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Absorptive Capacity and Potential of Local Labor Markets



The case of Gaziantep, Hatay, Kahramanmaraş, Kilis and Şanlıurfa







Absorptive Capacity and Potential of Local Labor Markets: The case of Gaziantep, Hatay, Kahramanmaraş, Kilis and Şanlıurfa

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Absorptive Capacity and Potential of Local Labor Markets

The case of Gaziantep, Hatay, Kahramanmaraş, Kilis and Şanlıurfa

Preface

Turkey is now de facto home to roughly 2.7 million Syrians fleeing conflict and collapse in their own country. The rapid influx of Syrians raises complex questions of housing, legal status, and labor, in specific as well as broader challenges of social and economic integration.

Report on "Absorptive Capacity and Potential of Local Labor Markets: The case of Gaziantep, Hatay, Kahramanmaraş, Kilis and Şanlıurfa" is prepared within the context of Mitigating the Impact of Syrian Crisis on Southeast Anatolia Region Project that is funded by the European Union and implemented by the United Nations Development Programme (UNDP) together with Southeast Anatolia Project Regional Development Administration (GAP RDA) and the Disaster and Emergency Management Authority (AFAD).

The project aims to increase the quality of the service provided for the local communities and the Syrian population avoid the possible social tension through building capacity for local and municipal service delivery on waste management and rehabilitation and improving the livelihoods in order to increase the employability of the impacted communities including the Syrians under Temporary Protection.

This report leverages both primary and secondary research, and looks at the ways, in which Syrians in Turkey (hereafter, Syrians under Temporary Protection, or SuTP) currently participate in the country's labor market. Based on a range of studies, we discuss measures that could help increase SuTP's integration into local labor markets.

Drawing on detailed analyses of the local economies of five provinces, mostly along the Syrian border, which together have absorbed a significant proportion of SuTP, we explore possible solutions for a more comprehensive integration of SuTP.

Key to this process are building on the existing skills of SuTP and, through a careful understanding of the grounded economic realities of each city in the region, providing incentives to support specific industries and areas for growth, as well as providing tailored training and support for SuTP.

Such measures, if effectively enacted, have the potential to foster job creation, through adding value and boosting efficiency and productivity, and could provide for better economic integration of more Syrians in the region. A key message from this research is that the initiatives discussed in this report have the potential to benefit both the SuTP and host communities.

UNDP has full ownership of the conclusions, recommendations and discussion of policy options contained within this report, which draws on many sources of insight, including data and interviews with experts from public institutions, civil society organizations, private sector and international organizations, as well as economic analysis by McKinsey & Company. The authors are grateful for all these invaluable contributions and collaboration.

Data Limitations

In the absence of sufficiently detailed data, especially at the provincial level, sizing the current and future labor demand and supply—and hence, assessing the gap between the two—requires making some assumptions. In doing so, we draw on past trends and national-level projections of the Medium-Term Program (2016-2018, revised) of the Government of Turkey.

The volatility and scarcity of SuTP-related data exacerbate the challenge. For instance, an earlier version of this report was based on January 2016 figures on the number of registered SuTP in Turkey. One month after our analysis, the Directorate General of Migration Management (DGMM) published updated figures, which pointed to a 200,000 increase in the number of registered SuTP, and a slightly different gender distribution.

Informality in labor markets is yet another challenge. We recognize that the available data on informal employment may be more reliable at an aggregate (i.e. national) level. Thus, assumptions for both SuTP and host communities employed informally at provincial level should be interpreted accordingly.

In such a context, we have applied estimates and high-level assumptions in order to translate macro-level data to the provincial level, and made informed projections and estimates when needed. Although these assumptions are unlikely to hold true in all cases, we are confident that we have exhausted most, if not all, possible ways of validating them with the information available to us.

To reflect the inherent uncertainty of projections, the limitations of data, and the assumptions we have made, we strongly recommend readers of this report interpret the quantitative estimations only as an indication of order of magnitude.

Annexed to the report, we provide detailed methodological notes for readers who wish to have a greater understanding of our way of thinking.

Acronyms

А	
AFAD:	Disaster and Emergency Management Authority
D	
DGMM:	Directorate General of Migration Management (www.goc.gov.tr)
Е	
EU:	the European Union
F	
FTE:	Fulltime Equivalent
G	
gap: gap RDA:	Southeast Anatolia Project Southeast Anatolia Project Regional Development Administration
I	
igeme: Ilo: Iskur:	Turkish Export Promotion Agency <i>(abolished)</i> International Labor Organization Turkish Labor Agency
L	
LFPR:	Labor force participation rate
Μ	
MGI: MoD: MoFAL: MoH: MoNE: MoSIT: MTP:	McKinsey Global Institute Ministry of Development Ministry of Food, Agriculture and Livestock Ministry of Health Ministry of National Education Ministry of Science Technology and Industry Medium Term Program of the Government (2016-2018, revised)
U	
UN: UNDP: UNHCR: UNICEF: UR:	United Nations United Nations Development Programme UN High Commissioner for Refugees United Nations Children's Emergency Fund (Children's Rights & Emergency Relief Organization) Unemployment rate
0	
OIZ:	Organized Industrial Zone
S	
SGK: SuTP:	Social Security Agency Syrians under temporary protection (in Turkey)
т	
TIM: TL: TUIK:	Turkish Exporters' Assembly Turkish Lira Turkish Statistical Institute
W	
WB:	World Bank

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Executive Summary

Since 2011, more than 3.5 million SuTP have entered Turkey. Some 800,000 have already left, and almost half of the remaining now live in five provinces close to Turkey's border to Syria: Gaziantep, Hatay, Şanlıurfa, Kilis, and Kahramanmaraş. In December 2015, UNDP sought to identify and size potential venues for integrating Syrians under Temporary Protection (SuTP) into labor markets, with a specific emphasis on these five provinces.

Integrating SuTP into local labor markets is a multidimensional issue, with economic, social, political facets. This report deliberately focuses only on the economic.

Based on consultations with relevant stakeholders and drawing on experiences in similar settings, we have adopted a bifocal approach. We first analyzed the current state, with a view to understand what can be done in the near future (i.e. until 2018), and then adopted a medium-term view (i.e. between 2019 and 2023) to analyze further absorptive opportunities.

According to our estimates, the labor supply, which is now at 2.4 million (including SuTP), could reach nearly 2.6 million by 2018. We further estimate that the current labor demand of ca. 2 million, including also that for SuTP, could reach 2.1 million. At an unemployment rate of 8 percent, this suggests a need to create some 260,000 jobs between 2016 and 2018 (inclusive). This is in addition to the jobs that structural economic growth would already create.

Our analysis suggests several important issues:

- SuTP skill levels are relatively low. According to our estimates, the average skill level of SuTP is 1.87 points (based on the ILO's most recent international standards for the classification of occupations, ISCO-08). More importantly, skill levels of SuTP in the region (i.e. the five provinces in which the assessments were conducted) overlap significantly with those of the host communities, especially the unemployed. **The overlap points to possible competition for low-skill jobs.**
- Informal employment is high in the region. By one account, 30-50 percent of the labor force is informally employed.¹ SuTP have been employed, largely informally, in both manufacturing and agriculture. As the local businesses confirm, with the exception of a few occupations (e.g. shoemaking), SuTP have often been employed not for their skills but mainly as low-cost labor, which would vanish when SuTP are employed formally.
- The language barrier has been cited as one of the most important obstacles for the employment of SuTP. Consequently, in most services industries, there is little to no room for the employment of SuTP. For instance, if SuTP had possessed better skills in Turkish, it would have been reasonable to expect call centers with serious problems in filling open jobs (call agents) in the region to employ them already.

¹ Based on the difference between the total number of employed according to the records of Social Security Institution and employment rates in TUIK's main labor force indicators by province.

- ISKUR records at the provincial level reveal a number of immediate opportunities, especially for low-skill occupations not filled by host communities². Prevalence of low-skill jobs not filled by host communities suggest relatively easy opportunities for the economic integration of SuTP.
- The labor absorption capacities of provinces, as well as the types of skills they demand, vary significantly, underscoring the limitation of a one-size-fits-all solution. However, this does not obviate the need for regional coordination. Better coordination might overcome some of the mismatches that local markets cannot address alone.
- Tailored job placement mechanisms could facilitate integration of SuTP into labor markets. ISKUR renders services both for employers and job seekers. Extension of such services to SuTP in a tailored way may help faster integration of SuTP into local labor markets.

More can be done in the medium term. The five provinces at the center of this study have generally had high unemployment, despite relatively low Labor Force Participation Rates. Local economies have found it hard to generate sufficient employment opportunities even for local communities. If internal growth dynamics of local economies prevail, it may be difficult to absorb the additional labor supply of SuTP.

There is clear need for new employment opportunities. Yet to absorb labor demand, job creation will need to attend to the grounded skills of SuTP and to promising areas of development. Our analyses suggest that as many as 200,000 jobs could be created in the next five to seven years. We wish in particular to identify four areas of absorptive capacity: 1) potential improvement in key value chains, 2) SuTP resources-related labor supply, 3) expected SuTP-induced infrastructure and service demands, and 4) the likely multiplier effect of SuTP employment.

Capturing job creation potential requires a set of supporting measures, with careful regional coordination. A cohesive approach to development may help to better integrate SuTP into the region and would include: 1) infrastructure investments, 2) skills development, 3) the attraction and careful matching of investment to key sectors, 4) support for SMEs, and 5) an emphasis on corporate social responsibility. Cohesiveness is the keyword, as the impact of such an approach will be greater than sum of its parts. For instance, if efforts towards improving the economic infrastructure of the region are not complemented by investment incentives, employment creation opportunities will likely remain limited. Similarly, if vocational training programs are not complemented with SME development programs, the region may host trained but unemployed SuTP.

² ISKUR also keeps record of jobs that have been vacant for a while and report them as hard-to-fill occupations. Hence, low-skill occupations not filled by host communities refer to the vacancies to which host communities do not show interest.

Getting to Know the Syrians under Temporary Protection in Turkey

Syrian migration to Turkey has been steadily rising since 2011, often in dramatic peaks. A conservative estimate, based on historical growth rates of Syrians and excluding further inflows or outflows, suggests there could be an additional 192,000 SuTP in Turkey in the coming years, bringing the total population to nearly 2.9 million by 2018.³

1000 People 192 2.908 2,716 212 984 2.811 1,295 Mid 2013 -Mid 2015 -Expected SuTP Mid 2011 -Mid 2014 -Registered Expected net mid 2013 mid 2014 mid 2015 Feb 2016 SuTP population population by population in increase 2018 Feb 2016 2016-18

Exhibit 1: SuTP Population

SOURCE: Population Influx from Syria to Turkey, AFAD (2014); Directorate General of Migration Management (Feb 2016); World Bank Open Data

NOTE: Syria's annual population growth rate (PGR) was 2.3 percent in 2009 (Source: World Bank). This rate is not only the most recent rate unaffected by the crisis, but also the median of annual population growth rates in the 10-year period between 2000 and 2009. Based on 2.3 percent annual PGR, SuTP population will be ca. 2.9 million in 2018. If the SuTP population growth, and fast (i.e. 1.15 percent p.a.), SuTP population will be ca. 2.81 million in 2018. This estimation includes only population growth, and excludes any potential inflow/outflow.

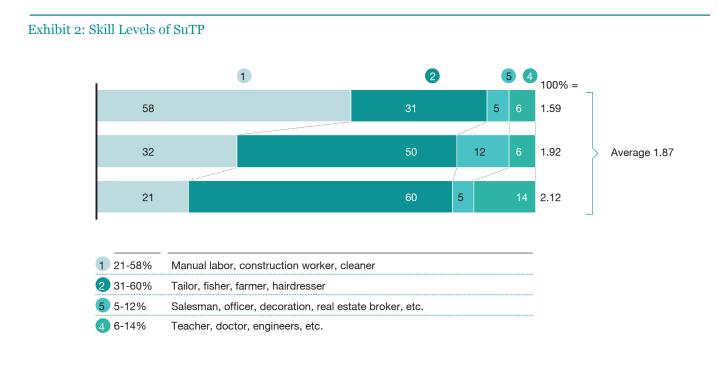
SuTP are dispersed across Turkey, with significant populations in most major industrialized cities. Almost half live in five provinces close to the Syrian border: Hatay, Gaziantep, Kahramanmaraş, Kilis, and Şanlıurfa (hereafter referred to as the region). Though home to only a small percentage of SuTP in Turkey, the majority of camps are in the region too. The demographic data on SuTP suggest a relatively young population, roughly equally distributed in terms of gender, and coming mostly from the cities of Aleppo and Idlib.⁴

³ Unless otherwise noted, all demographic information about SuTP and their locations in Turkey is based on data published by DG of Migration Management in Feb 2016. Population projections are based on World Bank open data on Syria.

⁴ The information on camps (i.e. temporary protection centers), and gender and age profile of SuTP is based on DG of Migration Management.

Three recent surveys⁵ further point to a relatively low level of educational attainment among SuTP. An ISKUR survey found that 18 percent of SuTP were illiterate; another 43 percent held a primary-school education, and only 6 percent had any university education. An AFAD survey yielded similar results; a UNDP survey pointed to the possibility of higher illiteracy rates.

When the outcomes of the three surveys are mapped onto ILO's International Standard Classification of Occupations (ISCO-08)⁶, all confirm, despite variations in the precise distribution of skill levels, that an overwhelming majority of SuTP arrive with an occupation skill set level of 2 or below.



SOURCE: UNDP, Kilis Provincial Directorate of ISKUR, AFAD, ILO

ISCO-08 categorizes occupations into 10 main groups and maps them into skill levels from 1 to 4 where skill level 1 represents elementary occupations which usually require physical strength and skill level 4 represents occupations that require higher education and complex working environments/job requirements. Occupations specified in the surveys were matched to the relevant skill level by the team. Occupations categorized as "other" in UNDP survey, distributed proportionately among the rest of the occupations.

This is in part a reflection of Syria's pre-crisis economy. In 2010, with a population of 21 million, Syria had a GDP of \$40 billion, with GDP per capita at \$2,000.⁷ To put this last figure into context, GDP per capita was roughly five times higher in Turkey at the time. Imports and exports both amounted to \$10 billion, with Syria's relatively modest oil industry accounting for much of the latter.

NOTE:

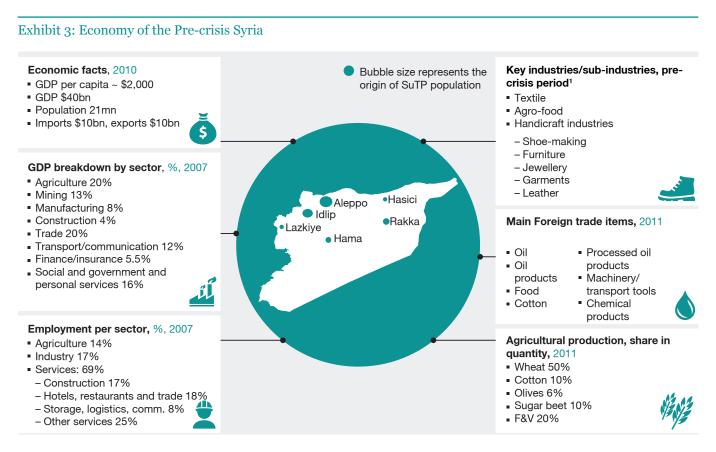
⁵ The surveys have been conducted by AFAD, UNDP, and ISKUR Kilis Provincial Directorate.

⁶ ISCO-08 ranks jobs on a scale of 1 (jobs that rely primarily on physical exertion) to 4 (jobs that demand higher levels of education and more complex working environments); examples of skill level 1 include manual laborers, construction workers, and cleaners. Skill level 2 includes tailors, fishermen, farmers, and hairdressers.

⁷ World Bank Open Data

A sectoral breakdown of GDP (2007) shows that agriculture and services (mostly low value added) accounted for more than 80 percent of Syria's pre-crisis economy. Much of the economy was based on agriculture and such industries or sub-industries such as textile production and handicrafts, especially shoemaking and furniture production.

In sum, most of the Syrian migrants come from an already relatively lowskilled economy, and arrive with such experience to Turkey's emerging urban economies.



SOURCE: World Bank, IGEME, Interviews, 2007 Syria Central Bureau of Statistics

Sizing Labor Supply and Demand in the Region

An understanding of the dynamics of labor supply and demand in the five provinces at the center of this study is crucial to understanding how the SuTP labor force might fit into the region's economy.

Labor Supply

Based on the age profile of the extant SuTP and the pre-crisis LFPR in Syria,⁸ we estimate that some 380,000 SuTP are ready to be added to the region's labor force in early 2016, with another 40,000 anticipated by 2018.⁹ The current local (i.e. host community) labor supply in the region, meanwhile, is around 2 million, with another 170,000 anticipated by 2018.¹⁰ Hence, the present labor supply of approximately 2.4 million, created by both the SuTP and host communities, is thus projected to reach 2.6 million by 2018.

SuTP labor supply is estimated to account for roughly 16 percent of the total labor supply in the region. A more granular review at the provincial level, however, suggests that in less populous provinces with a sizable SuTP community, such as Kilis, the SuTP labor force accounts for a much larger share of almost 50 percent of the total labor supply.

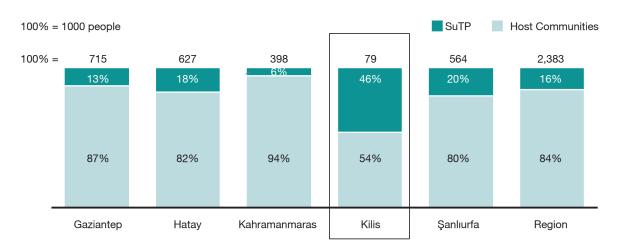


Exhibit 4: Estimated breakdown of Labor Supply by Host Communities and SuTP

NOTE: SuTP labor supply estimations are based on SuTP population in the target provinces and age profile of the SuTP population in Turkey (Source: Directorate General of Migration Management, February 2016), and female and male Labor Force Participation Rates in pre-crisis Syria (Source: World Bank Open Data).

⁸ Based on Male LFPR of 73 percent and Female LFPR of 14 percent (Source: World Bank).

⁹ Based on age profile of SuTP (Source: DGMM)

¹⁰ Based on TUIK data from Address-based Population Registration System, TUIK population projections, TUIK provincial labor force indicators (2013), TUIK Household Labor Force Surveys (2014-2015), Ministry of Development Medium Term Program of the Government (2016-2018, revised)

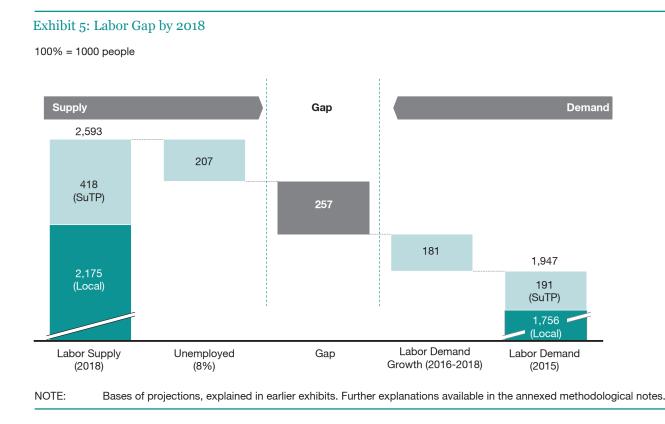
Labor Demand

The current labor demand of approximately 1.95 million is a result of both structural growth of the regional economies and growth related to the influx of SuTP (i.e. economic activities stemming from the crisis in Syria such as storage, packaging, and the transport of humanitarian aid, including those to Syria).

Based on economic growth rates projected by the Medium Term Program of the Government (2016-2018, revised), we estimate that the region could create as many as 180,000 additional jobs by 2018. Roughly one third of the projected job growth is expected to occur in Gaziantep.

The Gap

In summary, according to our estimates, labor supply in the region will reach 2.6 million, whereas labor demand will reach 2.1 million by 2018. Thus, in order to achieve an 8 percent unemployment rate, some 257,000 jobs would need to be created in addition to those expected from projected structural growth of the regional economies.



This is a daunting task for the region, and more so for such provinces as Kilis, Hatay and Şanlıurfa, as we discuss in the following section.

Absorbing Current Labor Demand

This section examines more closely the dynamics of each province. We first estimate labor demand and supply for 2018, split into SuTP and host communities. Our estimates are based on (a) GDMM data as of February 2016 on SuTP, (b) TUIK data (e.g. ADNKS, provincial labor force indicators, household labor force surveys) and (c) the Government's Medium Term Program's (2016-2018, revised) projections regarding economic growth and labor force parameters. These are further supported by assumptions based on such labor force indicators as unemployment rate, labor force participation rate, and population growth, as detailed in the annexed methodological notes.

A key assumption concerns the forecasted 2018 unemployment rate. We assume that the unemployment rate will be 8 percent for both the host communities and SuTP. Most would argue that this is overly optimistic if not impossible, given the already high unemployment rates in many provinces in the region, the recent surge in unemployment in general, and the quotas imposed by the directive that regulates employment of SuTP.¹¹ We would not disagree.

However, a resilient local economy would need to achieve such a level of unemployment, in spite of natural or human-made crises. Thus, our assumption intends to demonstrate the level of job creation required for resilient local economies to demonstrate the scale of the challenge for the region. One can assume higher unemployment rates, which may sound more reasonable, and which at the end of the day would produce a narrower gap. Yet this would underestimate the severity of the issue.

Analyses of present labor market conditions are based on ISKUR's provincial labor market research reports and have been conducted at the occupational level. The provincial directorates of ISKUR issue labor market research reports, which provide information on the number of open jobs, including hard-to-fill jobs and the number of placements facilitated by ISKUR. These are stock data. We have used the number of "registered" open jobs as a proxy indicator to estimate both the size of the immediate employment opportunities and the types of jobs on demand.

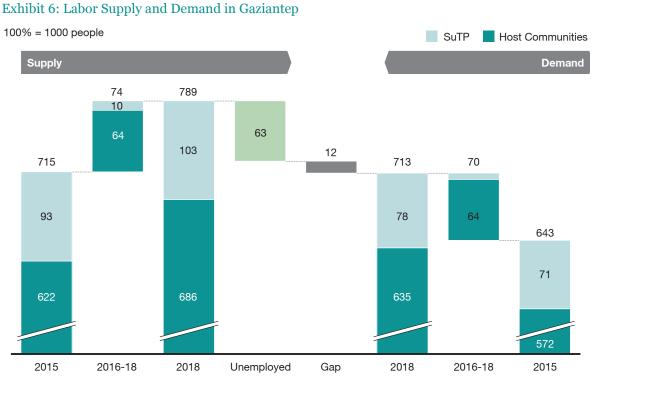
We calculate the average skill levels required by open or hard-to-fill jobs to understand whether these jobs can be filled by SuTP, given their skill levels. However, this is just an indication rather than a definitive answer. For instance, a job, even though the skill level it requires may fit into the SuTP skill profile, may not be filled by SuTP because of the language barrier. This would be especially true for open jobs in service industries.

In most provinces, we observe a considerable demand for low-skill labore.g. occupations as manual workmanship. Some of these jobs have already been filled by host communities through ISKUR. The remaining demand, however, is still sizeable in such provinces as Gaziantep. These jobs can be filled by SuTP through short training programs that would equip them with basic language skills and an understanding of the local business environment.

¹¹ Directive on Work Permits for Foreigners under Temporary Protection, Article 8 (Decree No: 2016/8375) http://www.resmigazete.gov.tr/ eskiler/2016/01/20160115-23.pdf

1 - Gaziantep

According to our estimates, Gaziantep's total labor supply could reach nearly 790,000 by 2018, with SuTP making up roughly 13 percent of the supply. Labor demand, meanwhile, is projected to reach 713,000 by 2018. Thus, our analysis suggests a gap of 12,000 by 2018, factoring in an unemployment rate of 8 percent (i.e. 63,000 unemployed).



NOTE: Bases of projections, explained in earlier exhibits. Further explanations available in the annexed methodological notes.

Based on ISKUR's provincial labor market research reports, we estimate that local businesses would have registered some 35,000 open jobs in 2015.¹² More than 65 percent of registered open jobs are in occupations such as manual labor and cleaning.

Based also on the past performance of the local economy, it is reasonable to assume that the Gaziantep economy could absorb such a gap. In our opinion, this is the case partly because Gaziantep has a sizable industrial base, composed of SMEs flexible enough to adapt to changing conditions. Secondly, a significant portion of the local economy still relies on low-skill and low-cost labor.

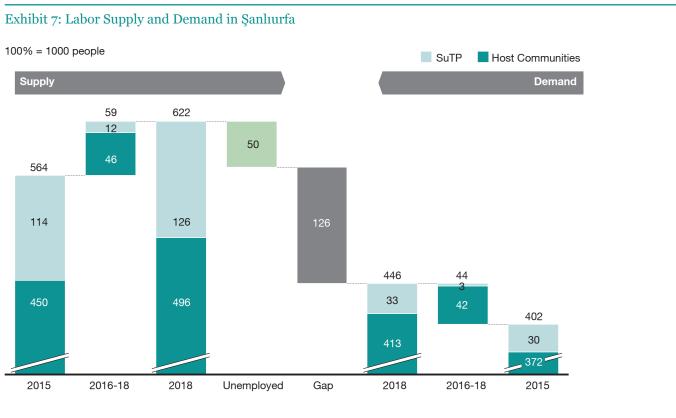
An unemployment rate of 8 percent, however, is higher than the unemployment rate that Gaziantep registered in 2013. As such, at this rate of unemployment, one may expect to see some competition between host community members and SuTP for low-skill jobs. However, local businesses complain about high employee turnover rates for low-skill jobs. Competition between SuTP and host communities may thus not be as intense as the numbers would suggest.

¹² At present, ISKUR's provincial labor market reports provide data on only the first half of 2015. We thus doubled the number of registered open jobs to estimate the full-year figures. We applied the same method in all other provinces.

2 - Şanlıurfa

Labor supply is projected to reach nearly 625,000 in Şanlıurfa by 2018, with SuTP labor making up approximately 20 percent of this supply. Labor demand, meanwhile, is expected to grow to nearly 450,000 by 2018.

Unlike Gaziantep, Şanlıurfa seems unlikely to fill the projected labor gap. Over the past three years, the city created roughly 13,000 jobs per year, less than one tenth of what the city would need to produce in order to meet projected demand.



NOTE: Bases of projections, explained in earlier exhibits. Further explanations available in the annexed methodological notes.

Registered open or hard-to-fill jobs do not offer a significant opportunity, compared to the gap to be bridged. Furthermore, services industries make up most of the registered open jobs, which can be fulfilled only by native Turkish speakers.

Considering this, agricultural activities seem to be the most promising area for SuTP employment in the short term in this province.

3 - Kahramanmaraş

The total labor supply in Kahramanmaraş is expected to reach nearly 425,000 by 2018, potentially outstripping demand by as much as 27,000, at an unemployment rate of 8 percent. Kahramanmaraş appears to have the capacity to fill the demand vs. supply gap.

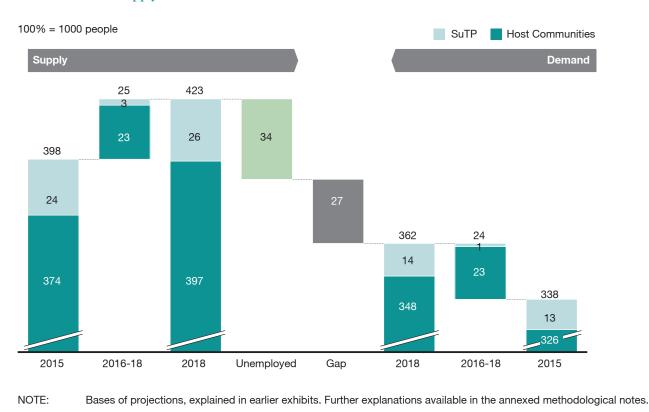


Exhibit 8: Labor Supply and Demand in Kahramanmaras

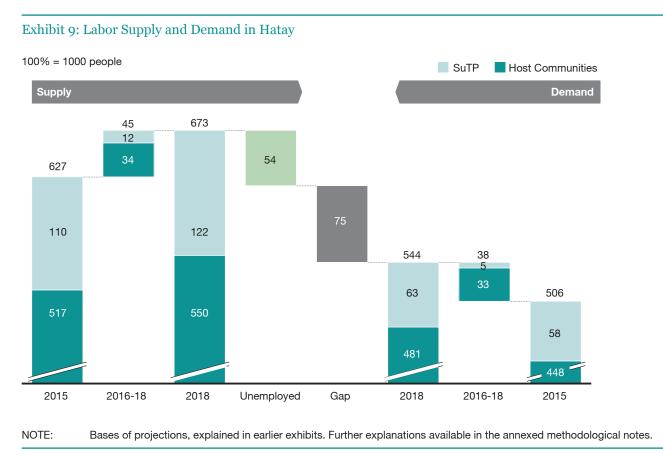
Open jobs in Kahramanmaraş offer significant opportunities in lowskilled occupations—for example, in manual workmanship and cleaning workmanship, which account for more than half of the registered open jobs in the province. Open jobs in the textile and apparel industry are another prominent cluster of opportunity. Opportunities within this cluster require machine-operating skills, which some SuTP may already possess or easily acquire, for textile was one of the most prominent industries in Aleppo—hometown of more than one thirds of SuTP.¹³

¹³ AFAD, Population Influx from Syria to Turkey (2014)

4 - Hatay

In Hatay, the total labor supply is expected to be roughly 675,000 by 2018, with SuTP labor constituting just over 15 percent. The city's labor demand growth is projected to grow to 544,000 by 2018.

Current job opportunities in Hatay are unlikely to fill the gap between labor demand and supply. Total employment figures in the city are roughly the same as they were in 2010, indicating that the city is already struggling to create additional jobs.

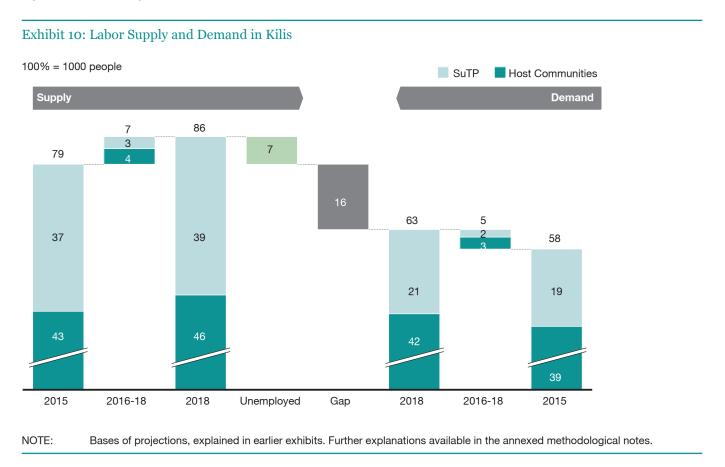


Similar to Şanlıurfa, Hatay would seem to face a significant burden of employment growth, which might be partially addressed through employment opportunities in the agriculture sector.

5 - Kilis

Kilis is expected to have an approximate total labor supply of 86,000 by 2018. Just over 45 percent of this is expected to be SuTP—a proportion unmatched in other cities. Labor demand in Kilis, meanwhile, is projected to grow to 63,000 by 2018. Assuming an unemployment rate of 8 percent, our analysis suggests a gap of 16 thousand, corresponding to 25 percent of the demand.

Kilis has added around 3,000 jobs every year over the past five years, suggesting that the city has taken a significant proportion of the influx of Syrians to Turkey.



Localized Interventions

Across the different provincial and urban economies of the region, there is a clear need to support job creation in areas that match the skills of the unabsorbed labor supply. Although much of the burden of economic integration falls on Şanlıurfa and Kilis, all cities face demand from a relatively under-skilled potential labor force.

Yet not all the profiled cities are the same. Labor demand in Kahramanmaraş and Gaziantep, for instance, suggests possibilities for work in textiles and apparel value chains, and in Hatay and Kahramanmaraş, in construction.

The local economies of Kilis and Şanlıurfa, meanwhile, are based heavily on service. The key point here is that any future economic plans to integrate SuTP into the labor supply will need to take into account both the skills of Syrians and the particular economic characteristics of provinces and cities where they have settled in Turkey.

Creating Additional Labor Absorption Capacity

As we indicated before, the five provinces at the center of this study have generally had high unemployment, despite relatively low labor force participation rates. This suggests that local economies have found it hard to generate sufficient employment opportunities even for the host communities. Thus, if the internal growth dynamics of the local economies prevail, the additional labor supply introduced by SuTP may not be easily absorbed.

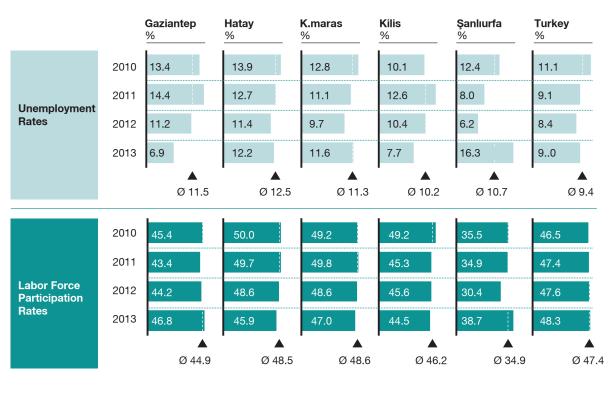


Exhibit 11: Unemployment Rates in the Region versus National Average

NOTE: Calculations are based on 2010-2013 Provincial Labor Force Indicators and Labor Force Household Surveys (Source: TUIK).

There is an obvious need for new employment opportunities. Yet to absorb the labor demand, job creation will need to attend to grounded skills and promising areas of development for SuTP.

Analysis suggests there may be four areas of absorptive capacity, which may leverage SuTP skills: 1) improvement in key value chains, 2) SuTP resources-related labor, 3) SuTP-induced infrastructure and service demands, and 4) the multiplier effect of SuTP employment. These have the potential to create as many as 200,000 additional jobs in the next five to seven years.

Exhibit 12: Additional Labor Absorption Capacity

	Definition	Context and focus areas	Potential
Improvement 1 in key value chains	 Change in the product mix, capability building, upgrade in exporting sectors in the region Filling structural shortage areas for non-preferred jobs 	Agriculture, livestock, foodTextilesMachine carpets	-32K
SuTP 2 entrepreneur -ship	 Jobs created based on capabilities of SuTP which existed in pre-crisis Syria Jobs created by SuTP investors 	 Syrian entrepreneurs setting up and expanding business in the region Craftsmanship in traditional Syrian sectors like shoe making, furniture and jewelry Export to Syria (leverage language & contacts) 	~12K
SuTP induced infra & services demand	 Jobs created based on new demand related to SuTP in the region 	 Infrastructure, social and municipal services and social housing for 1.3 million new inhabitants 	-95K
SuTP employment multiplier effect	Additional household demand for local goods and services based on increased income and jobs	 Participation of 1.3 million SuTP population to social and work life in the region, spending their earnings, salaries, aid etc. for food, clothing, housing etc XX Job creation potential between 2010 	60K

NOTE: Estimates on job creation potential in key value chains are derived from employment multipliers in World Input Output Database, based on a target output increase of \$100mn in key value chains (Source: World Input Output Database). Estimates on SuTP labor demand that may occur in relation to SuTP entrepreneurial resources are based on the number of Syrian-owned businesses and the employment that they create.

Estimates on SuTP-induced infrastructure and services demand are based on assumptions regarding number of employment opportunities per \$1mn infrastructure investment, and the SuTP service demand that they may create. Construction-related employment opportunities are FTE-adjusted.

1 - Improvement in Key Value Chains

The three most promising value chains for job creation are a) agriculture, livestock and food b) textiles and apparel, and c) machine carpets. These three value chains currently make up over 75 percent of the top ten employment sectors. They are furthermore present in multiple cities of the region, and match the existing skills of SuTP.¹⁴

Two further sectors for development are furniture production and shoemaking, though these sectors currently employ far fewer people than the other sectors. Yet these have a limited presence across the region, and have a limited share of total employment. They will be addressed in the following section.

Having identified the sectors most likely to provide employment opportunities, we analyzed six scenarios to provide an indication of the potential for job creation in value chains.

¹⁴ Employment data extracted from Ministry of Industry, Science and Technology (GBS). Textiles account for 62,000 jobs of a total of 185,000 (this, recall, among the top ten employment sectors). Agriculture, livestock, and food and machine-produced carpets account for 41,000 and 40,000 respectively. Textile work is present in three of the region's cities, agriculture/livestock/food in four, and carpet production in two. The closest sectors in terms of employment numbers are steel (12,000) and plastics (10,000); those though both do not match SuTP skills, and are found in only one city. The closest areas that match SuTP skills are furniture production (at 5,000 of total employment, spread across two cities), and shoemaking (4,000 of total employment, present in one city). The latter two will be analyzed in more detail in the next section.

Agricultural, livestock, and food (three scenarios):

- Improving fields and changing product mix: better irrigation and a switch to fruits and vegetables, from current reliance on cereals.
- Boosting food-processing capacity: investing in additional facilities able to create such durable processed foods as juices, canned goods, and dairy products.
- Increasing food trade with nearby Middle East countries: increasing foreign trade to neighboring markets, capitalizing on SuTP Arabic skills and regional connections.

Textiles and apparel (one scenario):

• Developing capability in manufacturing: increasing the capacity and productivity of the textile industry.

Machine carpet (two scenarios):

- Boosting capability in the production of synthetic yarn: developing the ability of major machine carpet input, currently sourced from abroad.
- Boosting the capacity of tufting carpet: developing a technique that accounts for roughly 70 percent of all carpets worldwide.

Scenarios vary in terms of ease of investment, capacity building, and labor intensiveness. Yet their potential to create employment is uniformly high.

The incremental job creation scenarios, above, would allow for the creation of up to 32,000 additional jobs in addition to extant structural growth. The majority of jobs (20,000) are envisioned in agriculture, livestock, and food industry, which constitute an important area for future investment and policy focus.¹⁵

A more detailed account of this scenario suggests a possible 9,000 jobs in crop production. Interviews with local agricultural officials revealed that a shift from cereals to fruits and vegetables could add more value and jobs.

The shift from cereals to fruits and vegetables requires more care than other crops, and an investment in irrigation.¹⁶ Yet the latter investment would be relatively low compared to the potential for job creation. As for food processing, stakeholder consultations have shown that certain areas have agricultural specialties that make them quite suitable for investment in processing: milk processing in Kahramanmaraş or grape processing in Kilis. These would require significant investments, but could yield as many as 7,000 additional jobs. As for increased trade in the Middle East, about 20 percent of Turkey's total agricultural export is based in the region. Meanwhile, just less than one-fourth of the country's agricultural exports are to Iraq and Syria. There is the possibility for expanded trade with nearby countries, which could draw on existing SuTP skills sets in language, social connections, and work experience with trade, with minimal required investments in vocational training. Development of this sub-sector could

¹⁵ Employment creation potentials in this section are based on employment multipliers, derived from MGI input-output tables and sector interviews.

¹⁶ Based on UNDP's experience gained during implementation of large-scale rural development programs (co-funded by UNDP, IFAD and MoFAL) that supported such transformative efforts and stakeholder consultations.

lead to the creation of up to 4,000 additional jobs.

The textile industry also has the potential to create as many as 4,000 jobs, through increased manufacturing capacity. Given the cost of required machinery, investment in such facilities would need to be substantial. Meanwhile, the skill set level required is high, necessitating intensive vocational training.

Analysis suggests the carpet industry could generate as many as 8,000 jobs, through the encouragement of yarn and tufting carpet production. Interviews revealed that much of the yarn used across the industry is imported. To create yarn production facilities requires substantial investments, yet could yield as many as 4,000 jobs. As for the mechanized production of carpets, Gaziantep is a major worldwide manufacturer of machine carpets. Seventy percent of floor carpets consist of tufting carpets and their machines are far more efficient than machine carpets. The investment required is considerable (around \$1 million per machine, not far from the cost for machine carpets), but sector interviews suggest that some producers are already transitioning to tufting carpets, and further investment could yield another 4,000 jobs.

2 - SuTP Resources-Related Labor Demand

Studies on SuTP resources and skill sets have suggested potential to create around 10,000 jobs. Key areas are shoemaking in Kahramanmaraş and Hatay, and furniture making in the latter. On the former, with a current total employment base of 14,000, and with 1,500 SuTP already working in the industry,¹⁷ these cities could have an additional employment potential of 6,000 jobs and would benefit from the existing skills of SuTP. There are particular opportunities in foremanship and cutting, which together account for more the vast majority of the industry's employment base. Specialized manufacturing has the potential to create up to 1,000 new jobs in Kahramanmaraş, and 5,000 in Hatay. There is also the possibility of higher value added through unique designs. Local businesspeople have praised SuTP skills in shoemaking, particularly in women's shoes. To capitalize on this potential, attention would need to be paid to financing infrastructural investment needs in manufacturing zones, and providing, when needed, vocational training in shoe design.

As for furniture, there are approximately 8,000 people already working in the industry in Hatay. As with shoemaking, a significant number of Syrians (roughly 1,000) already work in the area, drawing on the existing skills of SuTP. A significant part of the employment base, at 2,400, is in post-cutting, pre-dyeing production (turning, sanding, and fitting). Sanding requires little skill, but the other areas require qualifications. Dyeing employs some 3,200 people; however, it is often outsourced to smaller firms. Timber cutting employs some 1,200 whilst some 800 people are employed in packaging, which requires minimal skills. Local businesspeople have praised how Syrians entering the sector have kept costs down at a time when sale prices were falling. A specialized approach to the development of the furniture sector, paying special attention to financing areas of investment need, thus has the potential to create new areas of job growth.

¹⁷ Estimate on SuTP employment is based on information provided by local stakeholders.

Other potential areas for job creation stem from further SuTP skill sets and business investments. For instance, analysis suggests 2,000 to 3,000 jobs could be created by encouraging marketing and call centers for Arabic speakers, drawing on the language skills of SuTP. Additionally, some 1,000 jobs might could result from SuTP opening more businesses based in their particular skills and capital in specific sectors.¹⁸

3 - SuTP-Induced Infrastructure and Services

The SuTP population in the region has created an additional need for social infrastructure and services in such areas as health, education, social housing, water and waste management. The need for additional infrastructure and service provisioning capacity emerged mainly because of SuTP influx; however, once developed they would help address needs of the host communities as well.

According to our estimates, such additional infrastructure development and service provisioning efforts could provide as many as 90,000 to 120,000 jobs. However, as we will discuss later on, any infrastructure development effort should be based on thorough analyses that take into account the needs of both SuTP and host communities. Such needs analyses are beyond the scope of this report. In the absence of such analyses, we have adopted a top-down approach, made assumptions and used proxy indicators to estimate the labor absorption capacity that infrastructure development and social service provisioning efforts could create. Furthermore, we have focused on only three asset classes; other asset classes such as water management, waste (including solid) waste, roads would create additional employment opportunities too.

In due course, our assessments should be read with three caveats:

- Efforts towards development of the region's social infrastructure and social service provisioning capacity would create employment opportunities for both SuTP and host communities. Likewise, both SuTP and host communities would benefit from the additional capacity that such efforts would create.
- Our analysis is not based on a thorough infrastructure needs assessment study; and hence intends merely to provide an idea of the order of magnitude of potential employment opportunities.
- Our analysis is not exhaustive. Investments in infrastructure assets other than education, healthcare and housing could create additional employment opportunities as well.

Social housing and municipal services

Most potential jobs are in social housing and services. This would involve constructing houses for the hundreds of thousands of people living in the region (both host communities and SuTP), and supplying municipalities with personnel needed to deal with the everyday concerns of host communities and SuTP.

According to our estimates, constructing social houses to host 260,000 to 400,000 people could create some 50,000 to 80,000 jobs over the course of next five years.¹⁹

¹⁸ Based on sector interviews, and consultation with Gaziantep Chamber of Industry. The figures on potential employment from calls centers project the creation of two centers

¹⁹ Household sizes adjusted as per household sizes of SuTP (Source: UNHCR). 100m² apartments to host 6-8 persons. Investment unit costs (m²) vary across the provinces, ranging from TL450/m² to TL700/m². Employment multiplier of construction is 18.04 (direct, indirect and induced, FTE-adjusted; Source: WIOD, MGI)

Expansion of the municipal services to address the needs of SuTP as well as host communities may offer as many as 1,500 new jobs. This estimate is also based on top-down analysis, derived from number of municipal staff, required to serve the increased population in the region.²⁰

Healthcare Infrastructure and Services

According to TUIK, there are 87 hospitals with 13,116 beds, employing 33,187 healthcare personnel.²¹ The number of hospital beds per 1000 people ranges between 2.44 (Gaziantep) to 1.56 (Şanlıurfa), averaging 1.63 across the region.²² Similarly, the number of healthcare personnel per 1000 people averages 5.13 across the region. We use these two parameters, in parallel, to identify the need for additional beds, healthcare personnel and hospitals that will be required to deliver healthcare services to SuTP. In cases where the provincial capacity utilization rates for these two parameters are lower than the regional average, we assume that there is room for increasing the capacity utilization rates (i.e. healthcare services could be delivered to SuTP without making additional investment or mobilizing more healthcare staff).²³

According to our estimates, the construction of new hospitals²⁴ and the addition of medical and non-medical workers to deliver or facilitate delivery of medical services could add some 18,000 jobs. Some 8,500 of these jobs will be needed for the delivery of healthcare services, requiring medical degrees and license to practice medicine in Turkey.

Exhibit 13: Job Creation Potential through SuTP-induced Infrastructure Development

		Job creation context	Employment potential
Education	School infrastructure	Construction of~450 new schools in the re	gion ~8K
	Education personnel	 Teacher and other personnel required to so SuTP youth 	chool ~13K
Health	Hospital infrastructure	 Construction of 13 new hospitals in the reg to support SuTP healthcare needs 	jion ~9K
	Healthcare personnel	 Doctors, nurses, and other healthcare personal to support SuTP healthcare needs 	onnel ~9K
Social and sheltering	House infrastructure	New house construction for 260-400K peo	ple ~50~80K
	Municipal services	 Municipality personnel need for SuTP population in the region 	~1.5K

Services and infrastructure assumed to be provided in a 5-year timeframe

NOTE: Numbers of schools, hospitals and houses that we used as the bases of our estimates are indicative, and are not based on needs or gap analyses. The actual need might be more or less. Estimations are based on the assumption that TL1mn investment will create 18.04 jobs (FTE-adjusted).

²⁰ Headcounts of some municipalities are not public information or are not accessible. In such cases, publicly available information on municipal budgets has been used as proxies to estimate the number of admin and other municipal staff (including contracted workers). Some municipalities use third-party services to deliver certain municipal services.

²¹ National Health Statistics (Distribution of hospitals and beds by provinces, 2014; Distribution of health personnel by provinces, 2014) ²² National average is 2.66 as per TUIK National Health Statistics (2014)

²³ For instance, in Kills number of healthcare staff per 1000 people is 7.52, comparing favorably against all other provinces in the region. If this rate is reduced to 5.13 (i.e. the regional average), the existing healthcare personnel can cover the needs of some 60,000 SuTP without the need for any additional healthcare staff. However, the number of beds per 1000 people in Kills is 1.63, giving almost no room to improve capacity utilization rates of hospitals beds. Signaling that there may be a need to establish a new hospital in the province. The same analyses are made for all provinces in the region.

²⁴ Our estimates are based on the assumption that 13 hospitals with ca. 2100 beds will be built. Our calculations take into account the capacity of the existing hospitals. We estimate the additional capacity that existing healthcare infrastructure can absorb by adjusting the current bed per 1000 people and healthcare staff per 1000 people into account. A more granular review may yield different results.

Education Infrastructure and Services

According to our estimates, there could be as many as 400,000 schoolage SuTP students in the region over the next five years.²⁵ Assuming a 70 percent net enrollment ratio, across primary, lower secondary and secondary education,²⁶ and 12-classroom schools, there could be a need to build more than 750 schools in the region.²⁷

Thus, education infrastructure and services is yet another are for potential growth in employment. Some 8,000 workers (FTE-adjusted) could help construct more schools in the region.²⁸ Furthermore, some 12,000 could work as teachers and other school personnel capable of addressing the needs of SuTP youth.²⁹

Achieving higher enrollment ratios would increase the need for schools. For instance, an 85 percent enrollment ratio could require construction of as many as 940 schools of same size, in which case some 9,500 workers (FTE-adjusted) could be employed for construction activities, and some 15,000 teaching and non-teaching personnel could be employed for provisioning of education services.

4 - The Multiplier Effect of SuTP Employment

Each job to be created for SuTP should be expected to create or induce, directly or indirectly, the creation of additional jobs, as suggested by economic theory (i.e. employment multiplier effects). According to our estimates, 190 thousand SuTP who are presently employed could create as many as 60 thousand further jobs because of increased demand for goods and services, implying an employment multiplier of 0.32 points.

²⁵ Our estimates are based on the age profile of SuTP and number of SuTP in the region, as published by DGMM (Feb 2016)

²⁶ According to UNICEF statistics for Syrian Arab Republic (http://www.unicef.org/infobycountry/syria_statistics.html - accessed in Jan 2016), net enrollment ratios for primary and secondary schools (2008-2012) are 99.6 percent and 67.9 percent (male-female average), respectively.
²⁷ We used provincial averages of students per classroom, based on data in National Education Statistics 2015/'16 (MoNE).

²⁸ We assume that constructing a 12-classroom school would cost TL1mn, which is the average cost that we identified by taking into account the results of similar tenders (kik.ekap.gov.tr, ihalenet). We use WIOD and MGI employment multiplier of 18.04 (direct, indirect and induced; and FTE-adjusted) for construction industry (2011) per TL1mn increase in output. We assume half-day education for primary and lowersecondary students.

²⁹ We assume one non-teaching personnel per 15 classrooms. We used the minimum teacher per student ration in the region to estimate the number of teaching staff. Construction jobs are temporary in a five-year timeframe, whereas jobs in services are permanent.

Making Progress

Leveraging the existing, as well as creating additional, labor absorption capacity in the region will require a set of measures, which might include, *inter alia*, investing in infrastructure, developing skills, supporting SMEs, attracting investment and implementing corporate social responsibility programs. We discuss these potential initiatives in brief below.

This section should be read with the caveat that the measures mentioned herein are non-exhaustive. However, they do include all the actions, which are commonly cited or proposed by national and local stakeholders, including SuTP opinion leaders, as possible vehicles to create labor demand in the region. As such, additional measures that are not mentioned here could be introduced depending on emergent needs and availability of funding to address them.

Our main message is that most of the measures that respond to the extraordinary situation in the region are likely to create some form of employment opportunities, and in most cases, both the host communities and SuTP would stand to benefit from these opportunities. In terms of impact, cohesiveness will matter the most. As we describe below, most of the measures are interrelated and would create the maximum impact only if they are designed, developed and implemented in a cohesive manner.

1 - Infrastructure Development

Any infrastructure development effort should be based on a thorough needs analysis³⁰, and pursued in accordance with a diligently designed financial plan and a time plan. Any infrastructure investment, economic or social, to be made in the region are no exception.

Social Infrastructure

Social infrastructure development requires province-specific analyses, based on a portfolio approach that includes not only the development of new infrastructure assets, but also the renewal or renovation of existing assets for greater asset-specific and system-wide productivity.

The objective function of social infrastructure development is to ensure sustained delivery of social services to both SuTP and host communities. Employment creation associated with social infrastructure development is an interim "side benefit". As we indicated earlier, developing social infrastructure (social housing, hospitals, schools) of the region could create significant employment opportunities. However, most of these jobs would be construction-related, and hence would create employment opportunities only during the construction phase of the investments.

³⁰ Such an assessment is beyond the scope of this report.

Economic Infrastructure

The case for economic infrastructure development is similar, in the sense that development of such infrastructure also requires diligent planning based on a thorough needs analysis. Economic infrastructure development (e.g. organized industrial zones), however, would not only create employment opportunities during the construction phase, but also enhance economic activity and trigger more sustainable employment opportunities in the medium- and long-term.

Consultations in the region suggest that brownfield or greenfield organized industrial zone development has the potential to create some 125,000 jobs within a decade. Yet, unlike social infrastructure development, the real job creation potential of economic infrastructure development would be observed once the infrastructure is built and businesses making use of it arrive. This implies that any economic infrastructure development, especially the sizeable ones, such as Polateli organized industrial zone, will need to be accompanied by efforts on skills development, investment attraction and SME development, all of which we discuss below.

2 - Skills Development

Developing vocational skills of SuTP can facilitate their integration into labor markets. Such skills development efforts may range from basic Turkish Language training for those already in the labor force to development of customized curricula to help SuTP gain vocational skills relevant not only for the employment opportunities in the region, but also for the job opportunities that possible reconstruction efforts in the post-crisis Syria may create. As such, in structuring/designing such skills development programs, short- and medium-term possibilities and scenarios might be taken into consideration.

Skills development efforts that are expected to create short-term impact will need to build on the extant skills of SuTP and focus on jobs that are high on demand and/or hard to fill. As our analyses in the preceding section have suggested, occupations that require elementary skills e.g. manual workmanship, cleaning workmanship, could be considered "low hanging fruits". Furthermore, social and economic infrastructure investments could provide SuTP with employment opportunities, especially for elementary construction workmanship.

On the host community front, awareness raising activities may be needed to encourage host communities to embrace and welcome SuTP. Consultations in the region suggest some local businesses have found hard to count on SuTP's continued and timely presence, though these observations are rare.

SuTP's entrepreneurial capacity and artisanship provide yet another venue for absorbing labor demand, including self-employment in areas, such as shoemaking, confectionary etc. As such, skills development efforts that target SuTP who have started or plan to start their own businesses may also be beneficial.

Making long-term projections, in a setting defined by many uncertainties, is not easy. Long-term employment opportunities will come both from structural growth of the economy and possible transformational efforts geared towards enhancing competitiveness of the local economies.

Furthermore, increased formal education possibilities for SuTP youth will help facilitate their journey from education to employment.

Of critical importance here is matching job skills with local industry demand, through a collaboration program with relevant authorities that are able to continuously monitor developments and establish facilities for career planning and advisory. This would mean paying close attention to the specific labor-market needs of cities and opportunities for further improvement.

3 - SME Development

Our consultations suggest that most donor agencies are interested supporting such initiatives as the establishment and operationalization of technical and vocation training centers or programs that would directly reach out to SuTP. This is understandable. However, in the absence of growing SMEs with sufficiently large business volumes to employ more people, the impact of vocational trainings to SuTP may be limited. Adverse impacts are also possible. For instance, if SuTP are trained but not employed, they may lose motivation to attend further such training programs, in which case the vocational training capacity to be created in the region may become obsolete. As such, offering support for SMEs in the region through advisory, operational, and financial means will likely be critically important for local and SuTP employment.

In some cases, the impact of SME development on SuTP employment may not be immediately visible, for it will take some time for SMEs to grow and create additional employment opportunities. However, once SME development programs start bearing fruit, their impact on SuTP employment will likely be high.³¹ Furthermore, the employment opportunities created are likely to be longer lasting and sustainable, compared to temporary employment in construction industry or high turnover jobs such as manual workmanship.

4 - Investment Attraction

Foreign (or domestic) direct investment could further support job creation. National stakeholders, working with local stakeholders, could create an awareness program on favorable business investments. Additional opportunities may be in funding for investment support agencies to develop local plans and projects, capacity building, and investment promotion, with a focus on projects that are quickly and easily implementable, and with significant yields in terms of GDP, employment, and export.

Attracting investment will require inter alia the development of economic infrastructure in the region. Certain investments such as household appliances and food processing will also require a competitive local supplier base, which can be supported through SME development programs.

³¹ Please refer to impact assessments conducted for EU Business Centers (2007) and GAP Entrepreneurship Support Centers Project (2007) for assessments on impact of SME development services on employment creation.

5 - Corporate Social Responsibility

Corporate social responsibility (CSR) can also play an important role in job creation and integration. There is demonstrable interest among large Turkish corporations and holdings, as well as international investments across the EU and the Middle East, in supporting the region through CSR programs.³² This involves both raising awareness, among national and global companies, of the opportunities within the region, and fostering platforms between leaders and investors with a number of CSR projects to guide investors on how to meet the investment needs of the region.

The five measures we presented above could help to address common concerns that arose during workshops conducted for this study and interviews with local stakeholders in each target city: matters of language, cultural integration, infrastructure, industrial development, and a focus on city-specific industries with potential for growth.

³² Source: UNDP's consultations with the private sector companies in Turkey.

Appendix

I - A Closer Look at Target Cities and Value Chain Scenarios

How, then, to address the needs and potential of each city? Answering this question requires a careful look at the particularities of each city in the target region, beginning with Gaziantep.

The rapid influx of Syrians into Gaziantep coincided with a period of economic growth. Gaziantep has the largest registered employment base in the region, and in recent years, the city has seen this base expand at a rate of nearly four times that of the rest of Turkey. The textile industry is of particular importance in the city. Gaziantep also has a lively export base, sending cereals, textile, and chemicals to Iraq, Italy, the USA, Saudi Arabia, and Syria. Exports have furthermore been growing at roughly twice the pace of the rest of the country since SuTP began to arrive in 2011. Exports to Syria nearly tripled in the same time period. Meanwhile, SuTP are increasing their presence within the city's economy. Though small in scale and limited in capital, a steady number of businesses are integrating into Gaziantep's traditional industries, particularly in textiles, food, and shoemaking.

Kilis presents a different situation. Business life in the city is based to a large degree on wholesale and retail trade, and among registered employment, the public sector takes the lead, with no other sector having a distinct share in either employment levels or average firm size. Similar to Gaziantep, though less dramatically, the influx of SuTP into Kilis also came with a growth in employment, with the city's employment base expanding at just over the national average. Though rather limited in comparison to other cities in the region, Kilis exports overwhelmingly to Syria and Iraq, concentrating on cement, furniture, cereals, and textile, and has seen its export base increase at a rate close to that of Turkey more generally. While export to Syria remains small relative to other regional cities, the influx of SuTP has made such exports grow from under \$1million to \$30million in 2015³³. And SuTP are increasingly integrating into the domestic economy. Many businesses are unregistered, particularly in the service sector (particularly restaurants and grocery stores). Manufacturing, foreign trade, and construction account for the bulk of registered SuTP businesses.

Kahramanmaraş is something of an outlier in the region. The influx of SuTP seems to have had a negligible effect on its employment base, which has barely fluctuated over the past four years. Meanwhile, the city's economy is squarely focused on textiles, which predominates both in terms of employment base and average firm size. Yet unlike other regional cities, Kahramanmaraş's export destinations are not dominated by nearby Middle Eastern countries; most textiles and other raw materials are sent to such developed countries as Italy, Germany, and Spain. Since the influx of SuTP, export in Kahramanmaraş has grown at a rate that is less significant when compared with other target cities. Nor does the city carry out significant trade with Syria. On the whole, the arrival of SuTP to the city has had limited effect on its economy.

³³ Tim- Turkish Exporters' Assembly

Şanlıurfa also presents unique characteristics and challenges. Since the arrival of SuTP, unemployment has nearly doubled in the city, and labor force participation rates have grown as well. Across the same period, the city's employment base grew at roughly the same rate as that of Turkey in general. The public sector accounts for much of the city's total employment, with no other sector predominating either in terms of employment levels or average firm size. Şanlıurfa's export base, concentrated on furniture, cement, electronics, and steel, is tightly tied to nearby Middle Eastern countries, and has grown significantly since the arrival of SuTP, at a rate over three times that of Turkey's average. While mostly trading with Iraq, the arrival of SuTP has seen trade with Syria grow from very little to nearly \$46 million between 2011 and 2015.

Finally, in Hatay, the arrival of SuTP has had a negligible effect on the city's employment base, with unemployment rates roughly the same as before and labor force participation rates decreasing significantly. Similar to other regional cities, the public sector takes the lead in Hatay's total employment base, while no other industry except the manufacture of basic metals has a significant share in both employment levels and average firm size. Hatay's exports are based largely on steel, followed by fruits and vegetables, sent to Iraq, Saudi Arabia, Russia, Syria, and Egypt, among other countries. On the whole, exports have not fluctuated much since the arrival of SuTP. Yet after their arrival, exports to Syria have more than doubled.

II - Value Chain Scenarios

One important area for development involves the irrigation and conversion of cereal lands to fruit and vegetables, which analysis suggests, could yield up to 9,000 jobs.

Agriculture is especially widespread in Şanlıurfa, which has plenty of potential to increase employment. Currently a very high proportion of land in the city, and much of the value produced, is devoted to cereals. Current areas for development include field improvement, product mix change, food processing, and a number of more general potentials. Field improvement involves increased irrigation, which stands to double the current area of irrigable fields, adding nearly 1 million jobs. Cotton harvesting stands out as a particularly promising area for job creation. As for product mix change, Şanlıurfa has managed to obtain the same value from fruits and cereal through the contribution of cotton. Converting more cereals to vegetables would create further value.

Şanlıurfa also has the capacity for further development in processing both farm and animal products, especially dairy products and fruits and vegetable processing. There is a particular potential for encouraging more dairy production in a livestock industry now mostly focused on meat production. Cumin harvesting is another area that could expand, if enough labor is added.

Beyond agriculture, there is also scope to expand the textile industry, especially in terms of dyeing and finishing, which is currently limited by a lack of water. Inefficient harvesting practices in the cotton industry also result in the loss of nearly 200,000,000 TL per year³⁴. Providing more water to industrial zones and training cotton producers can both boost efficiency and value.

Agricultural production is also a promising field for development in Kahramanmaraş, where farming alone now accounts for 1.4 billion TL in created value. Here, too, much of the current production is in cereals. There is also a growing livestock industry. Kahramanmaraş could benefit particularly from increased irrigation, which could increase second and third harvests, produce higher yields, and support employment growth. Switching to greater fruit and vegetable production has the possibility to add both more revenue (potentially up to 3-6 times more) and expand employment, and would need to be incentivized in the long term. As with Şanlıurfa, dairy products and vegetables can be processed to add value, with cold-chain construction playing an important role. This would further meet clear local demand. Further areas for development include the improvement of the livestock industry, which requires training more shepherds. The walnut, almond, and olive industries could also be improved in terms of productivity, through training laborers on collection practices.

Hatay has a more equitable distribution of land use, spread fairly equally across cereals, fruits, and vegetables. The region has a relatively limited livestock industry, compared to other provinces in the region, and has a sizeable poultry industry. As with other regions, one of the key areas for development is in the improvement of irrigation infrastructure, which would allow for the maximization of production and higher employment.

³⁴ Source: Şanlıurfa workshop

Greenhouses are another promising area for development, particularly in the Samandağ district. This stands to increase product mix and employment, through continuous and more productive farming methods, and is an important area for further incentives.

Food processing is also a promising space in Hatay. The olive oil sector is a space for potential development, particularly if a sizeable refinery could be built. Processing peppers into paste and dried goods also has potential, as does laying poultry, which has grown significantly in recent years. All such sectors would need more focus, through incentives and trainings, to add value and boost employment. A qualified livestock zone, currently in the expropriation phase, represents a further important area for development and expanded employment, with opportunities through training in shepherding and relevant fields, in dairy farming and biogas.

Agriculture in Kilis is minimal relative to the other cities, and would likely result in limited job creation. As with other cities, irrigation can lead to a degree of job creation. As cereal production is not a major part of the economy however, product mix change is less relevant; more important is the encouragement of the cultivation of value-adding fruit and vegetables through constructing more greenhouses. The broiler industry, meanwhile, is growing in Kilis, but the city is not in the slaughtering and packaging steps of the value chain. Poultry companies are a space for incentives, with the training of a skilled labor force an important space for investment. Pepper production is a space for further development, as is processing in the oil value chain, extending to production, bottling, and logistics. For the latter, interviewees suggest existing processing facilities could be converted to oil refineries and technical education offered.

III - Methodological Notes

Labor Supply and Demand (Host Communities)

We estimate labor supply by multiplying non-institutional working age population³⁵ by labor force participation rate (LFPR).

Working age population in each province is available until 2015. In order to estimate the working age population of a province between 2016 and 2018 (inclusive), we multiply the average share of working age population across the total population over the last five years by projected population of the target province.

The share of non-institutional population in the total population is available only at the national level. We assume that the province-level share of the non-institutional population in total population will be the same as national average i.e. 97 percent.

The most recent province-level labor force statistics belong to 2013. In order to bring 2013 province-level LFPR to 2015, we use the growth rate of the LFPR at the national level. To estimate the province-level LFPR between 2016 and 2018 (inclusive), we use the national-level LFPR projections (growth rates) of the Medium Term Program of the Government (2016-2018, revised). In other words, we assume that recent province-level LFPRs will change at the same rate with the national average, and in the same direction.

We estimate labor demand by multiplying labor supply by employment rate (ER). The most recent ER at province-level again belongs to 2013. Parallel to our approach for estimating labor supply, we assume that province-level ERs will increase or decrease at the same rate with the national average.

Sources include:

- Address Based Population Registration System, TUIK
- Main Labor Force Statistics by Province, TUIK
- Household Labor Force Statistics, TUIK
- Population Projections, TUIK
- Medium Term Program of the Government (2016-2018, revised), Ministry of Development

Province-level Labor Supply and Demand (SuTP)

SuTP population data, including age profile and gender, is published by GDMM (Februar 2016). The population growth rate of SuTP is based on World Bank data. We use 2009 population growth rate of 2.3 percent, which is also the median population growth rate in the 10-year period between 2000 and 2009. However, 15+ age population estimations are not based on this growth rate; here we rely on actual age profiles of SuTP.

³⁵ The population of 15 years old and over within the non-institutional civilian population.

SuTP LFPR (segregated by gender) is also based on World Bank data (national estimates rather than ILO estimates). We must however underline that Syria's pre-crisis LFPRs are quite volatile. Hence, for both male and female LFPRs we take the average LFPRs between 2006 and 2010 (i.e. 73 percent for male and 14 percent for female). We do not foresee any change in SuTP LFPR by 2018.

We assume that the share of institutional population in total SuTP population is negligible.

Sources that we use include:

- Directorate General of Migration Management
- World Bank Open Data

Labor Demand Gap

Based on the above estimations on labor supply and demand, we estimate the labor demand gap as follows:

$$LDP=LS \times (1-UR)-LD$$

Where;

- LDP is labor demand gap,
- LS is labor supply
- LD is labor demand
- UR is unemployment rate

Average Skill Levels of the Open and Hard-to-fill Jobs

The average skill levels of open and hard-to-fill jobs are the weighted averages of sum of number of open or hard-to-fill jobs, multiplied by the corresponding ISCO-08 skill level for each occupation. We assume that open or hard-to-fill jobs, classified as "others" are equally distributed among the defined jobs in terms of skill levels.

$$ASL = \frac{\sum oj_i \times sloj_i}{\sum oj}$$

Where;

- ASL is average skill level of open jobs in a province
- oj is the number of open jobs for an occupation
- oj, is the number of open jobs for occupation i
- sloj_i is the skill level of occupation i, based on ISCO-08 on a scale of 1 to 4.

Other assumptions that we make can be found in the footnotes of the slide deck that supplements this report.

IV - List of Consultations

This report has been produced in consultation with national, regional and local stakeholders, to which we are thankful for their time, collaboration and contributions.

- Ankara
 - AFAD
 - TİSK
- Gaziantep
 - Chamber of Industry
 - Chamber of Commerce
 - Provincial Directorate of KOSGEB
 - Free Zone Directorate
 - Organized Industrial Zone Directorate
 - İpekyolu Development Agency Investment Support Office
 - Provincial Directorate of Migration Management
 - Provincial Directorate of Disaster and Emergency Management
 - GAGIAD-Gaziantep Young Businessmen Association
 - Regional Directorate of TUIK
 - Gaziantep University
 - [Potential] SuTP employers
- Kilis
 - Chamber of Commerce and Industry
 - İpekyolu Development Agency Investment Support Office
 - Provincial Directorate of Migration Management
 - Directorate of Disaster and Emergency Management
 - Provincial Directorate of ISKUR
- Kahramanmaraş
 - Chamber of Commerce and Industry
 - DOGAKA Investment Support Office
 - Provincial Directorate of Migration Management
 - Provincial Directorate of Disaster and Emergency Management

- Provincial Directorate of ISKUR
- Provincial Directorate of Food, Agriculture and Livestock
- Provincial Directorate of KOSGEB
- Kahramanmaraş Organized Industrial Zone Directorate
- [Potential] SuTP employers
- Şanlıurfa
 - GAP Regional Development Administration
 - Chamber of Commerce and Industry
 - Harran University
 - Karacadağ Development Agency Investment Support Office
 - Provincial Directorate of Migration Management
 - Provincial Directorate of Disaster and Emergency Management
 - Provincial Directorate of ISKUR
 - Provincial Directorate of Food, Agriculture and Livestock
 - Provincial Directorate of KOSGEB
 - Organized Industrial Zone Directorate
 - GAP EKODER
 - GAP YENEV
 - [Potential] SuTP employers
- Hatay
 - Chamber of Commerce and Industry
 - Provincial Directorate of ISKUR
 - Development Agency Investment Support Office
 - Handmade in Hatay-ANMOGEP



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