plants, however, would remain in Jordan, the country having established itself as a safe and profitable business environment. A parallel logic might also be seen to be in play; if the priority for Jordan is to see the eventual return of refugees to Syria, a principal way to contribute to this is by ensuring that refugees have the skills and expertise in key industries to support reconstruction, namely in building, manufacturing, electricity and ICT.

A final question is whether bestowing on refugees greater rights and autonomy creates a security risk. The tensions between refugees, host communities and the population more broadly, have been elaborated chapter 2. Would the issuance of working rights in the context of existing unemployment tip this fragile balance? It is difficult to answer this question definitively. One theory is that working rights for refugees would relieve pressure on local Jordanian livelihoods too. As illustrated in chapter 2, large numbers of Syrians are working informally and there is some evidence of them 'crowding out' Jordanians. Anecdotal evidence from site visits in and around Mafraq suggests that local Jordanians would approve of Syrians working in economic zones because this would mitigate Syrian competition with Jordanian businesses. However, it is clear that any move in support of refugee working rights would need to be accompanied by an extensive public sensitisation campaign, clearly outlining the opportunities that would accrue to the Jordanian economy and to Jordanians more generally.

It is also important to reference the emerging literature examining potential linkages between refugees and extremist groups. Some of this derives from events in Lebanon, and some from theoretical (vet logical) connections between the economic opportunities provided by extremist groups vis-àvis the financial strain and hopelessness felt by a refugee population that is unable to work and in the context of cutbacks in humanitarian assistance. Because of the strong and negative impact such

Jordan's best protection against instability, and against extremism more broadly, lies in generating conditions to support opportunity and raise living standards and hope for all. The best strategy to achieve this might be by capitalising on the refugee labour force to attract needed investment.

associations can have on the protection space, any linkages must be made cautiously and based on strong evidence. But there is little doubt that Jordan's best protection against instability, and against extremism more broadly, lies in generating conditions to support opportunity and raise living standards and hope for all. The best strategy to achieve this might be by capitalising on the refugee labour force to attract needed investment.

3.3 Conclusion

This paper has proposed that the Syrian refugee population and refugees per se could be better conceptualised as embodying new opportunities, rather than hardships, for host states. It details one example of how this might materialise; encouraging large-scale industrial investment in existing special economic zones, utilising both Jordanian and Syrian labour at pre-established ratios. This model has the potential to reduce hosting costs by increasing refugees' self-sufficiency in the context of severe shortfalls in international humanitarian assistance. Moreover, it would constitute an important step towards Jordan's longer-term economic resilience by promoting strategic investment in underdeveloped areas of the economy and by facilitating increased tax revenues. These ideas are not entirely novel. The use of 'zonal development' for the inclusion of refugees in states' economic development goals in ways that also promote their self-sufficiency has historical precedent.¹⁴³

This is a time-bound opportunity, contingent on investors identifying a marketing opportunity in the refugee hosting situation. This opportunity is erased if refugees return, or greatly compromised if another country, such as Lebanon, seeks to exploit the same idea. There is also a time limit concerning the requisite support of external parties; as European authorities begin to formulate policies to address their own migrant crisis, models such as this should be at the forefront of their thinking.

Given the time sensitive nature of this opportunity and one that is not without precedent, why has Jordan, or another host state, not acted faster?

One key issue is how refugee management is approached and conceptualised. As outlined at the beginning of this chapter, there is currently an inadequate balancing of the obligations of host states against that of other stakeholders. The right to seek refuge and to be protected against refoulement is enshrined in international law, however reciprocal obligations to ease the burden this creates in host states are not. This becomes particularly problematic when a situation becomes protracted. Host states are well aware of these inequities, and are increasingly hesitant to adopt liberal approaches without greater assurance that they will not be left to foot the bill over the long-term.

In response, this paper has advocated a need to elaborate new ways of approaching refugee management. It suggests that, in the context of inadequate rules on burden-sharing, a more constructive place to start might be the needs and interests of host states, or at least a better balancing of protection with host state imperatives. This nuance is important. What has been seen in many refugee situations is that an overemphasis on protection can quickly descend into an exercise of boxing ring-type posturing between the host state and humanitarian agencies. Where it is perceived that priorities are not being met, both sides fall back on the only tools they have: financial resources and appeals for the protection of rights on the part of donors and agencies, and closing borders and tightening restrictions on refugees on the part of hosts.

The idea that refugee actors should broaden a 'protection-centric' to include 'host state interests' is imbued with risk. Refugee protection, in its traditional top-down format, is vital and it is UNHCR's role to maintain this advocacy standpoint. But livelihoods and autonomy are also important and there need to be actors — within UNHCR or in other agencies — investigating, evaluating and proposing these options in a timely manner. This should not be construed as ruthless capitalisation on a vulnerable population. It should be understood as a necessary transition to more sustainable models for refugee hosting at a time when the frequency, depth and protracted nature of displacement means that traditional responses are no longer sufficient.

143 ibid.

¹⁴² P Collier and A Betts, above n 121.

The question could be how to mitigate against and address associated risks. For instance, if the start point moves more towards state-interest, will this further dis-incentivise donor community assistance? What checks and balances need to be set in place to ensure refugee populations are not exploited, particularly in the context of gross inadequacies in the international regulatory framework concerning migrant workers? And how might the ethical implications of refugee hosting becoming an object of state interest be addressed? In short, strong safeguards need to be set in place to ensure that economic rationalism does not undermine humanitarian imperatives. But where such solutions do make sense and can work, as this paper proposes is the case in Jordan, support from international, humanitarian and governmental actors should be forthcoming.

In summary, this paper has proposed that if host states are expected to a provide global public goods by offering a protection space for displaced communities, then state interest could be part of the conversation from the beginning. When the imperative shifts to how donors can help host states continue to provide these global public goods, a wider range of options can evolve. The model outlined here is by no means the only alternative. The main 'take away' is that the three orthodox durable solutions for addressing mass displacement, local integration, third country resettlement and repatriation, are failing to meet the challenges posed by global displacement and that new modalities need to evolve. A further alternative is a broader paradigm shift towards a fourth solution of a 'holding pattern' arrangement for refugees. Scenarios where refugees could have more autonomy to continue their lives and livelihoods, businesses could continue to operate, and the labour force could retain their skill-sets until a return scenario is possible. Likewise, while the emphasis of this paper was on special economic zones (owing to the particulars of Jordan's economic development strategy), other forms of zonal development, such as agricultural areas and buffer zones, deserve further consideration. To conclude, refugees' skills and expertise represent opportunities that host states, humanitarian agencies and donors ignore to their detriment. Moreover, there are broader imperatives of security and stability in the post-conflict context that demand more inclusive planning in the management of refugee crises. Such planning will only be successful if bold and innovative new solutions are tried and tested to push the international refugee regime forward and out of its stalling traditional framework.

Annex 1: Identifying Direct and Indirect Costs and Benefits of Housing Syrian **Refugees in Jordan**

	Direct costs	Indirect costs	Direct benefits	Indirect benefits
Water and sanitation	Water provision, subsidy losses, sanitation services and waste collection.	Reserve depletion, pollution (water and soil), water quality deterioration, water reliability and availability, Less frequent waste removal.	Infrastructure, reuse and extension projects that would not otherwise have taken place, environmental planning studies/research.	
Energy	Energy provision, subsidy losses.	Reserve depletion, pollution, changes in energy quality, reliability and availability		
Security	Police, gendarme, prisons, courts, military, border security.	Cost of crime to individuals involved; community perceptions of security, stability, and trust in Government; increased radicalisation, intra- community disputes, increased risk of terrorism (external and internal).	International support coping with threats, Improved relations with allies, improved intelligence sharing and training, new security assets.	
Education	Facility, teacher and administration costs	Decreased quality of education, number of children not in education	New curricula, teachers trained, new /improved schools	
Cash assistance	Provided by the Government, international organsiations, religious charities and local NGOs.	Diversion of charity assistance that may have benefited Jordanians.		
Food and non- food items	Food and non-food item provision, food subsidy losses.	Changes in price of food and services, availability and quality of food, food reserve depletion.	Greater purchasing power of Syrians	
Infrastructure (including housing and shelter)	New infrastructure (housing, roads, energy, water and sanitation, schools and other public facilities)	Change in price of rent and real estate, infrastructure depreciation (roads, energy, water and sanitation, schools and other public facilities).	Expansion in rental market, housing upgrades, new and improved pubic infrastructure	
Health	Health care provision in hospitals, clinics, ambulances, medication, vaccination programs.	New/recurrence of disease, psycho-social health/ mental illness, availability of medicine, waiting time to receive health care, cost of health care, availability and cost of medicine.	Medical equipment, new/improved facilities, trained health workers, new mental health workers and psycho- social health programs.	
Employment	Increased social security payments for Jordanians displaced from labour market.	Downward pressure on wages, income tax losses due to operation of informal economy, costs of rise in informal economy	New jobs created, vocational training programs, new markets/ businesses opened.	
Tourism		Estimated losses	International workers avail of touristic sites	

	Direct costs	Indirect costs	Direct benefits	Indirect benefits
Social indicators		Transactional sex, child marriage, child labor, undocumented persons, children vulnerable to statelessness, substance abuse, domestic violence, divorce, attitudes towards Government on refugee policy, attitudes towards refugees, increased social and economic inequality, demographic changes (youth bulge), sense of dignity, sense of Arab affinity, sense of hope for the future, sense of national identity.		
Public and trade deficit	Foreign and public debt, trade deficit	Poverty rates, negative economic growth, GDP, inflation	Expanded consumer and tax base, GDP and overall economic activity, Syrian company investments, foreign direct investiment, increased consumption of goods and services, increased capital inflows.	Expanded services and manufacturing sector, increased demand for work (source of Government revenues), increased entrepreneurship

Annex 2: Detailed Examination of Direct and Indirect Costs and Benefits

2.1 Direct and indirect costs

2.1.1 Water and sanitation

Jordan is the third most water scarce country in the world, with a per capita water resource availability per capita of 145 MCM, compared to the regional average of 800 MCM. Water may be delivered once per week in larger cities such as Amman, but as infrequently as every 12 days in some rural areas. Up to 60 percent of piped water does not reach the end user; a problem attributable to both aged infrastructure and illegal syphoning. Water scarcity has deteriorated due to the abnormal increase in the population since 2011. Za'atari and Azraq camps use around 4,000 cubic meters and 930 cubic meters of water per day respectively.¹⁴⁴ In addition to this direct cost, there is a loss born by the Government in terms of water subsidies, deterioration of water and sanitation infrastructure, as well as the costs of sanitation services and waste removal and disposal in urban areas. More difficult to calculate is the long-term, adverse impact on the country's meager water resources, such as potential pollution to the Za'atri water basin, soil pollution, and changes in water quality and availability

2.1.2 Energy

As a non-oil producing State, Jordan imports oil at a cost of JOD 4 billion per year (17 percent of GDP). While the country lifted oil subsidies in November 2012, it still subsidizes electricity generation, accounting for an annual net loss to the National Electric Power Company (NEPCO) of USD \$3.5 billion at the end of 2013.¹⁴⁵ The subsidy cost resulting from heightened electricity use, both in the camps and by urban refugees, is born by the Government. Any calculation must also take account of new required infrastructure, pollution due to increased emissions, and changes in energy quality, reliability and availability.

2.1.3 Health

Until December 2014, Syrians were afforded access to healthcare on the same terms as Jordanians with health insurance, in other words without charge, provided they had registered with UNHCR. But the burgeoning direct financial costs of providing such services, which had reached approximately JOD 34 million by the end of 2014, coupled with the depreciation of infrastructure, forced the Ministry of Health to impose a fee at the point of service for all Syrians.¹⁴⁶ Indirect costs include recurrence of disease, such as polio, and the costs of associated vaccination programs. To the extent that Syrians are affected by post-traumatic psycho-social or mental disorders, this has consequences for the individual and broader society. Other indirect costs relate to increased waiting time to receive health care, the cost of health

¹⁴⁴ World Vision International, Providing water in the desert, a daunting task now underway in Jordan, http://www.wvi.org/

syria-crisis/pressrelease/providing-water-desert-daunting-task-now-underway-jordan> accessed 1st May 2015. ¹⁴⁵ M Al-Daameh, Jordan's Finance Minister: We will eliminate electricity subisidies by 2017 (2014), Asharq Al-Awsat, http:// www.aawsat.net/2014/05/article55332275/jordans-finance-minister-we-will-eliminate-electricity-subsidies-by-2017> accessed 20 April 2015.

¹⁴⁶ K Malkawi, Gov't had no other choice but to stop providing free healthcare to Syrians – Hiasat (2014), The Jordan Times <http://jordantimes.com/govt-had-no-other-choice-but-to-stop-providing-free-healthcare-to-syrians----hiasat> accessed 25 April 2015.

¹⁴⁷ For example, an employer must demonstrate that a job requires experience or skills unavailable among Jordanians.

¹⁴⁸ L Hamai et al, Integrated Assessment of Syrian Refugees in Host Communities – Jordan (2013), Oxfam Great Britain.

care, and the availability and the cost of medicine.

2.1.4 Labor market

Under the Labour Code, in order to work, refugees must obtain a work permit from the Ministry of Labor, the requirements for which are onerous.¹⁴⁷ As a result, many refugees are employed in the informal labour market (see chapter 4). Some reports suggest that up to half of Syrian refugees in urban settings have at least one family member employed.¹⁴⁸ Syrians have competitive advantages over lordanians; they accept lower wages both due to necessity and greater flexibility; they can supplement their income with cash and non-cash humanitarian assistance. Syrians also have skill sets, including in some trades and crafts, not possessed by Jordanians. They may also be more active and entrepreneurial; the economic activity rate of Syrians (48.5 percent) is higher than Jordanians (36.5 percent). Thus while the numbers are unclear, given that the Jordanian economy is characterized by small informal enterprises, the expectation is that Syrian refugees will, over time, develop more contacts and relationships with Jordanian employers, and progressively encroach on the informal employment sector. Moreover, that enterprising and resourceful Syrian refugees, driven by difficult livelihood conditions, will inexorably be pulled into the orbit of the Jordanian economy.¹⁴⁹

The data, however, are not straightforward. The largest numbers of employed Syrians — an estimated 160,000 according to the U.N. International Labor Organization — are low-skilled workers who take jobs that Jordanians tend to avoid. Such jobs are in the construction, agriculture and retail sectors. Thus if Syrians have displaced employees, these are not principally Jordanians but instead some of the estimated 500,000 migrant workers from Asia and other Arab countries who work these low-wage jobs. Approximately half of these immigrants do not hold work permits. The implication is that Syrians are entering a labor market already familiar with informal employment and that the extent to which Syrians have displaced Jordanians has been limited. This is supported by unemployment not having increased in the Governorates that host most of the Syrian refugees.

This is not to imply that there are no negative implications. Syrians entering the market has placed downward pressure on wages. This harms other migrant workers and the 14 percent of the Jordanian population who live in permanent poverty. The situation also complicates Government policy initiatives. To the extent that Syrians are working in the informal labor market, this deprives them of revenue in the form of taxation and permits, a portion of which is channeled to national occupational programs intended to equip Jordanians with the skills needed to meet the demands of the local market. Moreover, the skill sets of Syrians and their willingness to work for lower wages undermines policies to create jobs for Jordanians or replace migrant workers with Jordanians. Finally, to the extent that Syrians have taken jobs away from Jordanians, this has created direct costs for the Government in terms of increased social security payments, and indirect costs in the form of them being deprived of insurance subscription to the Social Security Corporation's social safety network.¹⁵⁰

2.1.5 Security

The costs to the security sector brought on by the Syria crisis are significant. Border and military security has increased, both to facilitate the processing of refugees and provide increased security in response to increased threats of terrorism and conflict-related boarder incursions. Police work in the camps, and in 2014 the Government established both a Personal Status Department and Shari'a court in Zaatari camp, which facilitates the registration of marriages, deaths and issuance of birth certificates. A local non-Government organisation, ARDD-Legal Aid, has an office in the camp to support the Government in dealing with legal issues faced by the Syrian population; the office employs four full-time lawyers.¹⁵¹ Outside of the camps, Syrians avail of police and court services like other Jordanians. While numbers are difficult to obtain, it is clear that Syrians are detained in Jordanian facilities. Indirect security costs are more difficult to quantify. These include the cost of crime to the individuals involved; community perceptions of security, stability, and trust in Government; intra-community disputes; and the increased risk of radicalization and terrorism (external and internal).

2.1.6 Education

At the beginning of the refugee crisis, the Ministry of Education established temporary tented schools which were replaced by four school buildings for 4,000 students in 2012, coordinated by the Royal Charity Organisation of Bahrain.¹⁵² The Jordanian Ministry of Education also rented other buildings for the same purpose and refurbished existing buildings to make better use of space. Today, 12,000 are attending schools in the Za'atri camp and over 1,000 in the United Arab Emirates sponsored Marheeb Al Fuhood Camp, and 1,390 in Azraq camp.¹⁵³ Outside of the camps, refugees can access public schools if they are registered with UNHCR and have a card from the Ministry of Interior.¹⁵⁴ By the end of October 2012, 14,000 boys and girls were enrolled in (mainly) public schools; this increased to more than 110,000 by the end of 2013. At the end of the 2013/14 academic year, more than 120,000 refugee children were enrolled in schools throughout Jordan (100,000 in host communities and 20,000 in camps).¹⁵⁵

The indirect costs are again more difficult to calculate. The significant number of children out of school implies an increased risk that they are vulnerable to child labour and crime; it also threatens to compromise Jordan's high standing in the Arab region in terms of literacy.¹⁵⁶ Communities, whether in Jordan or Syria, will have to absorb these under-educated children.¹⁵⁷ Finally, there are costs in terms of decreased education quality. In many areas, schools have adopted a two-shift system, which involves reduced lesson times from 45 to 35 minutes and worsened student-teacher ratios.¹⁵⁸

¹⁵² S Baby, Bahrain's helping hand to Syrian Refugees (2012) http://www.somanbaby.com/soman_baby_writings/bahrain-

<http://data.unhcr.org/jordan /sectors/2015/

¹⁵⁴ Refugees also need a valid card from the Ministry of Interior after registering with UNHCR to access schooling. Note that in

¹⁵⁷ The total number of Jordanian dropouts in primary and secondary schools, according to some statistics, was 150,000, a

¹⁴⁹ S E Stave and S Hillesund, Impact of Syrian refugees on the Jordanian labour market, International Labour Organisation & FAFO (2015).

¹⁵⁰ International Labour Organisation, Jordan endorses a national framework for regulating the informal economy http://www. ilo.org/beirut/media-centre/news/WCMS_363990/lang--en/index.htm> accessed 1 May 2015.

¹⁵¹ ARDD-Legal Aid, ARDD-Legal Aid in Zaatari: Protecting Human Rights Through National Law (2014) http://ardd-jo.org/ node/389> accessed 14 March 2015.

helping-hand-syrian-refugees.html> accessed 7 May 2015.

¹⁵³ Education Working Group, 2015 Syrian Refugee Response in Jordan education/#indicator=&gender=&poptype=&funded=&appeal=&partner=&allocation=&monthrange=&location=®i on=> accessed 13 May 2015.

August 2007 (and each year thereafter), the Government granted all Iraqi children, regardless of their legal status, the right to enroll in public and private schools for the 2007/2008 academic year. ¹⁵⁵ MOPIC, Jordan Response Plan for the Syria Crisis 2015, Report of the Jordan Response Platform (2014), pp. 12. ¹⁵⁶ It has improved school enrolment to prestigious rates: as high as 91 percent in primary education and 94 percent in secondary education. Such achievements are at risk, given that the drop-out rates of Syrians are adding to the magnitude of social challenges.

figure that will be doubled by 120 percent if the 180,000 Syrian dropouts are added. In addition, the earlier figures do not account for those unregistered with the UNHCR, who number more than half a million with the same demographic distribution. Accordingly, not less than 250,000 of those unregistered Syrians are of school age, with drop-out rates expected to be no less than those of the registered refugees. In the most conservative scenarios, Jordan is facing an additional 100,000 dropouts, bringing the total Syrian dropouts to in excess of 280,000, almost double the Jordanian figures for all educational levels. ¹⁵⁸MoE had adopted a strategy to abolish the two shift system, which burdened the ministry's resources and school infrastructure and caused inconvenience for the children, families and educational and administrative staff.

2.1.7 Cash assistance

UNHCR provides cash assistance to at-risk families; the number of Syrian families being provided with cash assistance was 21,000 in December 2014. In the second half of 2014 the Norwegian Refugee Council (NRC) began piloting a market-based cash denominated voucher approach in place of centralised nonfood item distributions called Paper Plus. They have expanded the programme to camp-wide voucher distributions. On the one hand such payments add to Syrian's purchasing power, but it also has negative implications in terms of their ability to work for lower wages and rent accommodation at lower prices. Higher purchasing power also increases subsidy losses to the Government in terms of imported food, electricity generation and water.

2.1.8 Food and non-food items

Food and non-food items are provided in camps by UNHCR, the World Food Programme (WFP) and NRC. A fully functioning voucher-redemption system now operates in the Za'atari camp for both food and non-food items. The scale of markets and supermarkets now in existence in the camp means that quite sophisticated distribution techniques have been developed. For example, NRC uses a combined cloud-database-and-smartphone-app service, called CodeREADr, to manage its voucher system for non-food items.¹⁵⁹ Outside the camps, WFP and UNHCR are the two principal distributors of food items. Since 2014, WFP assistance to Syrian refugees living in host communities¹⁶⁰ has been carried out via electronic food vouchers. The programme is implemented by way of a partnership with MasterCard and Jordan Ahli Bank (JAB). These e-vouchers function like a pre-paid debit card. WFP transfers the value of the voucher directly to the e-voucher each month via the partner bank. By February 2014 the number of beneficiaries of WFP's voucher programme had reached some 537,000 Syrians living in host communities. However, towards the end of 2014 and into 2015, WFP has seen a significant shortfall in its donor funding, resulting in cuts to the amount of assistance provided to thousands of families. From April 2015, 34,000 people have no longer been able to receive food vouchers and a further 239,000 people have had the value of their vouchers reduced.¹⁶¹

The main impact for the Government is on food security and subsidy losses. Jordan, due to water scarcity

and the high volume of arid land, has an existing food security problem. The Kingdom imported 87 percent of its food requirements in 2012 at a total annual cost of US\$ 3.1 billion (14 percent of GDP).¹⁶² This has been exacerbated by population-driven increased demand from camps and urban areas.¹⁶³ A report by the Food and Agricultural Organization (FAO) estimated that the Government's six-month supply of strategic food reserves would be depleted within four months if the number of refugees continued to grow at the then-existing rate. Moreover, as in the case of water and electricity generation, the cost of food subsidization is passed on to the Government, where pre-Syrian food subsidization cost the equivalent of 1 percent of GDP annually, and JOD 290 million in 2013.¹⁶⁴¹⁶⁵ It is also important to take into account upward pressure on food prices (between 2011 and 2012, overall food prices in Jordan increased by 5 percent),¹⁶⁶ and changes to availability and quality of food in communities.

2.1.9 Infrastructure and capital costs (including shelter and housing)

Registered refugees benefit from Government services and infrastructure in the same way as Jordanians; this includes roads, parks, libraries and other public facilities. Any assessment of costs must take into account depreciation on such infrastructure and increased maintenance costs. In terms of shelter, the largest camps are Zaatari, the Emirates Jordanian Camp in Zarga and the 3respectively.¹⁶⁷ The vast majority of refugees, therefore, reside in communities, mainly in Amman (approximately 172,791), Irbid (approximately 144,214) and Mafraq (approximately 158,000).¹⁶⁸ Most urban refugees (around 90 per cent) rent private apartments.¹⁶⁹ Syrian demand for urban housing totaled 44,000 families in 2012 and 448,000 families in 2014, pushing prices up by 100 percent.¹⁷⁰ Again, it is important to highlight that Syrians compete with Jordanians in the rental market because they are willing to stay in lower quality housing and have more price flexibility due to cash grants from the humanitarian community.

NRC's integrated urban shelter programme provides financial and technical support to Jordanian landowners to bring new housing units on the market. It supports poor host communities by providing technical support and financial incentives to finish apartments and houses that they otherwise cannot complete. In exchange, Syrian refugee families are able to live in such units for at least 12 months rentfree.

2.1.10 Tourism

Given that Jordan has long-been considered part of a multi-country tourist package, the onset of the Arab Spring led to a 17 percent decline in tourist numbers in 2011, and further drop of 7 percent in 2012.¹⁷¹ While not as significant a cause, the influx of refugees is likely to have exacerbated or protracted this decline.

¹⁶⁸ UNHCR, Syria Regional Refugee Response (2014) <http://data.unhcr.org/syrianrefugees/country.php?id=107> accessed

¹⁶⁹ The remainder are being housed by hosts or relatives. The relevant law for refugees to rent or purchase property is Law No

¹⁷² However according to wazani this is not a notable phenomenon. The Supreme Judge's Department (SJD), which is the

¹⁵⁹Norwegian Refugee Council, Supporting dignified choices; 'Paper Plus' cash voucher programming in camps in Jordan (2015) <http://www.nrc.no/arch/_img/9193386.pdf> accessed 11 May 2015.

¹⁶⁰ E Luce, Evolution of WFP's food assistance programme for Syrian refugees in Jordan (2014), Emergency Nutrition Network <a>http://www.ennonline.net/fex/48/evolution> accessed 1 May 2015.

¹⁶¹ World Food Programme, WFP Prioritizes Most Needy Syrian Refugees for Food Assistance in Jordanian Communities (2015) <a>https://www.wfp.org/news/news-release/wfp-prioritizes-most-needy-syrian-refugees-food-assistance-jordaniancommunities> accessed 30 April 2015.

¹⁶² K Al Wazani, The Socio-Economic Implications of Syrian Refugees in Jordan (2014), 83.

¹⁶³ ibid.

¹⁶⁴ ibid.

¹⁶⁵ The Jordan Times, Cost of bread subsidy estimated at JD290m (2013) http://jordantimes.com/cost-of-bread-subsidy- estimated-at-jd290m> accessed 5 May 2015.

¹⁶⁶Wazani, above n 19.

¹⁶⁷While the initial waves of Syrian refugees were absorbed into communities, in August 2012 steadily increasing numbers, lack of available housing and the strains created on public services led to a change of Government policy whereby new arrivals were directed into camps.

March 2015.

⁴⁷ of 2006 for the Leasing of Immovable Assets, and Their Sale to Non-Jordanian and Judicial Persons. Art 3 states that where the buyer's country of residence maintains a reciprocal relationship, foreign nationals are afforded the right of ownership of property within urban borders in Jordan for residential purposes but only after acquiring the required permission from the Minister of Finance or the General Director of the Survey Department. ¹⁷⁰ Wazani, above n 19, 98.

¹⁷¹ The World Bank Economic, above n 3.

authority responsible, denied any abnormal increase in marriages with Syrians since the outbreak of the crisis. Statistics, for example, show that SJD issued less than 200 marriage contracts with Syrian women in 2012 compared with 270 in 2011. It is notable that intermarriages between Jordan and Syria are not new. It is a traditional practice that has occurred since the establishment of the two countries.

¹⁷³ Wazani, above n 19, 20.

¹⁷⁴ Wazani, above n 19, 81.

2.1.11 Social indicators

These include the externalities that result from a relatively homogeneous society accommodating a large and unexpected increase of people with different socio-cultural mores, a different dialect and different political views. The impacts of Syrians living in poverty, sexual and economic exploitation, increased child marriage and child labour, and undocumented marriage extend to all society.¹⁷² Hostility due to the perception of Syrians taking jobs and using infrastructure has been documented, and to the extent that this has contributed to social tensions and community disputes, has tangible as well as intangible implications. Hostility extends to perceptions that the international community and local charitable organizations have favored Syrians over Jordanians by diverting aid programs, detracting from their contribution to combatting poverty. Such sentiments are not necessarily misplaced; poverty pockets increased from 22 in 2006 to over 36 by the end of 2012.¹⁷³ A final area of tension is towards the Government regarding their policy of accommodating refugees, and how this feeds into general discontent and fragility. In a study by the Centre for Strategic Studies in October 2013, 76 percent of Jordanians stated that the existence of Syrians in their locales has had adverse impacts including competition for local jobs (41 percent of respondents) and rising prices (30 percent of respondents).¹⁷⁴ Another study conducted in April 2013 found that 71 percent of the study population and 43 percent of the opinion leaders would refuse entry to any new waves of Syrian refugees to Jordan. In June 2013, the rate increased to 73.5 percent of the study population and 55 percent of opinion leaders. Of these, 87 percent said it would be better to keep Syrians in refugee camps and not allow them to move into the local communities, while 92 percent claimed that the existence of Syrians had compromised job opportunities for Jordanians.¹⁷⁵ One month later, in July 2013, tensions rose further when the Government lifted fuel subsidies and raised the tax on telecommunications.

2.1.12 Public debt and trade deficit

While less visible, refugees also have impacts at the macro-economic level in terms of the overall performance of the economy. In the case of Jordan, refugees have caused rising imports, mainly foodstuffs and oil products, which has been attributed to a worsened trade balance deficit (the trade balance deficit grew from JOD 6.8 billion in 2010 to JOD 11.6 billion in the 2014 forecast).¹⁷⁶¹⁷⁷ Between 2011-2012, net public debt grew by JOD 3.4 billion, and by JOD 3 billion in 2013 and between 2000 and 2015. Debt topped JOD 20.8 billion in the first quarter of 2015.¹⁷⁸ Jordan's GDP growth averaged 8.24 percent between 2005-2007, contracting to 3 percent in 2014.¹⁷⁹ The extent to which this can be attributed to refugee influxes, however, requires specific correlation-regression analysis.

2.2 Direct and indirect benefits

2.2.1 Water, sanitation and energy

The value of new infrastructure, infrastructure repairs and upgrades, and investments in water-energy

2.2.2 Health

Benefits include new equipment at hospitals and clinics, trained doctors, additional mental health workers, and an increased number of psycho-social health programs.

2.2.3 Employment

New jobs were created for Jordanians by way of Syrian investment in the country, and through expanded United Nations, INGO and local NGO programs.

2.2.4 Security

The Syria crisis has facilitated increased international support with respect to Jordan's resilience to new threats (internal and external), improved relations with allies, improved intelligence sharing, new security assets, and training provided to security sector staff.

2.2.5 Education

Benefits might include new curricula, training provided to teachers and new or improved schools.

2.2.6 Cash assistance, food and non-food items

The purchasing power of Syrians on the Jordanian market, in addition to purchases made by the international community from the local economy, are stimulus actions.

2.2.7 Infrastructure and shelter

The Syrians have expanded the market to those leasing accommodation.¹⁸⁰

2.2.8 Tourism

Tourism is arguably one dimension of where the conflict in Syria had positive spillovers on Jordan. Jordan's tourism sector witnessed a V-shaped recovery in 2012 that can be attributable to growth

¹⁸⁴O Karasapan, 'Jordan's Syrian Refugees' (2015) Brookings Institute http://www.brookings.edu/blogs/future-development/

¹⁷⁵ ibid.

¹⁷⁶ ibid.

¹⁷⁷For a comprehensive report on the costs incurred by the Jordanian economy refer to the following figure: http://www.un.org. jo/sites/default/files/NAR.pdf

¹⁷⁸ 'Jordan's public debt reaches JD20.8 billion in Q1', Petra News Agency, (Amman) 11 May 2015 < http://www.petra.gov.jo/ Public_News/Nws_NewsDetails.aspx?Site_Id=1&lang=2&NewsID=195431&CatID=13&Type=Home>ype=1> at 6 May 2015. ¹⁷⁹ Cairo Amman Bank, 'Jordan Economic Report', Research Department (2015), 3 <http://www.cab.jo/sites/default/files/ Jordan_Economic_Report_-_March_2015.pdf> at 14 May 2015.

¹⁸⁰ Wazani, above n 19, 98.

¹⁸¹World Bank, Jordan Economic Monitor: Moderate Economic Activity with Significant Downside Risk, (2013), 16.

¹⁸² World Bank, Jordan Economic Monitor: Steady and Moderate Growth Continues, (2014) 1. ¹⁸³ Wazani, above n 19, 90.

posts/2015/02/25-syrian-refugees-jordan-karasapan> at 7 April 2015. ¹⁸⁵ Wazani, above n 19, 97.

¹⁸⁶ Y Mansur, 'Impact of Syrian Crisis on Jordan', (paper presented at the International Conference on the Socio-Economic Dimensions of the Syrian Conflict, Amman, 4 July 2013, 4). ¹⁸⁷ Wazani, above n 19, 98.

Annex 3: Quantifying Direct and Indirect Costs and Benefits

Quantifying the costs of the Syrian crisis is complicated by the shortage and reliability of data, the intangibility of some costs, and the complexity of attributing causality. There have, however, been attempts to overcome these challenge by various groups.

3.1 Konrad-Adenauer-Stiftung

In 2012, Konrad-Adenauer-Stiftung released "The Socio-Economic Implications of Syrian Refugees in Jordan", marking the first serious attempt to audit the economic implications of the refugee influx. The study, led by Dr. Khaled Al-Wazani, estimates the cost of the Syrian presence in Jordan up until the end of 2013 at around JOD 5.8 billion, and benefit as JOD 4.1 billion (an aggregate loss to the economy of JOD 1.7 billion). He sets out two scenarios for predicting future costs. The first scenario (a daily influx of 400 refugees per day) sets out a cost of net losses of JOD 2.6 billion for the year 2014, and under a second scenario (a daily influx of 1500/day), this cost reaches JOD 3.5 billion. This accounts for 16 percent and 20 percent of expected 2014 GDP respectively and for at least 20 percent of Jordan's public debt and over 60 percent of estimated 2014 public spending.¹⁸⁸ The methodology employed was the development of a cost-benefit matrix that considered impacts at the macroeconomic and sectorial levels, using available official figures and researcher's estimates.¹⁸⁹

3.2 Dr. Odeh al Jayyousi: Environmental Impact Assessment

In 2014, Dr. Odeh al Jayyousi attempted to assess the environmental impact of the refugee influx. His report estimates the cost of ecosystem degradations and natural capital at 2-5 percent of GDP.¹⁹⁰ This impact largely derives from lower water and air quality indicators and pressure on forests, but also draws upon direct and indirect, and short and long-term costs.¹⁹¹

Al Jayyousi adopts a methodology derived from the Driver-Pressure-State-Impact-Response (DPSIR) framework, which was developed to articulate the causal relationships and interactions between society and the environment The framework arranges appropriate environmental indicators into categories that can help communicate and illustrate the relationships between indicators: drivers (D) are forces that exert pressures (P) on the system and affect the states (S) or measurable conditions. This leads to impacts (I) on the social-environmental system that may have societal responses (R) which feedback to address drivers, pressures, states and impacts. He adapts the DPIR model to account for three domains of impact: reduced water quantity and quality, reduced air quality, and increased use of marginal lands.

3.3 Refugee Study Centre and World Bank

A third methodology was developed by the World Bank and Oxford University's Refugee Studies Centre: Guidelines for Assessing the Impacts and Costs of Forced Displacement. The Guidelines are a mixed method assessment tool to assist humanitarian agencies analyse the economic and financial consequences of development and humanitarian assistance.¹⁹² The Guidelines were pilot tested in Jordan in 2013 to assess the fiscal impacts of Syrian refugees.

The methodology covers four stakeholder groups: (i) refugees and IDPs (the cost of displacement on the displaced themselves), (ii) host population and state, (iii) area and country of origin and (iv) type of assistance provided to the displaced (international humanitarian and development assistance). For the purposes of this inquiry, the methodological focus on host communities and state and external assistance provided (parameters ii and iv) is most relevant.

The methodology for assessing host state impact is based on two analytical approaches. The first identifies parameter sets and indicators to apply to different affected groups. The second deals with macroeconomic outcomes at the national or regional level. The methodology sets out four levels of analysis of increasing detail:

- 1. Two generic parameters for analyzing economic outcomes are identified: micro- and macro-economic. These are complemented by two further parameters to assess socio-economic outcomes: social/ welfare and environment.
- 2. Within each parameter are main indicators, and a set of sub-indicators or variables providing the main instruments by which to measure impacts and costs.
- 3. Interaction indicators need to be identified to enable impacts and costs to be measured for specific education, disability status, family composition and religion.
- 4. Mediating variables enable further refinements of significance, largely non-economic factors, to be incorporated into the methodology. For example: risk-related (security level, perception of security and exposure to transitory income shocks), coping mechanisms (child labour, early marriage, education interruption, prostitution, transactional sex, other culturally unacceptable activities e.g. divorce, substance abuse, criminal activities, household separation, secondary migration, changing gender roles) and other factors such as psychological health, political rights and social change).

¹⁹¹ ibid, pp. 13.

categories of displaced people, for example: age, marital status, household status, gender, ethnicity,

¹⁸⁸ K Al Wazani, The Socio-Economic Implications of Syrian Refugees in Jordan (2014), 12.

¹⁸⁹ Macroeconomic figures for 2013 were adopted as officially published in the Draft General Budget Law for the Year 2014 under the allocation item "Re-estimated for 2013". The data provided by the State General Budget Law for the Year 2014 were used for making the macro-microeconomic impact in that specific year.

¹⁹⁰O Al-Jayyousi, 'Assessment of the Impact of Syrian Refugees on Environment in Jordan', 1 December 2014.

¹⁹² The World Bank, Guidelines for Assessing the Impacts and Costs of Forced Displacement (2012).

	Host community and sta	te
Economic parameters	Micro economic	Macroeconomic
Main indicators	Income	Household markets
	Income/disposable income	Housing supply/demand
	Consumption levels	Costs
		Rental markets
	Labor markets	Prices
	Wages	Goods and services
	Employment	
	Type of job	
	Labor force participation	
	Hours worked	
	Assets	Capital formation
	Livestock	Construction/infrastructure
	<u>Savings</u>	GDP
		Increase/decrease
Socio economic parameters	Social welfare	Environment
Main indicators	Health conditions	
	Access to services	Natural resources
	Children's health	Building materials
	Maternal health	
	Diseases	
	Nutrition	
	Education	
	Attainment	
	Literacy	

A methodology is also provided for assessing international humanitarian and development assistance. InterGovernmental agencies, donor Governments and NGOs play a significant role in addressing the needs of refugees. While such assistance may not always appear to impact the calculation of the costs borne by host states, it often does. For example, international organizations often provide food and nonfood items to refugees. If such goods are then sold by refugees, this has a spillover impact for local farmers, producers and retailers, especially if food is sold at below market prices. When food, materials or services are purchased for refugee projects from the local economy, this can have both positive impacts in terms of economic stimulation and job creation, but also detrimental impacts if imports rise or subsidies are involved (as in the case of Jordan). Other injections can have positive impacts for the host community, both short term and long term. Improvements to local shelters or schools may be principally for the refugee population, but in the long-term such assets will benefit the wider community; likewise, a donor provided health clinic that services both the displaced and host community. It is also necessary to calculate the macro and micro impacts of international assistance on the overall performance of a host country's economy, in other words, the developmental investment role performed by humanitarian programs. At the macro-economic level, this might include changes to the country's GDP, or the volume of gross fixed capital formation, or the economic multiplier impact of programmes.

	International humanitarian assis	tance
Parameters	<u>Program type</u>	Economic scale
Main indicators	Direct funding of beneficiaries	Macroeconomic
	Social and welfare programs	Microeconomic
	Infrastructure	

Finally, the guidelines provide some insight into how relevant data might be collected, and the need to supplement existing or unreliable datasets through qualitative data collection, surveying or proxy indicators. Once data is collected, attribution must be calculated i.e. an assessment of the probability that certain impacts are related to increased demand by the displaced population. This can be done through correlation and regression analysis. Sometimes, correlation can only be could be only general and tentative, which is why qualitative data collection can play an important and complementary role. The Guidelines also stress the importance of time series data, which provides insight into changes in impacts as a refugee population grows or shrinks.

3.4 Summary

As articulated by Roger Zetter, former director of th Refugees Studies center at Oxford University, there no model to accurately and reliably assess the impact and cost of displacement.¹⁹³ Moreover, in the rare case that evaluation does take place, it is often descriptive and incomplete:

It is clear that selectively citing figures on costs doe little to advance evidence-based policies; moreover, th lack of economic analysis to date has severely hampere the effort to move from 'care and maintenance' toward appropriate and targeted economic, migration development and humanitarian responses.¹⁹⁵

This chapter has aimed to trigger, not summarize, discussion on the real and measurable impact of the Syrian refugee crisis on Jordan and Jordanians. None of the methodological frameworks described above is a comprehensive means of calculating such impact. Key constraints include lack of data, the reliability of existing data and weak frameworks to calculate the cost of indirect externalities. It is clear, however, that the four parameter sets of economics, environment, social justice and human security, require a mixed method approach. While some figures exist, it is unclear how to bring them into a tangible assessment framework. A further outstanding question is how to deal with cost assessment as it relates to social intangibles. Methodologies that have been used to assess the social costs of disability, incarceration and mental illness on a community, may prove useful in this regard.

he	Governments tend to assess the
is	impacts and costs for the host
ict	community, while donors and NGO's
es	focus on the outcomes of their skills
es he ed	development and income-generating projects or cash and vouchers assistance for the refugee livelihood. Neither approach provides an aggregate account of the macro- and micro-economic and fiscal impacts and costs and quantitative
ds	methods and hard empirical data are
on,	noticeable by their absence. ¹⁹⁴

¹⁹³ R Zetter, Are refugees an economic burden or benefit?, Forced Migration Review (2013) < http://www.fmreview.org/

preventing/zetter#_ednref3> at April 10 2015. 194 ibid.

¹⁹⁵ ibid; World Bank, above n 3.

Cost-benefit analysis parameter sets

	Costs		Benefits
Macro-economic impacts	Methodology	Macroeconomic revenues	Methodology
Foodstuff subsidies ¹⁹⁶	Application of the subsidization cost per capita to Syrian refugees and residents.	Contribution to GDP	Changes in GDP relative to increase of the population attributed to Syrian refugees.
Public debt	Per capita cost calculated on the basis of the annual increase in the debt (rather than on the outstanding debt balance at the end of the relevant year).	Contribution to public revenues	The ratio of Syrians to the general population in each year multiplied by the total public tax and non-tax revenues.
Trade account and Imports	The study calculated the per capital cost from the trade deficit balance, which necessarily equates with the net per capita impact on variances in goods import and export items.	Foreign aid	Total increased assistance received by Jordan for Syrian refugee assistance according to Ministry figures.
		Contribution to foreign reserves	Calculation assumes that foreign assistance given for the Syrians is converted into local currency and hence directly affects the foreign reserves held with Jordan Central Bank (JCB) plus a weighted proportion of income flows from abroad, by deducing a proportion concurrent with the ratio of Syrians to the population from the total annual income flows from abroad. The calculation also includes annual increase in foreign reserves corresponding to the ratio of Syrians to the population, multiplied by the annual variance of foreign reserves (assuming that such an increase is due to the presence of Syrians)
Labor market and job opportunity costs	The calculation estimated 25 percent of Syrians entering the labor market (including urban refugees and prior residents) and assumed that 30 percent and 70 percent of those latter two groups compete with Jordanians and migrant workers, respectively. The estimated cost was calculated only in relation to those competing with Jordanians, with the impact on the labor market calculated based on three lost opportunities: 1. work permits and associated fees (assuming that 30 percent of Syrian pay subscriptions), 2. lost social insurance deductions, 3. income that could have otherwise been generated for Jordanian replacements (average wage does not exceed JOD 250).	investments	Adopted the Oxford Business Group's estimate of investment for the period 2012-2013 and an increase by 3 percent for an aggregate impact of the investment flows for 2012-2014 of JD900,000 in either scenario.

	Costs		Benefits
Macro-economic impacts	Methodology	Macroeconomic revenues	Methodology
Labor market and job opportunity costs	The calculation estimated 25 percent of Syrians entering the labor market (including urban refugees and prior residents) and assumed that 30 percent and 70 percent of those latter two groups compete with Jordanians and migrant workers, respectively. The estimated cost was calculated only in relation to those competing with Jordanians, with the impact on the labor market calculated based on three lost opportunities: 1. work permits and associated fees (assuming that 30 percent of Syrian pay subscriptions), 2. lost social insurance deductions, 3. income that could have otherwise been generated for Jordanian replacements (average wage does not exceed JOD 250).	Estimated Syrian investments	Adopted the Oxford Business Group's estimate of investment for the period 2012-2013 and an increase by 3 percent for an aggregate impact of the investment flows for 2012-2014 of JD900,000 in either scenario.
Sectoral impacts		Micro-economic revenues	
Education	Based on MoE data, the cost of the 110,000 Syrian refugee and resident students was estimated to be JOD 450 in primary education, JOD 850 in secondary education and JOD 1,100 in vocational education. The calculation reflects that 34 percent of UNHCR-registered Syrian refugees are in the 5-17 age group, half of whom are girls.	Housing rents	Calculation based on rise of Syrians in Jordan assuming that 20 percent share homes with other families, and monthly rents of apartments between JOD 150-250.
Health	The Ministry of Health estimates the cost of medical treatment at JOD 270/patient, out of which JOD 132 is a subsidy for non- Jordanians. Regardless of any amounts received by MoH from donors to cover the costs, the subsidy per patient is still a direct cost included in the real accounts paid by the State regardless of nationality (Since the figure is the outcome of a division of total cost by number of residents, the study finds it appropriate for use in estimating the costs of medical operational (non- capital) services incurred by the state. The assumption is that capital costs are already covered by donations or by the field hospital). The figure was then calculated based on the assumption that 10 percent of Syrians go to hospitals to receive treatment.	Job opportunities	Calculation based on UNDP report that assumes 50 percent of a total of 2100 jobs created by Syrian investments employ Jordanians. Such jobs were distributed into 30 percent and 70 percent in the years 2012 and 2013, respectively. The average monthly wage per worker assumed to be JOD 250.
Energy	The subsidy shared by Syrian residents per capita was based on losses sustained by NEPCO.	Retail sector revenues	The ratio of Syrian refugees and residents after the start of the crisis was used to determine their contribution to the growth of revenues in that sector

¹⁹⁶ Pressures created by the GFC, Arab Spring and popular movements inside Jordan, have led to policies of stabilization which have included subsidies on foodstuffs, the annual cost of which Wazani estimates to be JOD 200 million.

	Costs		Benefits
Macro-economic impacts	Methodology	Macroeconomic revenues	Methodology
Water	The calculation relied on the figure in the Joint Jordan-UN Appeal (annual per capita share of subsidies spent on water is JOD 15.15). This figure does not cover sanitation and environment-related costs. However, according to USAID estimates, such costs incurred by Syrians living outside the camps stands at around JOD 166 million.		
Security and defense	The calculation is made on a per capita basis in light of the estimated cost in the budget for the year 2014.		
Infrastructure	The calculation was derived from a proxy coefficient based on consultations with experts on infrastructure depreciation and renovation costs. The cost of current infrastructure is approximately JOD 40 billion for the last two decades. The proxy coefficient deduced was JOD 0.15/ capita impact on infrastructure depreciation on an annual basis. A per capita share of capital expenditure was also calculated in terms of capital expenditure in the public financial accounts and the General Budget.		
Municipal Services	The funds allocated to municipalities were raised in response to the new burdens of the Syrian refugees. The calculation (per capita share of municipal expenditure) was derived from a proxy coefficient for the cost of the Syrian refugees and residents Kingdom-wide.		
Municipal Services	The funds allocated to municipalities were raised in response to the new burdens of the Syrian refugees. The calculation (per capita share of municipal expenditure) was derived from a proxy coefficient for the cost of the Syrian refugees and residents Kingdom-wide.		

Oil and Energy	Royal Dutch Shell	Annex French Total	4: Major com Eni (Italian Oil Company)	Annex 4: Major companies forced to leave SyriaTotalEni (Italian Oil Company)China National PetroleumSchneider Electric		to leave Syria Schneider Electric	to leave Syria Schneider Electric Areva (nuclear
Energy	Shell		Company)	Petroleum Corporation (CNPC)			
Technology	Sony Corporation	IRIDEX Corporation (lasers for retinal surgery)	Italy's Area SPA (drag-net surveillance)	France Qosmos SA (network intelligence)	S	s Germany's Utimaco Safeware AG (cybersecurity solutions)	
Banking and Finance	Global Exchange (biggest currency exchange company in Syria, closed by Syrian authorities)	American Express Company					
Food and Retail	Bel Groupe (French Cheese Factory)	Kentucky Fried Chicken (KFC)	Benneton				
Construction	Lafarge Concrete (French, now in Jordan)	Rosch Company	Caterpillar	Veolia Environment SA (water supply and water management)	SA	AECOM SA Technology Corporation	

Annex 5: Viability Assessment for Establishing an Industrial Zone Along the Jordanian – Syrian Border

5.1 Introduction: Jordan's Manufacturing Prospects

This annex explores the viability of setting up industrial development projects along the Jordanian-Syrian border. In order for Jordan to achieve a long-awaited qualitative leap away from its middle-income trap predicament, large-scale investments in manufacturing need to be made. Subsequently, Jordan's host state status has come with a myriad of challenges while exposing, exacerbating, and even creating new economic deficiencies that it must grapple with. At the same time, the presence of large and unprecedented numbers of refugees in Jordan constitutes a new challenge, and opportunity, in terms of an expanded labour force and skillset. Refugees contribute to local economies by bringing new skills and resources, as well as increasing production capacity and consumption demand. Such forces can stimulate an expansion of any host economy hit by an external shock of a sudden and continuous and influx of refugees.

A more encouraging way of looking at the economic and social deficiencies stemming from Jordan's host state status is that they provide the impetus and urgency for Jordan to rectify structural economic deficiencies and transition steadily towards manufacturing and the export of light industrial products. Economists and policy-makers alike are coming to realize that the way forward for Jordan is to take the "high road to economic development [that] involves a process of structural change where production shifts increasingly towards activities with greater value added and knowledge-intensity."¹ Jordan must move away from services (which currently account for over 70 percent of GDP and more than 75 percent of jobs)² and towards activities that generate value-added economic activity. At the same time, it needs to navigate a positive shift in the economic landscape by attracting large-scale capital investments. Jordan needs to identify the sectors and projects in which this developmental potential lies and direct factors of production, and policy-making, toward it.

Jordan's economic strategy has been to invest in a strong education sector geared towards becoming a hub for technology-driven innovation. Having become caught in what is known as the 'middle income trap', economists have proffered the establishment of large-scale manufacturing. Significant progress has been made; economic and industrial zones have been established throughout the country, complemented by investment-friendly policies and a clear legislative and regulatory framework. There are still, however, obstacles to overcoming the entry barriers to global trade markets. Jordan must compete, for example, with Asia, which enjoys stability, market access (through its coastlines), plentiful natural resources and a large, low-cost labour force. Jordan cannot do much to improve its geographic market access (although this is becoming less important in the globalised economy), the stability of its neighbours, or its natural resource base. It needs something more or something different to generate the conditions to establish a manufacturing cluster.

¹ United Nations Economic and Social Council for Western Asia (ESCWA), Measurement and Analysis of Poverty in Jordan (2014), 25

² United Nations Development Program. Jordan Poverty Reduction Strategy, Final Report (2013), 31

In this regard, Jordan does have two important assets. First, the country represents a beacon of stability in a very unfriendly neighbourhood. The strategic importance of this, both to the region and the West, cannot be understated. There are great incentives in play to promote Jordan's stability, and these include investing in its economic potential. Second, Jordan is providing a global public good in terms of refugee hosting. No country wants to see refugees suffering, but subsequently, donor governments do not want to have refugees on their soil in large numbers. From a humanitarian perspective and in terms of global stability, this state of affairs is highly disconcerting. Nevertheless, it does bode well for Jordan breaking into and establishing a manufacturing cluster.

5.2 Assessing The Viability: Jordan's Pre-existing Industrial Frameworks

Jordan's modern human resource base, coupled with investor-friendly policies, in addition to relative stability and a functioning government and administration, provide Jordan with what has the potential to become an economic competitive edge. The 2011 Global Innovation Index (GII) ranked Jordan 41st worldwide (out of 125 countries) and 4th among the regional countries covered by the index. Its place in the chart is particularly noteworthy because it is more than 25 positions ahead of its closest regional competitor in the same income group, i.e. Tunisia, which ranks 66th. Although Jordan ranked only eighth in the region on innovation inputs, it was third in terms of output. Jordan's strengths come from its creative output base, with a strong dynamism at the level of residents' trademark registrations (where it is placed first in the region) and a relatively high level of exports of creative goods. Information and Communication Technology (ICT)-based industries such as business process outsourcing and call centres are also areas in which Jordan has a comparative advantage due to the widespread use of English and history of links with foreign investors.

Jordan already enjoys many of the comparative advantages needed to attract foreign capital investment, including in manufacturing. The country has also taken deliberate steps to open up this sector. Jordan's Investment Promotion Law (IPL), passed in 1995, was specifically designed to attract investors to 13 'vital' sectors, including agriculture, education, pharmaceuticals, and tourism. Incentives are provided to reduce the asset costs incurred by investors, while also supporting sector growth through cross industry links and clustering. The Kingdom's national investment promotion agency, the Jordan Investment Board (JIB), offers a 'one-stop-shop' that enables investors to carry out all licensing and registration services under one roof and in an expedited manner.

A critical part of Jordan's investment promotion framework has been the allocation of public land to create Qualified Industrial Zones, Development Areas, Free Zones, and the Aqaba Special Economic Zone. Again, the aim is to attract foreign investment, increase employment, advance high-value economies like manufacturing, and facilitate the transfer of technology and skills. A further aim is a more equitable distribution of economic activity; around 80 percent of Jordan's economic activity is concentrated in Amman despite it housing only 40 percent of population, creating skewed opportunities and living standards. Special laws and regulations are applied in these zones, including exemptions (alleviating customs and taxes) and incentives relating to capital ownership and facilities. This legal framework also offer equal treatment to both Jordanian and non-Jordanian investors, thus allowing foreign investors to own any project in full or part, or to engage in any economic activity in the Kingdom. Admittedly, there are a few exception to this, but they are mainly meant to encourage industrial activity.

5.3 The Precedent: the Jordan-Syrian Free Trade Zone

The joint Jordanian-Syrian Free Trade Zone (FTZ), the very first of its kind in the West Asia-North Africa (WANA), was first established under an agreement between the governments of Jordan and Syria in 1975, at a time when the relations between the two countries "witnessed an unprecedented rapprochement".³ On August 26, 1975, a Jordanian-Syrian FTZ was inaugurated as a joint venture established by Law No. /21/ for the year 1975 in the Syrian Arab Republic, and property number /5/1976 in the Hashemite Kingdom of Jordan. The basis for this FTZ was a preceding agreement of economic cooperation and trade as a Limited Liability Company (LLC) and "that enjoys the rights and powers to carry out industrial work in the two countries and while enjoying financial and administrative independence."⁴ In was created with an equally levied capital contribution of US\$15 million.⁵ At that point, the preliminary technical studies for the FTZ had been carried out along with the set-up of necessary bylaws, structures, accounting, storage, banking, and customs systems, with its headquarters in Dar'a in Southern Syria.⁶

Meetings to develop the FTZ took place in the next following years. Jordan's Minister of Industry and Trade at the time arrived in Damascus the following year to discuss joint industrial initiatives. It was decided that a joint industrial company should establish white cement factory in Jordan, as well as a ready-to-wear clothing factory and a metal frames and ball bearing plants in Syria.⁷ The initiative continued to move forward in the next three decades, despite the fundamental political changes that took place in both countries during the early 2000's. The initiative was followed up with a World Bank-administered agreement between the two countries signed in 2003⁸ with the aim of exporting products directly to the US and Europe.⁹ The Agreement was signed in the spirit of the Greater Arab Free Trade Agreement (GAFTA) and the quest of enhanced Arab economic integration (*takaful*).¹⁰

It would be unreasonable to dismiss these initiatives as a mere artefact of the past. Before the outbreak of instability of Syria, two thirds of the FTZ were located inside Syria proper, 650 hectares of land was devoted to the FTZ, and the strategic location of the Nasib-Jaber border crossing (close to Mafraq) was chosen for it.¹¹ Prior to the outbreak of instability in Syria, the area was fully equipped with the infrastructure it needed, including water, electricity, transport, storage, and custom and security clearance facilities.¹² Before its current closure due to looting and the outbreak of insecurity, the Jordanian-Syrian FTZ was reported to turn over about \$500m of goods in 2014, down from \$1.4bn a year before the war began in 2011.¹³ These disturbing figures should not continue to be treated as a motivation to halt the FTZ's operations. Its past successes and the current losses signify a serious need for relocating a once vibrant industrial and commercial activity to a safe haven, as well as an imperative to end the current Syrian tragedy.

³ L Brad, Jordan's Inter-Arab Relations: The Political Economy of Alliance-Making (1994) 161

⁴ 'Jordan controls joint Jordanian-Syrian Industrial Zone', *Islah News* 2 April 2015 (translated from Arabic: http://islahnews.net/312766.html) ⁵ L Brand, above n 3, 161

⁶ L Brand, above n 3, 162

⁷ ibid

⁸ The full text of the agreement can be found here: http://wits.worldbank.org/GPTAD/PDF/archive/Jordan-Syria.pdf

⁹ 'Arab League Countries Investment Climate and Opportunities', USA International Business Publications 1 (2011), 246

¹⁰ L Brand, above n 3, 159

¹¹ Islah News, above n 4

¹² T Abu Summaqa, 'Decision to close joint free trade area with Syria', *Al-Rai News* (Jaber Border) 18 October 2015 (translated from Arabic: http://www.alrai.com/article/743644.html)

¹³ J Reed, 'Closure of Syria' last border crossing hits Jordan economy', *Foreign Times* (Jaber) 8 April 2015

5.4 The workable dimension: participants and main players

Jordan's economic and political conditions as a middle-income income and secure refugee host state create an encouraging environment for multiple stakeholders to come together and contribute their respective advantages towards establishing a joint industrial area. Such an initiative would bring together foreign investors, local labour from the Jordanian and refugee pool, and Syrian industrial businesses that are in dire need for a safe and business-friendly environment to operate in. However, this win-win scenario can only be realized with the legislative support of Jordanian policy-makers and, equally important, that of European markets. The success of a potential joint industrial zone also hinges upon the foreign and domestic investments. If all these necessary and sufficient conditions are met, an optimal outcome for all stakeholders can be achieved.

5.4.1 The role of the Jordanian Government

In this context, the primary role of the Jordanian government would be to allocate and secure public land for the purpose of industrial development. As highlighted previously, Jordan already possesses the governmental capacity and legal framework required for utilizing public land for development purposes through its Development Areas Law of 2008. The Law is aimed at introducing and providing the legal foundation for empowering the private sector in playing a lead role in development through providing a wide array of incentives that relate to industrial projects:

- A low rate of 5% income tax on all taxable income from activities within the Area
- Full exemption from income tax on profits from exports
- Full exemption from sales tax on goods sold into (or within) the Development Area for use in economic activities
- Full exemption from import duties on all materials, instruments, machines, etc. to be used in establishing, constructing and equipping an enterprise in the Area
- Full exemption from social services tax on all income accrued within the Area or outside Jordan
- Full exemption from dividends tax on all income accrued within the Area or outside Jordan¹⁴

There are currently four Development Areas in Jordan. The model on which they are founded can be emulated for the purposes of this project. Jordan needs to bring together and harmonize its pre-existing free trade agreements with its domestic investment promotion framework to create an industrial free zone along the Jordanian-Syrian border, which employs both Jordanian and Syrian labour at pre-established ratios. This would enable Jordan to adopt what Jordan's Minister of Industry and Planning describes a "holistic approach that gets [Jordan] out of this crisis to reach a win-win situation that would help the Kingdom economically, create job opportunities and, at the same time, alleviate the refugee burden on the international community."¹⁵

5.4.2 The role of businesses and foreign investors

The success of this initiative also hinges upon investment flows. Investing in Jordan may be seen as a profitable opportunity to companies looking to position themselves prior to an anticipated reconstruction

¹⁴ ibid

¹⁵ K Malkawi, 'Integration of Syrian refugees in workforce hinges on new investments', *The Jordan Times* (Amman) 21 December 2015

boom in a post-conflict Syria, or for companies forced to leave Syria and that wish to resume operations. The following 'clusters' are likely to reap the highest returns from the proposed industrial zones:

• Manufacturing companies that identify a marketing opportunity in goods produced using 'safe' Syrian refugee and host community labour. Such opportunity is most likely to resonate with companies with active Corporate Social Responsibility programming (such as IKEA, UNIQLO, Benneton, and French Bel Group) and with markets in European countries where public dissatisfaction towards government refugee containment policies is rising.

• Energy, manufacturing and pharmaceutical companies forced to leave Syria that might view re-establishing in a similar but stable operating environment as strategically attractive. In 2010, a year before the outbreak of the crisis, there were nine public FTZs within Syria.¹⁶ By December 2010, the total capital invested in Syria's free zones reached around US\$ 833 million, with 74 foreign investment corporations operating with a total capital investment of US\$ 143 million.¹⁷

• Reconstruction industries seeking to secure a foothold in a post-conflict Syria. This particularly relates to semi-refined and refined raw materials industry, but may extend to research and development; the scale of Syria's reconstructive needs coupled with water and energy scarcity will call for new technologies.

5.4.3 The labour factor

Despite the plethora of challenges associated with Jordan's host state status, this also provides the country with the required manpower to support manufacturing endeavours. A principal reason for the underutilisation of some of Jordan's development areas is the disharmony between the labour force required and local labour market dynamics. The refugee population, which is concentrated in Mafraq, constitutes an immediately available, affordable and appropriately skilled set of workers. UNHCR registration data indicates at least 21,208 Syrian refugee builders and the ILO has identified that around 25 percent of refugees residing outside of camps are working in the Jordanian construction industry. Within the Syrian refugee community, there is also a range of transferable skillsets that could be attractive to light manufacturing and related industries, including electronics, mechanics, mechanised construction, handicrafts and carpentry.

One way Jordan can transform the refugee challenge into an opportunity is by starting to view potential refugee participation in the industrial zone as a way of closing pre-existing 'gaps' in the Jordanian labour pool and as an enabling factor that would make the proposed industrial zone more viable. That way, refugee skills and expertise is harnessed and contributes positively to private sector growth, with a view to creating both a self-sufficient population and effecting macroeconomic policy goals.

5.4.4 The role of foreign markets and international financial institutions

As part of a renegotiated aid package, entities like the European Union (EU) might offer more attractive free trade or market access agreements, increasing the appeal of Jordan to investors. Europe, who is battling its own refugee crisis, is an obvious stakeholder in this regard. Returning to the idea of Jordan providing a global public good by hosting refugees, there may be a strong market for the sale of 'safe' products –

¹⁶ USA International Business Publications, above n 9, 246

¹⁷ ibid

products that are manufactured by refugees, therefore providing them with a livelihood while subsequently sheltered from conflict. Effective marketing would capitalise on consumers' complex feelings towards refugees – their desire to assist, but at the same time not wanting to host them at the same rates as countries like Jordan.

The EU-Jordanian economic cooperation faces new realities in light of the protracted refugee inflow to the Kingdom. While the member states of the EU have extended commendable levels of humanitarian support, Jordan's ability to wither the crisis (and cater to refugees) depends on adopting innovative models for economic development that goes beyond aid dependency. Jordan cannot single-handedly adopt such a model and the EU as a strategic, long-term partner is crucial. Therefore, any current or future EU-Jordan cooperation must consider these new refugee realities.

Jordan already possesses the legal and diplomatic framework that enables both sides to support this initiative. The Association Agreement signed by the EU and Jordan that entered into force in 2002 allows Jordan to gain unfettered access, in the long-term, from the EU's Single Market established in 1992. The Single Market Act eliminated trade barriers, simplified existing rules and advocated free movement of people, goods, services and capital. In regards to industrial trade, Article 6 of the Agreement sets out custom exemptions and conditions in relation to Jordan's access to the EU as a Single Market:

Imports into the Community originating in Jordan shall be allowed free of customs duties and of any other charge having equivalent effect and free of quantitative restrictions and of any other measure having equivalent effect.¹⁸

Therefore, the Agreement has allowed the entry of Jordanian industrial exports into EU-member countries free of customs duties and other charges since the date the agreement entered into force. In addition, products manufactured in FTZs are subjected to certain exemptions. Goods produced in FTZs of any of the parties are eligible to benefit from the trade preferences under the Association Agreement on the strict condition that such goods comply with the rules of origin and can accordingly be granted a certificate of origin for export purposes.¹⁹ That said, as of May 2006, non-origin items used in the production of a good that meets the rules of origin of the Association Agreement are not eligible for customs duties refund or exemption from customs duties when exported or re-exported between the parties.²⁰ The rules of origin revolve around the 'nationality' of the produced goods and dictate that all materials used in the manufacturing of products must originate in Jordan.

The massive refugee influx, along with the protracted nature of the conflict, creates an urgency to upgrade certain dimensions of the existing cooperative frameworks. The existing Association Agreement focuses mostly on bilateral trade. While the free export of goods is a key component of economic integration, Jordan's economy is also in dire need of private investment flows. In order to support humanitarian/economic projects that generate employment opportunities for refugees and locals in host communities, companies must be incentivized to undertake these projects as part of their Corporate Social Responsibility (CSR) programs. A legal framework that facilitates these capital flows and protects all involved must be put in place to minimize the risks for participating companies, as well as incentive structures such as additional tax exemptions and subsidies extended by the EU.

¹⁸ The full text of the Agreement can be accessed here: http://mit.gov.jo/EN/The%20Center/ForeignTrade/Pages/jordan-eu-association-agreement.aspx

¹⁹ Article 31 of the Association Agreement

²⁰ Jordan Economic and Commerce Bureau, 'Jordan-EU Association Agreement' (2010)

">http://www.jordanecb.org/Public/English.aspx?Site_ID=1&Page_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=1&Page_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=1&Page_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=1&Page_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=1&Page_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=1&Page_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=1&Page_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=1&Page_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=1&Page_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=1&Page_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=1&Page_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=1&Page_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=1&Page_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=1&Page_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=1&Page_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=482&menu_id=32>">http://www.jordanecb.org/Public/English.aspx?Site_ID=482&menu_id=32>">http://www.jordanecb.org/Public

Furthermore, an Agreement on Conformity Assessment and Acceptance of industrial products (ACAA) has long been recommended and would enable Jordanian products from certain sectors to enter the EU market without additional technical controls. Jordan has chosen electrical products, toys, gas appliances and pressure equipment as priority sectors, but negotiations are yet to be launched. Any meaningful ACAA would also include manufacturing endeavours that harness the skillset of Syrian refugees. There is also an urgent need to expedite the adoption of a Deep and Comprehensive Free Trade Agreement and the setting up of the Special Fund pledged by the EU to enhance Jordan's manufacturing competiveness. Addressing the economic and social ramifications of the Syrian refugee crisis on Jordan requires immediate progress with negotiations and meeting pledges.

Beyond the EU, International financial institutions (IFI), such as the World Bank and the IMF, might also play a role through loans to offset manufacturing development or subsidise plant establishment costs. Accessing such loans and financial development assistance has long been problematic for Jordan due to its middleincome status. There is increasing recognition amongst donors, however, of pursuing links between development support for peace-building and post-conflict peace maintenance. It is empirically well established that conflicts reoccur at alarming regularity; around 40 percent of countries relapse into conflict within the first decade of post-conflict peace. Conflict economists have positively linked a lower risk of postconflict relapse to sustained economic recovery in the years immediately following a cessation of hostilities. Efforts to foster a post-conflict Syrian economy, including by supporting the establishment of industrial and manufacturing plants that could easily and quickly decant into Syria with a trained workforce of repatriating refugees, is thus likely to be seen by IFIs as strategic investments.

5.5 The Workable Dimension: Can Syrian Businesses Be Relocated?

Syrian and foreign companies that operated in Syria before the civil war require a safe haven for their operations. The nine industrial zones that existed in Syria in 2010 and prior to the outbreak of conflict was home to hundreds of companies worth at least US\$ 700 million in capital.²¹ These companies operate in addition to the ones that were located outside the free zones, indicating the investment potential this group of industries hold. If given sufficient incentives and allowed to employ refugee labour, then an industrial zone along the Jordanian-Syrian border would become a 'natural' destination for relocation.

The potential of these industries is further confirmed by the significant number of Syrian businesses that are already relocating to Jordan. In 2013, the Jordan Investment Board stated that in 2013 alone around US\$ 1 billion was invested by Syrians in Jordan's development sectors incentivised by the Board.²² Of the 500 Syrian companies established in Jordan since early 2012, 158 were industrial and employing around 2,157 workers²³.

At the same time, Irbid's Chamber of Industry reported that Jordan has only managed to attract 3 percent of the total Syrian industrial plants that have relocated abroad, with Turkey and Egypt attracting 70 percent and 25 percent of the relocating businesses respectively.²⁴ The lack of sufficient incentives and proper facilities was held as a main cause of this dismal figure. A failure to attract uprooted Syrian industries is a missed opportunity for Jordan, especially since some of these industries (such as food) export around 90

²¹ USA International Business Publications, above n 9, 246

²² O Karasapan, 'Jordan's Syrian Refugees', *Brookings* (2015) <http://www.brookings.edu/blogs/future-development/posts/2015/02/25-syrian-refugees-jordan-karasapan> at 7 April 2015

²³ K Al Wazani, The Socio-Economic Implications of Syrian Refugees in Jordan (2014), 98

²⁴ 'Irbid Chamber of Industry: lack of incentives repels Syrian manufacturing from Jordan', *Petra News* (Irbid) 9 September 2015. (source translated from Arabic: http://petra.gov.jo/Public_News/Nws_NewsDetails.aspx?Site_Id=2&lang=1&NewsID=194657&CatID=13)

percent of their products, which could help alleviate Jordan's negative trade balance.²⁵ An industrial zone that caters directly to the needs of Syrian industries searching for a safe haven and business-friendly environment can address the structural limitations that deterred Syrian industrialists from relocating to Jordan.

Another important category of industries that Jordan must cater to is Jordanian corporations who were previously operating within the Syrian side of the joint Syrian-Jordanian Industrial Zone. The losses were particularly high for these businesses and the inability of the Jordanian government to protect these industries because they are located on Syrian land has become a politically charged issues. The workers in the FTZ are currently on strike and threatening to go on a hunger strike if their expulsion from the FTZ is not addressed by the Jordanian government.²⁶ The most efficient and equitable course of action the Jordanian government can adopt is to provide an alternative zone within Jordan where these businesses can operate.

5.6 Further Considerations: The Security Dimension

Jordan has a proven track record at securing its borders, including in the highly volatile context of the Syria crisis. According to a very recent statement by Jordan's Prime Minister, Abdullah Ensour, Jordan has been the only state able to maintain the security of its borders with Syria, in spite of being a small country.²⁷ There has been much speculation about Jordan's plans to establish a humanitarian "buffer zone" in the southern Syria area and secure it with its military forces.²⁸ Jordan's proven capabilities in terms of protecting its border, shielding itself from security threats and extremism, despite the fact that violence in neighbouring Syria has been ongoing for more than four years, shows it possesses the power and ability to establish and secure an industrial "buffer zone" along the Jordanian-Syrian border. However, as is the case with the current Jordanian-Syrian Industrial Free Zone, the issue of territoriality is of paramount importance. The current disturbance of the FTZ's operations and the losses accumulated by investors are the results of the fact that two-thirds of the zone lies within Syria proper leaving the Jordanian military unable to protect the area and its nationals operating in it without violating international law pertaining to territorial integrity. If the economic activity in the FTZ that has been lost is relocated to a safe haven, it is important to ensure that it is moved to a location that the Jordanian military can protect and secure.

²⁵ ibid

²⁶ 'Jordan-Syria free trade zone: workers threaten hunger strike', *Jordan Zad News* (Amman) 4 January 2016 (translated from Arabic: http://www.jordanzad.com/index.php?page=article&id=224062)

²⁷ 'Jordan 'only country' to successfully protect its borders with Syria — PM', *The Jordan Times* (Amman) 3 January 2016

²⁸ S Jones, R Khalaf, and E Solomon, 'Jordan to set up buffer zone in southern Syria', Foreign Times (London/Beirut) 29 June 2015

Annex 6: Feasibility of Mainstreaming Additional Agricultural Products in Northern Jordan

This study analyzes the feasibility of mainstreamed additional agricultural production in Al-Ramtha, an area in the most northern part of Jordan. The study area is part of a larger plain known as the Hauran plateau, characterised by a balanced composition of clayey to clay-loamy soil along with moderate permeability. Rainfall is on average 250mm (2012/2013), reaching up to 300mm in some areas. The unique combination of soil texture, moderate temperatures and rainfall has historically supported a variety of agricultural products, especially field crops (wheat and barley). Analyses of Top Ten products for the past five years of production (2010–2014) reveals opportunities for expanding the production of vegetables, fruits, and grains for local and regional markets. In particular, tomato, cucumber, onion, and wheat are viable for expansion based on availability of markets throughout the year, lower demand for irrigation water, and amenability to low-skilled labor. The latter is pertinent to the viability of expanding production as part of a broader plan for improving the livelihoods prospects of Syrian refugees in Jordan, potentially leasing agricultural land to establish their development.

6.1 Background

Jordan has very limited arable land vis-a-vis its total area, amounting to less than 3.5 percent. Agricultural activities are concentrated in the Jordan Valley, which enjoys relatively fertile land and abundant water resources, with spring water mainly used for irrigation (other resources include stream and storage water). Other parts of the country could still be cultivable; most of these are spread out on hills in the northern, central, and southern regions and, to a lesser extent, the eastern plains.

This study focuses on Al-Ramtha; a large district within the Irbid Governorate in the far north of Jordan, close to its border with Syria (Fig. 1). Al-Ramtha's area is around 40km². In addition to Ramtha city, the district encompasses two smaller towns, Al-Torrah and Al-Shajarah. Al-Ramtha is considered one of the most important passageways to the other neighboring countries of Levant, and was the main gateway between Jordan and Syria for travelling and goods exchange prior to the outbreak of conflict in 2011.

Jordan has categorised Al-Ramtha as one of the largest poverty pockets in the Kingdom (19.2 percent, with an elevated rate of unemployment at 15 percent). Residents mainly work in agriculture and ranching. According to the Ministry of Labor, foreign labor in the agricultural sector has reached 91,821 people (81 percent) as of 2011.

6.1.1. Land characteristics

Al-Ramtha is an open steppe landscape; encompassing the lowest part of the Hauran volcanic plateau. The vast majority of soil coverage is characterised by a reddish-clay soil texture, with proportions of Clay Loam in some places (Fig. 2). Clay soils have fine textures and poor-to-no permeability properties, which allows less seepage and more retention of water and air, proving excellent composition of fertile topsoil. Historically, the study area was well known for its high productivity of field crops and vegetables; Hauran lands were once the largest producers of wheat, barley, and vineyards, as well as other grains, fruits, and vegetables in the Levant. As of 2012, Jordanians have cultivated nearly 288.8 thousand dunums for wheat and 551 thousand dunums for barley. In total, wheat and barley crops constitute only 8 percent of the total 10,566,000 dunums of agricultural land areas in Jordan (FAO, 2013).

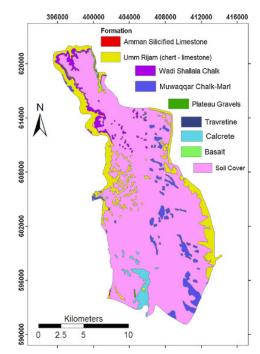
6.1.2 Water resources

Farming in the study area is highly dependent on rainfall. In 2012/2013, 254.2 mm annual average precipitation was recorded in the area according to the Jordanian Meteorological Department. However, the area could still benefit from available surface and river waters, especially water sources in the Yarmouk basin, shared with Syria, including Al-Wehda Dam (with a storage capacity of around 100mcm). Farmers also rely on digging artesian wells for irrigating crops. There is a good opportunity to use reclaimed water discharged from the nearby Ramtha wastewater treatment plant to be used for certain restricted crops.

Figure 1: Ramtha location map



Figure 2: Soil cover distribution



Source: Natural Resources Authority, 1997

The Jordanian Ministry of Agriculture (MOA) is the responsible entity for planning, developing, managing, and supporting agricultural activities, as well as ensuring the sector's nationwide quality and sustainability. The MOA has representatives in each one of the 12 governorates in order to directly engage with farmers and help enhance their livelihoods. Through Agriculture Law no. 13 (2015), the MOA is responsible for preserving arable lands and protecting against illegal practices and/or changing their use. The law also placed liabilities on cutting trees and

Forging New Strategies in Protracted Refugee Crises: Syrian Refugees and the Host State Economy

introducing new plant species without prior consent. All agriculture-related assistance should be hosted within MOA's regime, which, *inter-alia*, includes providing funds, new farming techniques, pesticides, fertilizers, and marketing opportunities. On the other hand, the Law of Agricultural Risk Management Fund has provided support to the local agricultural sector in case of loss of produce in unusual circumstances (weather, drought, pests, etc.); other kinds of support through this Fund include building institutional capacities in risk management and promoting less risky techniques.

In 2012, the Agricultural Fund provided monetary assistance amounting to 2,818,422 JOD for utilising arable lands, and another 7,410,384 JOD for financing material and tools, while a total of 18,669,446 JOD was dedicated for developing new water sources and upgrading existing ones. On average, the individual share for small projects was 5,100 JOD (source: Agricultural Credit Corporation).

6.1.3 Marketplace Analysis

The agricultural marketplace is diligently and continuously supervised and supported by MOA. As mentioned above, in 2014 the agricultural sector contributed to the national GDP by 3.8 percent (WBG, 2015), compared to 3.3 percent (by market price) in 2012 according to the Central Bank of Jordan. The MOA constructs monthly reports on export/import activities from/to regional and international markets, in an attempt to analyse trading activities in the sector.

Statistical analyses on external and internal markets for Jordanian agricultural products have shown that Arab neighbors have been the biggest purchasers of Jordanian agricultural products over the past five years (2010–2014). However, internal markets are still persistent and constitute a good domain for the local farmers. The following presents a quick view on the biggest markets and the best selling fruits, vegetables, and field crops, during the period 2010–2014.

6.1.4 External markets

The largest external consumers of Jordanian vegetables and fruits are shown in Figures 3 and 4 below.

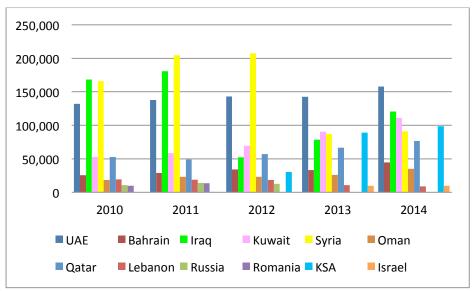


Figure 3: Distribution of external markets for vegetables (2010 – 2014)

Source: MOA – Import/export yearly reports (2010 – 2014)

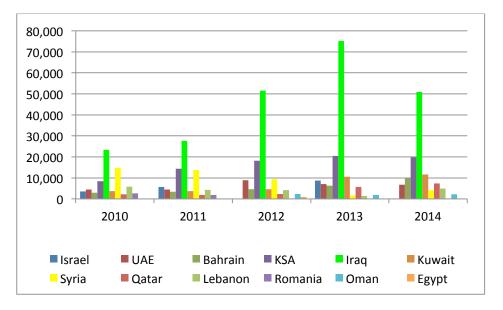
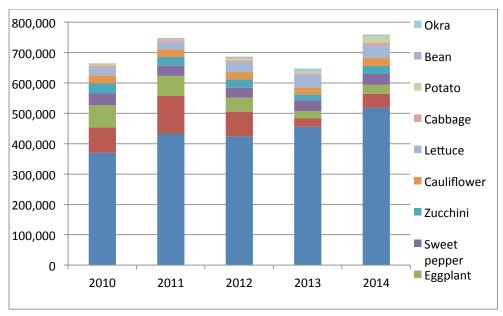


Figure 4: Distribution of external markets for fruits (2010 – 2014)

Distribution of vegetable and fruit exportation records for 2010–2014 are displayed in figures 5 and 6.





Source: MOA – Import/export yearly reports (2010 – 2014)

Source: MOA – Import/export yearly reports (2010 – 2014)

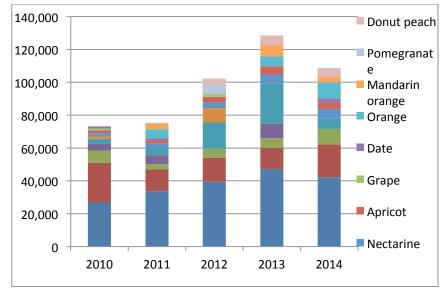


Figure 6: Distribution of exported fruits (2010 – 2014)

For 2015, monthly reports have shown the following quantities and percentages for the top ten varieties of vegetables and fruits (Table 1).

Туре	Export	%
Tomato	35,512	45.7
Watermelon	7,619	9.8
Paprika	5,274	6.8
Peach	4,616	5.9
Lettuce	4,101	5.3
Melon	3,979	5.1
Zucchini	3,919	5.0
Cauliflower	3,856	5.0
Eggplant	2,420	3.1
Potato	2,024	2.6
Other	4,428	5.7
Total	77,748	100.0

Table 1: Top ten fruits and vegetables - November 2015

6.1.5 Local Markets

The majority of agricultural production in Ramtha is traded at the Irbid central market, with few products sold in individual markets in Ramtha, Al-Shajara and Al-Torrah. The following tables (2 and 3) provide quantities (in tons) and prices (in JOD/kg) of top ten agricultural products that were traded at the central market in the period 2010–2014.

Source: MOA – Import/export yearly reports (2010 – 2014)

	2	010	201	1	2012	
	Varieties	Price (JD/kg)	Varieties	Price (JD/kg)	Varieties	Price (JD/kg)
1	Watermelon	0.14	Watermelon	0.16	Watermelon	0.17
2	Apple	0.79	Apple	0.80	Lemon	0.54
3	Lemon	524.434	Banana	0.62	Melon	0.23
4	Banana	Banana 615.839		0.43	Orange (Navel)	0.56
5	Melon	205.633	Orange (Navel)	0.57	Clementine	0.32
6	Orange (Navel)	518.071	Melon	0.21	Banana	0.62
7	Clementine	338.249	Clementine	0.33	Peach	0.52
8	Orange (Sweet)	504.675	Peach	0.43	Grape	0.61
9	Grape	615.838	Grape	0.56	Mandarin Orange	0.32
10	Peach	646.792	Drange (Red Present)	0.29	Orange (Red Present)	0.33
)13	201	14	
		Varieties	Price (JD/kg)	Varieties	Price (JD/kg)	
		Watermelon	0.18	Watermelon	0.22	
		Apple	0.83	Apple	0.95	
		Banana	0.66	Banana	0.74	
		Lemon	0.61	Orange (Navel)	0.55	
		Melon	0.26	Lemon	0.71	
		Orange (Navel)	0.57	Melon	0.23	
		Clementine	0.42	Clementine	0.41	
		Grape	0.69	Peach	0.67	
		Peach	0.51	Orange (Red Present)	0.41	
		Orange (Red Present)	0.40	Orange (Valencia)	0.44	

Table 2: Top ten fruits traded at the Central Market of Irbid - (2010 - 2014)

Table 3: Top ten vegetables traded at the Central Market of Irbid - (2010 - 2014)

Ton Ton	20	010	20)11		2012
Top Ten	Varieties	Price (JD/kg)	Varieties	Price (JD/kg)	Varieties	Price (JD/kg)
1	Tomato	0.25	Tomato	0.19	Tomato	0.22
2	Potato	0.34	Potato	0.31	Potato	0.28
3	Cucumber	0.29	Cucumber	0.26	Cucumber	0.28
4	Onion	0.28	Cabbage	0.15	Cabbage	0.13
5	Cabbage	0.14	Cauliflower	0.21	Cauliflower	0.27
6	Corchorus	0.15	Onion	0.26	Corchorus	0.21
7	Zucchini	0.31	Corchorus	0.17	Eggplant	0.25
8	Eggplant	0.22	Eggplant	0.20	Zucchini	0.33
9	Cauliflower	0.18	Zucchini	0.29	Parsley	0.12
10	Corn	0.23	Parsley	0.84	Corn	0.25

	2013		2014	ł
Varie	ties	Price (JD/kg)	Varieties	Price (JD/kg)
Toma	ato	0.25	Tomato	0.25
Pota	to	0.48	Potato	0.40
Cucun	nber	0.30	Cucumber	0.32
Cabba	age	0.14	Cabbage	0.16
Onic	on	0.34	Onion	0.34
Corche	orus	0.20	Cauliflower	0.30
Eggpl	ant	0.26	Eggplant	0.25
Zucch	nini	0.33	Corchorus	0.23
Caulifle	ower	0.25	Zucchini	0.37
Pars	ley	0.11	Parsley	0.13

6.1.6 Grain markets

Jordan has recently become highly dependent on imported wheat, quantities of which reached a total of 1,350 (1000 Metric Tons) according to the market year 2014. Wheat importation started at 761 (1000 MT) in 1994, recently reaching 1,350 (1000 MT) in 2014, illustrating a significant increase in Jordan's reliance on external markets for wheat (source: United States Department of Agriculture).

On a local level, Ramtha was previously well known for its production of wheat and barley. In 2012, plain areas cultivated for wheat and barley were estimated to make up 11,950 dunums and 8,450 dunums respectively. Production of wheat and barley in the same year stood at 1,792.5 tons and 1,690 tons, respectively. See Table 4 for other varieties as well (expressed in quantities and total areas).

	Summer Vegetables (rain fed) – census 2012													
Onion: 225 dunum,	Watermelon: 520 dunum	Melon: 495 dunum, 618.8	American cucumber: 285	0kra: 220 dunum, 88 te										
157.5 ton)	650 ton	ton	dunum, 1140 ton	OKI a. 220 uununi, 88 u										
	Summer Ve													
Eggplant: 120 dunum,	Zucchini: 600 dunum,	Sweet pepper: 70 dunum,	Bean: 80 dunum, 120 ton	Watermelon: 80 dunur										
360 ton	1200 ton	105 ton	bean: oo uunun, 120 ton	40 ton										
Melon: 60 dunum. 36 to	Potato: 1800 dunum, 36	Onion: 60 dunum,												
	ton	120 ton	-	-										
		Winter cereals (rain-f	ed)											
Wheat: 11950 dunum,	Barley: 8450 dunum, 169	Other varieties: 1700												
1792.5 ton	ton	dunum, 85 ton	-	-										
		Fruit trees												
Apple: 70 dunum	Pear: 50 dunum, 75 ton	Pomegranate: 50 dunum, 2	-	_										
rr		ton												

Table 4: Winter cereals and summer vegetables and fruits in Ramtha - 2012

Cereal crops in Ramtha are mostly rain-fed, which means that the capacity of growing and producing cereals is strongly correlated with rain intensity. Climate change and shifting in cultivation practices have impacted production. Additionally, wheat and barley fields are privately owned lands. Tenure is fragmented and land ownership disputed, which has led to land being left without the necessary investment in some cases. This has affected cereal production in the area and caused a sharp decline in wheat and barley production in the last two decades.

6.1.7 Possibilities for increasing yield

In terms of biggest production of vegetables and fruits in Jordan, tomatoes and cucumbers rank among the highest around the year. Tomatoes, on average, demand a water quantity of about 400mm throughout the growing cycle (usually 90–120 days). While tomatoes can easily be transplanted in open fields, cucumbers need warmth and special arrangements, such as greenhouses, rolling cover crop mulches and laying down dipping irrigation systems in order to provide 500mm of water during a typical lifecycle of 100 days. Both tomatoes and cucumbers require well ventilated, clayey and slightly loamy-acidic soils, in addition to sufficient sunlight, warmth and surface drainage. Ramtha's climate provides all of the above. Other product varieties could also be considered, when thinking of less expensive cultivation techniques, and taking into consideration demands for irrigation water. Onion is intensively grown in the study area as rain-fed produce: an ideal choice for less humid environments given that a good drainage arrangement is provided during wet seasons to prevent mold formation. Those varieties are comparatively simple to grow and do not require special expertise.

Increasing cultivation opportunities for tomatoes, cucumbers, onions, and wheat in Ramtha could support the livelihoods of newcomers to the area. Non-Jordanians are not allowed, under the relevant laws and regulations, to purchase agricultural land. However, they can benefit from leasing lands to undertake an agricultural activity. The Ministry of Agriculture, via its small loans fund, can provide financial assistance towards such enterprises. This kind

of support could be extended to include, for instance, necessary cultivation techniques, organic and artificial fertilizers, plastic houses, dripping irrigation, pesticides, etc. In summary, there is sufficient evidence to suggest that the following types of produce could be amenable to expanded production in Ramtha: tomatoes, cucumbers, onions, and wheat.

Tomatoes: Bestselling around the year, both local and regional markets are available; however, regional markets are the biggest domain for tomato (specifically Iraq and KSA); appropriate soil composition and permeability; easy to grow in open areas and does not require sophisticated housing; can be irrigated by rain and supplemented by other sources; and most importantly local experience is abundant.

Cucumbers: Bestselling around the year; local and regional markets are strong enough to accommodate more production; comparing to tomato, cucumber still needs plastic houses and soil covering to preserve warmth and humidity, and to protect against undesirable herbaceous growing. But a good investment after all due to its big markets.

Onions: Require less advanced technologies, they can withstand dry conditions, and consumes less water than other crop fields; onions also have very good local and regional markets. However, transplanting onions requires a special attention in that sufficient drainage and soil ventilation are essential.

Wheat: a worth-to-expand field crop; it plays a significant role in strengthening national economy; increasing Wheat production locally would decrease reliance on external sources; rainfall is fair enough to support water needs in Ramtha, which could also be supplemented with other traditional sources; additionally, Wheat needs less follow up during growing seasons comparing to other options.

6.2 Requirements

In order to increase existing levels of agricultural activity, the following areas would need to be satisfied before moving towards the implementation stages of new projects:

6.2.1 Capacity

This includes ensuring availability of land and investment. In a refugee context, lands of an agricultural value at the outskirt of the town could be leased to new investors, under the stewardship of MOA and some liaison with local councils (municipalities, farmers association, etc.). However, land selection should avoid environmentally fragile areas and those of ecological, heritable, and/or cultural values. Land allocations should be commensurate with numbers interested in this development. Funds can be secured through national and/or international mechanisms (for instance, Agricultural Credit Corporation).

6.2.2 Legality

This generally implies obtaining clearance and approving land tenure from the relevant authorities, finalising agreements, payments, and final signature, as well as following up with legal matters throughout the contract lifetime.

6.2.3 Logistics

This kind of assistance may include facilitating communication channels and providing temporary means for initial setup and tilling, equipment, materials, etc.

6.2.4 Resources

Expansion initiatives such as the one under discussion here are generally fostered by governmental and nongovernmental agencies working in cooperation. It is imperative that sufficient resources are made available for the sustainability of expansion initiatives. Resources in this case may include:

6.2.5 Water

Although the above suggested products are less dependent on irrigation water, it would be important to plan for enough quantities to restore dry conditions. The area where this development is taking place mainly depends on artesian wells for irrigation. However, other sources could be used, like storage/dam water (Al-Wehdah dam), stream water (Yarmouk basin), and reclaimed water (Al-Ramtha WWTP);

• **Manpower:** Land investors should be the principal workers in their field, including other capable members of their family, yet other paid labor could also be sought from local markets, but should be kept minimal. This is to achieve the highest engagement of and return for people who are in need, as well as to minimise additional costs;

• **The know-how:** Applying best farming practices in line with available funds. It includes, *inter-alia*, clearing land, tilling, seeding, pumping water and irrigating, fertilizing, combating pests, harvesting rain, harvesting crops, and restoring land;

• **Equipment and material:** financial assistance should be set aside to allow for agricultural inputs, including purchasing equipment and material. This would comprise all possible cultivating, combating, and harvesting related tools, in particular: fertilizers, pesticides, herbicides, mulches, greenhouses, pumps, dripping systems, etc.

• **Advisory:** Planning is important at the very onset of the initiative, which could be transferred to nonlocal investors by local expertise. Planning should be guided towards lowest impact crop production systems that would ultimately minimise environmental risks. Continuous supervision will be needed throughout the project lifecycle. This role could be attached to both the provincial departments of MOA as well as to the Farmers Association. Technical information during implementation could include conveying meteorological data (frost/heat waves, floods, dust, etc.), pest and insect risks, as well as promoting new technologies, issuing prices/market bulletins and various advices on restoring land capacity.

6.3 Strengths

- Availability of a good fertile soil in the study area
- Relatively higher tolerance to drought conditions
- Comparatively high and constant demands in both external and local markets
- Less expensive setting and cultivation techniques, especially for tomatoes, onions, and wheat; and
- Innovative resource for improving livelihoods

6.4 Weaknesses

- Lack of capital investment
- Operational costs of finding alternative water sources, like digging artesian wells, pumping, and networking
- Insufficient knowledge of best agricultural practices and marketing specific to the area
- Public dissatisfaction over integrating non-Jordanians in the sector
- Less access to agricultural guidance
- Difficulties in leasing agricultural lands

• Logistical difficulties

6.5 Opportunities

- Enhancing livelihoods of non-Jordanian locals, especially involuntary displaced people;
- Reducing pressure on other economic sectors;
- Enhanced productivity of land; and
- Increased agricultural contribution to national GDP.

6.6. Threats/ Risks

- Inadequate control of local pest infestation,
- Trans-boundary crop diseases and pest (e.g. wheat rust, and tomato leaf miner),
- Unexpected severe conditions (flooding events, extreme temperatures, pest invasion, etc.),
- Damage to soil and excessive loss of land nutrients,
- Non-sustained land tenure,
- Swamped markets leading to demand reduction and prices instability, which eventually will have adverse impacts on food/human security.

6.7 Environmental Impacts

As described above, the new interventions to the agricultural sector in Ramtha are expected to be greatly beneficial to the local people (both indigenous and newcomers) at the socio-economic scale, and would also maintain coherence in the overall community. However, potential impacts on the physical and biological environment should be taken into account, including:

• Clearing natural vegetation: loss of natural vegetation and habitat, loss of useful local natural resources, exposure of soil to rain and wind, direct drying of soils by wind and sunlight, exposure of river banks to erosion. Impacts include loss of biodiversity, deterioration of water-catchment capacity, change in micro-climate, increased vulnerability of soil to erosion, reduced soil-water retention capacity;

• Cultivating and weeding crops: this could result in deterioration of soil structure, loss of natural vegetation, loss of some plant species, exposure of soils to rain and wind, direct drying of soils by wind and sunlight. Impacts include loss of biodiversity, increased vulnerability of soil to erosion, reduced soil-water retention capacity;

• Adding nutrients e.g. manure and fertilizers: this would result in run-off or leaching of nutrients from soil. Impacts include pollution of water resources;

• Irrigating crops: this could result in changing soil water dynamics, unsustainable demand for water to apply to crops. Impacts include increasing the salinity of soil, drying of water courses and surface water;

• Controlling pests: using pesticides could lead to destruction of pests and other, possibly beneficial, organisms. Impacts include pollution of water resources, poisoning of wildlife and imbalance in local ecology, buildup of toxic materials in soils, loss of beneficial organisms, and pest resistance to pesticides in general;

• Harvesting crops: this would result in removal of nutrients soil-plant-soil cycle. Impacts include degradation of soils, increased vulnerability of soils to erosion, and decrease in soil fertility.

6.8 Conclusion

Increased agricultural production in Ramtha is viable. Agricultural development in this area is promising for enhancing the national economy as well as for integrating non-Jordanians and providing them with livelihoods support.

Tomatoes, cucumbers, onions and wheat comprise one set of proposed products for mainstreaming, because of their high levels of year-round sales, availability of local and regional markets, and comparatively less intensive water and technology demands compared to other products being grown in the region. Potential environmental and local socio-economic impacts, however, should be considered and addressed. Governmental agencies and humanitarian actors would need to act as lead players in supporting and sustaining any initiatives based on these recommendations.

Annex 7: Vegetables and Fruits Exportation from 2010 to 2014

Tables 1 & 2: Year 2010: Distribution of vegetables and fruits by quantities and receiving countries. Quantities are in Tones.

Type vs. Country	UAE	Bahrain	Iraq	Kuwait	Syria	Oman	Qatar	Lebanon	Russia	Romania	Other	Total
Tomato	85894.6	15249.5	108686.0	32613.8	68767.9	12020.0	32104.2	7190.5	566.9	3375.3	3386.4	369855.1
Cucumber	3088.7	1779.1	29272.0	524.1	27430.0	302.0	1650.3	2768.5	9868.7	1968.8	4761.0	83413.2
Eggplant	1453.2	779.0	22993.0	2140.0	38688.1	92.0	2286.9	4311.6	115.1	310.5	259.3	73428.7
Sweet pepper	6635.2	2212.2	4865.0	4547.1	4124.4	1193.0	4709.2	1543.6	248.3	4273.3	4579.8	38931.1
Zucchini	6095.7	1284.4	206.0	2476.3	17628.0	1047.0	2219.5	1643.9	21.6	-	391.8	33014.2
Cauliflower	15314.0	1491.0	349.5	4137.9	6.1	1789.0	3576.0	39.9	-	1.3	3.2	26707.9
Lettuce	10088.8	1492.7	8.0	4307.3	1356.0	1397.0	3961.9	49.0	-	-	112.5	22773.2
Cabbage	2977.2	842.0	35.0	1592.0	220.0	166.0	1731.1	5.9	-	-	25.0	7594.2
Potato	66.0	93.0	358.0	203.0	4027.2	15.0	125.0	86.9	-	-	7.9	4982.0
Bean	212.2	254.0	42.0	270.0	938.0	111.0	551.0	1017.7	-	10.9	82.7	3489.5
Other	105.9	16.7	1524.6	136.5	2762.7	6.0	23.0	592.2	0.0	42.4	2685.0	7895.0
Total	131931.5	25493.6	168339.1	52948.0	165948.4	18138.0	52938.1	19249.7	10820.5	9982.5	16294.7	672084.1

Type vs. Country	Israel	UAE	Bahrain	KSA	Iraq	Kuwait	Syria	Qatar	Lebanon	Romania	Other	Total
Peach	-	834.0	392.9	2988.0	13820.0	363.6	7660.4	255.3	28.0	-	529.5	26871.7
Watermelon	-	1595.2	779.0	6.0	3169.3	1470.0	6030.5	432.0	4281.4	2681.8	3733.5	24178.6
Melon	-	151.9	164.0	-	5129.5	220.0	671.1	227.0	761.8	0.7	33.2	7359.2
Olive	3441.1	10.0	4.0	16.0	-	1.0	-	22.0	-	-	567.5	4061.6
Clementine	-	87.0	239.0	2235.0	87.0	231.0	-	131.0	-	-	45.0	3055.0
Lemon	-	231.0	368.0	370.0	15.0	472.0	-	329.0	-	-	88.3	1873.3
Nectarine	-	347.0	165.0	856.0	5.0	145.2	-	93.0	-	-	174.6	1785.7
Apricot	-	181.8	123.9	552.6	111.0	82.4	170.9	82.3	1.3	-	92.4	1398.7
Grape	-	286.0	111.0	81.0	-	329.0	23.9	141.0	11.0	-	324.6	1329.3
Date	-	73.9	37.2	38.0	-	51.7	32.0	65.1	700.7	21.8	217.4	1215.9
Other	50.0	597.5	500.7	1355.6	1023.0	319.9	194.6	421.4	15.6	0.0	264.3	4742.6
Total	3491.1	4395.3	2884.5	8498.2	23359.8	3685.8	14783.4	2199.2	5799.7	2704.4	6070.3	77871.6

Type vs. Country	Romania	Russia	Lebanon	Oman	Bahrain	Qatar	Kuwait	UAE	Iraq	Syria	Other	Total
Tomato	7088.4	484.8	10073.2	16484.0	17502.0	32200.3	37925.3	94314.0	88115.8	122401.0	7261.2	433849.9
Cucumber	1917.6	12655.2	2519.2	319.0	2010.0	1400.5	876.3	2268.5	67291.1	25662.9	124095.6	124095.6
Eggplant	125.9	79.5	2327.1	138.0	1001.0	1737.4	2184.0	1261.0	20086.5	35561.6	65164.1	65164.1
Sweet pepper	4475.0	982.4	1061.1	1360.0	1999.5	3666.1	4176.2	5472.0	3654.0	2629.0	33866.6	33866.6
Zucchini	73.3	8.9	1750.9	1037.0	1397.1	1921.6	3144.8	5447.5	24.0	12907.3	28753.0	28753.0
Cauliflower	-	-	3.4	2194.0	1755.0	3409.0	4245.0	13701.0	28.0	5.7	25345.7	25345.7
Lettuce	-	0.4	137.9	1381.0	1620.5	3012.8	3818.1	12093.2	2.1	741.0	22808.9	22808.9
Cabbage	-	-	42.1	190.0	954.0	1063.0	1626.0	2707.0	3.0	3.0	6610.5	6610.5
Bean	3.0	-	664.5	125.0	436.0	508.0	388.0	313.0	15.0	1028.2	3515.7	3515.7
Potato	4.1	-	36.4	42.0	45.0	46.0	187.0	77.0	669.0	2302.4	3408.8	3408.8
Other	1.0	0.4	306.2	8.0	14.4	24.6	49.2	117.4	1112.0	1674.1	3767.7	7075.1
Total	13688.2	14211.5	18921.9	23278.0	28734.5	48989.2	58619.9	137771.6	181000.4	204916.1	24362.7	14211.5

Tables 3 & 4: Year 2011: Distribution of vegetables and fruits by quantities and receiving countries. Quantities are in (Ton)

Type vs. Country	Iraq	KSA	Syria	Israel	UAE	Lebanon	Kuwait	Bahrain	Romania	Qatar	Other	Total
Peach	17299.0	5868.5	7517.2	-	1274.2	32.6	694.3	609.9	-	289.7	1323.7	33585.4
Watermelon	106.0	22.0	5485.8	115.0	554.0	2720.4	1040.0	968.0	1921.4	517.0	2812.0	13449.6
Olive	-	-	-	5435.0	4.0	-	-	-	-	3.1	19.0	5442.1
Orange	5036.0	229.1	3.0	-	8.0	-	11.0	17.0	2.0	7.0	0.0	5313.1
Clementine	3.7	3318.0	1.3	-	183.0	-	330.0	252.0	-	72.0	75.0	4160.0
Mandarin orange	3756.0	41.0	-	-	-	-	15.0	22.0	-	3.0	0.0	3837.0
Melon	979.0	15.0	453.7	-	372.8	725.2	240.1	252.0	23.9	199.0	422.6	3260.5
Nectarine	-	1616.0	-	-	635.4	-	335.4	289.0	-	156.0	296.9	3031.8
Apricot	175.0	736.5	137.2	-	283.7	9.6	178.8	163.9	-	65.4	115.9	1749.9
Date	-	58.0	89.0	9.0	221.5	786.2	120.0	76.4	-	29.0	407.0	1389.1
Other	292.0	2461.0	74.3	83.0	954.8	47.0	767.7	693.1	0.6	511.9	730.7	6616.0
Total	27646.7	14365.0	13761.3	5642.0	4491.4	4320.9	3732.2	3343.4	1947.9	1853.1	6202.7	87306.5

Type vs. Country	Syria	UAE	Kuwait	Qatar	Iraq	Bahrain	KSA	Oman	Lebanon	Russia	0 Other	Total
Tomato	119483.3	95409.2	45797.3	38392.5	40976.9	22415.0	27209.0	15764.0	8165.0	437.7	10064.3	424114.2
Cucumber	33692.4	1734.0	1135.1	1230.0	8834.9	1862.4	112.0	153.0	2588.7	11107.	8 18595.3	81045.7
Eggplant	34018.5	1153.2	1971.0	1231.0	1551.9	827.0	13.0	140.0	3027.6	258.8	2148.5	46340.4
Sweet pepper	2737.3	5828.7	4801.4	4249.7	79.1	2280.5	651.0	1294.0	1448.8	927.8	8753.6	33051.8
Lettuce	17.1	18590.1	4056.2	3677.2	-	1286.8	1261.0	1869.0	388.8	0.2	6.2	31152.7
Zucchini	11498.6	5131.8	3326.5	1893.1	348.2	1310.8	39.0	1070.0	1743.1	0.5	372.2	26733.8
Cauliflower	37.2	11282.0	4940.0	3504.0	-	2145.0	724.0	2349.0	-	-	3.5	24984.7
Potato	3266.2	1318.0	1252.0	1124.0	20.0	626.0	51.0	225.0	2.4	-	87.0	7971.6
Cabbage	1245.3	2111.0	1641.0	1247.4	-	858.0	54.0	169.0	48.3	-	14.0	7388.0
Bean	879.1	451.2	448.0	416.0	9.2	327.0	7.0	103.0	850.0	-	28.5	3519.0
Other	755.6	270.5	74.7	57.6	526.1	31.9	0.0	6.0	231.2	5.7	3491.6	5450.7
Total	207630.6	143279.7	69443.0	57022.5	52346.2	33970.5	30121.0	23142.0	18494.0	12738.	5 43564.7	691752.7
Type vs. Cou	ntry Iraq	KSA	Syria	UAE	Kuwait	Bahrain	Lebanon	Oman	Qatar 1	Egypt ()ther To	tal
Peach	2427				635.7	503.0	-	430.7	-			407.0
Clementine	1310			87.0	200.0	137.0		98.0	76.0 -			027.0

Tables 5 & 6: Year 2012: Distribution of vegetables and fruits by quantities and receiving countries. Quantities are in (Ton)

Clementine	13105.0	2324.0	-	87.0	200.0	137.0	-	98.0	76.0	-	0.0	16027.0
Watermelon	-	16.0	5351.9	1853.0	1599.0	1441.0	2627.6	90.0	364.0	-	1405.5	14748.0
Lemon	7289.0	510.0	9.1	176.0	365.0	211.0	-	116.0	181.0	-	0.0	8857.1
Pomegranate	5382.0	8.0	-	6.0	44.0	44.0	-	31.0	13.0	-	0.4	5528.4
Melon	-	372.0	810.5	1250.8	484.2	388.6	611.3	895.0	394.3	2.0	93.1	5301.8
Donut peach	-	2684.0	-	460.8	206.0	225.0	-	181.0	138.0	-	0.0	3894.8
Apricot	-	2092.6	298.2	396.0	225.9	206.0	1.9	188.7	124.3	-	1.1	3534.7
Nectarine	-	1967.0	-	445.2	247.0	240.0	-	182.0	129.0	-	0.0	3210.2
Grape	-	557.0	-	615.2	239.4	97.0	-	131.0	60.0	-	10.1	1709.6
Other	1492.9	738.2	184.9	566.2	444.3	1115.1	859.6	60.2	439.9	217.8	979.2	7098.3
Total	51544.9	18128.2	9308.4	8859.9	4690.5	4607.7	4100.4	2403.6	2263.1	918.3	2491.9	109316.9

Type vs. Country	UAE	Iraq	Kuwait	KSA	Syria	Qatar	Bahrain	Oman	Israel	Lebanon	Other	Total
Tomato	113368.0	82271.0	75613.2	83024.0	47717.9	52973.0	31151.0	24646.0	3226.0	3308.6	72.0	517370.7
Cucumber	804.8	18626.0	1411.3	402.7	12792.7	1430.9	1425.2	255.0	5983.0	1699.3	1642.2	46473.0
Lettuce	18932.8	21.0	6237.7	3751.5	-	4007.3	1807.8	2889.0	-	2.4	0.0	37649.5
Sweet pepper	5949.0	690.0	6986.0	7872.0	1041.6	4782.7	2446.0	1580.0	140.0	855.8	3873.6	36216.7
Eggplant	563.2	5051.0	1646.2	62.0	19451.0	900.3	535.0	138.0	190.0	863.4	41.2	29441.2
Cauliflower	8301.0	103.0	7994.0	1007.0	203.8	5045.0	2772.0	2192.0	-	18.3	10.0	27646.1
Zucchini	5375.3	458.0	5247.0	519.3	7094.0	2706.2	1687.0	1364.0	200.0	1200.6	542.3	26393.7
Potato	1306.0	13563.0	1537.0	1437.0	1985.0	1659.0	1087.0	1071.0	-	23.0	0.0	23668.0
Cabbage	2582.0	30.0	3373.0	519.0	2.5	2125.0	1283.0	575.0	-	1.3	2.0	10492.8
Bean	563.0	-	912.0	152.0	346.4	776.6	519.0	330.0	-	572.4	4.6	4176.0
Other	73.6	0.0	68.4	9.7	253.7	23.3	26.9	9.0	40.0	226.3	3176.0	3906.8
Total	157818.7	120813.0	111025.9	98756.2	90888.6	76429.1	44739.9	35049.0	9779.0	8771.2	9363.9	763434.6

Tables 7 & 8: Year 2013: Distribution of vegetables and fruits by quantities and receiving countries. Quantities are in (Ton)

Type vs. Country	Iraq	KSA	Kuwait	Bahrain	Qatar	UAE	Lebanon	Syria	Oman	Other	Total
Peach	30697.0	5503.5	950.7	752.9	454.2	1069.5	-	2368.3	480.7	0.0	42276.7
Watermelon	-	163.0	5136.0	5801.0	4234.6	614.6	2527.8	1186.3	125.0	87.0	19875.3
Orange	9273.0	128.3	59.0	64.0	30.0	23.3	-	-	12.0	0.0	9589.7
Melon	1117.0	913.0	1981.2	977.0	1050.4	2144.2	730.2	209.6	408.0	1.3	9531.8
Clementine	3797.0	1400.0	460.0	308.0	145.0	128.0	-	-	102.0	0.0	6340.0
Nectarine	-	3284.2	602.0	430.0	284.0	520.0	-	-	293.0	290.0	5703.2
Donut peach	-	4055.0	421.0	290.9	113.0	317.4	-	-	145.0	0.0	5342.2
Apricot	-	2068.0	420.5	401.2	217.4	350.2	3.8	294.3	260.7	18.3	4034.3
Mandarin orange	3256.0	29.0	52.0	17.0	14.0	1.0	-	-	2.0	0.0	3371.0
Date	-	78.5	170.0	87.0	109.0	194.3	1608.7	23.5	19.0	86.6	2466.5
Other	2826.0	2163.5	1353.7	642.2	732.7	1388.1	50.7	17.7	321.3	821.5	12366.3
Total	50966.0	19786.0	11606.0	9771.1	7384.2	6750.6	4921.1	4099.6	2168.7	1304.6	120896.9

Type vs. Country	ι	JAE	Kuwait	KSA	Syria	Iraq	Qatar	Bahrain	Oman	Leban	on Israe	el Othe	er Total
Tomato	97	671.7	59216.8	78833.0	56018.8	72665.0	44884.0	21503.0	18875.0	3995.	4 677.0	0 836.	5 455176.2
Lettuce	19	239.4	7017.3	3583.5	-	17.0	4341.1	2316.6	1977.8	5.7	-	0.3	38498.8
Sweet pepper	55	573.6	6015.4	5488.0	1162.5	133.0	4703.7	2079.2	1211.0	1257.	1 1121.	.0 6166	.2 34910.7
Cucumber	7	12.5	849.1	90.0	8264.9	3558.0	1036.6	1500.0	172.0	1523.	0 6998.	.0 2869	.5 27573.6
Eggplant	6	99.5	1924.0	31.0	17686.5	514.0	1104.0	569.0	69.0	1399.	7 454.0	0 212.	7 24663.4
Cauliflower	90	047.0	6120.0	651.0	2.4	7.0	3967.0	1897.0	1916.0	-	-	0.0	23607.4
Zucchini	54	135.4	4550.9	207.0	3410.4	63.0	2395.5	1265.0	1071.8	905.5	5 19.0	404.	
Okra		1.6	5.0	-	0.3	-	7.9	9.0	1.5	0.5	-	8289	.9 8315.8
Cabbage		359.0	2674.1	206.0	35.0	-	1451.0	790.0	273.0	5.0	-	4.3	
Potato		390.0	1407.0	37.0	-	1462.0	2155.0	833.0	196.0	-	-	0.0	
Other		44.6	842.2	118.3	502.3	0.0	552.8	455.0	223.0	1427.	3 402.0		
Total	142	2674.3	90621.9	89244.8	87083.1	78419.0	66598.6	33217.0	25986.1	10519	.2 9671.	.0 19454	4.4653489.4
Type vs. Count	try	Iraq	KSA	Kuwa	it Israel	UAE	Bahrain	Qatar	Oman	Syria	Lebanon	Other	Total
Peach		36913.	0 5684.	1 894.8	-	1028.9	566.9	405.4	406.6	913.7	-	526.9	47340.2
Clementine		22084.				85.0	160.0	116.0	78.0	-	-	0.0	24773.0
Watermelor	ı	24.0	189.0	4781.) -	1017.0	3124.0	2888.0	137.0	429.0	-	90.0	12679.0
Olive		-	-	1.0	8777.0	-	-	-	-	-	-	0.8	8778.8
Mandarin oran	ıge	6733.0	5.0	35.0	-	5.0	-	2.0	-	-	-	0.0	6780.0
Orange		5820.0	168.4	33.0	-	15.0	20.0	6.1	4.0	-	-	0.1	6066.6
Melon		316.0	366.0	1623.	9 -	1583.0	647.0	987.0	322.5	-	113.3	3.4	5962.1
Donut peach	1	-	4051.	0 563.0	-	597.0	310.0	161.0	152.0	-	-	0.0	5834.0
Nectarine		-	3171.	0 575.0	-	596.1	411.0	204.6	236.0	-	-	0.0	5193.7
Apricot		-	3025.	9 507.8	-	539.8	353.5	204.7	226.3	153.3	8.2	0.0	5019.5
Other		3246.0	1915.	8 1242.	2 0.0	1574.5	773.4	777.9	248.2	81.3	1298.3	731.1	11888.8
Total		75136.0	0 20511	.2 10571	7 8777.0	7041.3	6365.8	5752.8	1810.6	1577.3	1419.8	1352.2	140315.7

Tables 9 & 10: Year 2014: Distribution of vegetables and fruits by quantities and receiving countries. Quantities are in (Ton)

Country		Vegetables (ton)	Fruits (ton)	Total (ton)	%		
Arab countries	KSA	15,023	3,724	18,747	24.1		
	UAE	15,701	2,562	18,264	23.5		
	Kuwait	8,684	3,810	12,494	16.1		
	Qatar	7,998	1,945	9,943	12.8		
	Bahrain	4,159	2,311	6,470	8.3		
	Iraq	2,603	3,591	6,194	8.0		
	Oman	3,810	453	4,263	5.5		
	Sub-total	I		76,375	98.2		
Non-Arab countri	ies	1,157	215	1,373	1.8		
Grand Total		1		77,748	100.00		

Table 11: Distribution of exported vegetables and fruits in May 2015 by countries

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