



RURAL MIGRATION IN TUNISIA DRIVERS AND PATTERNS OF RURAL YOUTH MIGRATION AND ITS IMPACT ON FOOD SECURITY AND RURAL LIVELIHOODS IN TUNISIA

REVISED RESEARCH REPORT JANUARY 15 01 2018

Table of contents

Executive summary	10
Index of tables and figures	14
Introduction	16
1 The context for analysis of rural youth migration in Tunisia	17
2 Focus for this study and methodology	20
2.1 The three migrant-sending rural areas	20
2.2 Quantitative methodology	23
2.2.1 The survey in migrant-sending rural areas in Tunisia	23
2.2.2 The survey in urban Tunisia and Italy	24
2.3 Qualitative methodology	25
3 Analysis: an introduction	26
3.1 The three migrant-sending areas in rural Tunisia	26
3.2 The households interviewed in rural Tunisia	28
4 The determinants of rural youth migration	30
4.1 Micro-, meso- and macro-levels of analysis	30
4.1.1 Micro-level	30
4.1.2 Meso-level Determinants at Household Level	31
4.1.3 Macro-level Contextual Determinants	32
4.2 The determinants of rural youth migration: data analysis and results	34
4.2.1 Comparing households with and without migrants	34
4.2.2 Analysis at the individual level: a focus on migrants and current residents in origin (from migrant and non-migrant households)	
4.2.3 The role of education	38
4.2.4 Reasons for migration and status before migrating	40
4.2.5 A multivariate exploration	43
4.2.6 Evidence from focus groups on determinants of youth migration	45

5 Patterns of Rural Migration	7
5.1 Distinguishing between migration types	7
5.2 Patterns of rural migration: data analysis and results	3
5.2.1 The characteristics of migration moves	3
5.2.2 Channels for migration and networks49)
5.2.3 Return intentions51	L
5.2.4 Evidence from focus groups on patterns of rural youth migration 52	2
6 Effects of Rural Migration on the Livelihood of Origin Areas	1
6.1 Perspectives on migration impacts	1
6.1.1 Evidence from the literature on migration impacts in Tunisia54	1
6.2 Effects of Rural Migration on the Livelihood of Origin Area: data analysis and results 56	õ
6.2.1 Labour market status	õ
6.2.2 Contact and involvement of migrants with origin place and household)
6.2.3 Remittances61	L
6.2.4 Evidence from the focus groups on impacts of rural youth migration	3
Conclusions and recommendations	5
References)

Executive summary

The evidence presented in this report enhances understanding of rural out-migration by young people in Tunisia to facilitate positive impacts on food security, agriculture and development in rural areas. A key contemporary policy challenge is that rural migration, including circular and seasonal migration, is often not accounted for in national policies, strategies and programmes for agricultural and rural development. There is little evidence about the determinants of youth migration from rural areas and its potential impacts on food security and rural poverty in origin areas. The persistence of knowledge gaps limits the prospects for developing informed policies and targeted interventions to improve the management of rural labour mobility and enhance agricultural and rural development in migration-prone rural areas.

To address these knowledge gaps this report analyses three key issues:

- the determinants of migration and mobility in Tunisia and their relative influence on the likelihood of rural youth migrating;
- patterns and types of rural youth out-migration in Tunisia, including temporary and circular migration;
- the impact of rural youth migration in Tunisia on rural livelihoods and societies in origin regions and the material and non-material contributions made by migrants to the development of origin regions.

In Tunisia, as in many other developing countries, migration is a key component of rural livelihood strategies and can enable income diversification and counter food insecurity. For an increasing number of people, forms of 'distress migration' are becoming a last resort option, including young women and men moving from rural areas to escape conflict, political instability, poverty and food insecurity, as well as the effects of demographic change, pressure on natural resources and manmade natural disasters. Rural youth are particularly vulnerable to such distress migration as the only option to meet their aspirations and needs.

A key demographic characteristic in Tunisia is its large youth population bulge, with about 47 percent of the population under 30 years old. Indicators of the economic potential of Tunisia and its population have yet to be translated into improved employment levels and opportunities for young people. In 2014, the World Bank noted that the Tunisian 'economy has remained stuck in low performance, with high unemployment, and has been unable to take off—there is broad agreement that the inadequate economic performance is at the root of the 2011 revolution' (World Bank, 2014: 300).

The study focuses on three rural areas: the Makhtar delegation in the Siliana governorate, the Ain Drahem delegation in the Jendouba governorate, and the Benit Kdech delegation in the Médenine Governorate. The study areas were selected on the basis of three indicators extracted from the Tunisian Recensement Général de la Population et de l'Habitat 2014: urbanization level; out-migration rates; and, the percentage of rural migrants aged between 15-34 in the total out-migrant population.

To generate original data and information, a mixed methods approach was used that combined quantitative and qualitative components, including a survey and focus groups in origin rural areas in Tunisia and in destination urban areas in Tunisia and Italy. Quantitative research is based on a survey implemented in three rural areas in Tunisia – located in the governorates of Siliana, Jendouba and Médenine – and in urban areas in Tunisia (Médenine city and Grand Tunis) and the Centre-North of Italy (most of them in Milan and nearby cities); qualitative research is based on focus groups carried

out in the three above-mentioned governorates and in the urban part of Médenine. The study areas were selected on the basis of three indicators extracted from the Tunisian Census of 2014: urbanization level; out-migration rates; and, the percentage of rural migrants aged between 15-34 in the total out-migrant population. Quantitative research is based on a survey implemented between May and June 2017 that targeted: (i) households in migrant-sending rural areas in Tunisia (N=608), including households with migrant members ('migrant households') and households with no migrants ('non-migrant households'); migrants in destination areas in Tunisia (401); and Tunisian migrants in Italy (199). Qualitative research was conducted between January and March 2017 and was based on a specific participatory tool called the 'Historical Livelihood Matrix'. Through this matrix, participants of a heterogeneous focus group are able to jointly discuss and analyse their current livelihood system as the result of historical dynamics.

Characteristics of the migrant population

The report shows that the majority of migrants are men, especially among international migrants. The mean age of migration is slightly higher for those who left after 2011 (25.8 years old compared to 24.1 years old for those who left before 2011) and especially for international migrants (28.2 years old compared to vs 24.1 years old for internal migrants).

International migrants, and among them those having migrated after 2011, are more likely to have higher educational levels than non-migrants: respectively 24 percent and 30 percent among them have a university degree and are more likely to originate from highly educated origin households. This suggests a link between education and migration, with positive self-selection of migrants according to higher level of educational attainments, especially among international migrants. At the same time this result can be driven by an increase in study-related reasons for migration: recent migrants were indeed more likely to migrate for study reasons. With 'education' declared as a channel for entry in Italy by 21.7 percent of respondents who had migrated after the Revolution (2011), we have confirmation of the increasing relevance of student migration from Tunisia.

Such results point to youth migrating for study reasons as a potential investment for the country of origin and as a key target to be sustained by ensuring safe and protected migration. Furthermore, students abroad can act as a bridge between the socio-economic systems of the sending and the receiving countries, both whilst abroad or once they have returned to Tunisia. Policies to keep connections alive and to engage students while abroad, including joint research projects, virtual returns, short-term visits and assignments, and to re-attract them in the origin country through permanent or temporary returns could be implemented by the Tunisian government to support a positive relationship between migration and development.

Drivers of rural youth migration

The report shows that non-migrant households and migrant households with recent migrants (who left after 2011) are more likely to perform agricultural production and livestock farming as main activities, while households with migrants who left before 2011 are more likely to have declared 'construction' and 'salaried work' as main sources of their income. A possible explanation can be found by considering this finding alongside our evidence on the respondents giving 'reduction in income from agricultural activities' as a reason for migration, which is particularly relevant among migrants in Tunisia and those who migrated before 2011. This suggests that migrants who left for another internal destination and those who migrated before 2011 did so because of a decline in agricultural productivity and increasing land fragmentation, who left to move to 'construction' and 'salaried work'.

Along with the specific reference to problems within the agricultural sector, the key reasons for migration, especially internal migration within Tunisia, are connected to the search for better job opportunities and the improvement of living conditions. For those migrants that moved to Italy, such elements are considered important as too are sustaining the family and changing lifestyle. Data on the occupational status before migrating mirrors these results, as more than half of internal migrants declared they were unemployed prior to migration, while fewer than 20 percent were in employment, while migrants in Italy show the opposite picture, with more than half of individuals in employment before leaving and fewer than 20 percent unemployed.

This report provides evidence of a significant process of feminization of migration, particularly in the form of internal migration by young women from rural areas moving to work in other regions, often on seasonal basis. There has also been an increase in international migration after 2011. This feminization is likely to be associated with an increase of highly educated migrant women. Women interviewed for this study showed a higher proportion of university degree holders, which applies both to post- and pre-2011 migrants and to current residents. In all three cases this proportion is of around twice the size with respect to that of men. Even more evident for women, international migration is aimed at pursuing university education, with a significant increase in study-related reasons for migration and a decrease in marriage-related reasons when comparing those who migrated prior to 2011 and those after 2011.

Patterns of rural youth migration

The report shows that around half of international migrants had made at least one internal move before arriving at destination. The report also shows that recent Tunisian migrants in Italy are more likely to be irregular, compared to migrants who left before 2011, reflecting the increasing closure of European borders and the consequent limited availability of regular channels to reach Europe.

Migration seems to be rewarding for both internal and international migrants in terms of occupational outcomes: while between 65 and 75 percent of migrants declared themselves to be employed at the time of the survey, this was the case for only 22 to 30 percent of non-migrants. The main effect that migration seems to have is on female labour market participation. Furthermore, employed migrants are, in general, more likely to have a contract and to be registered in a social security system.

The report also analyses return intentions and finds these to be higher for migrants in Italy, than for migrants in Tunisia: 60 percent of migrants in Italy declare they want to return either in the short or in the long term while 34 percent of migrants in Tunisia declare this intention. Common reasons for wanting to return are homesickness, family nostalgia and retirement (the latter mostly among those who left before 2011).

Impacts of rural youth migration

The fact that it is mainly men that are migrating does, of course impact on origin households in term of gender composition. In households with no migrants the share of men is around 54 percent, while in migrant households only around 44 percent of current members are men, on average. This results in a feminization of households with migrants, where women are found more likely to be active compared to women in non-migrant households, while their unemployment levels remain still high. Further, among the stayers, we observe that those from migrant households (especially those with international migrant members) are more often found to have a formal contract and access to social security.

Only one out of four households/migrants is involved in the reception/sending of remittances, with international migrant households receiving double the amount compared to internal migrant households. Evidence suggests that these are used for consumption, education, health and savings, but not for investments. Financial literacy programmes for migrants and remittance recipients have resulted in significant increases in savings and productive investments in the origin households; such programmes could be developed that target rural migrant-sending areas, with the participation of a wide range of actors, including government officials, banks, microfinance institutions, trade unions and diaspora associations.

While incomes from remittances tend not to be invested in productive activities, evidence presented by this report shows that migrants have a rate of involvement in economic activities in their places of origin that ranges from 33.4 percent for internal migrants and 23.4 percent among international migrants. Interestingly, most of the involvement is connected with agricultural production (87.7 percent among internal migrants and 66,7 percent among international ones) and livestock activities (15.2 percent among internal migrants and 20 percent among international ones). Also, among those who participated in the economic activities of the household at their place of origin in the previous year, 79.2 percent of internal migrants and 64.2 percent of international migrants did so in agricultural production.

Furthermore, data that shows the activities performed upon return show that an important share (51 percent for migrants in Tunisia and 39 percent for migrants in Italy) of migrants who declared wanting to come back in Tunisia, are keen to work in agriculture. The intention to invest in this sector upon return is affected by gender, with both internal and international migrant men outnumbering women (respectively 59 percent men vs. 32 percent women and 42 percent men vs. 31 percent women).

Given the key role of agriculture both as a preferred sector for transnational engagement of migrants and as a targeted domain of activity and investment upon future return, policies focusing on migration and rural development could address both these forms of diaspora mobilisation. In particular, measures fostering the return migration of potential agro-entrepreneurs and the reintegration of returnees into local labour markets should take full account of the scope (retirement or productive return, intention to enter the labour market as an employee or as an entrepreneur, area of return, etc.) and nature of return migration (demographic and socio-economic characteristics, educational level, skills acquired abroad, availability of capital to be invested, etc. of returnees). Although there is little evidence of the effectiveness of voluntary return programmes, measures to favour the return of migrants to their areas of origin could include the offer of tailored training opportunities (in, for example, SMAE creation and management), access to targeted financial products, start-up grants and equipment at subsidized prices.

Index of tables and figures

Table 1: Macro-economic indicators 2010-2015	. 18
Table 2: The Tunisian Agricultural sector- key indicators	. 18
Table 3: Employment in agriculture, industry and services	. 19
Table 4: Key variables for the selection of the three delegations (2014 data)	. 21
Table 5: Land use in the three study areas (2015)	. 22
Table 6: Characteristics of land use and farming systems in the surveyed rural areas	. 22
Table 7: Population breakdown of the surveyed regions	. 23
Table 8: Focus Group Participants	. 25
Table 9: Characteristics of households by area of origin (percent)	. 27
Table 10: Distribution of households	. 28
Table 11: Characteristics of households and their members: migrant and non-migrant households	. 35
Table 12: Age, gender, and age of migration (migrants only) for members of non-migrant households and current residents and migrants of migrant households	
Figure 1: Level of education of current residents of non-migrant households and of current residents migrants of migrant households (pop. 15+ years old)	
Figure 2: Level of education of current residents (from non-migrant & migrant households) and migrants gender (pop. 15+ years old)	-
Figure 3: Reasons for migration	. 41
Figure 4: Reasons for migration by gender	. 42
Table 13: Status before migrating	. 43
Table 14: Probability of being a recent migrant (2011+) by key control variables; migrant sample only. AME	. 44
Figure 5: Probability of having migrated in 2011+ by gender and education; migrants only	. 45
Table 15: Origin of migrants (%)	. 47
Table 16: Number of moves and seasonal work; migrants in Tunisia and Italy	. 48
Table 17: Destination of first move, by number of moves; migrants in Tunisia and Italy	. 49
Table 18: Channels of migration and networks; migrants in Tunisia and Italy	. 50
Table 19: Return intentions; migrants in Tunisia and Italy	. 51
Figure 6: Labour market status for current residents of non-migrant households and for current residents migrants of migrant households (pop. 15+ years old)	
Figure 7: Labour market status for current residents of non-migrant households and for current residents migrants of migrant households. Men and women 15+ (%)	
Table 20: Job contract and social security for current residents of non-migrant households and for current residents and migrants of migrant households. Men and women 15+	
Table 21: Properties and economic activities in origin; migrants in Tunisia and Italy	. 60
Table 22: Remittances received and sent	
Table 23: Remittances received, by type of household activity	. 61
Figure 8: Frequency of reception/sending and use of remittances by origin migrant households, as declared origin households Questionnaire 1/2) and migrants (Questionnaire 3)	-
Table 24: Use of remittances by migrant origin household activity	. 63

Introduction

The evidence presented in this report enhances understanding of rural out-migration by young people in Tunisia to facilitate positive impacts on food security, agriculture and development in rural areas. A key contemporary policy challenge is that rural migration, including circular and seasonal migration, is often not accounted for in national policies, strategies and programmes for agricultural and rural development. There is little evidence about the determinants of youth migration from rural areas and its potential impacts on food security and rural poverty in origin areas. The persistence of knowledge gaps limits the prospects for developing informed policies and targeted interventions to improve the management of rural labour mobility and enhance agricultural and rural development in migration-prone rural areas.

To address these knowledge gaps this report analyses three key issues:

- the determinants of migration and mobility in Tunisia and their relative influence on the likelihood of rural youth migrating;
- patterns and types of rural youth out-migration in Tunisia, including temporary and circular migration;
- the impact of rural youth migration in Tunisia on rural livelihoods and societies in origin regions and the material and non-material contributions made by migrants to the development of origin regions.

In Tunisia, as in many other developing countries, migration is a key component of rural livelihood strategies and can enable income diversification and counter food insecurity. For an increasing number of people, forms of 'distress migration' are becoming a last resort option, including young women and men moving from rural areas to escape conflict, political instability, poverty and food insecurity, as well as the effects of demographic change, pressure on natural resources and manmade natural disasters. Rural youth are particularly vulnerable to such distress migration as the only option to meet their aspirations and needs (Deotti and Estruch, 2016).

Globally, there is also a major youth employment challenge that is especially evident in rural areas in developing countries. This report shows that, while the causes of rural youth migration are context-specific, one-third of all international migrants from developing countries are 12-24 years old while rural youth are increasingly likely to migrate because the prospects for gainful employment in agriculture are hampered by low productivity, poor access to markets and lack of dynamism between farm and non-farm activities. To compound the situation, young people often lack access to land, credit, and inputs to start their own farms.

1 The context for analysis of rural youth migration in Tunisia

A key demographic characteristic in Tunisia is its large youth population bulge, with about 47 percent of the population under 30 years old (World Bank, 2017). Indicators of the economic potential of Tunisia and its population have yet to be translated into improved employment levels and opportunities for young people. In 2014, the World Bank noted that the Tunisian 'economy has remained stuck in low performance, with high unemployment, and has been unable to take off—there is broad agreement that the inadequate economic performance is at the root of the 2011 revolution' (World Bank, 2014: 300).

Relatively strong GDP growth in Tunisia compared to other MENA countries during the first decade of the century saw a decrease in the total population living below the poverty line from 32 percent to 16 percent between 2000 and 2010. In the same period, income per capita of the lower 40 percent of the population improved by one-third (World Bank, 2014). Furthermore, public investments contributed to improved education levels as well as improved rates of infant and maternal mortality and child malnutrition. Improvements in road, information and communications infrastructure also occurred. However, this decline in absolute poverty rates at the national level has masked persistent regional disparities in living standards between rural and urban areas and between 'leading' (coastal areas) and 'lagging' regions (non-coastal areas). Extreme poverty is more likely to occur in rural than urban areas. Households living in governorates with fewer employment opportunity are more likely to be poor (Amara and Jemmali, 2017). Developments of the kind mentioned above have not been so evident in non-coastal areas in the North West and Centre West, more specifically the governorates of Kesserine, Kairouan, Siliana, Jendouba, El Kef and Sidi Bouzid (Amara and Jemmali, 2017).

By 2017, the World Bank was referring to 'few tangible economic dividends of political transition' with economic growth of 1.0 percent in 2016 (2.0 percent excluding agriculture and fisheries) compared to 1.1 percent in 2015 (0.1 percent excluding agriculture). Reported unemployment remained high at around 15 percent of the working population. Youth employment was more than double this rate. Low economic growth and a sharp rise in public spending including wages, combined with delays in implementing key reforms have led to high fiscal and current account deficits.

In 2015 the share of Tunisia's GDP derived from agriculture was 10.5 percent while, in 2013, employment in agriculture as a share of total employment was 15.3 percent (World Bank, 2017). In line with regional trends structural constraints limit farming productivity: scarce natural resources (e.g. water), inadequate access to new technologies and financial resources, and uneven distribution of land (Boughzala and Tille, 2014). As in other South Mediterranean countries, underdevelopment of the agricultural sector forces rural households to integrate their income from agricultural activities with revenues from off-farm sources, including emigration (Nori et al., 2009). Research shows that rural migration patterns, including by young people, are complex and determined by a variety of 'push' and 'pull' factors (Deotti and Estruch, 2016). Analysis of inter-governorates migration in Tunisia shows that migration flows are mostly from rural to urban areas, especially for male youth (Amara and Jemmali, 2017). Between 2009 and 2014 both internal and external migrants were largely young (between 20 and 40 years old) (INS, 2016).

Table 1 shows the overall macro-economic structure and reveals a slight increase in the value of the agricultural sector.

Table 1: Macro-economic indicators 2010-2015

	2010	2011	2012	2013	2014	2015
GDP growth (annual %)	3.5	-1.9	4.0	3.0	2.9	1.0
Industry, value added (% of GDP)	31.5	31.5	31.1	30.2	29.3	28.2
Services, etc., value added (% of GDP)	60.3	59.5	59.4	60.3	61.0	61.4
Agriculture, value added (% of GDP)	8.2	9.0	9.5	9.4	9.7	10.4

Source: World Bank (2017), Data-Bank, World Development Indicators: http://databank.worldbank.org/data/reports.aspx?source=2&country=TUN#

Table 2 shows that more than half of Tunisia's land (62 percent) is used for agricultural purposes, although only half of this consists of arable land while the rest is natural ranges, woods and scrubland. Although the majority of arable hectares are dedicated to arboriculture, livestock is the sector with the highest share of added value to GDP (38 percent compared to 25 percent from arboriculture and 15 percent from cereal and other crops).

Table 2: The Tunisian Agricultural sector- key indicators

Area	Million (m) Hectares (Ha)
Total area	About 16,21 (162, 155 km²)
Total land for agriculture	About 10
Repartition of land for agriculture	Million (m) Hectares (Ha)
Arable land	5
Natural ranges	4
Woods and scrubland	1
Repartition of arable land	Percentage of total arable land
Arboriculture	55
Cereals	28
Forage crops	11
Agricultural sector	Percentage of total GDP added value derived from agriculture production
Livestock	38
Arboriculture	25
Cereals and vegetable crops	15

Source: FAO, (2017), Etude sur l'agriculture familiale à petite échelle au proche orient et Afrique du nord, Tunisie

In line with regional trends, powerful structural constraints limit farming productivity in Tunisia. These include scarce natural resources (e.g. water), inadequate access to new technologies and financial resources, and uneven distribution of land (Boughzala and Hamdi, 2014). The Tunisian government has not adopted land reforms that would favour low-income farmers. Land distribution has remained the same as it was in the 1960s with 22 percent of total farm land belonging to the 1.2 percent richest farmers (Ayadi et al. 2004). Additionally, land property is parcelled due to existing property distribution rights and demographic pressure (Gafrej, 2016) while the majority of the

population in rural areas do not own land or own micro-farms (Boughzala and Hamdi, 2014).¹ This fragmentation limits farmers' access to credit and insurance (Gafrej, 2016), and negatively affects poverty and consumption rates in rural areas.² As a consequence, agricultural activity remains mainly pluvial, extensive, and highly dependent on climatic changes, with negative consequences on food security. For instance, Tunisia is highly dependent on cereal imports (Ouertani, 2016).

There is a significant economic and social divide between rural and urban areas, with the latter having easier access to the advantages of economic exchange while rural areas are more isolated and experience higher levels of poverty and unemployment, which is reflected in higher vulnerability to food insecurity.

These disparities have been exacerbated by government interventions in favour of export-oriented companies located in the coastal governorates. Regarding the agricultural sector, policy measures have subsidized products mainly produced on the coast areas and for which Tunisia is not competitive (e.g. cereals, beef, and milk) while neglecting products from the interior regions (World Bank, 2014). Government subsidies and market-oriented large farmers have helped to improve the added value of agriculture – which increased at about 4 percent per year over between 1980 and 2000 because of the use of new technologies such as fertilizers and other chemical inputs, and irrigation systems while there were also management and efficiency improvements.

Agricultural sector growth has not corresponded to an increase in labour demand while the pay in the agricultural sector has only increased at a rate of around 0.5 percent annually. As a consequence, small farmers have been pushed to carry out additional economic activities, for instance in the construction sector (Ayadi et al., 2004). Table 3, below, shows how employment in the Tunisian agricultural sector has been steadily declining.

Table 3: Employment in agriculture, industry and services

	2010	2011	2012	2013
Employment in agriculture (% of total employment)	17.6	16.2	17.0	15.3
Employment in industry (% of total employment)	32.7	33.5	33.0	33.3
Employment in services (% of total employment)	48.8	49.5	49.6	51.0

Source: World Bank, (2017), Data-Bank, World Development Indicators: http://databank.worldbank.org/data/reports.aspx?source=2&country=TUN#

¹ Micro farms are defined as less than 10 hectares of rather arid land or less than two hectares of irrigated land (see Boughzala and Hamdi, 2014).

² In 2010, the poverty rate in rural areas (22.6 percent) was almost 50 percent higher than the national average (15.5 percent) and more than double than in large cities (9.0 percent) (Boughzala and Hamdi, 2014).

2 Focus for this study and methodology

This report seeks to generate new understandings of the drivers of youth migration, patterns of rural youth out-migration and the impacts of this youth out-migration on rural livelihoods. To generate original data and information, a mixed methods approach was used that combined quantitative and qualitative components, including a survey and focus groups in origin rural areas in Tunisia and in destination urban areas in Tunisia and Italy. Quantitative research is based on a survey implemented in three rural areas in Tunisia – located in the governorates of Siliana, Jendouba and Médenine – and in urban areas in Tunisia (Médenine city and Grand Tunis) and the Centre-North of Italy (most of them in Milan and nearby cities); qualitative research is based on focus groups carried out in the three above-mentioned governorates and in the urban part of Médenine.

2.1 The three migrant-sending rural areas

The part of the study which was carried out in rural migrant-sending areas focuses on three delegations: the Makhtar delegation in the Siliana governorate, the Ain Drahem delegation in the Jendouba governorate, and the Benit Kdech delegation in the Médenine Governorate. These are shown in red on Map 1 below.

ALGERIE

ALG

Map 1: A physical and administrative map of Tunisia

Map source: www.viviani.com

The study areas were selected on the basis of three indicators extracted from the Tunisian *Recensement Général de la Population et de l'Habitat 2014*: urbanization level; out-migration rates; and, the percentage of rural migrants aged between 15-34 in the total out-migrant population, as shown in Table 4, below. For further details on the steps followed to select the delegations, and for a distribution of the above-mentioned variables in all delegations of Tunisia, refer to Touihri (2017).

Table 4: Key variables for the selection of the three delegations (2014 data)

Delegation	Urbanization rate (urban population as share of total population)	Out-migration rate (migrants as share of total population)	Percentage of 15-34 aged rural migrants (as share of total outmigrant population)
Makhtar (Siliana)	46.2	18.3	58.0
Ain Draham (Jendouba)	26.8	13.2	48.1
Béni Khédèche (Médenine)	11.6	3.5	56.2

Source: INS, (2015), Recensement Général de la Population et de l'Habitat 2014, Principaux indicateurs, April 2015.

There is significant variation in agro-pastoral activities between the three delegations (see Tables 5 and 6). In Ain Draham, agricultural land is mainly composed of forests and, therefore, agro-forestry activities predominate. In Béni Khédèche, almost 80 percent of land is used for pastoral activities. In Makthar, land is mainly arable and used to cultivate cereal crops. Traditional farming systems including pastoralism in the South and cereal crops in the North - have experienced decreased viability due to poor performance and/or poor remuneration rates. Agro-forestry activities and breeding of small ruminants are widespread in all three studied areas. Livestock breeding in intensive forms appears to be an activity with a promising future, as increased urban consumption means increased demand for animal proteins. Opportunities for forestry development, including for aromatic and medicinal pharmaceutical purposes (e.g. absinthe and rosemary), have receive little attention despite their great potential. Arboriculture (e.g. cherry, fig, olives) has been increasing since the 1980s and is seen as a viable alternative due partly to changes in production costs as well as in market prices. The development of arboriculture appears to account for changes in the agroecological system (i.e. dry spells and land fragmentation), as well as in socio-economic domains (i.e. labour restructuring and the increase in market prices for oil and fruits). Work opportunities provided by arboriculture are mostly on a seasonal basis.

To elicit a shift in farming systems would necessitate important (public) investments in water and irrigation systems, at least in the initial stages. Consistent investments in water infrastructure have demonstrated great potential in terms of enhancing local productivity and livelihood levels and appear to have contributed to people remaining active in a sustainable agriculture sector.

There is also variation in the three study sites in terms of respective land tenure systems (see Table 6). In Makthar the land is mainly divided into small household plots. In Ain Draham and Béni Khédèche there is state-owned land, which means that the community can access the land but cannot buy it or there are collective systems for community's use.

Table 5: Land use in the three study areas (2015)

	Total area (Ha)	Total land for agriculture (Ha)	Percentage of forests as share of total agricultural land (Ha)	Percentage of rangelands as share of total agricultural land (Ha)	Percentage of arable land as share of total agricultural land (Ha)
Ain Draham	50,100	48,710	78.0	3.1	18.9
(Jendouba)					
Béni Khédèche	135,562	121,115	1.3	79.7	19.0
(Médenine)					
Makhtar	35,600	33,820	15.4*	0.9*	83.7
(Siliana)					

Source: République Tunisienne, Ministère du Développement, de l'investissement et de la Coopération International, (2016), Gouvernorat de Médenine, Siliana, Jendouba en chiffres.

Table 6: Characteristics of land use and farming systems in the surveyed rural areas

Delegation	Prevailing land tenure system *	Prevailing farming systems *
Makhtar (Siliana)	Small household/ individual plots (more than 50 percent with less than 5 Ha);	Semi-arid climate; Cereal crops, small ruminants; Potential for forestry and cultural tourism; Increasing interest for small ruminants and arboriculture (olives and cherry trees);
Ain Draham (Jendouba)	State-owned lands: the community has access but not tenure, at times based on tenders; Individual plots of limited size (≤ 1 Ha)	Sub-humid climate; Agro-Forestry activities in about 80 percent of the area, including small ruminants; Other forestry potential in charcoal. Medicinal plants and wild fruits collections and development of dairy and apiculture schemes. Potentials for eco-tourism;
Béni Khédèche (Médenine)	Collective community lands under a process of individualisation and fragmentation (plots between 10 and 20 Ha)	Arid climate; Mountainous farming systems; Small ruminants, olive trees / arboriculture; Arboriculture (olives, fig trees) and eco-tourism are developing;

Source: Information elaborated by the RuMiT study project.

In terms of the size of the rural population (see Table 7), Béni Khédèche is the delegation with the highest percentage of rural population as a share of the total (88.7 percent) compared to 72.6 percent in Ain Draham and 53.4 percent in Makhtar. Data from the 2014 *Census* shows that it is also the delegation with the lowest external migration as share of the total population between 2009 and 2014 (1.8 percent compared to 6.5 percent for Ain Draham and 8.5 percent for Makhtar).

^{*} In the case of Makhtar, the data are about forests (15.4) include also public rangelands. Instead, data about 'rangelands' (0.9) are limited to private pastures.

Table 7: Population breakdown of the surveyed regions

Delegation	Total population (2015)	Urban population (% of total) (2015)	Rural population (% of total) (2015)	External migration (% of total population 2009- 2014) (INS, 2015)
Makhtar	29,052	46.6	53.4	8.5
(Siliana)				
Ain Draham	35,400	27.4	72.6	6.5
(Jendouba)				
Béni Khédèche	25,885	11.3	88.7	1.8
(Médenine)				

Source: République Tunisienne, Ministère du Développement, de l'investissement et de la Coopération International, (2016), Gouvernorat de Médenine, Siliana, Jendouba en chiffres; (INS, 2015).

2.2 Quantitative methodology

Quantitative research is based on a survey implemented between May and June 2017 that targeted: (i) households in migrant-sending rural areas in Tunisia (N=608), including households with migrant members ('migrant households') and households with no migrants ('non-migrant households'); migrants in destination areas in Tunisia (401); and Tunisian migrants in Italy (199).

2.2.1 The survey in migrant-sending rural areas in Tunisia

The selection of households in migrant-sending rural areas in Tunisia followed a two-step approach. First, the research team randomly selected households in the targeted delegations (Ain Draham, Makthar, and Béni Khédèche) on the basis of the 2014 Census. Second, a quota system was applied to ensure that the sample included: households with migrants that had moved before January 2011 (a maximum of 50 percent); households with migrants that had moved after January 2011 (a minimum of 40 percent); and households with no migrant as a control-group (10 percent). Table 10 in the next section shows the distribution of households according to the period of migration their migrant(s) members(s) and to their destination, be this internal or international.3 Note that although the sample is not representative of the population residing in the selected migrant-sending areas, it provides a good selection migrant and non-migrant households that allows making reliable and interesting comparisons. For further details on the sampling methods used refer to Touihri (2017).

In rural areas of origin, questions were addressed to the household head. In case the household head was not present, the husband/wife was interviewed and, if they were not present, another household adult was selected randomly. The definition of household member applied in the survey was as follows: a person that usually lives in the house, shares meals and expenses. This included direct family members that reside or have resided in the past five years in another place at least six months and were household members before their departure. This definition thus covers the following household members:

-

³ The destination was not part of the sampling strategy.

- present members: people that usually live in the house, share meals and expenses, including
 direct family members that have resided in the past five years in another place for at least six
 months but have returned;
- recent migrant members: those that left the house in the past five years (after December 2010) but were household members before their departure;
- historic migrant members: those that left the house more than five years before (before January 2011) but were household members before their departure.

As regards the contents of the questionnaires developed for rural Tunisia (from now on, defined as Questionnaire 1/2), some questions applied to both migrant and non-migrant households, while others applied only to migrant households. Questions that applied to both households with and without migrants included the age, gender, educational and labour market status of their members, the main household's economic activity, and the amenities of the household, such as water and heating, among the most important ones. In migrant households more specific questions were asked, which covered topics connected to the drivers of migration (such as the reasons for migration of the migrant members and their labour market status before migrating), the patterns of migration (such as the period of migration and the number of moves), and the impact of migration in households (such as remittances and the participation of the migrant in the household's activities).

2.2.2 The survey in urban Tunisia and Italy

The survey carried out in urban areas in Tunisia and Italy targeted migrants residing in these two locations. In Tunisia, migrants were interviewed in the urban areas of Médenine city and Grand Tunis (Mnihla and Raoued). Migrants were contacted through use of the snowball technique based on contacts provided by households in migrant-sending rural areas. This technique allowed the project team to reach migrants in absence of a reliable database and to compare migrants' and origin households' perspectives on the impacts of migration. Of course, this has strong limitations in terms of the representativeness of the data, for which the results based on this survey need to be interpreted with caution.

In Italy, the survey took place in the Centre-North of Italy in the cities of Milan, Parma, Ferrara, Bologna, Galliera, and Modena. Selection of these areas was on the basis of official Italian data on the Tunisian Population resident in Italy provided by ISTAT, as of 31 December 2015. Migrants were initially contacted through personal contacts as well diaspora connections, mosques, and Islamic associations. Other migrants were either approached directly in public spaces, via social media such as Facebook groups/pages) or through snow-balling technique. When approached directly in public spaces participants were identified via a direct question about their nationality. Interviews were face-to-face apart from two cases conducted via Skype calls with migrants residing in Milan. Most of the migrants interviewed were male, older than 25 years, and who left their rural place of origin before 2011 (Touihri, 2017). For further details on the sampling methods used and a distribution of migrants by age, gender and period of migration, refer to Touihri (2017).

As regards the contents of the questionnaire, developed for urban areas in Tunisia and Italy (from now on, defined as **Questionnaire 3**) and responded by the migrants themselves, they focused mainly on the migration experience. It included questions on similar dimensions as those collected in

-

⁴ ISTAT data as of 31 December 2015: http://www.comuniitaliani.it/statistiche/stranieri/tn.html

Questionnaire 1/2, including the drivers of migration, the patterns of migration and the migrants' role and/or involvement with their country and household of origin.

2.3 Qualitative methodology

Qualitative research was conducted between January and March 2017 and was based on a specific participatory tool called the 'Historical Livelihood Matrix' (Nori et al., 2009). Through this matrix, participants of a heterogeneous focus group are able to jointly discuss and analyse their current livelihood system as the result of historical dynamics. This method allows understanding of the strategies people apply as well as the scenarios and solutions they foresee/propose. Focus group discussions were carried out in the three migrant-sending rural areas (see section 3.1) and in a migrant destination area (the Médenine delegation). The total number of focus groups was 53 with a final sample of 638 participants. Each focus group comprised between 5 and 15 participants. The final sample was balanced in terms of gender and age: women represented 34.2 percent of the sample while young participants (with an age between 18-35 years) accounted for 41.5 percent. Participants were identified and gathered via partner associations' contacts and snow-ball techniques. Table 8, below, shows the focus group sessions and participants in each delegation.

Table 8: Focus Group Participants

	Sessions	Youth	Adults	Male	Female
Makhtar	12	64	120	142	42
(Siliana)					
Ain Draham	12	55	73	92	36
(Jendouba)					
Béni Khédèche	15	105	66	69	102
(Médenine)					
Médenine ville	14	41	114	117	38
(Médenine)					
Total	53	265	373	420	218

3 Analysis: an introduction

We now move on to draw from original data gathered for this study. The analysis is largely based both on qualitative data from the focus groups and on quantitative data from the surveys carried out in rural/urban Tunisia and in Italy. As regards the quantitative analysis, it is based mostly on Questionnaire 1/2 – done in three migrant-sending rural areas in Tunisia – and to a lesser extent on Questionnaire 3 – done in urban areas in Tunisia and Italy. In some cases, the analysis is done at the household level, while in others it is done at the individual level. These datasets/levels of analysis are used alternatively, depending on the research question explored (each time this is clarified in the text). However, in general we give preference to Questionnaire 1/2 because, on the one hand, the sampling method used to collect the data is more accurate and, on the other hand, it allows making better comparisons between different household types and between those who stayed and those who left.

3.1 The three migrant-sending areas in rural Tunisia

Before moving to the core of the analysis, it is useful to show some general characteristics of the three migrant-sending areas in rural Tunisia, based on the households' information collected in the survey. These are shown in Table 9. Béni Khédèche (Médenine) is the area with the highest percentage of households with at least one international migrant; furthermore, it is also the area with the highest concentration of households that have migrants who left in 2011 or later (in particular households that do not have pre-2011 migrants), and also the one with the lowest percentage of households with pre-2011 migrants only. On the contrary, Ain Draham (Jendouba) has the lowest share of households with recent migrants only, and the highest share of households with migrants who left before 2011. Makthar's (Siliana) households are divided between those with recent migrants only and those with pre-2011 migrants only.

Table 9: Characteristics of households by area of origin (percent)

	Ain Draham	Makhtar	Béni Khédèche
	(Jendouba)	(Siliana)	(Médenine)
Household type			
Non-migrant households	9.5	9.5	9.5
Migrant households: with internal migrant(s) only	85.4	87.6	75.6
Migrant households: with international (& internal) migrant(s)	5.0	3.0	14.9
Period of migration of migrants			
Only 2011+	20.5	46.3	50.3
2011+ and pre-2011	33.5	7.4	21.0
Only pre-2011	46.0	46.3	28.7
Main activity of the household			
Agricultural production	2.0	18.5	21.5
Livestock farming	19.6	26.7	42.0
Industrial activity	0.5	0.0	0.0
Sale of animal products	0.5	1.5	0.0
Commerce	1.0	5.6	9.5
Services (restaurant, transport)	0.0	3.6	0.5
Construction	34.7	33.3	3.0
Employee/salaried work (travail salarié)	41.7	10.8	23.5
Household amenities			
Running water	89.4	52.0	58.5
Potable water	45.5	56.1	65.5
Hot water	10.6	6.1	10.0
Heating	63.8	4.1	0.5
Internet access	2.5	7.7	3.5
Mobile network	40.6	90.3	86.0

Note: the N varies slightly depending on the variable (around 200 households were surveyed in each area).

Source: Own calculations based on Questionnaire 1/2

Table 9 also shows the activity and socio-economic characteristics of the households as we observe them now (bearing in mind that these might be affected by migration of household members). We observe that agricultural production and livestock farming are more common in Béni Khédèche (Médenine); while Ain Draham's (Jendouba) households are much more concentrated in construction and salaried work. In Makhtar (Siliana) households are more diversified in terms of their activities. Regarding households' amenities, we observe that these are related to the areas of origin: running water, for example, is very widespread in Jendouba, but less so in the other areas; a large share of households in Ain Draham also has heating (which is almost non-existent in the other areas, with warmer weather). Potable water is more widespread across areas, but more common in Béni Khédèche. Finally, most households in Makhtar and Béni Khédèche have mobile network, while this is much smaller for households in Ain Draham.

3.2 The households interviewed in rural Tunisia

Table 10 shows the distribution of households by the current migrant status of their members, as well as the classifications that will be used throughout the study. In this report, 'household members' refers *both* to current resident members or non-migrants (i.e. members of the households residing in the areas of origin at the time of survey implementation, which in the case of migrant households correspond to those 'left behind') and to migrant members that have left the household. Households are initially classified into three types:

- non-migrant households (i.e. households with non-migrant members only, that is, all members currently live in the household);
- migrant households with internal migrants only (i.e. households with migrant member(s) who currently reside in Tunisia solely);
- migrant households with international migrants (i.e. households with migrant members who currently reside abroad).⁵

Among migrant households, a further classification is shown, depending on the period of migration of all their migrant members:

- 2011+ only (i.e. all migrant members left in 2011 or later);
- 2011+ and pre-2011 (i.e. some migrant members left before 2011 and others in 2011 or later);
- pre-2011only (i.e. all migrant members left before 2011).

This year of migration is based on the first move the migrant made, and not on the year the migrant moved to the current destination. Following the sample design, Table 10 shows that around 90 percent of households have migrant members, while around 10 percent do not. Among households with migrant members, most of them have solely internal migrants. A bit more than 7 percent of households in the sample have at least one international migrant.

Table 10: Distribution of households

	Total	%
By household type		
Non-migrant households	57	9.48
Migrant households: with internal migrant(s) only		82.86
Migrant households: with international migrant(s)*	46	7.65
By period of migration of their migrants		
2011+ only	155	37.62
2011+ and pre-2011	92	22.33
Pre-2011 only	165	40.05

Source: Own calculations based on Questionnaire 1/2.

* Around half of these households also have internal migrants(s).

As regards the year of migration of household members, just under 40 percent of all households have migrants who left solely in 2011 or later; around 40 percent of households have migrants who left before 2011 only; while around 22 percent have both migrants that left before 2011 and

-

⁵ Around half of these households also have internal migrant members.

migrants that left in or after 2011.⁶ Note, however, that for around 26 percent (142 in total) of households with migrants there is at least one migrant member with missing information on the year of migration. We exclude them from this table and from the following household-level descriptive statistics because we cannot know into which category they would fall.

-

⁶ Looking at individual-level information, around 10 percent of migrants in the sample migrated in 1997 or earlier (the earliest is 1957, but most of cases left in the 1980s and 1990s), around 15 percent between 1998 and 2004, around 30 percent between 2005 and 2009, around 25 percent between 2010 and 2014 and around 20 percent in 2015 or later.

4 The determinants of rural youth migration

4.1 Micro-, meso- and macro-levels of analysis

Determinants of migration decisions can be analysed at three levels. A *micro-level* focuses on individual migration decisions that are influenced by individual characteristics. A *meso-level* focuses on the socio-economic characteristics of the household. A *macro-level* focuses on the contextual features of the area of origin. These three levels of migration determinants are not mutually exclusive and it is important to understand not only their potential effects but also their interplay and implications for youth migration.

4.1.1 Micro-level

The micro-level approach is an actor-focused perspective that has its roots in neo-classical economic theory. Associated with 'push-pull' thinking it identifies the main causes of migration as being effects on individual decisions to stay or move of wage differences between different geographic areas (Castles and Wise, 2008). People will migrate towards countries where the labour supply is lower and wages higher. The neo-classical economic approach is driven by the assumption that individual migrants are rational, utility-maximising individuals with free choice and full information. The 'expectancy value theory' (Chemers et al., 1978) and the 'theory of planned behaviour' (Ajzen, 1991) address the limitations of these assumptions by including the impact of contextual factors on individual migration decisions, although migration is still viewed as a rational and goal-oriented decision based on individual migrants' comparison of economic factors and also of contextual factors including values, norms and societal influences in different locations.

Before analysing the data from surveys conducted for this report, we begin by outlining the existing evidence on micro-level factors in Tunisia. In Tunisia, the reported share of 15-29 year-olds reported as 'willing to emigrate' jumped from 22 percent in 1995 to 76 percent in 2005 (Catusse and Destremau, 2016). Between 2008 and 2010, 28 percent of Tunisians expressed a wish to migrate (OECD, 2012). Bardak (2015) reported that more than half of the young population would like to migrate because they saw no future in their country. Despite the attractiveness of the idea of migration, however, the likelihood of migration in reality is much lower, around 10 percent.

Analysis of data from the 2014 Tunisia Labour Market Panel Survey (TLMPS) shows that after the 2011 revolution the age of emigration from Tunisia increased (27 years compared to 25 years pre-2011). The proportion of single migrants also increased considerably (58.3 percent compared to 38.6 percent before 2011). While migrants were more educated than non-migrants and returnees after 2011, the proportion of migrants with a tertiary education was lower (21.8 percent compared to 26.0 percent before 2011) (David and Marouani, 2017).

A qualitative study by Kriaa (2013) conducted among migrant households found that migration drivers were mostly economic with migration perceived as a way to overcome migrants' and households' financial constraints. The TLMPS survey confirms that unemployment and low-quality jobs were the main migration drivers. More than half of migrants (56 percent) were unemployed and 71 percent had an irregular job. The majority of people that were unemployed in Tunisia found employment in the destination country (David and Marouani, 2017).

Labour market dysfunctions have been seen as especially detrimental to young people who experience a difficult transition from school to active life. According to a 2013 survey among

Tunisians aged between 15 and 29, 18 percent of respondents were not engaged in education, employment or training. This phenomenon is particularly strong in rural areas and particularly affects young women (ONEQ, 2014).

For single male migrants, migration has been found to represent a strategy to satisfy their needs and achieve their professional goals and projects (Kriaa, 2013). Since their income is used to support their family, their own aspirations are frustrated. Personal aspirations are a strong migration driver particularly in the case of young graduates that are unable to pursue a career in Tunisia (Kriaa, 2013). Tunisian youth see migration as a way to improve their future prospects (UNFPA, 2015).

Many unskilled respondents expected to find a skilled job abroad and most of them working in agriculture did not want to work in the same sector abroad (Sabadie et al., 2010). In rural areas, the main migration drivers were found to be the search for a job as well as the desire to escape social pressures in rural communities (World Bank, 2014). Additionally, Belhedi (2001) points out that access to basic infrastructure (e.g. water and electricity) as well as to education and health services played a role in migration decisions to move to urban areas.

The presence of Tunisian women in international migration outflows is increasing, especially to France (Boubakri, 2010). The majority were found migrate to follow their husband or father while the number of women migrating alone is smaller. This latter group are mainly from wealthy families where a member has already migrated. They move mostly to finalize their education or pursue a professional goal (Kriaa, 2013). However, in the Southern rural areas, it is usual for married women to remain in Tunisia to take care of children and the household under the father-in law's control (Saad and Bourbouze, 2010).

4.1.2 Meso-level Determinants at Household Level

We now briefly specify what we mean by the meso-level, or, household-level factors. The highly influential 'New Economics of Labour Migration' (NELM) paradigm emerged in the 1980s to specify the main motivation for migrants as being to improve household living standards by using migration as a form of income diversification (Stark and Bloom, 1985). Migration can increase household income and reduce economic risks. The Sustainable Rural Livelihoods (SRL) approach categorizes rural households' livelihood strategies according to their assets, which can be physical, financial, human, social and natural (Scoones, 1998, Freguin-Gresh et al., 2014). According to Scoones (1998) these assets are used to pursue different SRL strategies, including migration.

We now look at evidence from the existing research on the effects of meso-level factors. Migration networks have been found to play a key role in out-migration from Tunisia (Bilgili and Marchand, 2016). The TLMPS found that the majority of migrants could find employment in the destination country through their family and friends networks, although highly skilled migrants rely less on families and friends than do lower skilled migrants (David and Marouani, 2017). Qualitative research reported in this study (Kriaa 2013) found that, in the majority of cases, the migration decision is planned jointly with the family. Households financially support the migration project, even when irregular, with extended family networks providing lodging and sustenance in the destination country until migrants obtain employment. It has, however, been found that support from networks varies according to the origin area (Kriaa, 2013). For example, Belhedi (2001) shows that households plan the migration of single members – either for working or family reunion reasons, or according to a circular/seasonal patterns – to avoid the departure of the entire family. Migration is facilitated in

areas where social networks are more developed and can support migrants' settlement in destination areas or take care of their family members left behind (e.g. in the Southern areas such as Jerba, Nefzaoua, Ghomrassen, Matmata, Mareth, Chebba, Msaken).

Departures without the household's approval can lead to isolation. Boubakri and Mazzella (2011) studied an extended Tunisian family originating from Ghoumrassen and that, when the household's younger members migrated to France against their parents' approval, they were rejected by their families and, at least for a while, had to live without their financial support.

The role of the head of household is of importance. The number of women in Tunisia exclusively managing a farm or jointly with a man is relatively high, but, because of local cultural norms, women prefer not to assume the title of household head even if their husband is not present (e.g. if he is dead or has migrated) or does not work in agriculture. This is especially true in the case of patrilocal extended households (i.e. married couples living with husband's parents). Women are generally more active in agricultural work than men. A qualitative study by Ben Hmida (2016) with interviews of young Tunisian men and women (between 18 and 30 years old) in the governorate of Jendouba reveals that more women than men are working in the agricultural sector undertaking seasonal or daily work on farms near their residence in addition to working in their own household. The main reason for women's involvement in agricultural activities is that the income - although occasional increases social status. In contrast, men are more likely to look for a stable job with a constant income. Ben Hmida's study confirms that women are usually the breadwinners and the family income's manager. As a consequence of this working division, women develop diverse and multivalent professional skills that can be applied to different sectors (e.g. handcrafting, farming, breeding) while men's competences remain limited to their physical capacity that can be used only in sectors such as construction (Ben Hmida, 2016).

4.1.3 Macro-level Contextual Determinants

A macro-level, contextual perspective facilitates integration of this wider social and economic context to encompass the impact and influence of both public (such as government authorities at national and sub-national level) and private actors (households, private businesses and community structures) on migration decisions taken at a household level.

We now survey evidence from the existing research literature on the effects of these macro-level factors. As previously noted the drivers of youth migration in Tunisia are primarily economic. Under the Ben Ali government, migration was a strategy to cope with the failure of the country's economic model and consequent growth in youth unemployment (Paciello et al., 2016). The Tunisian economy is labour intensive and based on low-skilled activities. The consequent structural mismatch between the labour demand for unskilled workers and a growing supply of skilled labour increases unemployment especially among educated and young Tunisians (World Bank, 2014).

After the 2011 revolution the unemployment rate among young Tunisians increased to stand, in 2016 at 35.7 percent compared to a national rate of 14.7 percent (World Bank 2017). Most of the unemployed people have no previous work experience but have intermediate and higher education (Bardak 2014).

Tunisia is affected by structural and historical socio-economic inequality. Before 2011, an annual GDP growth of about 5 percent was accompanied by high unemployment and poverty rates with strong disparities between regions (ONEQ, 2014). These disparities have been exacerbated by government

interventions in favour of export-oriented companies located in the coastal governorates.

For the agricultural sector, policy measures have subsidized products mainly produced in coastal areas and for which Tunisia is not competitive (e.g. cereals, beef, and milk) while disregarding those cultivations produced in the interior regions (World Bank, 2014). Government subsidies and market-oriented large farmers have helped to improve the added value of agriculture – which increased at about 4 percent per year over the period of 1980-2000 – because they could use new technologies (e.g. fertilizers and other chemical inputs, and irrigation systems) and carry out management and efficiency improvements. However, this growth of the agricultural sector has not corresponded to an increase in labour demand in the same period. Additionally, the minimum salary in the agricultural sector has only increased by 0.5 percent per year. As a consequence, small farmers have been forced into additional economic activities, for instance in the construction sector (Ayadi et al., 2004).

In Tunisia, structural constraints limit farming productivity. These include scarcity natural resources (i.e. water), inadequate access to new technologies and financial resources, and uneven distribution of land. Therefore, agricultural activity remains mainly pluvial, extensive, and highly dependent on climatic changes, with consequences for food security. For instance, Tunisia is highly dependent on cereal imports (Ouertani, 2016).

In the agricultural sector, land property is parcelled due to existing property distribution rights and demographic pressure and the majority of the population in rural areas do not own land or own micro-farms (Gafrej, 2016).⁷ Land property fragmentation limits farmers' access to credit and insurance (Gafrej, 2016) and negatively affects the poverty and consumption rates in rural areas. Where land is mainly collective or lent by the state emigration is limited due to the local population's fear of losing their land rights in case of departure (i.e. in the mid-West and extreme North-West regions) while a land ownership regime facilitates population movements (Gafrej, 2016).

Agricultural activities constitute a major share of the economy of rural regions. Consequently, the underdevelopment of the agricultural sector pushes Tunisian youth to migrate from rural to urban areas to look for a job (Boughzala and Tlili Hamdi 2014). Analysis of inter-governorates migration in Tunisia between 1999 to 2004 shows that internal migrants move from economically depressed interior areas in the West to coastal governorates with low unemployment rate and high per capita expenditure (Amara and Jemmali, 2017). Moreover, coastal regions are perceived to offer better opportunities to develop commercial (legal or illegal) activities with foreign economies and to migrate abroad (Lamine, 2008).

Unemployment among young women between 15-24 years is particularly high at 38 percent in 2016 (World Bank, 2017). Female participation in agricultural employment is relatively but often limited to unpaid family work or seasonal work, which offers low wages (Boughzala, 2014). Social norms limit female employment opportunities and their scope for mobility for employment. Their families were found to be more likely to tolerate young women moving to other areas when their employment was sociably acceptable – for instance as nurse or teacher – or increased their possibility to marry (World Bank, 2014).

⁷ Micro farms are defined as less than 10 hectares of rather arid land or less than two hectares of irrigated land (Boughzala, 2014).

4.2 The determinants of rural youth migration: data analysis and results

This section draws from original data collected for this report to compare households with and without migrants and to carry out an individual-level analysis comparing migrants and current residents (or non-migrants) in migrant and non-migrant households. Key comparisons are made between households with internal migrants and those with international migrants, and between households with migrants that emigrated at different time points; the individual-level analysis follows these cleavages as well. These multiple comparisons will help to identify the potential drivers of migration. Attention is focused on four main dimensions:

- at the household level, its main activity;
- at the individual level, the educational level of migrants and non-migrant household members;
- the status of migrants before migrating;
- and, their reasons for migrating.

4.2.1 Comparing households with and without migrants

Table 11 shows the general characteristics of households as well as their main activity, land and material conditions. These characteristics are observed for households with and without migrants (internal/international and who migrated at different time points).

Considering all household members (both migrants and current residents), we observe that migrant households are in general more numerous than non-migrant households. After departure of migrants, however, the reverse is observed: in other words, the number of current residents is smaller in migrant households than in non-migrant households. In households with migrants, these constitute, on average, around 40 percent of all household members. As expected, the share of current male residents — with respect to all current household members — is lower in migrant households, especially those where there are migrants that left before 2011. Households with migrants are also much less likely to have children.

Table 11: Characteristics of households and their members: migrant and non-migrant households

	Non-	Migrant	Sub-classifications for migrant households,				
	migrant	house-	based on their migrant members' characteristics				
	house- holds	holds	Internal	Inter- national*	Only 2011+	2011+ and pre- 2011	Only pre-2011
General characteristics							
Average number of household members, including migrants	4.2	5.6	5.6	5.5	5.3	6.7	5.1
Average number of current household members	4.2	3.4	3.5	3.2	3.8	3.2	3.2
Average percentage of migrants within households	0.0	37.9	37.2	45.2	29.5	52.3	37.3
Average percentage of men within current household members	52.5	43.7	43.9	41.0	47.5	40.3	40.1
Households with children below 15 years old	42.1	16.2	16.9	6.3	19.3	8.3	18.3
Main activity (%)							
Agricultural production	23.5	13.1	13.3	10.9	16.8	8.7	12.1
Livestock farming	27.5	29.7	29.4	32.6	36.8	30.4	26.1
Industrial activity	0.0	0.2	0.2	0.0	0.0	1.1	0.0
Sale of animal products	0.0	0.7	0.8	0.0	1.9	0.0	0.6
Commerce	0.0	5.9	5.2	13.0	4.5	5.4	4.2
Services (restaurant, transport)	2.0	1.3	1.4	0.0	0.6	0.0	1.2
Construction	29.4	23.0	24.3	8.7	16.1	20.7	25.5
Employee/salaried work (travail salarié)	17.6	26.2	25.4	34.8	23.2	33.7	30.3
Land							
Average land extension of households (Ha)	3.2	3.3	3.0	6.3	4.1	2.2	1.9
Average number of parcels of households	0.8	1.2	1.1	1.4	1.6	0.9	0.7
Material conditions							
% of households with access to running water	71.2	66.3	65.6	73.9	65.2	73.9	64.8
% of households with access to potable water	64.7	54.9	54.5	58.7	52.9	43.5	52.1
% of households with access to hot water	13.5	8.5	7.2	21.7	4.5	9.8	9.7
% of households with access to heating	28.8	22.3	22.7	17.4	14.2	44.6	27.9
% of households with access to internet	2.0	4.8	4.2	10.9	6.5	1.1	4.3
% of households with mobile phone line	67.3	72.8	71.5	87.0	82.5	53.8	67.3

^{*} Might include internal migrant members.

Note: The Ns in this table vary slightly depending on the variable explored. Refer to Table 10 for the total N by household type. Source: Own calculations based on Questionnaire 1/2.

The most common activities of households at the time of survey implementation are agricultural production, livestock farming, construction and salaried work. The share of households in livestock farming and construction is similar for households with and without migrants, on average. However, migrant households are more likely to have declared 'salaried work' as the main activity, while non-migrant households are more likely to perform agricultural production (with smaller land extension and number of parcels, on average).

Some interesting differences emerge depending on whether the household has international migrants or not and, most interestingly for the purposes of looking at push factors, depending on the period in which migrants left the household (i.e. first movement). The main difference between households with and without international migrants is that salaried employment is more common in the former, while construction is more common in the latter. When looking at households based on the period in which their migrant members migrated, important differences also emerge. First, agricultural production and livestock farming are more common among households with recent migrants only (2011+) than among households with pre-2011 migrants only; conversely, households with pre-2011 migrants only are more likely to perform activities connected to construction and salaried work. Although no clear conclusions can be derived, one could hypothesize that these observed changes are connected to push factors associated with agricultural and farming activities, on the one hand, but also to changes in the main activity of remaining members, from agricultural to other non-agricultural activities, which is observed in household with more long-term migrants, on the other. Second, the high percentage of households with recent migrants whose main activity is livestock farming, which also coincides with the area of Médenine, might also lead to hypothesize that there are push factors connected to this specific sector in that specific area. As additional information, the data shows for example that in this area, migrant households are less likely to have bought or sold animals in the past 5 years, compared to non-migrant households. Further research could identify potential causal mechanisms.

As regards their material conditions, the indicators of water and heating point to better material conditions for non-migrant households than for migrant households, on average. Some indicators point to better conditions for households with international migrants compared to those with internal migrants only, although results are not consistent; this might be due to the relatively low number of respondents as well as to the availability of resources and weather conditions in the areas of origin, which are probably impacting the results observed for households with recent and more long-term migrants as well. Finally, migrant households are more likely to have access to mobile phone and Internet, compared to non-migrant households, which can be important for communicating with those who left.

4.2.2 Analysis at the individual level: a focus on migrants and current residents in origin areas (from migrant and non-migrant households)

In this and the coming sub-sections, rather than focusing on households, we focus on individuals. We look at different categories of migrants and of current residents in origin households in Tunisia, paying attention to destination and period of migration. This categorization allows us to compare in more detail the characteristics of migrants versus the characteristics of current residents in origin areas in Tunisia, being these from migrant or non-migrant households. Furthermore, it allows comparison of what the current residents in rural areas in Tunisia say about the migrant members who left the household with responses from the migrants themselves, interviewed in urban areas in Tunisia and Italy.

Table 12 shows the number of current residents and migrants in non-migrant and migrant households; it also shows their distributions based on whether migrants are internal and/or international and the period of migration. Furthermore, the percentage of men, mean age and mean age of migration are shown. In their majority, migrants are men, and this has an impact in the gender composition of origin households. In fact, we can see that while in households with no migrants the share of men is around 54 percent, in migrant households only around 44 percent of current members are men, on average. Some differences emerge as regards the year of migration of migrants and their destination. Looking at the N, we observe that around 45 percent of migrants left in 2011 or after, while around 55 percent left before 2011; 8 international migrants constitute around 5 percent of all migrants. The gender composition of these sub-categories reveals that among recent (2011+) and internal (currently living in Tunisia) migrants there is a higher share of women (compared to older and international migrants). This would suggest that migration is becoming more feminized over time, and also that female migration is mostly within the country. 9 Finally, the average age of emigration is around 25, although recent migrants (2011+) and, in particular, international migrants seem to have migrated for the first time at an older age.

Table 12: Age, gender, and age of migration (migrants only) for members of non-migrant households and for current residents and migrants of migrant households

			N	Men (%)	Age (mean)	Age of (mean)	migration*
Non-migrant households	Current residents		239	54.4	33.9		
Migrant households	Current	Internal hh	1740	44.1	38.3		
	residents	International hh	138	39.1	40.9		
		2011+ hh	579	47.2	37.1		
		Pre & 2011+ hh	296	40.5	44.4		
		Pre-2011 hh	530	40.2	37.7		
	Migrants	Internal	1128	66.8	33.6	24.6	
		International	54	85.2	37.9	28.2	
		2011+	426	64.1	28.8	25.8	
		Pre-2011	530	67.9	38.3	24.1	·

^{*} Age of the first movement (out of the origin household)

Note: hh=Household.

Source: Own calculations based on Questionnaire 1/2.

-

⁸ Note that the percentage of migrants with missing information on the year of migration is around 19 percent.

⁹ One could also calculate the statistics in the other direction (with gender as the independent variable), to look at the probability that a man or a woman be a migrant. This calculation reveals that 46 percent of men in the sample are migrants, while this drops to 25 percent for women. Moreover, it shows that among migrants only, while 57 percent of men migrated before 2011 (vs. 53 percent of women), for the next period (2011 or later), women have a higher relative percentage (47 percent vs. 43 percent for men). These statistics suggest a similar pattern as shown in Table 4, so general conclusions do not change. In order to reach more definitive conclusions it would be necessary to have the gender composition of migrants and non-migrants for several periods in order to better confirm that women are migrating more now than, for example, 10 or 15 years ago.

4.2.3 The role of education

The educational level of migrants and current members of migrant and non-migrant households varies considerably. Figure 1 shows the distribution of educational levels for different categories of individuals with 15 years old or more. Generally speaking, migrants tend to be more educated than current members of migrant and non-migrant households; in particular, this difference is driven by the fact that they are more likely to have a university degree. If we consider that the percentage of individuals that achieve a post-secondary degree in Tunisia is, according to data from the World Bank for 2010, around 10 percent, ¹⁰ a share of around 20 percent of individuals with university degree among the migrant population (on average) is quite a large figure. International migrants and, especially, recent migrants (2011+) have the largest share of individuals with a university degree (around 24 percent and 30 percent respectively). Conversely, official statistics show that around half of the population in Tunisia have primary education or less, and the proportion of migrants with these studies is lower at around 40 percent, on average.

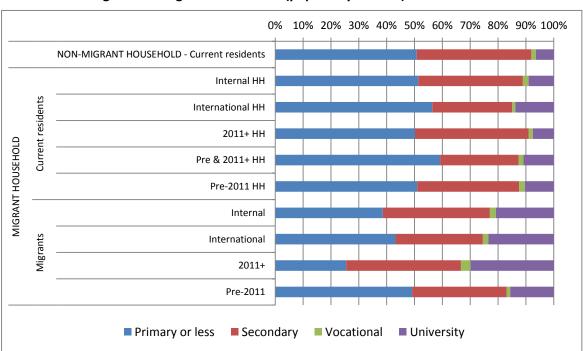


Figure 1: Level of education of current residents of non-migrant households and of current residents and migrants of migrant households (pop. 15+ years old)

N=2192 (the N is lower when individuals are classified according to period of migration due to missing cases). Source: Own calculations based on Questionnaire 1/2.

Again, important differences emerge depending on the period of migration. Recent migrants are much less likely to hold a primary level education compared to migrants who left before 2011: only 25 percent of migrants who left after 2011 have a primary level education. Overall, although primary and secondary education are very common educational levels among migrants, even those who go abroad, recent migrants seem to be more educated than older migrants.¹¹ Note, however, that we

_

Data from: http://databank.worldbank.org/data/reports.aspx?source=Education-Statistics:-Education-Attainment#. Wittgenstein Projection: Percentage of the population age 15+ by highest level of educational attainment (Total).

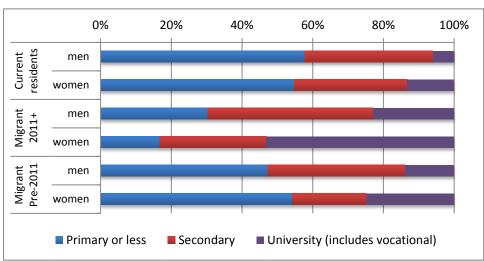
¹¹ Migrants from Médenine, followed by migrants from Siliana, are the most likely to have a university degree. However, the population in Médenine is also more educated on average.

do not know if this education was obtained before or after migration; also, it is difficult to derive a strong conclusion on whether highly educated people are more likely to migrate after 2011 rather than before 2011, given that the population as a whole has increased their educational levels thanks to educational expansion. However, the data clearly reveals that there is a link between university education and migration. As we will see later on, this is also probably connected with an increase in study-related reasons for migration.

Finally, it is also interesting to note that among current residents the higher concentration of individuals with university education is also observed among those who belong to migrant households, especially those who have international migrants. This might speak of push factors connected to a higher average educational level of the family of origin. Note, however, that current household members that have only 2011+ migrants are less likely to have a university degree.¹²

Figure 2 shows results separated by gender. Here we only divide between current household members (be these from migrant or non-migrant households) and migrants, differentiating between those who left before 2011 and those who left in 2011 and later. It is interesting to observe that women have a higher proportion of university degree holders, and this applies both to 2011+ and pre-2011 migrants and to current residents. In all three cases this proportion is of around twice the size with respect to that of men.

Figure 2: Level of education of current residents (from non-migrant & migrant households) and migrants, by gender (pop. 15+ years old)



N=1331 (683 men, 648 women; current residents) and 865 (267 men, 143 women migrant 2011+; 326 men, 129 women migrant Pre-2011).

Source: Own calculations based on Questionnaire 1/2.

U

It is difficult to make a definitive statement based on this data as to whether educated women are emigrating more now than 10 or 15 years ago because this would require data on educational distributions by gender for different periods of time and the exact time when education was obtained. However, the results point to a strong relationship between university education and migration among women. It is striking, for example, that among those who left in 2011 or later, more than 50 percent of women have a university degree (versus around 23 percent of men). Also note

¹² One might hypothesize that while before only some educated household members migrated, in more recent years it seems as if a higher share of educated members within the household migrated. However, more detailed research would be needed to support this statement.

that the share of male university holders over the total population of migrants is 10 percent for pre-2011 migrants and 7 percent for 2011+ migrants (it has therefore reduced for recent migrants); conversely, the share of female university holders over the total population of migrants is 15 percent for pre-2011 migrants and 19 percent for 2011+ migrants (it has therefore increased for recent migrants). Although better data would be needed to address selection mechanisms over time (i.e. who migrates at different time points), the results suggest, first, a feminization of migration over time and, second, that this feminization is likely to be associated with an increase of highly educated migrant women (or, as we will see later on, with women that migrate to study).

4.2.4 Reasons for migration and status before migrating

Migration is a decision that, in most cases, involves other household members, in particular the head of household of origin. However, around one quarter of responses – both by respondents in rural areas in Tunisia and by migrants in Italy – are that no household members were involved in the migration decision of migration. The main declared reasons for migrating are work (70 percent of the total sample of Tunisian migrants in Italy) and to improve life conditions, such as access to better health and educational services (50 percent). Many migrants also mention to get married (around 13 percent, mostly women), to study (10 percent) or due to a reduction in income from agricultural activities (11 percent). Figure 3 shows the main reasons for migration for various categories of migrants.¹³ We divide between migrants in Tunisia and Italy, and between migrants who left the origin household (first movement) in 2011 or later and migrants who left before 2011.

Although all categories of migrants mention work and improving life conditions as the two most important reasons for migration, interesting differences emerge depending on the period of migration, the destination and also the questionnaire. Migrating to improve life conditions, rather than migrating for work, seems to be more important among recent migrants, when we look at the migrants' perspective. Migration connected to study also appears as a stronger reason for migration among recent migrants. Conversely, migration connected to getting married is less strong among recent migrants. Also, recent migrants are less likely to mention a reduction in income from agricultural activities as a reason for migration: this reason appears more among migrants who moved before 2011. The comparison between migrants in Tunisia and migrants in Italy reveals that the number of individuals whose reasons for migration are connected to work and improving life conditions is much higher in Tunisia than in Italy. In Italy, these factors are important, but sustaining the family and changing the lifestyle also appear as relevant factors. Among migrants in Tunisia, a reduction in income from agricultural activities is important too as a reason for migration.

¹³ Although reasons for migration are probably better declared by migrants themselves, in Questionnaire 3, we also include the responses from Questionnaire 1/2 given that the sample has been collected with stricter sampling methods.

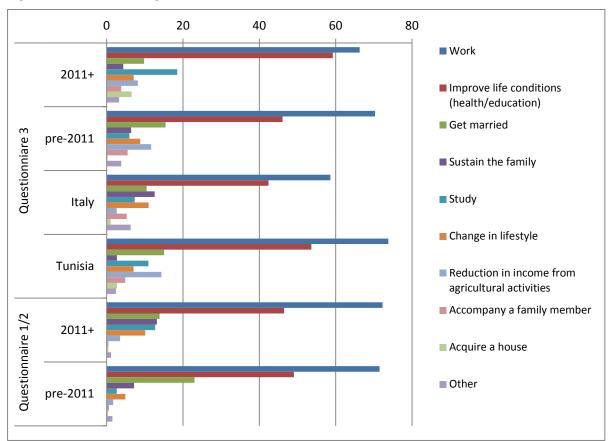


Figure 3: Reasons for migration

Note: The Ns for Questionnaire 3 are as follows: Migrants in Tunisia=412; Migrants in Italy=191; Migrants who migrated in 2011+=184; Migrants who migrated before 2011= 421. Multiple responses allowed.

Source: Own calculations based on Questionnaires 1/2 and 3.

Figure 4 explores reasons for migration by gender and period of migration; this is based on Questionnaires conducted in Tunisia for which responses are not given by migrants themselves, but by the respondent in the household of origin. There are important differences depending on whether the migrant is a man or a woman, as well as depending on whether migration happened before or in/after 2011.

For men, work and improving life conditions are the two most important reasons for migration, and this applies to both periods of migration. Furthermore, sustaining the family, change in lifestyle and, to a lesser extent, study and reduction in income from agricultural activities, appear as more relevant reasons for migration among recent migrants (i.e. with their first migration in 2011+).

Among women the picture is quite different. Next to improving life conditions and work, getting married is an important reason for migration. However, Figure 4 shows considerable variations in female's reasons for migration depending on the period of migration. In particular, migration for work and study is much more relevant for recent migrants than for migrants who left before 2011; conversely, migration to get married and to improve life conditions becomes less relevant among 2011+ migrants. In particular, while migration to get married applied to around 60 percent of migrant women before 2011, this only applies to 30 percent of recent migrant women (that is, those who left in 2011 or later). Furthermore, and following the previous argument around highly educated migrant women, it is interesting to observe that while among migrant women who left before 2011, a study-related reason for migration applies to only 5 percent of them, this grows to 25 percent among

recent migrant women. These are therefore considerable changes in the patterns of female migration between both periods. The comparison with men is also interesting: in particular, only 6 percent of recent migrant men reveal a study-related reason for migration.

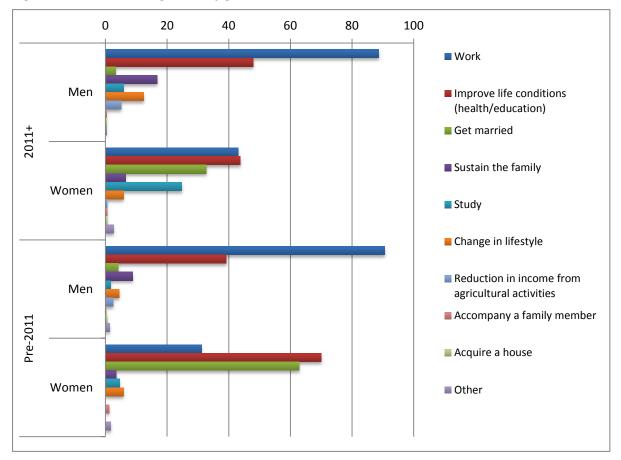


Figure 4: Reasons for migration by gender

N=273 men, 153 women migrant 2011+ and 360 men, 170 women migrant pre-2011+ (multiple responses allowed).

Source: Own calculations based on Questionnaires 1/2.

As regards the status before migrating, the responses of respondents in rural Tunisia (Questionnaire 1/2) and in urban Tunisia and Italy (Questionnaire 3) are very different, so it is difficult to derive relatively precise conclusions. Table 13 shows that while in Questionnaire 1/2 - responded by the current household head of a migrant household in rural Tunisia – it seems as if most migrants were unemployed before migrating, in Questionnaire 3 – responded by the migrants – the most common response is that they were employed before migrating. When separating between internal and international migrants in both questionnaires (tables available upon request) the results show that international migrants are more likely to have been employed before migrating than internal migrants. This seems in line with other evidence, which shows that international migrants have often made an internal move to urban Tunisia before migrating externally, and that employment is lower in urban areas than in rural areas (Amara and Jemmali, 2017). However, the difference between both questionnaires remains. An explanation might be the different perceptions of the migration experience by the migrants themselves, interviewed in destination urban areas, and by household members who remained, interviewed in rural Tunisia. However, it should be noted that samples (and sampling procedures) are also very different between both surveys, meaning caution should be used when reaching definitive conclusions.

Table 13: Status before migrating

		_	
	Questionnaire 3	Questionnaire 1/2	
Employed (%)	54.16	18.25	
Unemployed (%)	19.09	51.43	
Housework (%)	2.28	8.05	
Student (%)	18.76	21.56	
Retired (%)	0.16	0.09	
Disabled (%)	0.33	0.36	
Other (%)	5.22	0.27	
N	613	1118	

Source: Own calculations based on Questionnaires 1/2 and 3.

4.2.5 A multivariate exploration

One of the interests of this project is to see how migration has changed over time. To this purpose, we now present a multivariate model in which the most relevant variables are studied together. Specifically, we estimate the probability of being a recent (2011+) migrant (vs. having migrated before 2011) as a function of age, gender, education, reasons for migration and status before migrating. This analysis is based on data from Questionnaire 1/2 and only applies to the migrant population. It must be noted that the obtained results should not be read in terms of cause and effect, not only because we do not know the order of some events (e.g. we do not know if the education was obtained before or after migrating), but also because of the nature of the sample design, as discussed in the methodology section.

Table 14 shows Average Marginal Effects derived from a logistic regression; for descriptive purposes, different models are shown with additional variables. We have left education and previous status to the last models to observe the mediating role of these variables on study reasons (especially, being highly educated and being a student before migrating).

Table 14: Probability of being a recent migrant (2011+) by key control variables; migrant sample only. AME

	M1	M2	M3	M4
Age of migration	0.008	0.011	0.013	0.015
	(0.002)***	(0.002)***	(0.002)***	(0.002)***
Male	-0.072	-0.097	-0.071	-0.073
	(0.037)	(0.043)*	(0.042)	(0.044)
Study reasons		0.351	0.269	0.206
		(0.072)***	(0.074)***	(0.077)**
Marrying reasons		-0.202	-0.158	-0.133
		(0.055)***	(0.054)**	(0.057)*
Education (ref. Primary	or less)			
Secondary			0.228	0.208
			(0.038)***	(0.038)***
University/Vocational			0.244	0.156
			(0.047)***	(0.050)**
Status before migrating	(ref. employed)			
Unemployed				0.153
				(0.047)**
Housework				0.054
				(0.083)
Student				0.301
				(0.060)***
N	837	837	837	835

Source: Own calculations based on Questionnaire 1/2.

In line with the descriptive findings, Model 4 in Table 14 shows that migrants who left for study reasons are 21 percent more likely to have migrated after 2011 (rather than before 2011), while migrants who left for marrying reasons are 13 percent less likely to have left after 2011 (note that these two variables are introduced as dummies). The age of migration is also higher for migrants who left after 2011, as shown before. In terms of education, migrants with university degree are around 16 percent more likely to have migrated after 2011 (compared to migrants with primary education). Also migrants who were unemployed or students before migrating are more likely to have migrated after 2011, compared to those who were employed. Those who were students, in particular, have 30 percent more probability of having migrated in this period. Finally, although we do not observe statistically significant results as regards gender, the positive coefficient suggests that among migrants, women are more likely to have migrated after 2011 (rather than before 2011) compared to men.

Given the strong connections found earlier between women and university education, we have added interactions between education and gender to explore whether having a university degree on the probability of migrating after 2011 varies by gender. The results are plotted in Figure 5. Although confidence intervals overlap, and therefore the results need to be taken with caution, the Figure suggests, first, that both middle and highly educated men and women are more likely to be post-2011 migrants than primary educated men and women. Second, and more importantly, it shows that highly educated migrant women are more likely to have migrated after 2011 than migrant men, while low educated migrant women are less likely to have migrated in 2011+ than low educated

migrant men. The results, therefore, add further evidence to the idea that highly educated women lead the feminization of migration.

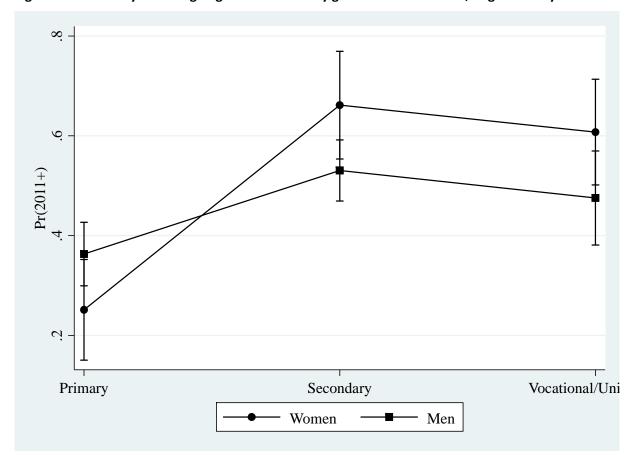


Figure 5: Probability of having migrated in 2011+ by gender and education; migrants only

4.2.6 Evidence from focus groups on determinants of youth migration

Focus group discussions highlighted the role of infrastructures, the increased economic polarization of the agricultural sector in the country, and changes in the economic model of rural households in enhancing internal migration from the studied areas. During the Ben Ali presidency – especially in the late 1990s – the government improved infrastructure in rural areas such as road, rail and telecommunication networks. Improved infrastructures were seen to have played an important role in modernizing agricultural production and integrating rural livelihoods into market dynamics, in terms of access to mechanization and information as well as to new markets. However, economic development has been less evident in arid/mountainous regions in contrast with neighbouring flatter regions where the agricultural sector has been boosted by increased access to machinery and marketing opportunities, which required additional seasonal workers. Meanwhile, this process contributed to shift the rural household economy from a subsistence-base to a consumption-base, which, in turn, has generated consumption needs that income from farming activities is not able to cover. As a consequence, migration from the studied rural areas to neighbouring regions has intensified thanks also to the improved transport.

For rural youth, an important migration driver was seen as being the effect of compulsory school enrolment until the age of 15 years that was introduced in the 1990s. Besides limiting youth's involvement in the agricultural workforce to holiday periods, this prolongation of the compulsory school period was seen to have contributed to changing the perception of agricultural work among

rural youth. Focus group analysis suggests that, migration decision among rural young Tunisians have a strong socio-cultural dimension as the rural world and the agricultural sectors are stigmatized because they are associated with a missed chance to evolve and become 'modern'. Thus, migration from rural to urban areas becomes a way to escape rural words perceived as archaic.

Additionally, findings identified the growing negotiation power of young people vis-à-vis household heads absent because of migration. As a consequence, in contrast with previous research rural youth (both male and female) appears to have enhanced its power on migration decisions as well. This is particularly significant in the case of rural young women since it is an indicator of a degree of autonomy that earlier was not evident and that is unlikely to be reversed. This trend is also found in Southern areas (i.e. Béni Khédèche) where gender aspects are traditionally more conservative.

The Tunisian revolution has undoubtedly provided rural youth with new room for manoeuvre. However, young participants in focus groups seem more concerned and informed about the civil and socio-political aspects of their country and life than about local legislation and politics. Moreover, although internet connections have enhanced the degree of information, participants commented that a 'double connection' (electronic <u>and</u> political) is still necessary to access opportunities.

Focus group research also highlighted the importance of the land tenure system. Participants reported that access to land represents an issue of concern throughout the areas, though with differences and nuances across the three sites. Since land is considered not only as an asset but also as a link to the family's history, lands markets are not developed while family heritage remains one of the main means to acquire control of land. According to the predominant land inheritance system, households' land plots are divided between male descendants, a mechanism that fragments the property of the land into smaller plots with reduced productivity. As a consequence, some heirs prefer to migrate and leave their land plot to the others (e.g. either rented or free of charge lease).

In all of the three study sites, the decreasing size and the fragmentation of land property was reported as a major determinant of the decreased productivity and viability of faming enterprises. In most areas, the limited size of land plots contributes to the uncertainty and volatility of agricultural employment as most agricultural workers are self-employed, which can also trigger migration.

The fragmentation process concerns also collective lands. Originally, these lands were owned by tribes or other ethnic communities, but are currently under the state's tutelage, which began a privatization process in the 1960s that is still ongoing. In Béni Khédèche, the privatization of collective community lands has been detrimental to the prevailing agro-pastoral sector. These communal lands used for grazing purposes have been fragmented into small private plots so that currently shepherds can access only the plot they own, which decreases sheep and goats breeding performance. Focus group participants reported feeling to have an increased control of a decreasing viable resource.

Finally, each of the report's three study sites is located in governorates close to borders with Algeria (in the North) and Libya (in the South-East). Focus group participants identified security concerns for local communities with a feeling of being squeezed between insurgency groups and military forces. In such a context, an option is to leave the 'battleground'.

5 Patterns of Rural Migration

5.1 Distinguishing between migration types

It is possible to distinguish different patterns of migration according to duration, root causes, and migrants' characteristics. We now briefly survey evidence from the existing literature before moving on in the next section to present the new data gathered for this study.

Despite the poor working conditions in urban areas, Tunisian rural youth tend to migrate to cities. This is particularly true for young men while young women mostly migrate to other rural areas (World Bank, 2014). In Tunisia, internal rural-urban migrants tend to establish nuclear family units instead of maintaining the original extended households. Nevertheless, they retain kinship ties with their origin household (Charrad and Goeken, 2006). Migrant households prefer to live beside their origin family and visit them frequently (Holmes-Eber, 1997).

Regarding the linkages between internal and international migration, a qualitative study among migrant households in Tunisia noticed a predisposition towards international migration among migrant households that had already internally migrated (either from rural to urban areas or between governorates) (Kriaa 2013). However, findings do not support the hypothesis that internal migration leads to international migration although certain areas in Tunisia are specialized in one of the two migration patterns (e.g. Ghomracen, Djerba, and Metouia). Instead, a migration project initially conceived as temporary often turns into permanent via family reunion. Regarding return migrants, until their retirement they do not cut their links with their destination countries, but usually travel back and forth (Kriaa, 2013).

Europe is the main destination for international migrants from Tunisia (David and Marouani, 2017; Boubakri, 2010). Population scenarios project declining employment-related migration pressure from Tunisia during the period 2015–2035 (Groenewold et al., 2016). According to Boubakri (2013), skilled young Tunisians plan to migrate abroad temporarily in order to build their professional career while unskilled and less educated migrants usually aim at leaving their home country permanently.

Data from the 2014 TLMPS survey indicates that although the majority of Tunisian migrants come from urban areas, after the 2011 revolution the percentage of migrants from rural areas has increased significantly, as Table 15 below shows. According to David and Marouani (2017), after the 2011 revolution the distribution of origin governorates has changed as well: before 2011 migration flows were mainly from Ariana, Ben Arous and Mednine while after 2011 the origin governorates were primarily Mahdia, Ben Arous and Sidi Bouzid (David and Marouani, 2017).

Table 15: Origin of migrants (%)

Origin	Before 2011 revolution	After 2011 revolution	Average
Urban	79.2	50.8	70.3
Rural	20.8	49.2	29.7

Source: David and Marouani, 2017.

A 2016 report by the Forum Tunisien pour les Droits Economiques et Sociaux (FTDES) focused on youth and undocumented migration from six districts in six different governorates (Ariana, Kasserine, Medenine, Mahdia, Kef, Gafsa). The sample involved 1168 individuals from which 21.1 percent of respondents declared themselves ready to migrate while 56.8 percent of households from the sample had a relative abroad. The drivers of youth migration were linked with the characteristics of

regions and migrants themselves. The surveyed regions were densely populated, suffered from lack of vital infrastructure. The report found that respondents lacked interest in sporting and cultural activities as well as in public affairs, political activities and voluntary community life. Pellicer et al. (2017) also highlight the importance of the role of education and the fulfilment of job-seeking aspirations in mobilizing youth in Tunisia. The FTDES study also found that 30.9 percent of respondents were willing to take part in irregular migration in the absence of regular migration opportunities while 9.2 percent of the total respondents had already participated in irregular migration (FTDES, 2016). The FTDES study also reported increased numbers of potential out-migrants after 2011, which was related to personal perceptions of a deterioration in living conditions, terrorist threats hitting the tourism sector, the problematic marketing of agricultural products plus strikes in the interior regions, which had an impact on foreign investment. The ILO (2013) characterized the majority of Tunisian irregular migrants as young and single men under 30, with low educational levels (not above secondary school) and unemployed.

5.2 Patterns of rural migration: data analysis and results

5.2.1 The characteristics of migration moves

This section uses original data gathered for this report to analyze the characteristics of migration moves, with channels of migration and destination and with intentions to return.

Table 16 shows the number of moves done by migrants interviewed in urban areas in Tunisia and Italy. Specifically, individuals are asked how many times they have changed residence (migrated). The results shows that while in Tunisia most individuals have done only one move (around 87 percent of cases), in Italy it is most common to find migrants that have previously done two or more moves. Table 16 also shows that on average, less than 30 percent of migrants move periodically for work reasons (seasonal work). In Tunisia seasonal work seems to have become more common among recent migrants, while the opposite is observed for migrants in Italy.

Table 16: Number of moves and seasonal work; migrants in Tunisia and Italy

	Tunisia	Italy	Total
Number of moves			
One move (%)	86.8	34.4	68.0
Two moves (%)	11.3	32.2	18.9
Three or more moves (%)	1.8	33.3	13.2
N	326	183	509
Do seasonal work			
2011+ migrant (%)	24.5	26.7	
Pre-2011 migrant (%)	16.4	30.7	

Source: Own calculations based on Questionnaire 3.

Table 17, below, shows the relationship between the number of moves done by migrants and whether the first move is internal or international; migrants in Tunisia and Italy are shown separately. There are inconsistencies in the responses to this question, because migrants that are in Italy and declare only one movement should have a value of 100 percent in the first column (and not 68 percent); similarly, migrants in Tunisia who have done only one movement should also have 100 percent in the first column (and not 97 percent). Nevertheless, the table shows that some migrants do internal movements in Tunisia before migrating abroad. If we group migrants in Italy that have

done 2 or more moves before arriving in destination, around 50 percent of them declare to have made a first internal movement before moving abroad. We can also observe that some migrants who currently reside in Tunisia have been abroad and have returned.

Table 17: Destination of first move, by number of moves; migrants in Tunisia and Italy

		Tuni	sia	Italy		
	1 move	2 moves	3 or more moves	1 move	2 moves	3 or more moves
	(%)	(%)	(%)	(%)	(%)	(%)
Internal	96.5	94.6	83.3	31.7	45.8	49.2
International	3.5	5.4	16.7	68.3	54.2	50.8
N	283	37	6	63	59	61

Source: Own calculations based on Questionnaire 3.

5.2.2 Channels for migration and networks

We now ask what channels have migrants used to migrate and what networks do they have at destination? Although the series of questions on these topics, present in Questionnaire 3, were connected to 'international migration', all migrants have responded. As expected, some questions are irrelevant for internal migration (such as the need for a visa); others, however, can be interpreted correctly in both contexts, such as the presence of networks in destination places. Table 19, below, shows a detail of these questions, by country of destination and period of migration; we have considered only relevant questions according to the context.

Table 18, below, shows that it is quite common for migrants to have contacts (family members, friends, etc.) in destination before migrating. However, while this trend seems to have become stronger for internal migrants in Tunisia (if we compare those who left the household before 2011 and those who left in 2011 or later), for those who are in Italy, having contacts before migrating seems to be less relevant among 2011+ leavers than among earlier ones. Furthermore, undocumented migration has also become more common, which might suggest an increase of uncertainty around the decision to migrate and possibly the increasingly difficult channels for regular migration. Finally, note that education is a stronger channel for migration for recent migrants, which goes in line with the increasing role of studies among the reasons for migration.

Table 18: Channels of migration and networks; migrants in Tunisia and Italy

		Italy	Т	unisia
	2011+	pre-2011	2011+	pre-2011
Had contacts in destination before migrating (%)				
Yes	52.2	70.0	54.0	46.4
N	46	150	139	263
Channels used for migrating (%)				
Agency/broker	6.5	14.1	0.0	10.0
Education	21.7	4.0	2.5	1.8
Seasonal work program	2.2	7.4	0.0	0.0
Job offer	4.3	12.1	10.8	20.1
Irregular	23.9	17.4	31.7	16.0
Other	41.3	45.0	55.0	52.1
N	46	149	120	219
Documents used (%)				
Tourist visa	6.5	30.2		
Student visa	15.2	4.0		
Residence permit	13.0	16.8		
Work permit	6.5	13.4		
Other	6.5	13.4		
No official document	52.2	22.1		
N	46	149		

Source: Own calculations based on Questionnaire 3.

5.2.3 Return intentions

Table 19 shows the return intentions of individuals and a series of questions related to reasons, preparation and expected activity among those who declare they want to return to origin (i.e. responded 'Yes').

Table 19: Return intentions; migrants in Tunisia and Italy

		Tunisia		Italy
	2011+	Pre-2011	2011+	Pre-2011
Return intentions (%)				
Yes	17.8	22.7	43.5	40.7
Yes, in a late future	10.4	15.8	21.7	20.7
No	71.9	61.5	34.8	38.6
N	135	273	46	140
Reasons for wanting to return (multiple)* (%)				
Retiring	8.3	32.3	14.3	28.3
Homesickness	33.3	53.2	33.3	18.9
Family nostalgia	33.3	21.0	57.1	15.1
Low salary	4.2	11.3	0.0	3.8
Discrimination	0.0	3.2	0.0	1.9
New business affair in origin	8.3	4.8	0.0	17.0
Help the family in economic activities	12.5	6.5	0.0	3.8
Other	20.8	14.5	23.8	22.6
N	24	62	21	53
Measures taken to prepare the return* (%)				
Regained contact with family/friends	29.2	22.6	29.0	23.4
Job search	0.0	3.2	3.2	12.5
Documentation	4.2	1.6	0.0	4.7
Search for a house	4.2	1.6	3.2	6.3
Other	25.0	38.7	22.6	20.3
None	37.5	32.3	41.9	32.8
N	24	62	31	64
Wants to perform an economic activity upon ar	rival* (%)			
Yes, agricultural**	37.5	55.7	46.4	35.5
Yes, commercial	20.8	26.2	14.3	22.4
Yes, restaurant	0.0	1.6	10.7	6.6
Yes, other	12.5	3.3	14.3	10.5
No	29.2	13.1	14.3	25.0
N	24	61	28	76

^{*} Applies only to those who responded 'Yes' to the question on return intentions.

Source: Own calculations based on Questionnaire 3.

Return intentions to origin are much higher for migrants in Italy than for migrants in Tunisia: on average (note that average values are not shown), around 40 percent of migrants in Italy declare they want to return (and an additional 20 percent say they want to return in a late future), while the

^{**} It is not specified whether this includes livestock farming.

value drops to around 20 percent for migrants in Tunisia (while an additional 14 percent say they want to return in a late future). However, this difference might be related to the different spatial references of both groups. Given that at least half of migrants in Italy have done more than one internal movement before moving to Italy, it is probable that the idea of returning does not necessarily mean returning to the origin area (as it most probably means for internal migrants in Tunisia), but also returning to the home country. Interestingly, migrants in Italy who left the origin household in 2011 or later (recall this refers to the first movement) are more likely to say that they intend to return to the origin country at some point, while the opposite pattern is observed among internal migrants in Tunisia (recent migrants are less likely to declare they want to return to origin than older migrants).

Common reasons for wanting to return (among those who responded 'Yes' to return intentions), both among migrants in Italy and among migrants in Tunisia, are homesickness, family nostalgia and retirement (the latter mostly among those who left before 2011). Accordingly, regaining contact with family and friends appears as an important measure in the process of preparation for return. Finally, an important share of migrants who declare wanting to return would like to perform an agricultural activity (it is not specified whether this includes livestock farming) upon arrival: this is 51 percent for migrants in Tunisia and 39 percent for migrants in Italy. As shown in Table 9, this share varies depending on the current location of migrants and period of migration: for example, around 56 percent of internal migrants who left before 2011 say they would like to perform this activity; this is lower for the other groups, with values that go from 35 percent to 46 percent. Note also that most of migrants who say they want to perform this activity are men: specifically, 59 percent of migrant men in Tunisia say they want to do this activity, vs. 32 percent of women. Among migrants in Italy, around 42 percent of men say they want to perform this activity, vs. 31 percent of women.

5.2.4 Evidence from focus groups on patterns of rural youth migration

Focus group participants highlighted how off-farm activities — including migration — represent a major factor that has disengaged the male rural workforce from its direct participation in household farming. Male temporary mobility has shifted to a long-term, structured migration. Male household heads were initially directed towards neighbouring regions for seasonal work in agricultural sector. However, they later moved further towards Tunis, often driven by trade or work opportunities in the construction sector. Eventually, they have been followed / replaced by their offspring — their adult male sons.

However, short-term and short-scale mobility is still an important mobility pattern in the studied areas but now it is mostly undertaken by rural young women. In contrast with previous research, the qualitative findings show that nowadays rural young women represent an important migrating group from each of the three studied areas, although in many cases with a more localized and temporary pattern than their male predecessors. Participants in focus groups reported that this phenomenon began during the Ben Ali Presidency and has increased since. Such migratory trajectories affect mostly areas within the country, and often with a daily and/or seasonal profile when connected with agricultural work. This mobility has developed into more stable patterns (with seasonal periods back home) when connected with textile factories in coastal regions or domestic work in urban centres. In the three study regions, rural young women emigrate to work in other regions, often on seasonal basis. This can be in the following sectors: agricultural sector: in neighbouring regions, often in the arboriculture sector; the domestic sector, mostly in Tunis; and, manufacturing/industrial work:

mostly in coastal cities. Participants also raised concerns about the intermediation networks that manage the transportation of the rural female workforce since this was seen to lack transparency and accountability.

Focus group participants reported that family reunification as well as the logistical support by family members and friends that had already migrated played a key role in facilitating the migration project. This network represents a social as well as cultural migration trigger. Furthermore, relatives and friends that had already migrated and settled in destination areas are reported as a primary source of financial support for the migration project. This support in destination areas replaces origin household support so that the migration project is not a burden on the household economy. Additionally, in many cases, young migrants adapt to accommodate in the workplace (i.e. male young migrants in construction sites, and female young migrants in the houses they served or at relatives'/friends' lodgings).

6 Effects of Rural Migration on the Livelihood of Origin Areas

6.1 Perspectives on migration impacts

Until the early 2000s, a general pessimism prevailed among scholars and policy-makers on the impact of migration on the development of migrants' areas of origin. In the early 2000s the international debate on the nexus between migration and development was reshaped by the publication of the World Bank's Global Development Finance report, which underlined the value of migrants' remittances as a source of development finance in sending countries (Ratha, 2003). This influenced a more 'optimistic' turn in the debate (de Haas, 2008). However, due to the endogeneity of migration decisions it is difficult for researchers to prove a direct relationship between migration and developmental changes in origin areas, for instance in terms of income, food security and inequality outcomes. The current general consensus is that the effects of migration on origin areas are dependent upon the local context and households' and individuals' characteristics (Deotti and Estruch, 2016).

6.1.1 Evidence from the literature on migration impacts in Tunisia

We now present a brief survey of existing research evidence on the impacts of migration before, in the next section, presenting new data and evidence that were gathered for this report. In Tunisia, with high unemployment and significant regional disparities, remittances can play an important role (Kouni, 2016). For example, remittances were found to have played a positive role in absorbing economic shocks resulting from political change after 2011 (Edelbloude, Sers and Makhlouf, 2017). According to Amara, Jemmali and Ayadi (2017) rural-urban migration in Tunisia increases on average the welfare of migrants and the education level exerts the strongest influence on welfare differences in migration. This supports the hypothesis that the skilled are more mobile than the unskilled from rural areas and they are more likely to improve their per capita incomes by moving to urban zones. Amara, Jemmali and Ayadi (2017) show that the coastal areas, more specifically Greater Tunis, attract more skilled workers than the other coastal agglomerations.

Similarly, Amara and Jemmali (2016) and Angel-Urdinola et al. (2015) found that Tunisian migrants were more attracted to governorates with low unemployment rates and high per capita expenditure which are located mainly in the coastal areas. The largest out-migration flows were directed from lower income and deprived regions in the inland part of the country to economically advantaged ones in the littoral part. Thus, a majority of migration flows were found to be driven mainly by geographical, demographic, and socio-economic factors.

Youth migration from rural to urban areas diminishes the labour force in the agricultural sector and as a consequence hinders its economic growth and productivity. Additionally, since cities are not able to absorb all these young unskilled migrants social and economic challenges in the cities are exacerbated (World Bank, 2014). A survey by the Tunisian Observatories National de l'Emploi et des Qualifications (ONEQ, 2014) among Tunisian youth aged between 15 and 29 found unemployment to affects more youth in urban (66 percent) than in rural areas (33 percent). Rural regions in the South–East, South-West, and North-West had the lowest rate of unemployment among respondents while rates were highest in the Tunis districts and in the Centre-East and Centre-West of the country.

Data on return migrants from the 2014 TLMPS showed that only a small percentage declared that they had returned either to look after a family business or farm (3.3 percent) or to start a business in Tunisia (10.3 percent). However, a much higher number of returnees than non-migrants are employers or self-

employed (54 percent compared to 21 percent of non-migrants) (David and Marouani, 2017).

According to Amara and Jemmali (2017), internal migration in Tunisia has contributed to regional disparities and wealth redistribution between more advantaged coastal areas to less advantaged inland regions. However, as regards international migration, data related to official money transfers in 2007 show that the main destinations are coastal governorate (Tunis, Médenine, Nabeul, Sousse, Bizerte, Ben Arous, and Mahdia) while interior governorates – mostly rural areas – received only 3 percent of transfers each. This data may suggest that migration abroad involves in greater proportion the population resident in coastal areas (Boubakri, 2010).

Official data do not capture the total amount of migrants' money transfers since these can also be sent via informal channels. For example, field surveys in the interior governorate of Kasserine reveal an active role played by migrants in initiating agricultural projects that official data on migrants' transfers do not show (Boubakri, 2014). According to Boubakri (2005), in Tunisia there are no reliable statistical tools to measure regional economic growth and therefore to evaluate migrants' contributions to it.

Kriaa (2013) found that once migrants are installed in the destination country, they transfer money to their origin families. Most interviewed households confirmed that their life has improved because of remittances. However, amounts, regularity and the transfer method depends on migrants' revenue, profession, and education. The final use of the received remittances is diversified and usually covers productive investments as well consumption expenditures for education, health care as well as housing. As regards productive investments, migrants can financially support their friends' or family's economic activities. However, long-term migrants, who left Tunisia before the 1990s, prefer to invest in housing while more recent migrants are more inclined to productive investments. For return migrants, in most case their productive investments were found not to have been successful. Finally, the Kriaa (2013) study points out various negative effects derived from migration on the origin households. First, the family members left behind show psychological and emotional distress as a consequence of the departure of the family members, usually the father/husband. Additionally, migrants' young close relatives in Tunisia (e.g. son or brother) cease to look for employment since the remittances they receive from their kin abroad is higher than what they could earn if they worked (Kriaa, 2013).

Bouchoucha (2013) shows that migration by one of the parents, especially the father, has a positive impact on the school attendance of children since this is higher than among non-migrants' children, especially in the case of teenagers. This result can be explained by remittances' support to children's education as well as parents' pressure on children to repay their efforts.

Analysis of the 2014 TLMPS survey by David and Marouani (2017) found that almost half of interviewed returnees declared not to have sent remittances to their family during their period abroad. Moreover, only a small percentage of surveyed households had received remittances from abroad over preceding year. For these, remittances represented the most important share of the non-labour income (82 percent) and a significant part was received mainly via informal channels (e.g. friends and relatives). The main recipients are the migrants' sons or daughters while only in one fifth of the case they were sent to the spouses. However, data present a significant prevalence of female-headed households among the remittance receiving households (34.4 percent) compared to non-receiving ones (18 percent).

For international migrants from rural areas in the South of Tunisia, at least initially, remittances were mostly used for the origin household's consumption needs since many migrants are married men with wives and children left at home. Otherwise, investments target mainly trading activities while usually

migrants are not interested in the agricultural sector due to the previously mentioned structural problems (i.e. limited irrigation, arid soil, and complex land tenure). However, according to Saad and Bourbouze (2010) migrants that left in the 1960s and returned in the late 1990s are currently buying land and herds from local small farmers with the money they saved during their years abroad. As a consequence, these local small farmers abandon their farm and start work in these big estates, which results in a land concentration.

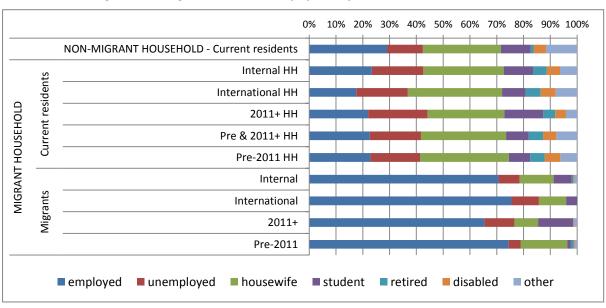
6.2 Effects of Rural Migration on the Livelihood of Origin Area: data analysis and results

We now use the new data gathered for this report to assess the impacts of migration. First, we focus on the links between migration and labour market status, both for migrants and for current members of migrant and non-migrant households in rural areas in Tunisia. Next, we focus specifically on remittances and the connections that migrants have with origin areas and households. As in the previous sections, we differentiate between internal and international migrants (and current residents in origin households with internal/international migrants) and between recent and non-recent migrants (and current residents in origin households with recent only, non-recent only and recent and non-recent migrants).

6.2.1 Labour market status

Figure 6 shows the labour market status¹⁴ (for individuals with 15 years old or more) of migrants and current members of migrant and non-migrant households.

Figure 6: Labour market status* for current residents of non-migrant households and for current residents and migrants of migrant households (pop. 15+ years old)



^{*} It is a proxy for the most common situation during the past year.

Source: Own calculations based on Questionnaire 1/2.

-

¹⁴ Note that labour market status is measured differently to international standards (where normally individuals are asked what they were doing during the past week). Here individuals are asked first whether the person in question (recall it is the head of household normally responding in Questionnaire 1/2) worked during the past year for more than six months. If the answer is yes, they are considered 'employed'. If the answer is no, then the reason for non-employment is asked (this is where the other categories come from).

Migrants leave mainly for economic reasons, and this is reflected in the fact that most of them have been employed in destination for more than 6 months. Furthermore, the relative share of employed vs. unemployed (which constitutes the potential active population in the sample) is also bigger for migrants, implying that in destination migrants are less likely to be unemployed, compared to those left behind. Interestingly, however, among current residents, those who live in households with migrants have a lower proportion of employment, as well as a higher proportion of unemployment compared to individuals living in non-migrant households. The share of individuals doing housework is also much bigger in origin, a fact connected to the self-selection of young men among the migrants, and the overrepresentation of women in origin migrant households. However, differences with respect to households with no migrants are not relevant in terms of this category. Figure 6 also shows that internal migrants and migrants who left in 2011 or later are more likely to be students than, respectively, those who migrated abroad and those who left before 2011; this is in line with the declared reasons for migration, where study was more often mentioned among migrants in Tunisia and among those who left more recently.

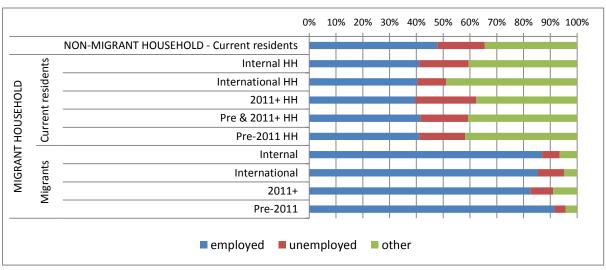
In order to have a more detailed description of the division of labour between men and women of different household types and migrant statuses, Figure 7 focuses on three categories of individuals of working age (15 years old or more): employed, unemployed (i.e., when considered together, active) and doing something else (i.e. inactive). For both men and women, employment is more prevalent among migrants than among current residents. Furthermore, among women, internal migrants are in general more likely to be employed than international migrants. Internal female migrants are also more likely to be active (i.e. employed or unemployed) than women who moved abroad. With regard to the period of migration, recent migrants are more likely to be unemployed than migrants who left before 2011. Among women, it is particularly interesting to observe that those who left in 2011+ are more likely to be active (i.e. either employed or unemployed). This might also be revealing different reasons for migration among women: indeed, this result goes in line with a lower predominance of marriage as a reason for migration among recent migrants.

Among non-migrants, we observe interesting differences as to how work is divided between male and female current residents who live in migrant and non-migrant households. In particular, while men in non-migrant households have the highest level of activity (compared to men in migrant households), it is women in migrant households who actually have the highest activity levels (compared to women in non-migrant households). Although women's unemployment levels are also high – which might reveal the difficulties they find in the labour market and, perhaps a process of adaptation to the absence of male workers that is not completely successful – this higher activity suggests that migration can indeed have an impact on how work is redistributed across genders within households.

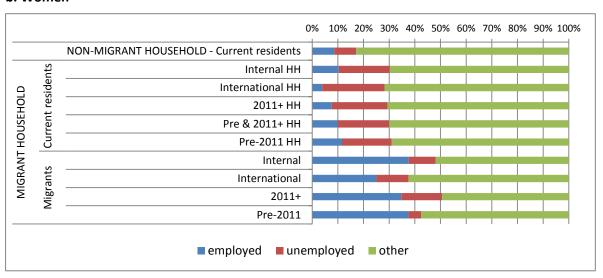
Figure 7 also shows that male current residents in non-migrant households are more likely to be employed than male current residents in migrant households. Note, however, that the relative share of employed/unemployed members is the most favourable for men in households with international migrants, which might speak of better resources these households have (however, we observe the opposite among women, which leads to the average value in Figure 5). Finally, unemployment seems to be slightly higher among current household members with recent migrants only than among current household members with migrants who left before 2011. Although differences are very small, this might reveal a process of adaptation of the household to the absence of young individuals in a working age.

Figure 7: Labour market status* for current residents of non-migrant households and for current residents and migrants of migrant households. Men and women 15+ (%)

a. Men



b. Women



^{*} It is a proxy for the most common situation during the past year.

Source: Own calculations based on Questionnaire 1/2.

Table 20, finally, shows two indicators associated with employment/non-employment vulnerability: whether the person has a contract (among employed only) and whether the person is registered with a social security system.

Table 20: Job contract and social security for current residents of non-migrant households and for current residents and migrants of migrant households. Men and women 15+

	Non- migrant hh	Migrant hh								
	Current resident		Curre	ent reside	nt		Migrant			
		Internal hh	Inter- national hh	2011+ hh	Pre & 2011+ hh	Pre 2011 hh	Internal	Inter- national	2011+	Pre 2011
Men										
Has a contract	11.4	14.6	21.1	11.1	21.3	18.5	27.2	44.1	31.7	29.4
Has social security	15.4	22.4	38.8	23.5	29.2	22.9	31.2	25.0	24.6	42.9
Women										
Has a Contract	14.3	16.5	50.0	20.0	18.8	13.3	57.0	50.0	69.2	51.6
Has social security	1.2	3.7	10.1	4.0	4.1	5.4	16.0	25.0	14.6	20.0
Men										
Total contract	44	253	19	90	47	65	632	34	218	320
Total social security	91	621	49	234	113	157	724	40	268	340
Women										
Total contract	7	85	4	20	16	30	135	2	52	62
Total social security	83	842	79	278	169	258	363	8	151	165

Source: Own calculations based on Questionnaire 1/2.

Bearing in mind that some cells have few cases (which we do not consider in this description), we observe that migrants are, in general, more likely to have a contract (among the employed) and more likely to be registered in a social security system. International migrant men are more likely to have a contract than internal migrant men; and recent migrant men are less likely to have social security than older ones. Among women we observe that those who migrated in 2011+ are more likely to have a contract than those who left before 2011. Among the stayers, we observe that those from migrant households (especially those with international migrant members) are generally better off in terms of having a contract and social security.

All in all, migration seems to bring changes to origin households: the remaining members are less likely to be employed and more likely to be unemployed, on average, compared to those who belong to households where no one has migrated. However, they are also more likely to have a contract (among the employed) and to be registered with social security. In addition, we observe important changes in gender roles: women in migrant households become more actively involved in the labour market, even if not very successfully, given the high unemployment; men, on the other hand, are less likely to be active compared to those in non-migrant households.

6.2.2 Contact and involvement of migrants with origin place and household

As regards the frequency of return to the origin household, according to Questionnaire 1/2 (by respondents in rural areas in Tunisia), around 40 percent of migrants return to the origin household more than three times per year, and around 30 percent two to three times a year. For Questionnaire 3 (by migrants themselves) the number of migrants who declare returning home at least two times a year is smaller, but this is due to the larger share of migrants residing abroad (i.e. in Italy) in the sample. In both cases, nevertheless, the contact seems to be quite frequent for a good part of migrants (tables available upon request).

As regards the involvement of migrants in origin households and regions, differences emerge between both Questionnaires. Respondents in Questionnaire 1/2 reveal that, in their majority (more than 80 percent), migrants do not own properties in origin. However, this value decreases to 50 percent for migrants in Questionnaire 3; the remaining 50 percent mostly declare to own a house in origin, and percentages are the same for migrants in Tunisia and Italy (see Table 21; other tables available upon request).

Similarly, in Questionnaire 1/2 respondents declare that migrants do not perform economic activities in origin (around 90 percent) and do not participate in the household of origin's economic activities (around 90 percent). However, in Questionnaire 3 around 33 percent of migrants in Tunisia and 23 percent of migrants in Italy declare to perform activities in the origin place at the time of survey implementation (see Table 21); furthermore, around 37 percent of migrants in Tunisia and half of migrants in Italy declare to have participated in the past year in the economic activities of the household of origin. Note that it is mostly migrants who left before 2011 who are most likely to be involved in activities in origin. Among those who perform activities in the place or household of origin, or did so in the past year, agriculture is the most common; other activities that stand out are livestock, commerce (especially for migrants in Italy) and rent and industrial activities (for migrants in Italy).

Table 21: Properties and economic activities in origin; migrants in Tunisia and Italy

	Tunisia	Italy
Owns a property in origin (%)	53.5	52.8
Has economic activities in origin (%)	33.4	23.4
Detail of economic activities (% multiple)		
Agricultural production	87.7	66.7
Livestock	15.2	20.0
Sale of animal products	0.0	4.4
Commerce	5.8	13.3
Services (restaurant, transport)	5.1	2.2
Construction	4.3	4.4
Rent	0.0	15.6
Industrial activity	0.0	0.0
Participated in economic activities of the origin household; past year (%)	37.2	50.8
Detail of economic activities (% multiple)		
Commercialization of products	11.1	25.3
Agricultural production	79.2	64.2
Livestock	9.0	4.2
Industrial activity	4.2	11.6

N=413 (Tunisia); 195 (Italy); minor variations emerge based on missing cases.

Source: Own calculations based on Questionnaire 3.

6.2.3 Remittances

As regards remittances, below we present results from Questionnaire 1/2 and from Questionnaire 3. Questionnaire 1/2 reveals that only around 26 percent of origin households receive remittances from migrants, be these money or goods. Similarly, only 25 percent of migrants in Questionnaire 3 reveal to have sent remittances home. Some differences emerge as to whether migrants are in Tunisia or abroad. Table 22 shows the percentage of households that have received remittances, based on whether they have international migrants or not (Questionnaire 1/2), and the percentage of migrants that has sent remittances home, based on whether they are in Tunisia or in Italy (Questionnaire 3). We observe that households with international migrants and migrants in Italy are, respectively, more likely to receive and send remittances (note also that among migrants in Italy, those who left before 2011 are more likely to send remittances than recent ones).

Table 23 shows the percentage of origin migrant households that have received remittances according to the household activity. We observe that among migrant households whose main activity is agricultural production, only 15 percent have received remittances; this increases to values between 25 percent and 29 percent for households whose main activity is livestock farming, construction and salaried work and to 38 percent for households whose main activity is commerce.

Table 22: Remittances received and sent

	Questionn	aire 1 & 2	Questionnair	e 3
	Households that have	received remittances	Migrants that have sent	remittances
	With internal migrants only With international		Migrants in Tunisia	Migrants in
		(& internal) migrants		Italy
%	24.8	47.8	10.9	54.1
N	492	46	414	196

Source: Own calculations based on Questionnaire 1/2 and 3.

Table 23: Remittances received, by type of household activity*

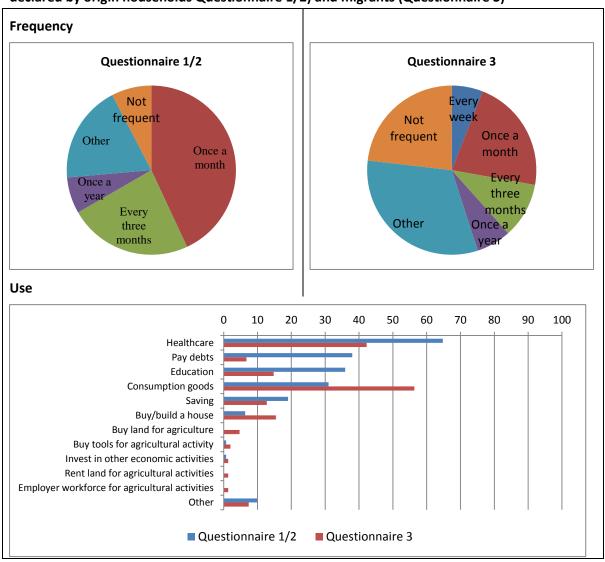
	Received remittances (%)	N
Agricultural production	15.5	71
Livestock farming	27.8	169
Commerce	37.5	32
Construction	25	124
Employee/salaried work (travail salarié)	28.6	140

^{*} Only most relevant household activities were chosen (see Table 3).

Source: Own calculations based on Questionnaire 1/2.

Figure 8 shows the frequency of reception/sending of remittances and what these remittances are used for, as declared by members of migrant households in Tunisia (Questionnaire 1/2) and by migrants in Tunisia and in Italy (Questionnaire 3). Again the results vary considerably between both questionnaires, which might be connected with the share of internal/international migrants in each. In particular, the frequency of reception/sending is quite different across samples. However, we find some interesting patterns in terms of the use of remittances: for both questionnaires, the results show that remittances are more related to consumption and to improving the livelihoods in origin, rather than to new investments. Healthcare expenses, consumption of goods, education, paying debts and, to a lesser extent saving and buying a house, are the most common uses of remittances.

Figure 8: Frequency of reception/sending and use of remittances by origin migrant households, as declared by origin households Questionnaire 1/2) and migrants (Questionnaire 3)



^{*} Multiple responses allowed

Source: Own calculations based on Questionnaire 1/2 and 3.

Table 24, finally, shows how remittances are used by the main household activity of the migrant origin household. Households in agricultural production use remittances mainly for education; households in livestock farming use them especially for healthcare; households in commerce, for healthcare and consumption of goods; households in construction for healthcare, pay debts and education; and households doing salaried work for healthcare and consumption of goods.

Table 24: Use of remittances* by migrant origin household activity

	Agricultural production	Livestock farming	Commerce	Construction	Travail salarié
Healthcare (%)	27.3	55.3	75.0	74.2	72.5
Pay debts (%)	9.1	34.0	8.3	71.0	30.0
Education (%)	54.5	23.4	50.0	51.6	30.0
Consumption goods (%)	27.3	17.0	83.3	6.5	52.5
Saving (%)	18.2	10.6	41.7	3.2	35.0
Buy/build a house (%)	18.2	8.5	0.0	3.2	5.0
N	11	47	12	31	40

^{*} Multiple responses allowed.

Source: Own calculations based on Questionnaire 1/2.

Regarding other assets that migrants might use in the household of origin or transfer to other household members, such as specific knowledge or competencies, the most common response in Questionnaire 1/2 (which applies to 50 percent of migrants) is that no knowledge/transfer of knowledge was used or done. Among the remaining migrants, the three most common types of knowledge used/transferred are masonry, carpentry and driving of vehicles. Finally, when origin households in Tunisia were asked their opinion about whether migration has been a determinant factor for the socio-economic situation of the household, 38 percent responded that it has been determinant, while around half of them said this it is not very determinant and a bit more than 10 percent said it is not determinant at all (tables available upon request).

6.2.4 Evidence from the focus groups on impacts of rural youth migration

Focus group research highlighted the disengagement of the male rural workforce from its direct participation in household farming activities, which has changed labour allocation patterns in small household's farms. Migration by household heads and the commitment of younger male members to school as well as to other livelihood systems, has generated a labour shortage in household farming activities. This has been filled either by foreign workers from Sub-Saharan countries – although not specifically in the project areas – or by women. Rural women have gradually replaced the departed male workforce and have become the primary source of farm labour. Initially, this phenomenon mostly involved adult women (i.e. the wives and mothers of household heads), but later also rural girls (sisters and daughters) have been called to work in farming activities. In the project areas, the recruitment of female agricultural workforce is relatively recent and they are mostly employed in activities related to arboriculture.

Together with women's migration for family reunion, female employment in farming or as external workforce in other farms decreases their involvement in the household's secondary, often overlooked, farming activities, such as small stock and vegetable gardening. This can have a critical impact on the household's food security since rural women are still largely responsible for these secondary farming activities.

As a result of the departure of the male household heads, the household's social structure has changed, from an extended family model to a scattered model. Additionally, roles and responsibilities within the household have been reshaped and nowadays both women and younger household members have increased their decision-making power. In particular rural women (i.e. both adult and young ones) play a more relevant role in farming strategies, a phenomenon that can

be called the 'feminisation of rural households'.

Land tenure remains a main social, and cultural reference for rural households in the studied areas. However, household members' migration is gradually changing perception of their land from a link to the family's history to a commodity. In the studied areas, a growing number of plots are not utilised or abandoned by out-migrating families. As a strategy to tackle land's abandonment, in the Northern areas land rental schemes (i.e. *Metayage* and especially *Fermage*, see Section 2) have spread.

Recent developments in the rural land market mean that out-migrating families are reportedly more prone to sell their land, often with a view to invest in housing in destination areas. This demonstrates a detachment from rural origin areas that decreases the family's possibility to return. According to focus group participants, the rural land market has been growing since the 2011 revolution and will continue to grow in coming years. This phenomenon is not negative *per se* since it might decrease competition on existing limited resources as well as facilitate land concentration and therefore provide opportunities for better performing agricultural production.

As regards pastoral activities, together with land, livestock herds represent a financial as well as a socio-political asset. However, findings from the focus groups show that pastoral farms are highly negatively affected by the limited interest of local youth in shepherding work, which is critical to maintain pastoral systems effective.

Regarding the economic returns arising from migration in origin areas, focus groups highlighted that remittances were mostly invested in the origin household's agricultural activities (i.e. to acquire agricultural inputs, such as livestock and labour) and in education. The result is that remittances' contribution to rural economic development is limited since they are mainly used for current expenses whereas saving represents a present and future priority. In many cases, remittances were reported to cover household's basic needs, which indicates an overall impoverishment of rural livelihoods. This seems confirmed by the fact that migration projects are mostly financed by networks in destination areas. Poor investments in agricultural activities can also be explained by the current limited violability of small farms.

The limited amount of remittance income devoted to education can be associated with an overall downturn in rural, but is also a signal of a less interest in education due to the high rate of unemployed graduates (*diplomés chômeurs*) as well as to the quality of the education system across the country, which is perceived to have worsened. Poor investments in education together with migration by the more educated household members can negatively affect the agricultural sector's capacity to evolve and innovate.

Conclusions and recommendations

This report focused on three key aspects of rural youth migration in Tunisia: the drivers of such migration, the patterns of rural out-migration, and, finally, its impact on sending households. This conclusion summarizes the key findings and suggest some related policy recommendations addressing policy makers and practitioners in the field of migration, rural development and agriculture.

Our data on households shows that the majority of migrants are men, especially among international migrants. The mean age of migration is slightly higher for those who left after 2011 (25.8 years old compared to 24.1 years old for those who left before 2011) and especially for international migrants (28.2 years old compared to vs 24.1 years old for internal migrants).

International migrants, and among them those having migrated after 2011, are more likely to have higher educational levels than non-migrants: respectively 24 percent and 30 percent among them have a university degree and are more likely to originate from highly educated origin households. This result suggests a clear link between education and migration, with positive self-selection of migrants according to higher level of educational attainments, especially among international migrants. At the same time this result can be driven by an increase in study-related reasons for migration: recent migrants were indeed more likely to migrate for study reasons. Available data does not provide information about whether the education level was obtained before or after migrating, so this report cannot conclude whether migrants left after having attained their educational qualifications in Tunisia or of if they completed their secondary studies abroad. However, with 'education' declared as a channel for entry in Italy by 21.7 percent of respondents who had migrated after the Revolution (2011), we have confirmation of the increasing relevance student migration from Tunisia.

Such results point to youth migrating for study reasons as a potential investment for the country of origin and as a key target to be sustained by ensuring safe and protected migration. Furthermore, students abroad can act as a bridge between the socio-economic systems of the sending and the receiving countries, both whilst abroad or once they have returned to Tunisia. Policies to keep connections alive and to engage students while abroad, including joint research projects, virtual returns, short-term visits and assignments, and to re-attract them in the origin country through permanent or temporary returns could be implemented by the Tunisian government to support a positive relationship between migration and development.

In relation to drivers of rural out-migration, we found that non-migrant households and migrant households with recent migrants (who left after 2011) are more likely to perform agricultural production and livestock farming as main activities, while households with migrants who left before 2011 are more likely to have declared 'construction' and 'salaried work' as main sources of their income. A possible explanation can be found by considering this finding alongside our evidence on the rate of responses giving 'reduction in income from agricultural activities' as a reason for migration, which is particularly relevant among migrants in Tunisia and those who migrated before 2011. This suggest that migrants who left for another internal destination and those who migrated before 2011 did so because of a decline in agricultural productivity and increasing land fragmentation, with their households having left this sector to move to 'construction' and 'salaried work'. Further research could test this hypothesis and, by doing so, better frame the understanding of migration as the result of household-level strategies, and subsequently, the role and the impact of

remittances sent by migrants on households in Tunisia.

Along with the specific reference to problems within the agricultural sector, the key reasons for migration, especially internal migration within Tunisia, are connected to the search for better job opportunities and the improvement of living conditions. For those migrants that moved to Italy, such elements are considered important as too are sustaining the family and changing lifestyle. Data on the occupational status before migrating mirror these results, as more than half of internal migrants declared they were unemployed prior to migration, while fewer than 20 percent were in employment, while migrants in Italy show the opposite picture, with more than half of individuals were employed before leaving and fewer than 20 percent 19.9 percent unemployed.

Our data also provide evidence of a significant process of feminization of migration over time, particularly in the form of internal migration by young women from rural areas moving to work in other regions, often on seasonal basis. There has also been an increase in international migration after 2011. This feminization of international migration is likely to be associated with an increase of highly educated migrant women. Women interviewed for this study showed a higher proportion of university degree holders, which applies both to post- and pre-2011 migrants and to current residents. In all three cases this proportion is of around twice the size with respect to that of men. Even more evident for women, international migration is aimed at pursuing university education, with a significant increase in study-related reasons for migration and a decrease in marriage-related reasons when comparing those who migrated prior to 2011 and those after 2011.

As for the patterns of migration, the research found that around half of international migrants had made at least one internal move before arriving at destination. Future research could further explore the mobility patterns of migrants from Tunisia, trying to understand how internal and international mobility are connected (i.e. which kind of internal mobility is undertaken: from rural to urban, from rural to rural, etc.; whether such internal movements represent a stepping stone to international migration or if international mobility is the result of a failed internal migration, etc.). Data also show that recent migrants in Italy are more likely to be irregular, compared to migrants who left before 2011, reflecting the increasing closure of European borders and the consequent limited availability of regular channels to reach Europe.

Migration seems to be rewarding for both internal and international migrants in terms of occupational outcomes: while between 65 and 75 percent of migrants declared themselves to be employed at the time of the survey, this was the case for only 22 to 30 percent of non-migrants. According to results drawn from this research, the main effect migration seems to have is on female labour market participation. Furthermore, employed migrants are, in general, more likely to have a contract and to be registered in a social security system.

Further research could look more in depth at labour market integration outcomes of Tunisians at destination, also distinguishing between men and women. A range of other factors such as access to the formal labour market and to a social protection system, the quantity and quality of the soft and hard skills acquired by individuals during migration, the (mis)matching of skilled individuals into receiving labour markets and wage levels all impact on diaspora members' capacity to contribute to the development of sending areas. This can occur through forms of transnational economic involvement with households and communities at origin enabled by remittances, investments, skills transfer and the economic re-insertion of returnees. Integration into the lowest levels of the labour market may in fact hamper the acquisition of relevant skills and knowledge as human capital

obtained abroad is not necessarily brought back and reinvested in the origin country, due to different economic systems.

According to the data gathered for this report, return intentions are higher for migrants in Italy, than for migrants in Tunisia: 60 percent of migrants in Italy declare they want to return either in the short or in the long term while 34 percent of migrants in Tunisia declare this intention. Common reasons for wanting to return are homesickness, family nostalgia and retirement (the latter mostly among those who left before 2011).

Finally, the report looked at the impact of rural migration on households at origin. The fact that it is mainly men that are migrating does, of course impact on origin households in term of gender composition. In households with no migrants the share of men is around 54 percent, while in migrant households only around 44 percent of current members are men, on average. This results in a feminization of households with migrants, where women are found more likely to be active compared to women in non-migrant households, while their unemployment levels remain still high. Further, among the stayers, we observe that those from migrant households (especially those with international migrant members) are more often found to have a formal contract and access to social security.

Only one out of four households/migrants is involved in the reception/sending of remittances, with international migrant households receiving double the amount compared to internal migrant households. Evidence suggests that these are used for consumption, education, health, savings, but not for investments. Financial literacy programmes for migrants and remittance recipients have resulted in significant increases in savings and productive investments in the origin households; such programmes could be developed that target rural migrant-sending areas, with the participation of a wide range of actors, including government officials, banks, microfinance institutions, trade unions and diaspora associations.

While incomes from remittances tend not to be invested in productive activities, evidence presented by this report shows that migrants have a rate of involvement in economic activities at origin that ranges from 33.4 percent for internal migrants and 23.4 percent among international migrants. Interestingly, most of the involvement is connected to agricultural production (87.7 percent among internal migrants and 66,7 percent among international ones) and livestock activities (15.2 percent among internal migrants and 20 percent among international ones). Also, among those who participated in the economic activities of the household at their place of origin in the previous year, 79.2 percent of internal migrants and 64.2 percent of international migrants did so in agricultural production.

Furthermore, data that shows the activities performed upon return show that an important share (51 percent for migrants in Tunisia and 39 percent for migrants in Italy) of migrants who declared wanting to come back in Tunisia, are keen to work in agriculture. The intention to invest in this sector upon return is affected by gender, with both internal and international migrant men outnumbering women (respectively 59 percent men vs. 32 percent women and 42 percent men vs. 31 percent women).

Given the key role of agriculture both as a preferred sector for transnational engagement of migrants and as a targeted domain of activity and investment upon future return, policies focusing on migration and rural development could address both these forms of diaspora mobilisation. In particular, measures fostering the return migration of potential agro-entrepreneurs and the

reintegration of returnees into local labour markets should take full account of the scope (retirement or productive return, intention to enter the labour market as an employee or as an entrepreneur, area of return, etc.) and nature of return migration (demographic and socio-economic characteristics, educational level, skills acquired abroad, availability of capital to be invested, etc. of returnees). Although there is little evidence of the effectiveness of voluntary return programmes, measures to favour the return of migrants to their areas of origin could include the offer of tailored training opportunities (in, for example, SMAE creation and management), access to targeted financial products, start-up grants and equipment at subsidized prices.

References

Amara, M.; Jemmali, H. (2016): Deciphering the Relationship Between Internal. Migration and Regional Disparities in Tunisia. *Social Indicators Research*, DOI 10.1007/s11205-016-1487-y

Amara, M.; Jemmali, H. (2017): Household and Contextual Indicators of Poverty in Tunisia: A Multilevel Analysis. *Social Indicators Research*, DOI 10.1007/s11205-017-1602-8

Amara, M.; Jemmali, H.; M. Ayadi (2017): Rural-Urban Migration and Income Disparity in Tunisia: A Decomposition Analysis. Working Paper 1085, April 2017. The Economic Research Forum (ERF), Giza, Egypt.

Angel-Urdinola, D.F.; Nucifora, A.; Robalino, D. (eds., 2015): Labor Policy to Promote Good Jobs in Tunisia. Revisiting Labor Regulation, Social Security, and Active Labor Market Programs. International Bank for Reconstruction and Development, The World Bank Group, Washington, D.C.

Ajzen, I. (1991): The theory of planned behavior. *Organizational behavior and human decision* processes, 50.2 (1991): 179-211

Ayadi, M.; Boulila, G.; Lahouel, M.; Montigny, P. (2004): Pro-poor growth in Tunisia. *International Development & Strategies, France*, 84.

Bardak, U. (2014): Labour Market and Education: Youth and Unemployment in the Spotlight. In: *IEMed Mediterranean Yearbook 2014*. L'Institut Europeu de la Mediterrània, Barcelona.

Belhedi, A. (2001): Les facteurs socio-économiques de la migration, Population et développement en Tunisie, La metamorphose, Ceres Editions, 2001, 801p cf. Chapitre 8, pp. 233-254.

Ben Hmida, M. (2016): Diagnostic participatif de la situation sociale et économique de jeunes sans emploi en milieu rural, Institut National du Travail et des Etudes Sociales. Université de Carthage.

Bilgili, O.; Marchand, K. (2016): *Migration, development and climate change in North Africa*, Thematic input paper prepared for the Thematic Regional Meeting of the Swiss Agency for Development and Cooperation on 'Climate Change, Disaster Risk, Migration and Economic Development', Agadir, May 2016.

Boubakri, H. (2005): Les effets des réseaux migratoires transnationaux sur l'économie locale et régionale à Tataouine (sud-est tunisien). In: Charef, M. and Gonin, P. Emigrés-immigrés dans le développement local, Agadir (Maroc): Editions Sud-Contact, pp. 133-158.

Boubakri, H. (2010): *Tunisie: Migration, marche du travail et développement.* Document de travail, Project de Recherche: Faire de migrations un facteur de développement, Une étude sur l'Afrique du Nord et l'Afrique de l'Ouest.

Boubakri, H. (2013): *Revolution and International Migration in Tunisia*. MPC Research Reports 2013/04, Robert Schuman Centre for Advanced Studies, San Domenico di Fiesole (FI): European University Institute.

Boubakri, H., (2014): Les investissements des migrants tunisiens à l'étranger: au-delà des chiffres, les vrais effets sur les territoires, In: Daviet S. (Dir): Vers un entreprenariat transméditerranéen? Les stratégies d'internationalisation des entreprises maghrébines et de réinvestissement des Maghrébins d'Europe, Editions: IRMC-Karthala.

Boubakri H.; Mazzella S. (2011): L'horizon transnational d'une famille tunisienne élargie. Autrepart.

Revue de sciences sociales au Sud, Presses de Sciences Po (PFNSP), 57-58 (1), p. 111-126.

Bouchoucha I. (2013): The impact of parental migration on children left behind: The case of Tunisia, QScience Proceedings, fmd 19, p. 1-9.

Boughzala, M.; Tlili Hamdi, M. (2014): Promoting inclusive growth in Arab countries rural and regional development and inequality in Tunisia. Global Economy & Development, Working Paper 71, Brookings.

Catusse, M.; Destremau, B. (2016): Governing Youth, Managing Society: A Comparative Overview of Six Country Case Studies (Egypt, Lebanon, Morocco, Occupied Palestinian Territories, Tunisia and Turkey). Working Paper / Power 2 Youth program. ISSN 2283-5792.

Charrad, M. M.; Goeken A. (2006): Continuity or change: family law and family structure in Tunisia. In: Oheneba-Sakyi, Y. and Takyi, B.K. (eds): *African Families at the Turn of the Twenty-First Century.* Dubugue, Iowa: Kendall/Hunt Publication.

Chemers, M. M., Ayman, R., and Werner, C. (1978): Expectancy theory analysis of migration, *Population & Environment*, *1*(1), 42-56.

David, A.; Marouani, M. A. (2017): *Migration patterns and labor market outcomes in Tunisia*. Working Paper No. 2017/01. Developpement et Sociétés, Université Paris 1, Pantheón Sorbonne.

De Haas H. (2008): *Migration and Development: A Theoretical Perspective.* Working paper, Vol. 9. International Migration Institute, University of Oxford.

Deotti L.; Estruch E. (2016): Addressing rural youth migration at its root causes: A conceptual framework, Social Policies and Rural Institutions Division. Food and Agriculture Organization, Roma.

Edelbloude, J.; Sers, C.F.; Makhlouf, F. (2017): Do remittances respond to revolutions? The Evidence from Tunisia. *Research in International Business and Finance*, 42: 94–101.

Freguin-Gresh S. et al. (2014): Les Systèmes Familiaux Multi-localisés: un modèle d'analyse original des ruralités aux Suds, Montpellier, UMR ART-Dev., Document de travail ART-Dev (2014)

FTDES (2016): *The youth and undocumented migration*. Tunisian Forum for Social and Economic Rights and the Rosa Luxemburg Stiftung Foundation.

Gafrej R. (2016): Avec le changement climatique, quel avenir de l'agriculture en Tunisie?, Watch Letter n°37, September 2016, CIHEAM

Groenewold, W. G.; de Beer J. A. A.; de Valk H. A. G. (2016): Prospects of labour migration pressure in Algeria, Morocco, Tunisia and Turkey. *Genus*, 72(1): 8.

Holmes-Eber, P. (1997): Migration, urbanization, and women's kin networks in Tunis. *Journal of Comparative Family Studies*, 28(2):54-72.

ILO (2013): Youth, Employment and Migration. Country Brief Tunisia. International Labour Organisation, Geneva. Available at http://www.ilo.org/emppolicy/pubs/WCMS_219632

INS (2016): *Statistiques Tunisie, Flash Migration*. Bulletin N° 3, Novembre 2016, L'Institut Nationale de la Statistique, Tunis

Kouni, M. (2016): Remittances And Growth In Tunisia: A Daynamic Panel Analysis From A Sectoral Database. *Journal of Emerging Trends in Economics and Management Sciences*, 7(5): 342-351.

Kriaa, M. (2013): Etude de l'impact de la migration sur les familles de migrants présentes au pays, UNFPA, UNICEF, IOM, OTE, Statistiques Tunisie and Confédération Suisse.

Lamine, R. (2008): Croissance démographique et dynamiques migratoires récentes des grandes villes tunisiennes, en *Mobilités résidentielles, pratiques de mobilités et constructions territoriales en périphérie*, Exemples au Maghreb. Les Cahiers d' EMAM, numéro 16, 2008.

Nori, M.; El Mourid, M.; Giorgi, P.; Nefzaoui, A. (2009): *Herding in a Shifting Mediterranean Changing agro-pastoral livelihoods in the Mashreq and Maghreb region*, EUI Working Papers- RSCAS 2009/52, Robert Schuman Centre for Advanced Studies, San Domenico di Fiesole (FI): European University Institute.

OECD (2012): Connecting with Emigrants. A Global Profile of Diasporas. Organisation for Economic Co-operation and Development, Paris.

ONEQ (2014): Transition vers le marché du travail des jeunes femmes et hommes en Tunisie, Observatoire National de l'Emploi et des Qualifications, Work4Youth Série de publication N° 15, ILO, Genève.

Ouertani, E. (2016): Food Security In Tunisia Within Water Scarcity The Relative Importance Of The Meat Sector. *International Journal of Food and Agricultural Economics* 4(1): 35.

Paciello, C.; Pepicelli, R.; Pioppi, D. (2016): *Youth in Tunisia: Trapped Between Public Control and the Neo-Liberal Economy.* Working Paper No. 6., Power2Youth, ISSN 2283-5792

Pangaribowo, E. H. et al. (2013): *Food and nutrition security indicators: a review.* Working Paper 108, ZEF Working Paper Series, ISSN 1864-6638

Pellicer, M.; Assaad, R.; Krafft, C.; Salemi, C. (2017): *Grievances or skills? The effect of education on youth attitudes and political participation in Egypt and Tunisia*. Working Paper 1103. The Economic Research Forum, Giza.

Ratha, D. (2003): Workers' Remittances: An Important and Stable Source of External Development Finance. Global Development Finance Report, World Bank.

Saad, A. B.; Bourbouze, A. (2010): Les nouveaux visages du pastoralisme «moderne» du grand sud tunisien. In: Lerin F. (ed.): *Pastoralisme méditerranéen: patrimoine culturel et paysager et développement durable.* Montpellier, CIHEAM / AVECC / UNES.

Sabadie, J. A. et al. (2010): Migration and Skills: The Experience of Migrant Workers from Albania, Egypt, Moldova, and Tunisia, Washington, The World Bank Group.

Scoones, I. (1998): *Sustainable rural livelihoods: a framework for analysis*. IDS Working Paper No. 72. Inst. Dev. Studies, Sussex, UK.

Stark, O.; Bloom, D.E. (1985): The New Economics of Labor Migration, *American Economic Review*, 75(2): 173-178.

Touihri, N. (2017): *Méthodologie d'échantillonnage de l'enquête*, European University Institute: Migration Policy Centre.

UNFPA (2015): Défi de la jeunesse tunisienne. United Nations Population Fund, Tunis.

World Bank (2014): *Tunisia: Breaking the Barriers to Youth Inclusion.* The World Bank Group, Washington, DC.

World Bank (2017): Tunisia's Economic Outlook – October 2017. The World Bank Group, Washington D.C. Available http://www.worldbank.org/en/country/tunisia/publication/tunisia-economic-outlook-october-2017.