

Introduction

More than three decades ago, Spanish agriculture underwent a series of structural changes that profoundly transformed the sector, leading it to become the leading producer of fresh fruit and vegetables in the EU (Molinero-Gerbeau, 2020a). The creation of the common market, the financing of the Common Agricultural Policy (CAP) and the impetus provided by both the state and the business sector led to the emergence of a series of global agricultural enclaves throughout the country which, through the application of the Californian model of industrial agriculture, turned the Spanish countryside into a veritable global food factory (Moraes *et al.*, 2012).

In addition to transforming the territories where the sector developed, creating massive spaces such as the "sea of plastic" in Almeria (Ferrez, 2024), the new industrial agriculture brought about significant socio-demographic changes. In moving from a peasant or family model to a factory model, the primary sector required large numbers of wage workers to function, which, at a time when the rural exodus that had already begun was intensifying, created significant difficulties in finding local labour (Reigada, 2017). This production problem was solved, as in most countries in the global centre, by employing immigrant workers who, due to the strong growth of the Spanish economy, began to arrive in the country in unprecedented numbers (Arango, 2000).

Today, migration and agricultural work go hand in hand to such an extent that the contingent of foreign workers has become a structural part of the primary sector's production scheme. Without their willingness to do work that is arduous, poorly paid and carries little social recognition (López-Sala, 2016), Spanish agriculture would not only have failed to achieve its current dynamism, but would have barely been able to survive.

Despite the essential nature of this work, a fact that was even legally recognised, as was done by the EU and many other neighbouring states, by decree during the pandemic (Sajir *et al.*, 2022), there is no clear and coherent national policy on how to enable predictable migration channels that guarantee both the availability of these workers and respect for their most basic rights. The effects of this absence lead to problems ranging from widespread labour exploitation of the group (Fernández *et al.*, 2023) to unpredictable production, which weighs heavily on the sector.

One of the elements that undoubtedly hinders the articulation of a national plan on the issue is the current fragmentation, partiality, opacity and, in some dimensions, absence of both sociodemographic data and data indicative of the migratory channels that bring foreign workers to the Spanish countryside.

This article will review the available statistical sources, indicating what data exists and what sociodemographic profiles it reveals. The aim is twofold: on the one hand, it will seek to provide tools to those researching the issue to facilitate their access to existing information and, on the other, it will seek to highlight the gaps in this information with the aim of stimulating debate on the need to promote systematic data collection and subsequent transparent access as strategic drivers for improving Spanish migration governance.

The article will be structured as follows. After this introduction, we will take a historical look at how agriculture and migration have developed a structural link in Spain. Subsequently, a meta-analysis will be carried out on what and how research has been conducted in this area with the aim of understanding what evidence has been found, but also what its limitations have been. The next section will review the available statistical sources, indicating what data they provide and what gaps they present in understanding the main sociodemographic characteristics of the contingent of foreign agricultural workers. Finally, there will be a discussion section followed by a series of conclusions that will close this article.

Agriculture and migration in Spain: a historical overview of a structural link

As mentioned above, migrant workers became part of the agricultural industrial fabric in the early 1990s, when it began to expand its production scheme significantly (Morales *et al.*, 2012). In the beginning, in the absence of a well-defined state migration policy, due to the country's history of negative net migration, the majority of those who began working in the sector did so informally (Gualda, 2012). Most of them were men from the Maghreb and sub-Saharan Africa who found in agriculture a first way to stabilise their situation, begin to earn an income and plan their regularisation. Unfortunately, their working conditions were characterised by being very poor, with precarious labour relations and severe exploitation predominating (Calavita, 2005).

The various mass regularisations implemented by the national government, together with the implementation of the arraigo mechanism, which since 2005 has defined a permanent route to administrative regularisation (Aguilera, 2006), led part of this workforce to leave the sector in search of better opportunities. Nevertheless, Spain's booming economy continued to attract migrants to the country, even placing Spain's net immigration rate among the highest in the OECD, surpassed only by the United States during the first decade of the 21ST century (Arango, 2013). This meant that part of the sector continued to be fuelled by migrant workers, both irregular and regular.

The national origins of these contingents were varied, with Morocco and sub-Saharan Africa remaining among the main nationalities over time, but with the addition of workers from Latin America and Eastern Europe. New migrations, such as those from Romania, will be key to understanding how the agro-industrial sector remained afloat, despite the challenge of securing the necessary labour in such a changing context (Molinero-Gerbeau, 2021).

At the same time, with the aim of providing a mechanism that, like countries such as Canada and France, would allow for a greater degree of production forecasting and guarantee a stable workforce for the sector, the Spanish government developed a temporary migration programme in 1999. Known as GECCO (initials that refer to "Collective Management of Recruitment at Source", its official name), this seasonal work programme will allow employers to recruit large numbers of workers in their countries of origin and bring them to the UK for a maximum of nine months per year. Although GECCO was originally designed for any sector, it ultimately proved to be useful for agriculture, particularly for seasonal crops. Given that GECCO allows participants to repeat campaigns, it establishes a circular migration mechanism that, over time, has ended up being applied almost exclusively in the province of Huelva, as it has a campaign (for red fruits) that fits perfectly with the profile of seasonal workers (Molinero-Gerbeau, 2020b).

It should be noted that, although GECCO is very attractive, it is a micro-programme that currently transports less than 20,000 workers per year, which constitutes only about one-fifth of the labour required in Huelva.

Finally, to understand how the sector has been fuelled by foreign labour, it is worth highlighting three geopolitical factors that have had a decisive influence on its development.

The first of these has been the eastward expansion of the EU, although the 2004 and 2007 expansions did so for different reasons. The 2004 enlargement led to a dramatic decline in the workforce, particularly the Polish workforce, as Poland ceased to be a third country and was therefore no longer able to participate in GECCO. Furthermore, as Polish citizens now had European nationality, they opted for other destinations (such as the United Kingdom) and other sectors of employment that were better paid than Spanish agriculture (Gualda, 2012). In fact, this loss of labour is at the root of the impetus for the programme with Morocco, which currently accounts for more than 90% of recruitment at source.

The second enlargement, concerning the inclusion of Romania and Bulgaria, will paradoxically have the opposite effect. Although both states will also lose their third-country status, which will mean their withdrawal from the GECCO programme, for more than a decade they will become the main suppliers of labour to the sector, especially Romania (Molinero-Gerbeau, 2021). However, this result, which is the opposite of what happened in the Polish case, can only be understood in the context of the second major geopolitical event: the economic and financial crisis of 2007-2008.

2007 was the year with the highest number of hires in the history of GECCO, with nearly 40,000, but the following campaign saw this figure fall to around 14,000, dropping in subsequent years to a low of 2,000 in 2013 (Macías *et al.*, 2016). This decline will be linked to a decision by the central government, which, in the face of rampant unemployment, will choose to freeze GECCO in order to promote the employment of people already residing in the territory. However, this did not happen, and business owners chose to take advantage of the fact that Romanians no longer needed a visa, as they were European citizens, and organised their own recruitment processes in that country, thus bringing in the labour they needed without the bureaucratic restrictions of the GECCO (Molinero Gerbeau, 2018). In this way, unlike with Poland, entry into the EU will serve to bring more people from Romania, and not only to the provinces where seasonal production predominates.

The third geopolitical factor that will cause major disruption in the sector will be the COVID-19 pandemic declared in 2020. At a time when GECCO was recovering from the 2008 crisis and the sector had managed to balance the supply of workers between those

arriving from the East, those hired in their country of origin (almost all of whom are women) and the employment of residents (whether they are in a regular or irregular situation), the slowdown in mobility caused by the pandemic will pose a major challenge. Although agricultural work was considered "essential" in Spain and "critical" by the EU, thus allowing mobility and on-site work for those who carried it out without the need for confinement, the closure of borders in countries of origin such as Morocco, coupled with a certain amount of European competition to secure these workers, meant that the sector faced difficulties (Sajir *et al.*, 2022). In this context, many people from Romania chose to go to work in Germany, as it was not only closer, but also offered better wages, which made this route more complicated for employers (Şerban and Croitoru, 2022).

We are currently in a period of transition. GECCO numbers remain low, as we will see later (less than 20,000 hired per season), but the government has not only launched pilot programmes with new countries such as Ecuador, Honduras and Senegal, but has also expressed its intention to promote circular migration as an alternative to irregular migration. It is therefore possible that this mechanism will expand its quota in the coming years.

On the other hand, the progressive decline in the number of people from Eastern Europe could be offset by an increase in the hiring of people in an irregular situation, but we do not have data to confirm this, which is a fact that will be discussed later. However, before addressing the existing statistical data, the next section will conduct a meta-analysis of what and how research has been carried out in this area with the aim of understanding what evidence has been found, but also what limitations it has had in understanding the socio-demographic dynamics of the migrant worker population in Spanish agriculture.

Three decades of research in this field: forms and scope of accumulated knowledge

The study of the conditions of migrants working in Spanish agriculture is as long-standing as the phenomenon itself, with research addressing these issues already available in the late 1980s (Berlan and Nevado, 1987). However, the evolution of this field of analysis will run parallel to the intensification of the process of integration of migrant workers into Spanish agriculture, coinciding with its progressive industrialisation. Thus, in the 1990s,

certain authors began to talk about the formation of enclaves (Giménez, 1992) and the social dynamics involved in this reality (Checa, 1995), and little by little, their study began to take shape as a specific subfield within migration studies (Pedreño, 1999).

Events such as the racist riots in El Ejido (Almería) in 2000 (Martínez, 2001) and the aforementioned implementation of recruitment at source (Gualda and Ruiz, 2004) broadened the foundations of a field of research which, however, will not see a proliferation of research on the subject until practically the second decade of the 21st century.

The launch of the GECCO programme with Morocco will undoubtedly be a significant factor in attracting a growing research community (Moreno, 2009), which will be reflected in the emergence of research projects that will significantly expand knowledge on the subject. In this regard, noteworthy projects from the second decade of THE 21ST century include CIRCULAR (Towards new formulas for migration management in the Spanish case? Recruitment at source, mobility partnerships and migration circularity CSO2011-27115) led by Ana López Sala (CSIC) in 2011, and the ENCLAVES project (Social Sustainability of New Agricultural Production Enclaves: Spain and Mexico (Enclaves) CSO2011-28511) led by Andrés Pedreño Cánovas (University of Murcia) in the same year. In addition to these, other international projects, such as TEMPER (Temporary vs. Permanent Migration — Grant Agreement 613468) funded by the European Commission, will also study this reality in Spain.

Undoubtedly, the doctoral theses that will emerge from these projects, together with those directed by researchers specialising in this field of study, will generate a multiplier effect that will increase the number of people dedicated to studying migration in Spanish agriculture. Currently, although it remains a minority field within migration studies, it is quite dynamic, as can be seen, for example, in the number of national and international publications that have addressed the Spanish case in the last five years (Ruiz *et al.*, 2024).

This non-systematic meta-history of the subfield of research on agricultural work and migration in Spain allows us to understand its dynamism and the temporal dimension of the knowledge accumulated in this area. However, despite its prolific nature and the extensive knowledge it has generated, it has been affected by certain biases. The main

one is the research approach, which has predominantly used qualitative methodologies and case studies, resulting in certain shortcomings in terms of its scope and territorial dimension. Thus, enclaves such as Murcia, Huelva and Lleida have been extensively studied, while, on the contrary, important agricultural production centres such as Jaén, Aragón and Albacete have hardly been researched. In terms of scope, it has been common to find structural policy analyses (see, for example, Molinero-Gerbeau, 2020b), in-depth research on working conditions (see, for example, Ramírez, 2020), gender dynamics (see, for example, Reigada, 2022), legal conditions (López-Sala, 2016) and other related topics such as housing, racism and many others (for a complete overview of the most recent research, see Ruiz Ramírez *et al.*, 2024).

Whether due to the difficulty of researching a group characterised by its spatial segregation, precariousness or the existence of language barriers (Avallone, 2014), there have been few quantitative studies, let alone demographic studies, on this group.

The survey carried out in Lleida by the project "Observatori permanent de la immigració de les comarques de Ponent: Els temporers a les comarques de la Plana" (Permanent Observatory on Immigration in the Western Counties: Seasonal Workers in the Counties of Ponent and La Plana), funded by the Lleida Provincial Council in 2015 (Ref. 201500223, 2015-2016) is one of the few that has attempted to draw up a sociodemographic profile of migrant agricultural workers in Spain (some of its results can be consulted, for example, in González *et al.*, 2021). More recently, some projects focused on the field of health have also proposed quantitative methodologies, although most of them are still in the initial phase. Although descriptive, the study of data with an international perspective carried out by Molinero-Gerbeau (2020a) can also be added to this list of efforts to understand some sociodemographic dimensions of the group of migrant agricultural workers in Spain.

In short, the use of numerical data has been very limited in this area of research, undoubtedly influenced by the partiality and inaccessibility of the available data. In the next section, we will discuss which records and databases contain sociodemographic information on this group, indicating where and how to access them, analysing them and pointing out their advantages and shortcomings.

How can we measure the scale of the phenomenon? Available statistical data sources and their analysis

Firstly, it is important to note that, as there is no standard protocol for data search, the records presented below are the result of more than a decade of research by the author on the subject, although they have not been systematically identified. This means that it cannot be ruled out that there may be other data that have not been identified during this period and that could complement what is presented here. For example, it is possible that some regional statistical institutes have their own data that has not been detected by the author.

The order in which the data is presented below follows a deductive reasoning, or the logic of presenting the most general data first and then the more specific data. Graphs or tables will be provided depending on what is considered most useful or visual for the objective set, and the sociodemographic profile corresponding to the most recent period of the data will be provided.

Labour Force Survey (EPA) — National Institute of Statistics

The Labour Force Survey (EPA) is an ongoing statistical study conducted by the National Statistics Institute (INE), whose main objective is to provide detailed and systematic information on the employment situation of the resident population in Spain. The EPA makes it possible to estimate the size and evolution of the active, employed, unemployed and inactive population, as well as to study their characteristics according to variables such as gender, age, educational level, nationality and economic activity. The survey is conducted through personal and telephone interviews with a representative sample of around 65,000 households each quarter, representing around 180,000 people. The sample design is rotational, allowing for the observation of temporal and comparative dynamics. The EPA has been collecting information since the first quarter of 1964, although its current methodology was consolidated in 2005 to adapt to European and international standards. The data are published quarterly, usually a few days after the end of each quarter, and are available both in reports and in microdata accessible for research purposes. The survey follows the methodological criteria set by the International Labour Organisation (ILO) and Eurostat, which ensures comparability with labour

statistics from other countries. Due to its breadth, continuity and reliability, the EPA is one of the main statistical sources for the analysis of the labour market in Spain, being used both in the design of public policies and in academic and economic studies.

With regard to agricultural work carried out by migrants in Spain, its long history is particularly useful, allowing us to see the evolution of this contingent since it began to enter the sector. Specifically, two EPA databases provide relevant information in this regard: those that collect information on active workers¹ and employed workers².

Of course, certain precautions must also be taken, not only because it is a survey and not registered data, but also because, as it is quarterly, the annual data presented here is calculated by taking an average of the four quarters, showing figures that, for example, obscure factors such as seasonality.

The EPA variables provided by the databases of active and employed workers are as follows: gender, economic sector, nationality and period. The first allows us to differentiate between data for men and women, while the second allows us to select the agricultural sector. The latter has the limitation of not being able to disaggregate by subsectors or tasks, so all workers in the sector are included in the data, ranging from agricultural engineers to farm labourers.

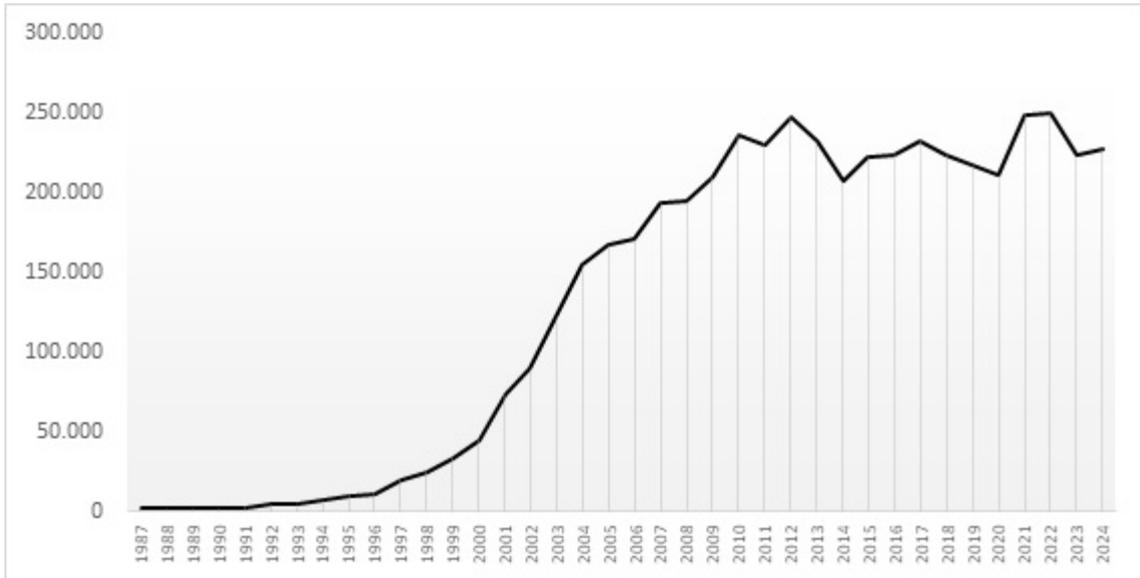
The nationality data is the least useful, as not only is it not disaggregated by country, but the available regions are only the European Union, the rest of Europe, Latin America, the rest of the world and stateless. The period data corresponds to each quarter of the year.

The lack of variables such as age, province of work and nationality by country detracts from the usefulness of this database, so its main value lies in showing, on the one hand, the national scale of the phenomenon and, on the other, its historical trajectory.

Figure 1 shows both dimensions for the period 1987-2024, in the case of active workers.

¹ This database can be consulted at the following link (for the period from 2008 to the present): <https://www.ine.es/jaxiT3/Tabla.htm?t=65102&L=0> [Consulted on 28 March 2025]

² This database can be consulted at the following link (for the period from 2008 to the present): <https://www.ine.es/jaxiT3/Tabla.htm?t=65127&L=0> [Consulted on 28 March 2025]



Graph 1. Active workers of foreign nationality in the Spanish agricultural sector during the period 1987-2024 (annual average). Source: Labour Force Survey

As can be seen, the increase in the number of workers in Spanish agriculture has been spectacular, beginning to take off in the 1990s, multiplying exponentially in the first decade of the 21st century and, despite certain fluctuations, remaining relatively stable from 2010 to 2024, with an average of 229,000 foreign workers active in agriculture throughout the country.

In terms of the demographic characteristics of this group, it should be noted that in 2024, the foreign workforce in Spanish agriculture was heavily male-dominated, accounting for almost 75% of all foreign workers in the sector (171,200) compared to 25% women (55,600).

Unfortunately, with regard to the national origin of workers, the lack of disaggregated data makes it impossible to obtain useful information, as can be seen in Table 1.

	Dual nationality	European Union	Rest of Europe	Latin America	Rest of the world and stateless persons
No. of workers	29,100	56,200	8,000	35,400	127,300
% of total	11.4	22.0	3.1	13.8	49.7

Table 1 Active foreigners by nationality in the Spanish agricultural sector in 2024 (annual average). *Source:* Labour Force Survey

The table shows that almost half of foreign agricultural workers in Spain come from the 'rest of the world', while the second most common origin is the European Union. In any case, the aggregate form of the data makes it uninformative.

In short, according to the EPA, the majority sociodemographic profile of foreign agricultural workers in Spain would be male and from a region other than Europe or Latin America. As we will see in the next section, data from the State Public Employment Service (SEPE) will allow for a greater level of detail.

Registered contracts — SEPE

The State Public Employment Service (SEPE) is an autonomous body attached to the Ministry of Labour and Social Economy, whose main function is to manage and coordinate employment policies at the state level, as well as to contribute to the monitoring and analysis of the labour market.

Among its many responsibilities, the SEPE maintains a database of registered contracts, an administrative statistical source that collects detailed information on employment contracts formalised in Spain. This database provides information on variables such as the volume and type of contracts signed, differentiated by contract type, duration, working hours, economic sector, geographical area, age, sex and nationality of the worker, among

other criteria. As this data is not based on surveys but on registrations, it is more reliable than the EPA and provides a more accurate picture of the figures collected, as the data is generated from the mandatory registrations that companies make with the SEPE.

Unfortunately, the format in which the data for the field of study that interests us in this article is published is not functional, as contracts for foreigners in agriculture are published monthly without being broken down by nationality or gender³. To obtain this information, you must go to the Transparency Portal of the General State Administration⁴ and submit a request. The request must specify the type of data required, the time period covered and the variables of interest. Fortunately, the SEPE usually responds by providing this data in well-organised files. However, those making this request should allow at least fifteen days to receive the data⁵. It is a cumbersome procedure and it is not clear why this data is not available for download in CSV format like that of the EPA, but at least the delay is not very long and it has a much higher level of disaggregation than the EPA data.

Thus, in the most recent request made by the author, data on registered contracts in agriculture were obtained, disaggregated by province, nationality, sex and age. It should be noted, however, that the data refer precisely to registered contracts and not to individuals, so they do not provide a fixed number of workers, as the same person may have several contracts in the period analysed. However, since the implementation of Royal Decree-Law 32/2021 of 28 December, popularly known as the "labour reform", the temporary nature of contracts has been drastically reduced, so that from 2022 onwards, the figures may come quite close to the number of workers.

Given that presenting data for the entire country is a monumental task, we will now proceed to draw up a socio-demographic profile of migrant agricultural workers in the five provinces with the highest volume of contracts in 2024. Excluding workers of Spanish nationality, these are, as shown in Table 2, Murcia, Huelva, Jaén, Almería and Seville.

³ See, for example, the section on 'Contracts with foreigners' in the single volume for January 2024, which is available at this link: <https://www.sepe.es/HomeSepe/que-es-el-sepe/estadisticas/contratos/estadisticas-nuevas/2024/enero.html> [Accessed: 4 April 2025]

⁴ See: <https://transparencia.gob.es/> [Consulted on: 1 April 2025]

⁵ The various requests made by the author took between fifteen days and a month to be resolved. On one occasion, SEPE even contacted him by telephone to send the data file in the format requested by the author.

Province	No. of contracts to foreigners
Murcia	166,920
Huelva	95,404
Jaén	56,244
Almería	54,523
Seville	35,992

Table 2. Top five Spanish provinces by volume of contracts registered for foreign workers in the agricultural sector.

Source: SEPE Registered Contracts

As can be seen, the province with the most contracts registered in the whole country is Murcia, almost five times more than the fifth province in the ranking, which in this case is Seville. In any case, the first four on the list stand out for exceeding fifty thousand contracts, as the difference between Almería (or Jaén, which is not far behind) and Seville is almost twenty thousand contracts, indicating a clear hierarchy of these territories over the rest.

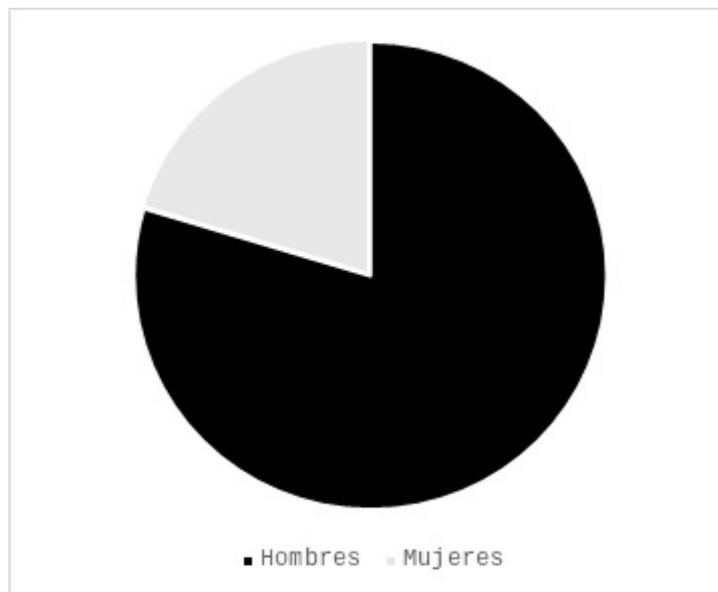
Each of these provinces has its own particular characteristics in terms of production. For example, Murcia, known as the "Orchard of Europe" (Pedreño, 1999), offers a varied production that provides work all year round, so its productive fabric is capable of settling the workers on whom it depends in the territory. Huelva, on the other hand, is almost a monoculture, that of red fruits (especially strawberries), whose production is seasonal and therefore requires mobile contingents to work in the province for only a few months a year, which is why GECCO has worked very well in the enclave (Molinero-Gerbeau, 2020b). In Jaén, the situation is similar to that in Huelva, with olive trees predominating (in fact, a significant part of the contingent displaced by the campaign to Huelva comes from working in Jaén). The case of Almería is similar to that of Murcia, and Seville combines both, producing mainly seasonal products such as citrus fruits (especially oranges and mandarins) and olives, although it is a region where a significant volume of

tomatoes are produced which, being a non-seasonal crop, can be produced all year round⁶.

These differences undoubtedly imply varied profiles that deserve to be analysed individually.

Murcia

In Murcia, the vast majority of agricultural contracts are awarded to foreign men, who account for 80% of the total, as shown in Figure 2.

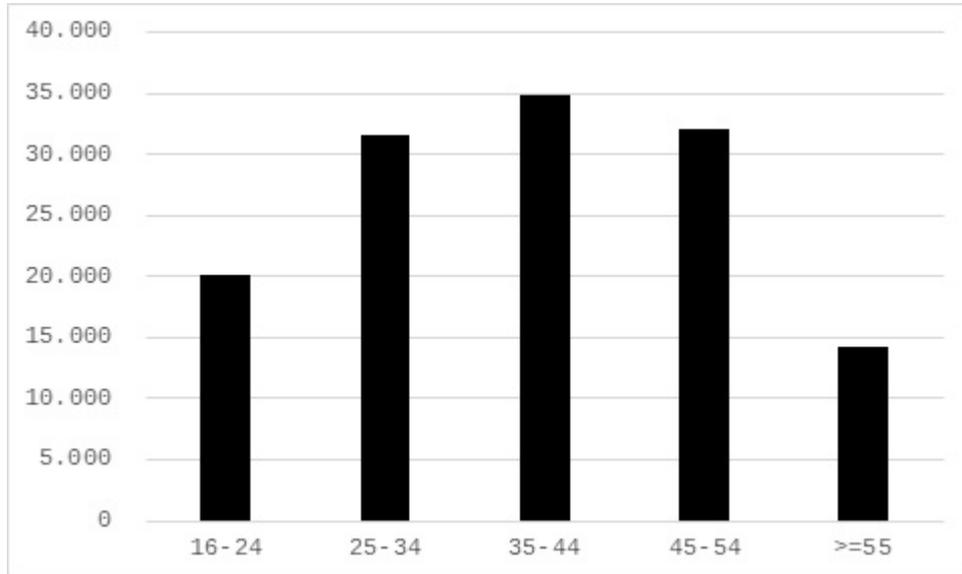


Graph 2. Distribution by sex of contracts signed with foreign workers in the agricultural sector in Murcia in 2024.

Source: SEPE Registered Contracts

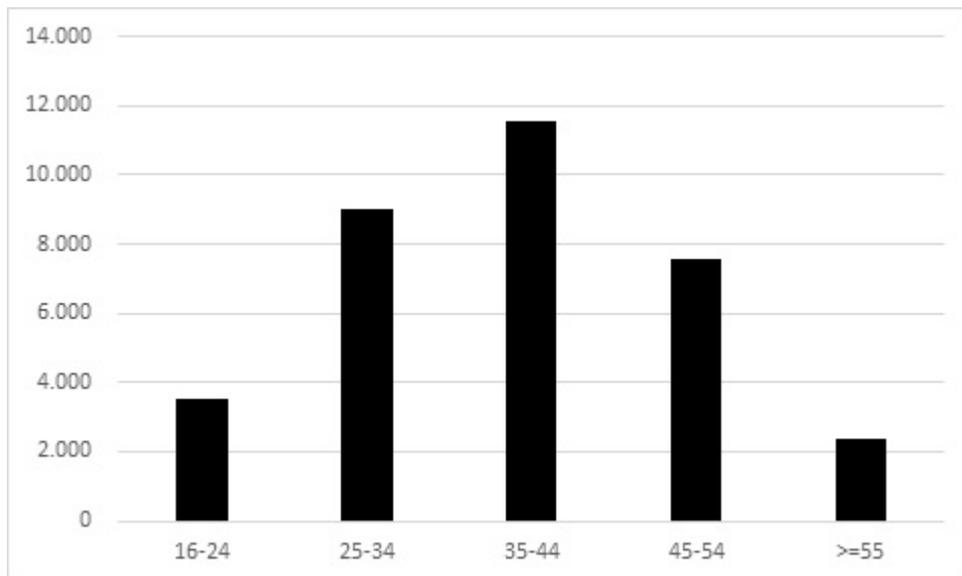
In terms of the age of those hired, as shown in Figure 3, the majority of men are between 25 and 54 years old, with significantly fewer below or above these ages. Women, as shown in Figure 4, show a similar distribution, although those between 35 and 44 years old stand out in terms of volume.

⁶ These data can be consulted on the Statistical Portal of the Seville Provincial Council, in the report *Avance de producciones y superficies agrícolas. November 2024* [Consulted: 1 April 2025]. Available at: <https://portalestadistico.dipusevilla.es/es/deintereses/noticias/Avance-de-producciones-y-superficies-agricolas.-Noviembre-2024-00001>



Graph 3. Age distribution of contracts signed with male foreign workers in the agricultural sector in Murcia in 2024.

Source: SEPE Registered Contracts



Graph 4. Age distribution of contracts signed with female foreign workers in the agricultural sector in Murcia in 2024.

Source: SEPE Registered Contracts

The top five nationalities of migrant workers in Murcian agriculture are, in descending order, as shown in Table 3, Morocco, Senegal, Ecuador, Mali and Algeria.

Nationality	No. of contracts
Morocco	95,347
Senegal	11,378
Ecuador	9,062
Mali	7,523
Algeria	4641

Table 3. Top five foreign nationalities by volume of contracts registered in the province of Murcia in 2024. *Source:* SEPE Registered Contracts

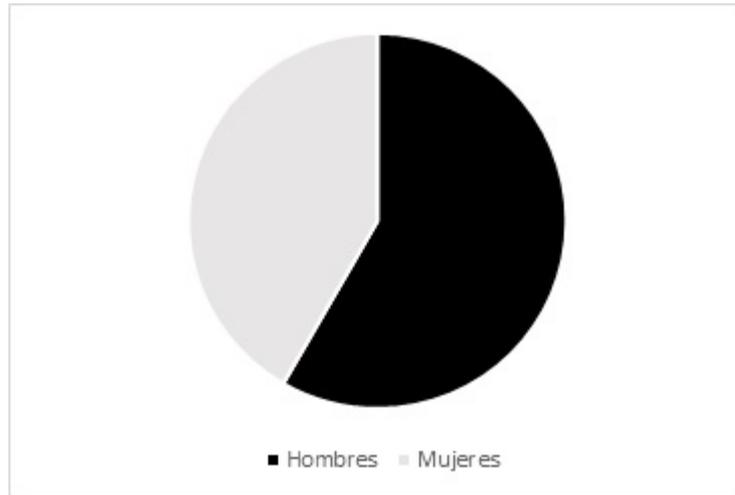
The absolute predominance of Morocco is striking, with almost 60% of the total number of contracts for the migrant contingent, eight times greater than the next nationality present in the sector, Senegalese, which barely reaches 7% of the total.

Therefore, cross-referencing the data presented here, we could say that the majority sociodemographic profile of migrant agricultural workers in Murcia, based on registered contracts, is male, Moroccan, aged between 35 and 54.

Huelva

As in Murcia, in Huelva the vast majority of contracts in agriculture in the province are signed by migrants (75%), although the Huelva contingent differs significantly from that of Murcia in terms of its composition.

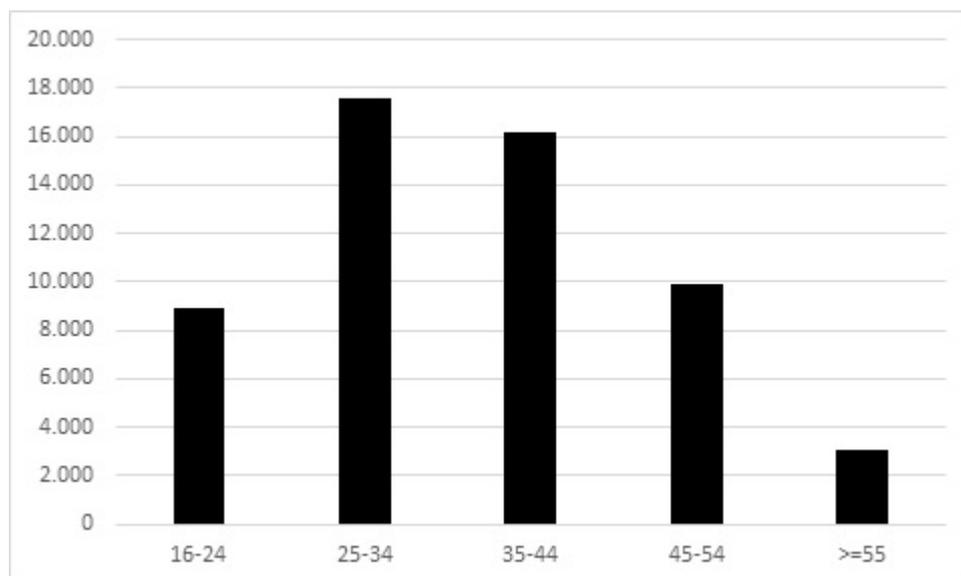
Contrary to the general impression that may exist, given the high visibility of the GECCO programme, where practically 100% of the contingent is made up of women, the distribution by sex of contracts signed by foreigners working in agriculture in Huelva shows more men than women, although it is true that the difference is smaller (58% of contracts to men and 42% of contracts to women) than in other enclaves, as shown in Figure 5.



Graph 5. Distribution by gender of contracts signed with foreign workers in the Huelva agricultural sector in 2024.

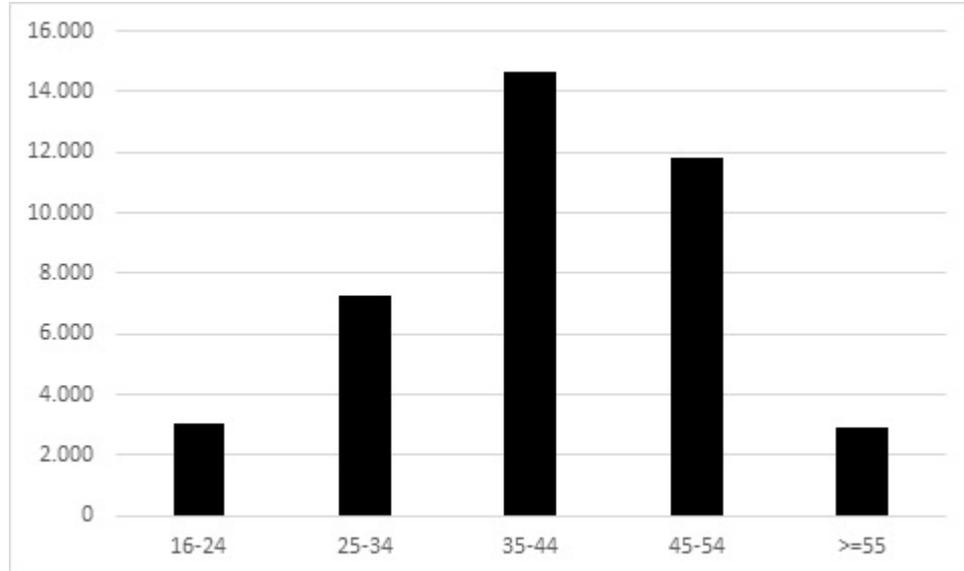
Source: SEPE Registered Contracts

With regard to the age of these workers, as shown in Figures 6 and 7, there is an interesting gender disparity, with a significant proportion of male workers aged between 16 and 24, while women in this age group represent a very small part of the tot . The largest age group among men is between 25 and 34, while among women it is between 35 and 44 (twice as many as those in the previous age group). In both cases, the proportion of people over 55 is small.



Graph 6. Age distribution of contracts signed with male foreign workers in the agricultural sector in Huelva in 2024.

Source: SEPE Registered Contracts



Graph 7. Age distribution of contracts signed with female foreign workers in the agricultural sector in Huelva in 2024.

Source: SEPE Registered Contracts

The top five nationalities of migrant workers in Huelva's agriculture sector are, in descending order, as shown in Table 4, Morocco, Romania, Senegal, Mali and Bulgaria.

Nationality	No. of contracts
Morocco	48,103
Romania	16,047
Senegal	7,930
Mali	7,637
Bulgaria	4779

Table 4. Top five foreign nationalities by volume of contracts registered in the province of Huelva in 2024. Source:

SEPE Registered Contracts

As in Murcia, Huelva shows a clear predominance of workers of Moroccan origin, who account for half of all contracts for migrant workers, three times more than the next nationality, Romanian, which in turn doubles the third and fourth: Senegalese and Malian. In last place is the contingent of Bulgarian workers, although they represent only 5% of the total number of contracts signed with foreigners in the province's agricultural sector.

Based on these data, in the case of Huelva, the majority sociodemographic profile of the migrant agricultural worker would be, as in Murcia, that of a Moroccan man, but here he would be between 25 and 34 years old. However, given not only the practical balance between the sexes, but also the fact that the group of Moroccan workers is made up of a majority of women (53%), it should be noted that there is also another predominant profile with a similar presence in the province: that of a Moroccan woman between the ages of 35 and 44.

Jaén

The productive enclave of Jaén presents notable differences from the other two analysed. Firstly, despite being the third province in terms of total number of contracts signed by migrant workers in agriculture, these only represent 28% of the total, with Spanish workers making up the vast majority.

Secondly, the proportion of contracts signed by men compared to women is significantly higher than in Huelva and Murcia, with 95% of contracts signed by men, as shown in Figure 8.

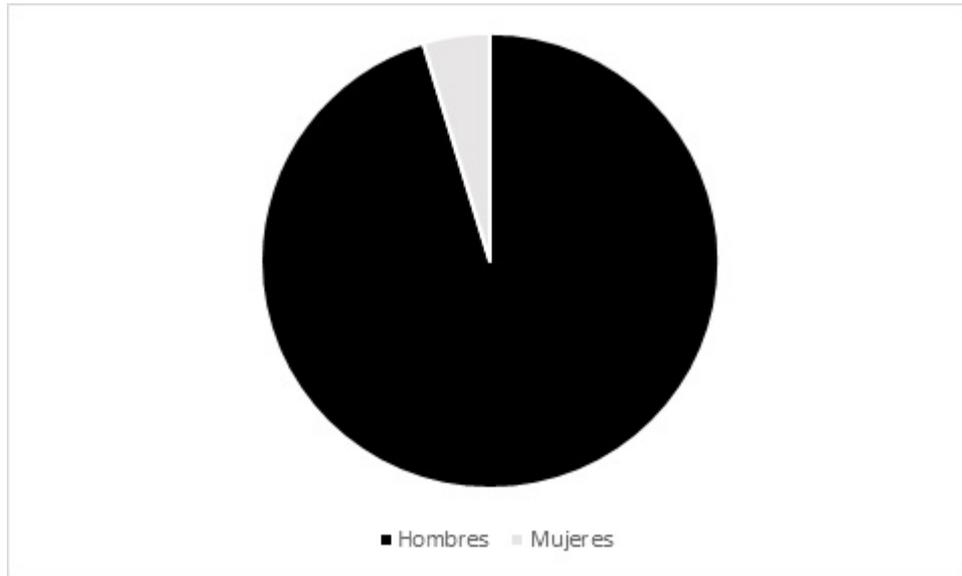
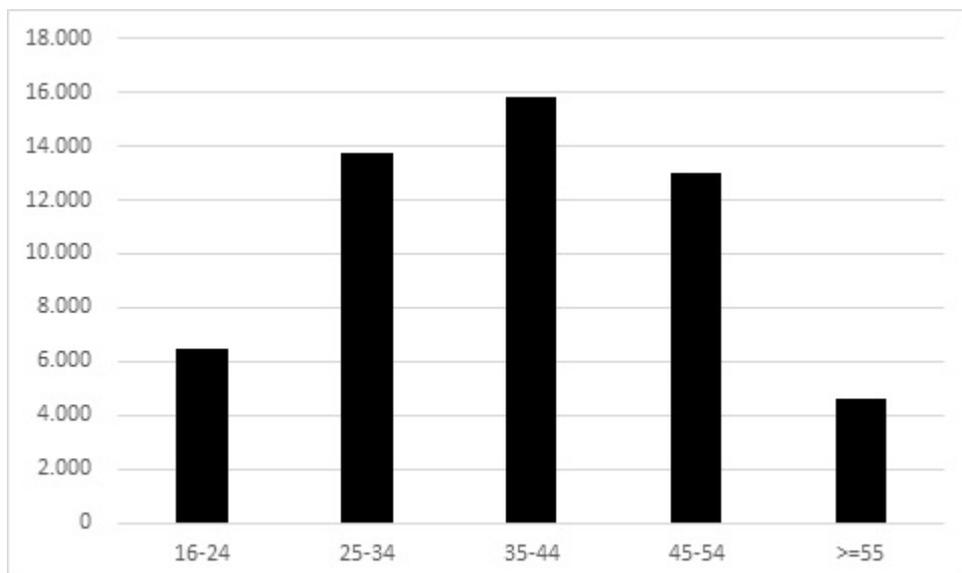


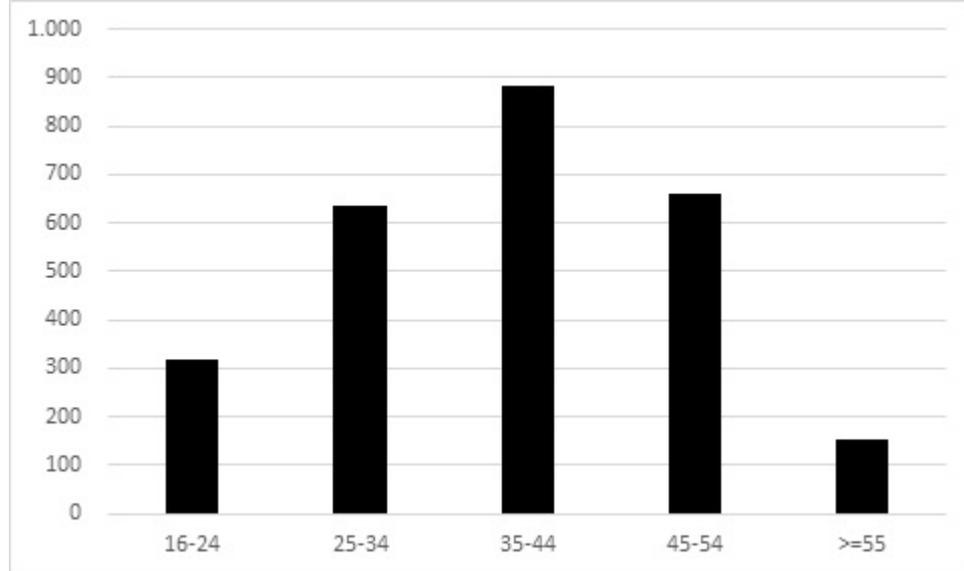
Figure 8. Distribution by sex of contracts signed with foreign workers in the agricultural sector in Jaén in 2024.
 Source: SEPE Registered Contracts

Most of these workers, as shown in Figure 9, are between 25 and 54 years old, as is the case with foreign men working in Murcia, and, as there, there are significantly fewer younger and older workers. Women, as shown in Graph 10, have a similar age distribution, although the number of female workers between the ages of 35 and 44 stands out slightly from the rest.



Graph 9. Age distribution of contracts signed with male foreign workers in the agricultural sector in Jaén in 2024.

Source: SEPE Registered Contracts



Graph 10. Age distribution of contracts signed with female foreign workers in the agricultural sector in Jaén in 2024.

Source: SEPE Registered Contracts

The top five nationalities of migrant workers in Jaén's agriculture sector are, in descending order, as shown in Table 5, Morocco, Senegal, Mali, Algeria and Romania, showing a certain pattern of repetition of nationalities among agricultural enclaves at the national level.

Nationality	No. of contracts
Morocco	16,036
Senegal	14,436
Mali	10,563
Algeria	4,162
Romania	3,179

Table 5. Top five foreign nationalities by volume of contracts registered in the province of Jaén in 2024. *Source:* SEPE Registered Contracts

In the case of Jaén, although most of the contracts signed by foreign workers correspond to people from Morocco (28% of the total), in percentage terms this figure is very similar to that of contracts signed by Senegalese workers (25%), reflecting an almost equal balance between the two nationalities.

Once again, the majority socio-demographic profile in this province would be that of a male Moroccan worker between the ages of 35 and 54, followed by a male Senegalese worker, but in this case between the ages of 25 and 54.

Almería

Known for its sea of plastic (referring to the concentration of greenhouses that can be seen even from space), Almería is the fourth province in Spain in terms of the volume of contracts for foreign workers in the agricultural sector. There, 77% of all contracts are made with migrants.

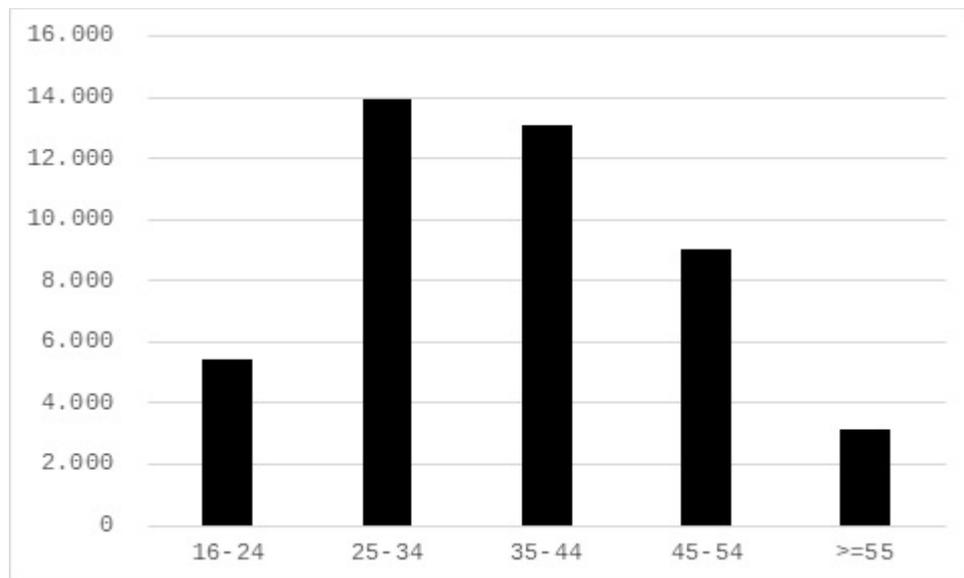
Without reaching the level of Jaén, and closer to the situation in Murcia, there is again a predominance of contracts signed with men over women, with a difference of around 82% compared to the remaining 18%. Figure 11 shows this distribution.



Graph 11. Distribution by sex of contracts signed with foreign workers in the agricultural sector in Almería in 2024.

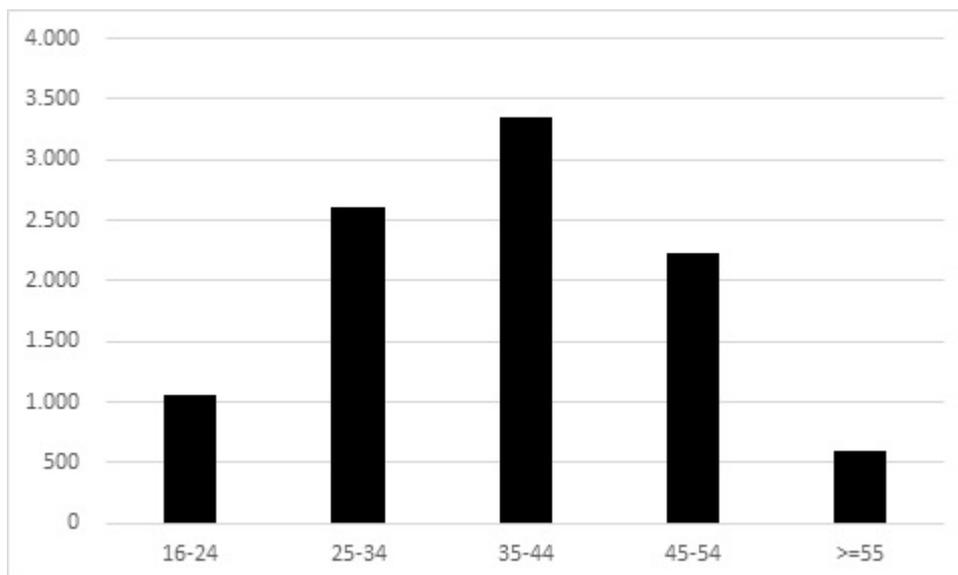
Source: SEPE Registered Contracts

Most of these workers are between 25 and 44 years old, with a significantly lower proportion in the other age groups. Women, on the other hand, are more concentrated in the 35-44 age group, although a significant proportion are between 25 and 34 or between 45 and 54, as shown in Figure 13.



Graph 12. Age distribution of contracts signed with male foreign workers in the agricultural sector in Almería in 2024.

Source: SEPE Registered Contracts



Graph 13. Age distribution of contracts signed with female foreign workers in the agricultural sector in Almeria in 2024. Source: SEPE Registered Contracts

The top five nationalities of migrant workers in Almeria's agriculture sector are, in descending order, as shown in Table 6, Morocco, Senegal, Mali, Romania and Gambia, the latter being the only new addition to the pattern observed in previous cases and representing, in any case, barely 3% of the total number of contracts signed with foreigners in the province's agriculture sector.

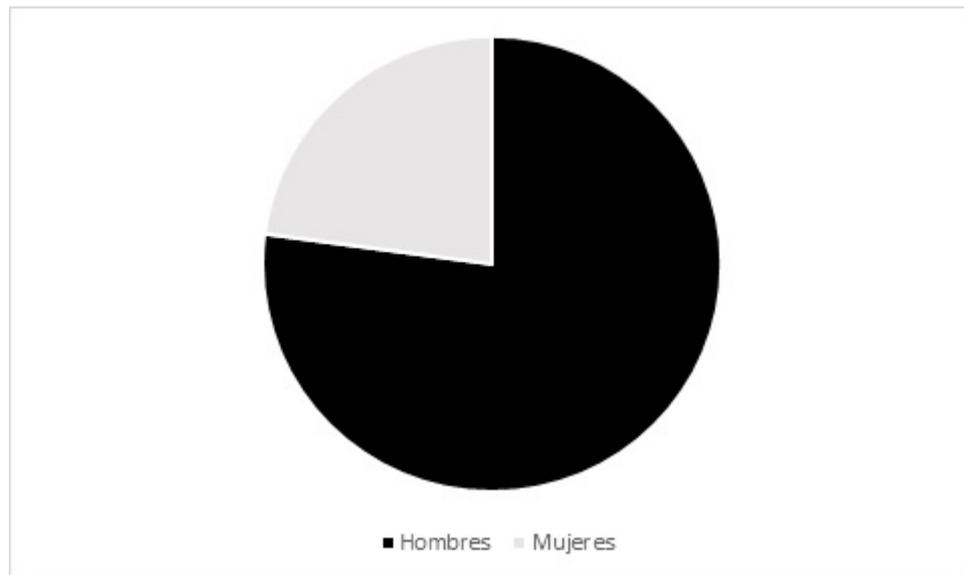
Nationality	No. of contracts
Morocco	28,217
Senegal	6,591
Mali	5,231
Romania	2,567
Gambia	1,591

Table 6. Top five foreign nationalities by volume of contracts registered in the province of Almería in 2024. Source: SEPE Registered Contracts

Contracts awarded to Moroccans account for 51% of the total, showing an absolute predominance of this nationality over the rest, as the next largest group, Senegalese, represents only 7%. This notable difference allows for a clearer sociodemographic profile to be drawn up, corresponding in Almería to that of a male worker from Morocco aged between 25 and 54.

Seville

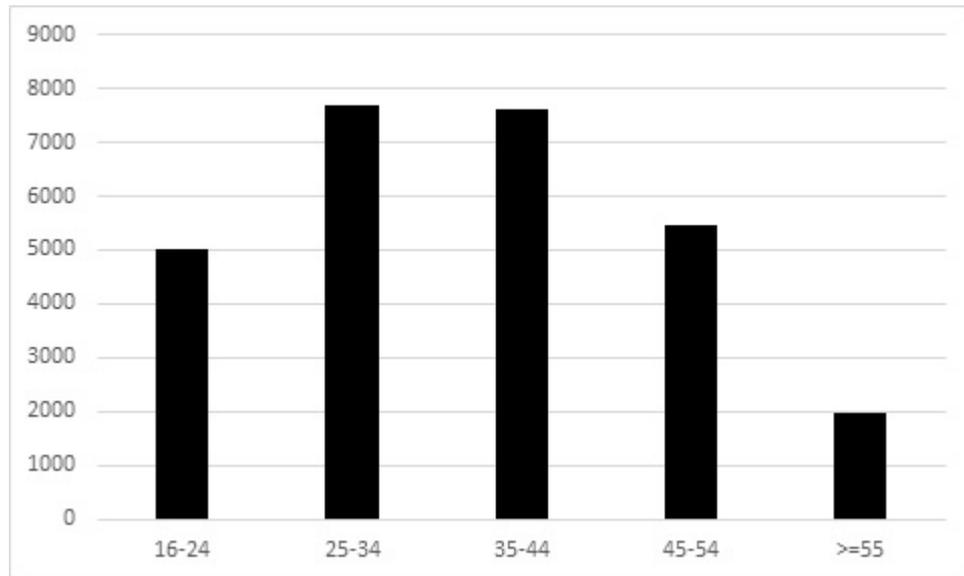
The case of Seville shows, in general terms, some parallels with that of Jaén because, despite being the fifth province in the country in terms of the number of contracts signed with migrants in agriculture (35,992), these only represent 24% of the provincial total. Of these, the majority are also signed by men, accounting for 77% of the total, as shown in Figure 14.



Graph 14. Distribution by sex of contracts signed with foreign workers in the agricultural sector in Seville in 2024.

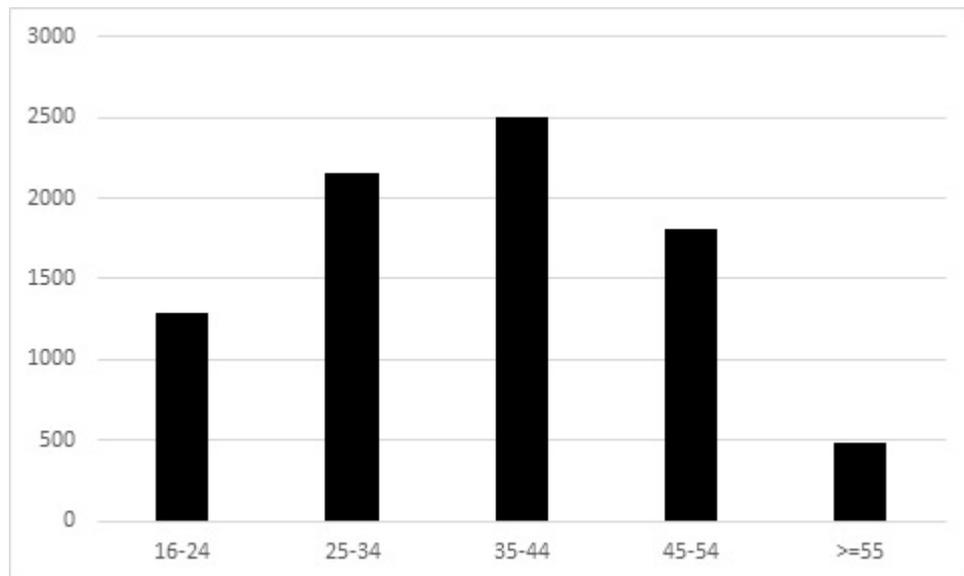
Source: SEPE Registered Contracts

As in Almería, Figure 15 shows that most of these workers are between 25 and 44 years old, with a considerable proportion in the 16-24 and 45-54 age groups, but only a minority over 55. Despite slight variations, women also show a similar distribution, as reflected in Figure 16.



Graph 15. Age distribution of contracts signed with male foreign workers in the agricultural sector in Seville in 2024.

Source: SEPE Registered Contracts



Graph 16. Age distribution of contracts signed with female foreign workers in the Seville agricultural sector in 2024.

Source: SEPE Registered Contracts

As for the five nationalities with the highest presence in agricultural contracts in the province, we find, in descending order, as shown in Table 7, the usual nationalities of other agricultural enclaves, although with differences in order and magnitude, with Seville being the only province where contracts with Romanians predominate over those with

Moroccans. The order is as follows: Romania, Morocco, Senegal, Bulgaria and Mali. As can be seen, almost half of the contingent (42%) is made up of workers of Romanian origin, while contracts with Moroccans account for 20% of the total. The rest of the nationalities have a lower incidence on the total, with none of them reaching 10%.

Nationality	No. of contracts
Romania	15,260
Morocco	7,463
Senegal	2,953
Bulgaria	1633
Mali	1433

Table 7. Top five foreign nationalities by volume of contracts registered in the province of Seville in 2024. *Source:* SEPE Registered Contracts

Based on this data, the majority sociodemographic profile of foreign agricultural workers in Seville would be male, Romanian, aged between 25 and 44.

Collective Management of Recruitment at Source — GECCO

The data corresponding to the GECCO temporary migration programme, which we mentioned earlier, already appear in the two previous databases because, despite being a very specific political mechanism, those who come through it are still registered both as part of the active population (INE) and in terms of contracts (SEPE). However, given the specificities of a migration channel that operates through bilateral agreements and generates strictly temporary, albeit circular, migration, it is important to be able to access its own data in order to have tools that allow it to be understood and evaluated.

The main problem in this regard is that GECCO data is only partially public and, moreover, difficult to locate, so it is very likely to be largely unknown.

To find the available data, you need to go to the Permanent Immigration Observatory (OPI) belonging to the Ministry of Inclusion, Social Security and Migration . With a format very similar to that of the INE, the OPI has a database called OPIbase, which contains a dataset entitled " r residence permit holders by province according to sex, age group, type of permit and reason for granting"⁷ . If you look closely, you will see that among the "reasons for granting permits" there is one called "Collective Management of Recruitment at Source and other fixed-term contracts". The title itself already indicates one of its main weaknesses, which is that it includes both GECCO permits and other unspecified permits, making it impossible to know exactly what it includes and to what extent. On the positive side, it should be noted that these data are from the register and can also be disaggregated by gender, type of authorisation, age and province. Furthermore, they are collected every quarter, which allows for monitoring of their historical evolution.

However, in addition to the limitation already mentioned, the major obstacle to our analysis is that it does not allow us to select the agricultural sector, so it includes all economic sectors. Nor does it allow us to disaggregate by nationality, so we only have totals that prevent us from knowing, for example, how many hires each GECCO participating country contributes.

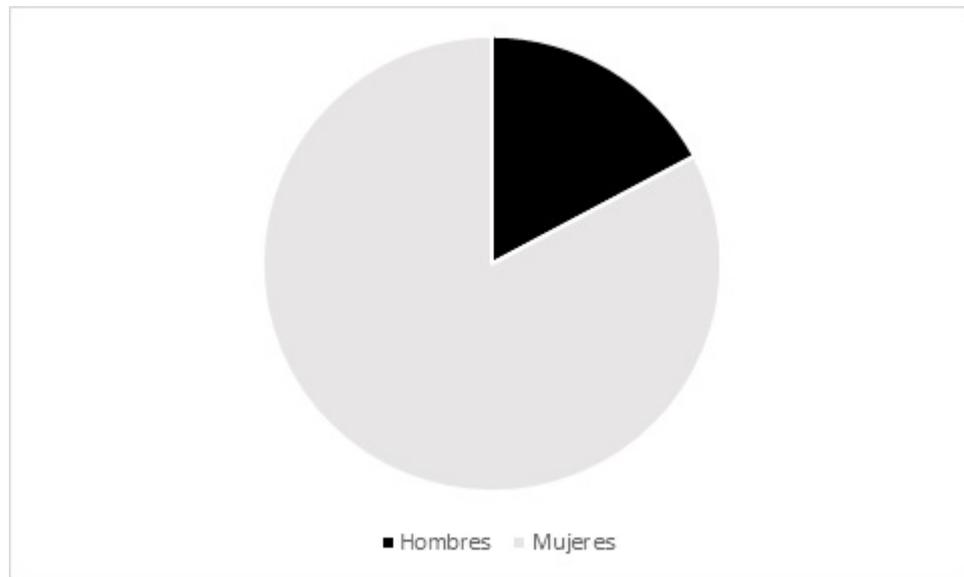
To find out these details, as with the SEPE database, you have to go to the transparency portal and request them. The author's experience is that the response time in this case is much longer (often exceeding 90 days), but the data provided so far by the Ministry of Inclusion, Social Security and Migration has provided a useful level of disaggregation for analysis by showing the nationalities of the participants and the labour sector in which they have worked.

Unfortunately, the most recent data available to the author only goes up to 2022, as the request made through the transparency portal to obtain the data for 2024 has not yet been answered. Therefore, below we will show the data for 2024, calculating an annual

⁷ See: https://expinterweb.inclusion.gob.es/jaxiPx/Tabla.htm?path=/Stock/I0/&file=AT_PV_SX_GE_TIP_MOT.px [Accessed: 3 April 2025]

average from the quarters listed in OPIbase, and we will address the other dimensions using the data for 2022.

In 2024, a maximum number of 20,054 GECCO authorisations was reached in the second quarter of the year, with an annual average of 17,848. The latter shows an absolute dominance of women over men, with women accounting for 83% of the total number of people hired through GECCO, as shown in Figure 17.



Graph 17. Persons with GECCO residence permits by sex in 2024. Annual national average.

Source: OPIbase

Given that the age ranges provided by OPIbase are excessively broad, the data is not relevant to our analysis, as there are obviously no participants in the first age range, which covers people between 0 and 15 years of age, with the vast majority falling into the second range, which covers those between 16 and 64 years of age and therefore includes practically everyone of working age.

The data by province is relevant because it shows, as indicated in Table 8, that 77% of people residing in Spain with a GECCO or other fixed-term authorisation did so in the province of Huelva. The second province with the most people with this type of permit is Lleida, which accounts for just 6% of the total, followed by the Balearic Islands, Huesca and Segovia, each with just 3%.

Province	Annual average number of persons with GECCO or fixed-term authorisation	% of total
Huelva	13,830	77
Lleida	996	6
Balearic Islands	546	3
Huesca	492	3
Segovia	485	3

Table 8. Top five Spanish provinces by number of residents with GECCO or fixed-term authorisation in 2024. *Source:* OPIbase

These data coincide with one of the main sociodemographic profiles we developed for the province of Huelva using SEPE data, as, according to OPIbase data, the majority of people with GECCO authorisation would be women residing in Huelva and of working age.

Looking at the data obtained through the transparency portal, several interesting cross-references can be made. For example, with data on the sectors in which these foreign nationals work, it can be seen that since 2013 (although it has always been predominant) 100% of people hired through the GECCO procedure work in agriculture. Therefore, unless there have been significant changes in 2023 and 2024, which has not been reported in any publication, it can be confirmed that the OPIbase data refer overwhelmingly to the agricultural sector, with the exception of fixed-term permits, which may correspond to other sectors. Table 9 shows the distribution of GECCO authorisations by employment sector for the period 2010-2022.

SECTOR	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Agriculture	11,517	14,285	6,464	2,963	2,834	2,767	5,562	17,543	17,303	18,987	15,037	14,365	18,565
Hospitality	3	-	-	-	-	-	-	-	-	-	-	-	-
Industry	12	-	-	-	-	-	-	-	-	-	-	-	-
Services	458	333	191	-	-	-	-	-	-	-	-	-	-

Table 9. Authorisations granted under the GECCO 2010-2022 programmes by sector. *Source:* Subdirectorate-General for Migration Flow Management and Coordination

Given that the OPIbase data are already disaggregated by province, it is not particularly useful to replicate those provided by the Subdirectorate General for the Management and Coordination of Migration Flows. It should only be noted that these also reflect the absolute predominance of the province of Huelva in receiving these workers, always exceeding the 70% threshold (except in 2012) and, in the case of the period between 2016 and 2022, exceeding the 90% threshold of the total.

As for the nationalities of GECCO participants in the same period (2016-2022), it should be noted that Moroccans accounted for more than 90% of the total. Table 10 shows the only five nationalities of GECCO workers present in 2022, which, in any case, were the only five present in the period 2016-2022.

Nationality	Number of persons	% of total
Morocco	16,786	90
Colombia	862	5
Honduras	633	3
Ecuador	143	1
Senegal	141	1

Table 10. Authorisations granted under the GECCO 2016-2022 programmes by nationality. *Source:* Subdirectorate-General for Migration Flow Management and Coordination

Based on the data obtained from this source, it is possible to expand the majority sociodemographic profile previously developed with OPIbase data, incorporating the predominant nationality: Moroccan.

Eurostat

Eurostat is the statistical office of the European Union, responsible for collecting, processing and disseminating comparable statistical data among Member States. Among its many areas of work, migration statistics stand out, which aim to provide detailed and harmonised information on migration flows, foreign populations and the movements of citizens within and outside the EU. These statistics enable analysis of aspects such as the number and characteristics of immigrants and emigrants, the acquisition of nationality, asylum applications and mobility within the Schengen area, etc. The geographical coverage includes all EU countries, as well as other associated countries such as Norway, Switzerland and Iceland. Eurostat publishes these data annually, based on information provided by national statistical institutes, and following a common methodology defined in coordination with Member States to ensure international comparability. Due to their harmonised nature, accessibility and broad scope, Eurostat's migration statistics are a key tool for the design of European policies on migration and integration, and are widely used in academic research, institutional reports and comparative demographic analyses.

Unfortunately, in the field of migration and agricultural work, despite being one of the most dynamic and sustained movements of intra-Community workers over time, the availability of data is not only extremely limited, but also ceased to be collected in 2020. Eurostat explained this by stating that it only had data for 2017 and 2018, and that this data was not available for all EU countries, which made it difficult to compare and ensure the completeness of the information. Furthermore, it seems no coincidence that this interruption occurred in the year of the COVID-19 pandemic, as this significantly affected data collection and the mobility of seasonal workers, which may have contributed to the interruption in the collection of this data (European Commission, 2020).

In any case, this database, entitled *First permits issued for remunerated activities by reason, length of validity and citizenship* (migr_resocc)⁸, is supposedly fed by data from the OPI⁹, so in principle it only replicates the same data, which should therefore match, and its only added value would be to enable comparisons between European countries. However, as it is only aggregate macro data on the first permits issued under the category of "seasonal work" —a label that can cover multiple professions and sectors— its analytical value is very limited.

The only disaggregated variable it offers is temporal, allowing us to see how many permits have been issued for a duration of between three and five months, between six and eleven months, or more than twelve months. In any case, once again, given that it does not allow for any other type of disaggregation by sector, nationality, etc., it is an irrelevant database for analysing this social reality.

Irregularity

Some of the migrant workers employed in the Spanish agricultural sector are in an irregular administrative situation. Although this phenomenon was particularly significant in past decades, when control and regularisation mechanisms were more limited (Molinero-Gerbeau, 2020b), it is currently estimated to represent a small but not negligible percentage of the total (Márquez and Gordo, 2014). Given their legal status, this group is affected by statistical invisibility, a fact that contrasts with the fundamental role they play in agricultural campaigns, contributing decisively to the functioning of the sector (López-Sala, 2022).

Unfortunately, there are very few estimates of how many workers are in this situation, with the one carried out by Fanjul and Gálvez-Iniesta (2020) for the Porcausa Foundation probably being the only one in recent times. In it, the authors estimated, using data from the EPA and the Continuous Sample of Working Lives, that the rate of irregularity in Spanish agriculture was around 8.9%. This does not seem unreasonable, but as it is a speculative exercise, it could be higher or lower, with a differentiated impact in different enclaves. Due to these limitations, it is currently impossible to draw up a

⁸ See: https://doi.org/10.2908/MIGR_RESOCC [Accessed: 3 April 2025]

⁹ See https://ec.europa.eu/eurostat/cache/metadata/EN/migr_resval_sims_es.htm [Accessed: 3 April 2025]

sociodemographic profile of migrant agricultural workers in an irregular situation in Spain ().

Data limitations and implications for national policy

The data we have provided here show a number of significant limitations to a better understanding of the phenomenon of migration and its interrelation with agricultural work in Spain.

Four major shortcomings can be identified, which correspond to those mentioned in the title of this article: fragmentation, partiality, opacity and lack of reliable data.

Firstly, the fact that so many different sources have to be consulted in order to reconstruct the socio-demographic puzzle of the agricultural migrant contingent poses a considerable difficulty for anyone wishing to examine this reality, which reduces the possibility of working with this data to a handful of experts. Not only does it make no sense to have to go to the INE, the SEPE and the OPI to find some of this data, but in many cases it is not even easy to find on their own websites. In this regard, it would be desirable to have a single access point, as New Zealand has done, for example, with its Stats NZ portal¹⁰, where it has set up an Integrated Data Infrastructure, which is not perfect but does reduce the obstacle of fragmentation to some extent.

The second major problem detected in accessing this data is its partiality. All the records and surveys analysed offer a partial view of reality, but do not represent it in its entirety. Whether it is because the EPA does not have data on active workers in agriculture by province, or the OPI does not have data on the nationalities of those participating in the GECCO, in the end, some fundamental dimension is always omitted for carrying out research with analytical value. On other occasions, the level of disaggregation is non-existent or incomplete. A clear example of this is, once again, the EPA data, which aggregates the number of migrant agricultural workers for the whole country but also provides information on their nationality by region and not by country of origin. The former prevents an understanding of the complexity of the social reality analysed, and the latter directly provides data that is of no use whatsoever.

¹⁰ See: www.stats.govt.nz [Accessed: 3 April 2025]

The third problem concerns the opacity surrounding certain data. It is difficult to understand why certain state bodies such as the SEPE or the Subdirectorato General for the Management and Coordination of Migratory Flows have extremely useful and extensively disaggregated data, but do not make it available to the public through open access. Although the creation of the transparency portal has significantly improved this situation, facilitating access to data and legally obliging those who have it to respond to requests received, the fact that users do not know the level of detail available to those who produce and record the data limits their access. Given that the bodies receiving requests are reactive and there is no public information on the level of detail they have, it is possible that, due to the applicant's lack of knowledge, dimensions that could be useful for analysis may be lost.

In other cases, it is possible to submit a request to access microdata from certain databases, such as the EPA itself, but the INE charges for this, which reduces universal access, restricting it to those who have the funds to pay for it. It is very likely that both problems, i.e. the public unavailability of existing data and the paid access to microdata from certain sources, are related to the underfunding of the services that should provide them, which is why it is essential that the State invests resources in facilitating transparent and democratic access to data for citizens.

The fourth and final flaw has to do with the absence of data. Agriculture is a key sector, both for the EU¹¹ and for the State¹², and its interrelation with migration, another essential policy area for the Government (Molinero Gerbeau, 2023), makes it urgent not only to publicise the available data, but also to produce new data on aspects such as working conditions, health problems, etc., which will enable the design of effective public policies. Only in this way will it be possible, on the one hand, to work to guarantee the stability of a sector that is a pillar of the economy and, on the other, to ensure that its operation respects human rights since, as countless studies point out, it is currently characterised by being a huge source of exploitation (Ruiz *et al.*, 2024).

¹¹ See, for example, the European Commission's recently launched Strategic Dialogue on the Future of EU Agriculture https://commission.europa.eu/topics/agriculture-and-rural-development/strategic-dialogue-future-eu-agriculture_es [Accessed: 4 April 2025]

¹² See, for example, the CAP Strategic Plan in Spain <https://www.mapa.gob.es/es/pac/pac-2023-2027/plan-estrategico-pac.aspx> [Accessed: 4 April 2025]

Conclusions

This analysis has shown that drawing up a sociodemographic profile of migrants working in Spanish agriculture is a complex task. This difficulty is not only due to the heterogeneity of the sector, in which each territorial enclave has specialised in a type of production that requires a different labour profile, making it impossible to identify a homogeneous pattern at the national level. The main limitation lies, above all, in the limited availability of data to adequately understand the phenomenon.

Of the five data sources mentioned here, only those with a very limited level of disaggregation, such as the EPA, OPIBase and SEPE, are readily available through the public portals of the organisations that produce them. Some data sets, such as those in the latter two databases, are particularly difficult to locate on their websites. Eurostat is also accessible, but its cessation of data collection from 2020 onwards, coupled with the fact that the data it provided was excessively aggregated, means that it is not a useful source of data on this subject.

In order to at least understand the basic socio-demographic aspects of the migrant population working in Spanish agriculture, it is necessary to submit requests through the transparency portal, with the uncertainty that this entails regarding the time it will take to respond to the request, whether the agency receiving it will respond positively, and what variables will be included in the data provided. This complex and inaccessible process means that the information is available to very few people, which limits the debate on public policies with potential applicability to the context to those who have access to this data. As a result, it hinders the participation of a large part of society, including employers and trade unions.

For the sector, one of the results of this fragmentation, partiality, opacity and lack of data is a chronic forecasting problem. For workers, it leads to invisibility, which in turn leads to severe exploitation.

Without accessible and reliable data, dichotomies arise, such as the fact that, on the one hand, GECCO is internationally recognised as a programme associated with good practices (López-Sala, 2016) and, in fact, the government has recently committed to

expanding¹³, and, on the other hand, the vast majority of studies that have examined it point to it as a mechanism that encourages severe labour exploitation (Ruiz *et al.*, 2024). Employers themselves have also complained about the limited number of authorisations granted annually, as well as other aspects, such as the excessive bureaucracy of the programme¹⁴, which explains why, in the end, it has been applied practically only in the province of Huelva, as we have seen in the analysis of the data.

The State must invest in making its data records public, in disaggregating those it already offers publicly with more variables and, above all, it must propose a data collection strategy that allows for a better understanding of this social reality.

Despite these problems, however, the exercise carried out here has made it possible to identify some socio-demographic patterns regarding foreign labour in Spanish agriculture. It has been found that the most common nationalities are Moroccan, Romanian, Senegalese and Malian, with a relatively high presence in some enclaves of nationals from other countries such as Bulgaria and Ecuador. It has been determined that the vast majority of migrant labourers are men, with the exception of Huelva, where almost half of the workers are women. And although there is some disparity in the predominant age ranges, it can be said that the majority of those who do this work are between 25 and 34 years old. Finally, it is important to note that everything points to a low presence of workers in an irregular or irregular situation in the sector. However, once again, more rigorous data collection could provide greater clarity in this regard.

Bibliography

Aguilera Izquierdo, R. (2006). Access to the labour market for irregular immigrants: extraordinary regularisation processes and social and labour integration. *Journal of the Ministry of Labour and Social Affairs*. 63, pp. 175-195.

¹³ See, for example, this news item: The Government signs agreements with Mauritania, Gambia and Senegal to strengthen safe and regular migration channels and protect workers' rights [online]. [Accessed 4 April 2025]. Available at <https://www.inclusion.gob.es/w/el-gobierno-firma-acuerdos-con-mauritania-gambia-y-senegal-para-reforzar-vias-seguras-y-regulares-de-migracion-y-proteger-los-derechos-de-los-trabajadores>

¹⁴ See, for example, this news item from the Union of Small Farmers and Ranchers (UPA): Labour shortages and the lack of viable alternatives for soil disinfection jeopardise the upcoming berry season [online]. [Accessed 4 April 2025]. Available at: <https://upahuelva.es/gecco2022/>

- Arango, J. (2013). *Exceptional in Europe? Spain's Experience with Immigration and Integration*. Washington D.C.
- . (2000). Becoming a Country of Immigration at the End of the Twentieth Century: the Case of Spain BT. In: King, R., Lazaridis, G. and Tsardanidis, C. (eds). *Eldorado or Fortress? Migration in Southern Europe*. London, Palgrave Macmillan UK, pp. 253–276.
- Avallone, G. (2014). Migration and agriculture in Southern Europe: Emergence of a new international proletariat. *International Migration*. 27, pp. 137-169.
- Berlan, J. P. and Nevado Peña, D. (1987). Agriculture and the labour market: A California for Europe? *Agriculture and Society*. 42, pp. 233-245.
- Calavita, K. (2005). *Immigrants at the Margins. Law, Race, and Exclusion in Southern Europe*. Cambridge, Cambridge University Press.
- Checa, F. (1995). Socio-economic opportunities in the migration process of African immigrants in Almería. *Agriculture and Society*. 77, pp. 41-82.
- European Commission (2020). *Attracting and Protecting Seasonal Workers from third countries in the EU*. Brussels.
- Fanjul, G. and Gálvez-Iniesta, I. (2020). *Foreigners, undocumented and indispensable: A snapshot of irregular immigration in Spain*. Madrid, PorCausa.
- Fernández García, M., Molinero-Gerbeau, Y. and Sajir, Z. (2023). 'They think you belong to them': migrant workers' perspectives on labour exploitation in Spain'. *Journal of Ethnic and Migration Studies*. 49(15), pp. 3976-3995.
- Ferrez Gálvez, F. (2024). *Harvesting the future. Social conflicts in the construction of Almeria's 'sea of plastic' (1977-1986)*. Almeria: University of Almeria Press.
- Giménez Romero, C. (1992). Foreign workers in Spanish agriculture: enclaves and implications. *Journal of Regional Studies*. 31, pp. 127–147.
- González Rodríguez, J. A., Garreta Bochaca, J. and Llevot Calvet, N. (2021). Immigrant seasonal workers in the countryside of Lleida (Spain): profiles and socio-labour situations. *AGER. Journal of Studies on Depopulation and Rural Development*. 31, pp. 109-137.

- Gualda Caballero, E. (2012). Circular migration in times of crisis. Eastern European and African women in agriculture in Huelva. *Papers*. 97(3), pp. 613-640.
- Gualda Caballero, E. and Ruiz García, M. (2004). Female migration from Eastern Europe and the agricultural labour market in the province of Huelva, Spain. *International Migration*. 2(4).
- López-Sala, A. (2016). Induced circularity for selective workers. The case of seasonal labour mobility schemes in Spanish agriculture. *Arbor*. 192(777), pp. 1-12.
- . (2022). Voices from the fields. Migrant agricultural workers during COVID-19 in Spain and new forms of activism for dignity. *Geographical Studies*, 83(293).
- Macías Llaga, I., Márquez Domínguez, J. A. and Jurado Almonte, J. M. (2016). The recruitment of Moroccan seasonal workers in their country of origin for Spanish fields as an experience of co-development. *Cuadernos Geográficos*. 55(2), pp. 173-194.
- Márquez Domínguez, J. A. and Gordo Márquez, M. (2014). Alternatives to the seasonal quota: other business strategies for supplying agricultural labour. In: Márquez Domínguez, J. A. (ed.). *Foreign day labourers in Spain. The seasonal agricultural quota as a policy for controlling migratory flows*. Huelva, University of Huelva, pp. 305-336.
- Martínez Veiga, U. (2001). Work organisation and racism: El Ejido (Spain) in 2000. *International migrations*. 1(1), p. 28.
- Molinero-Gerbeau, Y. (2018). The privatisation of temporary migration programmes in Spain as a post-crisis effect. In: Arango, J. et al. (eds). *Cidob Yearbook on Immigration*. Barcelona, Cidob, pp. 284–306.
- . (2020a). The growing dependence on migrant labour for agricultural tasks in the global centre. A comparative perspective. *Geographical Studies*. 81(288), pp. 1-27.
- . (2020b). Two decades of displacing foreign workers to the Spanish countryside: a review of the recruitment mechanism at source. *Social Panorama*. 31, pp. 141-153.

- (2021). From complementary to indispensable. Romanian workers in the seasonal production enclaves of Huelva and Lleida. In: Marcu, S. (ed.). *Transformations and challenges of the mobility of Eastern Europeans in Spain, thirty years after the fall of the Berlin Wall: 1989-2019*. Valencia, Tirant Lo Blanch, pp. 239-260.
 - (2023). State policies and global governance of migration: obstacles to the development of an international regime on human mobility. In: Estrada Villaseñor, C. (ed.). *Migration crises as an element of international coercion. Strategy Notebooks*. Madrid, Ministry of Defence, pp. 99-125.
- Moraes, N. *et al.* (2012). Global agricultural enclaves and labour migration: global convergences and transnational regulations. *Politics and society*. 49(1), pp. 13-34.
- Moreno Nieto, J. (2009). Seasonal contracts at source: Moroccan women in Huelva agriculture. *Journal of Mediterranean International Studies*. 7, pp. 58-78.
- Pedreño Cánovas, A. (1999). Building the "vegetable garden of Europe": workers without citizenship and permanent nomads in Murcian agriculture. *Migrations*. 5, pp. 87-120.
- Ramírez Melgarejo, A. J. (2020). Temporary work as the basic norm of agricultural employment in a southern European territory. *Labour Relations Notebooks*, 38(1). pp. 125-144.
- Reigada, A. (2022). A link in global agricultural chains: hiring, labour and sexuality policies in the strawberry fields of Andalusia (Spain). *Current Anthropology*. 63(5), pp. 519-540.
- (2017). Family farms, migrant labourers and regional imbalance in global agri-food systems: on the social (un)sustainability of intensive strawberry production in Huelva (Spain). In: Corrado, A., Castro, C. de and Perrotta, D. (eds). *Migration and Agriculture Mobility and change in the Mediterranean area*. Abingdon and New York, Routledge, pp. 95-110.
- Ruiz Ramírez, C., Castillo Rojas-Marcos, J. and Molinero-Gerbeau, Y. (2024). *Essential but invisible and exploited. A literature review of the experiences of migrant workers in the European agricultural sector*. Oxford, Oxfam.

Sajir, Z., Molinero-Gerbeau, Y. and Avallone, G. (2022). 'Everything changes, everything stays the same'. The governance of migrant labour in Spanish and Italian agriculture in the first year of the COVID-19 pandemic. *Estudios Geográficos*. 83(293).

Şerban, M. and Croitoru, A. (2022). The COVID-19 pandemic as an opportunity to bring the migration of agricultural workers into focus through media coverage. *Estudios Geográficos*. 83(293)

Yoan Molinero Gerbeau*
Assistant Research Fellow at [the University Institute for Migration Studies](#)
(IUEM-Comillas)