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Short note

Characteristics of foreign agricultural work in the Autonomous Province of Trento

SONIA MARONGIU

CREA - Research Centre for Agricultural Policies and Bioeconomy, Italy

Abstract. In Italy, more than one third of workers recruited in agriculture comes from abroad and the incidence of foreign workers is increasing. One of the areas with a consolidated presence of foreign employment in agriculture is the Autonomous Province of Trento, where 66.7% of total workers comes from other countries. The highest request of workers, expressed from June to October (corresponding with the harvest of fruits, grapevine and berries) is not satisfied by the local workforce and the recruitment of foreign workers is crucial to satisfy the farms labour needs. This situation has shaped a local regulative framework where farmers and the local institutions collaborate actively in order to guarantee the yearly satisfaction of workforce needs, minimizing the risk of labour shortage and irregular work. The paper is developed around a descriptive analysis based on the elaboration of national and provincial dataset (mainly INPS and Labour Agency) and gives a general overview of the foreign workforce components in the AP of Trento.

Keywords: migrants, foreigners, agricultural workforce, migration policies.

JEL codes: J21, Q10, Q18.

1. INTRODUCTION

The employment of foreign workforce is a growing phenomenon interesting all the economic sectors in Italy, including the primary sector: around 370,000 foreign workers (coming from 155 countries and representing over one third of the total agricultural employment) are legally employed in agriculture. Dynamics and trends are not the same, depending on the characteristics of agriculture and the local context. According to an analysis based on the last Agricultural Census (Coderoni *et al.*, 2018), foreign workers are mainly involved in some of the most specialized agricultural systems like livestock farming (extensive and intensive) and farm specialized in permanent crops, while diversified farms seem not to rely, in the same way, on foreign workers. However, despite the presence of immigrants prevalently in conventional farms, the contribution of foreign work to a multifunctional agriculture, especially in rural and marginal areas, seems to have a growing relevance (De Rosa *et al.*, 2019).

The incidence of foreign workers on total workforce in agriculture is not the same in all the Italian regions. One of the highest percentages is record-

ed in the Autonomous Province (AP) of Trento, where seasonal foreign workers are regularly employed in the sectors and where, in the last years, the local labour supply has also included refugees and seeking asylum, thus raising several critical issues but also underlying the social importance of agriculture in the integration process management (Giarè *et al.*, 2020; Gaudio, Corrado, 2018; Piovesan, 2015).

In the AP of Trento, the role of foreign workforce is crucial, and its importance is related to the persistence of various services and activities in all the economic sectors, including agriculture (Gretter, 2018). During the last thirty years, employment in the AP of Trento has grown and this has been favoured by the increase of the resident population, pulled up from the 90s by the phenomenon of migration. Due to local labour shortage, foreign workforce resulted essential to satisfy the labour market needs, covering jobs not occupied by locals. This contribution was especially important for agriculture, characterised by a strong seasonal component (concentrated mainly in the harvest period for apple, grapevine and berries; most widespread during the year for livestock farming) and activities related to the elderly care and assistance (University of Trento, 2014).

The presence of adequate conditions for the safeguarding of rights for both employers and employees, makes the seasonal work a kind of triple win situation, a model of migration management advantageous for the sending and receiving countries and the foreign worker themselves. To this regard, the migration policies in this Province, move on a two-pronged approach: on one side, specific interventions aim to stabilize the long-standing immigrants, permanently residents; on the other side, efforts are made to manage temporarily situations, based on circular migrations implying a variable presence of foreign workers in order to compensate the workforce shortage in particular periods and conditions.

This work is a descriptive analysis focused on the basic features of the foreign agricultural workforce in the AP of Trento, in terms of number of workers, work conditions, characteristics and general management of the foreign workflows, legislation. One of the characteristics of agriculture in this territory is the seasonal component, determining a high labour demand in some months of the year, not satisfied by the local work supply. Therefore, the foreign labour recruitment is essential to cover this need, according to a well-proven management system matching every year the labour demand and supply and reducing the bureaucracy. In literature, several works have described the foreign workforce in agriculture at national level (Zumpano, 2020; Casella, 2020; Macri *et al.*, 2018; Baldoni *et al.*, 2017; Corrado,

2015) and in specific territorial contexts (Macri, 2019, Timpanaro *et al.*, 2018). This work is a contribution to this last part, describing the situation in a small province that can be considered an outstanding example of good management of foreign workforce, where the coordination among farmers, local labour agencies, inspection policies, integration and social policies, have created a very effective system, avoiding systematic irregular and black labour (isolated cases are occasionally detected).

The paper is divided in several sections. A brief overview on the literature based on the analysis of foreign workforce in agriculture is given in the second paragraph, with a focus on topics regarding not regular or illegal work. The third paragraph describes the methodology and the source of data used in the analysis, based on the elaboration of national (ISTAT, INPS) and provincial datasets (mainly the data of the local Labour Agency). The fourth paragraph is a general framework of the agricultural development in the AP of Trento, revolving around permanent cultivations and livestock activities, with a strong seasonal component that makes crucial the recruitment of foreign workforce in determined periods of the year. The fifth paragraph presents the characteristics of foreign work in the AP of Trento in terms of nationality, gender, age, economic sector, type of contract, work conditions etc. A section of the paragraph describes the local measures taken during the Covid19 pandemic to face the problems of the border closure and quarantine during the lockdown period. The sixth paragraph analyses the model of recruitment of foreign workforce in terms of regulative framework. Finally, the conclusions.

2. LITERATURE REVIEW

The foreign work in agriculture is a research field widely explored in literature, where a multitude of contributions have analysed the phenomenon under several perspectives and in different spatial and temporal contexts (Timpanaro *et al.* 2018). Every historical era experienced the emergence of migratory flows from well-defined territorial areas (e.g. Europe v/s America; Asia v/s Europe; Africa v/s Europe) and for different reasons. For a large part of immigrants, agriculture can be considered one of the main solutions and a sector of easy entry, where foreign workforce is involved in prevailing seasonal labour-intensive and unskilled duties. According to some analysis made in the USA, in some cases there is a theoretical and empirical evidence that irregular immigrants are more likely to be selected into low-wage, low-skill farm jobs than legal workers, with

low earnings where legalization is not likely to increase worker earnings but may result in a wage decrease in some farm jobs (Taylor, 1992). However, literature has also underlined its importance as a tool for the development of agricultural sector (Saloutos, 1976) and, recently, their potential role in building up patterns of modern rurality and multifunctionality (Zumpano, 2020; De Rosa *et al.*, 2019; Al Shawwa *et al.*, 2012; Van der Ploeg *et al.*, 2008).

One of the most debated topics in literature, at national and international level, is the analysis of vulnerable position of immigrant workers in terms of life conditions, not regular or illegal works. Diverse factors foster this vulnerability (Palumbo, 2016). The first concerns the reason which lead people to migrate: conflicts, wars, unemployment and poverty, need to send money home for their family. Migration policies are another factor playing an important role in rendering migrant workers particularly vulnerable to situations of exploitation. In Italy, for example, if the migration policies have supported the employment of migrants in certain labour markets with the development of annual quotas (for example, the domestic work), the same system has proven to be inadequate, with long and complicated procedures (Santoro, 2010). This element, together with the rigid linkage between a residence permit and an employment contract, would drive migrants further towards irregular channels, thus fostering their vulnerability to exploitation. EU migrants, who do not need a residence permit linked to an employment contract, are more likely to be involved in a context of informality and irregularity (Palumbo, 2016). The situation gets worse in case of gendered power relations involving women (Valentino, 2020). This context of acceptance of inadequate work conditions and exploitation is observed in many countries, including Italy, not only for illegal workers but also for legal and seasonal workers afraid of losing their job: in this case, even when immigrants are legalized and are entitled to regular employment, a large share of them work in the underground economy, accepting irregular working conditions (Reyneri, Ballarino, 1998). In the worst cases, they are trapped in the phenomenon of *caporalato* (Corrado, 2018a), widespread not only in the southern regions of the country but strongly exploding also in the central and northern regions (Piedmont, Lombardy, Emilia Romagna, Tuscany, Veneto and Latium). Empirical evidences showing the demand of foreign agricultural workforce for low paid and unskilled tasks has been showed also for the Africans recruitments in Spain (Corrado, 2018b; Hoggart, Mendoza, 1999) and for the northern Greece (Lianos *et al.*, 1996).

The widespread irregularity in agriculture, makes difficult obtaining data and estimates of the phenomenon. Studies demonstrate that agriculture is characterised by the highest rates of irregularity of employment and that a great portion of migrant workers remain invisible for statistical surveys (Osservatorio Placido Rizzotto, 2018; Centro Studi e Ricerche Idos, 2015). Specific investigations made on the field, permit sometimes to have an idea about the most difficult situations otherwise not well explained or captured by the official statistics (Valentino, 2020; Macrì, 2019).

Alongside these analyses, the literature has also explored the legal employment and the integration of foreign workers in the economic system in which they have been recruited. In some cases, the integration has been favoured by a public support aiming at avoiding the abandonment of agriculture (Gretter, 2018; Membretti, Viazzo, 2017; Cavalli, 2016), while in other cases, local initiatives have been implemented to improve the work and life conditions of foreigners with learning pathways (Timpanaro *et al.*, 2018) or with social integration programmes (Ministero dell'Interno, 2017). Other studies have analysed the importance to guarantee a legal framework for the foreign workforce in agriculture (Lovoi, 2018; Gidarakou, 2011), especially where the labour demand is not always covered by the local supply and there is a large component of seasonality (Marongiu, 2019; Hennebry, Preibish, 2010). This work is a contribution to that part of literature focused on the good management systems of foreign workforce in agriculture. The analysed area is the AP of Trento, where around two-thirds of the agricultural activities are guaranteed by the yearly migration flow and where the collaboration between farmers and local institutions have contributed to minimize the risk of irregular or illegal work.

3. METHODOLOGY AND SOURCE OF DATA

Describing the situation of foreign work in agriculture is not easy and often the official data do not permit to capture all the aspects of this phenomenon (Barbieri *et al.*, 2015). Moreover, there are several sources of data, showing different aggregates, field of observation, variables and frequency.

This work considers official national and local figures to illustrate the size, features and main components of foreign work in agriculture in the AP of Trento. The descriptive analysis is supported by a qualitative analysis of the local work conditions, according to what required by the provincial regulations and reported by Producer

Associations or other entities involved in the general management of the labour in agriculture.

Data about the foreign residents in Italy are collected by the National Institute of Statistics (ISTAT), based on the results of the permanent census of population. This information is stored in a data warehouse, in a specific section displaying the annual balance in terms of residents, natural and net migration, new citizenship, etc. The foreign population includes foreign citizens without Italian citizenship normally residents in Italy and recorded in the municipal register.

An important source of data about the legal immigration is the Statistical Office of the Ministry of Interior. Being a part of the National Statistical Programme, this activity contributed to the National statistical system. A specific section is devoted to immigration and asylum where information about the number of immigrants with legal residence permit (VISA) is collected. The survey is update devery year, based on the information transmitted by the police headquarters; the results are published in a yearly report divided by Provinces, reasons behind the VISA request, nationalities, etc.

Another source of information, normally used in this kind of analysis, is the National Social Security Institute (INPS – *Istituto Nazionale della Previdenza Sociale*) dataset managed by the Statistical Observatory of agriculture, that every year updates a wide range of indicators on the most important aspects of the labour market (firms, workers, duration of the employment contracts, labour policies, etc.), pensions, income and family support services. This part is divided in two sections: self-employed and employee agricultural workers. In this analysis, only the second section is considered, and the aim is to give an informative framework about the number of workers, the kind of contract, the nationality. The source of data is based on several types of administrative archives: the model of declaration presented every three months by the employer containing information about the workers employed; an identification archive of the agricultural holdings; the archive of the VISA managed by the Ministry of Interior. The statistical unit is the worker, identified by the tax code. The allocation of one worker in a province is made considering the highest number of working days: a worker could be identified in two provinces, but he is attributed in the prevalent one. It is also important to consider that one of the classification variables is the type of contract, that can be permanent or fixed-term contract: one worker could have worked with both typologies in one year, so the number of agricultural workers is not always equal to the sum of permanent and fixed-term contract.

These databases are used to draft important national reports and analysis focused on the foreign market labour in Italy (like the yearly report on the foreign workforce issued by the Ministry of Labour and Social Policies or the reports drafted by the EBAN Observatory on work in agriculture).

At territorial level, an important information is collected by the Labour Agency of the AP of Trento, whose institutional role is to guarantee technical assistance for the elaboration and implementation of the labour policies in the Province. It operates through decentralized job centres (CPI, *Centri per l'impiego*) having the important role in matching the demand and supply in the labour market. All the information of job-searching people (unemployed and/or employed but searching other jobs) are collected in a database available for the firms or companies operating in the territory. Moreover, it analyses the labour market, monitoring data, elaborating and publishing the results of the researches. The Labour Agency considers the number of recruitments per year and not the single contract (a worker could be employed with a single contract and recruited two times in a year for different tasks). It is not based on a sample, but on the effective number of recruitments activated in a year.

The Institute of Statistic of the AP of Trento (ISPAT) is locally responsible for the territorial statistics and surveys, including those foreseen in the National Statistical Programme. ISPAT collects systematically a wide range of data, available on-line or published in reports and publications. Seasonal workflows data are gathered by Cinformi (Informative Centre for the Immigration), which operates strictly connected with the Province (Marongiu, 2019).

4. GENERAL OVERVIEW OF AGRICULTURE IN THE AUTONOMOUS PROVINCE OF TRENTO

Together with the AP of Bolzano, the AP of Trento is one of the two autonomous provinces of Trentino Alto Adige region. The AP of Trento is located in the north-eastern Italy, extended on 6,207 square kilometres and distinguished by its extremely mountainous relief: 60% of the whole area is at an altitude of over 1,000 m and 15% below 400 m, where is concentrated half of the total population. The territory includes about 300 lakes and a varied climate conditions (including the Mediterranean climate in the area of Garda lake). 63.0% of the whole area is covered by forested land. According to ISTAT, in 2019, the cultivated area extended over 134,905 hectares, 1.9% of which arable land, 82.1% permanent meadows and pastures and 16.0% permanent crops. Permanent

meadows and pasture represent the land base of a significant livestock population (with 23,550 dairy cows, 23,734 non-dairy cattle, 32,815 sheep and 11,059 goats; ISPAT database) but also an important element of the landscape, valorised as tourist attractiveness. On the economic point of view, permanent crops represent the most important agricultural sector in the AP of Trento, with the production of apples, grapes and berries. The apple-growing area is extended over 10,220 hectares (9,920 hectares harvested) producing 518,500 tons (+3.7% with respect to 2018 and +152.7% with respect to 2017, a year characterized by a very low production because of bad weather conditions, mainly hailstorms). The results of the last Agricultural Census (2010) show a high fragmentation of agricultural land: 63.5% of farms have a surface lower than 2 hectares and 21.7% included between 2 and 5 hectares.

Melinda is the most important consortium of growing-apples farms, grouping 16 Cooperatives in Non and Sole Valleys. Grapevine is cultivated on 10,210 hectares (9,815 hectares harvested) with a production of grapes equal to 117,000 tons in 2019 (-17.1% lower than 2018) and a production of more than 3.3 million hectolitres of wine. 8 PDO and 3 PGI are produced in this territory. According to the continuous Labour Force Survey made by ISTAT, in 2019 around 4.3% of workforce in the AP of Trento has been employed in the aggregate agriculture, silviculture, hunting and fishing. In 2010, this incidence was 3.5%. On average, 10,285 units have been employed in the agricultural sector: this figure, deriving by a sample survey, does not reflect the strong seasonal component of agricultural work in this territory (as mentioned later, the recruitments recorded by the local Labour Agency have been 19,332 in 2019).

Regarding the number of farms, an important source of information is the provincial register of agricultural enterprises (APIA – *Archivio Provinciale delle Imprese Agricole*) established with the provincial law n.11 of 4 September 2000, and including two sections, one for the full-time farmers and one for the part-time farmers (working at least 300 hours per year in individual farms). All the farmers included in APIA must be registered also in the Chamber of Commerce; farmers with more than 65 years must be registered (enrolled) also in the INPS list. Individual farmers or associated farmers are included. According to the last available data (31.12.2019) in the AP of Trento there are 7,672 farmers (-16.6% compared with the data of 31.12.2008) 7,164 of whom are single farmers (12.2% women) and 508 are associated farms. A considerable number of holdings (42.4%) is recorded in the second section, evidencing the relevance of part-time farms. The agriculture in

this Province can be considered highly specialized: looking to the farm types, 40.1% represents growing fruit farms, 19.7% grapevine and 13.4% livestock farms. The mixed system fruit/grapevine represents 15.4% of the total while the combination fruit/livestock only 3.6%. APIA database permits to have also an idea about the age of the farmers: only 8.3% has 18-35 years (9.9% in 2008); 22.7% is included in the class 36-50 years (33.8% in 2008); 39.3% has 51-65 years (33.4%) and 29.7% over 65 years (21.5% in 2008). In one decade, the number of farmers with less than 50 years is decreased while the aged ones are increased.

5. THE FOREIGN WORKFORCE IN AGRICULTURE IN THE AP OF TRENTO

5.1. Foreign population in the AP of Trento

According to ISTAT (Tab. 1), the foreign residents in the AP of Trento accounted for 46,507 units in 2019, corresponding to the 8.6% of total residents (46.8% men and 53.2% women), an incidence lower than the regional one (8.9% in Trentino Alto Adige) but slightly higher than the national average (8.4%). In the north-eastern Italy, foreigners represent 10.4% of the total population. An interesting parameter is the natural growth of the population (balance of natality and mortality rate), negative for total residents but positive for the foreigners in all the considered territorial aggregations. In the AP of Trento, the indicator is -835 for the total residents while for the foreigners the natural growth is +626. This evidence has several explanations. The first is related to the different age groups structure: the foreign population is younger than the Italian one and this justifies the different mortality rate between the two groups. More specifically, 21.4% of foreign residents is minor (17.0% is the percentage for the Italians) while 61.8% has less than 40 years (against 39.4% of Italians). Elderly foreign population is 5.2% (against 23.7% of Italians). Another reason is the provincial birth rate, equal to 14.9 births per year every 1,000 foreign residents while for Italians the rate is equal to 7.1 (ISPAT, 2020).

The net migration is always positive, highlighting a higher number of immigrants than emigrants. On total 1,642 people have acquired the Italian citizenship in AP of Trento in 2019.

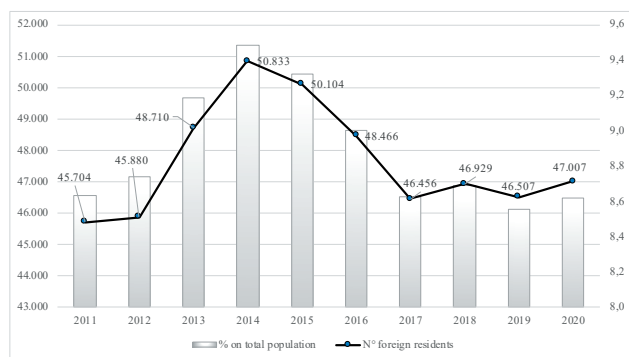
Since the 60s, the AP of Trento has recorded a low rate of depopulation compared to other territories in the Italian Alps, particularly with respect to the surrounding mountain territories of Lombardy and Veneto. Foreign migrants have been attracted to some valleys finding employment at the beginning in the manufacturing

Tab. 1. Residents (total and foreigners) in the AP of Trento in 2019.

	Total residents			Foreign residents			
	n.	Natural growth	Net migration	n.	Natural growth	Net migration	New citizenships
AP of Trento	543.721	-835	3.157	46.507	626	2.149	1.642
Trentino Alto Adige	1.074.034	-55	4.520	95.459	1.299	4.520	3.325
North-East Italy	11.628.491	-41.574	64.562	1.212.857	15.374	53.420	34.873
Italy	59.816.673	-214.333	153.273	4.996.158	55.487	207.086	127.001

Source: Elaboration on ISTAT Population survey.

sector and tourism (Gretter, 2018). In the last 30 years, the presence of foreigners has shifted from a numerically marginal aspect to a widespread and deeply rooted social phenomenon (Ambrosini *et al.*, 2014), requiring targeted design of the public policies. In 1990, the incidence of foreigners on the total population was 0.6% while ten years later, in 2000, the percentage raised until 3.0%. In 2005 the value jumped to 6.0% and since then, the number of foreign residents increased progressively. The enlargement of EU and the inclusion of several eastern European countries opened the way to a large number of foreigners, attracted to Italy. Most of them were relatives of people already living in the AP of Trento, while a growing number were (and still are) middle-aged women employed in the care of elderly people (around 4,000). In many small and remote localities, where there are not active public health care services, they represent the sole source of support (Gretter, 2018). The increasing number of foreign residents reached the highest peak in the 2-year period 2014-2015 (Fig. 1), with an incidence higher than the national average (around 7%). In terms of units, the actual situation is very similar to what has been observed in 2011 (only +2.9% of units more), with a similar incidence on the total population.

Fig. 1. Trend of the foreign residents in the AP of Trento and incidence on the total population.

Source: Elaboration on ISTAT Population survey.

ISTAT reports also the citizenship of foreign residents, in the AP of Trento, showing around 145 different origins. The first group is represented by people coming from Rumania (22.0%), Albania (11.9%), Morocco (8.1%), Pakistan (6.4%) and Ukraine (5.3%).

In addition to the data regarding the foreigners normally resident in the territory, the Ministry of Interior reports 29,259 VISA released in 2019 for legal immigrants, 32.0% of which for fixed-term contract works, 33.3% for familiar reasons and 18.7% regarding minors (Ministro degli Interni, 2020).

5.2. Characteristics of foreign work in agriculture

In the AP of Trento, the contribution of foreign work to the local economic growth is today relevant. As mentioned, the demand became pressing since the end of the 90s, when the increasing work needs began to be not completely covered by the local population. Today, many sectors (mainly agriculture, tourism and services, as well as domestic assistance) are supported by foreign workers.

A first description of the workforce distribution in agriculture between Italians and foreigners is provided by the administrative archive of INPS, based on the forms submitted by the employers for each employee and used to calculate the retirement benefits. Table 2 shows the number of workers in agriculture and the working days for different territorial aggregates in 2019. On average in Italy, 64.1% of the total agricultural workers are Italians. This proportion is completely reversed in the north-eastern district of Italy and in Trentino Alto Adige, where the foreign workers count for 65.0% of the total employed in agriculture. In the AP of Trento, the 26,695 unit shave an incidence of 57.4% (63.7% coming from EU and 36.3% from extra-EU countries).

Regarding the number of working days, in Italy averagely 31.7% is covered by foreign work while in the AP of Trento this percentage raised until 36.6%: 351,839 working days are covered by EU workers and 417,060

Tab. 2. Workers and number of working days in the agricultural sector in 2019.

	2019				2019		
	EU	Extra-EU	Italians	Total	EU	Extra-EU	Italians
	n. workers				workers (%)		
AP Trento	9.754	5.569	11.372	26.695	36,5	20,9	42,6
Trentino Alto Adige	28.373	9.751	20.496	58.620	48,4	16,6	35,0
North-East Italy	57.640	68.086	122.504	248.230	23,2	27,4	49,4
Italy	139.989	244.292	686.512	1.070.793	13,1	22,8	64,1
	n. working days (,000)				working days (%)		
AP Trento	352	417	1.332	2.101	16,8	19,8	63,4
Trentino Alto Adige	1.201	772	2.569	4.542	26,4	17,0	56,6
North-East Italy	3.843	6.921	15.061	25.825	14,9	26,8	58,3
Italy	11.219	24.699	77.381	113.299	9,9	21,8	68,3

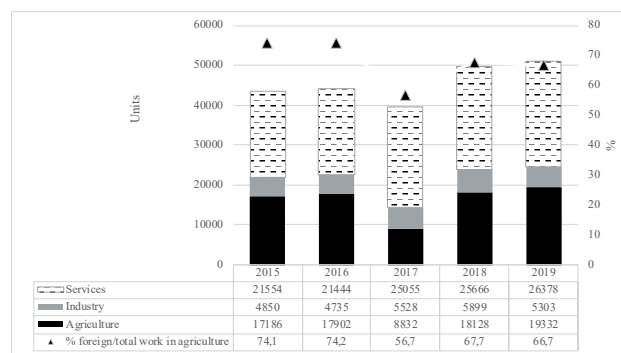
Source: Elaboration on INPS data.

by extra-EU workers. In the AP of Trento, Italians are employed in agriculture 117 working days per year (similar to the national average, 113) while a difference is recorded (detected) between EU workers (36 working days) and extra-EU workers (75 days). The reason is probably due to the higher recruitment of EU workers in the summer for the harvesting period while extra-EU workers remain in the farm for a longer time, in more structured activities.

INPS archive permits to perform an interesting analysis of foreign women working in agriculture. The global incidence is higher in Italy, with 32.1% of women working in agriculture against the 25.2% of the AP of Trento. A great difference is recorded for EU workforce: the national average is 38.3% while at provincial level the incidence is 22.2%. Women coming from extra-EU countries have a higher incidence, counting for 22.1% against 17.5% as average in the whole country.

Further details about the characteristics of foreign workforce are collected by the local Labour Agency. Globally, 51,013 foreign workers have been recruited in Trentino in 2019 (+2.7% respect to 2017), mainly coming from European Union (52.2%). The enlargement of EU has favoured the migration coming from central and eastern Europe (22.2%) that lead to the replacement of Albanians and Moroccans in the agricultural activities (ISFOL, 2012). Looking to the characteristics of the recruitments of foreign workers per age, economic sector and type of contract (Tab. 3), most of them are male (61.1%) and the biggest quota of women is employed in the sector of services (76.9%). On total, 69.8% of foreign workers has less than 44 years. Foreign workers are employed mainly under fixed-term contracts (74.6%) or part-time contracts (19.4%). On average, 37.9% of foreign

Fig. 2. Recruitments of foreign workers per economic sector in the AP of Trento in 2015-2019.



Source: Our Elaboration on ISFOL Study.

workers are absorbed by the agricultural sector, 10.4% by industry and 51.7% by services.

While for industry and services the recruitments have increased constantly during the time, in agriculture the workforce entity is strongly dependent by the seasonal conditions and outcomes. Figure 2 shows the trend during the period 2015-2019: after the difficulties in 2017 due to frosts and hails that have compromised the harvest of permanent cultivations, in 2018-2019 the recruitment level has raised again to the same levels of the previous years.

As previously mentioned, the agriculture in the AP of Trento has been characterized by a strong seasonal component, so the recruitments vary over the years but also during the year according with the seasonal needs. According to the opinion of Producer Organizations, the highest foreign labour request is expressed from June to October, corresponding with the harvest of fruits, grape-

Tab. 3. Recruitment of foreign workers per age, economic sector and type of contract in the AP of Trento in 2019.

	2019					
	Male		Female		Total	
	n.	%	n.	%	n.	%
<i>Age</i>						
less than 25 years	5.820	18,7	2.231	11,2	8.051	15,8
25-29 years	4.604	14,8	2.250	11,3	6.854	13,4
30-34 years	4.658	15	2.512	12,6	7.170	14,1
35-39 years	4.046	13	2.727	13,7	6.773	13,3
40-44 years	3.809	12,2	2.905	14,6	6.714	13,2
45-49 years	3.154	10,1	2.605	13,1	5.759	11,3
50-54 years	2.532	8,1	2.288	11,5	4.820	9,4
more than 55 years	2.528	8,1	2.344	11,8	4.872	9,6
Total	31.151	100,00	19.862	100,00	51.013	100,0
<i>Economic sector</i>						
Agriculture	15.666	50,3	3.666	18,5	19.332	37,9
Industry	4.378	14,1	925	4,7	5.303	10,4
Services	11.107	35,7	15.271	76,9	26.378	51,7
Total	31.151	100,00	19.862	100,00	51.013	100,0
<i>Type of contract</i>						
Permanent contract*	1.167	3,7	1.097	5,5	2.264	4,4
Fixed-term contract*	25.538	82,0	12.495	62,9	38.033	74,6
Apprenticeship*	631	2,0	208	1,0	839	1,6
Part-time contract	3.815	12,2	6.061	30,5	9.876	19,4
Other	0	0,0	1	0,0	1	0,0
Total	31.151	100,0	19.862	100,0	51.013	100,0

*excluding part-time contracts.

Source: Our elaboration on Labour Agency open data.

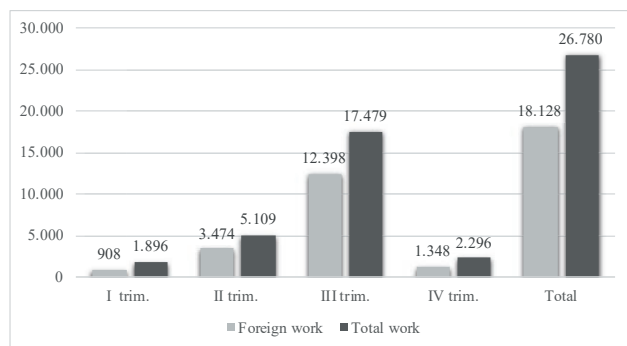
vine and berries (July-August for blueberries and strawberries; June-September for blackcurrant; June-October for raspberries). In June-July some workers are employed also in thinning operations of apple growing orchards. A small quota is employed in packaging activities. This distribution of foreign workforce during the year is confirmed by the quarterly data collected by the Labour Agency that shows a similar recruitment in the second and third trimester (+2.3%) while a wider use of foreign workforce has been recorded for the first (+18.4%) and fourth trimester (+49.2%), corresponding to the harvest period. On average, 67.7% of total workforce need in agriculture has been covered by foreign workers. Figure 3 shows the recruitments of foreign and total workers per trimester in 2018.

The management of foreign work in the AP of Trento follows the rules of the collective labour agreement. According to specific analysis (ISFOL, 2012), and complying with the indications of the Producers Associations, the daily working time for harvesting is on aver-

age 6-7 hours with peaks of 8-9 hours in case of higher needs. Foreigners employed in fruit and grapes sectors work 30-40 days per year (3 months). A small part is employed in thinning operations for a shorter period (15 days). Workers occupied in berries are employed for a longer period: on average 60-80 days per years, starting from March (renewal of the crops) until the end of summer (harvesting).

In general, foreign workers in agriculture are considered low-skilled labour forces and are employed on daily basis. A great part of seasonal workers are students or other workers that use their holiday period to work in Italy during the harvest of apple and grapes (ISFOL, 2012). The recruitment system is very flexible in order to guarantee an adequate number of units to meet the needs of the famers. The structural need of foreign labour has also created a kind of stable relationship between farmers and workers: it is not uncommon to employ the same workers for more years, already trained for the specific agricultural operations.

Fig. 3. Foreign workers recruited in agriculture per trimester in the AP of Trento (2018).



Source: Our Elaboration on ISFOL Study.

Workers coming from European countries seem to be more willing to come back in the same farm over the years while for extra-EU workers some problems have been highlighted, despite the permission released by the authorities (ISFOL, 2012). Workers coming from third countries are usually not willing to stay in relationship with the employers, so often are not recruited for more than one season. This makes this seasonal work quite loose and more difficult to monitor in a transparent way, even if in Trentino there is a very low level of irregular contracts.

Salaries are regulated by the Provincial labour agreements for agricultural workers (the last one signed on 14th March 2019). Salaries and wages have increased (+2.9% respecting the agreement of 2014-2017 period). For seasonal workers in fruit and grapevine sector, the ordinary hourly wage is 8.0 Euros, increased to 9.5 Euros in case of overtime. Workers employed in berries have an hourly wage of 8.9 Euros and 10.5 Euros for overtime. For common fixed-term workers, the hourly wage is 10.8 Euros while for qualified workers, it raised to as much as 12.0 Euros.

Normally, farms and cooperatives guarantee an accommodation equipped with a kitchen to the seasonal workers, as expected by the Provincial labour agreement. Living and working in the same place might represent an advantageous solution to the housing problem allowing significant savings, but it can cause social isolation and a lack of integration in the local community, perceived as a problem (Medda, Farkas, 2002; Palumbo, 2016). For accommodation and breakfast, and for a meal, 3.0 Euros shall be deducted respectively by the daily wage. There is a wide part of foreign workers that have contacts with other fellow countrymen and take proper advantages by this opportunity, avoiding the payment for services provided by farms.

5.3. Local measures during Covid19 pandemic

Covid19 pandemic has impacted the agricultural workforce, especially the pool of seasonal workers employed in the crop harvesting. Lockdown and restrictions in the mobility of workers across the borders contributed to labour shortages, mainly in countries that rely on seasonal workers (Bochtis *et al.*, 2020). An inadequate supply of labour was expected in the AP of Trento mainly during the first lockdown (May-July 2020) coincident with the activities of the growing berries farms. The border closure and the compulsory period of quarantine requested in some cases, have limited the foreign recruitments and alerted the permanent crop sector, highly dependent on foreigners. The most important concern was the labour shortage in the harvesting period: specific interventions have been carried out to mitigate the risk based mainly on the substitution of migrant labour with domestic workers. This strategy has been followed in other EU countries affected by the same problem (Mitaritonna, Ragot, 2020), creating websites to put unemployed individuals and part-time workers in touch with farmers. This strategy has been followed in the AP of Trento. With the impossibility to facilitate the use of local labour through the voucher, a specific website has been set up to connect farmers with seasonal workers. The initiative was coordinated by the Labour Agency and the three Producers Organizations (Col-diretti, Confagricoltura, CIA). In pandemic period, the initiative has been appreciated, especially by the workers unemployed during the lockdown period (Marongiu, 2020). The list of candidates was divided in four areas: harvesting, cultivation of orchards and vineyards, breeding activities, berries harvesting. Retired people could be added to the list. According to the data of the Labour Agency, in June 2020 around 6,300 units have applied to this initiative as seasonal workers, but only 240 have been contacted in that period by farmers. In the meantime, at the beginning of June, the reopening of the borders for European countries has permitted the entrance of workers coming from the Schengen area, mitigating the risk of workforce shortage for upcoming harvesting operations.

The result of this double intervention is showed in Table 4, that compares the recruitment of foreign and Italian workers in the agricultural sector in 2019 and 2020. In general, the primary sector seems to have overcome the expected problem of workforce recruitment thanks to a substitution of the foreigners with the Italian workers. On total, during the 2019-2020 period, the variation of the total workforce in agriculture is slightly decreased (-1.7%): the decrease of foreign recruitments

Tab. 4. Recruitment of foreign and Italian workers in agriculture in the AP of Trento (2019-2020).

	2019			2020			Variations (%)		
	Italians	Foreigners	Total	Italians	Foreigners	Total	Italians	Foreigners	Total
Male	6.095	15.666	21.761	7.967	13.065	21.032	30,7	-16,6	-3,4
Female	3.571	3.666	7.237	4.282	3.189	7.471	19,9	-13,0	3,2
Total	9.666	19.332	28.998	12.249	16.254	28.503	26,7	-15,9	-1,7
%	33,3	66,7	100,0	43,0	57,0	100,0			

Source: Labour Agency open data.

(-15.9%) has been offset by a higher quota of Italian workers (+26.7%). In 2019, the incidence of foreign workers on the total has been 66.7%, while in 2020 the percentage has decreased to 57.0%, an unusual value for the territory. Only in 2017, because of the adverse weather conditions, the incidence has been so low. Even if the foreign workforce availability has been guaranteed by the reopening of the borders for European citizens, the constraints during the pandemic period and the delay in the activation of the so-called *Decreto Flussi* for extra-EU citizens (signed only in October 2020), have determined an increase in the recruitment of Italian workers. However, the relevance of foreign workforce remains important.

6. REGULATIVE FRAMEWORK OF FOREIGN WORK IN AGRICULTURE

The most important legislative act regulating the admission/integration of migrants in Trentino is the provincial law n.13 of 2 May 1990 (*Interventi nel settore dell'immigrazione straniera extracomunitaria*), specifically inherent to the extra-EU migrants residing in the territory, which, in the first article, recognizes the integration as the most important policy objective. This law promotes specific initiative to overcome the difficulties of inclusion, governing several integration aspects like sanitary assistance, education, social aspects, etc. The provision of these services is finalized to protect individually the extra-EU migrants but also to integrate them in the social and cultural life, in order to guarantee an adequate integration level, respecting their ethnic, cultural and religious identities (Woelk *et al.*, 2016). In the provincial law n. 21 of 13 November 1992 (*Disciplina degli interventi provinciali in materia di edilizia abitativa*) additional interventions regarding more specifically the housing policy for extra-EU migrants have been added. The provincial law n. 13 of 27 July 2007 (*Politiche sociali nella provincia di Trento*) completes this framework, strengthening the inclusion of foreign

citizens among the beneficiaries of all the interventions regarding the housing and social policies. In terms of labour, the provincial law n. 19 of 16 June 1983 (*Organizzazione degli interventi di politica del lavoro*) did not provide specific provisions (measures) regarding foreign workers (the migratory phenomenon was almost absent) but it sustained *ad hoc* intervention for the inclusion of extra-EU workers in the provincial economy. The Labour Agency has been established under this law. To guarantee the right of migrants, the AP of Trento has established the Informative Centre for the Immigration (Cinformi, *Centro informativo per l'immigrazione*) under the Department of health and social solidarity, having several tasks: facilitate the access of foreign citizens to public services, offer information and advice about the entry and residence arrangements in Italy, offer linguistic and cultural support. Regarding the seekers-asylum requiring international protection, the Province provides an ordinary admission system with SPRAR, realized by involving the specific local context (municipalities).

As previously explained, foreign workforce is considered an important resource for an economy strongly dependent by this source, especially in agriculture and tourism characterized by high seasonality. One of the most widespread problem in the management of seasonal work is the bureaucratic requirements in processing residence and work application by the police headquarter (*Questura*). The structural work need, concentrated in specific periods of the year, has consolidated the foreign recruitment process in Trentino, offering an interesting solution to solve the farmers' problems and minimizing irregular work. Most workers come from eastern Europe and almost all obtain a residence permit for seasonal work on the basis of an employer's direct call. This mechanism works well, especially in agriculture, owing the coordination between farmers, provincial offices and police. The foreign workers arrive in Trentino with a regular authorization for a fixed-term work (for instance: harvest of grapes and apple or for an employment in the touristic sector) and once they have finished, they come back to their countries.

Cinformi plays an important role in this process supporting the entrance and the recruitment of workers. Its structure (*Sportello Unico*) provides the authorization for extra-EU seasonal workers and for third-countries workers, evaluating in this case the request of VISA and collaborating with the police authorities. Once the entrance is permitted, the foreign worker must submit this authorization to the Italian Consulate in order to have the VISA. When the worker reaches the employer, they subscribe the contract, the application concerning the resident permit and the contract starts immediately after the subscription. Every possibly variation or termination of the employment must be communicated to Cinformi. The validity of the residence permit for the seasonal work is strictly linked to the duration of the VISA, normally nine months.

The number of permits released every year is variable, depending on the need expressed by the agricultural sector. In 2018, the quota of foreign workers recruited under *Decreto Flussi* accounted for almost 1,500 for the AP of Trento (Marongiu, 2019); at the end of July 2018, the applications for seasonal work were 1,392 (590 for grapes and apple harvest, 483 for other agricultural activities, 313 for the touristic sector). Most of the applications come from Albania (404), Serbia (263), Moldavia (196), Macedonia (103), India (108), Ukraine (99), Bosnia-Herzegovina (55), Marocco (55), Pakistan (23), Kosovo (19).

The described system is continuously monitored and controlled in order to minimize the risk of irregular work. Unlike other regions, the AP of Trento has a very low share of irregular migrants and, in general, all of them are employed with regular residence permits. Irregularities are not common: specific analysis does not highlight systematic use of irregular contracts, as it happens in other Italian regions (Barbieri *et al.*, 2015). The most common irregularity is the declaration of a lower number of working days, but this is not a serious phenomenon considering that the ratio between the declared and effective working days is around 90%. This behaviour has been observed in around 10% of contracts, in the small and medium farms (INEA, 2012). Illegal work is also present, but the monitoring activities have been strengthened over the years and most part of the notifications are sporadic (Ambrosini *et al.*, 2019).

7. CONCLUSIONS

The paper has described the situation of the foreign workforce in the AP of Trento where, in 2019, the incidence of foreign work on the total work has been equal

to 57.4%, compared to a national average of 35.9%. Agriculture is the sector with the highest percentage of foreign employment, whose role has been becoming crucial since the end of 90s, when the increasing labour need was not completely covered by local people. Today, almost two-thirds of the total recruitments in agriculture include foreign workers, considered as an important element for the development of the agricultural sector. As a consequence, legal employment and local integration are continuously strengthened and included in the general migration policy strategies.

Trends and size (impact) of the agricultural employment in the AP of Trento depend on the characteristics of the most important sector (apple and grapes production and livestock activities) and by the seasonal trends over the years and during the year. Official data released by the Labour Agency have shown an increase in the number of foreign recruitments in agriculture over time (+2,146 recruitments from 2015 to 2019), strictly dependent on the seasonal conditions (like in 2017 because of frosts and hails). Moreover, in the same year, the workforce demand is variable, concentrated mainly from July to September, during the harvesting period of apples and grapes.

Satisfying the workforce needs in this kind of labour market requires an efficient recruitment model, able to avoid social problems or illegal work and based on a strong collaboration between farmers and local institutions (including the police). Several elements contribute to the success of this system. First of all, matching the workforce demand and supply permits to plan the acquisition of work permits (VISA), avoiding uncertainty and reducing tensions emerging in case of workers in stand-by for a recruitment. The residence permit is valid only during the work period and well regulated by the public structure. The second element regards the provenience of foreign workers, coming from homogeneous areas, in contact with a wide net of resident fellow countrymen, that permits an easier inclusion process. In case of cohabitation between different ethnic groups, the accommodation offered by farmers seem to be a good way to overcome related problems (ISFOL, 2012). The third element is the control of the migrations: at local level, programs and policies are targeted to manage them; analysis, researches, studies are carried out to have a constant knowledge about this phenomenon.

As normally happens in agriculture, it is difficult to define the presence of irregular work in a timely manner. However, the AP of Trento confirms a fundamentally correct labour market structure where the spread of irregular employment contracts is not pointed out, and the notifications and complaints are sporadic and

not structural. The importance of foreign work has been underlined also during the Covid19 pandemic, where the agricultural sector has experienced other ways to recruit agricultural workers, especially for the harvesting of berries, apples and grapevine. The local initiative to connect farmers with seasonal workers through a specific website, has permitted to satisfy the global workforce need coming from farms and to compensate the lower availability of foreign workers during the pandemic. With respect to 2019, in 2020 less foreign workers have been recruited (-15.9%) compared to a higher quota of Italians (+26.7%) available during the lockdown. However, even with a larger availability of local workers, foreign recruitments have been relevant even under the pandemic, emphasizing once again the importance of this source for the local agriculture.

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