

GEOGRAPHIC MULTIDIMENSIONAL VULNERABILITY ANALYSIS - JORDAN



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BACKGROUND AND RATIONALE

There are several best practices and emerging approaches to measure vulnerability. Most of the literature adheres to some variation of a basic formula recurrent throughout the literature:

Risk + Response = Vulnerability¹, or, as articulated in Holzmann et al. (2008) guidelines on the Household Economy Approach,

"Baseline + Hazard + Response = Outcome." Part of measuring the response includes incorporating a perspective in sustainable livelihoods that assesses both the capabilities and assets that contribute to resilience (Naudé and McGillivray, 2009)².

Existing vulnerability analysis, mainly those undertaken by the World Bank, "only capture poverty at a point in time using uni-dimensional measures such as income or consumption."

Such measures are a good indicator of poverty because they provide a way to capture income from different sources. However, recently many poverty experts (Ahmad, Gassmann, 2010) have argued that money-metric indicators of poverty, such as income and consumption, fail to capture the complex, multi-dimensional aspects of poverty, such as access to entitlements that comprise the basic minimum required to maintain a basic standard of well-being³.

This distinction is critical, as methods applicable at one level may not be appropriate at another. Macrolevel interventions typically include measures at the country level, with international and regional policy applications. Meso-level measures typically include subnational measures, usually comprised of quantitative measures based on census data or statistical sampling. At the individual and household, or micro level, however, vulnerability is more frequently assessed using participative and qualitative measures for programmatic targeting. Though each level possesses unique requirements for analysis, they intersect in meaningful ways, and the literature consistently recommends the use of mixed methods.

Vulnerability is the interaction between both exposure to risk and one's capacity to respond and cope. The focus on economic and social vulnerability in UNICEF's definition is based on an understanding of poverty and deprivation as multidimensional and dynamic. Social protection programmes and policies must address both social and economic vulnerabilities together, along with their underlying drivers.

Grounded in UNICEF's understanding of multi-dimensional poverty and

external research on vulnerability, three central concepts underpin UNICEF's work on social protection (UNICEF, 2011)4:

- 1. Vulnerability captures the interaction between:
- exposure of individuals and households to risk, i.e., the chances or threat of an adverse event or hazard
- Their capacity to respond and cope, i.e., their level of susceptibility or exposure to this event due to the uneven distribution of resources (physical, economic, social, and political).
- 2. Both social and economic vulnerabilities are essential and often intertwined.
- 3. Vulnerabilities are shaped by underlying structural social, political, and economic factors.

One noteworthy difference between the anthropological and sociological literature is the conceptual distinction drawn in the latter between social vulnerability and economic vulnerability (Alwang et al., 2001).⁵ The concept of social vulnerability has been incorporated into both the hazard assessments and economic literature. Literature from this perspective focuses on the multidimensionality of poverty and encourages the use of participatory

methods to understand the qualitative features of poverty. This approach goes beyond standard economic methodologies of measuring proxies, such as consumption, for poverty levels. It instead analyses the roles of both social institutions and power in creating vulnerability as experienced at the micro-level. On the flip side, it also examines the ability to cope, or resilience, as connected to assets such as social capital.

From the economic perspective, Alwang et al. (2001) identifies three strands within the economics literature that conceptualize vulnerability in terms of either 1) poverty dynamics, 2) food security, or 3) sustainable livelihoods, specifying that the "literature rarely separates risk response into its reduction, mitigating, and coping components (p. 5)". The poverty dynamics literature is concerned primarily with the risk of falling into poverty or deeper into poverty. Some writers, such as Prowse (2011), emphasize the importance of measures that factor in risk rather than using six static poverty measures.6

A common theme within the literature is a discussion of the external and internal sides of vulnerability, 'external' referring to risk, and 'internal' referring to individual capacities for coping (Chambers 1989).⁷

¹ Holzmann, R., Paul, R.H. and Dorfman. M. (2008) "Pension systems and reform conceptual framework," Social Protection Discussion Papers and Notes 46175, The World Bank.

² Naude, A.S. and McGillivray, M. (2009) Measuring Vulnerability: An Overview and Introduction Oxford Development Studies, vol. 37, issue 3, pp. 183-191.

³ Ahmed, M. and Gassman, F. (2010) Measuring Multidimensional Vulnerability in Afghanistan. MGSoG: 004. Working Paper.

⁴ UNICEF (2011) Social Protection Strategic Framework: Integrated Social Protection Systems: Enhancing Equity for Children. Available at: <www.unicef.org/socialpolicy/files/Concept_note_external-fv-dec2011.pdf>, last accessed 10.11.2019.

⁵ Alwang, J., Siegel, P.B., Jorgensen, S.L. (2001) Vulnerability: a view from different disciplines. World Bank.
6 Prowse, M. (2011) Towards a Clearer Understanding of Vulnerability in Relation to Chronic Poverty. CPRC Working Paper No. 24. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1754445, last accessed 10.11.2019.

In selecting methods, there are several factors to consider, including the time and resources available to undertake the study. Data constraints are an especially important consideration when working in developing countries. UNICEF recommends selecting tools and indicators by scoring their relative levels of "feasibility, reliability, and utility," according to a given scope.

Objective of the Study: Geographic mapping tool for assessing performance and supply capacity of different sectors, to identify gaps, improve the allocation of resources, and policy planning.

Components for Analysis

This multidimensional vulnerability will look at the several aspects of the well-being by using Sustainable Development Goal (SDG) indicators to assess the risks faced by the children and the population when deprived of essential services and adequate living conditions. This analysis will also cover multidimensional socioeconomic vulnerabilities for designing appropriate adaptation and mitigation policies for poor and vulnerable populations in Jordan regardless of nationality.

This vulnerability analysis will be conducted using a sectoral assessment approach, which covers: 1) Economic Outlook and Poverty, 2) Education,

7 Chambers, R. (1998) Editorial Introduction: Vulnerability, Coping and Policy. Wiley Online Library. Available at: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1759-5436.1989.mp20002001.x, last accessed 10.11.2019. 3) Health, 4) Livelihoods, 5) Social Protection, 6) Housing, 7) WASH, 8) Local Governance and Municipal Services, 9) Energy, 10) Justice, 11) Transport, 12) Environment, and 13) Food Security and Nutrition.

This analysis will rely on nationally representative surveys conducted by the government and other agencies:

- Household Expenditure and Income Survey (2017–18)
- Demographic and Health Survey (2017–18)
- VAF (UNHCR 2019) Indicators related to Vulnerability Assessment for Syrian Refugees
- EMIS: Education
- Comprehensive Food Security and Vulnerability Analysis (CFSVA, 2019)
- Administrative Data: Education, Health, WASH, Local Governance and Municipal Services, Energy, Justice, Transport, Environment, and Poverty.

Steps to Operationalize Measurement of Multidimensional Vulnerabilities:

Step1: Identify Domains

Step 2: Identify Dimensions/ Components

Step 3: Identify Indicators

Step 4 : Identify Thresholds and Cut-off

Step 5: Identify Levels of Vulnerability

Step 6: Geographic Mapping of Vulnerability

Vunerability Assessment Task Force (Consultation)



ECONOMIC OUTLOOK FOR JORDAN

TABLE 1: SDG1 – End poverty in all its forms everywhere

	NATIONALITY SEGREGATED										
SDG Objective	SDG Indicator	Indicator of Interest	Syrians	Non-Jor- danians	Jordanian	Geo- graphic Distribu- tion	Source				
men, and poverty in to national	iving be- y sex and	Percentage of Jordanians living below the poverty line				Country-wide	HEIS 2018				
	of population living poverty line, by sex age	Percentage of Syrians living below the poverty line				Governorate	UNHCR (2019)				
	Multidimensional Poverty Index				North, Centre, and South	DOS and ESCWA (2019)					
1.2.2 Prochildren	1.2.1 Proportion low the national	Child Multidimensional Poverty Index (MODA)				Governorate	UNICEF (2018)				

Compounding financial crises, political turmoil in the region (post-Arab Spring), disruption in gas supplies from Egypt, and the Syria crisis have had a severe impact on the economy. Jordan's economic performance remained restricted in 2018, where the real GDP growth reached 1.9 per cent, which is a 0.2 percentage point decrease from 2017. This is also way below the average of 2.6 per cent between 2010 and 2016 (Central Bank of Jordan, 2018).8

The GDP growth rate for the first quarter of 2019 reached 2.0 per cent (DOS, 2019). The IMF's second review for the country shows a forecast of a

2.2 per cent GDP growth rate in 2019, and it can go to 2.5 per cent in 2020 (IMF, 2019).

The Syria crisis has significantly impacted GDP growth. According to the IMF (2017), the estimated cumulative impact is about 18 per cent of annual GDP; this is mostly attributable to the disruption in the trade routes which increased the trade deficit. Exports to Iraq – once Jordan's primary export market, accounting for almost a fifth of domestic exports (about US\$1.2 billion a year) – has declined by more than 50 per cent since the closing of the Iraqi-Jordanian border.

According to the IMF (2019), government efforts for fiscal consolidation facilitated in lowering the combined public-sector deficit in 2016–17, and consistent monetary policy has maintained financial stability in the face of significant uncertainty while keeping credit flowing to the private sector.

Socio-economic crisis has loomed over the last year for the new government, with the challenges remaining essential and pressing. The new government has tried to revive the momentum for reform, with outstanding achievements in terms of an upturn in tourism and exports – the latter facilitated by the reopening of the Iraq border.

Table 2 below shows the selected economic indicators for Jordan. Growth is expected to be held back by ongoing delays in implementing structural reforms, a challenging regional environment, and limited scope for public investment given the constrained fiscal position.

Inflation has risen over the last year and reached 4.5 per cent for 2018, while the rate for 2017 was reported at 3.3 per cent, and in 2016 it was -0.8 per cent. Inflation in 2019 is expected to be 2.5 per cent more because of cuts in breadsubsidies and subsidies on other food items; this will increase the national percentage of people living in poverty. The debt to GDP ratio stood at 94.4 per cent in 2018, which is expected to rise to 95.6 per cent for 2019. The projections show that sustained fiscal effort (assumed at a cumulative 3 per cent of GDP during 2020-22) and growth recovery would gradually reduce public debt to about 84 per cent of GDP by 2024.

The current account deficit (excluding grants) fell to 10.3 per cent of GDP in 2018, reflecting buoyant tourism, increased exports to Iraq and the USA, and significant compression of non-energy imports (IMF, 2019). However, the financial account was not sufficiently strong to cover the still-large current account deficit, reflecting a considerable decline in foreign direct investment and sizeable private outflows following the uncertain political and economic environment in the aftermath of the widespread protests in mid-2018. The government has received several aid and loan packages: US\$500 million loans from the World Bank disbursed during July and August, the announcement of a US\$2.5 billion aid package from Saudi Arabia, Kuwait and UAE, and an additional US\$0.5 billion from Qatar. This influx has also resulted in stable Net International Reserves, which have stayed at around US\$11.4 billion.

Revenue and grants as a per centage of GDP have stayed consistently at around 26 per cent, and the projections show the same, whereas the government expenditure as a percentage of GDP is 28.6 per cent for the financial year 2018, which is expected to rise to 29.2 per cent for 2019.

Jordan could soon face an exchange rate crisis and a subsequent default on its debt, and may also experience a balance of payment crisis due to the terms of trade shocks, the decline in export demand, the reduction in tourism and remittances flows, and real exchange rate appreciations.

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⁸ Available from: http://statisticaldb.cbj.gov.jo/index?action=level4, last accessed 11.11.2019.

TABLE 2: Selected Economic Indicators (per cent)

	2017 (Actual)	2018 (Actual)	2019 (Proj)	2020 (Proj)	2021 (Proj)
Real GDP at market price	2.1	1.9	2.2	2.4	2.6
Nominal GDP at market price	3.9	3.7	4.4	5.0	5.2
Nominal per capita GDP	4,202	4,359	4,387	4,542	4,720
Consumer price inflation	3.3	4.5	2.5	2.5	2.5
Gross Debt as percentage of GDP	94.3	94.4	94.6	94.1	92.4
Of which: external debt	39.9	37.4	41.3	42.3	44.4
Current Account Balance (including grants)	-13.3	-10.3	-9.9	-8.7	-8.7
Net International Reserves (US\$ billion)	12.6	11.4	13.4	14.7	16.4
Revenue and grants as percentage of GDP	25.7	26.1	26.9	26.7	26.1
Govt. Expenditure as percentage of GDP	28.3	28.6	29.2	29.6	29.8

*SOURCE: IMF (2019) AND CENTRAL BANK OF JORDAN (2019).

Labour Markets: the Syrian refugee crisis has negatively impacted formal and informal sector employment in Jordan. Particularly in Northern governorates: Amman, Mafraq, Irbid, Jerash, and Zarqa, the unemployment rate has risen more than in other governorates. The average unemployment rate of these governorates, with the largest influxes of refugees, increased by about 3.3 per cent (IMF, 2017).

Tourism: Travel receipts overall have increased significantly over the last few years, from JD 2.9 billion in 2013 to 3.7 billion in 2018 (Central Bank of Jordan, 2018). As a percentage of GDP, this has decreased over the years, and in 2018 it

was only 10 per cent of GDP (depicted in graph on the right).

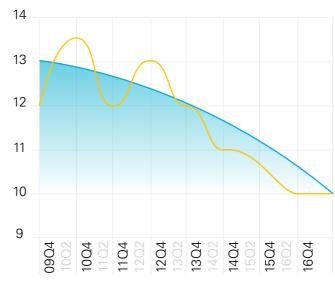
Public and Private Transfers: Jordan received considerable support from the international community to cope with the refugee crisis. Transfers to the federal budget and private transfers (i.e., transfers from private citizens, donor support, and transfers through UN agencies) have also contributed to contain the overall current account deficit. However, international transfers have recently started to slow down, and this will have a significant impact in the coming years. Grant inflows over the past five years reached US\$6.5 billion, partly buoyed by an agreement with

selected GCC members for US\$3.75 billion in budget grants. As there is a high probability of changes in donor's preferences, with shifts from providing budget grants to concessional lending, committed budget grants over the 2019-23 period amount to US\$4 billion, only about 1 per cent of annual GDP. According to the IMF (2017), there has been unidentified capital inflow in the country, thought to have come mainly from the Syrians who have moved their businesses to Jordan. This inflow has also helped to finance the balance of payments.

According to the IMF (2019), the economy has remained broadly stable, but low growth and insufficient job creation remain critical challenges. Over the past year, growth has been supported by higher exports to Iraq, following the reopening of the border in August 2017, but exports to other

key partners (such as GCC countries) are still down. Unemployment reached 19 per cent in the second guarter of 2019; unemployment remains particularly high for women and young people. Subdued inflation has resulted from the removal of GST exemptions and higher excise on cigarettes and fuels supported under the program in early 2018, along with the authorities' decision to remove bread subsidies. Higher global food and oil prices pushed inflation to a peak of 5 per cent in July 2018, with the year ending at 4.5 per cent. Most recently, in 2019, headline inflation eased due to real food and electricity price shocks.

TRAVEL RECEIPTS



Travel receipts (in per cent of GDP)

—4-Quarter moving average

—Hodrick-Prescott trend

*SOURCE: JORDANIAN AUTHORITIES AND IMF STAFF CALCULATIONS.



POVERTY IN JORDAN

Below the poverty line (the poorest 15.7% of Jordanians)

Above the poverty line (84.3% of Jordanians)

 Proposition
 Proposition

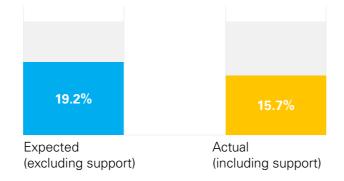
The absolute poverty rate⁹ in Jordan for the whole population stood at 14.4 per cent in 2010. The rate in 2018 was 15.7 per cent, although this rate is for Jordanians only, meaning that more than 1 million Jordanians live below the poverty line.¹⁰

Government support is crucial for the poor. It is also essential for those who live above but close to the poverty line. Approximately 300,000 Jordanians can sustain living standards above the poverty line only because they receive support from the Government as cash assistance (e.g., NAF) or other forms of material support (e.g., food assistance through the School Feeding Programme). In the absence of these forms of government support, the poverty rate would have reached 19.2 per cent (NSPS 2019).¹¹

Investigating the incidence of child poverty in the Kingdom reveals data on the geographic and gender distribution

of child poverty. According to the 2015 Census, there are 3.16 million children in Jordan, of which more than 0.6 million are multidimensionally poor (moderate poverty level), and 0.04 million are acutely poor. For (UNICEF Arab Child Poverty Report 2018), the threshold to be defined as multidimensionally poor is set at 2, which implies that children deprived in two or more dimensions would be considered multidimensionally poor. More than 20 per cent of the children in Jordan are multidimensionally poor, according to this criterion.

Poverty Rate for Jordanians



⁹ Calculated as the level beneath which the minimal requirements for survival (i.e., minimum calorific requirement plus essential non-food items) are unmet. The absolute poverty line is equal to an expenditure of 814 JD per individual, per year (or 67.8 JD per individual, per month). At the household level this equates to 4394 JD per household, per year (or 366 JD per household, per month).

TABLE 3: Incidence of moderate and acute poverty – Multidimensional child Poverty

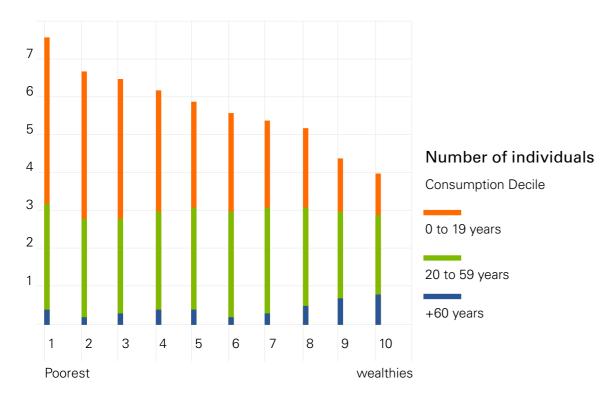
Population Under 18 (Millions)	3.16
Moderate Poverty (Millions)	0.64
Moderate Headcount 2+ (per cent)	20.3
Moderate Adjusted Headcount 2+	8.7
Acute Poverty (Millions)	0.04
Acute Headcount 2+ (per cent)	1.2
Acute Adjusted Headcount 2+	0.5

^{*}SOURCE: UNICEF (2018), Data from DHS 2012.

¹⁰ Last national poverty analysis conducted in 2018 and does not include child poverty. There is also a lack of disaggregated data beyond the governorates level.

¹¹ National Social Protection Strategy (2019) - MOPIC, MOSD and UNICEF.

One of the most visible patterns is the tendency for household size to be larger among the poorer segments of society. The average individual in the poorest decile lives in a household of 7.1 persons, of which 4.6 are below the age of 20 years old. Poor households include fewer elderly members and are less likely to have an elderly head of household (as shown in the graph below).



The average salary of a poor head of household is 241 JD/month. Although they consume only 1JD per person per day worth of food, this accounts for 33% of their total consumption (NSPS, 2019). The figure below presents the characteristics of the poor households.

CHARACTERISTICS OF POOR JORDANIANS



Larg size of poor households (>7 in the poores decile), mostly children.



Per cent of the poor received some form of loan.

Working poor (58 per cent of men in the poorest decile participate in the labor market.





The average wage of the poor worker



Working in the private sector.



low-paid jobs and competition with the growing number of migrant workers



Do not participate in the social security.



*SOURCE: NSPS (2019)

TABLE 4: Multidimensional Poverty Index in Jordan

Area	MPI	н	A	Vulnerable	Severe Poverty	Population Share
National	0.002	0.4%	35.4%	0.7%	0%	100%
Urban	0.001	0.3%	35.5%	0.6%	0%	89.2%
Rural	0.004	1.1%	35.1%	1.1%	0%	10.8%

^{*}SOURCE: OPHI (2019), DATA FROM DHS 2017-18.

REFUGEES IN POVERTY

In 2018, 78 per cent of the Syrian population in Jordan was highly or severely vulnerable, living below the Jordanian poverty line. 12 There is a small increase in the measured expenditures of the survey population compared to 2017, reflecting to a corresponding reduction of highly vulnerable cases into moderately vulnerable cases. 13 The distribution of welfare vulnerabilities is relatively equal across governorates, except for Amman that has lower rates of highly vulnerable and over double the percentage of low or moderately vulnerable. Expenditure per capita in Syrian households is negatively associated with case size. In other words, the mean expenditure per capita consistently decreased as the case size increases. For every additional person in a case, spending

per head declines by 7.5 JD. There is a significant difference between the average expenditure per capita of male and female-headed households. It is estimated that male-headed households spend 8 JD more per person each month compared to female-headed households. In 2017, the overwhelming majority of refugees (78 per cent) were living in non-camp settings (referred to as host communities), with a higher concentration in northern and central Jordan. Of these, around 50 per cent are under 18 years of age. Twelvethousand Syrians refugees remain living along Jordan's northeast desert border near Rukban, of whom an estimated 80 per cent are women and children.

The protracted nature of the crisis is exacerbating the vulnerabilities of refugees. The Government of Jordan has been shouldering the burden of the crisis by hosting and contributing substantially to refugees. Despite these efforts, the situation of Syrian refugee children has deteriorated significantly since 2016, driven mainly by the prolonged nature of the crisis and prevalent unemployment and underemployment among the refugee workforce. Over 80 per cent of Syrian refugees are reported to be relying on crisis or emergency coping strategies, causing Syrian refugee children to be at high risk of dropping out of school and participating in child labor (UNHCR, 2015).

According to a UNICEF (2018) recent assessment of Syrian refugee children in host communities in Jordan, 79 per cent of households interviewed in the survey are poor (income below the national poverty line of 68 JD per person, per month), this increases to 85 per cent for the children surveyed. Severity of monetary poverty is also higher among children. More than 81 per cent of Syrian children aged 0-5 years and 50 per cent of children aged 6-17 years are both monetarily and multidimensionally poor. Thirty-nine per cent of the Syrian refugee households interviewed are food insecure, and 26 per cent are vulnerable to food insecurity.

Multidimensional child poverty significantly differs across age

groups, the highest headcount of multidimensional child poverty is recorded for children aged 0–5 years; 94 per cent, followed by children aged 15–17 years: 64 per cent, and 60 per cent for 6–14 year-olds (UNICEF 2018).¹⁴

¹² Highly Vulnerable: Expenditure per capita is less than the absolute poverty line of 68JD per person per month. Severe Vulnerable: Expenditure per capita is less than the abject poverty line of 28JD per person per month.

13 Vulnerability Assessment Framework (2019) – UNHCR–Jordan

¹⁴ NICEF (2018) Assessment of Syrian Refugee Children in Host Communities in Jordan



EDUCATION

TABLE 5: SDG4 – Ensure inclusive and quality education for all and promote lifelong learning.

SDG Objective	SDG Indicator	Indicator of Interest	Syrians	Non-Jordanians	Jordanian	Geographic Distribution	Source
ıdary chieve	<u></u>	Percentage of children enrolment in KG2 by nationality and sex.				Governorate	MOE 2018 Annual Report
4.1. Increase children's access to quality and equitable primary and secondary education and ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and	4.1.1 Proportion of children achieving at least a minimum proficiency level in reading and mathematics, by sex, age, and nationality sex.	Percentage of students enrolled in formal education in camps out of total school- aged population, by sex.				Camps	UNICEF
primary men and	um prof lity sex.	Teacher-student ratio				Directorate Level	DOS Education profile 2018
quitable	a minim nationa	Students to School Ratio				Directorate Level	DOS Education profile 2018
ity and e	at least age, and	Students to classroom ratio				Directorate Level	DOS Education profile 2018
s to qual	chieving by sex,	Number of double Shift Schools by 2025				Governorate	MOE 2018 Annual Report
ı's access e that tantial pr	nildren a ematics,	Percentage of students in double-shift schools, by nationality and sex				Governorate	DOS Education profile 2018
childrer nd ensur d a subsi	tion of ch nd math	No. of students enrolled in higher education, by sex				Governorate	DOS Education profile 2018
 Increase children's acceducation and ensure that all youth and a substantial literacy and 	4.1.1 Proportion of children achieving at least a minimum pro in reading and mathematics, by sex, age, and nationality sex.	No. of students enrolled in TVET and Special Education, by sex				Country-wide	NSPS (2019)
. 4.1. edu all y	1.4.1.	Education Vulnerability Scores				Governorate	VAF (2019) and HIES (2018)

SDG Objective	SDG Indicator	Indicator of Interest	Syrians	Non-Jordanians	Jordanian	Geographic Distribution	Source
to numeracy (for Jordanians, Syrians refugees, and migrants). 4.2 To increase access to quality education for children (both male and female) in early childhood and to increase their readiness 4.1.2 Proportion of population in a given age group achieving at least a fixed level of proficiency in functional literacy and numeracy skills, by sex, and age. 4.2.2 Participation rate in organized learning (one year before the official primary entry age), by	Government expenditures on Education as percentage of GDP and total expenditures				Country-wide	UNICEF Budget Analysis	
	Enrolment in Private and Public Schools by Income Deciles				Country wide	NSPS (2019)	
	Percentage of children with distance to school more than 2 KM by income deciles				Country wide	NSPS (2019)	
to numeracy (for Jordanians, S migrants). 4.2 To increase acces education for children (both ma and to increase their readiness	 4.1.2 Proportion of gat least a fixed level numeracy skills, by 4.2.2 Participation rathe official primary 	Percentage of disabled children enrolled in basic education				Country wide	

^{*}SOURCE: OPHI (2019), DATA FROM DHS 2017-18.

SITUATION ANALYSIS

Early Childhood Education (ECE), Basic and Secondary Education

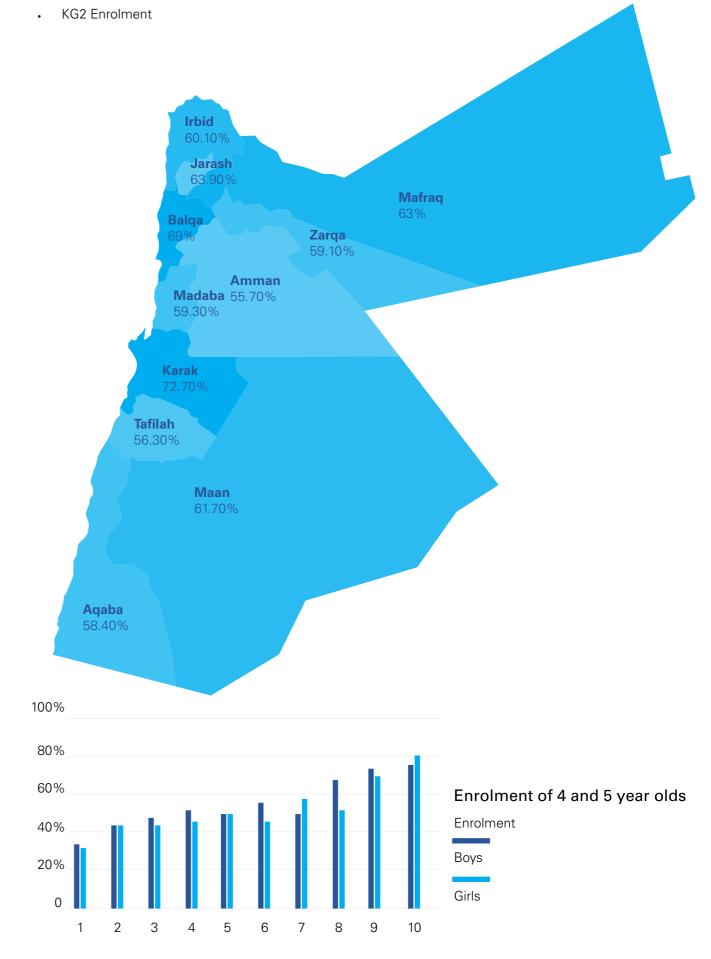
The sensitivity of the brain to the social environment makes Early Childhood Education and Development (ECED) interventions a necessity for children to learn, to live well, and to grow socially. On the other hand, adverse experiences and lack of developmental support during the early years can impair the development of the brain, and lead to cognitive and behavioral challenges later in life.

The National HRD strategy acknowledges the importance of ECE in a child's first few years, as this gives an unprecedented opportunity to set the foundation for life-long health and well-being. The nursery classes are the responsibility of the Ministry of Social Development, and the private sector. The Ministry of Education (MOE) is responsible for KG. In 2017, the Ministry of Education had approved KG in 68 double shift schools starting in 2017, open to children of all nationalities. The National Education Strategy also considers the improvement in the quality of education provided at the KG2 level; according to the strategy, MOE will adopt a quality assurance framework for kindergartens by the end of 2020.

There are considerable differences in KG enrolment among the rich and the poor in the country. According to HIES 2017–18, the access opportunity or participation of the children of poorest households (1st decile) in early education is merely 32 per cent compared to 77 per cent for highincome/wealthiest households (10th decile). This showed that poor and vulnerable children do not have access to early childhood education programs, which will lead to more disparities in the future. It is proven that early childhood education can increase average school readiness in Jordan by ten percentage points per year of schooling.

The map shows the KG2 enrolment at the governorate level, where the total gross enrolment rate at KG2 is around 60 per cent. 15

It is essential to mention the caveat here about the availability of data on KG enrolment in Jordan. There are no consistent or agreed estimates available for KG enrolment in the country, and a number of sources are available where the figures do not match. For example, DHS (2018) shows a very bleak picture for KG enrolment, whereas HIES has better enrolment estimates for 4 and 5 year-olds, which correspond more closely to the Ministry of Education and DOS figures.



¹⁵ Data provided by DOS (2017–18).

Conflict in the region has led to an adverse effect on the provision of governmental education services, given that the majority of the non-Jordanian children are enrolled in MOE schools. In 2016–17, 13 per cent of the students in MOE schools were non-Jordanians. Double shift schools have also increased from 708 MOE schools in 2016-17 to 746 schools; with the inclusion of double-shift schools for UNRWA, this number reaches 905. These schools are present in host communities and camps; governorates hosting the highest number of Syrian refugees (Amman, Mafraq, Irbid, and Zarga) have the highest number of double-shift schools. Sixty-nine per cent of the total number of enrolled Syrian children are attending these double shift schools, whereas the rest attend single shift schools.

The government target to reduce the number of double shift schools to 339 by 2025 does not yet seem feasible, given that there are no significant plans to increase the number of schools which can accommodate all the students who are studying in MOE and other government schools. The majority of the double shift schools were opened after the influx of Syrians, which has placed extra burdens on the education sector, ranging from classroom overcrowding, shorter lessons, and a high teacher-pupil ratio.

The expected years of schooling (13.4 years for females and 12.9 years for males) and mean years of schooling

(9.7 for females and 10.7 for males) have improved over the last decade (MOE, 2018). ¹⁶ The Net Enrolment Rate for Jordanian boys and girls at the basic education level is significantly high. At the secondary level, NER for Jordanian boys is lower than for girls; this is mostly due to poverty and the need for boys to join the labor market as unskilled workers. The femalemale student ratio at the level of basic education is 96.3, whereas, at the secondary level, it is 114.8 (DOS, 2017) ¹⁷

Although Jordan has opened its publicschool system to both registered and unregistered Syrian children, families still face numerous challenges that prevent enrolments, such as cost barriers in transportation and school supplies and the alternative of sending their children into the workforce. There are currently an estimated 141,428 Syrian refugee students receiving education in Jordan. Among the registered Syrian refugees, approximately only 69 per cent were enrolled in Jordanian schools for 2016-2017, and 31 per cent are out of both formal and informal education (UNICEF, 2018 estimates).

The table below reflects the Net Enrolment Rate by gender and nationality. For the Jordanian population, the Net Enrolment Rate for basic education is nearly 95 per cent; there is no significant difference between male and female enrolment. When targeting specific programming towards refugee-dense populations,

TABLE 6: Net Enrolment Rate (NER) by gender and nationality, 2016–17 (per cent)

Education	ı	NER-Syrians	5	NE	R-Jordania	ıns	NER-Total		
Level	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
4	3.2	2.8	3.0	20.5	19.2	19.8	14.2	12.9	13.6
5	11.4	11.1	11.2	68.4	67.3	67.8	61.9	61.0	61.4
Primary	69.0	67.6	68.3	99.8	98.9	99.3	96.9	96.5	96.7
Basic	57.6	58.0	57.8	98.8	98.5	98.6	94.5	94.9	94.7
Secondary	15.7	19.8	17.7	77.6	85.8	81.7	64.8	77.9	71.2

*SOURCE: DOS (2018)

policies should focus on the proportion of Syrians in the densely-populated governorates, such as Amman, where the proportion of Syrian students to Jordanian is 25.7 per cent; 25.1 per cent in Mafraq; 22.2per cent in Irbid, and 17.4 per cent in Zarqa. The ministry has planned to build 51 new schools for the Syrian population in the various governorates (MOE, 2018). 18

Learning Poverty

Children who are unable to read and understand short, age-appropriate text by age 10 are regarded as being in Learning Poverty. This indicator takes into account schooling and learning: the share of children who have not achieved minimum reading proficiency and adjusts it by the proportion of

children who are out of school. Today, 52 per cent of children in Jordan at late primary age are not proficient in reading, adjusted for the out-of-school children (World Bank, 2019). 19

¹⁶ MOE (2018) Education Strategic Plan 2018–2022.

¹⁷ DOS (2017) Jordan in Figures 2017.

¹⁸ Ibid.

¹⁹ World Bank (2019) Learning Poverty in Jordan.

TABLE 7: Indicators and components of Learning Poverty

Indicators and Components	Boys	Girls	All
Learning Poverty	55.3	48.2	52
Below Minimum Proficiency	52.8	46.7	50
Out-of-School	5.2	2.8	4
Human Capital Index	0.54	0.59	0.56
Learning-adjusted Years of Schooling	7.2	8.1	7.6

^{*}SOURCE: WORLD BANK (2019) 20

Supply Side Vulnerabilities

Key Statistics²¹:

- Average No. of Students per Class Unit: 25.1.
- Average No. of Students per Teacher: 15.4 (including MOE, other government, private and UNRWA schools).
- Percentage of Girls among Students: 49.5 per cent
- Percentage of Female School teachers to Total Teachers: 69.5 per cent.
- Percentage of Total School-Age Population who are Students in Basic and Secondary Stages: 20 per cent.
- Percentage of Total School Buildings that are Rented Properties: 35.5 per cent.

In this section, we have looked at the institutional vulnerabilities with a particular focus on Syrian majority districts. Overall, the Pupil-Teacher Ratio (PTR) in Jordan is currently 15.4:1, which is comparative

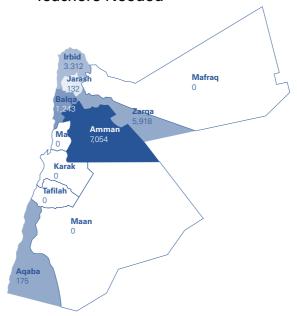
Pupil-Teacher Ratio (PTR) in Jordan is currently 15.4:1, which is comparatively better than most of the countries in the region, and also according to the UNESCO Institute for Statistics benchmark of 40:1.

The international community and MOE have agreed at a designated PTR of 20:1 in host communities in Jordan for all governorates, whereas the OECD average PTR is 14:1. A governorate will, therefore, be vulnerable if the ratio is more than 14. Keeping 14:1 PTR, the calculated gap in teachers' availability at the governorate level is presented in the map below (data at the directorate level is also annexed – see Appendix

A). In districts with a high density of refugees, such as Russia (Zarqa), Al Owesmeh (Amman), and the overall Zarqa governorate, the student to teacher ratio is much higher than 14; it can be observed that Amman, Zarqa, and Irbid have the highest gaps in terms of teachers' availability.

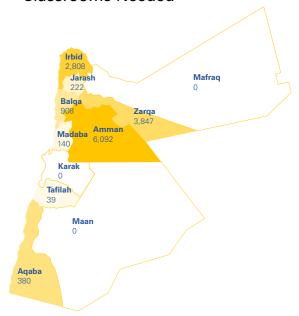
The second map looks at the gaps (by number) in the availability of classrooms in schools. Again here, the

Teachers Needed



average in OECD countries, i.e., 21.4 students per classroom was taken for comparison purposes.²² Governorates with a high density of refugees: Amman, Irbid, and Zarqa need additional classes to reach an average of 21.4 students per classroom. The study also analyses the students to school ratio: Irbid, Zarqa, Amman, and Aqaba have more than 300 students per school.

Classrooms Needed



Students to School Ratio



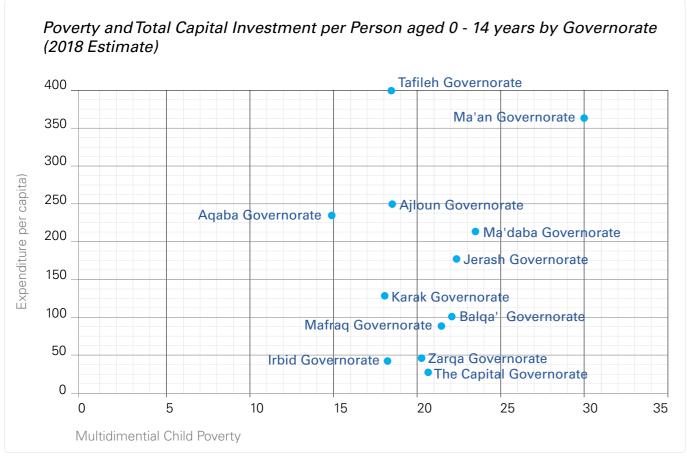
²⁰ World Bank (2019) Learning Poverty Jordan report

²¹ Source: DOS (2018)

²² Data obtained from DOS (2018)

The graph below shows the per capita capital expenditure and child poverty estimates for the governorates. This graph is important to highlight the vulnerable governorates in terms of child poverty estimates and if they

are receiving appropriate budgetary allocation per capita. This graph shows that Mafraq, Balqa, Zarqa, and Amman receives the lowest per-capita budget, with high rates of child poverty.



*SOURCE: UNICEF (2018A)²³

The instructional time during the school year in Jordan is one of the lowest in the world – one of the biggest problems in the Jordan education system is lack of instruction time, and that not enough is being done to tackle this. For example, the school year ends much earlier in Jordan than in other countries, and the school day is short.

Household Expenditure on Education

Regarding the size of expenditure on education, according to HIES 2017/2018,²⁴ education appeared as the third-highest household expenditure

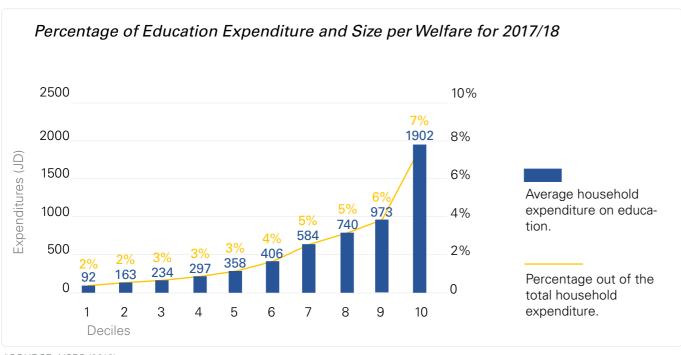
on non-food groups and services with a national average annual expenditure of JD 579, which constitutes an average 4.6 per cent of a household's total expenditure. Household expenditure on education increases from the poorest deciles to highest income deciles, as shown by the distribution of education expenditure per welfare level according to HIES 2017/2018:

The wealthiest deciles spend more on education in comparison with the poorest deciles in terms of percentages. By looking at the type of enrolled schools, the HIES 2017/2018 results presented below show that the majority of the poorest deciles send their children to public schools, which are free of charge. For example, 95 per cent of the 1st decile households enroll their children in Public Schools compared to 55 Per cent of those from the wealthiest 10th decile.

Nevertheless, at the beginning of the 2018/2019 academic year, it was announced that around 35,000 students have moved from private to public schools due to the poor economic and living conditions through which the country is going, in addition to the dramatic increases in the tuition fees of private schools.

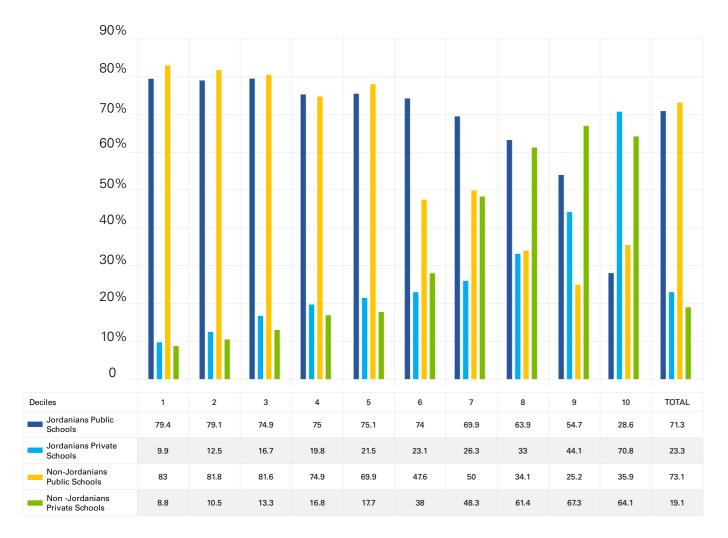
²³ UNESCO (2016) UNESCO Jordan Country Statistics-SDG4 Available at: http://sdg4monitoring.uis.unesco.org/ pdf_by_country/JO.pdf>, last accessed 11.11.2019.

²⁴ As per Main Indicators announced by DOS for Household Expenditure Data



*SOURCE: NSPS (2019)

Type of Schools Enrolled Within per Welfare Level for 2017/2018



However, the real burden of education expenditure was experienced more in Higher Education²⁵ than in general education. Moreover, HIES 2017/2018 revealed that 5 per cent of the poor families obtaining loans had done so for education purposes.

Table 8 compares Jordanian and Non-Jordanian children in different deciles and distance to school. More than 11 per cent of the children in the wealthier deciles have a distance to school of more than 4 km, whereas, for the poorest deciles few children go for more than 4 km.

TABLE 8: Distance to school for Jordanian and Non-Jordanian children per wealth decile

		JORDA	NIANS			NON-JORDANIANS				
INCOME DECILES	Less than 1 km	1 km to 4 km	4 km to 10 km	More than 10 km	Do not know	Less than	4 km to 10 km	More than 10 km	Do not know	Less than
1	49.4	44.0	5.8	0.8	0.1	47.9	42.5	7.8	1.7	0.2
2	49.1	41.5	8.2	1.1	0.2	48.8	42.6	7.5	1.2	0.1
3	46.7	44.9	6.5	1.9	0.0	42.7	47.3	9.7	0.3	0.0
4	46.8	43.1	8.4	1.6	0.1	45.6	45.9	8.4	0.2	0.0
5	42.1	45.8	10.8	1.4	0.0	52.1	38.1	9.2	0.0	0.6
6	42.3	46.5	8.1	2.8	0.3	56.9	25.0	15.1	3.0	0.0
7	42.2	43.0	12.0	2.9	0.0	31.4	34.9	14.5	19.2	0.0
8	38.2	44.4	13.5	3.8	0.1	33.4	37.7	16.2	12.7	0.0
9	32.3	49.2	13.0	5.3	0.2	33.6	48.7	17.7	0.0	0.0
10	23.4	41.7	22.8	12.1	0.0	26.5	66.2	3.9	3.5	0.0
TOTAL	43.3	44.3	9.7	2.5	0.1	45.7	42.9	9.0	2.3	0.1

*SOURCE: Calculations based on HIES 2017-18

Important Fact about Higher Education

Enrolment: SDG indicator 4.2.1 emphasizes the participation rate of youth and adults in formal and nonformal education and training by sex. According to data provided by the Ministry of Education, enrolment numbers in colleges and universities were as follows:

25 Based on HIES 2010

TABLE 9: Higher Education"

	201	6-17	201	7-18	2018-19		
Public Universities	132,539	99,811	137,087	101,885	137,572	97,259	
Private + Public Universities	166,588	152,399	174,332	155,848	177,345	147,925	

Vocational/Technical Education

Less than three per cent of youth participate in technical and vocational education and training (TVET). TVET is provided at the secondary and tertiary levels by both public and private institutions. The public sector includes the MOE and the Vocational Training Corporation. The private sector is also active both at post-basic and tertiary level, but only targets a minority of students.

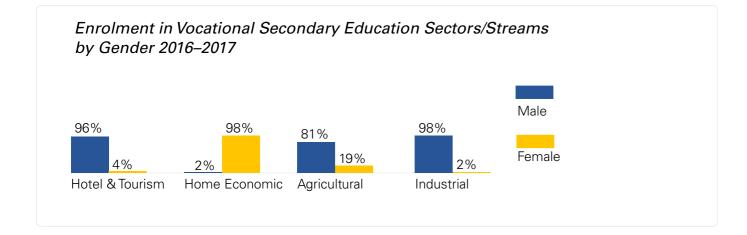
Students with the lowest grades are directed to the vocational stream, negatively stigmatizing vocational education despite the growing needs of the job market. For example, with ten times as many students choosing higher education over vocational

training, there is a critical lack of craftspeople and technicians compared to engineers and scientists.

The number of students in 2015/2016 amounted to 25,187.²⁶

A gender gap is apparent in enrolment, where at the overall level, streams have 43 per cent females versus 57 per cent males.²⁷ A high per centage, 93 per cent of the total enrolled females are enrolled in home economics. Other programmes/streams are often available only at males' schools, preventing females from enrolling in other subjects.

This is further demonstrated by looking at the gender distribution per vocational stream/programme, shown in the graph opposite.



26 MoE Strategic Plan, p. 24

27 MoE Strategic Plan, p. 24

Special Education

By law, nurseries in Jordan are obliged not to discriminate against students with disabilities, ²⁸ and must provide qualified staff and additional training for caregivers and parents of children with disabilities. ²⁹ According to the Instructions on Public Kindergartens No. 2 (2018), kindergartens should also have a separate and suitable entrance for children with disabilities, as well as provide them with an adequate bathroom. ³⁰

And though the Persons with Disability Law No. 20 (2017) obliges MOSD, which is responsible for nurseries to ensure that they are inclusive for persons with disabilities,³¹ the proportion of children with disabilities in nurseries is almost zero due to the absence of genuine enforcement of the law.

Children with disabilities can access primary and secondary education through:

- MOE specialized schools (150 merging schools)
- Al-Manar Centres of MOSD (18 centres for simple disabilities)
- As well as through the charity sector and private centres.

The enrolment percentage of children with disabilities in public education was 5 per cent for the scholastic year 2016/2017. MOE merging of school's locations have been chosen according to the number of children with disabilities in the area.³² These schools provide accessible amenities and

specialized curricula for students and also free transportation services.³³

While, Al- Manar centres were established as educational, training, and rehabilitation day-centres open to students with simple, medium disabilities or diagnosed with autism. Males are accepted from ages 6–16, while females are accepted from ages 6–19. In addition to the time spent at the centre, beneficiaries are provided with free transportation services. There are currently 18 centres across the Kingdom, providing services to 740 students.³⁴

Enrolment and Barriers to Attendance:

Those enrolled in the formal education system face different challenges. The most commonly reported issues that discourage attendance are the distance to school, financial constraints, safety and security concerns, and bullying (UNICEF 2018b).35 Unsurprisingly, the numbers of school-age children have risen substantially more than the resources available to build the infrastructure necessary for their schooling. Everyday observations have included: over-crowding, shortened class times, and highly strained teacher capacity. The UNICEF (2018b) study also explores the reasons for nonattendance at school; the majority of the households reported that school requirements for their children's age groups are not met, and identified financial constraints and child labour as other reasons for long-term nonattendance.

²⁸ Article 12 – Nursery Regulations No. 77 (2018)

²⁹ Article 16 – Regulations on Nurseries no. 77 (2018)

³⁰ Article 11 – Instructions on Public Kindergartens No. 2 (2018)

³¹ Article 27 (h) - Persons with Disability Law No. 20 (2017)

³² Ministry of Education Answers to Administrative Data Questions

³³ Nevertheless, there is no information about the transportation allowance provided to PWD in the budget.

³⁴ MoSD Answers – Please refer to Appendix B

³⁵ UNICEF (2018b) My Needs, Our Future: Baseline Study report for Hajati Cash Transfer.

Syrian Vulnerability

There are in total 134,121 Syrian children enrolled in the formal education system; of these nearly 32,000 are in camps, 35,557 in single shift schools and 66,580 in double shift

schools. Gender segregation for camps and host community schools is shown in Table 10 below;

TABLE 10: Gender segregation at schools

2010	6-17	2017-18		201	8-19	2018-19		
Male	Female	Male	Female	Male	Female	Male	Female	
16,040	15,944	17,502	18,055	32,481	34,099	66,023	68,098	
31,9	984	35,	557	66,580		134,121		
Percentage		24%		26.	5%	49.6%		

*SOURCE: OPEN EMIS (2018-19)

The table below shows the enrolment for the Azraq and Za'atari camps; there is still a significantly high proportion of children not enrolled in formal education or non-formal education. In Azraq, 16 per cent of females and 20 per cent of the males are out of school; in the Za'atari camp, 19 per

cent of females and 20 per cent of the males are out of school. There is a significant effort needed to enrol these children back in schools. The highest proportion of out of school children are in secondary education programme age groups.

TABLE 11: School enrolment for Azraq and Za'atari camps

САМР		Primary NFE - Secondary Catch-up		NFE Total Pop excluding KGs (6–17) as of May 19		Total (NFE+Fe)		OOSC (excluding KGs)		OOSC% (Excluding KGS)		TOTAL OOSC%			
O/ ((VII	F	М	F	М	F	М	F	М	F	М	F	М	F	М	TOTAL
Azraq Camp	4,859	4,782	99	131	166	259	6,088	6,443	5,124	5,173	964	1,270	16%	20%	17.80%
Za'atari Camp	9,081	9,263	69	92	232	363	11,558	12,174	9,382	9,718	2,176	2,456	19%	20%	19.50%
Total Camps	13,940	14,045	169	223	398	622	17,646	18,617	14,506	14,890	3,140	3,727	18%	20%	18.90%

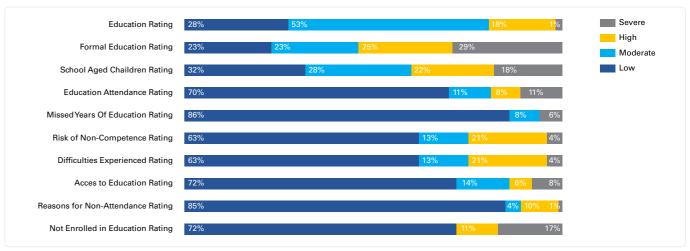
^{*}SOURCE: OPEN EMIS (2018-19)

In Jordan, access to education for registered Syrian refugee school-aged children is currently free, but Syrian households face multiple problems to ensure that their children can enroll and remain in schools. These vary from social and safety issues, financial constraints, distance to school and the limited availability of places in schools.

In 2019, 19 per cent of children are classified as vulnerable according to the VAF education rating.³⁶ Overall, male and female headed-family cases were equally vulnerable. Large family

sizes are likely to be slightly more vulnerable, owing to more children and the need to share resources between them. For most indicators, the governorate does not affect the average vulnerability rating. In terms of formal education ratings, more than half of the households are vulnerable in terms of access to formal education. The risk of non-completion is 25 per cent; another critical indicator is difficulties experienced in going to school, where vulnerability is again 25 per cent. Non-enrolment ratings also show that 25 per cent of children are vulnerable.

Education Rating



*SOURCE: UNHCR (2019)

The graph below is adapted from UNHCR (2019), which shows vulnerability for each of the indicators. For most indicators, the governorate does not affect the average rating; however, Tafilah had the worst rating for years of missed school attendance (although due to the low sampling in

this region, we cannot measure this with statistical confidence).

36 UNHCR VAF Report 2019.



*SOURCE: VAF (2019)

TABLE 12: MOE Capital expenditure on Syrians

Project (JD)	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Re-estimated 2017
Accommo- dating Syrian students	0	4,991,147	6,408,574	5,646,551	6,000,000

The table above shows the capital expenditures for accommodating Syrian students in government schools. For 2017, MOE spent JD 6 million specifically for Syrians, which is lower than the JD 6.4 million spent in 2015.

Remaining Needs And Vulnerabilities

Though the Ministry has made concerted efforts to accommodate Syrian children into the Jordanian school system, there are severe constraints associated with financial and land resources. Additionally, the Ministry has faced significant challenges in securing the resources to build and improve infrastructure and to incorporate the necessary accommodations for children with disabilities, who are often the most vulnerable of this population.

Highly crowded schools, especially those with double shift school (DSS) programming, need additional attention and funding to maintain facilities and to ensure that adequate and safe infrastructure is in place.

Drop-out rates remain high, especially for males between grades 7-11, when compared to females within the same age group; males also repeat courses at a significantly higher rate.

Lastly, refugee children are often dealing with the grief and trauma of having to flee their homelands, which can be disruptive of their educational goals. Ideally, teachers would be given training in the psychosocial skills needed to support such children, but the capacity to build these goals into an already resource-constrained environment of double shift schools is increasingly difficult.

Educational Services For The Poor And Vulnerable Groups: Future Plans As A Whole³⁷

 To ensure equitable educational services for all, the Ministry of Education:

o Announces transparent criteria for the expansion of Early Childhood Education with a focus on access for the poor and residents of remote areas.

o Implements the comprehensive integration plan for children with disabilities, including clarifying types of disability and services offered to each, including standards for accessibility and inclusion in nursery, and school licensing requirements.

o Identifies the quality assurance criteria, which is essential in order to improve the quality of learning opportunities at preschool level. Moreover, quality assurance procedures and standards reflect the reality of preschool education and the extent to which schools and the system are achieving objectives.

o Adopts responsibility for the operation of Al Manar Educational Centres (gradually over three years of the action plan). Adopts responsibility for the operation of all education programmes serving juvenile delinquents.

o Implements an incentive programme to encourage excellent teachers to serve in poor and remote schools and to ensure boys' schools have the same level of quality teachers as at girls' schools.

o Continues to identify small remote schools that could be consolidated and raises awareness among residents about the trade-offs between physical accessibility and quality of education.

- Improving education service delivery with more classrooms, teachers, and schools.
 - o Urgent need for additional teachers in Amman, Zarqa, Irbid, and Balga.
 - o Additional classrooms needed for schools in Amman, Zarqa, Irbid, Jerash, and Balga.
 - o Students to school ratios are very high in Zarqa and Aqaba.
- Per capita expenditure on education by the Jordanian Government in Zarqa and Amman needs consideration and revision, and possible increased expenditure in education development.
- Ensuring access and equity for all children by improving enrolment rates in schools and accommodating all age groups.³⁸
- Providing educational opportunities for out-of-school children especially those who are between 9–12 years old through the catch-up programme over the next five years.³⁹

³⁷ Some of them adopted from the National Social Protection Strategy Document

³⁸ Ministry of Education (2018) Education Strategic Plan 2018–22.

³⁹ Ibid.

- To improve the management of Educational Information Systems, the Ministry reviews its policies and work plans and adopts modern technological tools and systems that provide inclusive and accurate data on schools, students and teachers, such as on Open EMIS and GIS.
- Institutionalizing risk and crisis management at the level of the Ministry and at the directorates' level.
- Aligning the education system with the labour market.
- o Ministry of Education incorporates "employability skills" into the curriculum from the youngest ages. Relevant skills include teamwork, following through on goals/objectives, English language, articulating career options based on personal talents and passions.
- o Mandatory apprenticeships and volunteer work incorporated into the curriculum.

The Ministry of Finance and Prime Ministry consolidate all publiclyfunded educational grants into a single system that awards grants based on transparent criteria and excludes specializations for which there is already an oversupply of graduates. All recipients of publicly-funded grants are required to work in jobs that advance the goals of the NSP Strategy for an established period after graduation. All publicly-funded educational loans are consolidated into a single independently-managed system that includes enforcement mechanisms for the repayment of loans. The Ministry of Finance includes a report of publiclyfunded grants and loans (including demographics of recipients and repayment rates) in the annual budget submission.



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HEALTH

TABLE 13: SDG4 – Ensure healthy lives and promote well-being for all at all ages

SDG Objective	SDG Indicator	Indicator of Interest	Supply Side /Household	Syrians	Non-Jordanians	Jordanian	Geographic Distribution	Source
ealth- Jordani-	ices infec- eral and	Health insurance coverage (by nationality and sex)	Supply Side/ Household				Governorate	Census (2015) and DHS (2018)
essential h	ential servi nild health, ng the gene	Number of health- care centres per 60,000 population	Supply side				Governorate	DOS-Health Stats (2018)
overage, including financial risk protection, access to quality essential health- e, effective quality and affordable essential medicines and vaccines for Jordani- rants	ential health services (defined as the average coverage of essential services entions that include reproductive, maternal, new-born and child health, infecommunicable diseases and service capacity and access, among the general aned populations)	Mortality Rate for children: Infant mortality, child mortality, under 5 and pre-natal	Supply Side/ Household				Country-wide	DHS 2018
tion, access ntial medic	erage cove ernal, new- acity and ac	Percentage of chil- dren completed basic vaccination (by sex and nationality)	Supply Side/ Household				Governorate	DHS 2018
risk protec dable esse	d as the av active, mate ervice capa	Average number of hospital beds per 10,000 population	Supply Side/ Household				Governorate	DOS-Health Stats (2018)
g financial y and affor	ices (define Ide reprodu eases and s	Fertility Rate (by nationality)	Household				Governorate	DHS 2018
ge, includin ctive qualit	nealth servins that inclunicable disconlations)	Average Post Natal care visits (by nationality)	Supply Side/ Household				Country-wide	DHS 2018
health coveragess to safe, effe and migrants	essential Patervention on-commun	Health insurance Status of Poorest Deciles	Supply Side/ Household				Country-wide	HIES 2018
3.8 Universal health coverage, including financial risk protection, care and access to safe, effective quality and affordable essential ans, Syrians, and migrants	3.8.1 Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, new-born and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged populations)	Health Vulnerability Rating**	Household				Governorate	VAF 2019, HIES 2018
. 3.8 Un care at ans, Sy	• 3.8.1 C based tious d	Government expenditures on Health as percentage of GDP and total expenditures	Supply Side				Country-wide	UNICEF Budget Analysis

Indicator of Interest	Supply Side /Household	Syrians	Non-Jordanians	Jordanian	Geographic Distribution	Source
Prevalence of Disability	Household				Country-wide	DHS 2018
Distance to government primary health facilities	Supply Side				Governorate	HIES 2018
Average Health Expenditures by the households	Household				Governorate	HIES 2018
Percentage of households with chronic illness	Household				Governorate	HIES 2018
Doctors to population ratio	Supply side				Governorate	DOS-Health Stats (2018)
Nurses to population ratio	Supply side				Governorate	DOS-Health Stats (2018)

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Jordan has made considerable improvements over the last decade in the health of its population. The Government of Jordan is committed to sustaining and improving the health status of its population while the country continues to cope with a global economic downturn, the influx of refugees, and epidemiological shifts. Jordan is performing well in the majority of Sustainable Development Goal 3 targets: "Ensure healthy lives and promote well-being for all at all

ages." The figure below shows Jordan's performance on the SDG3 objectives:

Overall, Jordan's health performance is much better than the performance in the surrounding region, but challenges remain. The top challenge is road traffic deaths, while Jordan also scores low for the subjective wellbeing of the population. The indicators on the left show the overall performance of Jordan against the SDG targets. Jordan's SDG target score is 76.3.

Good health and well-being



Maternal mortality	(per 100,000 live births)	50	• †
Neonatal mortality	(per 1000 live births)	11	• †
Under 5 mortality	(per 1000 live births)	19	• †
Incidence of tuberculosis	(per 100,000)	6.8	• †
HIV prevalence	(per 1000)	0	•••
The death rate from NCDs	(per 100,000)	19.2	• 1
The death rate from household and ambient pollution	(per 100,000)	51	•••
Traffic deaths	(per 100,000)	23.6	•-
Life expectancy at birth	(years)	74.3	•
Adolescent fertility	(births per 1000)	23.3	• †
Births attended by skilled health personnel	(%)	99.6	•••
Infants who receive two WHO vaccines	(%)	93	• †
UHCTracer Index	(0-100)	77.3	• †
Subjective wellbeing	(0-10)	4.6	• ↓

*SOURCE: (SDG INDEX, 2019).

Rating

- SDG achieved
- Challenges remain
- Significant Challenges remain
- Major Challenges remain
- (information unavailable)

Trend

- On track to achieve goal by 2030
- Score moderately increasing, insufficient to attain a goal
- Score stagnating or increasing at less 50% of required rate
- Score decreasing
- · Trend information unavailable

The health-care system in Jordan provides comprehensive public health-care services to most of its citizens, at relatively low costs. The health system comprises of private, public, charity, and non-governmental organizations (NGOs). The public sector comprises the Ministry of Health (MOH), the Royal Medical Services (RMS), the National Center for Diabetics, Endocrinology, and Genetics, and the university hospitals.

There are 32 hospitals operated by MOH plus 99 comprehensive health centres, 378 primary health-care centres, and 198 peripheral health centres (UNICEF, 2017a), whereas RMS operates 12 hospitals, two comprehensive health-care centres, and field clinics. The private sector has 61 hospitals, a large number of private clinics, and charity-funded institutions. Finally, the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) and the **United Nations High Commissioner** for Refugees (UNHCR) offer primary health-care services to registered refugees in Jordan through contracts with implementing parties.

Fertility Rate

The total fertility rate for Jordan declined rapidly in the 1990s from 5.6 births per woman in 1990 to 3.7 in 2002, to 3.5 in 2012. Fertility also declined remarkably between 2012 and 2017–18 from 3.5 to 2.7 per woman, whereas

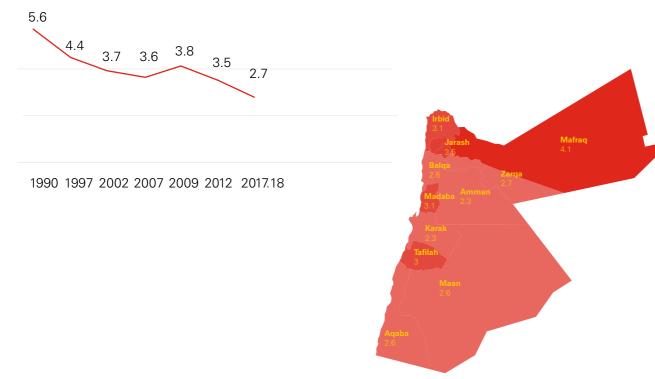
for Syrians, the fertility rate is 4.7 (DHS 2017–18).

The fertility rate varies across the governorates, where the highest is reported in Mafraq (4.1), followed by Ajloun (3.5) and Jerash (3.5). The high rates of fertility in these northern governorates are mainly due to the presence of Syrians in these communities, where for Syrians, the overall fertility rate is reported at 4.7 per woman. The fertility rate varies across the wealth quintiles: in the lowest quintiles the fertility rate is 3.9; this decreases to 1.4 for the wealthiest quintiles.

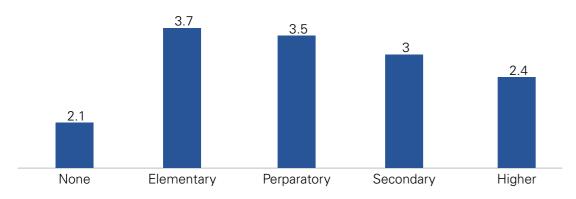
Trends in fertility

Births per woman for the 3 years period before the survey.

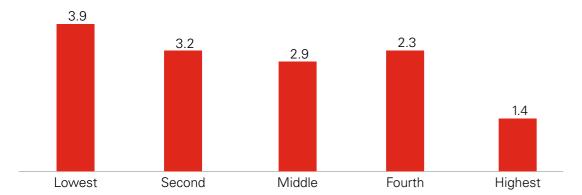
Fertility rate on syrian women is 4.7



Fertility rate by education status



Fertility rate by wealth quintiles



Mortality

SDG target 3.1, and 3.2 refers to maternal and child mortality. Jordan's maternal mortality rate is 50 per 100,000 live births, 40 which is lower than the SDG target 3.1 references of 70 per 100,000 live births. This can be attributed to 100 per cent skilled birth attendance, 99 per cent antenatal care from a health provider, and 99 per cent of deliveries taking place at health facilities (DHS 2017-18).41

SDG target 3.2 refers to ending preventable deaths of new-borns and children under 5 years of age. Infant mortality is 17 per 1,000 live births, which is a bit higher than SDGs target of 12 per 1,000 live births; under-five mortality is 19 per 1,000 live births, which is lower than 25 per 1,000 live births, as mentioned in SDG (DHS 2017–18).

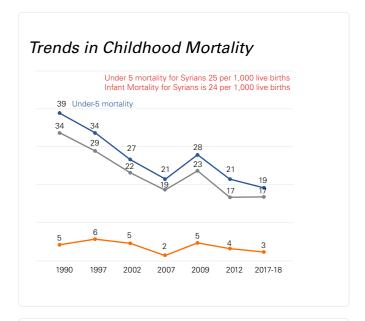
Antenatal Care (ANC)

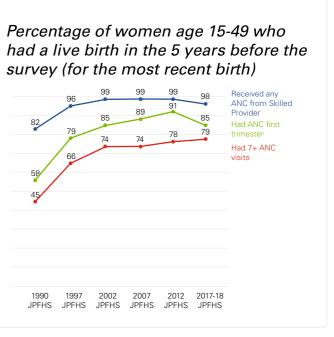
The percentage of women who had at least seven ANC visits increases with increasing education, from 55 per cent among those with no education to 84 per cent among those with higher education.

Similarly, the percentage of women who had at least seven ANC visits increases with increasing household wealth, from 69 per cent among those in the lowest wealth quintile to 89 among those in the highest quintile. ANC from skilled providers is received by 96 per cent of Syrians, with 62 per cent of Syrians receiving 7+ ANC visits.

This section will mainly focus on SDG target 3.8: Achieve universal health

coverage, including financial risk protection, access to quality essential health-care services, and access to safe, effective, quality and affordable essential medicines and vaccines for all.





⁴⁰ These are the estimates only.

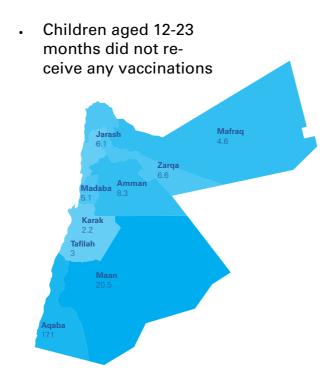
⁴¹ DHS (2017–18) Population and Family Health Survey-Key Indicators Report. DOS, USAID, UNICEF and UNFPA.

Vaccination

Table 14 next shows the vaccination records by sex, nationality, and governorate for all the major vaccinations. Data show that 86 per cent of children aged 12–23 months have received all basic vaccinations, while 86 per cent have received all basic vaccines according to the Jordanian immunization schedule.

Seven per cent of children in this age group 12–23 months have not received any vaccinations. Though the overall coverage of basic vaccinations seems high, 8 per cent of male and 5.6 per cent female children didn't receive any vaccinations. The governorates of Ma'an and Aqaba are the worst performers in terms of the provision of basic vaccinations and have relatively high percentages of children who didn't receive any kind of vaccinations.

Other nationalities, especially those living in ITS settlements, have not received basic vaccinations. The first map shows the governorate level variation where children aged 12–23 months did not receive any kind of vaccination, and the second map shows where children aged 12–23 months received all the basic vaccinations.



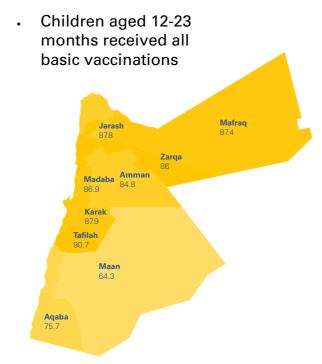


TABLE 14: Vaccinations by Sex and Nationality (Children aged 12-23 months)

	BCG	DPT-IPV-Hib III	Polio III	Hepatitis B III	Rotavirus III	Measles	All Basic Vaccinations	No Vaccinations
Sex								
Male	91.7	88.4	83.6	88.7	86.9	87.4	84.7	8.0
Female	94.0	92.0	85.0	91.6	90.7	88.4	87.0	5.6
Residence								
Urban	92.6	89.7	84.1	89.8	88.6	87.7	85.6	7.2
Rural	94.0	92.6	85.2	92.2	88.7	89.2	86.8	4.5
Nationality								
Jordanian	93.7	91.5	86.0	91.7	90.4	89.7	87.7	6.0
Syrian	90	84.3	76.4	84.2	82.0	79.6	75.8	8.8
Other Nationalities	80.5	75.7	71.7	71.8	71.9	75.7	75.2	19.5
Total	92.7	90.0	84.2	90.1	88.6	87.9	85.7	6.9

*SOURCE: DHS 2017-18.

Health Insurance Coverage

According to the Ministry of Health statistics: three-quarters of the population is covered by health insurance (73 per cent). This has increased considerably since the last census in 2015. That census had data at the governorate level, so this report uses census data at the governorate level. According to the census, the public sector covers 52.1 per cent of Jordanians, comprised of the Civil Insurance Program (CIP) (26.4 per cent of Jordanians), RMS (24.1 per cent), and UH (1.6 per cent). The private sector covers 7.9 per cent of the population. UNRWA covers the primary healthcare costs of 1.6 per cent. Other mechanisms, such as professional unions, cover 1.6 per cent, and those covered from outside of Jordan

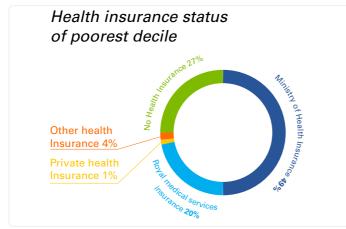
comprise 0.3 per cent. In addition, 4.7 per cent of Jordanians are uninsured but are protected by law.

A Royal Decree provides all children under the age of six with free healthcare services at MOH facilities (UNICEF 2017). The census did not describe, however, how it attributed the primary source of insurance for Jordanians with multiple sources of coverage (e.g., CIP and RMS). For Non-Jordanians, nearly 80 per cent of the population in Amman, Balga, Madaba, Tafilah, and Agaba are not insured. These governorates host other nationalities in addition to Syrians, like those living in the ITS, small villages and towns. For Jordanians, Amman is the worst performer with 45 per cent of the population not insured, followed by Zarga (39 per cent), Madaba (22 per cent) and Agaba (22 per cent).

Governorates	% of Non-Jordanian Female Population with NO health Insurance Coverage	% of Non-Jordanian Male Population with NO Health Insurance Coverage	% of Non-Jordanian Total Population with NO Health Insurance Coverage	% of Jordanian Female Population with No Health Insurance Coverage	% of Jordanian Male Population with No Health Insurance Coverage	% of Jordanian Total Population with No Health Insurance Coverage	% of total population with No Health Insurance
Amman	82	85	84	44	45	45	58.7
Balqa	77	86	83	23	25	24	35.2
Zarqa	67	72	70	38	40	39	49.3
Madaba	76	83	80	20	23	22	31.6
Irbid	73	75	74	19	21	20	33.8
Mafraq	39	44	42	15	16	16	26.8
Jerash	35	39	37	12	14	13	20.1
Ajlou	63	69	66	7	9	8	14.3
Karak	58	74	68	9	11	18	18.1
Tafilah	75	82	80	8	11	9	13.7
Ma'an	65	72	70	12	15	14	19.8
Aqaba	71	77	75	21	24	22	37.1
Jordan	72	77	75	30	32	31	44.5

*SOURCE: CENSUS (2015)

As with the social assistance system, the public health insurance system suffers from a profusion of similar programmes that have accumulated over time and result in inefficiencies, confusion about entitled benefits, and insurance contributions and a medical fee structure that is neither aligned with the actual cost of service nor the ability-to-pay. One quarter of the population in the poorest deciles in Jordan is not covered by any health insurance.



*SOURCE: HIES 2017/2018

Hospital Capacity-Health Sector Services in Jordan

In this section, we will be looking at governorate level segregation for services like hospitals (per 60,000 people) and hospital beds (per 10,000 people).

The maps below reflect the number of beds per 10,000 people, using a national standard of 18 beds per 10,000 people excluding Amman as

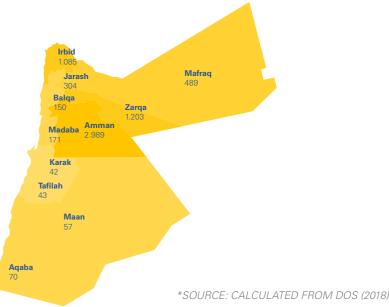
its standard is 26 beds per 10,000 people. Mafraq, Zarqa, Jerash, and Madaba have the lowest beds capacity to serve the population, with nearly half of the population is not covered by bed capacity in the governorates. The second map shows the estimated beds gap, Amman almost needs 3,000 beds and with Zarqa and Irbid require more than 1,000 beds.

The number of hospital beds per 10,000 people, using the national standard of 18 beds per 10,000 people excludes Amman as its standard is 26 beds per 10,000 people

 Percentage of Population not covered by bed capacity in hospitals.



 Number of additional required Beds (Beds Gap).



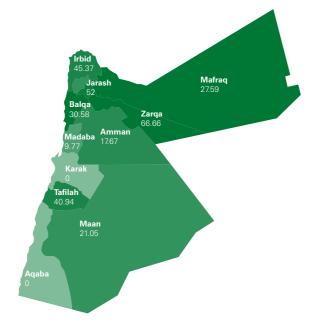
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The maps below reflect the additional hospital capacity required to cater to the needs of populations in each governorate. The first map shows the population which is not covered by hospital capacity, according to a ratio of one hospital for 60,000 population. In Zarqa there is a need for an additional 16 hospitals, which will cover 66 per cent of the additional population not

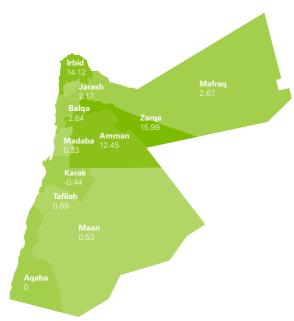
covered by current capacity. Irbid, Jerash, Tafilah, and Mafraq needs a significantly higher number of hospitals to cover their populations.

Number of Hospitals: National standard of one Hospital for 60,000 people

 Population no covered by hospital capacity.

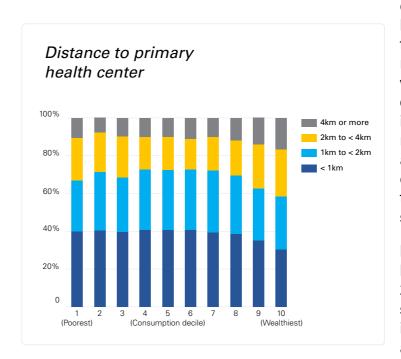


 Number of additional required hospitals (Hospital Gap).



*SOURCE: CALCULATED FROM DOS (2018)

The situation of the health sector closely mirrors that of the education sector in the achievement of nearly universal access but with an overemphasis on higher levels at the expense of lower levels of service provision. The public budget allocated to health is higher in Jordan than in most comparable countries, and Jordan was an early achiever of Sustainable Development Goals related to access.⁴² More than 90 per cent of Jordanians – poor as well as wealthy – live within 4 kilometres of a primary health-care centre (NSPS, 2019).



Persons with Disability

In Jordan, estimates of the prevalence of disabilities vary widely. According to the HIES 2017/2018, between one and two per cent of households include at least one member with a disability, with rates higher reported for poorer households than wealthier households.

On the other hand, according to the Population and Housing Census of 2015, 11.1 per cent of the population has some form of disability (ranging from mild to severe). These individuals are more vulnerable to being deprived of proper education, adequate health services, and equal access to labour market opportunities due to the negative societal perceptions, which result in isolation and stigmatization. Most families with children with disabilities prefer keeping them at home, or within the care centres, they have been entrusted to and restrict their contact with the outside world. As a result, only 5.4 per cent of children with disabilities are enrolled in education. This results in profoundly reducing a person with disability's ability to be self-reliant as they miss out on educational and work opportunities that may allow them to become selfsufficient.

In 2017, a new law was passed for the Rights of Persons with Disabilities No. 20, which was celebrated for its broad scope and detail. Annex contains the information on the institutions that are obliged to fulfil the needs of the persons with disabilities.

42 The World Health Organization's Global Health Expenditure Data is the reference source for international comparison. It uses the revised System of Health Accounts 2011 which clarifies the financing mechanisms and introduces new dimensions which improve the comparability of health expenditures. Estimates of current health expenditures include healthcare goods and services consumed each year. This indicator does not include capital health expenditures such as buildings, machinery, IT and stocks of vaccines for emergency outbreaks. Data was extracted from the World Development Indicators database, available at https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS?locations=XM-JO, last accessed 12.11.2019.

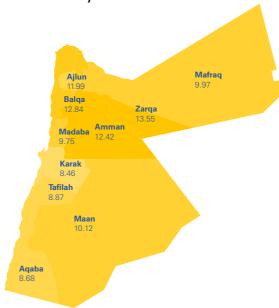
The table below shows the percentage of individuals with Chronic Diseases as per the Consumption Level (HIES 2017-18). The data below show that the rate of persons with chronic illness is much higher for the wealthiest quintiles where it reaches to 24 per cent.

The maps at the governorate level show the percentage of households with at least one person with a disability. The highest rates of reported disability are in Amman, Zarqa, Balqa, and Ajlun; some of this can be attributed due to the high numbers of Syrians in these governorates.

Household Level Health Expenditures

The second map shows the average household-level health expenditure; the highest expenditure is reported in Amman and Madaba due to expensive medication and health-care facilities in these governorates, and to the majority preferring to see doctors in private hospitals and clinics. In other governorates, by contrast, the majority relies on government-provided health-care facilities.

 Percentage of households with at least one person with a disability



 Average Household Health Expenditure

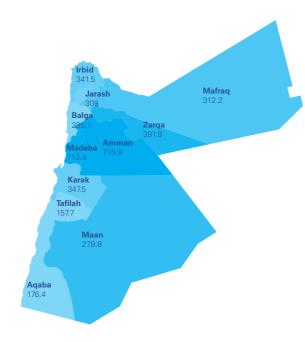


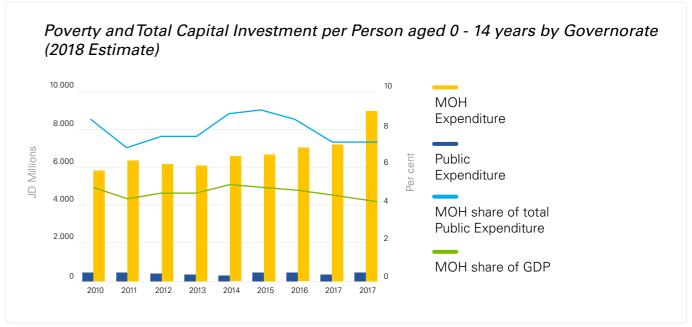
TABLE 15: Chronic Diseases per Consumption Level

Wealth Deciles (1=poorest; 10=Wealthiest)	1	2	3	4	5	6	7	8	9	10
% of citizens with chronic illness	8%	9%	9%	10%	11%	11%	12%	14%	19%	24%

Health Expenditure

The graph below shows government health expenditures as a per cent of GDP, and total public expenditures for the base year prices of 2010. The health expenditures are 4 per cent of the GDP and 6.6 per cent of total public

expenditure. The real expenditure on health has declined from 2016 to 2018 by almost half a percentage point when expressed in terms of GDP.



*SOURCE: GENERAL BUDGET, MOH BUDGET, CENTRAL BANK DATA. PRIMARY AXIS: EXPENDITURE IN 2010 JD, MILLIONS. SECONDARY AXIS: MOH SHARE (%). SOURCE:

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Syrian Vulnerability Assessment⁴³

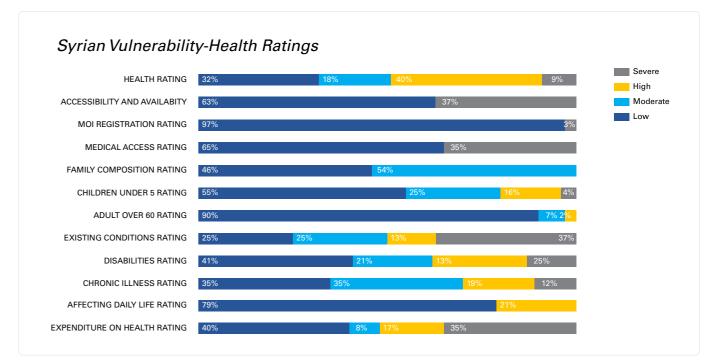
This section will mainly focus on Syrian vulnerability, and is adapted from the VAF UNHCR 2019 report. UNHCR and the Health sector modified the vulnerability identification formula in 2017. According to the VAF report, 49 per cent of the population in 2019 are classified as vulnerable (high or severe). This is a reduction from 55 per cent in the VAF 2017 survey. The index is comprised of access and availability of health services, MOI registration, medical access, family composition, children below six, adults above 60, existing medical conditions, the presence of disabilities, the presence of chronic illness, and health issues affecting life and health expenditure by households (the results for each of these indicators are provided in the graph below). While the atomic indicators remained largely the same, the way that they were combined was changed in order to reflect observations in other, similar assessments.

Along with the model change there was a change in the distribution of identified vulnerabilities. Family composition plays a major role, where larger case sizes are more likely to be vulnerable than smaller cases. Expenditure on health care remains one of the major vulnerabilities for the households, where more than half of the households reported being vulnerable. Existing medical conditions which requires regular care also increases the health-care.

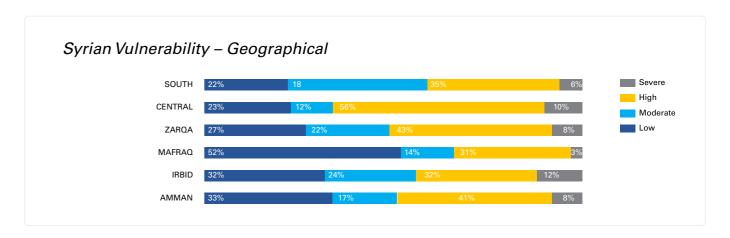
In terms of disability, 38 per cent of households are vulnerable, given that they have one or more family members with a disability.

At the governorate level, there are some major differences among the health vulnerability ratings. Irbid and Mafraq have lower ratings for high and severely vulnerability ratings for health, whereas the highest vulnerability is reported for Zarqa, where refugee to local population ratio is also significantly high.

Mafraq emerges as the region with the smallest proportion of people with vulnerabilities according to the VAF health indicator, where 34 per cent are vulnerable according to these criteria. The central region has an above-average level of health vulnerability. Sixty-six per cent of respondents in this region are classified as having health vulnerabilities.



*SOURCE: VAF (2017)



⁴³ The findings are adopted from VAF UNHCR 2019.

Recommendations and Ways Forward⁴⁴

 Increase transparency of public health-care spending and expand coverage of health insurance to the poor:

o The Ministry of Health provides universal free health insurance to all Jordanians below the poverty line (with eligibility determined by Takaful). The Ministry of Health offers a voluntary programme through which any worker registered with SSC and earning less than 350 JD/month can sign up for health insurance based on the (subsidized) contribution rate applied to public employees.

o Reduce the number of separate publicly-funded insurance programmes. The Civilian Insurance Program consolidates existing programmes to harmonize benefits and align beneficiary contributions with the ability to pay. Royal Military Service and the Civilian Insurance Program presents plans for the merger of the two entities over the coming three years. The Minister of Health issues instructions requiring all fee exemptions to be based on transparent ability-to-pay criteria and channelled through "Takaful."

o The Ministry of Health and other relevant public agencies establish a fee schedule that reflects the actual costs of health services and products.

All medical bills should be required to highlight the actual value of health services and products (according to the fee schedule) and any deductions (e.g., amounts paid through insurance or fee exemptions). This is expected to clarify and raise awareness about the extent to which the cost of health care is subsidized from the public budget.

- Improve primary health-care services and reduce the over-use of secondary⁴⁵ and tertiary-care⁴⁶ services.
- Increase expenditure on development to provide an appropriate number of health facilities (beds and hospitals) in the densely populated governorates of Amman, Zarqa, and Irbid. This would decrease the burden on health facilities.
- Child Mortality rates are high for Syrian children in Jordan as compared to Jordanian children. Adequate and affordable health-care facilities for the Syrian population can result in lower mortality rates, as most of the Syrian in Jordan families cannot afford healthcare costs.
- Coverage of basic vaccination for children is also very low in the southern governorates (Ma'an and Aqaba) and for Syrian children. National immunization campaigns need more resources and a better targeting framework, and also, the programme needs awareness-raising among the communities and advocacy campaigns.
- Non-Jordanians and poor Jordanians have high rates of no insurance;

in order to have a comprehensive health coverage for vulnerable non-Jordanians, development partners need to target these populations in the vulnerable governorates of the country.

• Real health expenditures as a per centage of GDP is decreasing over the years, placing an additional burden on poor households and resulting in a lack of basic health-service provision in the country. This has already had a very pronounced impact on the Syrian population, where health expenditure costs are higher, especially while there is a significantly high proportion of the disabled population.

⁴⁴ Adapted from NSPS 2019.

⁴⁵ Secondary care: Health-care services provided in hospitals. Includes cases requiring short-term but serious treatment such as delivery, intensive care and medical imaging services.

⁴⁶ Tertiary care: Specialized health-care services such as advanced medical examination, cancer treatment, neurosurgery, heart surgeries, severe burns treatment, advanced paediatric care and other complex medical and surgical interventions.



WATER AND SANITATION

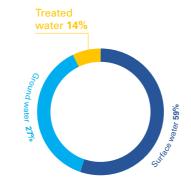
TABLE 16: SDG 6: Ensure availability and sustainable management of water and sanitation for all.

			Unit of Analysis					
SDG Objective	SDG Indicator	Indicator of Interest	Supply Side /Household	Syrians	Non-Jordanians	Jordanian	Geographic Distribution	Source
en erable		Per capita share for the water	Supply Side				District	UNICEF and MOWI (2018)
nd equitable access to safe and affordable drinking water for all dequate and equitable sanitation and hygiene for all and end open cial attention to the needs of women and girls and those in vulnera	nd (b) a nd (b) a	Percentage of house- holds with connec- tion to the sewer networks	Supply Side				District	UNICEF and MOWI (2018)
nd equitable access to safe and affordable drinking water for all dequate and equitable sanitation and hygiene for all and end opcial attention to the needs of women and girls and those in vuln	safely managed drinking water services (a) safely managed sanitation services and (b) a water (a) safely managed sanitation services and (b) a	Sanitation and Water Network in Camps	Supply Side				Camps	UNICEF and MOWI (2018)
fordable d and hygier en and gir	safely managed drinking water services (a) safely managed sanitation services swater (a) safely managed sanitation services swater	Vulnerability In- dex-Syrians**	Household Level				Governorate	VAF (2019) and HIES (2018)
safe and af sanitation ds of wom	naged drir managed managed	Expenditure on Water, Hygiene San- itation	Household Level				Governorate	VAF (2019) and HIES (2018)
access to sequitable s	safely mai (a) safely water (a) safely water	Percentage of house- holds with access to safe water	Household Level				District	VAF (2019) and HIES (2018)
equitable quate and attention	ulation using ulation using vith soap and ulation using vith soap and	Performance of Water Utilities	Supply-side				Sub-district	UNICEF and MOWI (2018)
universal and access to adec paying special	of popular of popular of popular of popular of popular of popular acility with	Vulnerability Index for Water	Supply Side				Sub-district	UNICEF and MOWI (2018)
e e -	6.1.1 Proportion of population using safely 6.2.1 Proportion of population using (a) sar hand-washing facility with soap and water 6.2.1 Proportion of population using (a) sar hand-washing facility with soap and water	Vulnerability Index for Sanitation	Supply Side				Sub-district	UNICEF and MOWI (2018)
6.1 Achiev 6.2 Achiev defecatior situations	6.2.1 F hand- 6.2.1 F hand- hand-	Percentage of Non-revenue water	Supply Side				Sub-district	UNICEF and MOWI (2018)

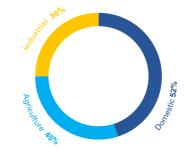
Jordan ranks as the world's second water-poorest country (MOWI, 2017). As a water-scarce country, Jordan has one of the world's lowest levels of water resource availability per capita, with only 125 cubic metres per person, per year in 2017.

The current total use exceeds renewable supply. The difference (the water used that is not renewable) comes from non-renewable and fossil groundwater extraction, and the reuse of reclaimed water. If supply remains constant, per capita domestic consumption is projected to fall to 90 cubic metres per person, per year by 2025, further constraining economic growth and potentially endangering public health.

· Sources of water



· Water Uses



*SOURCE: (MOWI, 2018)

As a result of successive refugee influxes into Jordan, along with natural growth, its population has increased by more than a factor of nine over the last 54 years. This rapid population growth has increased pressure on public infrastructure, including water and wastewater networks. This has been compounded by significant changes in the country's socio-economic profile, which has increased the demand for water while increasing standards and expectations. The very difficult water situation in Jordan is compounded by high rates of non-revenue water, an estimated 47.5 per cent nationally. Such high rates of leakage, in addition to illegal connections and faulty meters, reduce the amount of water available in the water network, and increases the supply costs, as well as further depleting Jordan's water resources. Domestic use accounts for approximately 45 per cent of the water provided in Jordan, with almost 3 per cent used for industrial purposes and 52 per cent used for irrigation. The very low price of agricultural water, high levels of illegal connections, the everincreasing population, and expanding industrial and agricultural sectors, have resulted in demonstrable and long-term declines in water levels in the principal aguifers underlying the country. Industrial water use in 2017 was 32.1 million cubic metres (MCM). The industrial sectors with the highest consumption are the fertilizer industries producing potash and phosphate, oil refineries, thermal power plants, cement factories, and other light and medium industries.

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Across Jordan, the Ministry of Water and Irrigation has been monitoring water levels for decades, with water level declines in excess of 10 metres observed in some of the major aquifers. Furthermore, the high rates of water subsidy, at more than 50 per cent, have contributed to a devaluation of water as a resource and, as a result, to a limited sense of responsibility to practice water conservation.

Irrigation water is heavily subsidized, with very low tariffs for surface water deliveries to the Jordan Valley. There are also very low tariffs and small restrictions on the over-extraction of groundwater in the Highlands. It is expected that as tariffs increase, a shift to higher-value crops and more efficient production technologies will be needed, in addition to administrative closures to reduce the over-extraction of groundwater and shifting its allocation towards domestic and industrial use.⁴⁷

The population increase since the beginning of the Syria Crisis in 2011 is reported to have reduced the per capita daily water consumption from over 88 litres per person, per day (L/p/d) to less than 66 L/p/d. Even for those connected to a network, water availability has become increasingly irregular. MOWI has reported that in densely populated areas, water is available in the network once a week, while in some remote rural areas, this is once every 12 days. Availability varies depending on the season and the geographical area, with the summer months (May to September) being particularly

challenging due to the dual burden of increased visitors, and the significantly increased demand for irrigation.

Two in every three schools in Jordan lack basic, functional and dignified sanitation services (this is the second-lowest rate in North Africa and West Asia region) (JMP WASH in Schools 2017).

Apart from the scarcity of water, another challenge is with populations located remotely from significant water sources, where water must be transported and elevated over vast distances, increasing high pumping and energy costs. For instance, Amman is provided by sources located 125–235 kilometres away and lifted to 1,200 metres through five pumping stations (MOWI, 2017).

WASH in Schools

- Water: 93 per cent of the schools have basic drinking water services, whereas 7 per cent have limited drinking water services
- Sanitation: 33 per cent of the schools have basic sanitation services, whereas 66 per cent of the schools have limited sanitation services.

SOURCE: UNICEF, 2016 48

Dams Storage Capacity: In Jordan, all dams have a designed storage capacity of 335.3 MCM (MOWI 2015 factsheet), whereas the total capacity utilized was 18.6% of the total storage in 2017.

Water Vulnerability in Jordan

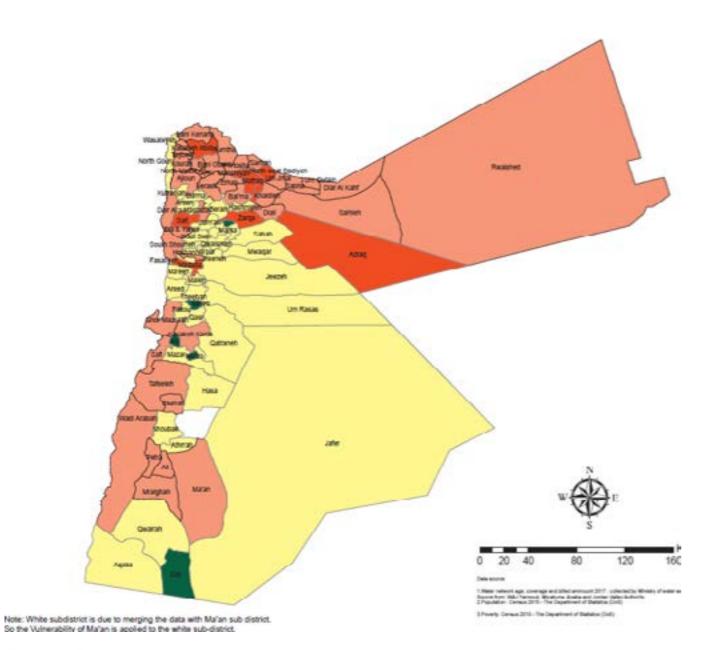
As one of the most water-scarce countries in the world, Jordan has for decades faced constant challenges to ensure the provision of clean water and sanitation services, particularly in rural areas. Jordan is characterized as being an arid to semi-arid country with an average annual rainfall of less than 200 mm a year over 90 per cent of the country. Nationally, 51 per cent of water is used for irrigation, despite the relatively low contribution of the agricultural sector to the country's GDP (3 to 4 per cent in 2013). Detailed subdistrict level segregation is provided in Appendix C. The groundwater level in the principal aquifers drops at a rate of 2 metres per year, but the decline in some depleted areas reaches 5 to 20 metres (MOWI 2017).

Over the past 20 years, Jordan's government, supported by donors, has made substantial efforts to convince agricultural producers to use treated wastewater as an additional resource, by ensuring that treatment levels comply with agricultural reuse standards and convincing consumers of the safety of food produced from reclaimed water mixed with fresh water. Indeed, a target has been set to increase the use of treated wastewater from 140 MCM per year in 2015, to 235 MCM per year in 2025, most of which would be used to irrigate fruits and vegetables and other food and

tree crops, with a small allocation to support forage and fodder production for livestock.

Since 2016, UNICEF, in collaboration with MOWI, has been generating maps to highlight the significant disparities in water and wastewater services across Jordan. In 2018, these maps were updated to reflect information on water vulnerability at a sub-district level. Water vulnerability criteria include poverty, water demand from Syrians vs. Jordanians, actual consumption vs. standard allocation, coverage, losses, and network age). Results have identified 64 sub-districts (belonging to 43 districts and 7 governorates) as high to severely vulnerable in terms of water supply. In 2018, the water and wastewater vulnerability maps expanded the criteria to include, for the first time, operation and maintenance indicators. The highest vulnerability index score was associated with North West Badiyeh, Azraq, Mafraq, Sahab, and Ajloun. Among those seven subdistricts are the two with the highest numbers of Syrian refugees (Kasabeh Irbid and North-West Badiyeh). These maps are used as an advocacy tool across the sector to ensure the areas in most need are prioritized for interventions.

⁴⁷ Hussein, H. (2018) 'Tomatoes, tribes, bananas, and businessmen: An analysis of the shadow state and of the politics of water in Jordan,' Environmental Science & Policy, Vol. 84, pp. 170–176.
48 UNICEF (2016) UNICEF Data and Analytics Profile – WASH in Schools.



Legend

Vulnerability index (# of sub-districts) Below or equal 0%: Low Vulnerability (5)

(25% to 50%] : High Vulnerability (39)

Above 50% : Severe Vulnerability (7)

(D% to 25%): Moderate Vulnerability (37)

TABLE 17: Top 10 highly vulnerable sub-districts.

GOVERNORATE	SUB-DISTRICT	INDEX
Zarqa	Zarqa	1
Mafraq	North-west Badiyeh	0.911
Mafraq	Mafraq	0.853
Irbid	Kasabeh Irbid	0.671
Balqa	Salt	0.615
Zarqa	Azraq	0.568
Madaba	Madaba	0.504
Mafraq	Rwaished	0.497
Balqa	Era & Yarqa	0.494
Ma'an	Ma'an	0.449

^{*}SOURCE: UNICEF AND MOWI (2018)

The Vulnerability Index is based on the following indicators:

1) Syrian vs. Jordanian population (10 per cent), 2) Water network coverage 2017 (25 per cent), 3) Water network losses 2017 (20 per cent), 4) Poverty 2010 (10 per cent), 5) Average consumption vs. Standard Consumption 2017 (25 per cent), 6) Water network age 2017 (10 per cent).

Table C-1 in the Appendix shows the district level percentage of households connected to the public water network. There are two districts: Mwaqar (Amman), and Jeezeh (Amman), where more than 80 per cent of the population do not have access to the public water network followed by North-west Badiyeh in Mafraq (72 per cent), Sahab in Amman (66 per cent), and Rumtha in Irbid (64 per cent). There are a number of other districts where more than 40 per cent of the households do not have access to the public water network. See Appendix C for more details.

Support is provided to increased water and sanitation coverage in unreached

areas through the rehabilitation or extension of water and/or sewerage networks in priority areas identified by MOWI, based on the vulnerability maps and studies. In parallel, UNICEF is addressing climate change in the Water Safety Plan processes serving as a practical tool to support WSP development and implementation while further considering and integrating the risks posed by climate variability and change to the available resources and capacities.

The operation and maintenance component has been added to the vulnerability map as an indicator of how well the utility company responds to issues related to the services provided. The index reflects the vulnerability in responding to complaints by identifying the number of the maintenance team in relation to the number of complaints received. This indicator is directly related to the age of the network. It is evident from the map above that northern districts are more vulnerable than southern districts, mainly due to high population density.

To support efforts towards sustainable water and sanitation, UNICEF supported the development of a mobile application (and associated database) to enable the public to report on incidences of water leakage and wastewater overflow across the country. To complement the application, a database was also created which directs alerts on leakage and overflows to maintenance teams, which will significantly reduce the response time, and importantly, reduce the volume of water lost. This aims to assist utilities in reducing water consumption through early leakage detection and to proactively follow-up on maintenance work. UNICEF established a "WASH innovation Hub" through an agreement signed with the Jordan University of Science and Technology (JUST) and the Hashemite University (HU) to identify and implement innovative technologies relating to water conservation, reuse, wastewater, climate change mitigation, and public health issues.

Access To Water In The Camps

Of the estimated 670,000 Syrian refugees in Jordan, approximately 19 per cent live in four camps (Za'atari, Azraq, King Abdullah Park and the Emirati Jordan camp). In the camps, water is provided at no cost to the refugee, either to local tanks or to centralized distribution points, depending on the camp. As the camps have evolved differently, access to water varies between the camps. However, there are standards

governing the quantity (an average of 35 L/p/d) and the distances (less than 200 metres).

In **Za'atari Camp**, UNICEF constructed the water supply network, including the construction of secondary and tertiary pipelines and connections to households, flow control chambers, 6 pumping stations, control rooms, and communication networks. There are 3 boreholes with a production capacity of 4 million L/day, and a minimum 35/L/c of safely managed water provided daily.

In **Azraq Camp**, 1,547 m³/day of water is supplied to refugees through a water network to 301 tap stands across the camp available at an average of almost 120 metres from the caravans. On average, 35 to 45 L/p/d of safely managed water is provided daily from two boreholes located inside the camp.

SANITATION VULNERABILITY

Since 1990, access rates for improved sanitation facilities have increased in both urban and rural areas, with a significantly higher increase reported in rural areas; both urban and rural areas were reported to have 99 per cent coverage, which represents an increase from 97 per cent in 1990. Importantly, the rate of open defecation in rural areas has reduced from 3 per cent in 1990, to close to 0 per cent in 2015, which is a significant achievement. According to DHS findings (2018), 98.2 per cent of households have access to improved sanitation according to the WHO definition. However,

although rates of open defecation and access to unimproved facilities have reduced considerably since 1990, many challenges remain to ensure the provision of adequate safe water and sanitation services, particularly for the most vulnerable. The SDG target 6.2 identifies a target, by 2030, of "access to adequate and equitable sanitation and hygiene for all, and end[ing] open defecation, paying special attention to the needs of women and girls and those in vulnerable situations." The corresponding transfer from the MDGs to the SDGs for sanitation is drastic for Jordan, moving from a situation with 97.9 per cent access to an improved sanitation facility to 80.6 per cent with access to safely managed sanitation (JMP, 2017).49 Although these figures show essential progress, there are pockets of the population, including the informal tented settlements, where there is no access to an improved sanitation facility, as reported from the targeted assessments.

With the focus of the SDGs shifting from access to safely managed wastewater, it is anticipated that the rates for Jordan will be significantly reduced. Informal estimates cited during the Sectoral consultations in September and October 2016 suggested that only 12 per cent of household wastewater is properly collected, transported and treated. One other alarming figure for Jordan's progress towards the SDGs is the rate of access to sanitation facilities at schools. While the access to gendersegregated WASH facilities in schools across Jordan is high (66 per cent),

the recent JMP report on WASH in Schools has reported that 33 per cent of schools are lacking in basic sanitation, which is defined as gender-segregated and usable (available, functional and private) at the time of the survey.

The sanitation vulnerability maps of 2018 identified 77 out of a total of 88 sub-districts as high to severely vulnerable, based on sanitation vulnerability criteria: poverty, coverage, Waste Water Treatment Plant (WWTP) condition, network age, and Syrian vs. Jordanian population. The highest vulnerability indexes correspond to North-west Bediyeh (Mafrag), Era and Yarqa (Balqa), Allan and Zai (Balqa), Azraq, Mafraq, and Sahab (Amman). It is also fair to conclude that districts hosting Syrian refugees are the worst performers. Table 18 below shows the top ten vulnerable sub-districts in Jordan according to the analysis for

49 JMP (2017) Jordan Country Profile.

TABLE 18: Top 10 highly vulnerable sub-districts

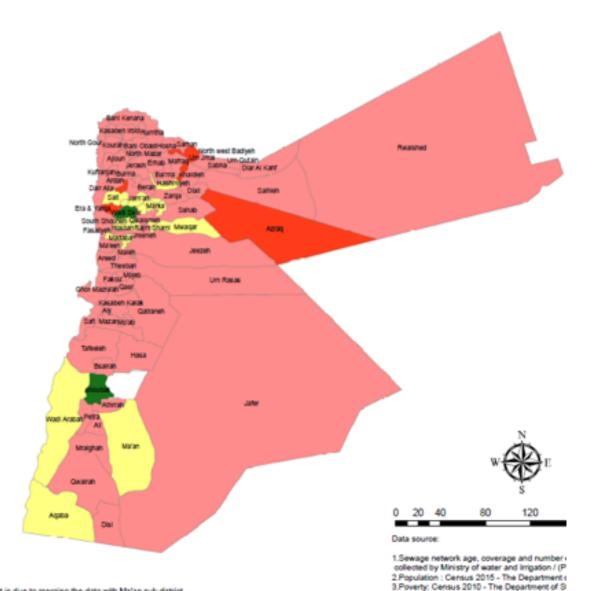
GOVERNORATE	SUB-DISTRICT	INDEX
Mafraq	North-west Bediyeh	1
Zarqa	Azraq	0.72
Balqa	Era & Yarqa	0.62
Balqa	Allan & Zai	0.62
Mafraq	Mafraq	0.57
Amman	Sahab	0.56
Ajloun	Ajloun	0.53
Ajloun	Kufranjah	0.53
Irbid	Rumtha	0.53
Ma'an	Petra	0.53

^{*}SOURCE: UNICEF AND MOWI (2017)

UNICEF and MOWI.

The key components of safe sanitation in Jordan include safe wastewater collection, disposal and treatment; solid waste collection; drainage, and vector control. Table C-2 in the Appendix reflects the public sanitation network needs at the district level. The analysis identified districts with 100 per cent of the households lacking access to the public sanitation network. Irbid (Bani Kenana, Kourah, North Gour, North Mazar, Taybeh, Wasateveh), Mafrag (North Badiyeh, North-west Badiyeh, Rwaished), Karak (Aiy, Fakou, Qase, Qatraneh, South Gour and South Mazar) and Tafilah (Bsairah, Hasa) governorates have the lowest access to the public sewerage network.

Based on the identified priority areas, UNICEF targets the areas most in need of sanitation and wastewater management interventions. UNICEF has provided support to the Ministry of Water and Irrigation (MOWI) in monitoring the Joint Monitoring Program (JMP) outcomes and progress towards the Sustainable Development Goal (SDG) 6. UNICEF has particularly taken an interest in supporting the government to move the sanitation agenda forward, particularly the sanitation goal 6.2, often given less priority. In 2019, UNICEF supported the Ministry in the development of a clear roadmap to identify milestones for change for reaching the sanitation and hygiene targets. The sanitation roadmap has highlighted key findings and recommendations about the national context providing a framework for the sector's use in prioritizing interventions that bring the country closer to achieving the SDG goals.

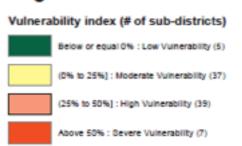


Note: White subdistrict is due to merging the data with Ma'an sub district.

Sanitation Facilities in Camps

Overall, 123,000 individuals residing in camps have access to improved and appropriate sanitation facilities, of which 50 per cent are the members of female households. Since October 2018, all households for the 79,000 refugees in Za'atari Camp are connected to the wastewater network. The wastewater trucking was gradually reduced in the camp, and completely eliminated by March 2019. All generated wastewater, approximately 2,000–2,200 m³/day, is now collected through the network and

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transferred to the Za'atari treatment plant. The Za'atari treatment plant is also serving the camps of communities in the surrounding area, where approximately 100 m³ of wastewater from these communities is treated daily.

In Azraq Camp, wastewater generated from the 39,000 people residing in the camp is safely managed, collected, and transported by trucks to the nearest wastewater treatment plant. Approximately 19,000 m³ of wastewater is collected per month. The camp is also expanded with a greywater network connecting household to the septic tanks, ensuring a cleaner environment for children, and privacy for household members, particularly girls and women.

The table below shows household expenditure on mineral water, water bills and for water tankers. For the Kingdom overall, the highest average household cost for mineral water is reported in Madaba and Jerash, whereas average household expenditure on water bills and water tankers is high for the Mafraq and Amman governorates.

Household Expenditure on Water

TABLE 19: Average annual household expenditure on water by governorate in Jordanian Dinars for 2017-2018

	Total Populati Non-Jor	ion (including danians)	Jorda	nians
	Average household expenditure on mineral water	Average household expenditure on water bills/water tanks	Average household expenditure on mineral water	Average household expenditure on water bills/water tanks
Amman	44.3	100.4	43.5	104.2
Balqa	45.2	66.4	47.1	67.9
Zarqa	46.4	83.1	45.8	85.8
Madaba	84.6	87.5	85.6	90.2
Irbid	58.0	97.9	55.4	99.2
Mafraq	44.0	123.3	43.1	129.5
Jerash	84.4	75.4	83.5	77.4
Ajlun	53.8	83.6	53.1	84.3
Karak	68.0	57.6	68.7	58.2
Tafilah	44.1	36.5	43.7	37.1
Ma'an	70.0	45.5	69.3	45.9
Aqaba	7.1	62.5	6.2	62.9
Kingdom	49.8	91.2	49.1	93.6

*SOURCE: HIES (2017-18)

Syrian Vulnerability Assessment⁵⁰

According to the VAF report (2019), 11 per cent of the Syrian population are identified as having high or severe vulnerability. While this indicator might appear very low, several subindicators reveal much higher levels of vulnerability, namely expenditure on WASH items (58 per cent), accessibility of safe drinking water (64 per cent), and solid waste management (82 per cent). Larger case sizes are more likely to be vulnerable than smaller cases. Thirty-seven per cent of the population of case size one is assigned the lowest vulnerability category compared to ten per cent of the population of case size four or more.

WASH has the highest variability in vulnerability for its indicators per governorate than any other sector.

Core components of vulnerability identification for WASH: 1), Accessibility of latrines, 2) Reliability of the sanitation system, 3) Reliability of solid waste system, 4) Accessibility of water.

Key Findings:

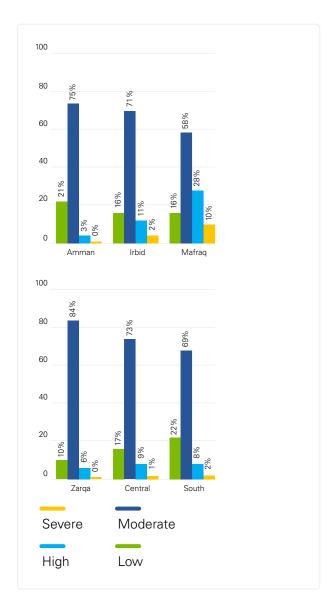
- Accessibility of Latrines: This indicator changed in 2017 and is a combination of the physical accessibility of facilities sharing latrines between families and the perception of security. Forty-three per cent of the population are identified as having a moderate vulnerability.
- Sharing Latrines (overcrowding in shared latrines): 28 per cent of the population share a latrine between two cases, 16 per cent of the population

50 Section adopted from UNHCR VAF 2019

- share a latrine with more than two cases.
- Physical Accessibility: Persons with disabilities may encounter specific difficulties when it comes to the use of the latrine, shower, and access to safe water. Four per cent of the population were identified as living in accommodation where the facilities were not physically accessible by all family members.
- Perception of Security: Eight per cent of the population living in houses where the perception of the access to latrines is not perceived to be safe and secure.
- •Type of wastewater disposal: This describes the connection to the public sewage system. Seventy-three per cent of the population are in houses connected to the network sewage system, about a quarter of the population are in homes connected to a tank or unlined pit, and three per cent of the population report being in homes utilizing unlined pits, buckets, bags or outdoor space.
- Reliability of solid waste management (Vector Evidence Rating): 52 per cent of the cases experienced visible vector evidence more than twice a year, 30 per cent of cases experienced vector evidence once or twice a year.
- Accessibility of Water: This indicator is now a combination of the source of water and WASH expenditure. The high number of severely vulnerable (64 per cent) is largely driven by high expenditure. Eleven per cent of the population live in houses not connected to the municipality or piped sources.

o WASH Expenditure: Most of the refugees are connected to the public network, having the economic means to increase access to water through water storage (private water tank), or primary, and supplementary water through water truck delivery. WASH expenditure was therefore seen as a critical factor. Fifty-eight per cent of cases reported spending more than five per cent of their available funds on water.

The next figure reflects governorate level vulnerability ratings, proportionate to the populations in each region.



Recommendations and Ways Forward⁵¹

 As the country overall is waterscarce, but the Northern and Western governorates have severe water vulnerability, there is a need to urgently address this imbalance, as the population grows in these governorates at a much higher rate, so there is an urgent need to address the water scarcity in these regions. Rainwater tanks, solar-energy fed water tanks, small multipurpose dams, including sand dams, and artificial groundwater recharge facilities are some examples of resilient climate options that can provide storage and buffer capacity to communities if primary water sources

o While diversifying sources of water away from the over-exploited aquifers is important, artificial recharge (aquifer re-injection) would go further to ensure the sustainability of groundwater resources in Jordan. Desalination plants – decentralized at the local level, mainly from saline aquifers – should be promoted and the use of solar energy supported.

o Sources of drinking water should also be diversified, and storage capacities increased; this will alleviate the pressure on the over-exploited groundwater resources and allow the natural recharge of aquifers. Spreading the risk between different water sources and separating domestic use from other needs is an essential strategy for

51 Some of the recommendations are from National Water Strategy 2016–25.

maintaining water services as climate risks increase.

o At the local level, the application of robust technical standards in the design of water systems is an essential first step in ensuring that WASH facilities are made resilient to droughts, floods, landslides, and extreme weather events.

• Sanitation seems to be an issue in the majority of the governorates; there is an urgent need to address the issue of safely managed sanitation facilities. At the local level, the application of robust technical standards in the design of sanitation systems is an essential first step in ensuring that WASH facilities are made resilient to droughts, floods, landslides, and extreme weather events. Other specific measures can be followed, as follows:

o The establishment of inter-ministerial commissions should be endorsed at the highest level and engage the ministries of planning, finance and economy, health, education and social development, agriculture, environment, and national statistical offices under the leadership of MOWI to take the responsibility for wastewater and sanitation-related issues.

o Improve the standards and flexible decision-making processes that allow designers to shape the entire wastewater collection, conveyance, and treatment design around the anticipated reuse of wastewater.

o It is necessary to maintain centralized data through NWIS at the national level, collating data from the various stakeholders who produce wastewater analysis (JVA, MoEnv, WAJ laboratories, EWE-RSS, Environment Monitoring and Research Central Unit, EMARCU and DOS) to ensuring compatibility in the reporting units between all agencies submitting data. Data should be compiled for each core parameter at each sampling location to get a consistent indicator and results over time.

o The wastewater strategy needs to shift from centralized supplyled infrastructure provision to decentralized, people-centred demand creation coupled with support to service providers to meet that demand.



LIVELIHOODS

TABLE 20: SDG8 – Promote sustained, inclusive and sustainable growth, full and productive employment and decent work for all.

			Unit of Analysis		tional gregat			
SDG Objective	SDG Indicator	Indicator of Interest	Supply Side /Household	Syrians	Non-Jordanians	Jordanian	Geographic Distribution	Source
g for	the na-	Unemployment Rate (by sex)	Supply Side/ Household				Governorate	DOS-LFS (2018)
ı, includin	proportion of the na-	Youth Unemployment Rate	Supply Side/ Household				Country-wide	DOS-LFS (2018)
employment and decent work for all women and men, including for disabilities, and equal pay for work of equal value	as a	Young People Not in Employment nor in Education (NEET)	Supply Side/ Household				Country-wide	JLMPS (2018)
and decent work for all women and mand equal pay for work of equal value	ex, age and persons with disability social protection and employment programs	Entrepreneurship	Supply Side/ Household				Country-wide	JLMPS (2018)
nt work for pay for w	ex, age and persons with disability social protection and employment	Labour Force Participation (by sex)	Supply Side/ Household				Country-wide	JLMPS (2018)
and decer	ersons wit on and en	Cost of Doing Business	Supply Side				Country-wide	World Bank 2018
mployment disabilities, a	age and pe al protecti	Under employment and wage differentials (by sex)	Supply Side				Country-wide	JLMPS (2018)
		Social Insurance coverage	Supply Side				Country-wide	JLMPS (2018)
and prod	Unemployment rate, by s. government spending in s budgets and GDP	Percentage of Syrian refugees issued work permits	Supply Side				Country-wide	Ministry of Labour (2018)
8.5 Achieve full and productive young people and persons with	8.5.2 Unemployment rate, by s 8.b.1 Total government spending in tional budgets and GDP	Percentage of Syrians Unemployed	Supply Side/ Household				Country-wide	JLMPS (2018)
. 8.5 A youn	8.5.2 8.b.1 Total	Average Household Income for the poorest deciles	Supply Side/ Household				Governorate	HIES (2018)

Labour Markets

There is contradictory evidence on whether the Syrian refugee crisis has any impacts on the employment trends in Jordan. According to the IMF (2017) unemployment rose by 3.1 per cent even though labour-force participation decreased by 2 per cent.⁵² The argument for this analysis is the abundant supply of Syrians in the informal labour market has resulted in a reduction of the share of self-employed in the economically active Jordanian population.

The average unemployment rate of governorates with the most massive influx of refugees increased by about 3.3 per cent since the beginning of the Syrian Refugee Crisis. Labour force participation was slightly reduced in the governorates with a large influx of refugees, while it decreased above national levels in the rest of the governorates. On the other hand, a study by Wahba (2018) reflects that labour market outcomes for Jordanians have not been adversely affected in areas where there has been a high concentration of Syrians refugees.⁵³ The same study shows that non-Jordanian workers have experienced the brunt work shortages in localities where there was a high concentration of Syrian refugees.

Keeping in view both arguments, we will be looking at the unemployment trends for adults and the youth in particular from national-level data

collections by DOS (2018).54

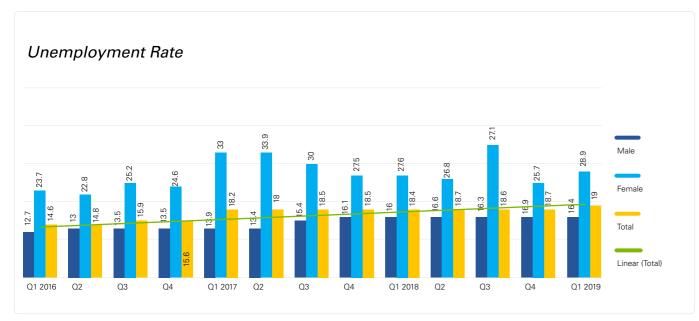
The unemployment rate in Jordan was 12 per cent in 2014, which increased to 18.7 per cent in 2018 and reached 19 per cent in the first quarter of 2020. The figure below shows the quarterly trends for unemployment rate for males, female, and totals from the first quarter of 2016 to the first quarter of 2019. The unemployment rate is on the rise with increasing rates for females.

⁵² IMF (2017) Jordan Selected Issues. IMF Country Report No 17/232 Washington D.C.

⁵³ Wahba. J. (2018) The Impact of the Syrian Refugee Influx on the Jordanian Labour Market.

Policy Brief: Economic Research Forum (ERF).

⁵⁴ DOS (2018) Labour Force Survey.



*SOURCE: DOS (2019)

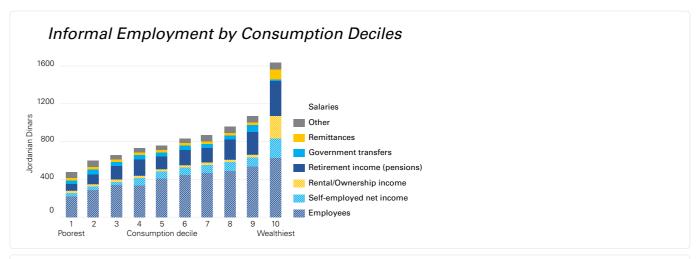
Poor Households Livelihood Situation

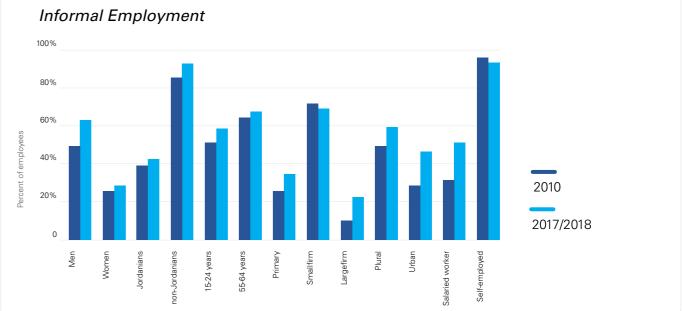
Most employment for members of poor households is in the private sector, primarily in services (75 per cent among the poorest decile). The average working person in the poorest decile earns only 241 JD/month, including overtime and bonuses – often spending a significant share of their salary on public transportation for commuting (NSPS, 2019). If the size of the household in the poorest decile is more than 7, and if there is only one income earner, the household will fall below the poverty line. The poor households

are less likely to be self-employed than wealthier Jordanians, as depicted in the graph below which shows livelihood status for all deciles. Nearly half of the working poor are employed in the informal sector which would mean no social security coverage.

Informal employment increased from 2010 to 2016, from 20 per cent to 24 per cent, while irregular employment (not subject to the Social Security Law because the work is temporary) also increased from 1 per cent to 8 per cent in 2016 (Ragui and Salami 2018).⁵⁵ The graph below shows the informal employment for different categories of households (NSPS 2019).⁵⁶

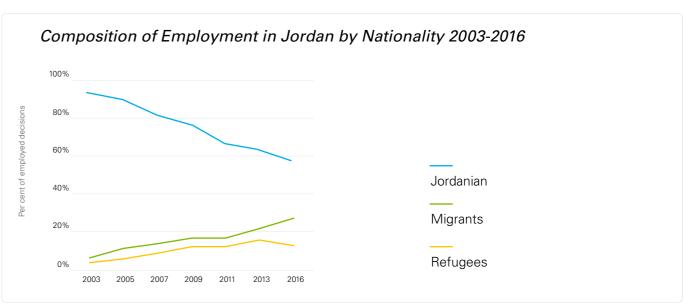
55 Ragui A. and Salami, C. "The Structure of Employment and Job Creation in Jordan: 2010-2016," Presentation in the Seminar on the Jordanian Labour Market, Amman Jordan May 14, 2018. Analysis based on the Jordan Labour Market Panel Survey conducted by the Economic Research Forum and the Department of Statistics.
56 NSPS (2019).



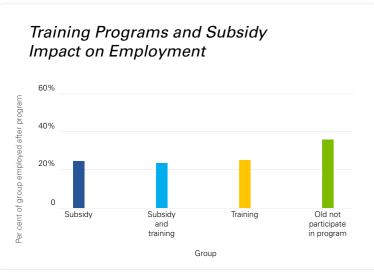


*SOURCE: World Bank (2019) Jobs Diagnostic based on Jordan labor market panel survey.

Decent Work And Social Security: Existing Situation and Challenges



^{*}SOURCE: Assaad Krafft and Keo based on Population and Housing Censuses and Employment and Unemployment Surveys.



*SOURCE: Tzannatos, Zafirts (2019).

"An Evaluation Job Readness and Placment" Component of the Government of Jordan/Wrld Bank Project "Support to Building Active Labor Market Programs" 26 November 2013 (mimo).

68 per cent of men in the poorest decile participate in the labor market

Very few women in the poorest decile participate in the labor market (13 per cent)

The poor are less likely to self-employed than wealthier Jordanians, due in part to the high risk involved in entrepreneurship and the already increasing levels of debt.

Half of poor workers are in the informal sector (not registered with Social Security), reflecting the broader trend of increasing informality.

The Government spends significant amounts on labor market programs (mostly training, wage subsidies, and micro-lending).

The few existing evaluations show that these programs rarely provide signification benefits in terms of long term employment or increases in income.

*SOURCE: NSPS (2019)

Youth Unemployment and Entrepreneurship

The unemployment rate for 15-19-yearolds is 48.7 per cent, and for 20-24-yearolds, the unemployment rate is 38.5 per cent (DOS 2019).⁵⁷ This has some huge implications for the young population, who are economically active. The unemployment rate is high among the university degree holders (Bachelor's degree and higher divided by labour force for the same educational level) by 24.4 per cent compared with the other educational levels. The results also show that 54.7 per cent of the unemployed are secondary certificate holders and higher, and that 45.3 per cent have less than secondary school qualifications (DOS, 2019).

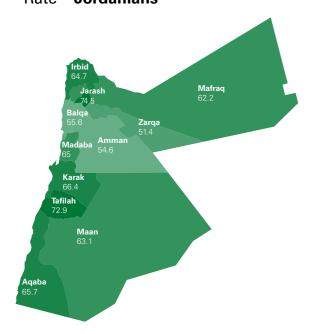
The four maps below show the geographical distribution for unemployment rates for the youth (15–24 years) both among Jordanians and Syrians. In the case of Jordanian youth, the highest unemployment rates for both female and male are reported in Jerash, followed by Amman, Zarqa, and Balqa, where the unemployment rates are above 60 per cent. For the young male population, the unemployment rate is highest in Madaba, Ma'an and Aqaba.

Syrians: For the young female unemployment rate, Tafilah and Balqa have the highest unemployment rate

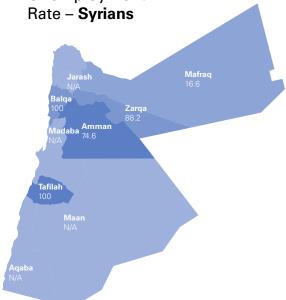
followed by Zarqa where very few young girls are employed in the labor market. The situation for young boys in Syrian households is not as bad, but 100 per cent unemployment rates are reported in Tafilah and more than half of the young population in Mafraq, Zarqa and Balqa are unemployed.

57 DOS (2019) Labour Force Quarterly Survey. Available at: http://dos.gov.jo/dos_home_e/main/archive/Unemp/2019/Emp_Q1_2019.pdf

Female 15-24 years
 Unemployment
 Rate – Jordanians



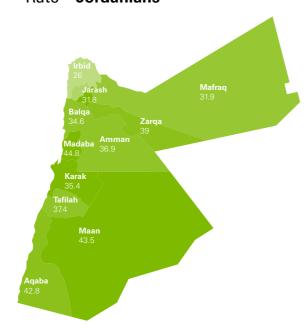
Female 15-24 years Unemployment



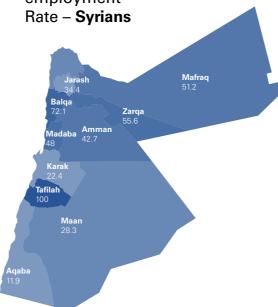
SOURCE: DOS (2018)58

Adult Unemployment Rate: Overall female unemployment rates for the Jordanian population is high in Jerash, Tafilah, Irbid, and Aqaba, whereas for males, the highest rates of unemployment were reported in Madaba, Zarqa, and Ma'an. Syrians: For the Syrian male

Male 15-24 years
 Unemployment
 Rate – Jordanians

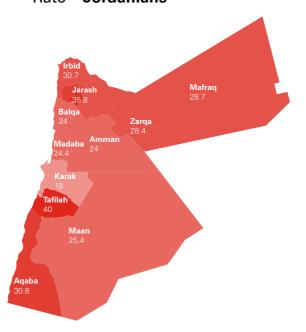


 Male 15-24 years Unemployment

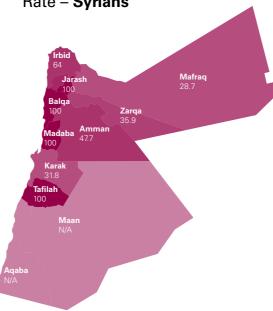


population, the highest unemployment rate is reported for Mafraq, Balqa, and Zarqa, where more than one third are unemployed. For the Syrian female population, 100 per cent unemployment rates are reported for Jerash, Balqa, Madaba, and Tafilah.

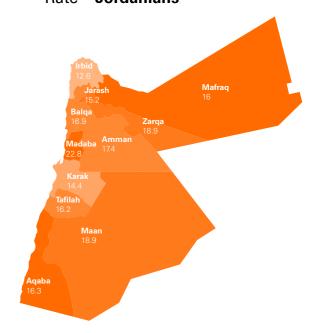
Female
Unemployment
Rate – **Jordanians**



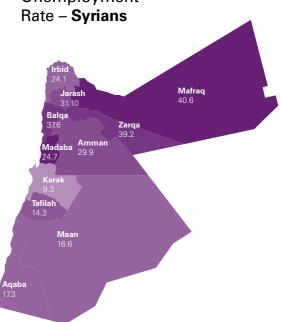
Female
 Unemployment
 Rate – Syrians



Male
 Unemployment
 Rate – Jordanians



Male
 Unemployment
 Rate – Syrians



58 Data provided by DOS (2018) to the Vulnerability Assessment Task Force.

Labour Force Participation

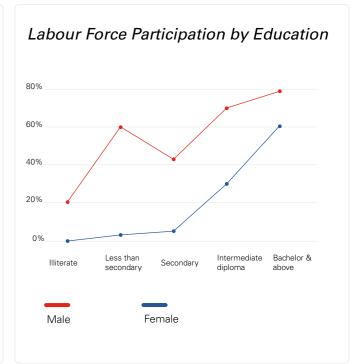
The female economic participation in Jordan is considered one of the lowest compared to other countries. According to the GCR report (2018), Jordan is ranked 133 out of 140 countries for the Female Labour Force Participation Rate indicator. This low economic participation rate is a result of multiple factors: cultural issues, marriage and family responsibilities, childcare and the cost of nurseries, in addition to the lack of proper public transportation networks. The female labour force participation rate dropped slightly from 14.7 per cent in 2010 to 13.2 per cent in 2016, while the married women labour force participation rate fell from 12.7 per cent in 2010 to 10.7 per cent in 2016 (Amer, 2018).60

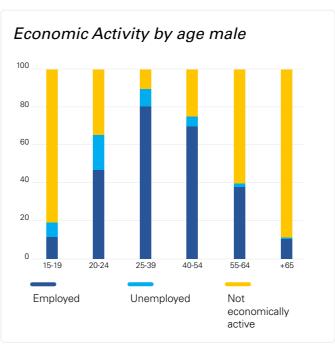
Labour Force

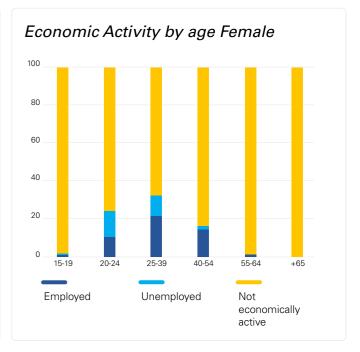
The male participation is much higher than the female participation rate, regardless of the educational attainment level. However, gender gaps are smaller among the most educated. Labour force participation levels by education reflect that those with better education have higher participation in the labour market, but this differs for males, where men with lower secondary levels have better rates when compared to men with secondary education. The lower two graphs show economic activity for men and females

according to different age brackets. For both males and females, the most productive age is from 25–54 years, where we see the highest employment levels, whereas there is very low economic activity in evidence for those who are below 25 years old and for those who are older than 54 years.

Labour Force Participation by Gender, Marital Status 100% 80% 40% 20& Never Married Married







SOURCE: DOS (2016)

59 Amer, M. (2018) School to Work Transition in Jordan 2010–2016. Working Paper No. 1196: ERF

Entrepreneurship:

Youth that are not engaged in labour or training may be interested in establishing their own enterprises and becoming a source of employment for others. Since 2010, Jordan has benefitted from an upswing in the establishment of support institutions and initiatives mandated to support entrepreneurs and encourage entrepreneurial activities amongst young people (above the age of 15 years), to diversify employment opportunities. Despite increased support, entrepreneurship remains a challenging endeavour. More than half of young people indicate they would like to own their businesses, showing a marked interest in entrepreneurship. Of the 6.8 per cent of young selfemployed workers, 66.6 per cent do so for greater independence (with 23.4 per cent citing that they could not find salaried employment). Limited access to finance, gaps in education, social and cultural norms, attitudes, aspirations, limited exposure to the international market, and the cost of doing business are some of the critical factors that prevent young people from engaging in entrepreneurial activities. The Government of Jordan, along with the Central Bank of Jordan, invested \$98 million in the launch of Innovation Start-ups, and for Small and Medium Enterprises. Of the total 825 projects supported, only 150 are start-ups.

Social norms and values in Jordan are one of the most important barriers to youth motivation engagement in self-started business activity. Given the importance of entrepreneurial thinking as a meta-skill in the future world

of work, it is vital to adapt policies for emerging entrepreneurial mindsets and the economic engagement of young people in the transition to adulthood. Entrepreneurial competencies like leadership, self-esteem, creativity and, most importantly, proactivity are strong predictors of entrepreneurial potential and future career prospects.

Young People Not in Education, Employment or Trainingg (NEET):

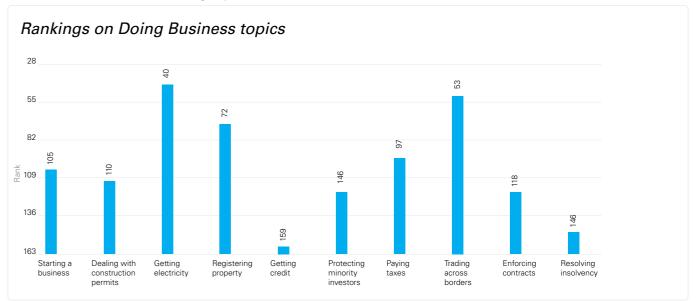
The NEET population are those who are either unemployed, searching for a job (standard definition), discouraged unemployed (with a desire to work, available for work, but not searching for a job) or out of labour force. The NEET rate for young people from 15-29 years of age was 39.4 per cent in 2016 (Amer, 2018). It is much higher for women than for men. In 2016, half of the women were neither employed nor enrolled in the education system compared to 26.2 per cent of men. Estimates of the numbers of male NEETs varies for different age groups: 33 per cent among those aged 20-24 years and 22.6 per cent among those aged 25-29 years. The female NEET rate increased gradually and substantially with age from a rate of 22.8 per cent among those aged 15–19 years to 63.3 per cent among those aged 20-24, and finally to a rate of 78 per cent among those aged 25-29 years.

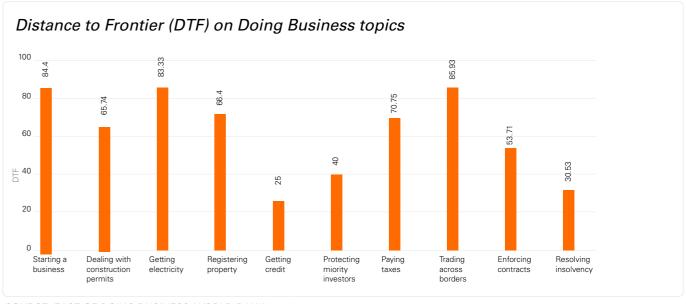
Doing Business in Jordan:

The World Bank's Doing Business Index captures essential dimensions of the regulatory environment as it applies to local firms. It provides quantitative indicators on the regulations for

starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, resolving insolvency. In 2018, Jordan was ranked 103 out of 190 countries for Doing Business. The Doing Business score for Distance to Frontier is 60.58 out of 100.61 The graphs below

shows the rankings on Doing Business and Distance to Frontier for Doing Business topics. A brief analysis of the Doing Business topics shows that the business environment's propensity to create enterprises is not very effective, with high costs associated with getting credit, construction permits and registration of property.





SOURCE: EASE OF DOING BUSINESS, WORLD BANK (2018)

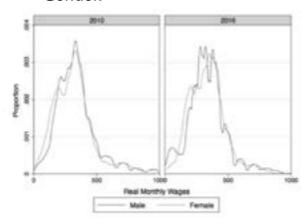
60 The distance to frontier (DTF) measure shows the distance of each economy to the "frontier," which represents the best performance observed on each of the indicators across all economies in the sample since 2005. An economy's distance to frontier is reflected on a scale from 0 to 100, where 0 represents the lowest performance and 100 represents the frontier. The ease of doing business ranking ranges from 1 to 190.

Underemployment and Wage Differentials:

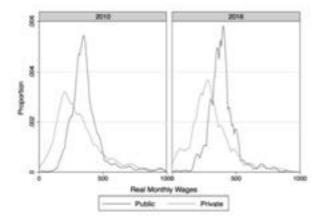
A recent study by Galal and Said (2018) reflects that real wages have increased from 2010 to 2016, but the difference is minimal.⁶³ The wage differential among men and women do not reveal drastically different findings. A significant difference in the distributions is apparent when we compare public and private wages, where wages in government and public enterprises are much higher than in the private sector. Over time, private sector wages have caught up to some degree with public sector wages.

The presence of wage compression in the Jordanian labour market is further corroborated by inequality measures. The figure below displays trends in Gini coefficients over the 2010–2016 period, indicating that total inequality has declined from 3 6per cent to 30per cent, matched by similar declines across gender and the regions. Perhaps the most important institutional change that took place in Jordan over this period was the change in maximum wage legislation, which set limits for maximum wages in government in accordance with the civil service law number 82 for 2013, and its amendments through 2017. It is important that those limits affected higher-grade jobs, particularly those on temporary contracts. Wage inequality fell by 26 per cent in government, and by 19 per cent in public enterprises (Galal and Said 2018).

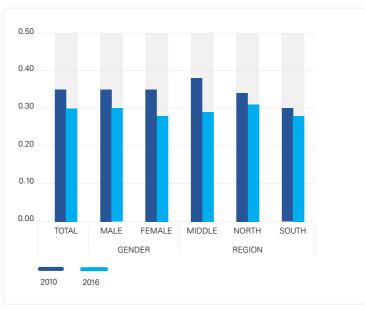
Wage DifferentialGender.



Wage Differential
 Public and Private Sector



 Trends in wage inequality (Gini Coefficients) by Gender and Region.



SOURCE: JLMPS (2018) 64

Social Insurance Coverage:

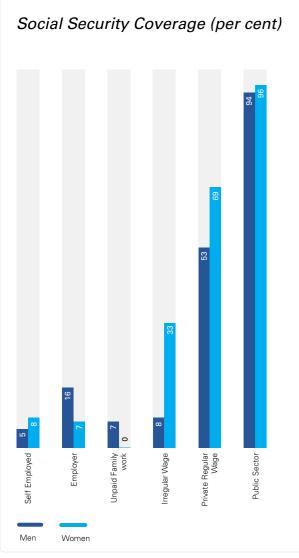
The overall incidence of social insurance coverage appears to slightly increase in 2016, for private-sector wage workers, irregular wage workers, and non-wage workers (employers and self-employed) (Alhawarin and Selwaness, 2018).65 Workers starting in the public sector were the most likely to acquire social insurance coverage at the start of their jobs, followed by the private wage workers inside the establishment. Both men and women who started their first job after the 2010 reform experienced a decline in their proportion of acquiring social insurance coverage upon the initiation of their employment. Moreover, the average incidence of early retirement slightly

declined among men while still being highly prevalent around the ages of 40–46.

The figures below show the social security coverage for men and women in all sectors and separately for the private sector by type of work. Overall, 53 per cent of men and 69 per cent of women are registered for social insurance coverage. Of this covered total, two-third of the workers in manufacturing, wholesale, and other services are covered by social insurance.

⁶¹ Galal, R. and Said, M. (2018) The Evolution of Wage Formation and Inequality in Jordan in 2010-2016. Working Paper, ERF.

⁶² JLMPS (2018) Jordan Labour Market Population Survey. ERF and DOS.
63 Alhawarin, I. and Selwaness, I. (2018) The Evolution of Social Security in Jordan's Labor Market: A critical comparison between Pre- and Post 2010 Social Security Reforms. Working Paper, ERF.



SOURCE: JLPMS (2018)

Work Permits for Syrian Refugees

Syrian refugees must apply for a work permit in Jordan to work legally. As of 30 November 2018, 125,392 work permits were issued to Syrians after the Jordan Compact of (January) 2016.⁶⁴ In the period from January to November 2018, nearly 42,000 work permits were issued, of which 26,000 were issued in the camps. Only 4,764 permits were issued to females, which is only 4 per cent of the total permits. On 3 June

Producture Sector Social Security Coverage (per cent)

Wholesale and retail

Construction

Wholesale and retail

Other Services

Manufacturing

Manufacturing

Manufacturing

Manufacturing

Manufacturing

Other Services

Manufacturing

Other Services

2018, the Ministry of Labour issued a circular regarding the Cabinet decision to exclude Syrian Refugees working in the manufacturing sector from the foreign labour percentages reduction under the NEEP.

Though not all refugees can access work, the majority of those who do (82 per cent) have engaged only in temporary, informal, or inconsistent employment. This may impact the ability of families to plan financially,

64 Ministry of Labour Syrian Refugee Unit (2018). Monthly Progress Report.

as income sources are unpredictable and vulnerable to change. This burden is further exacerbated if families have taken out debt to purchase food in the absence of adequate resources, placing families in a detrimental cycle of dependence.

Humanitarian funding remains a large source of income and though is this also prone to flux, it nevertheless the most stable source of income for refugee families. The economic realities experienced by many refugee families may put them in positions to accept demeaning or degrading work, often on lower wages than their Jordanian counterparts.⁶⁵

Recommendations and Ways Forward⁶⁶

The government ensures a just, private sector-focused labour market based on decent working conditions and social security. The government enables families to be economically self-sufficient.

- •The Ministry of Labour submits to the Council of Ministers an action plan to reduce informal employment (including employment relationships that are not subject to national labour legislation, not covered by social security or for which there is no contract). Social Security Corporation operationalizes mechanisms to expand social security coverage to temporary and part-time workers.
- Focussing on those governorates where there are high unemployment rates for young populations and with

the highest concentrations of Syrian refugees.

- •The work permits issues to the Syrians are focussing only on fields which are already worked by Jordanians and which have already proven not to be very lucrative. The Syrian population can be an asset to expand the agriculture base for the country where they have the required knowledge and experience.
- Expand employment, accessibility and the quality of jobs o Prior to providing services to any employer (e.g., issuing or renewing work permits), MOL verifies that the employer is in compliance with Labour Law and relevant regulations for all current employees (e.g., the Ministry ensures that evidence is on file demonstrating that the employer is up to date on social security contributions and that contracts exist). The MOL revises existing regulations to ensure working conditions in all sectors are appropriate for Jordanian workers (e.g., acceptable working hours including requirements for overnight work, payment mechanisms, and overtime pay) and reduces the incidence of informal employment, including through the issuance of bylaws for agriculture and other sectors.
- Reduce worker preference for the public over private-sector employment: avoid creating expectations of public sector jobs for life, and enhance and harmonize working conditions between the public and private sector, including actions and targets for each year.

⁶⁵ International Labour Organization, Impact of Syrian Refugees in the Jordanian Labour Market of Amman, Irbid, and Mafrag 2015

⁶⁶ Some of them Adopted from NSPS (2019)

- Costs of doing business: The costs of doing business are very high in Jordan, and the country is ranked low on the Cost of Doing Business index. Fees and documents to register a business and then make it fully operational are time-consuming and costly, having a significant impact on entrepreneurship. In order to ensure ease of doing business, government should work closely with the private sector to encourage entrepreneurship especially for small and medium enterprises. This can help to resolve the crisis of unemployment in the country.
- Entrepreneurship: Drive the development of angel networks and alternative innovative funding platforms for young entrepreneurs through targeted incentives. Implement structural and legal reforms to promote entrepreneurship by reducing costs, bureaucracy, business disruption, and legal gaps.



NUTRITION AND FOOD SECURITY

TABLE 21:

SDG Objective	SDG Indicator	Indicator of Interest	Supply Side /Household	Syrians	Non-Jordanians	Jordanian	Geographic Distribution	Source		
le wom-	based on	Percentage of population who are food insecure and vulnerable to food security	supply side/ household				Governorate	WFP-CFSVA 2019		
r vulnerab	pulation,	Prevalence of Anaemia in Children (by sex and nationality)	supply side/ household				Governorates	DHS 2018		
To improve availability, access, and utilization of quality food for vulnerable wom- en, girls, boys, and men affected by the Syrian crisis	2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES) 2.1.1 Prevalence of undernourishment	Percentage of children access to appropriate recommended infant and young child feeding (IYCF) practices	household				Governorates	DHS 2018		
To improve availability, access, and utilization of qua en, girls, boys, and men affected by the Syrian crisis	e food inser (FIES) t	re food inse (FIES) ıt	re food inse (FIES) it	Percentage of Children from 0-5 months are exclusively Breastfed (by nationality)	Household				Governorate	DHS 2018
ess, and u	e or sever nce Scale urishmen	Dependency Ratio	Household				Governorate	HIES 2018		
oility, acce d men affe	f moderat y Experier f underno	Coping Strategies***	household				Governorate	HIES 2018		
ve availat boys, and	2.1.2 Prevalence of moderate or severe food the Food Insecurity Experience Scale (FIES)2.1.1 Prevalence of undernourishment	Household Expenditure on Food	Household				Governorate	HIES 2018		
. To imprc en, girls,	. 2.1.2 Pre the Food 2.1.1 Pre	Number of schoolchildren receiving fortified meals enrolled in the national School Feeding Programme	Household				Governorates/ Camps/Non- camps	WFP		

This chapter will look at the nutrition status of the population with a particular focus on children and food insecurity analysis.

Nutrition

Infant Feeding Practices

The Ministry of Health recommends exclusive breastfeeding during the first six months of life, as breast milk is the primary source of nutrients for young infants. In Jordan, the median duration of any breastfeeding is 9.7 months among children less than six months of age (DHS 2017-18). The median duration of exclusive breastfeeding is 0.9 months. On average, children whose mothers are Syrian have a longer median duration (1.5 months) of exclusive breastfeeding. The median duration of any breastfeeding is highest in Mafraq (11 months), and Zarqa 10.9 (months) Supplementing breast milk with liquids or other foods before this time is discouraged because it increases the likelihood of contamination and hence, the risk of diarrhoea. It is important to introduce complementary foods by the age of six months, however, because at that stage, the mother's breast milk no longer provides adequate nutrition for the child.

The DHS 2017–18 also collected data on infant feeding for the youngest children under the age of two living with the mother. As shown in Table 22, only 26 per cent of children aged 0-5 months are exclusively breastfed, 20 per cent are not breastfed, 8 per cent are given water along with breast milk, 2 per cent are breastfed and consuming non-milk liquids, 27 per cent are breastfed and consuming other milk as well, and 17 per cent are breastfed and consuming solid or

mushy food prematurely. At the age of 6–9 months, 48 per cent of children are being fed solids or mushy food along with breast milk, as recommended. Around one in three children aged 12–15 months continue to breastfeed while consuming complementary foods (34 per cent). Five in 10 children aged less than 2 months old are being fed with a bottle with a nipple. In Jordan, the percentage of children who are currently breastfeeding decreases from 33 per cent among children aged 12–17 months to 19 per cent among children aged 18–23 months.

TABLE 22: Percentage of Children from 0-5 months are exclusively Breastfed (by nationality)

			Br	eastfeeding stat	us					Number of all children under age 2
Age in months	Not breast- feeding	Exclusively breastfed	Breast- feeding and consuming plain water only	Breast- feeding and consuming non-milk liquids1	Breast- feeding and consuming other milk	Breast- feeding and consuming comple- mentary foods	Percentage Currently Breastfeeding and consuming comple- mentary foods	Number of youngest children under age 2 living with their mother	Percentage using a bottle with a nipple	
0-5	19.5	25.5	8.4	2.4	27	17.1	80.5	1,059	54	1,078
6-9	40.2	2.5	3.2	1.4	4.5	48.3	59.8	623	65.1	629
12-15	63.8	0.4	0	0.1	1.7	34	36.2	480	56.5	523
12-23	73.9	0.1	0.2	0.2	1.1	24.6	26.1	1,458	54.5	1,689
20-23	85.1	0	0	0.4	0	14.6	14.9	446	47.2	552

SOURCE: DHS 2017-18

The minimum acceptable diet indicator is used to assess the proportion of children aged 6–23 months who meet minimum standards concerning IYCF practices. Specifically, children aged 6–23 months who have a minimum acceptable diet meet all three IYCF criteria below:

- 1. Breastfeeding, or not breastfeeding and receiving two or more feedings of commercial infant formula; fresh, tinned, or powdered animal milk; or yogurt.
- 2. Fed with foods from four or more of the following groups: a) Infant formula, milk other than breast milk, and cheese or yogurt or other milk products; b) Foods made from grains, roots, and tubers, including porridge and fortified baby food from grains; c) Vitamin A-rich fruits and vegetables; d) Other fruits and vegetables; e) eggs; f) meat, poultry, fish, and shellfish (and organ meats); and g) Legumes and nuts.
- 3. Fed the minimum recommended number of times per day according to their age and breastfeeding status:

For breastfed children, minimum meal

frequency is receiving solid or semisolid food at least twice a day; for infants aged 6–8 months and at least three times a day for children aged 9–23 months. For children aged 6–23 months who are not breastfed, the minimum meal frequency is receiving solid, or semi-solid food or milk feeds at least four times a day.

The minimum acceptable diet varies across different age brackets and increases with the increase in age. For example, of children aged 6–8 months, only 12 per cent are getting a minimum acceptable diet, whereas for children aged 18–23 months nearly one-third receive the minimum acceptable diet. There is no significant difference for males and females, though, for females, only 21.7 per cent are receiving a minimum acceptable diet.

For Syrian children the situation is much worse, where only 15 per cent in total receive a minimum acceptable diet, as compared to 24 per cent for Jordanian children. Syrian children are also experiencing minimum dietary diversity because of their economic situation and the lower levels of minimum meal frequency.

TABLE 23: Percentage of youngest children age 6–23 months living with their mother who are fed a minimum acceptable diet

Among	all children age 6-2	23 months percent	tage fed:	
	Breastmilk, milk or milk products		Minimum meal frequency	Minimum acceptable diet
AGE IN MONTHS				
6-8	96.6	26.7	55.8	11.7
9-11	94.1	37.3	52.8	12.9
12-17	93.0	58.5	64.1	24.9
18-23	85.5	68.3	70.2	32.9
Male	92.2	52.8	62.1	23.2
Female	90.9	49.7	62.3	21.7
Jordanian	91.6	52.4	63.6	23.8
Syrian	91.2	44.5	54.8	14.6
Other Nationality	92.5	50.1	53.8	19.1

SOURCE: DHS 2017-18

Minimum Acceptable Diet (6-23 months aged)

Minimum diet diversity varies across governorates, with Mafraq (14.3 per cent), Madaba (13 per cent) and Tafilah (13 per cent) having the lowest minimum diet diversity among all the 12 governorates.



Anaemia Prevalence In Children And Women

Anaemia is characterized by a low level of haemoglobin in the blood. Haemoglobin is necessary for transporting oxygen from the lungs to other tissues and organs in the body. Anaemia can result from a nutritional deficiency of iron, folate, vitamin B12, or some other nutrients. This type of anaemia is commonly referred to as iron-deficiency anaemia and is the most widespread form of malnutrition in the world. Anaemia can also be the result of haemorrhage and chronic disease, malaria, parasites, or genetic disorders.

The 2017–18 DHS included direct measurements of haemoglobin levels for all children aged 6–59 months and women aged 15–49 years. Haemoglobin measurements were taken in the field using the HemoCue system.

Levels of anaemia were classified as severe, moderate, or mild according to criteria developed by the World Health Organization. Children with <7.0 g/dl of haemoglobin are classified as having severe anaemia, with 7.0–9.9 g/dl having moderate anaemia, and with 10.0–10.9 g/dl having mild anaemia. Women with <7.0 g/dl are classified as having severe anaemia, with 7.0–9.9 g/dl having moderate anaemia, and non-pregnant women with 10.0–11.9 g/dl and pregnant women with 10.0–10.9 g/dl as having mild anaemia.

Anaemia is common among children in Jordan; almost one-third of children are anaemic (32 per cent). Most of

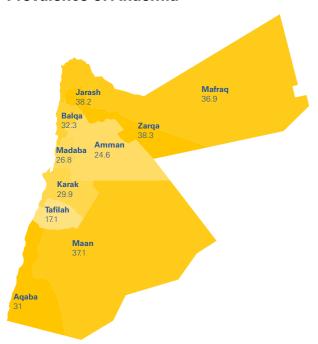
the children with anaemia have mild anaemia (21 per cent of all children). Eleven per cent have moderate anaemia, and less than 1 per cent of children have severe anaemia.

TABLE 24:

		Anaemi	a status		Prevalence o	f Anaemia in
		by hemoglobii	n children level		Wor	nen
	Any Anaemia (<11.0 g/dl)	Mild Anaemia (10-10.9 g/dl)	Moderate Anaemia (7.0–9.9 g/dl)	Severe Anaemia (<7 g/dl)	Background Characteristics	Any Anaemia Not pregnant <12.0g/dl Pregnant <11 g/dl
6–8 months	30.9	10.0	11.9	0.1	15-19 year	43.1
9–11 months	34.6	21.4	13.2	0.0	20-29	39.5
12–17 months	47.3	26.7	20.4	0.1	30-39	43.9
18–23 months	37.4	25.0	12.4	0.0	40-49	44.9
24–35 months	33.4	21.8	11.6	0.0	Pregnant	32.2
36–47 months	29.0	20.3	8.7	0.0	Breastfeed- ing	45.4
48–59 months	23.4	17.3	5.6	0.5	Neither	44.6
Male	31.3	20.4	10.6	0.2		
Female	32.1	21.6	10.4	0.1		
Jordanian	31.8	21.5	10.1	0.2	Jordanian	42.4
Syrian	34.3	21.2	13.0	0.1	Syrian	45.2
Other Nationality	31.1	15.7	15.4	0.0	Other Nation- ality	42.8
Total	31.7	21.0	10.5	0.2	Total	42.6

SOURCE: DHS 2017-18

Prevalence of Anaemia



SOURCE: DHS 2017-18

The prevalence of anaemia among children living in the North region (38 per cent) is higher than among those living in the Central or South regions (29 per cent for both regions). The prevalence of anaemia varies from 17 per cent in Tafilah governorate to 41 per cent in Ajloun governorates. Children of Syrian mothers have slightly higher rates of any anaemia than do children of mothers of other nationalities.

Anaemia is also common among women in Jordan, where 43 per cent of women tested are anaemic. Most of those with anaemia have mild anaemia (36 per cent of all women), while 6 per cent of women are classified as having moderate anaemia and less than 1 per cent have severe anaemia. The prevalence of anaemia ranges from a low of 35 per cent of women in Madaba governorate to a high of 49 per cent of women in Ma'an governorate. Syrian women have slightly higher rates of anaemia than women of other nationalities. Differentials in the

prevalence of anaemia among women by other background characteristics are minimal.

There are a total of 350,000 children receiving food under the National School Feeding programme. This has significantly helped to improve the nutritional needs of the children and for retention of children in school attendance.

Food Security

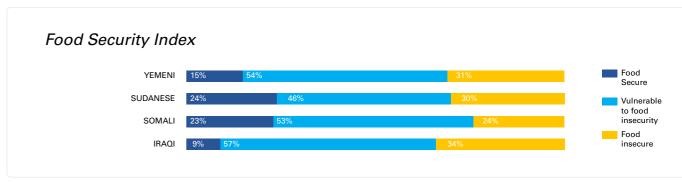
Before 2018, there is no baseline data for vulnerable Jordanians, and non-Syrian refugees. A comprehensive food security vulnerability assessment (WFP, 2019) provides data on these population groups. This section will summarize the findings from the report.

Non-Syrian Refugees

In addition to the registered 670,000 Syrian refugees registered by UNHCR in Jordan, there are more than 87,000 registered refugees or asylum seekers of other nationalities residing in the country. WFP (2019) reported on their food security situation and vulnerability.

Overall, only one-third of the non-Syrian refugees' cases were foodsecure (34 per cent); the rest were either vulnerable to food insecurity (56 per cent) or were food-insecure (10 per cent). Of female-headed households, 39 per cent were food secure, compared to 31 per cent for male-headed households.

More than half of Iraqi, Somali, and Yemini cases were vulnerable to food insecurity, although Iraqi refugees reported the lowest levels of actual food insecurity (9 per cent). Nearly onefourth of the Sudanese (24 per cent)

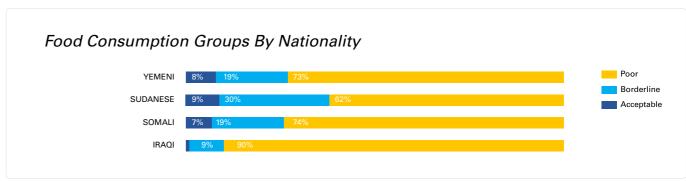


SOURCE: WFP-CFSVA 2019

and Somali cases (23 per cent) were food-insecure. These figures are much higher than the food insecurity figure observed for Syrian refugees, which is only 14 per cent in host communities.

Food consumption score (FCS) is also calculated for the Non-Syrian population, which gives a better understanding of the barriers to refugees' access to food. The majority of the refugees (86 per cent) report an acceptable level of food security in the preceding seven days. While for those cases which reported that consumption was not in line with their regular use, the majority indicated that they usually consume less than what they were reporting at the time of data

collection. No significant difference was reported between male and femaleheaded households. Iraqi refugees again reported the highest proportion of acceptable food consumption 99 (per cent), approximately three in four Somali (74 per cent) and Yemeni refugee cases (73 per cent) had acceptable food consumption, while Sudanese refugees had the lowest (62 per cent). More than one-third of Sudanese (39 per cent) had poor or borderline-poor food consumption. Poor or borderline-poor food consumption was reported by more than a quarter of Yemini (27 per cent) and Somali refugees (26 per cent).



SOURCE: WFP-CFSVA 2019

Negative Coping Strategies-Short Term

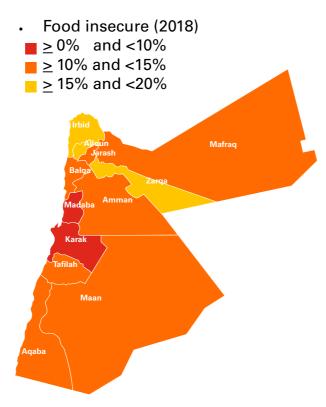
Negative coping strategies refer to how populations cope (use different strategies) when they lack sufficient food. By nationality, Sudanese refugee cases tended to use more severe consumption-based coping strategies more frequently (12.2) than Iraqi refugees (4.5). The coping strategies include: relying on less preferred food items, borrowing from family/friends, reduced numbers of meals consumed, limited portion sizes and restriction of adults' consumption.

Vulnerable Jordanians-Supported by the National Aid Fund

The NAF is the Government of Jordan's central poverty reduction and cash assistance program; it provides support to more than 100,000 households every year.

In comparison to the Non-Syrian refugees, there is a considerably high proportion of vulnerable Jordanian households who are vulnerable to food insecurity. Seven out of ten vulnerable Jordanian households were vulnerable to food insecurity (59 per cent) or were food insecure (11 per cent), with the highest proportion of food-insecure households reported in Karak and Madaba (17 per cent). While Amman had the highest proportion of foodsecure households (34 per cent), the share of food-insecure households was also significantly higher than the average (14 per cent). This is due to high living costs on the one hand, and better livelihood opportunities on the other. The difference between male and female-headed households is not statistically significant.

Larger households (7+ members)



SOURCE: WFP-CFSVA, 2019

are more often headed by men and are more vulnerable due to the high dependency ratio and the cut-off of NAF assistance. Food Consumption Score

(FCS)

More than nine out of 10 households reported that the amount of food that they consumed during the previous seven days reflected their regular consumption pattern, only 4 per cent reported to have consumed less than usual, and remaining 4 per cent had eaten more food than usually available during the recall period.

FCS for vulnerable Jordanians is much better, where 84 per cent had an acceptable FCS, 13 per cent borderline-poor, and 3 per cent poor. The average numbers of meals consumed on the day prior to the interview were 2.3 among the households with acceptable FCS, 1.9 among borderline-poor

households, and 1.7 among poor.
Among the one in six households in the borderline-poor and poor FCS categories, the consumption of highly weighted food groups such as meat, fish, eggs, pulses and dairy products was significantly lower than among the households with acceptable FCS

Negative Coping Strategies

Food consumption-based coping strategies are frequently utilized by a high proportion of vulnerable Jordanian households in order to deal with constraints affecting their access to food. Overall, 77 per cent of households reported relying on less preferred or less expensive food compared with their regular standards. In the week prior to the interview, this was done on an average of four of the seven days in order to mitigate the lack of access to food. Significantly, a high number of men and women in FGDs reported that they must opt for negative coping strategies to meet basic food needs. Nearly more than half reported reducing the number of meals per day (54 per cent), limiting portion sizes (51 per cent) and relying on other sources in order to meet the food needs of children in the household. This is also true for medium-sized (37 per cent) and large (47 per cent) households where the average numbers of children are higher. Borrowing food from other households was the only one of the five standard strategies which are frequently used by small (25 per cent), medium-sized and large households (20 per cent).

The map right shows the consumptionbased coping strategy index by governorates:



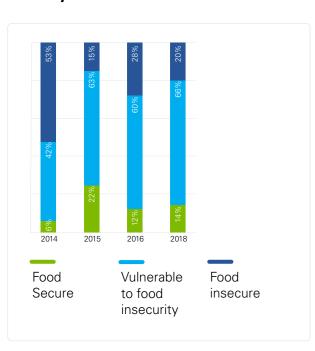
SOURCE: WFP-CFSVA (2019)

Syrian Vulnerability Assessment

Over the two years from 2016–18, food security deteriorated slightly among registered Syrian refugees living in host communities. In 2018, 20 per cent of registered Syrian refugee households in host communities were food-secure, compared with 28 per cent in 2016.

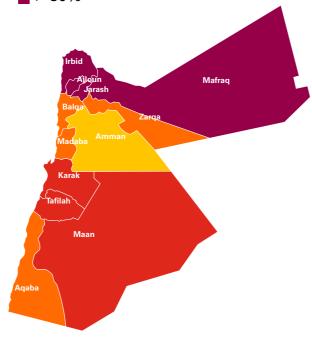
Over the same period, the proportion of food-secure households increased from 12 to 14 per cent, and the percentage of households vulnerable to food insecurity rose from 60 to 66 per cent. This improvement in food consumption is mainly attributable to increased total expenditure on food by the households. Where for 23 per cent of households, food accounted for more than 40 per cent of their spending in 2016, this figure had doubled to 44 per cent in 2018.

The graph below shows the food security index in host communities:



Across all governorates, 70 per cent of households were either food-insecure or vulnerable to food insecurity in 2018. Irbid is the worst performer, with 89 per cent of Syrian households falling into one of these two categories, followed by Mafraq (86 per cent). Though Amman has the highest proportion of food-secure households (29 per cent), this percentage had fallen since 2016 when it was 36 per cent. Compared with 2016, the overall percentage of food-secure households in all the three governorates that host the most significant number of Syrian refugees (Amman, Irbid, and Mafrag) decreased in 2018, reversing the trend seen between 2015 and 2016.

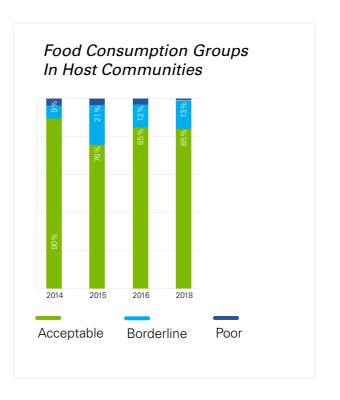
- Proportion of food insecure or vulnerable to food insecurity at the governorate level:
- ≤ 70
- _____ > 70% and <75%
- > 75% and <80%
 </p>
- **80%**



SOURCE: ADOPTED FROM WFP-CFVSA

Food Consumption Score – Host Communities

FCS for Syrian refugees living in the host communities has remained stable since 2016, with 85 per cent of households consuming acceptable amounts of food, 13 per cent consuming borderline-poor amounts, and 2 per cent falling into the poor consumption category in 2018. There was a slight improvement in FCS noted in Amman, Mafrag, and Zarga governorates, but worsened results in Irbid and the Southern governorates of Karak, Tafilah, and Ma'an. Whereas in all the governorates, at least 80 per cent of Syrian refugee households had acceptable food scores, in Irbid, Mafrag, Karak, Tafilah, Ma'an, and Agaba, more than 15 per cent had either borderlinepoor or poor scores.

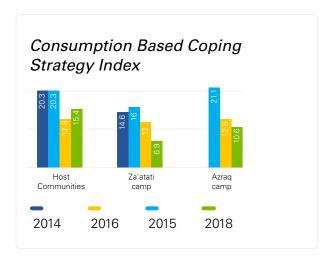


Syrian Refugees in Camps

The CFVSA (2018) study also analysed the average number of meals eaten per day for Syrian refugees. The average number of meals eaten per day remained constant from 2014 to 2016, at approximately 2.3 meals, but in 2018 it decreased to 2.1. Households with borderline-poor or poor food consumption scores consumed slightly lower than the average number of meals per day: 1.9 with borderline-poor scores and 1.8 with poor scores.

Coping Strategies Index

For Syrian refugees, the consumptionbased coping strategies index increased from 12.8 in 2016 to 15.4 in 2018. This is followed by a constant decrease in index from 2015 to 2016. A similar trend was observed among refugees residing in Azraq camp, while a continued decrease in the use of the strategies was found in Za'atari camp. Between 2016 and 2018, an increasing proportion of households used coping strategies that lowered the volumes of food consumed: reduced the number of meals per day by 55 per cent households, limited portion sizes by 44 per cent and restricting adult consumption by 46 per cent, implying that households were facing more significant difficulties in maintaining access to food. Such strategies are unstainable in the long-term, and continued use could have negative implications on the nutritional health of households.



Za'atari Camp

The percentage of food-secure households decreased from 30 per cent in 2016 to 23 per cent in 2018. Food insecure households in Za'atari accounted for 5 per cent of the total Za'atari camp population, this has remained the same since 2016, whereas those vulnerable to food insecurity increased from 65 to 72 per cent. Like the host communities, households in Za'atari are spending higher proportions of their total expenditure on food than in 2016: 43 per cent of the households spent more than 60 per cent of their expenditure on food in 2016, compared with 77 per cent in 2018.

Azraq Camp

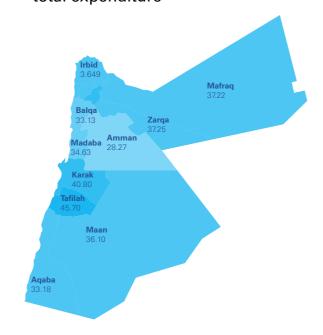
According to WFP (2018), the situation in the Azraq refugee camp is different because refugees have limited ability to adopt some livelihood-based coping strategies. The food security index is heavily influenced by livelihood-based coping strategies, and as such, it is not an appropriate metric for measuring food security in Azraq. The Food consumption score (FCS), described in the previous section, is the most accurate proxy for food security in Azraq camp.

Expenditure on Food

This section looks at the average household expenditure on food. The first map below reflects average expenditure on food as a percentage of total expenditure; it can be observed that households in Karak and Tafilah are spending more than 40 per cent of their expenditures on food items, followed by Zarqa and Mafraq (37 per cent for both).

Given that tobacco and cigarettes account for a significant amount in the food group category, we excluded that in the second map to calculate average household expenditure as a percentage of total expenditures. The trends at the governorate level stay the same. The last map shows tobacco and cigarette expenditure as a percentage of total food expenditure. In Aqaba, more than 18 per cent of the food expenses goes to tobacco and cigarettes, followed by Balqa (16.6 per cent), and in the rest of the governorates, the average is around 14 per cent.

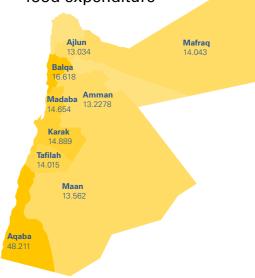
 Average Expenditure on Food as percentage of total expenditure



 Average household expenditure on foodexcluding tobacco and cigarettes



 Average tobacco and cigarettes expenditure as percentage of total food expenditure



SOURCE: HIES (2018)

Recommendations and Ways Forward

- Economic policies that grant work permits for longer-term and more stable work options that are safe and dignified for all refugees. Increasing efforts to formalize work for refugees and vulnerable populations and offer livelihood programmes that match their skills.
- Continue programming for direct cash transfer for food purchasing.
- Decrease reliance on funders with anticipated budget cuts and moving towards diversified funding relationships.
- Maintaining humanitarian assistance and support and also expanding its scope to cover vulnerable beneficiaries.
- Continued food assistance in camps, given that the population in camps have minimal livelihood opportunities, especially in Azrag camp.
- For vulnerable Jordanians: Explore development initiatives for supporting graduation out of poverty and the NAF. As part of the improved mechanism for graduation out of the NAF into economically sustainable livelihoods, households with working-age and abled-bodied members should be targeted for development initiatives focussed on livelihoods and vocational skills for which there is a demand.

The planned expansion in coverage of the NAF to an additional 85,000 households by 2020, and the adoption of an improved targeting model will create an opportunity for other actors to address gaps in coverage by providing complementary support to households that need multi-dimensional assistance, as well as to correct inclusion and exclusion errors, including those that occur as a result of NAF expansion.



SOCIAL PROTECTION

TABLE 25:

SDG Objective	SDG Indicator	Indicator of Interest	Supply Side /Household	Syrians	Non-Jordanians	Jordanian	Geographic Distribution	Source	
ve greater	1.3. Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable. 10.4.1 Labour share of GDP, comprising wages and social protection transfers.	Percentage of poor households covered by NAF (frequent cash, temporary cash, physical rehabilitation, emergency aid, instant cash)	Supply Side				Country Wide	NAF (2018)	
10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality.	all, including flo	Percentage of children covered by NAF and MOSD (Orphans and Disabled complementary services)	Supply Side				Country Wide	NAF (2018)	
licies, and proc	d measures for transfers.	Percentage of vulnerable Syrian and Jordanian receiving any kind of cash assistance	Supply Side				Country Wide	HIES (2018)	
protection pol	ate social protection systems and measures poor and the vulnerable.	n systems an nerable. ocial protectio	Zakat Beneficiaries	Supply Side				Country Wide	Zakat Fund
age and social	ocial protectio or and the vulr wages and sc	Social Protection Programs Budget analysis	Supply Side				Country Wide	UNICEF (2018)	
cially fiscal, w	y appropriate s rage of the poo DP, comprising	Percentage of Jordanian/ Non-Jordanian households by source of aid and groups of current household income	Supply Side/ Household				Governorate	HIES (2018)	
rt policies, espe	1.3. Implement nationally appropriate social protection syste achieve substantial coverage of the poor and the vulnerable. 10.4.1 Labour share of GDP, comprising wages and social pro	Percentage of households receiving any kind of social assistance (government, NAF, Zakat, UN, religious.	Supply Side/ Household				Governorate	HIES (2018)	
. 10.4 Adop equality.	. 1.3. Imple achieve sı 10.4.1 Lab	Percentage of women, girls, boys and men who experience GBV	Household				Governorate	DHS (2018)	

SDG Indicator	Indicator of Interest	Supply Side /Household	Syrians	Non-Jordanians	Jordanian	Geographic Distribution	Source
ition covered by social by sex, distinguishing sons, older persons, pregnant women, ctims and the poor	Percentage married girls and boys in early marriages (Jordanians and Syrians)	Household				Governorate	DHS (2018)
population constems, by second persons, ilities, pregnaljury victims.	Percentage of children who are subject to drug abuse	Household				Governorate	DHS (2018) & other sources
1.3.1 Proportion of protection floors/sy children, unemploy persons with disab new-borns, work-ir and the vulnerable	# of working children (Jordanians and Syrians)	Household				Governorate	DHS (2018) & other sources

This chapter will be looking at social protection coverage in Jordan, particularly focussing on a rightsbased approach to social protection. The right to social protection is enshrined in several international human rights instruments. The humanrights approach to social protection foresees that programmes are anchored in a system of rights, clearly establishing citizens' entitlements and corresponding obligations for the state. The Jordanian Constitution guarantees rights and access to basic social and health services for Jordanian citizens. Most of the programmes on social protection are embedded into other poverty reduction and development plans.

The government spends around 3.64 per cent of GDP on education, 4.11 per cent of GDP on health, and only 0.94 per cent of GDP on Social Protection programmes (noncontributory). Refugees are not eligible for any of the non-contributory programmes; therefore, most of the humanitarian assistance programmes are focussed only on refugees, while the coordination between the national system and humanitarian assistance programmes is not very robust. The social protection system in the country faces challenges of fragmentation, limited resources, and gaps in coverage. There is no national registry for the social protection programme, and overlapping is a fairly consistent phenomenon in the country.

The figure right reflects the overview of the significant social assistance programmes included under social protection (social security and non-contributory social protection mechanisms):

SOCIAL SECURITY MECHANISMS

ocial Securit System

- National pension scheme for private-sector workers, employees who joined the civil services after 1995 and military personnel recruited after 2002.
- It is a compulsory scheme.
 Covers approx, 72 per cent of workers in the country.

ilitary Pensio System

- Regulated by the Ministry of Finance.
- Cover members of the armed forces recruited before 2002.
- Participants receive benefits upon a service period of more than 16 years or upon reaching the age of 60.

Civil Servant Pension System

- Regulated by the Ministry of Finance.
- Covers government employees recruited prior to 1995.
- New employees are redirected to the Social Security Corporation.

NON-CONTRIBUTORY SOCIAL PROTECTION

itional Aid Fund (NAF)

- Regular cash assistance for vulerable familiers.
- It provides one-off payments in emergencies and for physical rehabilitation.
- Beneficiaries are eligible for subsidised health care.
- Regular cash transfer reached 73,126 families in 2018.

Ministry of Socia Development

Integrates community development and productive inclusion through supporting employment and skills development.

Zakat Fund

- Deliveries cash and in-kind assistance through individual programmes and is funded by donations.
- Only households who do not receive any other benefits are eligible.
- In principle, refugees are eligible - but no evidence of refugees accessing transfers under this scheme.

The government of Jordan, in collaboration with UNICEF (2019), launched a comprehensive National Social Protection Strategy, which aims to break the intergenerational cycle of poverty and to provide a social protection floor. The strategy has three pillars – collectively directed at a decent life for all Jordanians through the provision of a comprehensive, transparent and equitable social protection system.

The first pillar focuses on opportunities for families to be economically selfsufficient through the labour market. The second pillar focuses on the empowerment of the population through education, health care, and social services; and the third pillar focuses on targeted social assistance. In this chapter, we will mainly cover social assistance and what are the vulnerabilities associated with social assistance for the poor and marginalized, and what recommendations can follow that allow the poor to maintain a basic level of consumption with dignity. The other two pillars are covered in the Education, Health, and Livelihood sections. Secondly, this chapter also

looks at some of the indicators related to the protection component.

Jordan has ratified the ILO Convention on Minimum Standards of Social Protection, 1952 (No. 102). However, there are still many conventions on employment and health care yet to be ratified, to align the national system with international standards. Moreover, the progressive liberalization policies that have recently been implemented are arguably jeopardizing the improvement and expansion of social protection in Jordan. Despite this, Jordan is considered an active player in terms of social protection in the MENA region. There are in total 16 social protection programmes in Jordan, while only 12 have an identified legal/ regulatory framework (Machado et al. 2018).68

Social protection provision in Jordan involves a multitude of actors and programmes. These include several government ministries and departments: the Ministry of Social Development (MOSD), Ministry of Labour, Ministry of Awgaf, Islamic Affairs and Holy Places, Ministry of Education, Ministry of Health, Ministry of Finance. NSPS (2019) discusses targeted assistance, where the government provides targeted, temporary social assistance to citizens who are unable to be economically selfsufficient, allowing them to maintain a basic level of consumption. Under the social assistance component, there are two major programmes in Jordan – the NAF and Zakat fund.

68 Machado, A.C., Bilo, C., Soares, F.B., and Osorio, R.G. (2018) Overview of Non-contributory Social Protection Programmes in the Middle East and North Africa (MENA) Region through the Child and Equity Lens.

Social Assistance: Existing Situation and Challenges

The bulk of social assistance spending in 2018 was allocated for the bread subsidy. In January 2018, the government raised the price of bread and distributed JD 191 million to households as cash compensation. By international standards, Jordan spends significantly on non-targeted commodity subsidies while spending relatively little on poverty targeted social assistance programmes.

Given that cash compensation reached about 80 per cent of Jordanians far more than the 15.7 per cent of Jordanians who are poor – the cash compensation was not povertytargeted. Because bread prices were fixed in 2018, Government spending also increased during the year to maintain the announced price. The budget for cash compensation, as well as the continued subsidies, continues in 2019, and no decision has been made regarding the 2020 budget. A regressive subsidy exists on LPG canisters (widely used for cooking). Moreover, a highly distortionary crosssubsidy remains on electricity. Note that the numbers presented here are based on the recurrent budget. The full fiscal implications of subsidies are considerably higher when the public debt related to electricity and water is included.

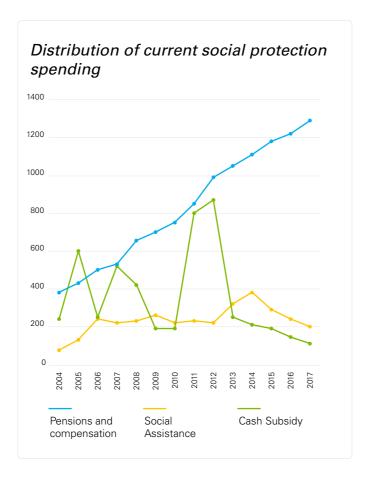
Jordan has a plethora of separate programmes with similar goals, resulting in inefficient spending on duplicated efforts (as well as impeding transparency and accountability.)
Until 2019, criteria for targeting cash

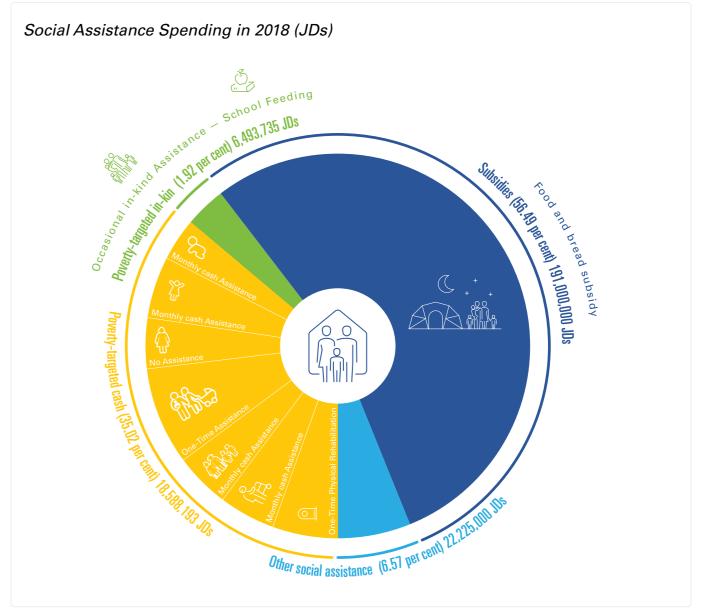
assistance has been focussed on those who are unable to work due to disability or old age.

Between 2012 and 2017:

- •Targeted social assistance decreased by 9 per cent or JD 21 million
- Non-targeted subsidies decreased by 88.4 per cent or JD 788 million

This decline in subsidy was not directed to targeted social assistance.





*SOURCE: Government Budgetary Documents, calculations by To-Excel.

Summary of Social Assistance Programmes

Here is the list of the major Social Assistance Programmes, where these programmes use a wide range of mechanisms to provide social assistance:

- Seven programmes provide monthly cash assistance: five operated by NAF and two operated by the Zakat fund.
- Five programmes provide one-time cash assistance: three operated by NAF and two operated by the Zakat Fund. The largest of these, the Zakat Emergency Cash Programme, provides 50 per cent of all one-time cash assistance.
- Universal subsidies and crosssubsidies are provided on five main products – bread, LPG, water, electricity, and transportation – and, for Military and Civil Service employees, on a range of other products as well.
- •The Ministry of Education provides ongoing, in-kind assistance to support food security among students through its School-Feeding Programme. A new NAF programme also aims to increase the coverage of the school-feeding programme.
- One-time or occasional in-kind assistance is provided under Zakat's School Bags Programme and Eid assistance.
- In addition, the Royal Court, the Prime Ministry, and Parliament each have budget allocations that are used for social assistance on an ad hoc basis.

National Aid Fund (NAF)

The main national social protection programme in Jordan is the National Aid Fund (NAF). It is a comprehensive scheme that currently consists of six different programmes. NAF was established in 1986 and functions as an autonomous institution. The individual programmes include regular cash assistance for vulnerable families living below the poverty line and for those with disabled family members. NAF also provides one-off payments in emergencies and for physical rehabilitation. NAF beneficiaries are eligible for free health care and receive insurance cards issued by the Ministry of Health. In general, these programmes are means-tested, in combination with socio-categorical targeting. Refugees are not eligible. There was a total of 111,110 beneficiary households in 2018 (331,453 individuals), and the regular cash transfer alone reached 73.126 households (243,054 individuals) (NAF, 2018). The largest of the NAF programmes offers monthly cash assistance, which provides 70 per cent of all recurrent cash assistance.

TABLE 26: NAF Programme

	2014		20	2015		2016		2017		2018	
	# of families	# of individuals	# of families	# of ndividuals							
Frequent Cash Aid	74,929	230,363	74,555	202,850	77,219	231,325	79,376	239,880	73,162	243,054	
Temporary Cash Aid	14,498	71,211	14,324	59,330	12,433	59,392	13,001	62,372	26,164	88,399	
Aid Physical Rehabilitation	717		568		712		894		768		
Emergency Cash Aid	3,829		4,215		4,167		4,739		5,635		
Instant Cash Aid	7,928		6,027		6,080		5,180		5,381		
Total	101,901	301,574	99,689	262,180	100,611	290,717	103,190	302,252	111,110	331,453	

SOURCE: NAF (2018)

On average, 37 per cent of the beneficiaries of unconditional cash transfer programmes are in the poorest 20 per cent of the population. For NAF, 47 per cent of recipients are in the poorest 20 per cent of the population. This is an indication of the challenges with the targeting methodology. Current NAF targeting is largely based on the identification of categories of households that are associated with being unable to work (e.g., elderly, disabled and female-headed households). In this regard, it is not surprising that a significant number of beneficiaries are not in the poorest 20 per cent of the population.

NAF is going to add an additional 25,000 households to the recurring cash assistance programme in 2019, and more households in the coming years. The overall target is to reach 185,000 households by 2021.

Though the household grant covers a considerable number of households over the year, the number of children targeted under these programmes remains low; in 2018, only 119,972 children were targeted, which is only 2.9 per cent of the total child population. The NAF is also there to support the disabled population, but a total of only 2,144 disabled people are reached. NAF has also been able to reach 16,649 orphans. A new NAF targeting formula has been agreed between the Government of Jordan, the World Bank, and UNICEF with support from UNHCR, WFP, and DFID. For the new targeting model, NAF is going to use a hybrid approach, with monetary poverty and categorical targeting as the second step. This new model will improve targeting methodology, for the first time including households who are in the informal labour market.

TABLE 27: NAF-Child Beneficiaries

Say	Sex Orphans		Child Beneficiaries						
Jex	Orphans	Disabled		A	ge				
			12–17	6–11	0–5	0–17			
Female	8,143	914	24,289	23,379	11,305	58,971			
Male	8,506	1,230	25,174	24,034	11,793	61,001			
Total	16,649	2,144	49,463	47,413	23,098	119,972			

Zakat Fund

The Zakat Fund operates as a government entity under the Ministry of Waqf but with very little liability on the government budget: only JD 147,000, according to the 2018 government budget estimates. This budget covers only the administrative cost of the Zakat Fund, which includes salaries and bills. Approximately JD 25 million per year comes from donations. It has a significant degree of autonomy as a result of its mostly self-financed budget.

The Zakat fund has a decentralized structure in which local committees have a significant degree of autonomy (in obtaining donations and in decision making) from the centralized Zakat Fund administration and its 19 offices around the country. Each of the 209 Zakat committees are responsible for a specific geographic area. Zakat operates two monthly cash assistance programmes; a one-time cash assistance programme (Urgent Cash Programme) and several one-time

in-kind assistance programmes (food parcels and coupons programme, Ramadan tables, Eid-ul-Fitr assistance, and school bags programme).

Zakat will be going through restructuring with the introduction of a new law, which is still in the draft form. The most significant change will be to establish an independent institution run by the Board of Trustees, and some of the fund's income will be channelled to finance the social security package. Secondly, the new law also emphasizes using the Zakat fund for poverty reduction and unemployment.

Problems with the Targeting Approach

In this section, it is essential to highlight the programmes with social protection coverage according to the various levels of income. The graph below is adopted from the Household Expenditure and Income Survey (2017–18), stating the lowest levels of average yearly household income and if aid

and assistance are available to these households. The graph reflects that nearly half of the Jordanian households earning less than JD 7,500 per year are not receiving any assistance, that only 7 per cent of the households earning less than JD 2,500 per year are receiving NAF assistance, and 1 per cent from the Zakat Fund. Similar estimates for those Jordanian households who are earning between JD 2,500-5,000 per year. Forty-one per cent of the households earning below JD 2,500 are also supported by religious institutions, individuals, and other agencies. For the Non-Jordanian population, 47 per cent

of households earning below JD 5,000 per year are covered by UNRWA, WFP, and UNHCR assistance, while another 22 per cent are also supported by religious institutions, individuals, and other agencies. Even with this support, nearly half of the Non-Jordanian households earning below JD 5,000 are not receiving any assistance. This analysis reflects that there are huge gaps in effective targeting by both government and non-government agencies. Nearly half of the households with minimal income are not receiving any assistance.

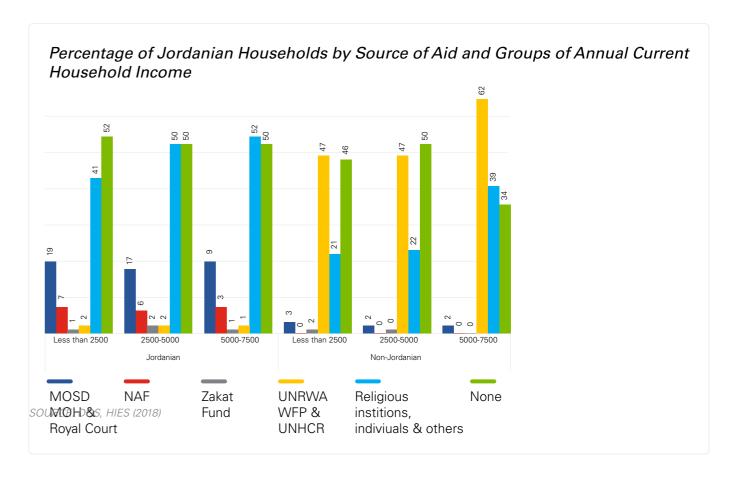


TABLE 28 next shows the percentage of the Jordanian population receiving cash assistance and the percentage of the population living below the average current household income per year of less than 7,500 JD. Four out of ten households in Zarqa, Mafraq, Jarash, Ajloun, and Ma'an have yearly

income less than JD 7,500, but NAF and Zakat coverage is very low for these governorates, whereas coverage in these governorates by MOSD, MOH and Royal Court programmes are relatively high.

TABLE 28: Governorate Level Social Assistance

Governorates	MOSD, MOH and Royal Court	NAF	Zakat Fund	UNRWA, WFP & UNHCR	Religious Institutions, Individuals and others	None	Average Current Household Income <7500 JD-No Assistance
Amman	6.9	1.5	0.4	0.6	35.4	62.9	34.2
Balqa	4.7	4.1	0.6	1.8	39.6	58.7	37.7
Zarqa	10.9	2	0.4	0.9	67	43.5	42.6
Madaba	5.7	2.3	0	0.1	40.1	56.5	38.5
Irbid	10.1	1.8	0.9	1.3	58.9	46	39.3
Mafraq	8.9	4.4	0.1	0.4	52.3	45.2	41.2
Jarash	11.2	1.7	0.4	0.6	51.9	45.7	42.7
Ajloun	10.7	3.8	0.2	0	52	46.9	41.6
Karak	6.7	3.2	0.1	0	37	58.7	36.2
Tafilah	8	0.7	0.6	0	24.1	72.8	37.7
Ma'an	7	6.5	0.3	0	49.4	52.5	41.7
Aqaba	7.2	1	0	0.8	37.7	61.8	38.2
Urban	8.1	2	0.4	0.8	46	55.4	37.1
Rural	8.4	3.1	0.6	0.3	47.3	51.7	41.2
Kingdom	8.2	2.1	0.5	0.8	46.2	54.9	37.6

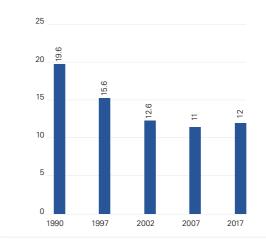
SOURCE: DOS-HIES 2017-18

Protection

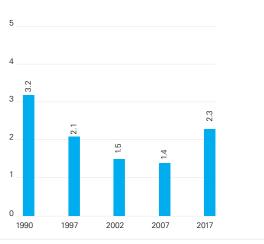
Child Marriage

Child marriage data is likely to present an underestimation of the true prevalence of child marriage: nationally representative survey data show a higher prevalence of women aged 13 years and older who married under the age of 18 compared to data from the Chief Justice Department. Demographic Health Survey data shows a gradual decreasing trend in child marriages for those below 18 years of age, and a lesser decrease for those married under 15 years of age between 2007 and 2012. However, increases in both marriage under 15 and under 18 among 18–22-year olds (the indicator used to monitor child marriage for the Sustainable Development Goals) are shown in the most recent data from 2017/2018.

Prevalence of Child Marriage at or before the age of 18 in Jordan among 18-22-year olds, DHS Data (all years)



Prevalence of Child Marriage at or before the age of 15 in Jordan among 18-22-year olds, DHS Data (all years)



SOURCE: UNICEF (2019), forthcoming.

Though the legal age of marriage is 18 years, judges are able to authorize the marriage of minors, mainly on religious grounds, without the need for approval by the Chief Justice Department (SIGI, 2016). There are also informal and nonformal marriages that are not registered with the Jordanian authorities, especially among Syrian refugees (The Association for the Development and Enhancement of Women, 2013).

Existing research on child marriage among Syrian refugee girls living in Jordan shows that these girls face specific vulnerabilities because of their refugee status. According to Shari'a court data of registered marriages in 2014, one-third of new Syrian brides were under 18, far higher than among other nationalities in Jordan (Higher Population Council, 2017). Some research indicates that Syrian customs

around child marriage may have started to influence northern Jordanian's decisions to marry early.

The phenomenon of early marriage is both common in some parts of Syria and legally acceptable (usually at 15-17 years); yet in Jordan, the increased rate of child marriage amongst this population group points to another negative coping mechanism for families trying to secure the economic futures of their children, and to reduce the financial burden on their households (UNICEF Hajati Cash Transfer Report, 2018). 69 Such marriages are now argued to be precipitated by difficult circumstances and uncertainty (as a social and economic coping strategy), and to ensure sutra.

69 UNICEF (2018) Post Distribution Monitoring Report. Hajati Cash Transfer Programme.

Child Labour

Article 73 and 74 of the Labour Law are in line with the standards contained in the international conventions on the reduction and abolishment of child labour, including the UN Convention on the Rights of the Child and the International Labour Organisation (ILO) conventions on Minimum Age (No. 138) and Forced Labour (No. 29). Despite the presence of explicit legislative provisions, there is a significantly high number of children in the labour force. According to ILO's (2017)⁷⁰ estimates:

A: Child Labour (aged 5–15 years) not in hazardous work

B: Child Labour (aged 5–15 years) and juveniles (aged 16–17 years) in hazardous work

C: Juveniles (aged 16–17 years) in permissible work

Children in Employment (Working children): 75,982 (A+B+C)

Child Labour: 69,661 (A+B)

Hazardous Work by Children: 44,917 (B)

The number of child labourers in Jordan has roughly doubled since 2007. The Working Population Ratio for boys in Karak is the highest in Jordan at 6.46 per cent, followed by 5.83 per cent in Ma'an and 5.12 per cent in Jerash. The WPR for boys is also high in Tafilah (4.85 per cent) and Aqaba (4.81 per

cent). Among the Syrian population, highest child labour rates are observed where 3.22 per cent of children are in child labour.

Domestic Violence⁷¹

- Experience of Violence: 21 per cent of ever-married women age 15–49 have experienced physical violence since the age of 15; 2 per cent of women have experienced physical violence during pregnancy.
- Marital Control: 15 per cent of evermarried women have experienced at least three controlling behaviours by their husbands.
- Spousal Violence: 26 per cent of evermarried women age 15–49 have ever experienced spousal physical, sexual, or emotional violence. Twenty-one per cent of women have experienced emotional violence. Eighteen per cent have experienced physical violence, and 5 per cent have experienced sexual violence.
- Injuries due to spousal violence: 24 per cent of ever-married women who have experienced spousal physical or sexual violence reported injuries; 22 per cent reported cuts, bruises or aches, and 8 per cent reported eye injuries, sprains, dislocations or burns.
- Help-Seeking: Only 1 in 5 women (19 per cent) who have experienced any physical or spousal sexual violence have sought help to stop the violence. Two-thirds have never sought help or told anyone about the violence.

Drug Abuse and Tobacco Usage among Children and Young People

The Anti-Narcotics Department confirmed that the increase in drug abuse amounted to 32 per cent in 2018, saying that 47 per cent of the users were between the ages of 18 and 27 years.

Tobacco Use: 72 Overall, 12 per cent of ever-married women aged 15–49 smoke a tobacco product; 8 per cent smoke cigarettes, and 7 per cent smoke a water pipe. Almost half of the men (45 per cent) smoke a tobacco product; 40 per cent smoke cigarettes, 11 per cent smoke a water pipe and 12 per cent smoke other forms of tobacco such as pipes and cigars. Among men who smoke cigarettes daily, 49 per cent smoke 15–24 cigarettes a day and 37 per cent smoke 25 or more cigarettes a day.

Women in urban areas are more likely to smoke (13 per cent) than rural women (6 per cent). Tobacco smoking ranges from 2 per cent in Karak and Tafilah to 19 per cent in Balqa among women and from 34 per cent in Tafilah to 55 per cent in Madaba among men. Jordanian women are slightly more likely to smoke tobacco (12 per cent) than Syrian women or women of other nationalities (both 9 per cent). The same patterns are observed among men.

Recommendations and Ways Forward⁷³

• Improve social assistance programmes coordinated by the National Aid Fund and Zakat Fund to ensure effective performance and effective spending.

o Also simplifying and consolidating the existing social assistance programmes provided by the National Aid Fund/Ministry of Social Development in a unified programme and developing the mechanism of the Fund's work to maximize coverage of the poorest households and to minimize leakage to other households.

- o Enhancing social assistance programmes provided by the Ministry of Awqaf and Islamic Affairs and Holy Sites. The Zakat Fund electronically links with all committees, using harmonized and verifiable eligibility criteria, enhancing transparency and accountability of the M&E system, and promoting targeted assistance programmes at the community level.
- The Council of Ministers develops a plan to improve poverty targeting of social assistance spending as a whole and takes necessary measures to allocate financial resources accordingly. Relevant Ministries and public institutions redirect housing programmes for the poor to focus on cash assistance and support for renewable and efficient energy.
- The Ministry of Education assesses and modifies the existing School

⁷⁰ ILO (2017) National Child Labor Survey 2016 of Jordan, <www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/publication/wcms_510520.pdf>, last accessed 13.11.2019.
71 DHS (2018)

⁷² DHS (2018)

⁷³ Some Recommendations are from NSPS (2019)

Feeding Programme to improve the quality of the services provided; to enhance poverty-targeting of beneficiary schools in cooperation with the relevant institutions; to raise awareness of healthy nutrition, and to utilize non-governmental and community based-services.

• Implementation and enforcement of laws to limit marriage under the age of 18; this can be done by enhancing the processes for registration of marriages.

olntergenerational norms discussions especially including tribal elders and grandparents, harnessing the positive elements of inherited beliefs and values to reduce child marriages.

- Raising awareness and campaigns in schools, colleges and universities on the adverse effects of tobacco and drugs use.
- The committee for combatting violence against women need to work together with other authorities responsible for the protection of women's rights and regional and local authorities in order to increase the number of rehabilitation centres and shelters for female victims of domestic violence.



LOCAL GOVERNANCE AND MUNICIPAL SERVICES

TABLE 29:

SDG SDG Objective Indicator			Indicator of Interest	Unit of Analysis	Nation	ality Segr	egated	Geographic Distribution	Source						
				Supply Side /Household	Syrians	Non-Jordanians	Jordanian								
f cities, licipal and	other waste management. 11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities.	d with rrated, by srability.	Progress on fiscal decentralization	Supply Side				Countrywide	N/A						
tal impact of lity and mun		collected ar d waste gene f civic respon	on of urban solid waste regularly collected and with discharge out of total urban solid waste generated, b social cohesion and the sense of civic responsibility.	Solid Waste Management by Municipalities	Supply Side				Countrywide	DOS (2018)					
environmen on to air qua		al urban soli		percentage of electronic wastes disposal in the medical waste sector	Supply Side				Countrywide	DOS (2018)					
se per capita becial attenti ıent.		portion of urban solid wa final discharge out of tot ening social cohesion anc	portion of urban solid we final discharge out of tot ening social cohesion and	pportion of urban solid we final discharge out of tot ening social cohesion and	pportion of urban solid we final discharge out of tot ening social cohesion and	pportion of urban solid we final discharge out of tot ening social cohesion and	oportion of urban solid we final discharge out of tot et	oportion of urban solid wa final discharge out of tot. ening social cohesion and	percentage of electronic wastes disposal in the industrial sector	Supply Side				Countrywide	DOS (2018)
11.6 Reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.									percentage of Jordanians reported having better social cohesion with Syrians in their neighbourhoods	Supply Side/ Household				Governorate	Stanford University and UNICEF
. 11.6 Redu including other wa	. 11.6.1 Pro adequate cities.	. Strengthening	Proportion of children under 5 years of age whose births have been registered with a civil authority, by age	Supply Side				Countrywide	DOS (2018)						

The government of Jordan has been committed to the 2015 Decentralization Law, and Municipality law reflects their commitment towards a culture of popular participation at the subnational levels of the government. This law will introduce a new level of decision-making at the governorate level, where the governorates will plan and prioritize the development projects, and also prepare and ratify the budgets. This would mean more financial and administrative powers to design and implement the projects and the provision of selected government services.

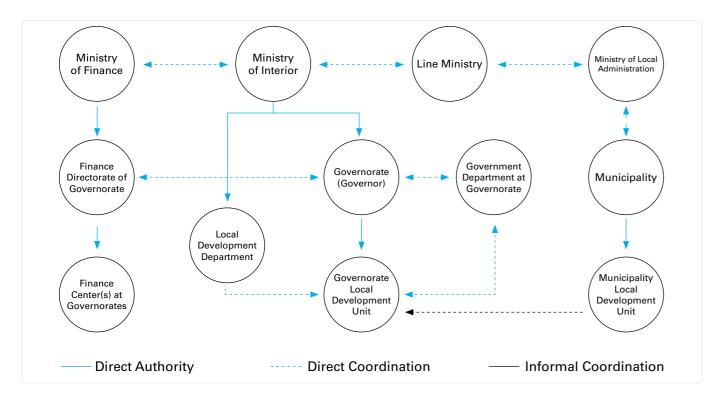
Financial decentralization will be led by the Ministry of Finance, which is a vital component for any decentralization exercise. However, this would require capacity building. This would also require ministries to be trained on fiscal management and procedures would need to be agreed with the governorates. Core building blocks for fiscal decentralization would entail expenditure assignment, funding, budget planning, budget execution and financial audit (MOF, 2017).⁷⁴

In order to understand the decentralization and local governance process, it is important to understand the relationships between the different entities (shown in the figure next page). Governorates are part of the Ministry of Interior, headed by a governor, who is the head of the public administration, handling public security, coordinating

with all governmental departments on the delivery of public services. In the new law, the governor will handle the duties of planning and approving the new development projects and the preparation and approval of their budgets. There will be elected governorate council with four-year terms which will have financial and administrative independence in law (MOF, 2017).

The local governance law will overlap with the aforementioned roles and responsibilities in the Municipality authority duties. The municipality is a civic jurisdiction institution with financial and administrative independence and functioning as a devolved entity. They are headed by the Mayor with their authorities and organization from the revised Law on Municipalities (No. 41, 2015). It is anticipated among the authorities that multiple links for planning and coordination will exist between the governorates and the municipalities in terms of planning and coordination. There is a need to avoid any overlapping for the smooth functioning of the local governance institutions by ensuring a precise mechanism for coordination and collaboration between the governorate and municipal councils.

74 Ministry of Finance (2017) Fiscal Decentralization in Jordan: Strengthening the role of Governorates in Improving Public Services. Available from: <www.mof.gov.jo/Portals/0/Mof_content/%D8%A7%D9%84%D8%A7%D9%85%D8%B1%D9%83%D8%B2%D9%8A%D8%A9/paper16102017EN.pdf>, last accessed 13.11.2019.



Municipal Services

Jordan is divided into 51 districts, 89 sub-districts, and 103 municipalities. With the influx of Syrian refugees and the presence of nearly 80 per cent refugees in the host communities, the provision of quality services by the municipalities have been affected. The majority of municipalities still need further capacity building (technical, HR and financial) to deal with the crises they are facing. Moreover, there is heightened pressure on municipalities to deliver more and better municipal and social services, to address housing deficiencies, to induce local economic development, and to support the social cohesion of communities (JRP, 2019).

Jordanian citizens in host communities are increasingly demanding a more effective response to their own needs

from state institutions and local authorities, particularly in smaller communities. This is partly a result of what many Jordanians perceive as unfair priority being given to Syrian refugees. An additional burden is also apparent in waste management collections and transportation, and waste disposal.

According to the recent VAF (2018), the vast majority of the surveyed Syrians in Jordan are severely vulnerable with regards to sanitation services. This is predominantly caused by solid waste management, where 31 per cent of cases either experience severe or moderate vulnerability, whereas elsewhere the reliability of solid waste management is relatively high.

Community perceptions of the municipal authorities' responsiveness in general to their priority needs

indicate that, overall, 56 per cent of households believe that municipalities were not responsive to their needs. The current levels of service delivery are still perceived as insufficient to meet demand. This includes perceptions of solid waste management, public roads, public lighting, sanitation, and general leisure spaces.

Integrated Solid Waste Management (SWM)

The Ministry of Local Administration is currently working to develop a 'National Strategy to Improve the Municipal Solid Waste Management Sector in the Hashemite Kingdom of Jordan.' The baseline report for this strategy highlights several initiatives that needed to be followed,76 and weaknesses in the institutional set-up. Level of capacity of municipalities and personnel in terms of Municipal Solid Waste Management (MSM) according to Horizontal Analysis and an In-Depth Diagnosis survey (2014) shows that 72 per cent have the medium capacity, and 22 per cent have a low recorded level of capacity. Statistics for solid waste management in Jordan show the need for significant budgetary allocations for technological advances to deal with the rising SWM demand (DOS, 2017):

- Quantity of Solid Waste of Municipalities in 2016: 3.5 Million tons.
- Costs of Solid Waste Collection and

Transport from all sectors 2016: 37 Million JD.

- The waste of automated and electronic wastes disposal in the medical waste sector in 2016: 3 per cent
- The waste of automated and electronic wastes disposal in the industrial sector in 2016: 89 per cent

As mentioned in JRP (2015), municipal solid waste (MSW) collection coverage is estimated at 90 per cent and 70 per cent for urban and rural areas respectively. About 50 per cent of MSW is food waste (organics), and 35 per cent is packaging waste. Most of MSW ends up at dumps and in landfill; only 7 per cent is currently recovered informally in Jordan.

The role of the private sector in solid waste management is also limited, except for some pilot projects. In 2009, the government-initiated the Amman solid waste management project that aims at strengthening the operational, financial, and environmental performance of municipal solid waste management. The Greater Amman Municipality is also planning to build two waste transfer stations in the northern and western areas of the city.

Solid waste management is an area of increased concern for municipalities due to increased tonnage and aging infrastructure. There are insufficient vehicles and pesticides; maintenance is lacking, containers are insufficient or in a poor state of repair, and there is not a large enough workforce to

⁷⁵ Jordan emergency services and social resilience project (JESSRP) monitoring study 1- January 2016.
76 Available at: <www.moma.gov.jo/Files/Docs/11102018_043930BaselineReport.pdf>, last accessed 13.11.2019.

run the system. All this results in pollution, and problems with insects, rodents, and stray dogs (JRP, 2019). There is a need in municipalities for an immediate intervention in the form of vehicles, including garbage trucks and compressors, light pickup trucks, dump trucks, loaders, fogging trucks and equipment such as fog machines, containers, garbage wheelbarrows, and pesticides.

Delivery of essential municipal services:

Provision of basic services by the municipality and support for social cohesion within communities are limited mainly due to housing shortages, housing deficiencies and low economic growth. The needs assessment conducted by UNDP (2014) in the aftermath of the Syrian crisis highlighted pre-existing problems and priority interventions:

- Pre-existing problems: Increased waste tonnage (due to an increase in the local population, lifestyle upgrades and Syrian arrivals), aging and insufficient transportation, problems in the workforce (bloating, performance and commitment issues), costly petrol and maintenance, pollution, insects, rodents, and stray dogs.
- Priority Interventions: Garbage trucks and compressors, light pickup trucks, dump trucks, loaders, fogging trucks, equipment and pesticide supplies, containers, garbage wheelbarrows, and labour assignment.

The continuous pressure on municipalities to deliver services has been affected by their already limited capacity to address housing deficiencies, induce local economic development, and support social cohesion within communities.

Social cohesion and civic participation:

Municipalities can play a pivotal role in improving social cohesion between the communities. Tensions between Syrian refugees and host community might increase over the coming years. Extensive anecdotal evidence, and some polling data from preceding years suggest that Jordanians have been frustrated with the perceived burdens associated with the hosting of refugees (Alarababa'h et al., 2019).77 IRI (2016) found that 61 per cent of Jordanians believed that attitudes toward Syrians were getting worse; the quantitative findings from the study of Alarababa'h (2019) identified the roles of humanitarianism and cultural protectionism in shaping attitudes towards Syrians, with no evidence to support a hypothesis that attitudes were hardening as a result of considerations around economic selfinterest or sociotropic considerations. The findings also suggest that, despite the relative similarity between the host and refugee communities in Jordan, cultural concerns remain an essential factor in the shaping of Jordanians' attitudes toward Syrian refugees.

Municipal services have been stretched by overpopulated host communities, leading to increasing societal tensions. The influx of refugees has caused evident demographic changes that need to be continuously addressed through community engagement. Engagement with young people at the municipal level needs to be focussed on potential community outreach on peace and non-violence. Maximizing access to municipal services should involve due consideration of the specific challenges and barriers faced by women and girls.

Measures should be implemented, building on community outreach and engagement efforts, by working with municipalities to plan and deliver municipal services in full engagement with local NGOs and community groups, to enhance social cohesion in tension areas and address the public participation and participatory approach.

- 1. Urban Management: Any future planning initiatives should address the immediate urban planning and management impacts associated with the Syria crisis, to facilitate the coordinated investment of resources in line with municipal plans and policies. There is a need for a systemic analysis of requirements and potential responses through an urban information management system that is compatible and harmonious with the national and local systems being used to support more effective decision-making, resources allocation, and urban responses by humanitarian actors, development actors, and Governments targeting the most vulnerable communities.
- 2. Decentralization and local governance: The local governance system in Jordan is highly centralized, even though by law, municipal councils and mayors are elected. As the country is reshaping its decentralization structures, following the 2015 approval of the Municipalities Law and the Decentralization Law, it is vital to

harmonize governorate plans with municipal council plans and ensure their synergy with national plans and strategies. The development of a sustainable, inclusive and evidence-based National Urban Policy (NUP) must be initiated and can be facilitated by several practices including stakeholder consultation, institutional capacity development measures, evaluation of country policy processes, and the exchange of experiences and knowledge.

3. The Capacity of Municipal **Administrations**: While Ministry of Local Administration is upgrading its systems for financial management and is working towards developing regulatory frameworks for guiding municipalities, they have insufficient capacity in terms of administrative and technical staff, financial management and accounting systems, in addition to a lack of equipment and logistical means. This leads to inefficient service delivery. Too often, management is concentrated in the hands of the Mayor, with insufficient checks-and-balances by the Municipal Council. Municipalities frequently fail to meet local needs due to inadequate financial resources as well as limited technical capacity. A variety of approaches are needed in order to strengthen local revenue and to generate revenues from a range of sources.

Birth Registration: 98 per cent of children under the age of 5 had their births registered with the civil authorities; this includes 89 per cent with a birth certificate and 9 per cent whose births were registered but who do not have birth certificates.

77 Alrababa'h, A. Dillon, A., Williamson, S., Hainmueller, J., Hangartner, D. & Weinstein, J. (2019) Attitudes toward Migrants in a highly-Impacted Economy: Evidence from the Syrian Refugee Crisis in Jordan. IPL: Stanford.

TABLE 30: Birth Registration of Children Under the age of 5

	% of children with birth certificate	% of children did not have a birth certificate	Total % of children whose births are registered		
Jordanian	89.6	9.1	96.2		
Syrian	84.5	8.2	92.7		
Other Nationality	85.0	13.2	98.2		

SOURCE: DOS (2018)

Achievements

o Several projects have been launched with the following objectives:

- To support Jordanian municipalities affected by the influx of Syrian refugees in delivering services and employment opportunities for Jordanians and Syrians
- To strengthen social cohesion and prevent violent extremism
- To achieve organizational development, financial management and financial independence for municipalities.
- To ensure the construction, rehabilitation, and maintenance of local infrastructure.

o Interventions addressing solid waste management have been launched and are ongoing, including the repair and development of landfills.

o Equipment, spare parts, and vehicles have been provided to several municipalities.

Ways Forward⁷⁸

o In order to fully implement the local governance structure, the government needs to prepare an implementation road map to set out short-, mediumand long-term objectives in the reform process.

o Clarify the roles and responsibilities at national, governorate, and municipal levels for the effective delivery of public services and competencies in the national planning and development process.

o Building on the current momentum of decentralization and reforms to initiate a road-map for governance structure in Jordan. Engagement with all the relevant stakeholders and keeping their needs in mind, while raising awareness, providing training opportunities, and institutionalizing a partnership approach between local public officials, CSOs and citizens.

o Enhanced coordination to ensure a clear mandate at the level of all subnational entities.

Policies and actual practices must be aligned with the principles of openness, transparency, accountability, and citizen participation.



⁷⁸ Adopted from OECD 2017: <www.oecd.org/mena/governance/Jordan-Highlights-2017.pdf>, last accessed 13.11.2019.

ENVIRONMENT AND CLIMATE CHANGE

TABLE 31:

		Indicator of Interest	Unit of Analysis	Nation	Nationality Segregated			
SDG Objective	SDG Indicator		Supply Side /Household	Syrians	Non-Jordanians	Jordanian	Geographic Distribution	Source
13.2 Integrate climate change measures into national policies, strategies, and planning 8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programmes on Sustainable Consumption and 8.4.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP 13.2.1 Establishment or operationalization of an integrated policy/strategy/ ational communication, biennial update report or other)		CO ² Emission in Jordan	Supply Side				Country-wide	Knoema (2018)
	/ABi	GHG emissions	Supply Side				Country-wide	Knoema (2018)
	Minimum Average Temperature rise	Supply Side				Country-wide	DOS (2017)	
ational polic al resource e mic growth f ogrammes or	8.4 Improve progressively, through 2030, global resource efficiency in consproduction and endeavour to decouple economic growth from environmen accordance with the 10-Year Framework of Programmes on Sustainable CC 8.4.2 Domestic material consumption per capita, and domestic material consumption per GDP 13.2.1 Establishment or operationalization of an integrated policy/strategy/ational communication, biennial update report or other)	Solid Waste Generation (per capita)	Supply Side/ Household				Country-wide	DOS (2017)
asures into n jh 2030, glob ouple econo nework of Pro		Forestation in the country	Supply Side				Country-wide	DOS (2017)
13.2 Integrate climate change measures into na 8.4 Improve progressively, through 2030, globa production and endeavour to decouple econom accordance with the 10-Year Framework of Prog 8.4.2 Domestic material consumption per capita, and domestic material consumption per GDP 13.2.1 Establishment or operationalization of an ational communication, biennial undate report		Biodiversity and Ecosystems	Supply Side				Country-wide	
	mestic mate I consumptio I consumptio stablishment	Performance of Jordan Renewable Energy and energy-efficient fund	Supply Side				Country-wide	JREEEF
. 13.2 Inte . 8.4 Impr producti accorda	8.4.2 Dormaterialmaterial13.2.1 Esational c	High-Level Risk Assessment	Supply Side				District Level	UNICEF and MOWI

	SDG Indicator	Indicator of Interest	Unit of Analysis	Nation	Nationality Segregated			
SDG Objective			Supply Side /Household	Syrians	Non-Jordanians	Jordanian	Geographic Distribution	Source
d dverse impacts of low greenhouse s not threaten food nationally determined		Per capita share of renewable water resources per year	Supply-side				Country Wide	UNICEF and MOWI
ed countries taking the lea	Production, with developed countries taking the lead plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, n	Percentage of water reuse for different purposes	Supply Side				Country Wide	UNICEF and MOWI
Production, with develop	plan which increases t climate change, and fo gas emissions develop production (including contribution, n	Percentage increase in the collection and treatment of Wastewater	Supply-side				Country Wide	UNICEF and MOWI

The minimum average temperature increased by 0.6–0.7°C since 2000, and the maximum average temperature by 1.3–1.4°C (DOS, 2017).⁷⁹ For the year 2085, two models suggest a predicted rise in mean temperature for all the country, whereas the increase in temperature will be more for the Eastern and Southern regions; further dynamic projections predict warmer summers as extremely likely compared to other seasons. Jordan, which is already subject to extreme variability related to the occurrence of extreme events (droughts, increased temperatures, increased rainfall variability, and floods) have become even more vulnerable due to the influx of large numbers of refugees.

Jordan nationally determines to reduce its greenhouse gas emissions by a bulk of 14 per cent until 2030: 1.5 per cent will be unconditionally met by the Jordanian Government (GOJ, 2014);80 subject to the availability of international financial aid and support to means of implementation, Jordan commits to reducing its GHG emissions by at least a further 12.5 per cent by 2030.

CO₂ emissions for Jordan were 22,772 kt in 2016, which increased considerably over the years. Where it was only 14,721 kt in 1997, it has grown at an average annual rate of 2.4 per cent (Knoema, 2018),81 which is still, however, only 0.6 per cent of the world's emissions. According to the World Resource Institute Climate Analysis Indicators Tool (WRI CAIT), Jordan's GHG emission profile in 2011 was dominated by emissions from the energy sector (73 per cent), followed by waste (13 per cent), industrial processes (9 per cent), and agriculture (4 per cent). Energy sector emissions of GHG increased by 60 per cent from 1990 to 2011, and waste emissions decreased by 42 per cent; the total increase was 59 per cent.

Water and **Environment Facts**82

- Population growth has reduced the average amount of freshwater available to Jordanians to less than 150m³.
- More than 93.5 per cent of rainfall evaporates or runs off, representing the lost potential for capture and aquifer recharge.
- Groundwater is being used at twice the rate at which it can be recharged.
- Agriculture consumes 51 per cent of Jordan's water supply but contributes only 3% of Jordan's GDP.
- An average 48 per cent of total water supplied by municipal networks is subject to unaccountable water losses (leakage, theft).
- Potential for reuse of treated wastewater in industry or agriculture could double by 2020.

Findings from Jordan's third national communication on climate change features dynamic projections predicting more heatwaves; monthly values

and the inter-annual variability reveal that some temperature thresholds could be exceeded, especially for summer months where the average of maximum temperature for the whole country could exceed 42-44°C. The risk of having frequent droughts is also very high, with droughts happening every 3 to 4 years by the middle of this century. On the other hand, annual values still show possible heavy rainfall. The impacts of more intense droughts could be at least partly offset by rainy years in a context of a general decrease in precipitation. Potential evaporation would also likely increase, whereas the projections show no change in wind speeds.

Impact of Climate change on Different Sectors

Climate change is expected to impose additional stress on the already constrained availability of water resources in Jordan. The overall reduction of quality and quantity of water may affect hygiene standards and increase diseases, especially among children and the most vulnerable segments of society.

The decreased availability of water due to higher temperatures and less precipitation may lead to the consumption and use of unsafe (contaminated) water for drinking and other purposes, causing many water and food-borne diseases. Flooding may increase the risk of epidemics of water

and food-borne diseases, primarily from contamination caused by the disruption of water purification and sewage disposal systems.

To cope with water shortages, Jordan is increasing the reuse of treated wastewater for the irrigation of trees and vegetables. If the water is not well treated, this could increase the transmission risk of several pathogens through crop contamination, with the potential for outbreaks of diseases like typhoid fever or hepatitis A.

Increasing temperatures and fluctuations in rainfall can create areas of higher risk for vector-borne diseases. This could see the spread of diseases not currently present in Jordan, including haemorrhagic fevers like West Nile virus fever, dengue fever or Rift Valley fever, or the re-emergence of diseases that have long been under control, like leishmaniasis, malaria, schistosomiasis or typhus.

Children will be particularly exposed to respiratory health problems. As climate change is expected to reduce precipitation and increase temperatures, this would result in increased levels of air pollution. Given that children spend more time outdoors (where air pollution is concentrated), and given that their lungs are not vet completely developed, they are exposed to the risks of diminished lung function and increased susceptibility to acute respiratory illness and asthma.83

⁷⁹ DOS (2017) Jordan in Figures.

⁸⁰ GOJ (2014) Intended Nationally Determined Contribution (INDC)

^{81 &}lt; https://knoema.com/atlas/Jordan/CO2-emissions>, last accessed 13.11.2019.

^{82 &}lt;www.usaid.gov/iordan/water-and-wastewater-infrastructure>, last accessed 13.11.2019.

^{83 &}lt; www.jo.undp.org/content/dam/jordan/docs/Publications/Enviro/climate-changet-from % 20 batir % 20 smaller % 20 version.pdf> pp. 189-190, last accessed 13.11.2019.

Water resources: As mentioned earlier, climate change will impact water resources, and the impact will be on a much larger scale than previously seen. The main climate hazards that the water sector faces in Jordan are temperature increase, increased incidence of droughts, precipitation decrease, and increased evaporation. Climate sensitivity indicators in the water sector were identified as reduced groundwater recharge, groundwater quality deterioration, decrease in stream flows, and growing demand for water. The assessment of sensitivity showed that the average sensitivity level is 3.71 (out of 5) and can be classified as high. Adaptation strategies and measures suggested for the water sector include rainwater harvesting, wastewater treatment, desalination, increasing the efficiency of irrigation technologies, greywater reuse, and public awareness. Annual precipitation is highest in the northern parts of Jordan, decreasing gradually towards the south. The annual precipitation ranges from 394 mm in the northern areas to 74 mm in the southern areas. Rainfall projections show that Jordan is likely to suffer from significant variability in the next 30 years, with a decrease in overall precipitation throughout the country towards the end of the century, except in the north-eastern area.

Agriculture Sector: Impoverished communities are expected to face the most severe consequences of increasing temperatures, droughts, a shift in the rainy seasons, and limited water availability, as their livelihoods are heavily dependent on agriculture. The adaptation strategies to reduce

the impacts of climate change on agriculture could be agronomic and crop strategies that are intended to offset lost productivity, either wholly or partially; this can also be complemented with socio-economic strategies aimed to meet the agricultural costs of climate change. Rising temperatures, increased evaporation, and decreased rainfall in Jordan will result in reduced groundwater recharge, groundwater quality deterioration, and streamflow reduction. As water evaporates and the soil becomes increasingly dry, the water demand for irrigation increases, leading in turn to increased competition for scarce water resources. In the long term, more frequent droughts will cause severe soil degradation leading to desertification, worsening the conditions in agriculture. This will have a direct negative impact on the most marginalized sectors of society and children. Reduced agricultural productivity and water availability will threaten the livelihoods of small farmers, affecting the incomes of rural families who may be unable to respond to the pressing need for the replacement of traditional water supplies with new methods that might require more spending.

Rising temperatures and droughts will also reduce water for vegetation, reducing the surface area covered by vegetation due to lower soil moisture. This will affect not only livestock but also the overall biodiversity of the country. Evergreen oak forests and pine forests in Jordan are expected to have a lower regeneration rate, alongside changes in composition and the

shrinkage of their geographic range. Non-forest vegetation is expected to have reduced growth in lower elevations, gradually increasing toward higher elevations.84

Biodiversity and Ecosystems: Climate change will broadly impact Jordan's ecosystems. In addition to the factors mentioned above, other effects will include forest dieback, community composition change, expansion to drier biomes into marginal lands, habitat degradation, and species loss. The highest exposure is expected to be in the Eastern and Southern areas of Jordan and the mountainous regions of the North. Overall, the highest vulnerable ecosystems are forests, especially in the north, and freshwater ecosystems in the Jordan rift valley, which highlights the need for adaptation interventions within these two ecosystems.

Coastal Areas: The vulnerability assessments conducted in Jordan showed clearly that the geographically restricted coastline of the Gulf of Agaba is highly vulnerable to climate change, given its exposure to sea-level rise, an increase of sea surface temperature and CO₂ concentrations. The sea level is also expected to rise in the Gulf of Agaba owing to the fact that it is a tectonically active area. Resulting coastal retreat and land area loss will further threaten fragile ecosystems with low adaptive capacity due to the space constraints – the Gulf of Agaba extends to no more than approximately 27 kilometres of coastline. A sea-level rise in Agaba would affect tourism and recreational activities on beaches and

marinas, as well as having adverse effects on industries, ecosystems, and biodiversity.85

Urban Sector: Urban areas in Jordan host more than 90 per cent of the overall population and will experience the long-term impacts of rising temperatures and decreasing water availability. Specific measures that the government needs to take immediately include: 1) introducing climate-responsive building techniques and elements to reduce the effects of heat, 2) promoting the use of energysaving devices and raising awareness, 3) amendments to sector policies and regulations, such as building codes.

Health Sector: Rising temperatures due to climate change will see increases in the spread of microorganisms, leading to increases in water and food-borne diseases. Environmental degradation and the deterioration of the quality of services and the function of ecosystems have associated health consequences. Biodiversity serves as an important source of food and income for rural households. Furthermore, ecosystem services identified in the hosting communities provide protection for water resources, offering reduced risk of disasters (DRR) and protection from erosion. Increase in the amount of hazardous waste being generated has so far exceeded the capacity of Jordan's only facility for hazardous waste treatment, leading to critical risk and exposure to fires and toxicity at this site.

^{84 &}lt; www.jo.undp.org/content/dam/jordan/docs/Publications/Enviro/climate-changet-from % 20 batir % 20 smaller % 20 version.pdf> pp. 20-22, last accessed 13.11.2019.

^{85 &}lt; www.jo.undp.org/content/dam/jordan/docs/Publications/Enviro/climate-changet-from % 20 batir % 20 smaller % 20 version.pdf> pp. 168-169. last accessed 13.11.2019.

Socio-Economic Analysis: The Third National Communication plan for Jordan climate change adaptation had developed a socio-economic analysis to determine the expected impacts of climate change on local communities and adaptation capacity, which was, however, only implemented in rural areas of Amman-Zarga basin. The results reflect that communities with less agricultural experience will suffer severe effects due to climate change and are expected to lose 10-20 per cent of their income; local knowledge and experience will be a major determinant for resilience to environmental changes; modern technology and protected agriculture can reduce the risk of climate adversities.

Jordan's natural resources are used in limited ways to support the population sustainably. However, its environment is exposed to several threats. In order to best explain Jordan's environmental difficulties, we must focus individually on each of these significant concerns: water shortages, agriculture/land, and air pollution. The right foundations for environmental protection require awareness on the part of the population, and a number of governmental and non-governmental organizations are actively involved in educating the populace about environmental issues. The vulnerability analysis emphasizes the conservation of water, agriculturally productive land and the quality of air: the contamination or loss of any of these three resources would have rapid and significant consequences for Jordan.

Jordan's renewable energy and

energy-efficient fund (JREEEF), in accordance with a comprehensive plan, has implemented projects and programmes targeting various sectors in all governorates to accomplish the objectives of the National Energy Strategy and the National Energy Efficiency plan, in partnership with international organizations, commercial banks, sector foundations, and CBOs. JREEEF programmes and projects aim to provide residential solar cells, solar heaters and LED energy-saving lamp programmes all over the kingdom. JREEEF also aspires to a partnership with the Amman Chamber of Industries to support small and medium-sized enterprise investment to improve renewable energy technologies and energy efficiency; the initial plan is to upgrade 21 factories in the first stage and 30 factories in the second stage.

Forestation: According to the Ministry of Agriculture, afforestation is one of the priorities, wherein 925 dunums (0.93 km²) were afforested in the country in 2019, which had decreased significantly in comparison to 2015 when 6,350 dunums (6.35 km²) were afforested (DOS 2017). No efforts are made for reforestation, and especially for those areas destroyed by fire, as in 2011 when 11,500 dunums (11.5 km²) of forest were damaged by fire.

Solid Waste Generation: Per capita waste generation is 1 kg per day, which is relatively low, whereas municipal waste in the country has steadily increased from 1.5 million tons in 2000 to about 3.5 million tons in 2016, which is posing a severe challenge to municipalities in big cities like Amman

and Agaba. 86 Amman alone accounts for almost half of the total solid waste generated in Jordan. There are only seven closed landfill sites in Jordan and a total of 21 working landfill sites. An annual total of 183 million cubic metres of septic and sewage sludge from the treatment of 44 million cubic metres of sewage water is generated in the greater Amman area.87

The monitoring of pollutants, e.g., Sulphur dioxide (SO₂), carbon monoxide (CO), and nitrogen oxides (NO, NO₂), in the northern governorates confirmed that high concentrations of these emissions are highly associated with increased human activities and are in a direct proportional trend with population size.

According to the latest reports by the Ministry of Environment,88 this average has already increased to 2,700 tons/year, and the treatment efficiency for this quantity is 87 per cent, meaning that only 2,341 tons of medical waste is treated (JRP, 2019). Currently, there is only one dumping site assigned for hazardous waste and it needs considerable rehabilitation due to the increased amounts (and types) of waste generated. According to the same report, this site receives approximately 2,000 tons of waste from pharmaceutical industries, drug stores (expired medicines and other items), and thermochemical residuals.

High-Level Risk Analysis

A key achievement in 2019 was the High-Level Risk Assessment developed by UNICEF in collaboration with the

MWI. The assessment measures the present day and expected future hazards affecting the WASH sector, providing evidence on understanding the exposure of such hazards and effects on the water and sanitation services situation in Jordan. The assessment aims at providing evidence to prioritize vulnerable climate areas and to provide a template for any national strategic document on what interventions can be implemented to avoid negative future impacts related to climate change.

Objectives of the Assessment:

- To measure the **present day** and **expected future** hazards that affect the WASH sector, providing evidence for understanding the exposure to such hazards and how they might affect the water and sanitation services situation in Jordan.
- To provide an overview and comparison between the exposure vs. the current vulnerabilities and available capacities.

The graph below shows the hazard group risk score, aligning the hazard groups to the risk index. The highest score is reported for environmental events and environmental degradation, followed by cross-border destabilization as a major factor. Risk from chemical hazards also contributes significantly to the index and increases the risks associated with climate change.

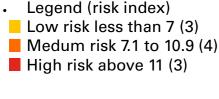
⁸⁶ DOS (2017) Statistical Year Book 2017 Jordan; Yamin (2018) Solid Waste Management in Jordan.

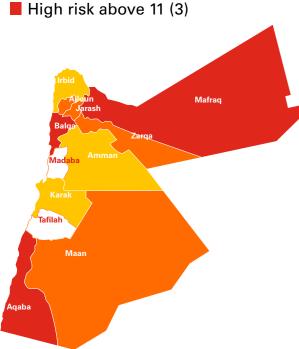
⁸⁷ For detailed discussion see the previous chapter: Local Governance and Municipal Services.

^{88 &}lt;a href="http://moenv.gov.jo/AR/Environmental_sectors/Waste/Pages/Medical-waste.aspx">http://moenv.gov.jo/AR/Environmental_sectors/Waste/Pages/Medical-waste.aspx, last accessed 10.11.2019.



For the high-level risk assessment mapping, one risk Index per each governorate is assigned according to the priority of each governorate. This method is used to generate a colour-coded map of Jordan showing average risk scores comparatively across the governorates.





Achievements (JRP, 2019)

- During 2018, UNICEF continued efforts for optimizing its operations and improving environmental sustainability and protection for its WASH interventions in camps. as well as at the border, in host communities and informal tented settlements. The end of 2018 marked the completion of the water and wastewater networks in Za'atari camp, resulting in a gradual reduction of trucking by 75 per cent, thereby reducing CO2 emissions. The construction of the wastewater network has significantly reduced pools of standing water and the unsafe disposal of wastewater, thereby reducing the potential contamination of aquifers and associated public health risks, especially for children.
- Water quantity and quality continue to be monitored in collaboration with the Ministry of Water in all boreholes providing water to the camps. Water levels in wells are

monitored via data loggers at five-minute intervals to detect any changes in the underlying aquifers. Community mobilization activities promoting responsible behaviour on water conservation continued in camps and vulnerable communities.

UNICEF has stopped hygiene kit distribution in Za'atari camp and significantly reduced it in Azraq camp, thereby reducing generated solid waste. It has been evidenced that hygiene kit distribution increases the amount of solid waste in the camp by 20 per cent. UNICEF introduced alternative options for refugees to purchase the necessary items, thus reducing the amounts of generated solid waste.

Because of limited funding for UNICEF, several interventions have been initiated in response to the Syria crisis in the environment sector, including:

- MoEnv and GIZ launched a process to engage in an intervention mitigating the impacts on natural resources and maintaining ecosystem services through a project that aims to reduce the pressure on natural capital through cash-for-work (CfW) measures for the development and maintenance of green infrastructure.
- MoEnv has put in operation a new mobile station for monitoring air quality.
- To help address challenges in the sector, MoEnv has issued the National Plan for Green Growth

and the National Strategy for Sustainable Production and Consumption.

In 2013, Jordan developed a National Climate Change Policy 2013–2020, which includes short-term and long-term objectives. The main long-term objective is to achieve a proactive, climate-risk resilient country while also remaining a low carbon emissions country. Jordan aims to reduce GHG emissions by 1.5 per cent unconditionally. This could be achieved by additional funding of around 12.5 per cent (USAID, 2011).90

⁸⁹ The initiative is expected to create 1,050 employment opportunities.

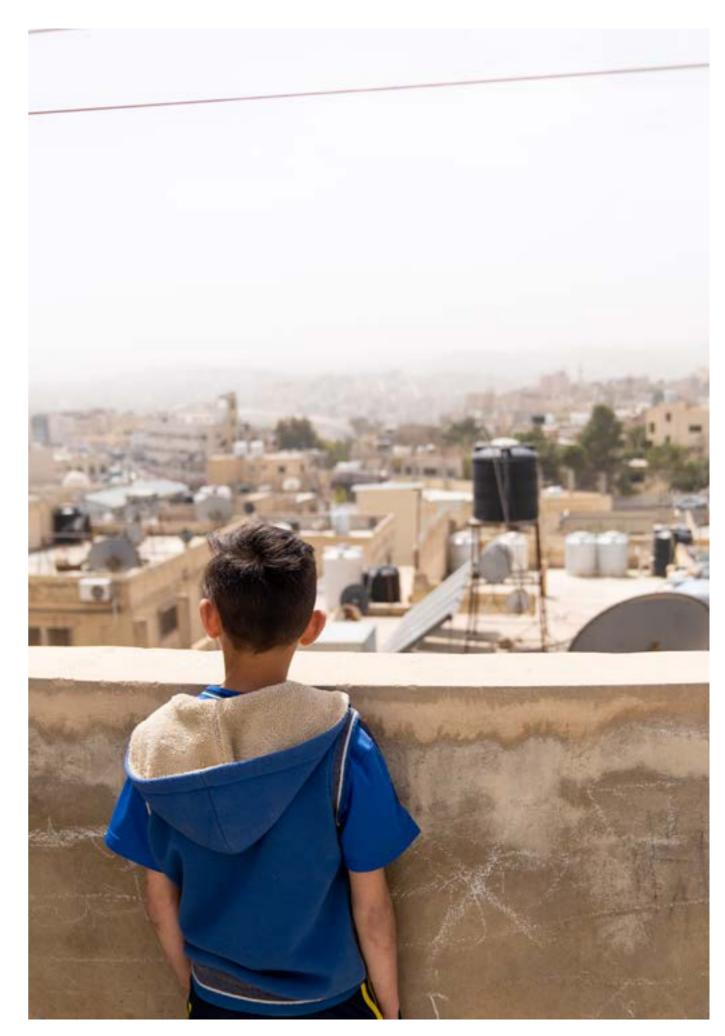
⁹⁰ https://www.climatelinks.org/sites/default/files/asset/document/Jordan%20Fact%20Sheet%20-%20rev%20 10%2008%2016_Final.pdf

Recommendations and Ways Forward⁹¹

- Linking SDGs 6 and 13 in Jordan to attain sustainable and resilient WASH services for all: Both water and climate change feature prominently in the new Sustainable Development Goals (SDGs) agenda with stand-alone goals. This provides an excellent opportunity for both agendas to be recognized as absolute priorities for global development. Goal 6 of the SDGs is more ambitious than previous development goals, insofar as it aims to "ensure availability and the sustainable management of water and sanitation for all," thus encompassing the entire watercycle. It aims to address many climate-related challenges, including the management of water under scarce conditions, the maintenance of water for ecosystems, and water quality issues. The stated aim of Goal 13 to "take urgent action to combat climate change," represents a significant milestone that was not addressed in the previous Millennium Development Goals.
- Working on WASH climate resilience, through the implementation of the Strategic Framework for WASH Climate Resilience, developed by UNICEF and the Global Water Partnership, is one key strategy for simultaneously supporting SDGs 6 and 13. UNICEF, along with other UN agencies and sector partners in Jordan, can support an

- enhanced collaboration between the Ministry of Water and Irrigation, the Ministry of Agriculture, and the Ministry of Environment for the implementation of the Framework. Where the municipalities or local utility companies manage water systems, systematic approaches, such as Climate-Resilient Water Safety Planning, are needed to assess and identify typical hazards (e.g., harmful pathogenic microorganisms, chemicals), but also climate-related hazards and risks, appropriate control measures, critical water quality limits, monitoring requirements and required corrective actions if critical limits are reached.
- Advocacy on climate change and water should be supported, and spaces and opportunities for partnerships should be created to allow the exchange of expertise, knowledge, and ideas. Young people, children, and civil society organizations working to raise awareness and find creative solutions on such issues should be promoted and linked with governmental, academic, and regional organizations.
- Moreover, in areas prone to flooding and droughts, it will be particularly important to increase water storage, as this would ensure water supply for WASH services throughout the year. Storage can be ensured through the use of dams and reservoirs, but also in a decentralized way at the local level by recharging aguifers.

91 UNICEF (2019) Water and Children in a Changing Climate: The risks for future Jordanian Generations (Forthcoming)



HOUSING

TABLE 32:

			Unit of Analysis	Nation	ality Segr	egated		
SDG Objective	SDG Indicator	Indicator of Interest	Supply Side /Household	Syrians	Non-Jordanians	Jordanian	Geographic Distribution	Source
s and up-	11.1 Ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	Percentage of households with adequate House flooring Material	Household				Country-wide	DHS (2018)
d basic service		Percentage of households with adequate House main wall material	Household				Country-wide	DHS (2018)
ole housing an		Percentage of households with adequate House roof material	Household				Country-wide	DHS (2018)
ife and affordal	ing in slums, in	Number of identified shelters and associated facilities in camps constructed, upgraded and/or improved	Supply-side				Camps	UNHCR
to adequate, se	o adequate, saf	Number of refugees benefiting from infrastructure in camps constructed and upgraded/ improved	Supply-side				Camps	UNHCR
ccess for	e access for all 1 ns ortion of urban	Percentage of household renting and owning apartments	Household				Governorate	HIES (2018)
• 11.1 Ensure a	. 11.1.1 Prop	Risk and climate- informed standardization of construction and housing.	Household				Governorate	TBC

			Unit of Analysis	Nationality Segregated				
SDG Objective	SDG Indicator	Indicator of Interest	Supply Side /Household	Syrians	Non-Jordanians	Jordanian	Geographic Distribution	Source
		The annual rate of the housing needs in the kingdom (housing unit)	Supply Side				Country-wide	Department of Housing and Urban Development
		Risk and climate-informed standardization of construction and housing in camps	Supply Side				Camps	

DHS (2017-18) collected data on housing characteristics such as type of housing, flooring/wall/roof materials, and the number of rooms used for sleeping. The data show that 71 per cent of housing units in urban areas are apartments, as compared with 24 per cent in rural areas. Dars, which are homes that are built with an enclosed central yard, account for 74 per cent of housing in rural areas compared with 26 per cent in urban areas. The most common flooring materials in homes are tiles (60 per cent of households) and ceramic tiles (37 per cent). Three in five households (60 per cent) in Jordan have four or more rooms in the house, and 44.3 per cent of households use two rooms for sleeping.

TABLE 33: The table below covers some of the indicators included in the Table 32 above:

Type of Housing Unit	Urban	Rural	Total
Apartment	71	24.4	66.3
Dar	26.1	73.8	30.9
Villa	1.4	1.4	1.4
Hut/Barrack	0.5	0.2	0.5
Mobile Structure	0.9	0.1	0.8
Other	0	0.1	0
Flooring Material	Urban	Rural	Total
Earth	0.1	0.4	0.1
Parquet or polished wood	0.6	0.1	0.6
Tile	57.4	77.9	59.5
Marble/ceramic tile	39.1	16.6	36.8
Cement	2.7	5	2.9
Frequency of Smoking in the home	Urban	Rural	Total
Daily	60	56.8	59.7
Weekly	4.3	5	4.4
Monthly	0.4	0.5	0.4
Less than once a month	0.6	0.2	0.6
Main Roof Material	Urban	Rural	Total
Concrete	97.8	98.7	97.9
Zinc/metal	1.4	0.2	1.3
Other	0.8	1.1	0.8

Main Wall Material	Urban	Rural	Total
Cement bricks	20.9	28.3	21.6
Cut Stones	23.6	6.3	21.9
Cut Stones and concrete	18	9.8	17.2
Concrete	35.5	53.6	37.3
Zinc/metal	Zinc/metal 1.2		1.1
Other	0.9	1.8	1

*SOURCE: DHS (2017-18)

The Housing Crisis: According to the Jordan Housing Developers Association (JHDA), the country is facing a severe crisis in affordable housing. There are plenty of houses available on the market which are expensive and luxurious, but the purchasing power of the people has decreased over the years. Apartments smaller than 110m² in size seems to be in high demand, but zoning regulations and municipal bylaws prohibit the construction of the smaller sized apartments and force developers to construct larger sized housing units, which are way above the price reach of most middle class buyers. Nearly 1.5 million refugees from the neighbouring countries compete with the locals for affordable housing. The real-estate market has declined by 7 per cent, from 2015 to the first quarter of 2018 wherein it was JD 1.4 billion. The total value of housing units built since 2015, and which remain unsold, is estimated by the JHDA to be approximately JD 1 billion. According to the association, 32 per cent of

Jordanians who bought apartments in 2017 chose ones that were smaller than desired.

The average rental prices in the country have decreased by nearly 14 per cent, but this is not true for the smaller apartments. Rental payments continue to constitute the single highest expenditure for most Syrian refugees and vulnerable Jordanians. Vulnerable and poor households always have a fear of eviction, and this is especially true for Syrian families. The table below shows the housing costs for households in the country as compared to non-food expenses and also as a percentage of total household expenses. For the poor household, nearly 40 per cent of household expenses are associated with housing costs; the percentage is lower for the households with more expenditure, but still, housing-related costs constitutes one-quarter of that total expenses.

TABLE 34: Housing Cost metrics

Groups of Household Expenditure (JDs)									
	<2500	2500-5000	5000-7500	7500-10000	10000-12500	12500-15000			
Housing Cost as % of total Non-Food expenses	67%	63%	54%	46%	40%	36%			
Housing Cost as % of total expenditure	39%	37%	32%	28%	25%	23%			

*SOURCE: HIES (2017-18)

TABLE 35: Housing Ownership

	Jorda	nians	King	dom
	Tenant	Owner	Tenant	Owner
Amman	26.7	66.5	30.8	60.4
Balqa	17.3	78.9	19.9	72.8
Zarqa	21.7	59.3	26.4	55.5
Madaba	15.4	82.8	20.9	77.0
Irbid	15.1	73.0	20.8	67.8
Mafraq	9.3	87.7	18.4	78.2
Jerash	9.8	70.8	13.2	67.7
Ajlun	11.9	68.3	14.1	66.5
Karak	19.1	72.2	21.4	69.9
Tafilah	15.9	69.7	17.5	68.2
Ma'an	14.7	76.4	17.7	73.7
Aqaba	34.4	51.5	37.8	48.4
Total	20.9	69.2	25.5	63.9

*SOURCE: HIES 2017-18

The table below shows the housing needs in the country at the governorate level. However, as discussed earlier, more apartments larger than 110 m² will not alone solve the housing problem. With an expected growth rate of 9 per

cent, additional apartments/houses are needed to cater to the needs of the population; Amman will require an additional 30,000 houses by the end of 2025, which is nearly 42 per cent of the needs in the kingdom.

TABLE 36: Housing Needs at the Governorate Level

DEE 00. Flodding 10000 at the Governorate Lover										
Governorate	2019	2020	2021	2022	2023	2024	2025			
Amman	27,677	28,088	28,348	28,771	29,202	29,643	30,092			
Balqaa	3,396	3,446	3,478	3,530	3,583	3,637	3,692			
Zarqa	9,426	9,566	9,655	9,799	9,946	10,096	10,249			
Madaba	1,307	1,326	1,338	1,358	1,379	1,399	1,421			
Irbid	12,225	12,407	12,522	12,708	12,899	13,093	13,292			
Mafraq	3,798	3,855	3,890	3,948	4,007	4,068	4,130			
Jerash	1,637	1,662	1,677	1,702	1,727	1,753	1,780			
Ajloun	1,216	1,234	1,246	1,264	1,283	1,302	1,322			
Karak	2,187	2,219	2,240	2,273	2,307	2,342	2,378			
Tafilah	665	675	681	691	702	712	723			
Ma'an	995	1,010	1,019	1,034	1,050	1,066	1,082			
Aqaba	1,299	1,319	1,331	1,351	1,371	1,392	1,413			
Jordan	65,828	66,807	67,425	68,429	69,456	70,503	71,574			

*SOURCE: Data provided by MOPIC.

Situation in the Camps

In camps, the total Syrian population is around 123,000 as of November 2019 (UNHCR, 2019). ⁹² In line with Jordan's strategy to become a green economy by 2020, UNHCR provided access to clean and renewable energy in refugee camps, and Jordan is now home to the first refugee camps in the world with renewable energy. The solar plant in Azraq refugee camp was inaugurated in May 2017 while the one in Za'atari camp opened in November 2017. In Azrag camp, UNHCR inaugurated a new extension of the solar power plant with the support of Jordanian company EDCO. In Za'atari camp, UNCHR partnered with the government to establish the largest solar power plant providing 12 hours of electricity per day from 5 p.m. to 5 a.m.

The shelters in these camps are considered to be among the best in the region, but HHftD assessment shows that inside the caravan, the temperatures are much higher than outside: in some cases, 48°C where the external temperature was only 36°C.

Some of the recommendations emerging from this assessment to improve insulation in the camps are given below:

 The outer metal skin of the current shelters is embedded into the ground, meaning that the cavity it creates is not ventilated. This leads to hot air in the cavity, which then migrates and reaches the inner skin. Separating and ventilating the external cavity would solve much of this problem, reducing overheating to 4 per cent of hours in the year. This would require the use of mesh, perforations in the outer skin, or some other approach that was rodent proof.

- Camp residents highlighted the issue of condensation. Bonding the insulation in the walls and roof to the inner metal skin and increasing its thickness would reduce or eliminate condensation and improve the thermal conditions.
- Providing an appropriate ventilation system in the caravans.
- have no shading. Hence solar gains in summer are more significant than needed, causing further overheating. Hence it is suggested that at least a simple horizontal shade is provided.

Syrian Assessment⁹⁴

Seventy-eight per cent of the population is identified as being highly or severely vulnerable according to the VAF shelter indicator. Security of tenure and shelter are the primary drivers for vulnerability. Case size does not have any significant effect on shelter vulnerability. Core components of vulnerability identification for Shelter are: 1) House crowding, 2) Shelter type, 3) Shelter condition, 4) Security of Tenure, 5) Shelter Mobility and Accessibility, and 6) Threat of Eviction.

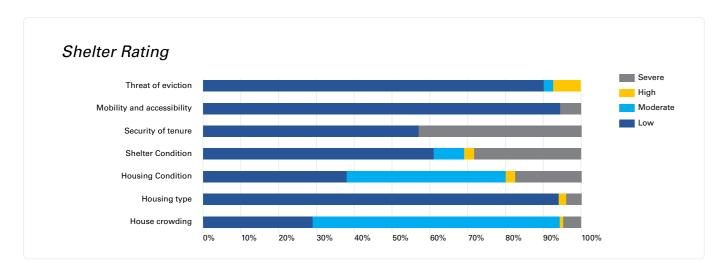
Key Findings

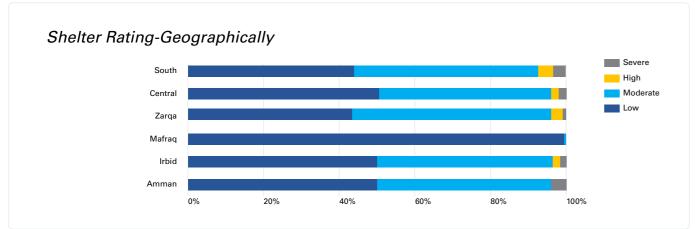
- Geographically there are only small variations in the VAF shelter rating.
- 95 per cent of the households surveyed lived in a finished building.
- 3 per cent of the households were living in informal settlements.
- The sub-standard shelter score was calculated based on whether roof, doors, electrical features, access to the dwelling, natural ventilation, and natural lighting were judged to be acceptable.
- In Mafraq, a relatively high proportion of households are residing in sub-standard buildings or informal settlements and have the highest overall sub-standard shelter scores, whereas Zarqa and Amman have the highest proportion of households living in finished

- buildings with the least living in informal settlements. Regions with the lowest sub-standard shelter score are Irbid and the South.
- The mean and median total rent per case is 74 JD and 70 JD, respectively. The per capita mean is 34 JD, and the median is 20 JD. The mean and median electricity per capita cost is 5 JD and 3 JD respectively. Regionally, the mean expenditure per capita for rent is lowest in Mafraq (22 JD), and the over twice as much in Amman (43 JD). The second highest rent per capita is in the South and is inbetween these values at 32 JD.

94 Adopted form UNHCR VAF 2019.

^{92 &}lt;a href="92">92 92 93 HHftD (2018) Improving the Thermal Comfort in New Shelters: Design recommendations for Azraq refugee camp. Healthy Housing for the Displaced.







ENERGY

TABLE 37

			Unit of Analysis	Nation	ality Segr	egated		
SDG Objective	SDG Indicator	Indicator of Interest	Supply Side /Household	Syrians	Non-Jordanians	Jordanian	Geographic Distribution	Source
		Percentage change in need for primary energy (toe) ⁹⁵	Supply Side				Country-wide	The Ministry of Energy and Mineral Resources (2017)
ervices nergy mix	technology	Import of Energy (Percentage)	Supply Side				Country-wide	The Ministry of Energy and Mineral Resources (2017)
access to affordable, reliable and modern energy services tially the share of renewable energy in the global energy π	7.2 Increase substantially the share of renewable energy in the global energy mix 7.1.1 Proportion of population with access to electricity 7.1.2. Proportion of population with primary reliance on clean fuels and technology	Sectoral Distribution of Final Energy Consumption	Supply Side				Country-wide	The Ministry of Energy and Mineral Resources (2017)
ble and mod ole energy in	lectricity liance on cle	Per capita consumption of Electricity	Supply Side				Country-wide	The Ministry of Energy and Mineral Resources (2017)
ordable, relia e of renewak	n access to e h primary re	Percentage of energy produced from renewable sources (solar)	Supply Side				Country-wide	The Ministry of Energy and Mineral Resources (2017)
	pulation witl	Solar water heating system	Supply Side				Country-wide	NSPS (2019)
ensure universal a Increase substanti	portion of po	The cost of crude oil and oil products imports	Supply Side				Country-wide	The Ministry of Energy and Mineral Resources (2017)
. 7.1 ensul	. 7.1.1 Pro . 7.1.2. Pro	Percentage of refugees have access to electricity in camps (frequency)	Supply Side/ Household				Camps	

Jordan is considered an energy insecure country as it imported 92 per cent of its energy in 2018; on the positive side, 100 per cent of the population has access to electricity. The country has two main challenges regarding its energy situation: the growing energy demand and very limited domestic resources to fulfil this demand. The local production of energy - including crude oil, natural gas, and renewable energy remains consistently low as a percentage of the total energy needs of the country, where in 2018 only 0.79 Mtoe of the energy consumed was produced in the country; in 2016 Jordan had to import 9.1208 Mtoe. Electricity consumption has increased fourfold between 1990 to 2018; the total energy consumption has reached 17.53 TWh.

Total primary energy supply has also remained pretty consistence since 1990; where it was 0.92 toe/capita in 1990, it reached 0.94 toe/capita in 2018. Maximum energy supply as per toe/capita was recorded in 2005, when it reached 1.17/toe/capita; since then there is a consistent decline for energy per capita. The increase in population due to the high number of refugees has increased the need for energy, not only for domestic consumption but also for sustaining the provision of services

provision including education, health, and water.

The renewable energy share in the total final energy consumption for 2018 is 10.35 per cent. Table 38 shows sources of primary energy consumed from 2013 to 2016, and shows that energy consumption significantly increased after the influx of refugees into Jordan. On the other hand, significant resources have been allocated for renewable energy resources, for which the consumption increased from 124 ktoe in 2010 to 711.1 ktoe in 2018.

95 toe = tons of oil equivalent; ktoe = metric kilotons of oil equivalent; Mtoe = Millions of tons of oil equivalent

TABLE 38: Consumed Primary Energy (ktoe)

Year	Crude oil and oil products	Coal	Pet Coke	Natural Gas	Renewable Energy	Imported Electricity	Total	Percentage Change
2013	6,689	204	116	907	145	96	8,157	-5.9
2014	7,479	332	88	301	152	109	8,461	3.7
2015	6,331	161	165	1,944	160	183	8,944	5.7
2016	5,327	220	182	3,389	423.8	84	9,614	7.5
2017	5,671	165	148	3,510	515	13	10,009	4.1

SOURCE: The Ministry of Energy and Mineral Resources –Annual Report 2017

The demand for electricity increased by 5 per cent in 2017; most of the increased demand is from households and the commercial sectors. Table 38 shows that the import of electricity from Egypt and Syria has decreased by 84 per cent, mainly due to an increase in locally generated electricity.

TABLE 39: Sector Distribution of Final Energy Consumption (percentage) 2013–2017

Year	Transport	Industry	Household	Others
2013	51	17	21	11
2014	46	20	21	13
2015	48	17	22	13
2016	48	16	20	16
2017	49	14	23	14

SOURCE: The Ministry of Energy and Mineral Resources – Annual Report 2017

The total residential electricity consumption increased significantly from 5,548 GWh in 2011 to 8,076

GWh in 2017, while the consumption of liquefied petroleum gas (LPG) increased from 370,000 tons in 2011

to 431,000 tons in 2017. As per the latest statistics in 2017, residential electricity consumption in the northern governorates showed an additional increase of 2.08 per cent compared to other governorates in Jordan, mainly because of the large presence of refugees.

The Per Capita Primary Energy Consumption has decreased from 1,193 ktoe in 2011 to 996 ktoe in 2017, while per capita consumption of electricity went down from 2,166 kwh in 2011 to 1,748 kwh in 2017, demonstrating that people cannot afford the previous levels of consumption.

The cost of crude oil and oil product imports in 2017 was estimated at JD 1734 million, registering an increase of 30 per cent compared to 2016.

Challenges and Key Initiatives

There have been significant tariff cuts for NEPCO since the last quarter of 2018, which has undermined its capacity to cover its operational costs. The positive impact of the availability of cheaper gas from Egypt since the last quarter of 2018, and expected from the Mediterranean starting in 2020, are not anticipated to be enough to offset expensive long-term power purchase agreements, particularly from coming into the stream of the shale oil project in 2020-21 (IMF, 2019).96 Based on unchanged policies and the tariff structure prevailing as of March 2019, NEPCO's losses are projected to

increase from 0.2 per cent of GDP in 2019, to 0.9 per cent during 2021–24.

In order to address the challenges associated with the lingering debt crisis for NEPCO, the World Bank, along with the international community and authorities, have prepared a multipronged plan aimed to place NEPCO's operations on a strong sustainable footing, with upfront action to ensure that NEPCO's slide into operational losses is not repeated:

- In addition to an initial correctional cost savings and revenue measure, and regular tariff adjustment to prevent losses in 2019, the authorities have implemented an array of other cost-savings and revenue measures.
- In efforts to rationalize the crosssubsidized tariff structure, the authorities have committed to rationalize tariffs for productive sectors on a revenue-neutral basis progressively. Also, there is a plan to reduce the cross-subsidy burden on productive sectors.
- NEPCO and the Ministry of Finance are to ensure no further accumulation of arrears.
- Donors have provided early indications of potential support to reprofile NEPCO's debt in the years ahead.
- Providing incentives for efficient electricity consumption.

96 IMF (2019) Second Country Review

The Ministry of Energy and Mineral Resources (MEMR), in close collaboration with the international community, has implemented several projects using renewable energy resources. The main project was set up for the provision of energy-saving LED lights and installed photovoltaic (PV) systems on rooftops in host communities in Irbid, Mafrag, and Jerash governorates. Under the new expansion of NAF, poor households in vulnerable governorates are going to get solar panels for their houses. Furthermore, a 13-megawatt solar power plant was completed in Za'atari camp, where the plant was connected and initiated commercial operations in November 2017; this resulted in an increase of electricity hours in the camp from 8 to 14 hours per day. The 40 MW provision of solar energy to refugees in southern Amman is also underway.

In particular, 35 PV systems were set up in public schools. Twenty-three of these schools host more than 5 per cent of the Syrian refugees and have average energy bills of more than JD 300 per month. The PV systems have helped to cover part of the increased demand for energy (due to overcrowding and double-shifting) at public schools targeted in the Irbid and Jerash governorates, (MOPIC, 2018).97 In addition to supporting 3,564 Solar Water Heating systems (SWH) for houses in the Northern governorates, 160 shelters rented by refugee families had systems installed in exchange for rent reduction for a period of 12 months, which helped to provide

security of tenure and save 30 per cent of the refugee expenditure in rent and to reduce utility bills by 28 per cent (MOPIC, 2019). Meanwhile, two more projects are under development, due for completion in the first quarter of 2019 which consist in programmes for the installation of PV panels systems and solar thermal systems for domestic hot water supply. These projects aim to serve host communities as well as refugees.

As shown by Table 38 above, renewable energy consumption has increased significantly in 2017, as a result of a number of government-led initiatives, but some of these measures will have a long-term impact on consumers. The new automatic electricity tariff adjustment mechanism (AETAM) is expected to shield NEPCO's operating balance from volatile oil prices. This will lead to mechanisms that will result in the fuel costs for electricity generation passing through to endusers. The AETAM should be part of the medium-term strategy for the sector; the renewables could supply up to 15 per cent of the need for electricity generation in the coming years; this can help to move the energy mix away from spot oil prices while contributing to global efforts to reduce carbon emissions.

The following vulnerabilities should be considered in supporting the energy sector in Jordan:

a. The significantly high and rising costs of using energy and electricity, which is negatively impacting service

provision as well as preventing energy access for domestic and private use to a vulnerable population, thereby limiting their capacities of movement and participation in social, educational and cultural activities;

oThe high cost of energy consumption also leaves refugees and host communities with fewer funds for spending on other essential needs, which leads to a lower standard of living and reduced social cohesion.

- b. Several examples are available where the high cost of electricity and energy is also associated with a decrease in Foreign Direct Investment and domestic investment, which leads to high levels of unemployment and slow economic growth.
- c. High energy tariffs in Za'atari and Azraq camps have put pressures on humanitarian organizations in the provision of essential service to refugees;
- d. The impact of AETAM can be reduced for the poorest segments of the population by minimizing the adjustment of the existing lifeline tariffs.

97 MOPIC (2018), Jordan Response Plan.

TRANSPORT

TABLE 40

			Unit of Analysis	Nation	ality Segr	egated		
SDG Objective	SDG Indicator	Indicator of Interest	Supply Side /Household	Syrians	Non-Jordanians	Jordanian	Geographic Distribution	Source
11.2 Provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons. 11.2.1 Proportion of population that has convenient access to public transport, by sex, age, and persons with disabilities	Number of buses per 1,000 inhabitants	Supply Side				Country Wide	JRP (2018)	
	Length of paved roads in governorates that are well maintained	Supply Side				Country Wide		
	at has conve ns with disab	Gender and disability sensitivity in public transportations	Supply Side				Country Wide	
	Proportion of the rural population who live within 2 km of an all-season road	Supply Side				Country Wide		
	Accessibility to public health services	Supply Side				Country Wide	JRP (2018)	
11.2 Provide transport sy expanding of those in disabilities	. 11.2.1 Pr transpol	Transport Strategy for Jordan	Supply Side				Country Wide	Ministry of Transport

Jordan's transportation system has faced several problems in the last decade, and with the continued influx of Syrian refugees, the situation has worsened. A few of the significant issues are congestion and frequent traffic jams, an increase in car ownership rates, road capacity, traffic demand management, a culture underpinning certain driver and pedestrian behaviours, the lack of reliable public transportation systems, the absence of national railway system, and the increase in transport due to the influx of people from Syria. According to the National Transport strategy, the road capacity provided is sufficient, but road users are faced with forced traffic flow and congestion, particularly in and around urban areas at certain peak times of the day or week. These conditions will worsen over time as transport demand is forecasted to increase.

Freight transport, the transportation of goods, and domestic transport in Jordan are strongly dependent on roads. Only for phosphate mines in the South is transport conducted by rail, in this case between the mines and the port of Aqaba. Regional transport, mainly the transportation of goods from neighbouring countries to Jordan, out of Jordan, or through Jordan, is currently concentrated on the road network. Most significant regional traffic flows affecting Jordan pass through the port of Aqaba (around 70 per cent). 98

Road safety is one of the major areas

of concern in the country. Jordan has one of the world's highest rates of road fatalities, suggesting that urgent attention is required to create safer road and neighbourhoods. There are 23 road fatalities per 100,000 population. In Jordan, more than 80 per cent of Syrian refugees are sheltered in urban areas, making the safe and dignified mobility and access of refugees to the primary services a top priority when responding to humanitarian crises.

Achievements

A shorter-term, fast-tracked recovery programme was initiated in 2018, which set out to achieve a minimum standard of pavement conditions across the main road network (either routine maintenance, periodic maintenance, or pavement reconstruction) and to maintain existing bridges.

MoPWH has identified priority packages and this will cover significant infrastructure needs in the Syrian population majority areas plus, with the opening of the border between Syria and Jordan, these priority packages will help to ensure a smooth flow of goods to or from Jordan. MoPWH had identified the following priority measures in its Highway Master Plan study:

 Maintenance and recovery of Road 15 (Desert Highway), short-term priority package 1, involving 488 kilometres of road network:

98 Jordan Transport Strategy

Generally, the MoT is responsible for all modes of transport other than roads, for transport policies, pricing, regulations, etc. Roads as a public asset, come within the remit of the MoPWH. The MoPWH looks after the development and maintenance of the road networks, and caters for road construction and maintenance. In Jordan, road transport is by far the most important mode of transport and the road infrastructure plays a crucial role. Responsibility for road infrastructure development lies with the MoPWH; while the MoT focusses on the other modes of transport – aviation, maritime, rail and public transport –, it is still responsible for the design of an overall policy for the transport sector, including road infrastructure development.

o Syrian Border (Jaber) to the Karak-Qatraneh intersection

o Karak-Qatraneh intersection to Ma'an

o Ma'an to the Saudi Border (Durra)

In the key priority areas for intervention, transport-related infrastructure, such as bus stops, intermediate connection areas and collection stations, are also suffering due to increased needs and demands, lower maintenance opportunities and limited funding

In the past, Jordan relied heavily on its trade with Syria and Iraq to support and fund the maintenance of its transportation systems. After the reopening of borders with Syria, Jordan will again try to build on its previous experience. In the long-term (2030), MoPWH has planned a new railway network that will be connected to Syria through Zarga and Mafrag with a railway line segmented as follows: Syrian border to Zarga Junction (63 km); Zarga Junction to Amman Logistics Center (32 km). These railway links will help to boost and optimize the operation of both of the projected dry ports/logistics centres in Amman and Mafrag.

Even though the transport sector interventions are pivotal and essential cross-cutting components to all the other services provided by Government and international cooperation, the sector has not received any funding to support its proposed interventions in 2018-2020 JRP.

A sector vulnerability assessment was performed for Jordan's northern governorates in 2017, taking into consideration the number of buses per 1,000 inhabitants. The assessment indicates an alarming drop in the bus to user ratio, from 0.82 in 2010 to 0.7 in 2017, which further jeopardizes the mobility and accessibility to the other services, especially in the underprivileged regions of Al Ramtha, Al Kora and Bani Kenanah in Irbid governorate.

The influx of Syrian refugees into Jordan requires commitment to implementing strategies to improve the public transport system, in cooperation with the private sector, and in a manner that provides high social, economic, and environmental returns. This includes upgrading and improving road safety standards, maintenance of existing roads networks, rehabilitation and expansion, and expansion of development, delivering viable regional roads with social, economic, and environmental returns.

The cost of transportation is one of the major household expenses for all income deciles. Table 41 shows expenditure on transport as a percentage of total non-food item expenses and as a percentage of the total expenditure for different groups of households, categorized according to the levels of their overall spending. For the lowest two income groups, nearly 10 per cent of the non-food item costs are associated with travel, whereas this is 23 per cent for the wealthiest households. This again confirms the

TABLE 41: Transportation expenses metrics

Groups according to Overall Household Expenditure (JDs)									
	<2,500	2,500–5,000	5,000–7,500	7,500–10,000	10,000–12,500	12,500–15,000			
Transportation expenses as percentage of Non-Food Expenditure	8	10	14	17	21	23			
Transportation expenses as percentage of Total Expenditure	4	6	8	11	13	15			

SOURCE: HIES (2017-18)

fact that transportation is one of the major monthly expenses incurred by households.

According to the limited availability of financial resources, the projects included in 2019 JRP are timely and geographically chosen and capture only the first phase of the planned projects' cycles.

Ways Forward

The following main priorities need to be addressed in 2019:

- Initiate and execute enhancement interventions that target the public transport system to meet the accelerating demands of increased population, specifically for the vulnerable sectors (e.g., users of special needs).
- Expand, maintain, and upgrade the existing infrastructure of the road networks and road safety in Irbid and Mafrag governorates.
- Upgrade the transportation system

modes in Jordan and in particular, the parts of the country that were most affected by the Syrian refugee influx, as well as enabling the MOT and MPWH to undertake evidence-based responses in the provision of improved transport services within host communities.

Targeted interventions should aim to improve access to roads and public transport services for newly constructed schools and health centres.

⁹⁹ Jordan 2025 A National Vision and Strategy

¹⁰⁰ UNHCR, 2018

modes of transport – aviation, maritime, rail and public transport –, it is still responsible for the design of an overall policy for the transport sector, including road infrastructure development.

⁹⁹ Jordan 2025 A National Vision and Strategy

¹⁰⁰ UNHCR, 2018

JUSTICE

TABLE 42

			Unit of Analysis	Nation	ality Segr	egated		
SDG Objective	SDG Indicator	Indicator of Interest	Supply Side /Household	Syrians	Non-Jordanians	Jordanian	Geographic Distribution	Source
eration, for nce and combat y at all levels	ith the Paris	Percentage of Jordanian and Syrian Children with documentation	Supply Side/ Household				Country-wide	MOI (2018)
all levels ernational coope to prevent violen decision-making	Distance to courts	Supply Side				Country-wide	Rule of Law Performance Report	
ent institutions at cluding through i reloping countries and representative	nt institutions at auding through int loping countries, and representative ghts institutions i	Increase in cases in Sharia Court (for Syrians only) (married cases and others)	Supply Side/ Household				Country-wide	MoJ
accountable and transparent institutions at all levels nt national institutions, including through international cooperation, for levels, in particular in developing countries, to prevent violence and com, inclusive, participatory and representative decision-making at all levels	pendent national human rights institutions in compliance with the Paris	Increase in cases in regular courts (for Syrians only)	Supply Side/ Household				Country-wide	MoJ
	nce of independer	Percentage of felonies to total general crime	Supply Side/ Household				Country-wide	DOS (2018)
 16.6 Develop effective, a 16.a Strengthen relevant building capacity at all leferrorism and crime 16.7 Ensure responsive, 	16.a.1 Existence of inde Principles	Percentage change in total general crimes	Supply Side/ Household				Country-wide	DOS (2018)

			Unit of Analysis	Nationality Segregated					
SDG Objective	SDG Indicator	Indicator of Interest	Supply Side /Household	Syrians	Non-Jordanians	Jordanian	Geographic Distribution	Source	
		General crimes rate per thousand populations (trend analysis)	Supply Side/ Household				Country-wide	DOS (2018)	
		Drug trafficking and possession and use of drugs (trend)	Supply Side/ Household				Country-wide	DOS (2018)	

Jordan's overall rule of law performance for 2019 saw it ranked 2nd out of 8 countries in the Middle East & North Africa region, 49th out of 126 countries and jurisdictions worldwide, and 11th out of the 38 lower-middle-

income countries with which it was grouped according to this category. 101 The table presents the indicators used to construct the overall Rule of Law Performance Indicators,

TABLE 43: Rule of Law Performance Indicators

Indicators	Factor Score	Global Rank
Constraints on Government Powers	0.49	77/126
Absence of Corruption	0.58	42/126
Open Government	0.41	99/126
Fundamental Rights	0.49	83/126
Order and Security	0.77	42/126
Regulatory Enforcement	0.58	36/126
Civil Justice	0.63	32/126
Criminal Justice	0.58	28/126

SOURCE: World Justice Project (2019) 102

¹⁰¹ According to the latest World Justice Report Rule of Law Index (2019).

¹⁰² World Justice Project (2019) Jordan WJP Rule of Law Index. https://worldjusticeproject.org/our-work/research- and-data/wjp-rule-law-index-2019>, last accessed 14.11.2019.

Jordan has achieved significantly high scores in terms of the provision of civil justice and criminal justice with overall ranking out of 126 countries of 32 and 28, respectively, but the factor score can still be improved. For order and security, Jordan's factor score is relatively good, but the ranking, on the other hand, is not so good.

The justice system has experienced a significant increase in caseloads since the arrival of Syrian refugees into the country. A survey by HiiL (2017) shows that 3 out of 10 Jordan residents reported having experienced at least one legal problem in the previous four years, and 60 per cent of this population have sought some kind of legal information (either formal or informal). 103 The most useful strategy to resolve legal problems, according to the users of justice, is to contact the other party independently. However, the majority of the solutions arrive via a mediator/conciliator or the decision of a tribunal.

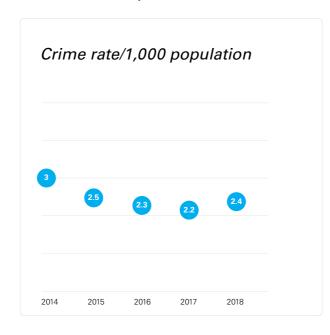
Felonies represent 71 per cent of total general crimes. The rate of change of total general crimes from 2014-18 is -8 per cent; so here we observe a significant decline in the last four years.

The graph shows the trends in the crime rate per 1,000 population; there is a significant decline that can be observed between 2014, where it was 3 crimes to 1,000 population, and 2018, when it reached 2.4.

Jordan's justice system faces several challenges that have been further exacerbated by the Syria crisis.

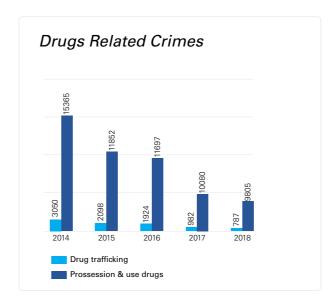
Approximately 530,000 neighbour-related disputes affect daily coexistence at the local level and can lead to other types of disputes that exponentially decrease quality of life (HiiL, 2017). The response is somewhat different if there is a possible impact on social cohesion among the communities, but this varies significantly based on the definition of social cohesion used, and there is no perfect definition. Overall, during the previous four years, around two million Jordanians experienced a justice problem.

A court client satisfaction survey conducted by the Ministry of Justice revealed that 78.9 per cent are satisfied with the services provided at court. The same survey shows that partners satisfaction during the last 4 years is between 83-85 per cent.



103 HiiL (2017) Justice Needs and Satisfaction in Jordan.

The graph shows the drug-related crimes in the country. A significant decrease in overall drug crimes was reported in 2018. Drug traffickingrelated crimes decreased by one-third since 2014, and possession and use of drugs reduced by nearly half (DOS, 2018). 104



Nevertheless, courthouses, legal staff, and legal services have been put under stress because of the increased caseload associated with the continued presence of Syrian refugees. From 2014 to 2017, the number of cases involving Syrian refugees as parties before Regular Courts have increased by 20 per cent, and the same trend is

expected to continue. It is, therefore, crucial to continue to provide legal services for Syrian refugees in Jordan and to support the resilience of host communities.

Crimes related to sexual abuse and exploitation have increased over the years, with 766 such crimes reported in 2014; the number increased to 1,023 in 2018, which represented 14 per cent of the total felonies for the year (DOS, 2018).

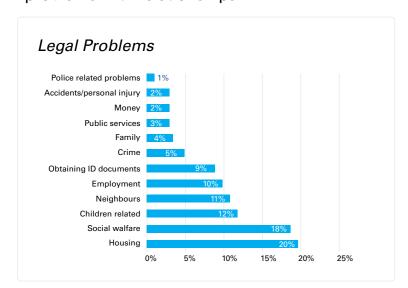
TABLE 44: Sexual Abuse

	2014	2015	2016	2017	2018
Sexual Abuse	766	752	982	1001	1023
% of total Felonies	10	10	15	15	14

104 DOS (2018) Justice and Security: Jordan in Figures.

In Jordan, approximately 250,000 (38) per cent) Syrian refugees have faced one or more serious legal problems in the past four years. The graph reflects the most serious legal issues among Syrian refugees in Jordan. The most significant legal problems are related to housing (20 per cent) and social welfare (18 per cent): the legal problems in the category of housing relate mainly to (threats of) eviction due to inability to pay rent or to the house owner increasing the rent; while typical social welfare problems might involve not receiving assistance from UNHCR (HiiL, 2018).¹⁰⁵

HiiL (2018) also reported on the consequences for the Syrian refugees in Jordan facing legal issues: these relate to loss of time and income. Problems include difficulties in receiving payments from UNHCR, evictions, and landlords increasing rent. Refugees in Jordan face substantially less violence and injuries than refugees in Lebanon, and also experience fewer problems with relationships.



include the sixth discussion paper "Rule of Law and Civil State," by His Majesty King Abdullah II, 106 the 2017implementation of resolution 1325 on Women, Peace, and Security."

Key achievements in the Justice Sector 2020 "Justice Sector Strategy," and the 2018-2021 "National Action Plan for the

Recommendations and Ways Forward 107

Capacity building for all actors in the criminal justice chain is required to develop a legal representation scheme delivered by the State, in complementarity with the other legal aid service providers and in line with international standards and the revised article 208 of the Criminal Procedure Code. Support should also focus on the provision of different typologies of legal aid services to refugees and host communities (legal awareness, legal advice/counselling, and information). Infrastructures also need to be modernized. Newly adopted legal frameworks and policies need to be implemented and eventually strengthened to guarantee access to information and rights to vulnerable people, including juveniles, female victims of gender-based violence, and refugees. Support to refugee and host community women in conflict with the law also needs considerably more attention, especially after the adoption of Law 15 of 2017 on "protection from domestic violence" and the appointment of 107 specialized judges (males and females).

In camps, there is the need for continued support to existing Sharia Courts to ensure that Syrian refugees can document their marriages and pursue other family law matters in accordance with Jordanian law. Specific legal services are needed

to assist refugees to: 1) participate in the urban re-registration exercise (delivery of new MOI Service Cards); 2) document marriages, deaths, and births; 3) comply with their rights and obligations under Jordanian labour law; 4) ensure security of tenure; and 5) safeguard children's rights to placement and protection.

For more details please check Annexure D1

105 HiiL (2018) Justice Needs of Syrian Refugees: Legal problems in daily life. Available from: <www.hiil.org/wpcontent/uploads/2018/09/Justice-Needs-of-Syrian-refugees.pdf>, last accessed 14.11.2019. 106 King Abdullah II sixth discussion paper, October 2016.

107 Adopted from JRP 2019.

APPENDICES

Appendix A: Education

TABLE A-1

Governorate and Directorate	PTR	Gap in Teachers Availability	Students to classroom ratio	Gap in Classrooms	Students to School ratio
Amman	16	7,054	26	6,092	323
Amman Qasbah	17	2,093	27	1,570	323
Aljamaah	13	-484	23	377	309
Sahab	18	437	27	280	340
Al Qwesmeh	19	2,547	29	1,609	400
Marka	18	2,771	28	1,985	374
Wadi Alseer	15	219	24	353	265
Naaor	14	46	24	131	262
Badiyeh Wosta/Mwagar	13	-88	22	17	206
Badiyeh Wosta/Jezah	10	-487	17	-229	170
Balqa	16	1,243	25	908	283
Salt Qasabah	14	73	22	41	216
Dair Alla	15	97	25	106	284
Shoonah Janoobiyyeh	15	100	26	119	311
Ein Albasha	18	973	28	642	374
Zarqa	19	5,918	30	3,847	360
Zarqa1	19	2,656	30	1,863	347
Zarqa 2	17	733	26	466	297
Ruseifa	22	2,529	32	1,518	433
Madaba	14	-10	23	140	246

Governorate and Directorate	PTR	Gap in Teachers Availability	Students to classroom ratio	Gap in Classrooms	Students to School ratio
Madaba Qasabah	16	376	25	292	293
Dieban District	9	-386	16	-152	149
Irbid	16	3,312	26	2,808	274
Irbid Qasbah	18	2,461	28	1,627	303
Bani Obaid	16	367	24	233	245
North Mazar	14	41	25	100	245
Al-Taibah & Al-Wasteiah	13	-63	23	77	260
Koorah	14	54	24	171	246
Bani Kenanah	13	-144	23	72	221
Aghwar Shamaliyyeh	15	135	24	142	261
Ramtha	16	461	26	387	315
Mafraq	13	-713	21	-43	216
Mafraq Qasabah	12	-459	21	-99	200
Badyah Shamaliyyeh .E	11	-647	17	-317	171
Badyah Shamaliyyeh .W	15	393	25	373	274
Jarash	14	132	23	222	221
Ajloun	13	-215	22	30	219
Karak	11	-1,457	21	-117	194
Karak Qasabah	11	-554	20	-68	195
Mazar Janoobi	11	-510	19	-104	162

Governorate and Directorate	PTR	Gap in Teachers Availability	Students to classroom ratio	Gap in Classrooms	Students to School ratio
Qasr	9	-457	20	-57	167
Agwar Janoobiyyeh	15	63	25	112	331
Tafilah	11	-588	22	39	196
Tafilah	11	-496	22	16	202
Bsaira	12	-93	23	23	181
Ma'an	10	-1,172	18	-302	164
South Badia	10	-460	17	-156	164
Petra	11	-160	21	-18	179
Shobak	7	-282	13	-111	96
Aqaba	15	175	26	380	349

Appendix B: Health

TABLE B-1

ВС	CG	DPT-IPV-Hib III	Polio III	Hepatitis B III	Rotavirus III	Measles	All Basic Vaccinations	No Vaccinations			
				Sex							
Male	91.7	88.4	83.6	88.7	86.9	87.4	84.7	8.0			
Female	94.0	92.0	85.0	91.6	90.7	88.4	87.0	5.6			
	Residence										
Urban	92.6	89.7	84.1	89.8	88.6	87.7	85.6	7.2			
Rural	94.0	92.6	85.2	92.2	88.7	89.2	86.8	4.5			
Governorate											
Amman	91.7	90.1	84.6	88.9	87.4	86.1	₿ €€€	8.3			
Balqa	97.3	91.8	91.3	91.5	92.8	91.9	89.1	2.7			
Zarqa	93.4	89.2	83.7	90.8	90.3	88.2	86.0	6.6			
Madaba	93.7	90.5	79.4	87.7	89.0	90.5	86.9	5.1			
Irbid	93.8	89.9	84.6	91.3	89.6	90.0	87.0	6.2			
Mafraq	92.7	92.2	82.3	92.9	89.3	90.6	87.4	4.6			
Jarash	93.0	92.7	88.3	92.7	92.5	89.5	87.8	6.1			
Ajlun	97.2	95.7	91.1	95.7	95.0	91.1	91.1	2.8			
Karak	97.8	95.7	87.4	94.9	90.0	89.2	87.9	2.2			
Tafilah	95.8	92.8	89.8	91.3	93.0	94.0	90.7	3.0			
Ma'an	78.6	70.3	62.8	70.2	69.1	67.4	64.3	20.5			
Aqaba	82.2	79.4	73.1	79.7	75.6	77.7	75.7	17.1			
				Nationality							
Jordanian	93.7	91.5	86.0	91.7	90.4	89.7	87.7	6.0			
Syrian	90	84.3	76.4	84.2	82.0	79.6	75.8	8.8			
Other Nationalities	80.5	75.7	71.7	71.8	71.9	75.7	75.2	19.5			
Total	92.7	90.0	84.2	90.1	88.6	87.9	85.7	6.9			

TABLE B-2 Governorate Level Population with No Health Insurance

Governorates	% of Non-Jordanian Female Population with NO health Insurance Coverage	% of Non-Jordanian Male Population with NO Health Insurance Coverage	% of Non-Jordanian Total Population with NO Health Insurance Coverage	% of Jordanian Female Population with No Health Insurance Coverage	% of Jordanian Male Population with No Health Insurance Coverage	% of Jordanian Total Population with No Health Insurance Coverage	% of total population with No Health Insurance
Amman	82	85	84	44	45	45	58.7
Balqa	77	86	83	23	25	24	35.2
Zarqa	67	72	70	38	40	39	49.3
Madaba	76	83	80	20	23	22	31.6
Irbid	73	75	74	19	21	20	33.8
Mafraq	39	44	42	15	16	16	26.8
Jerash	35	39	37	12	14	13	20.1
Ajloun	63	69	66	7	9	8	14.3
Karak	58	74	68	9	11	18	18.1
Tafilah	75	82	80	8	11	9	13.7
Ma'an	65	72	70	12	15	14	19.8
Aqaba	71	77	75	21	24	22	37.1
Jordan	72	77	75	30	32	31	44.5

SOURCE: Census 2015.

TABLE B-3

rates	5		ospitals: nation tal for each 60,0		Number of hospital beds per 10,000 people, using the national standard of 18 beds per 10,000 people excluding Amman as its standard is 26 beds per 10,000 people			
Governorates	Population	Total Hospitals	Hospitals GAP	% Population Not Covered by Hospitals Capacity	Total Number of Beds	Beds GAP	% Population Not Covered by Bed Capacity	
Amman	4,226,700	58	12	18	8,000	2,989	27.2	
Balqa	518,600	6	3	31	783	150	16.1	
Zarqa	1,439,500	8	16	67	1,388	1,203	46.4	
Madaba	199,500	3	0	10	188	171	47.6	
Irbid	1,867,000	17	14	45	2,276	1,085	32.3	
Mafraq	580,000	7	3	28	555	489	46.8	
Jarash	250,000	2	2	52	146	304	67.6	
Ajloun	185,700	2	1	35	240	94	28.2	
Karak	333,900	6	0	0	559	42	7.0	
Tafilah	101,600	1	1	41	140	43	23.4	
Ma'an	152,000	2	1	21	217	57	20.7	
Aqaba	198,500	4	0	0	287	70	19.7	
Jordan	10,053,000	116	52	31	14,779	6,698	37.0	

TABLE B-4 Main Rights of Persons with Disabilities (PWD) that Different Public Entities are Obliged to Fulfil

Ministry of Social Development

- Art 27 plan for replacing care centres with day services, ensuring accessibility in nurseries, orphan, elderly and juvenile care centres
- Art 29 enhancing the concept of a personal social worker, protecting and rehabilitating persons with disability (PWDs) who are victims of violence

Ministry of Higher Education

- Art 21 ensuring accessibility
- Art 22 maintaining the maximum tuition fee to be paid by a student with disability for the tanafusi regular programme does not exceed 10% and 25% for the muwazi programme

Ministry of Health

- Art 23 enhancing accessibility, training staff on how to communicate with PWD, designing early detection programmes
- Art 24 providing PWD with a health insurance card that covers the costs of treatment, medication, and equipment

Ministry of Awqaf & the Council of Churches

• Art 41 – Focusing religious dialogue on fostering the rights of persons with disabilities and accepting them as part of the diversity of humanity

Ministry of Education

- Art 17 finding alternative educational institutions to children with disabilities who are unable to access schools
- Art 18 set national plan to ensure PWD access in public and private schools
- Art 19 work with the Higher Council for Affairs of Persons with Disabilities (HCD) to improve curricula
- Art 20 responsible for licensing education institutions for PWD

Department of Statistics

- Art 45 (b)—including within the census questions showcasing the number of PWD, their geographical location, gender, age and details about their disability.
- Art 45 (c) creating a registry of all persons with disability and sharing it with relevant entities

TABLE B-5 Physicians, Pharmacies, Dentist and Nurses and midwives per 10,000 people

Governorates	Physicians (per 10000 people)	Pharmacies (per 10000 people)	Dentist (per 10000 people)	Nurses and midwives (per 10000 people)
Amman	1.2	3.6	12	1.28469
Balqa	3.6	3.1	36	5.64983
Zarqa	1.2	2.3	12	1.37548
Madaba	4.6	3	46	6.91729
Irbid	1.8	2.3	18	2.35672
Mafraq	3	1.8	30	4.25862
Jarash	3.3	2.4	33	3.2
Ajloun	5	1.5	50	5.60043
Karak	4.9	1.8	49	7.57712
Tafilah	8.5	2.2	85	14.56693
Ma'an	9.3	1.4	93	9.21053
Aqaba	4.1	2.3	41	6.44836

SOURCE: DOS (2018)

Appendix C: WASH

TABLE C-1

IADLL C									
Governorate	District	% of households not connected to the public water network	% of Non-Revenue Water	Operations and Maintenance Needs	Governorate	District	% of households not connected to the public water network	% of Non-Revenue Water	Operations and Maintenance Needs
Ajloun	Kasabeh Ajloun	44%	47%	7.5%	Jerash	Kasabeh Jerash	35%	35%	0.8%
Ajioun	Kufranjah	35%	38%	0.1%		Aiy	0%	73%	0.0%
	Jam'ah	0%	0%	8.8%		Fakou'	38%	73%	0.9%
	Jeezeh	83%	35%	7.5%		Kasabeh Karak	0%	73%	0.0%
	Kasabeh Amman	11%	0%	0.1%	Karak	Qasr	0%	73%	1.4%
	Marka	14%	0%	0.2%		Qatraneh	35%	73%	0.1%
Amman	Mwaqar	85%	37%	0.1%		South Gour	37%	73%	0.5%
	Na'our	45%	13%	2.7%		South Mazar	56%	73%	0.3%
	Qwaismeh	27%	0%	0.1%		Kasabeh Ma'an	26%	67%	2%
	Sahab	66%	19%	0.0%	Ma'an	Petra	0%	80%	0.0%
	Wadi Seer	0%	0%	0.0%		Shoubak	19%	54%	0.5%
Agaha	Kasabeh Aqaba	3%	41%	2.9%	Madaba	Kasabeh Madaba	7%	39%	3.3%
Aqaba	Qwairah	27%	72%	0%	IVIauaDa	Theeban	29%	60%	3.5%
	Ain Basha	16%	56%	0.1%		Mafraq	28%	79%	0.6%
	Dair Alla	36%	75%	1.3%	Mafraq	North Badiyeh	53%	79%	0.6%
Balqa	Kasabeh Salt	6%	40%	0.4%	iviairaq	North west Badiyeh	72%	52%	0.4%
	Mahes & Fohais	0%	46%	0.2%		Rwaished	36%	52%	0.0%
	South Shouneh	24%	81%	0.4%		Bsairah	13%	57%	13.6%
Irbid	Bani Kenana	36%	38%	0.5%	Tafilah	Hasa	34%	69%	0.1%
Irold	Bani Obaid	23%	25%	0.9%		Tafilah	0%	57%	0.0%

Govemorate	District	% of households not connected to the public water network	% of Non-Revenue Water	Operations and Maintenance Needs	Govemorate	District	% of households not connected to the public water network	% of Non-Revenue Water	Operations and Maintenance Needs
Irbid	Kasabeh Irbid	25%	34%	0.1%	Zarqa	Hashmiyeh	35%	0%	0.0%
	Kourah	46%	32%	0.1%		Kasabeh Zarqa	24%	11%	8.1%
	North Gour	39%	42%	0.0%		Rusaifah	48%	0%	12.8%
	North Mazar	47%	48%	0.2%		of Jordan	260/	47.5%	
	Rumtha	64%	38%	0.9%	Kingdom o				
	Taybeh	44%	48%	0.1%	(calculation based on sub-district level estimates				
	Wasateyeh	37%	48%	0.1%					

TABLE C-2

Governorate	District	Public Sanitation Network Needs %	
A:1	Kasabeh Ajloun	89%	
Ajloun	Kufranjah	70%	
	Jam'ah	0	
	Jeezeh	98%	
	Kasabeh Amman	13%	
	Marka	23%	
Amman	Mwaqar	95%	
	Na'our	94%	
	Qwaismeh	66%	
	Sahab	80%	
	Wadi Seer	1%	
Aqaba	Kasabeh Aqaba	29%	
Aqaba	Qwairah	100%	
	Ain Basha	31%	
Balqa	Dair Alla	100%	
Daiya	Kasabeh Salt	78%	
	Mahes & Fohais	0%	
Jerash	Kasabeh Jerash	89%	

Governorate	District	Public Sanitation Network Needs %	
	Aiy	100%	
	Fakou'	100%	
	Kasabeh Karak	63%	
Karak	Qasr	100%	
	Qatraneh	100%	
	South Gour	100%	
	South Mazar	100%	
	Kasabeh Ma'an	95%	
Ma'an	Petra	100%	
	Shoubak	21%	
Madaba	Kasabeh Madaba	83%	
Iviadaba	Theeban	100%	
	Mafraq	92%	
	North Badiyeh	100%	
Mafraq	North west 100% Badiyeh		
	Rwaished	100%	

Governorate	District	Public Sanitation Network Needs %	
	Bani Kenana	100%	
	Bani Obaid	50%	
	Kasabeh Irbid	44%	
	Kourah	100%	
Irbid	North Gour	100%	
	North Mazar	100%	
	Rumtha	85%	
	Taybeh	100%	
	Wasateyeh	100%	
	Bsairah	100%	
Tafilah	Hasa	100%	
	Tafilah	79%	
	Hashmiyeh	34%	
Zarqa	Kasabeh Zarqa	85%	
	Rusaifah	50%	

Appendix D: Justice 108

TABLE D-1

	Felonies	Crimes	Total Crimes	Percentage of Total Crimes
Amman	8,834	2,960	11,794	48%
Balqa	788	504	1,292	5%
Zarqa	1,693	841	2,534	10%
Madaba	519	178	697	3%
Irbid	2,782	1,229	4,011	16%
Mafraq	1,085	500	1,585	6%
Jerash	364	178	542	2%
Ajlun	255	159	414	2%
Karak	424	288	712	3%
Tafilah	152	58	210	1%
Ma'an	190	103	293	1%
Aqaba	414	156	570	2%

SOURCE: DOS (2018)

Achievements

In the 2017–2019 Jordan Response Plan, the Justice Sector proposed interventions to strengthen institutional capacity and to provide legal aid both for Jordanians and for Syrian refugees in host communities. For 2017–2019, a total of 4 projects and one agreement were recorded in JORISS for a total value of US\$11,747,627.

Legal aid services (including legal awareness, counselling/advice, training, Alternative dispute resolution [ADR], legal assistance and representation) are delivered by both state-run and civil society-led legal aid providers to both Syrian refugees and host communities across Jordan. A data collection mechanism to consolidate, at the Justice Sector level, the legal aid statistics produced by each legal aid provider is being developed and will

108 Reference to JRP 2019.

represent one of the priorities for 2019. Meanwhile, the key achievements are reflected in the annual reports of each organization.

In 2014 and 2016, Shari'a Courts expanded their services to refugee camps, and two new courts, competent to hear and determine cases, were established in the Za'atari and Azraq camps. In 2017, a total of 5,271 cases was processed through these courts, and 1,847 cases were processed in 2018 by the end of September. In urban settings, the estimated total number of cases that involved Syrians in Shari'a Courts across the Kingdom in 2017 was 16,475.

Following the recommendations of the Royal Committee for Developing the Judiciary and Enhancing the Rule of Law, Jordan introduced significant improvements to the legislative framework to protect individual rights. More than 14 laws and bylaws were adopted in 2017 in different areas of justice, including women's rights, 109 criminal justice, 110 and the rights of persons with disabilities, 111 with an impact also on persons affected by the Syrian crisis.

Between January 2014 and September 2018, all Regular Courts reported to the Ministry of Justice (MoJ) 64,314 court cases involving Syrian refugees as either defendants or complainants with a progressive increase of 20.5 per cent in the number of cases for the same period. Shari'a Courts face similar challenges. The crisis is affecting the ability of the justice system to perform efficiently, especially considering

that all cases are administered by a total of only 916 judges (176 female and 740 male) for Regular Courts, and 250 judges for Shari'a Courts. Syrian refugees are particularly vulnerable due to a lack of legal and civil documentation, and insecurity of tenure. They often experience work rights violations and resort to mediation and court services to resolve work-related disputes.

Infrastructure challenges are also a factor, considering that the Ministry of Justice owns only 18 court premises out of the 56 courts that it administers. Responding to this challenge, the MoJ promoted the improvement of service delivery through the expansion of e-services, which have been used by 2,103 users in 2017 compared to 1,520 users in 2016. CCTV systems were introduced to promote victim-friendly courts.

Support to juveniles in conflict with the law needs considerably more attention, considering that the number of cases in the juvenile courts increased from 10,527 in 2015, to 12,503 in 2016; 13,838 in 2017, and 11,774 up to the end of September in 2018.

In 2018, the Ministry of Justice adopted a Bylaw for the provision of free legal representation for criminal cases punishable with ten year term of imprisonment and above, but the related fund has yet to be established. The MoJ provided legal aid to 251 people in 2016; however, the needs still overwhelmingly exceed the current capacity of the Legal Aid Unit at the MoJ.

¹⁰⁹ Notably, the abolishment in 2017 of article 308 of the Penal Code which allowed sexual assault perpetrators to avoid punishment by marrying their victims.

¹¹⁰The Criminal Procedure Code was amended in July 2017 to include article 208 on legal representation.

¹¹¹ Law n. 20 of 2017 on the Rights of Persons with Disabilities

¹¹² Ministry of Justice, September 2018.





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