



THE HASHEMITE KINGDOM OF JORDAN
MINISTRY OF PLANNING AND INTERNATIONAL COOPERATION



NEEDS ASSESSMENT REVIEW OF THE IMPACT OF THE SYRIAN CRISIS ON JORDAN

Executive Summary

November 2013



UNITED NATIONS



HOST COMMUNITY SUPPORT PLATFORM



EXECUTIVE SUMMARY

The negative impact of the Syrian crisis on Jordan has manifested itself in three different but interrelated manners:

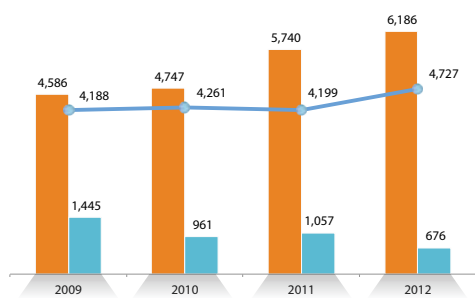
- Increased pressure on public finance, worsened trade deficit and losses to key economic sectors;
- Exacerbated vulnerabilities for the poorest segments of the Jordanian population;
- Deterioration of access to quality basic services in the most affected governorates.

■ Macroeconomic and fiscal implications of the Syrian crisis

The Government of Jordan has incurred over USD 251 million in additional expenditures during 2012, according to the Ministry of Planning and International Cooperation (MOPIC), to provide services and basic needs in the form of subsidies and current expenditures for Syrians in cities and communities. This was only partially offset by donor contributions and grants. For 2013, according to MOPIC and Ministry of Finance estimates, additional expenditures could reach up to USD 518 million, including USD 289 million for current expenditures and USD 229 million in subsidy costs (USD 133 million for electricity, USD 60 million for flour, USD 17 million for household gas, and USD 19 million for water). This increased spending is expected to have contributed to the budget deficit upsurge noted between 2010 and 2013. In addition, it has also partially offset Government efforts to rein in deficit spending.

These additional costs have forced the Government to further shift expenditures from capital investment to current expenditures (between 2009 and 2012, capital expenditures decreased by JOD 286

Figure 2: Domestic Revenues, Current and Capital Expenditures, JOD Millions

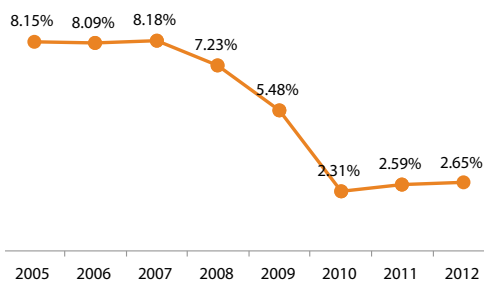


— Current Expenditure, JOD Millions — Capital Expenditure, JOD Millions — Domestic Revenue, JOD Millions

million as current expenditures expanded) and have contributed to further worsening the conditions of the already stressed infrastructure while expanding the public debt.

The deterioration of Jordan's trade balance is a direct consequence of the

Figure 1 Real GDP Growth Rate (%), 2005-2012

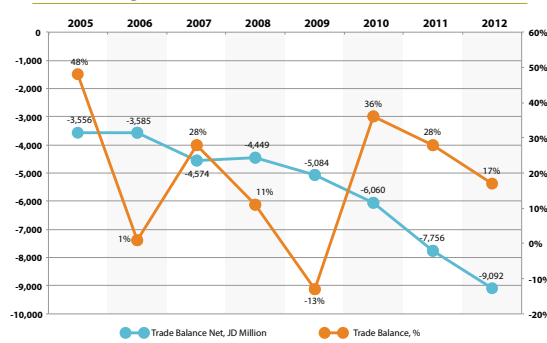


crisis. Due to the conflict in Syria, Jordan lost its major trade route, on which it depended for transit trade to Turkey, Lebanon and Europe. As a consequence the country has had to resort to more expensive alternative routes, hurting export price competitiveness. Exports to Syria and Lebanon decreased in the last ten months by over 43% and 41% respectively, compared to the same period last year. In addition, the rise in Syrian refugees has caused a rise in imports of 22% and 9% for 2011 and 2012 respectively, thus contributing to worsen Jordan's trade balance. In addition, cheap imports from Syria had to be substituted from elsewhere at higher costs. Consequently, the trade deficit in 2013 is expected to be much higher than that of 2012.

Syrian crisis has reduced GDP growth rate by

2%

Figure 10 Trade Balance, 2005-2012



will have reduced Jordan's GDP growth by 2 percentage points in 2013 to reach between 3% to 3.5% only. In effect, undermining in effect the impact that better control of budget spending, greater confidence in the local economy, slight improvement in tourism and remittances revenues as well as the international support through large foreign grants could have had on the economy.

Overall, it is estimated by the Central Bank of Jordan that the Syrian crisis

Employment, Livelihoods and Poverty

The crisis is taking a heavy toll on Jordanians especially on the most vulnerable segments of the population in the northern part of the country and in particular on employment and labor.

1 Employment and labour

Employment in Jordan is constrained by a number of factors

that are compounded by the particularities of Jordanian demographics, whereby the economically active population currently grows faster than population growth. As a consequence, employment generation is currently insufficient to keep pace with the

in the four Governorates that are host to the highest numbers of refugees (Amman, Irbid, Zarqa and Mafrq). Out of this number, about 38,155 persons are estimated to be working (about 3.5% of the employed population in the same Governorates). Driven by difficult livelihoods conditions, economically active Syrian refugees are reportedly seeking employment, primarily in local and informal settings characterized by seasonal, irregular and informal work.

Local surveys and assessments from a range of organizations have indicated crowding out of Jordanian labor by Syrian refugees in specific localities.

These reports estimates, that, over time,

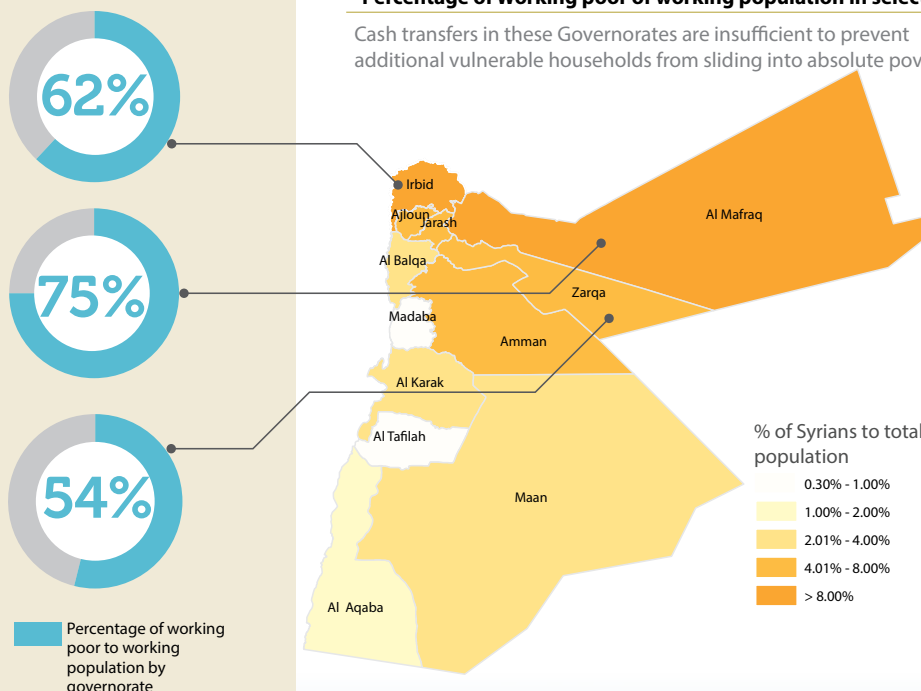
growth of the labor force, resulting in the number of unemployed persons growing faster than the number of employed persons. Statistics at the national level have not yet shown a clear impact of the Syrian crisis on the Jordanian labor market, however the picture at the local level is bleak.

This report estimates that the potentially active Syrian refugee labor force in Jordan make up 108, 265 persons, or about 8.4% of the total active force

Highest number of poor households concentrated in: Amman, Irbid, Zarqa and Mafrq. Also host to the highest number of Syrian refugees.

Percentage of Working poor of working population in selected governorates

Cash transfers in these Governorates are insufficient to prevent additional vulnerable households from sliding into absolute poverty.



Sources: MOI July 2013, DOS.

Syrians will increasingly make inroads in the tens of thousands of small, informal enterprises in agriculture, construction, retail trade, hotels, restaurants, and other services that characterize the Jordanian economy.

Direct competition with vulnerable Jordanian workers, and in particular the working poor for low paying unskilled jobs, in manufacturing, handicrafts and skilled agriculture, is likely to thus take place, potentially displacing large numbers of vulnerable Jordanians out of the labor market.

Evidence suggests that Jordanian women at the lower end of the market chain (in the home-based informal sector) are losing their jobs and income-generating opportunities to Syrian women. This particularly impacts female-headed households, due to their child-care commitments at home. Focus group discussions have also indicated that the resulting loss of income excluded women from contributing to family finance, affecting their ability to influence decision making in the household.

Evidence also suggests that increased Syrian labor market activity has put downward pressure on wages in the informal private sector, where wages were already low. This will have negative consequences for the most vulnerable segments of Jordanian workers that could be pushed into outright poverty by wage compression and crowding out.

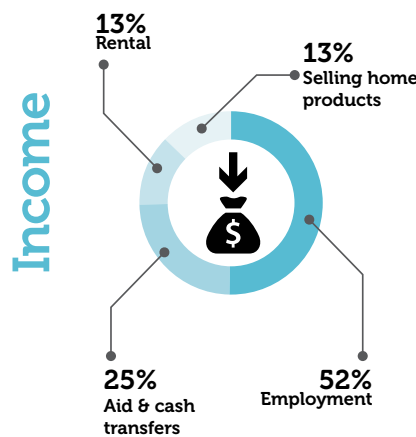
2 Livelihoods, poverty and vulnerabilities

The absolute poverty rate in Jordan is 14.4%. Poverty is concentrated in the Governorates hosting the largest numbers of refugees. Over the past years, the total number of poor households has steadily increased as a result of population growth, but their level of poverty has also intensified, as measured by the deterioration of the Poverty Gap Index. The highest numbers of poor households are concentrated in the urban areas of the Governorates of Amman, Irbid, Zarqa and Mafraq, which are also the Governorates that are host to the highest numbers of Syrian refugees. Mafraq and Irbid are also the Governorates that have the highest vulnerability rates, with 31% and 27% of their population being vulnerable to shocks, respectively.

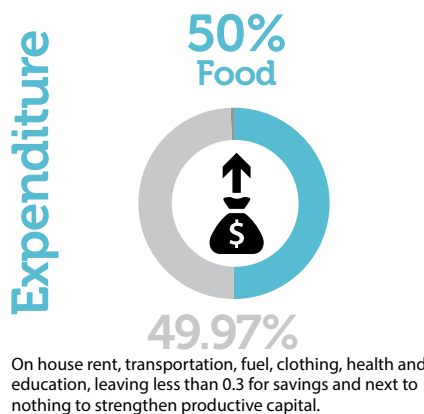
Oversupply of labour has put downward pressure on wages

Income and Expenditure

Poor households in Jordan are characterized by limited household productivity potential, large families, and low education levels.



Possible response options for employment and labor include support to: employment generation and training in host communities; improvement of labor migration management; greater formalization of the informal economy; development of an effective wage policy; and improving national policy coherence to maximize job creation potential.



On house rent, transportation, fuel, clothing, health and education, leaving less than 0.3 for savings and next to nothing to strengthen productive capital.

Poor households in Jordan are characterized by limited household productivity potential, large families, and low education levels. Their income comes mainly from employment (52%), aid and cash transfers (25%), rental (13%), and selling of home produce (13%). Expenditures are mainly spent on food (50%), house rent, transportation, fuel, clothing, health and education, leaving less than 0.3% for savings and next to nothing to strengthen productive capital.

In Zarqa, Irbid and Mafraq, working poor represent 53.6%, 62% and 74.6% of the working population. The report estimates that cash transfers in these Governorates are insufficient to prevent additional vulnerable households from sliding into absolute poverty. Country-wide, half of the poor are working poor.

Increased competition within the poorest segments of host communities over informal charitable and relief services, employment opportunities in agriculture and other irregular jobs requiring unskilled labor, is assessed as the main negative impact from the influx of Syrian refugees on local livelihoods.

Reduced economic resources increase women and children's vulnerability to access services that require finance (transportation, school uniforms, medicines, etc.). Financial pressures can also lead to

an increase in household tensions, as a family member with reduced outcome often employ coping mechanisms that affect those family members with the least negotiating space the most: children, young girls, boys and women.

3 Agricultural livelihoods

The Syrian crisis is also acutely affecting agricultural livelihoods. The agriculture sector employs a sizeable portion of the rural population.

The crisis has disrupted agriculture and food trade, leading to a 25% decline in agricultural exports to Syria and a 30% decline in agricultural imports from Syria, which translates into losses for Jordanian farmers and additional costs for traders that have had to find alternative trading routes.

Increased cost of feed, reduced availability of irrigation water, reduced market opportunities and forced abandonment of border proximity farmland is particularly affecting vulnerable small farmers and breeders, forcing them to sell animals or to seek alternative unskilled work in urban areas.

Trans-boundary animal diseases and trans-boundary crop diseases and pests are a subject of concern, due to the collapse of Syria's field veterinary services and the increased smuggling of unvaccinated livestock, and due to the collapse of plant

25%

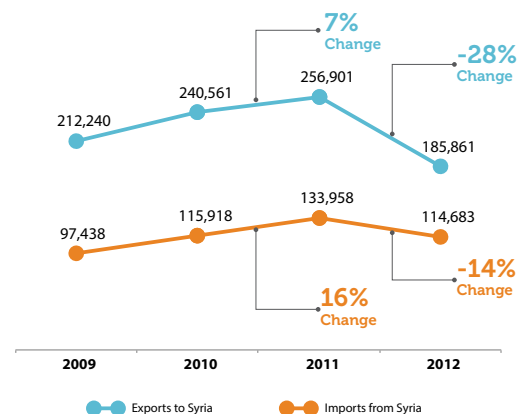
decline in agricultural exports to Syria

30%

decline in agricultural imports from Syria

Possible response options for livelihoods, poverty and vulnerabilities include: immediate support targeted at hardship cases in the affected governorates; immediate support to absorb unemployment among unskilled Jordanian workers in the affected governorates; value chain development support for vulnerable Jordanian households and those who live immediately below the poverty line; initiation of programmes for medium to long term promotion of local economic development;

Bilateral agricultural exports/imports between Jordan and Syria (USD thousand)



protection services in Syria, which in turn will increase risks of dissemination of diseases over the region.

Further depletion of local aquifers used by rural communities and large-scale irrigated farms could also take place in addition to the stoppage of water supplies from Syria and the drilling of boreholes for the Za'atari Camp and host communities in the Northern Governorates.

Overgrazing and land degradation of the fragile Badia rangelands is likely to increase with the disruption of cross-border transhumance between Syria and Jordan, inflated costs of animal feed, and the smuggling of herds from Syria.

Possible response options for agricultural livelihoods include: surveillance and control of trans-boundary animal diseases and trans-boundary crop diseases and pests; crop diversification and intensification and income-generation through community-based "climate-smart" agriculture technologies; and capacity development of the Ministry of Agriculture and other stakeholders to implement and monitor crisis response options.

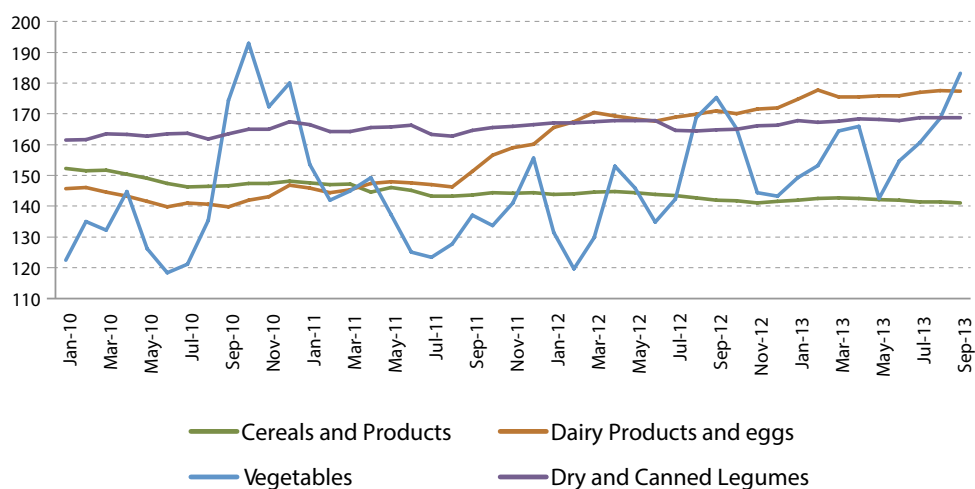
4 Food security

Food security of vulnerable households has already been affected and could deteriorate further, as a result of the above, but also due to the pressure placed on food supplies by the Syrian refugee influx.

Upward pressure on prices of locally-produced food supplies, such as chicken and sheep and goat meat, dairy products, eggs, fruits and vegetables, that have shown, unlike imported commodities, lower elasticity to the growing demand, pose a real challenge for the poorest segments of the society. Food consumption patterns among the poor may deteriorate as they will not be able to continue to afford these items, or they will be forced to make additional trade-offs between food and non-food expenditures.

The food security status of the poorest segments of society will be further impacted by the current upward pressure on rental prices, increased dependence on potable water from private vendors and potential price increases in other necessities, in addition to the loss of livelihoods in agriculture and trade and increased competition for employment highlighted above.

Food CPI Trends, 2010 - 2013



Possible response options for food security include: support to the development and implementation of the comprehensive national food security strategy (underway); support to household food security monitoring; support to improved food security stakeholders coordination; initiation of medium to long-term food security support programmes.

expects a further rise in the number of Jordanian children requiring care, either through fostering or institutional care.

Cash assistance and social security contribution schemes were further strained by the crisis. The National Aid Fund (NAF) estimates that the direct and indirect impact of the crisis resulted in an additional caseload of 20,000 families for a total cost of JOD 3 million. This includes Jordanian families who had to return to Jordan due to the war in Syria.

5 Social Protection

There has been increased pressure on already over-stretched family protection services from the management of Syrian cases and additional cases of Jordanian cases connected to the Syrian crisis, including the use of Juvenile services. The Ministry of Social Development (MOSD)

Possible response options include: strengthening and expanding the capacity of Government and service providers to meet the needs of the most vulnerable groups; and increasing the outreach of cash assistance programmes to respond to the additional caseload.

Social services

1 Education

Over the past decade, the Government of Jordan has heavily invested in the education system, enabling it to perform well in comparison with other middle-income countries and the MENA region. MDG targets for primary enrollment and gender parity are met, enrollment and survival rates exceed 95%. The provision of high quality education remains a key priority for the Government.

The Syrian crisis has had a profound impact on the education sector, in particular on public schooling. The Government of Jordan has granted access to free primary and secondary education to all Syrian refugee children, despite existing pressures on the education system, such as overcrowding in high population density areas and concerns about declining quality.

As of the end of November 2013, 86,966 Syrian children were enrolled in Jordanian public schools (excluding camps). It is estimated that the total caseload of Syrian children eligible for formal education is 150,000, while another 70,000 children require alternative education services such as informal and non-formal education.

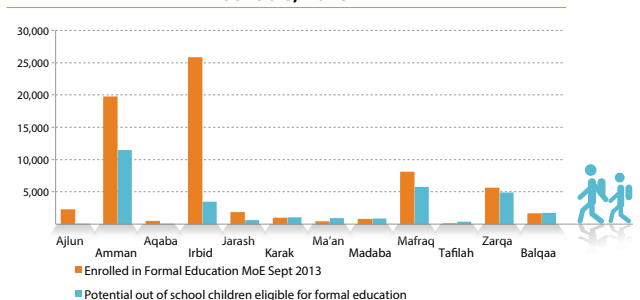
This additional caseload has exacerbated the levels of overcrowding in schools. Countrywide, 41% of schools are now crowded, against 36% in 2011. Almost half of the schools

As of the end of November 2013

86,966

Syrian children were enrolled in Jordanian public school

Actual enrolments and estimated numbers of out-of-school children eligible for registration in schools, 2013

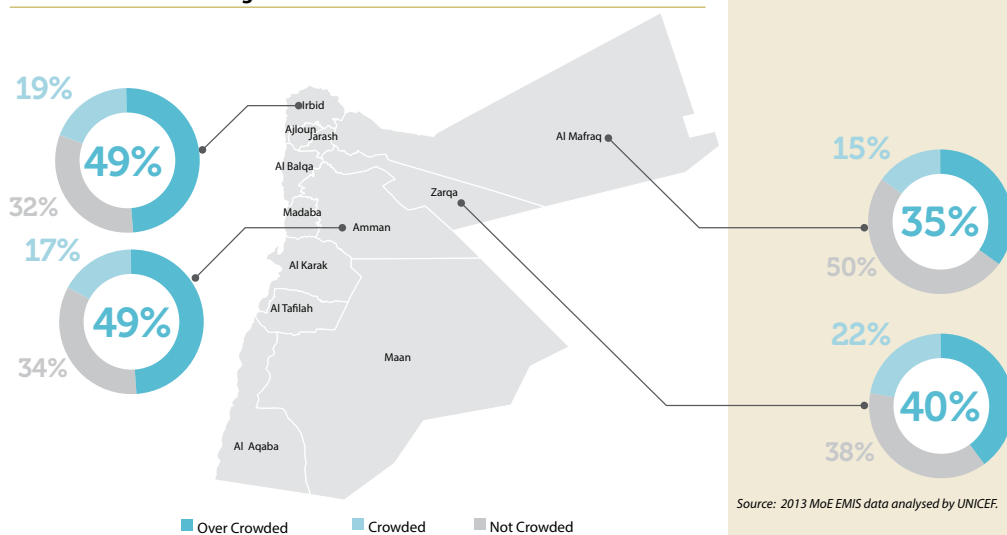


the past decade. While the establishment of second-shift schooling is subsidized by donors, operational costs are borne by the Ministry. With donor support, three new schools were built, and 26 schools provided with prefabs.

There is a fairly widespread perception that the quality of education has been impacted due to the crisis. Although the real effects of the crisis on quality of education have yet to be measured, the impact of

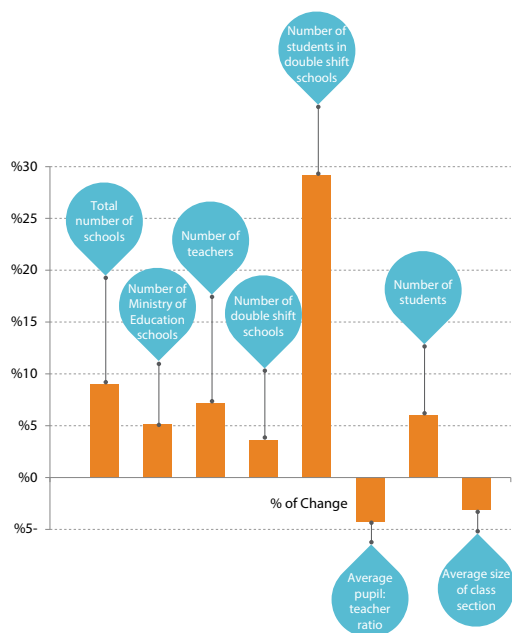
in Amman and Irbid, 40% in Zarqa and 35% in Mafraq, essentially schools in urban areas, are currently overcrowded and have limited capacity to accommodate additional students. Overcrowding is affecting girls' schools more frequently. The demand for Non-Formal Education for children not eligible to enrollment in formal education is likely to increase.

Overcrowding in Schools in Selected Governorates



Source: 2013 MoE EMIS data analysed by UNICEF.

Changes in education sector between 09/10 and 12/13



In response to this increased demand, the Government opened an additional 79 double shift schools. The total proportion of students attending double shifted schools has risen from 7.6% in 2009 to 13.4% in 2012-2013. This runs contrary to its strategy to reduce the number of such schools and reverses progress made over



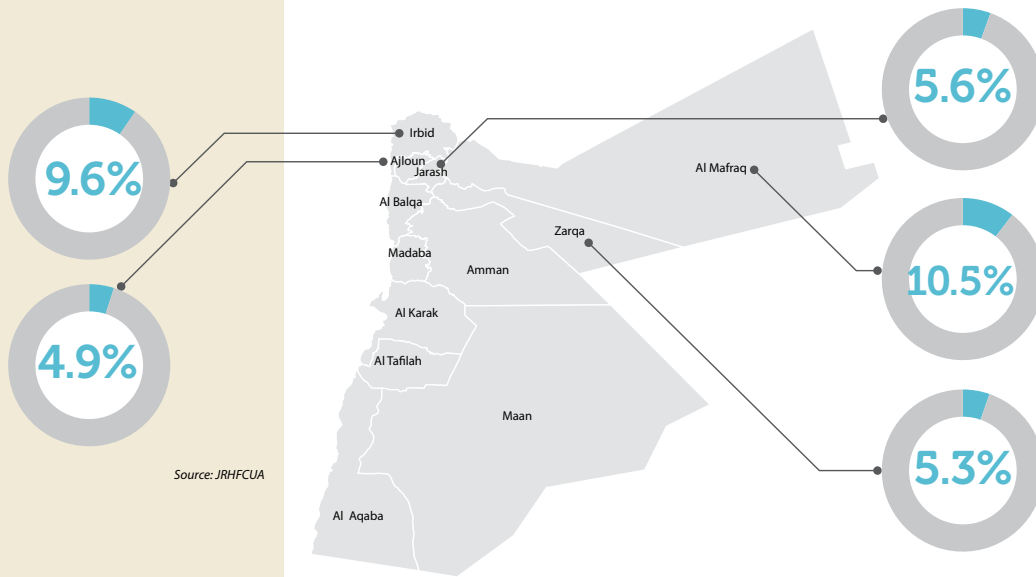
the Syrian crisis on key determinants of quality is real, which may be compounded by the difficulties Syrian students face to adapt to the Jordanian curriculum. Violence and bullying have also been identified as a factor that has the potential to undermine educational quality.

Possible response options for Education include: scaling-up and expanding on-going interventions in host communities, including through direct financial support, teacher training, equipment and infrastructure support; expanding the absorption capacity of schools, either through school expansion or school construction; support to teacher development programmes to safeguard education quality.

Source: MoE Data provided by UNICEF for the Needs Assessment Review of the Impact of the Syrian Crisis on Jordan, September 2013.

2 Health

Figure 21: Percentage of Syrian Patients per Total Patients by Governorate



Source: JRHFCUA

Jordan has an advanced health care delivery system. Thanks to progress made over the past decade, Jordan is one of the countries with the lowest infant and maternal mortality rates in the region, it has been polio free since 1995, it was due to be certified free from indigenous measles transmission, and was on course to develop its road map toward elimination of tuberculosis. Jordan also has one of the highest rates of public health spending in the region (7.72% in 2011). The above notwithstanding, the health sector in Jordan faces a

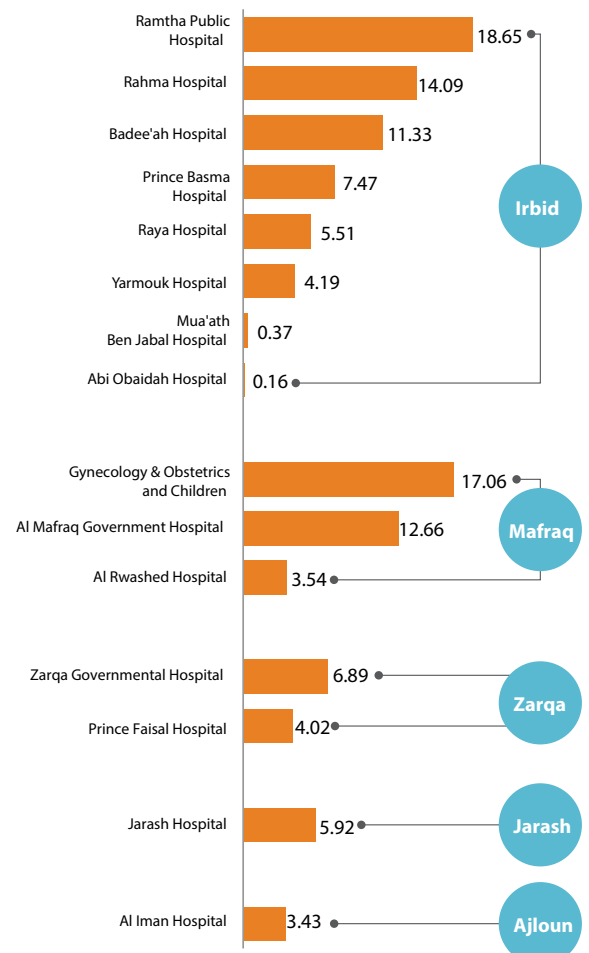
number of challenges. Primary among these is the country's ability to generate sufficient financial resources to cover health care costs.

The Syrian refugee influx has overwhelmed the capacity of the sector to deliver quality services to all. As a consequence, Jordan's ability to sustain the gains it has achieved is undermined.

In Irbid and in Mafraq, Syrian patients represent 10.45% and 9.59% of total patients, respectively, with the percentage as high as 18% in some locations. As a consequence, the ratio of health specialists per population has decreased in all categories, as has the ratio of hospital beds per habitants.







Comparative morbidity data show a different disease profile between Syrians and Jordanians could increase the disease burden for Jordan in the future. Jordan's cancer disease burden has increased by over 14% in the first quarter of 2013. TB notification cases are threefold greater among Syrians, while 116 cases of measles have been diagnosed so far. The possible

Percent of Syrians by Hospital in Five Governorates



Primary challenge:
Health care financing

Comparative Morbidity for Select Communicable Diseases Among Jordanians and Syrian Refugees (outside & inside camps), during 2012 to April 2013

Disease	Jordanians	Syrian Refugees
Pulmonary Tuberculosis (TB) per 100,000 population		13x 
Measles per million population No cases in Jordan since 2008		51x 
Cutaneous Leishmaniasis per million population		158x 

re-appearance of polio as a result of the recent outbreak of polio in Syria will require massive immunization campaigns.

Deficiencies in the supply and availability of medication, health equipment and specialist physicians in health facilities have been evidenced. Access to oral delivery-related medication

Impact of the Syrian Refugee Crisis on Jordan's Health Sector: Facilities and Health Workers

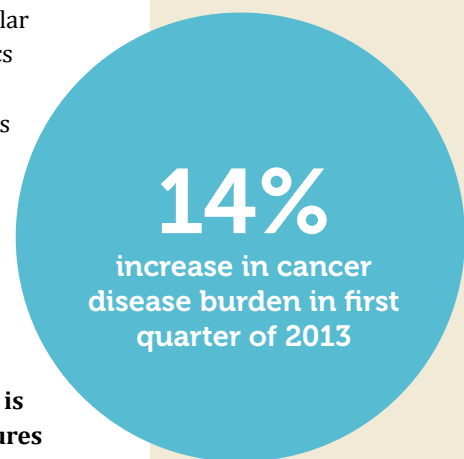
MOH Health Workers Capacity	As of mid-2012	Projected by end 2013
Physician/ 10,000 pop.	27	23
Dentist/ 10,000 pop.	10	9
Nurse (All Categories)/ 10,000 pop.	47	40
Pharmacist/ 10,000 pop.	16	14
MOH Total Health Facility Bed Number	4572 (38.1%)	4572 (38.1%)
Ratio of MOH totals Hospital Beds/ 10,000 pop.	18	16



is depressed in the Northern Governorates, so is access to cardiac and/or vascular drugs, oral rehydration and diuretics in Mafraq. Equipment related to vaginal delivery was available at less than 50% of health facilities, and pervasive shortage of specialized health workers, in particular dermatologists and gynecologists, was reported.

With the heightened demand for health services, the health sector is facing significant financial pressures and shortages. MOH has already incurred USD53 million in additional costs, including more than USD20 million in vaccines in 2013, a twofold increase in the span of one year.

Possible response options for Health include: direct and indirect support to reduce the financial gap resulting from the additional caseload created by the Syrian refugee influx; physically expand the bed, surgical, outpatient, emergency, maternity, lab and other infrastructure capacity of up to 20 MOH hospitals and 30 health care centres; strengthen MOH Preventive Programmes; strengthen emergency services capacity; support to human resources development and planning.



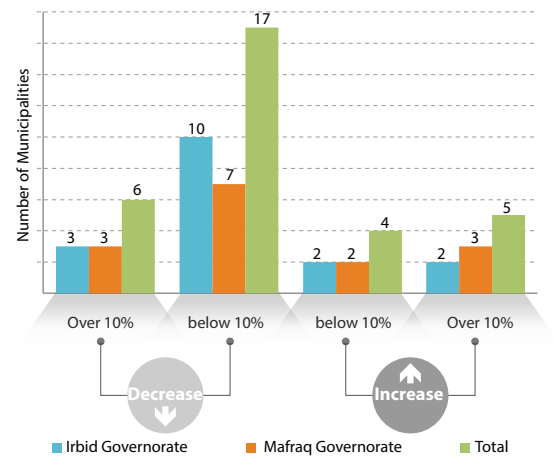
Local Governance

1 Institutional capacities and municipal finances

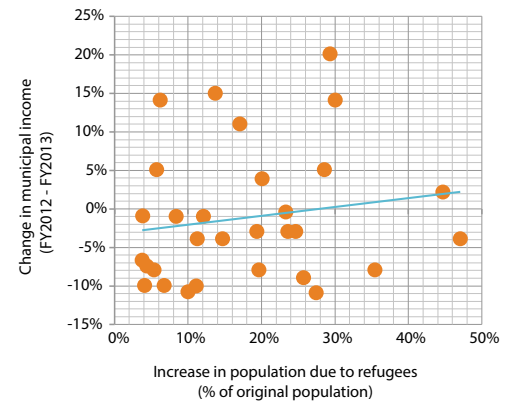
The local governance system in Jordan has been in a slow and inconclusive transition towards decentralization since 2005. Decentralization reform has renewed interest from the Government, and the first municipal elections since 2007 were held in August 2013. Municipal councils have the potential to enhance the profile of municipalities in service delivery, local development and the social sphere. However, they are inheriting bankrupt, bloated and dysfunctional municipal administrations.

With the exception of Greater Amman, municipalities have weak administrative and technical capacities, they suffer from severe financial distress, and only perform a portion of their mandated functions. They also lack equipment, logistical means, and capacity to maintain existing assets. Municipal and service infrastructure has been depleted over the years, and municipalities are incapable of investing in upgrade or even maintenance of equipment. Salaries consume more than 60% of municipal budgets, debt services have become unsustainable for most municipalities, and the generation of own revenue is constrained by legislation and vested interests, leaving municipalities with little if any investment capacity. As such they are unable to meaningfully respond to citizens needs and to influence the

Income Change (FY2012-FY2013) in Number of Municipalities



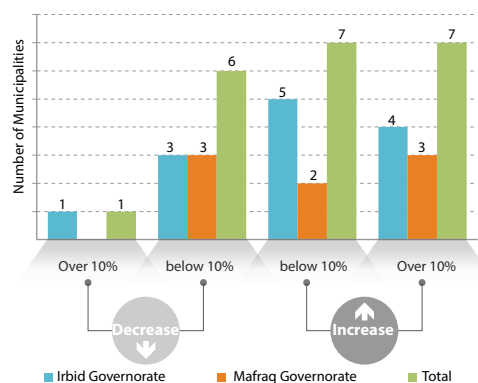
Correlation Between Income Change and Per cent Refugees



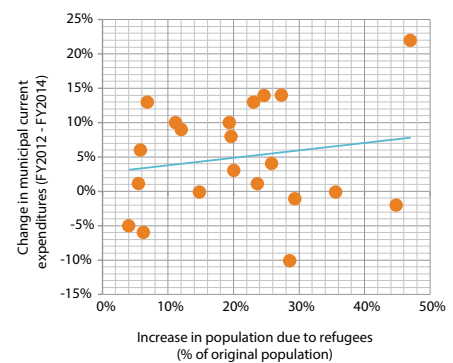
allocation of national resources and boost local development.

The Syrian crisis has heightened the pressure on fragile municipalities to meet increasing demand with the same level of available resources.

Change in Current Expenditures (FY2012-FY2014) in Number of Municipalities



Correlation Between Expenditure and Percent Refugees



The increased population has not translated into increased municipal resources in the Northern Governorates.

On the contrary, over the past year, municipal income in the areas most at risk has decreased for the majority of municipalities at a time where their needs were soaring fast. This is due to low collection levels of property tax, the limited share of licensing fees in municipal incomes in Mafraq and Irbid, the low number of new businesses acquiring licenses, and the low level of solid waste fees.

The increased population has led to a modest increase of current expenditures in the majority of municipalities in Mafraq and Irbid.

This is mainly because municipalities do not have the fiscal capacity to increase their budgets. However, all assessed municipalities have reportedly shifted funds from investment projects to their recurrent budget to support service delivery. As a consequence, in a situation of limited elasticity of municipal resources against a surge in population and a surge in service needs, municipal services are being hard hit and losing fast in terms of performance. The situation could unravel if no action is taken.

Growing tensions at the state – society interface: citizens in host communities have felt left-out and neglected, and expect a more prominent response to their own needs from state institutions and local authorities. Tensions between host communities and Syrian refugees are palpable in the Northern Governorates, where socio-economic problems created by the Syrian refugee influx are the most acute, exacerbating already existing feelings of marginalization and vulnerabilities among Jordanians. This is threatening the social contract between state and society. Moreover, the increased pressure on public services is also threatening social cohesion as access and quality of the services is being negatively affected as a result of the increased demand

The tension between decentralization and centralization dynamics has heightened as a result of the crisis, due to the urgency to have a rapid executive response to the pressing needs of host

communities. Despite positive signs, such as the recent Government decision to seek budget support for affected municipalities, the commitment of the Ministry of Municipal Affairs and the Ministry of Interior to continue building the capacities of Local Development Units and the supportive role of Governors in advocating for more direct support with the central government, the decentralization reform could be further delayed by the Syrian crisis.

Tensions between host communities and Syrian refugees are growing.

Possible response options for institutional capacities and municipal finance include: immediate budget and capacity development support to municipalities to scale up service delivery; capacity development of municipalities and governorates for evidence-based planning, donor coordination and strategic communication; support to rapid participatory planning capacity at community level; revision and/or completion of needed local development planning frameworks; support to emergency preparedness and response capacity of the local governance system; support to municipal administrative and service delivery processes for efficiency gains;

2 Delivery of municipal services and urban management

The increased population is overstressing a struggling municipal service delivery system. In solid waste management alone, the influx of refugees means an increase of 340 tons of waste to be disposed of daily. A recent assessment reveals that solid waste management issues rank first of current priorities among communities in 33 of 36 municipalities in the northern governorates. Municipalities and Joint Service Councils reported a severe shortage of equipment and of labor to face the surge in solid waste production. While social services in host communities have received early support



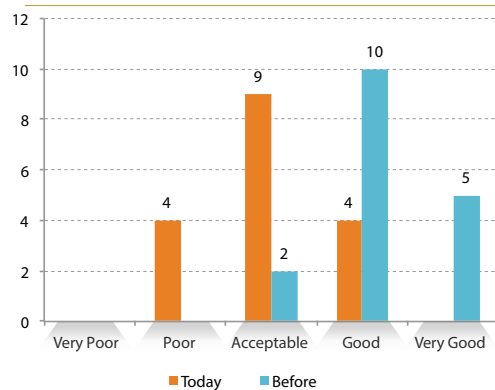
340 tons
increase in daily
waste



from donors, development assistance to municipal services has been slower.

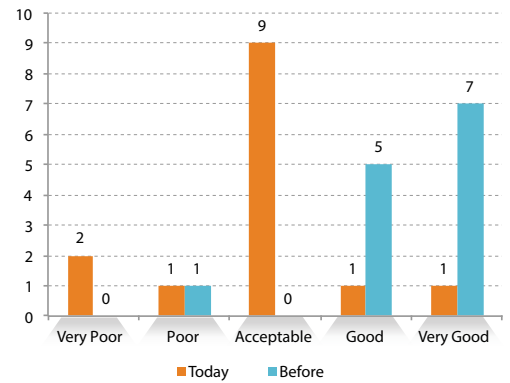
Development control by municipalities has become increasingly difficult. As construction activities have increased rapidly over the past two years, the capacity of municipal staff to monitor and control municipal development is overstretched.

Change in quality of SWM - Mafrq Governorate, 2013



Unplanned settlement growth is promoting unsustainable sprawl and informal settlements. It remains premature to predict the long-term impact of the crisis on the spatial development of specific localities. However, without a better understanding of current refugee movement dynamics and if basic planning does not happen, informal settlements may

Change in quality of SWM - Irbid Governorate, 2013



emerge outside planning boundaries that may be hard to contain and expensive to fix. In the case of Mafrq, settlement growth is currently happening in different directions, and the lack of planning guidance supported by pro-active infrastructure investment might ultimately result in the same problems as Jordan has seen in the past.

Shortfall in maintenance and building roads has been exacerbated. Rapid population growth equals more traffic and further degradation of the road network. With limited financial means diverted to more pressing issues, road and urban infrastructure is even less taken care of than before.

Possible response options for service delivery and urban management include: provide immediate budget support and equipment to municipalities; develop improved SWM plans at municipal level; implement improved SWM plans including equipment support and funding of labor intensive recycling activities; broaden the range of innovative solutions and partnerships for SWM; enhance the capacity of affected municipalities to better handle urban development and management; analyse absorption capacity and monitor urban shifting urban development dynamics; support elaboration of basic LED plans and/or revalidate and update existing LED strategies and plans; support the capacity of municipal LDUs.

Infrastructure and energy

1 Water and sanitation

Jordan is the fourth most water scarce country in the world, and is facing an enduring imbalance between the demand and the supply of fresh water.

Currently more than 97% of the Jordanian population is connected to piped networks. The majority of renewable surface water and groundwater has been exhausted, and the remaining usable resources for future are gradually diminishing. Water supply is based on a rationing system to cope with the deficit and ensure equitable distribution. Rural communities suffer more from water shortages.

In the Northern Governorates, public water services are strained, with high losses caused by old water distribution systems. Systems are operating continuously at full capacity, with no seasonal modulation. Parts of the water network are in urgent need of repair.

With the influx of Syrian refugees into Jordan, the gap between available water and demand has widened significantly. 81% of households in rural areas report running out of water once or twice a month. Due to limited storage capacity, many households are increasingly reliant on water bought from private vendors at more expensive rates.

More than 62% of the Jordanian population is connected to the sewage network. Coverage is lower in the North



(43%). The crisis has induced increased pressure on sewage systems and communal waste facilities in the Northern Governorates. There is an increased usage of septic tanks, and there is a concern that many septic tanks are inadequately constructed and regularly leak and overflow, increasing the risk of wastewater seepages or infiltration from septic tanks to underground water basins.

Concerns that the aquifer may become polluted without proper wastewater management practices in areas where there is a concentrated number of refugees, such as in the Za'atari Camp, have increased. This requires close monitoring and further actions to be put in place.

Possible response options for Water and Sanitation include: support to water conservation through water efficiency gains (network rehabilitation, leakage control, improved rationing distribution); support to improved water quality and quantity; support to increase sanitation coverage and waste water treatment efficiency; support to capacity development and institutional reform; support to water and sanitation infrastructure in schools and other public institutions.

2 Housing

The annual housing need is estimated at around 32,000 units, and the average number of units constructed, 28,589. Existing supply is not well aligned with the demand, in particular for lower income groups. The median expenditure on housing per household is 20%. However, going down the income scale, the rate exceeds a third to reach 35.3%. Jordan has a relatively high stock of vacant units (18%) and a low overcrowding ratio. The ownership ratio is 73.1% to 23.2% rented (with a low 12.5% for Mafraq). At the lower end of the income ladder, 44% are renting.

81%

of households in rural areas report running out of water once or twice a month.



The Syrian refugee influx has translated into an immediate demand for housing estimated at around 86,000 units, on top of the average annual need of 32,000 units. This surge has a severe impact on the municipalities where the Syrian refugees first settle. As the crisis becomes more protracted, the impacts are expected to become more structural and they will significantly affect the housing sector of Jordan as a whole. Mafrqa currently faces a huge housing demand that equals 12,600 units, i.e. 19 times the regular average housing need of 660 units.

One of the key concerns is the availability of affordable housing for low-income groups, already insufficient prior to the crisis.

Increased demand has inflated rental prices. Maximizing rental options has been the most prevailing and practical solution. The vacant stock has quickly filled up, rental prices have inflated up to 200%, with extremes at 300% compared to pre-crisis values. In some areas, Jordanian families have returned to their village of origin, or have regrouped to rent their houses for lucrative rents.

New construction has increased both within existing urban areas and in the periphery. In Irbid, the municipality estimates that new construction has increased by 10-20%. In Mafrqa, it is estimated that new construction could have resulted in an increased housing supply of 3,700 to 5,600 units, catering for about 25,900 to 39,200 Syrian families. Some

sources indicate that investors still hesitate as the length of the crisis remains unknown and the overall economic situation remains fragile.

Possible response options for Housing include: support to housing analysis and monitoring; support to policy formulation and revision of the National Housing Strategy; support to government investment to boost housing supply.

3 Energy

Jordan is one of the world's most energy insecure countries, importing about 97 percent of its energy needs. Jordan has traditionally relied on natural gas imported from Egypt for 80% of its electricity generation. A series of disruptions to this flow have been experienced since 2011, with gas imports from Egypt declining by up to 70%. In response, Jordan shifted to crude oil imports from the Gulf, which led energy costs to rise to make up approximately 20% of GDP. This has serious implications for the State budget, drastically decreasing the fiscal space to allow government to various priorities for sustaining development and ensure national resilience. The 2013 electricity subsidy bill is expected to reach USD1.8 billion, almost matching Jordan's forecasted 2013 budget deficit of USD 2 billion.

The Syrian refugee influx has exacerbated levels of residential energy consumption. Although the average per capita energy intensity among Syrians living in cities and towns is 25% less than the general population, the increase of 9.44% in residential energy consumption growth in 2012 compared to 5.9% in 2011 is mainly attributable to Syrian refugees, with an associated subsidy cost of JOD 44.3 million. According to MOPIC, in 2013, the cost could reach up to USD93.6 million for electricity and USD16.6 million for cooking gas.

Possible response options for Energy include: expanding the supply of electricity to households through new capacity in the grid; securing extra supplies of LPG for basic household cooking needs; and devise and implement strategies for efficiency gains as a source of new power capacity to address the expanded demand.

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