

# LOWINFOOD

Multi-actor design of low-waste food value chains through the demonstration of innovative solutions to reduce food loss and waste

GA No. 101000439

# D7.5 Report on gender analysis

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# **LOWINFOOD Consortium**

| N. | Full name of the organisation   | Short name | Country        |
|----|---|------------|----------------|
| 1  | Università degli Studi della Tuscia   | UNITUS     | Italy          |
| 2  | Alma Mater Studiorum Università di Bologna  | UNIBO      | Italy          |
| 3  | Sveriges Lantbruksuniversitet   | SLU        | Sweden         |
| 4  | FH Munster University of Applied Sciences   | ISUN       | Germany        |
| 5  | The James Hutton Institute  | JHI        | United Kingdom |
| 6  | Universitaet Fuer Bodenkultur Wien  | BOKU       | Austria        |
| 7  | Tampereen Korkeakoulusaatio SR  | TAU        | Finland        |
| 8  | Charokopeio Panepistimio  | HUA        | Greece         |
| 9  | Osterreichisches Okologieinstitut   | AIE        | Austria        |
| 10 | Elhuyar Fundazioa   | ELH        | Spain          |
| 11 | Matomatic AB  | MATO       | Sweden         |
| 12 | Unverschwendet GmbH   | UNV        | Austria        |
| 13 | Akademie Deutsches Baeckerhandwerknord GGmbH  | ADB        | Germany        |
| 14 | Foresightee (terminated on 30/01/2023)  | FOR        | Belgium        |
| 15 | Leroma GmbH   | LER        | Germany        |
| 16 | Mitakus Analytics UG  | MITA       | Germany        |
| 17 | Kitro SA  | KITRO      | Switzerland    |
| 18 | Regione Emilia Romagna  | RER        | Italy          |
| 19 | Pianeta Cospea srl  | PICO       | Italy          |
| 20 | Cogzum Bulgaria OOD   | COZ        | Bulgaria       |
| 21 | Uppsala Kommun  | UPP        | Sweden         |
| 22 | Recuperiamo srl   | REG        | Italy          |
| 23 | Antegon GmbH  | FT         | Germany        |
| 24 | Confederazione Nazionale dell'Artigianato e della piccola e media impresa Associazione di Viterbo e Civitavecchia | CNA        | Italy          |
| 25 | Assemblee des Regions Europeennes Fruitieres<br>Legumieres et Horticoles  | ARE        | France         |
| 26 | L.V.L Anonymi Emporiki Toyristiki Kksenodoxeiaki<br>Kataskevastiki Etaireia                                       | BLU        | Greece         |
| 27 | Iridanos-Inabelos Anonymi Etaireiatouristikes<br>Ksenodoxeiakes Kai Agrotikes Epixeiriseis                        | THA        | Greece         |
| 28 | Luonnonvarakeskus (started on 01/11/2023)   | LUKE       | Finland        |
|    |   |            |                |





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#### **Summary**

This report compiles the activities and work carried out during the LOWINFOOD project in the field of **gender equality** and specifically introducing gender perspective in the project design, implementation and evaluation phase.

It should be noted that the composition of the consortium has been very egalitarian from the beginning. The presence of women is very relevant and the representation in decision-making positions is balanced.

A guide on gender guidelines was developed at the beginning of the project to provide partners with a tool for designing and implementing gender mainstreaming during the project (see Annex I). After, it was discussed with members of WP2, WP3, WP4 and WP5 how to implement gender mainstreaming in each value chain as well as consumer level (out-of-home and at-home consumption). Several gender indicators were developed and introduced into the LOWINFOOD innovation evaluation methodology in the framework of the socio-economic evaluation (Task 1.3). After data collection, the gender analysis of LOWINFOOD innovations to reduce food waste has been carried out.

The data collection has been challenging and, in several cases, the representative sample was small. Therefore, the gender analysis has been done by categories of innovations (4 groups in total) and not for each innovation. There have been more women than men among the participants, and overall, they are satisfied with the implementation of the innovation. Women, in particular, are slightly more confident following the demonstration of these innovations. Some individuals chose not to disclose their sex or identified as genderqueer. Although the sample size is very small, it is important to acknowledge and represent these identities.

There is a clear vertical segregation among employees who have participated in the implementation of the 12 LOWINFOOD innovations. In direction and manager positions, men are predominant, while in staff and non-permanent staff positions, the number of women is much higher.

Throughout the project, gender sensitive and inclusive communication has been carried out, avoiding the use of sexist and stereotyped language, messages and images, and maintaining an active pro-equality behaviour. It is worth highlighting the gender equality messages that have been published on various international days such as the International Women's Day (March 8) and Women and Girls in Science Day (February 11).

Elhuyar (ELH) has been responsible for integrating the gender perspective throughout the project, with the contribution of all partners. This report has been elaborated by Elhuyar, who is the leader of Task 7.4 (Gender Equality). The content of this report has been shared and revised with the project coordinator who is the leader of WP7 (Project coordination and management).





#### Introduction to the deliverable

LOWINFOOD is a project committed to co-design, together with actors of the food chain, low-waste value chains by supporting the demonstration of a portfolio of innovations in a set of value chains particularly concerned by food loss and waste (fruits & vegetables, bakery products and fish), as well as in at-home and out-of-home consumption. Each of these value chains corresponds to a single Work Package (WP) of the project.

The innovations are selected among promising solutions that have already been developed and tested by some partners of the consortium, with the aim to provide the necessary demonstration and upscale to allow market replication.

The LOWINFOOD consortium comprises 27 entities, located in 12 different countries, and ranging from universities and research institutes to start-ups, foundations, associations, and companies working in the food sector. During the 52 months of the project, the partners are committed to complete 30 tasks and to deliver 60 outputs (deliverables).

This report explains how the gender perspective has been ensured throughout the LOWINFOOD project. This effort encompasses the definition and design of the project, the implementation and the evaluation phase, having the gender perspective special relevance on the following phases of the project: involving the actors of the food chains, evaluating the social impact of the innovations developed, in the activities aimed at informing consumers (without deepening the current gender-sensitive division of labour and also making men coresponsible), and maintaining a gender-sensitive and inclusive communication.

With these objectives in mind, the report is organised as follows. First, the composition of the consortium is analysed, paying particular attention to the decision-making spaces. Secondly, it explains how gender mainstreaming is ensured in all WPs and details the gender indicators that will be used in the evaluation of the innovations. In the third point, the gender analysis of the innovations within the social evaluation is carried out. Finally, the gender-sensitive and inclusive communication of the last four years is explained. Two annexes can also be found, one on the gender guidelines developed by Elhuyar and the other on the key percentages of household types in Europe.

# 1. Consortium composition

LOWINFOOD addresses the gender issue supporting gender balance in research teams and decision-making processes and by integrating gender analysis in the demonstration activities related to the innovations against food waste addressed by the project.

From the very beginning, the presence of women in the composition of the consortium has been very relevant, especially the presence and representation of women researchers in decision-making positions. This has led to a very horizontal way of working. Even the women

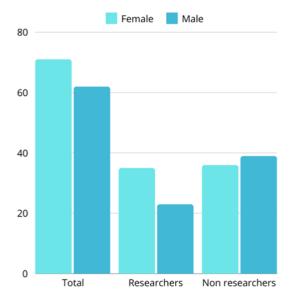




researchers have highlighted the idea of having worked in a network of **sisterhood** where mutual support, trust and closeness have been key values.

As can be seen in the table and graphs, women are in the majority among the project participants, especially among the female researchers. See below the composition of the consortium in 2022 and 2024 disaggregated by sex and researchers/non-researchers:

|      | TOTAL |     |            | R     | esearc | hers       | Non researchers |     |            |  |
|------|-------|-----|------------|-------|--------|------------|-----------------|-----|------------|--|
|      |       |     | Prefer not |       |        | Prefer not |                 |     | Prefer not |  |
|      | Women | Men | to say     | Women | Men    | to say     | Women           | Men | to say     |  |
| 2022 | 71    | 62  |            | 35    | 23     |            | 36              | 39  |            |  |
| 2024 | 52    | 28  | 2          | 25    | 15     | 1          | 27              | 13  | 1          |  |



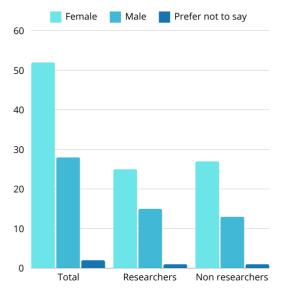


Figure 1: Consortium members in 2022 disaggregated by sex and researchers/non-researchers

Figure 2: Consortium members in 2024 disaggregated by sex and researchers/non-researchers





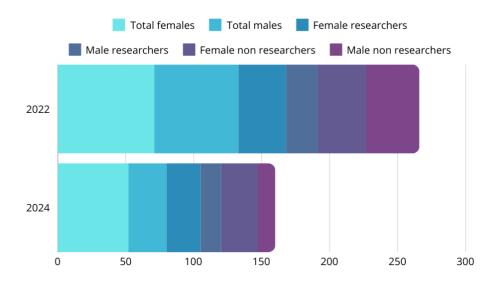


Figure 3: Composition of the consortium in 2022 and 2024 disaggregated by sex and researchers/non-researchers

The decrease of male members from 2022 to 2024 is relevant, especially among male non-researchers (from 39 in 2022 to 13 in 2024), thus having an impact on the total number. It should be noted that some partners have counted the number of people participating in LOWINFOOD and others the total workers of the partner. Therefore, the total number of participants in Figure 3 is much higher than the real total number of participants in LOWINFOOD. The total number of participants for the year 2024 is much closer to the real total.

If we pay attention to the leaders of the WPs we will see that it is very balanced with more women leaders than men.

| WP leaders | Women | Men |
|------------|-------|-----|
| WP1        | Χ     |     |
| WP2        |       | X   |
| WP3        |       | X   |
| WP4        | Χ     |     |
| WP5        | Χ     |     |
| WP6        |       | X   |
| WP7        | X     |     |
| TOTAL      | 4     | 3   |





The project management board is co-chaired by a woman and a man:

|                          | Women | Man |
|--------------------------|-------|-----|
| Project Management Board | Χ     | Х   |
| TOTAL                    | 1     | 1   |

The Scientific Board is very balanced, with a higher number of women participants. This space is composed of the WP leaders, the two members of the Project Management Board and three external experts: Felicitas Schneider (F), Julian Parfitt (M) and Kate Parizeau (F).

|                               | Women | Man |
|-------------------------------|-------|-----|
| Scientific Board participants | 6     | 5   |

# 2. Gender mainstreaming

In the first months of the project, a guide on gender guidelines (see Annex I) was developed by ELH, the leader of Task 7.4 Gender equality, to provide partners with a tool to design and implement gender mainstreaming throughout the project. The document was presented in one of the early meetings about evaluation of innovations and made available to all participants. Furthermore, the document was discussed in bilateral meetings held by ELH in spring 2021 with innovation work packages to concretise the implementation of gender mainstreaming in each value chain as well as at consumer level.

These individual meetings were attended by 16 people (10 women, 6 men) partners of UNIBO, ISUN, FOR, SLU, TAU, JHI, UNITUS, MATO, AIE and ELH.

| Partners | UNIBO, ISUN, FOR, SLU, TAU, JHI, UNITUS, MATO, AIE, ELH |  |  |  |  |  |  |  |  |  |
|----------|---|--|--|--|--|--|--|--|--|--|
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| Women    | 10 women  |  |  |  |  |  |  |  |  |  |
| Men      | 6 men   | 16 participants  |  |  |  |  |  |  |  |  |

The document was positively assessed by all partners and it was decided to collect this information in general in all work packages through **gender indicators**. These indicators are specified in the protocols for data collection (D1.2, D1.3, D1.4) where the structure of the surveys for each innovation was first disclosed.

- → Who is in decision-making positions, disaggregated by sex. (vertical segregation)
- → Who is in charge of the implementation of the innovation, disaggregated by sex. (horizontal segregation)





- → Regarding working conditions: whether they have enough time for the implementation of the innovation, whether this responsibility fits well with their daily work, whether the innovation makes work easier or not (disaggregated by sex).
- → If it is possible include some working indicators like the type of working day (full-time, part-time), type of contract (permanent, temporary), and work-life balance.
- → For Task 5.5 the types of families will be analyzed according to the age and sex of each member and an attempt will be made to ensure the participation of different types of families. (see Annex II)

**For the focus group discussions and interviews**, it is proposed to consider the recommendations of the gender guidelines document, which are as follows:

- → Guarantee participation of women and men of different socio-economic backgrounds.
- → Ensure a good presence of women among the interviewed people.
- → Guarantee the specific needs of women and men are accommodated.
- → Make sure to create an environment in which women feel secure to participate and give their views (apart from parity, the age or language of the participants can be considered, or not to mix employees with company heads, for example).
- → Issues such as time and accessibility should also be considered.

#### **Gender-sensitive and non-stereotypical language** is recommended.

Below is a detailed account of what was discussed at each bilateral meeting with work package members.

#### 2.1 WP2 meeting

In work package 2 LOWINFOOD aims to demonstrate the efficacy of four types of innovations, which should be able to address the problem of fruit and vegetables food loss and waste across the upstream value chain, from agricultural production up to retail.

These are the tested and improved innovations for fruit & vegetables value chain:

- Task 2.1 Software to manage withdraws of fruit & vegetables and donating them to charities
- Task 2.2 Cooperation system between farmers and food service sector
- Task 2.3 B2B digital market place for reducing food losses in the vegetables food industry
- Task 2.4 Sales-forecasting software for supermarkets, allowing a better management of orders

It the meeting of WP2 was reported that when the project was first thought of it was envisioned as a **feminist project** to involve female partners, not excluding men but to empower female colleagues in food waste. It is felt that much can be done and that a strong gender focus should be tried in this project because it is in the nature of LOWINFOOD.





In WP2 there seemed to be a lot of vertical and horizontal segregation, so members stressed that it would be interesting to know this data. For example, according to the innovation of Emilia-Romagna, in Italy, charities are run by men, but the majority of volunteers are women. It would be interesting to know this data, as well as the economic conditions of the volunteers.

In LEROMA, potential users will be identified, so they are committed to try to involve women and, if possible, women in decision-making positions.

#### 2.2 WP3 meeting

In work package 3 LOWINFOOD aims to reduce the waste of bread in the supply chain, from bakeries where the bread is produced to supermarkets and bakery shops, where the bread is purchased by consumers.

These are the tested and improved innovations for the bread value chain:

- Task 3.1 Innovative supplier/retailer agreements for bakery products
- Task 3.2 Stakeholder dialogue to develop guidelines against food loss and waste
- Task 3.3 Software for optimization of bakeries' production

And these are the recommendations presented for the 3 Tasks:

- → **Who is in decision-making positions**, meaning who decides whether to adopt the innovation, disaggregated by sex. (vertical segregation)
- → **Who is in charge of the implementation of the innovation** and what is their level of position disaggregated by sex. (horizontal segregation)
- → **Regarding working conditions**: whether they have enough time for the implementation of the innovation, whether this responsibility fits well with their daily work, whether the innovation makes work easier or not (disaggregated by sex).
- → If it is possible include some working indicators like:
- Type of working day (full time, part time)
- Type of contract (permanent, temporary)
- Work-life balance (to find out how flexible the participants are in balancing work and family life)

It was agreed that most of these questions can be answered by **looking at company records**. The work-life balance is more sensitive as the company could say that it is perfect. Therefore, if it is decided to ask a question related to gender, it will be used as an opportunity to integrate it when asking about the main topic. In any case, there were doubts whether it is reliable to draw conclusions on gender issues based on one person's questions. It was therefore decided to rely on the records provided by the company.

When recruiting bakeries and retailers, it was reported that there will be no problem for **women in decision making positions** to participate because they are generally in the majority in this field, women are often responsible for sustainability-related issues. Of course,





whatever the gender, it is in the interest of the researchers to involve the people who have the most knowledge and experience on the topics to be developed.

#### 2.3 WP4 meeting

In work package 4 LOWINFOOD aims at assessing the scope for reduction of food losses and waste in the fish supply chain in Scotland and Germany. To this end, LOWINFOOD pursues identifying hotspots of food waste generation and the scope for its prevention and reduction along the fish supply chain, and present innovative solutions.

These are the tested and improved innovations for the fish value chain:

- Task 4.1 Stakeholder dialogue to develop guidelines against food loss and waste
- Task 4.2 B2B digital market place for reducing food losses in the fish food industry

And these are the recommendations presented for the 2 Tasks:

- → **Who is in decision-making positions**, meaning who decides to adopt the innovation, disaggregated by sex. (vertical segregation)
- → **Who is in charge of the implementation of the innovation** and what is their level of position disaggregated by sex. (horizontal segregation)
- → If it is possible **include some working indicators** like:
- Type of working day (full time, part time)
- Type of contract (permanent, temporary)
- Work-life balance (to find out how flexible the participants are in balancing work and family life)

It was reported that **data will be collected in two ways**: providing and looking the companies´ records and asking the people who is going to participate in the workshops or focus groups. It is important to bear in mind that these people represent their company, so questionnaires should ask them in a way that gives information about the company and not about the individual's situation. It seems that in Task 4.1 the people involved will be relevant so it is interesting to have data on the individual. But it is also useful to provide data from company records to be analysed in both WP3 and WP4. In any case, it will be necessary to know better who is going to participate and then be able to orientate the process of collecting specific data also according to the identity of the attendees.

Fishing is a male-dominated sector, so the question arises as to **how it can be ensured that women also participate** and what the expectations are. It is not possible to guarantee that the presence of each sex is between 40% and 60% of the total as recommended in the guidelines. It is pointed out that we should try to invite them by ensuring, for example, to use gender-sensitive and non-stereotypical language when addressing them and by taking into account the aspects recommended for group discussions in the guidelines document. In terms of language, it was pointed that "fishing person" could be used instead of "fishermen".





#### 2.4 WP5 meeting

In work package 5 LOWINFOOD is aimed at reducing the waste of all food products at the consumption stage, with a particular focus on perishable foods. This has been done by testing, improving and demonstrating six different innovations

To this end, LOWINFOOD has focused on three target groups: food service companies (e.g. business and school caterers, restaurants); pupils and teachers at schools, and individual consumers.

These are the tested and improved innovations for out-of-home and household consumption:

- Task 5.1 Smart bin for restaurants' and hotels' kitchen
- Task 5.2 Technological innovation to better forecast meals in food service
- Task 5.3 Plate waste tracker for school canteens
- Task 5.4 Educational approach against food waste at schools
- Task 5.5 Mobile app to manage household food provisions
- Task 5.6 Mobile app to sell restaurants' surplus food

For **Tasks 5.1 and 5.2** this information will be collected by surveys and questionnaires:

- → **Who is in decision-making positions**, meaning who decides whether or not to adopt the innovation, disaggregated by sex.
- → Who is in charge of the implementation of the innovation and what is their level of position disaggregated by sex.
- → **Regarding working conditions**: whether they have enough time for the implementation of the innovation, whether this responsibility fits well with their daily work, whether the innovation makes work easier or not (disaggregated by sex).

For **Task 5.3** the following two points are recommended:

- → Pupils disaggregated by sex.
- → **Their attitude towards the innovation** (disaggregated by sex) to find out whether they accept the challenge, whether the innovation raises awareness of food waste and awareness varies by sex.

There is no problem with the first point because the schools already collect the distribution of students by sex but difficulties are pointed out when asking them what they think about. **Children cannot respond on their own**, therefore, some think that parents should be asked, while others propose involving teachers so they can have a questionnaire at class and they can ask children (talking in advance with schools, headmasters and teachers).

For **Task 5.4** the following points are recommended:

→ **The training material should contain gender-sensitive language**, i.e. both genders should be mentioned in a balanced way, stereotypes and reinforcement of traditional





gender roles and values should be avoided, and balanced images, and if so, also different family models, should be visualized.

→ **Teachers/kitchen staff** disaggregated by sex and their level of position.

The main concern is to find a balanced participation, as at least almost all of them are women, there are **very few men in this line of work**. It would be very difficult to have a 40%-60% distribution, but obviously a female perspective will be included.

For **Task 5.5** the following points are recommended:

- → **Identify different family models** for the testing.
- → For the user's profile, apart from de data disaggregated by sex include some indicators such as: time spent on unpaid care labour, socio-economic background, age, level of education or whether they telework or do face-to-face work.

It was reported that it will be tried to have some variation (family models, socio-economic background, level of education) when recruiting households, but it will not be a representative sample. It was pointed that if they pay too much attention on getting diverse, they might have problems recruiting them all, but they will try. The importance of maintaining **a representative sample** without forcing is noted, for example, the type of families. It is proposed to set a minimum number of responses to analyse the data for each category. For this purpose, the key percentages of family types in Europe have been compiled (see Annex II).

For **Task 5.6** the following points are recommended:

- → For the restaurants, **who is in decision-making positions**, meaning who decides whether to adopt the innovation, disaggregated by sex.
- → **Who is in charge of the implementation of the innovation** and what is their level of position disaggregated by sex.
- → For the user's profile, apart from de data disaggregated by sex **include some indicators** such as: time spent on unpaid care labour, socio-economic background, age, level of education or whether they telework or do face-to-face work.

It has been pointed out that there is no problem in applying these guidelines in the questionnaires and surveys, but **for the analysis** we have to take into account the actual responses to the surveys and be robust, we have to take into account the actual distribution of the population. These guidelines will be used for implementation and more robust quantities and percentages will be used for analysis.

It was added that in terms of **how to communicate gender issues** when we are going to ask about background information or when introducing indicators in workshops, etc., it is good to explain from the beginning why we are asking for this data, and what the main objective is, and if we see the opportunity to discuss with them it is positive. It depends on the people we are going to work with.





#### 3. Evaluation of the innovations

A common methodological framework for the evaluation of efficacy, economic, social and environmental impacts of the implementation of innovations was set in the framework of Subtask 1.1.1. At this point it was necessary to make this clarification on sex-disaggregated data:

When sex-disaggregated data is requested, some actors prefer to ask for gender-disaggregated data although it is basically sex-disaggregated data. According to EIGE (European Institute for Gender Equality), sex-disaggregated data are a part of gender statistics, and together with the other data to be collected (vertical segregation, horizontal segregation...) the complete gender analysis will be carried out. Therefore, data will be collected disaggregated by sex using the categories *female*, *male*, *other* and *prefer not to say*. In this way, the different gender identities will have visibility.

#### 3.1 Socio-economic evaluation task

The gender indicators for the evaluation of the implementation of the innovations were set in Task 1.3 Evaluation of economic and social impact of FLW reduction through innovations. The James Hutton Institute (JHI) leads Task 1.3 but other academic partners in WP1 also provide feedback and insights to Task 1.3 when relevant, as indicated in the Grant Agreement. The socio-economic impact assessment follows the timeline indicated in Figure 4.

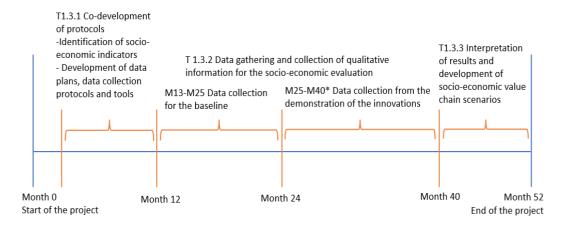


Figure 4: Data collection schedule for the socio-economic impact evaluation task (T1.3) in the LOWINFOOD project.

The JHI developed a preliminary list of socio-economic performance indicators. WP1 partners (ISUN, UNITUS, HAU, AIE, UNIBO, and BOKU) examined the list, commented and complemented it with additional indicators, or proposed to move them to other sections with a focus on their areas of expertise (e.g., food waste quantification UNIBO, social indicators HAU, gender aspect ELH). The final list of socio-economic indicators was thus elaborated with the feedback of the partners in WP1.





With these indicators agreed, the deliverable D1.4 'LOWINFOOD Socio-Economic Data Collection Protocol' was developed. It details how the data collection and impact analysis will be carried out. It reports that data will be collected via two separate surveys: management survey and participant survey. A generalised template of the management and participant surveys used in data collection can be found in the deliverable D1.4. The indicators are divided in two parts: economic impact analysis, and social impact analysis.

In the latter, it is stated that a gender perspective will be adopted to ensure gender equality throughout the evaluation. Where appropriate, data will be collected disaggregated by sex using the categories female, male, other and prefer not to say. This approach will thus give visibility to different gender identities. The data collection process will also take into account the multiple inequalities and needs of women.

It is also stated that vertical and horizontal segregation will be assessed by asking participants about their position and the sector they belong to in their company. The age of the staff involved and of the family members, as well as their satisfaction with the survey and the opinion of the respondents, will also be detected through staff surveys.

#### 3.2 Gender analysis

Those responsible for Task 1.3 reported that data collection has been challenging, due to the sensitivity of the data for companies; the inherent complexity of socio-economic phenomena (with downstream and upstream spillover effects in supply chains and geographically); and the resulting lack of data sets for benchmarking.

Nevertheless, data collection has been carried out and in deliverable D1.7 explores the socioeconomic evaluation of innovations on its users using both qualitative and quantitative data. This deliverable is complementary with D1.6 and D1.8, dealing with evaluation of the reduction of food loss and waste (FLW) that is achieved through the implementation of innovations, and evaluation of the environmental impacts of innovations.

To analyse the social impacts, data collected through "participant surveys" has been used. It was disseminated among employees of the companies, students at the schools, and members of the households implementing the LOWINFOOD innovations. It examines the change in the attitude and behaviour against food waste of those that took part in the implementation of the survey in the participating organisations.

The participant survey also included socio-demographic questions (age, gender, education); questions related to the role of the respondents in their organisation (where relevant) and in the management of the innovation; the duration of their involvement in its implementation; and their level of satisfaction with the survey. These are used to generate and assess the change in the gender-related indicators. Table 1 lists the indicators used in gender analysis.





| Vertical segregation   | Share of genders involved in implementing the innovation by job grade             |
|------------------------|---|
| Horizontal segregation | <b>Share of genders</b> involved in implementing the innovation, <b>by sector</b> |
| Share of genders       | Share of genders out of the total number participants                             |
| Survey satisfaction    | Share of genders among participants who assess the survey positively              |

Table 1: Indicators used in the gender analysis

The results of the social impact and gender analysis will be reported at action type category level as not each innovation has enough participants to run reliable statistical tests at individual level. These are the action type categories and the innovations that fall into each category:

| Innovation category                              | Innovation   |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
| 1. Food waste prevention governance (social)     | <ul><li>Bakery stakeholder dialogue</li><li>Fish stakeholder dialogue</li></ul>      |  |  |  |  |  |  |
| 2. Consumers' behavioural change                 | <ul><li>CozZo</li><li>Holistic Educational Approach</li><li>Matomatic</li></ul>      |  |  |  |  |  |  |
| 3.Supply chain efficiency (mostly technological) | <ul><li>Kitro</li><li>Sales forecasting</li><li>Foodtracks</li><li>Mitakus</li></ul> |  |  |  |  |  |  |
| 4. Food redistribution actions (organisational)  | <ul><li>Regional online platform</li><li>Regusto</li><li>Unverschwendet</li></ul>    |  |  |  |  |  |  |



Through this evaluation process, two scenarios are compared:

- BASELINE "no action scenario", the system without the innovation/before the innovation was introduced.
- DEMONSTRATION "Prevention/Redistribution action scenario", the system when the innovation was introduced.

Depending on the innovations, the baseline dissemination took place between end March 2022 and end June 2024; the post-implementation dissemination, between end May 2022 and mid-July 2024.

The data were collected from the users of most of the innovations assessed within the LOWINFOOD project in the fruit and vegetable, bakery, and fish supply chains, as well as with consumers in the households, catering, and tourism sectors. In total, **data from 12 innovations**. These include T2.1 "Regional online platform", T2.2 "Universchwendet", T2.4 "Sales forecasting software" (more precisely, Pianeta Cospea), T3.2 "Bakery stakeholder dialogue", T3.3 "FoodTracks", T4.1 "Fish stakeholder dialogue", T5.1 "Kitro", T5.2 "Mitakus", T5.3 "Matomatic", T5.4 "Holistic Educational Approach", T5.5 "CozZo", and T5.6 "REGUSTO". No responses were obtained from T2.3 and T4.2 "Leroma," since no company registered to use the platform to exchange materials in the supply chains of fresh fruit and vegetables or fresh fish, and from T3.1 "Innovative supplier-retailer agreement," since the innovation was not actually implemented but rather assessed through a simulation.

#### Food waste prevention governance innovations 'gender analysis

In the food waste prevention governance category, there are two innovations: *bakery stakeholder dialogue* and *fish stakeholder dialogue*. We can consider them as social innovations, and keep in mind that regarding the second innovation, the fishing sector is especially masculine as partners involved have highlighted.

In both the "baseline" and "post-demonstration" phases, there were more male participants among the interviewees, particularly during the baseline phase. According to the average survey satisfaction presented in Table 2 and illustrated in Figures 5 and 6, male respondents reported slightly higher satisfaction levels during the baseline phase. However, this trend reversed in the post-demonstration phase, where female respondents reported higher satisfaction. Overall, the participants expressed a general sense of satisfaction.





|                       |   | BAS  | ELIN | IE    | POST-IMPLEMENTATION |     |   |       |  |
|-----------------------|---|------|------|-------|---------------------|-----|---|-------|--|
| Food waste prevention |   | Men  |      | Women |                     | Men |   | Women |  |
|                       | N | %    | N    | %     | N                   | %   | N | %     |  |
| Not at all satisfied  | 0 |      | 0    | 0     | 0                   | 0   | 0 | 0     |  |
| Somewhat dissatisfied | 0 |      | 0    | 0     | 1                   | 20  | 0 | 0     |  |
| Neither satisfied nor |   |      |      |       |                     |     |   |       |  |
| dissatisfied          | 3 |      | 0    | 0     | 0                   | 0   | 0 | 0     |  |
| Somewhat satisfied    | 5 | 55.5 | 2    | 66.6  | 3                   | 60  | 0 | 0     |  |
| Very Satisfied        | 1 | 11.1 | 1    | 33.3  | 1                   | 20  | 2 | 40    |  |
| No response           | 0 | 0    | 0    | 0     | 0                   | 0   | 0 | 0     |  |
| TOTAL                 | 9 | 100  | 3    | 100   | 5                   | 100 | 2 | 100   |  |

Table 2: Participants in Food waste prevention governance innovations in both the "baseline" and "post-demonstration" phases disaggregated by sex and satisfaction

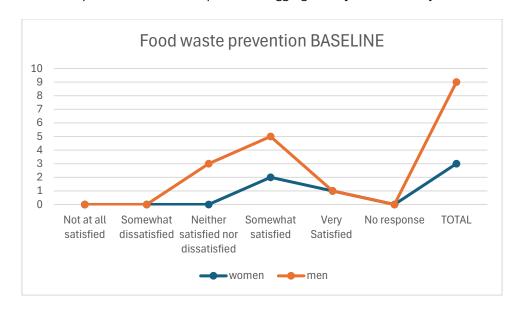


Figure 5: Participants in Food waste prevention governance innovations in the "baseline" phase disaggregated by sex and satisfaction (Number of respondents=12)



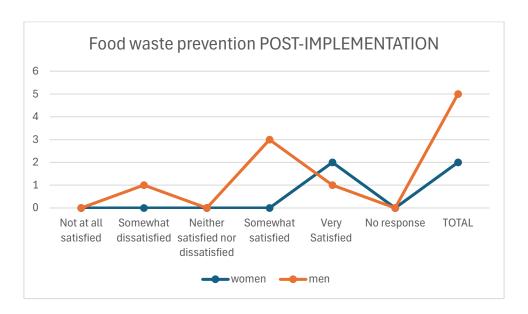


Figure 6: Participants in Food waste prevention governance innovations in the "post-demonstration" phase disaggregated by sex and satisfaction (Number of respondents=7)

#### Consumers behavioural change innovations' gender analysis

In the consumers behavioural change category there are three innovations: CozZo, Holistic Educational Approach and Matomatic. The gender-related indicators relative to this type of innovations are discussed separately for different types of participants: employees, households and students.

Among the **employees** interviewed who are all schoolteachers, women make up the majority, accounting for 70% of the total sample. This percentage remains unchanged between the "baseline" and "post-demonstration" phases. The average satisfaction ratings, as presented in Table 3 and Figures 7 and 8, are generally positive, although there are people who rate it negatively. The satisfaction levels for both women and men are virtually identical in the baseline phase, with a slight decrease for women in the post-demonstration phase. However, the differences in satisfaction ratings between genders and across phases are not statistically significant.



| Consumer behavioural change |    | BAS   | ELIN | IE   | P  | OST-IMPLE | MEN | MENTATION |  |
|-----------------------------|----|-------|------|------|----|-----------|-----|-----------|--|
|                             |    | Women |      | Men  |    | Women     |     | Men       |  |
| <b>EMPLOYEES</b>            | N  | %     | N    | %    | N  | %         | N   | %         |  |
| Not at all satisfied        | 1  | 2.7   | 2    | 12.5 | 3  | 7.5       | 1   | 5.8       |  |
| Somewhat dissatisfied       | 6  | 16.6  | 1    | 6.2  | 3  | 7.5       | 1   | 5.8       |  |
| Neither satisfied nor       |    |       |      |      |    |           |     |           |  |
| dissatisfied                | 13 | 36.1  | 6    | 37.5 | 13 | 32.5      | 8   | 47        |  |
| Somewhat satisfied          | 12 | 33.3  | 6    | 37.5 | 14 | 35        | 2   | 11.7      |  |
| Very Satisfied              | 2  | 5.5   |      | 0    | 4  | 10        | 5   | 29.4      |  |
| No response                 | 2  | 5.5   | 1    | 6.2  | 3  | 7.5       |     | 0         |  |
| TOTAL                       | 36 | 100   | 16   | 100  | 40 | 100       | 17  | 100       |  |

Table 3: Participants in consumer behavioural change innovations among employees in both the "baseline" and "post-demonstration" phases disaggregated by sex and satisfaction

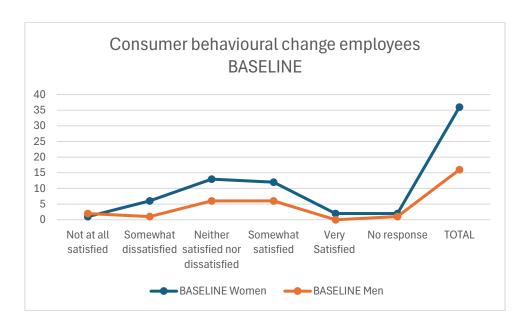


Figure 7: Participants in consumer behavioural change innovations among employees in the "baseline" phase disaggregated by sex and satisfaction (Number of respondents=52)



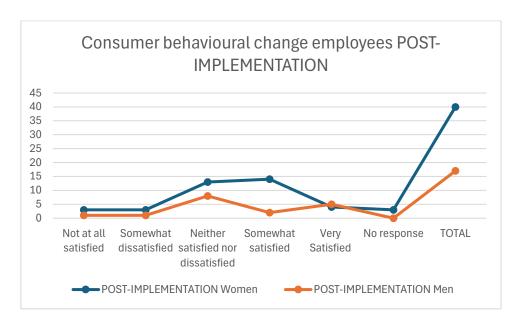


Figure 8: Participants in consumer behavioural change innovations among employees in the "post-demonstration" phase disaggregated by sex and satisfaction (Number of respondents=57)

Among **household** members interviewed, participation is balanced between women and men, and in general both sexes are very satisfied with the implementation of the innovations. See Table 4 and Figures 9 and 10,

| Consumer behavioural change |   | BASI  | ELIN | E    | POST-IMPLEMENTATIO |     |     |      |
|-----------------------------|---|-------|------|------|--------------------|-----|-----|------|
|                             |   | Women |      | Men  | Women              |     | Men |      |
| HOUSEHOLDS                  | N | %     | N    | %    | N                  | %   | N   | %    |
| Not at all satisfied        |   | 0     |      | 0    |                    | 0   |     | 0    |
| Somewhat dissatisfied       |   | 0     |      | 0    |                    | 0   |     | 0    |
| Neither satisfied nor       |   |       |      |      |                    |     |     |      |
| dissatisfied                |   | 0     |      | 0    |                    | 0   |     | 0    |
| Somewhat satisfied          | 1 | 20    | 1    | 16.6 | 1                  | 20  | 1   | 16.6 |
| Very Satisfied              | 4 | 80    | 5    | 83.3 | 4                  | 80  | 5   | 83.3 |
| No response                 |   | 0     |      | 0    |                    | 0   |     | 0    |
| TOTAL                       | 5 | 100   | 6    | 100  | 5                  | 100 | 6   | 100  |

Table 4: Participants in consumer behavioural change innovations among household members in both the "baseline" and "post-demonstration" phases disaggregated by sex and satisfaction





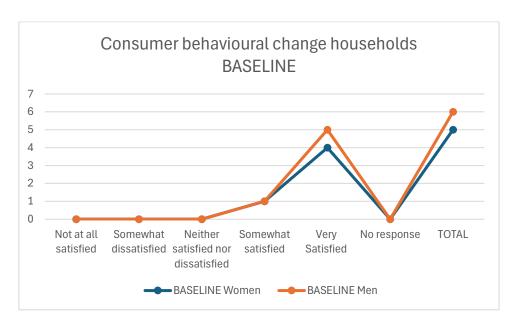


Figure 9: Participants in consumer behavioural change innovations among household members in the "baseline" phase disaggregated by sex and satisfaction (Number of respondents=11)

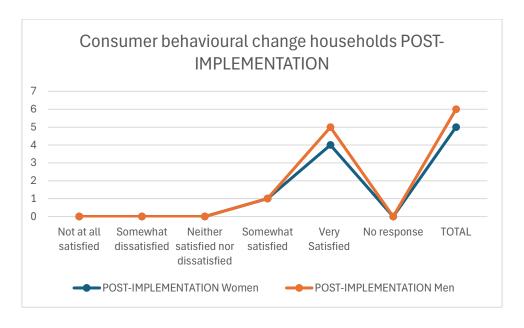


Figure 10: Participants in consumer behavioural change innovations among household members in the "post-demonstration" phase disaggregated by sex and satisfaction (Number of respondents=11)





To conclude the gender overview, the participation of **student** respondents reveals a high prevalence of women respondents (68% across the two phases), although they see a decrease from the baseline to the post-demonstration phase (from 39 respondents to 30), while the number of men and those who choose "prefer not to say" increased by one person. Only one person identifies as genderqueer and stays in both phases.

In terms of satisfaction, women students declare a marginally significantly higher value on average in the baseline phase, although the difference becomes non-significant after demonstration. Those who have chosen 'prefer not to say' prefer not to answer at the baseline (1 person) and are not satisfied after the demonstration (2 people). The sample is very small, but it is important to visualise them. The same happens for the person who identifies as genderqueer both in the baseline and post-implementation who is neither satisfied nor dissatisfied.

See Table 5 and Figures 11 and 12.

| Consume   |       | BASELINE |                 |     |     |      |                         |     |       |      | POST_IMPLEMENTATION |     |     |      |                   |     |  |  |
|---|-------|----------|-----------------|-----|-----|------|-------------------------|-----|-------|------|---------------------|-----|-----|------|-------------------|-----|--|--|
| r<br>behaviou<br>ral                            | women |          | Genderq<br>ueer |     | Men |      | Prefer<br>not to<br>say |     | Women |      | Genderq<br>ueer     |     | Men |      | Prefer not to say |     |  |  |
| change<br>STUDENT<br>S                          | N     | %        | N               | %   | N   | %    | N                       | %   | N     | %    | N                   | %   | N   | %    | N                 | %   |  |  |
| Not at all satisfied                            | 3     | 7.6      |                 | 0   | 2   | 15.3 |                         | 0   | 1     | 3.3  | 0                   | 0   | 0   | 0    |                   | 0   |  |  |
| Somewha<br>t<br>dissatisfie<br>d                | 1     | 2.5      |                 | 0   | 2   | 15.3 |                         | 0   | 3     | 10   | 0                   | 0   | 1   | 7.1  | 1                 | 50  |  |  |
| Neither<br>satisfied<br>nor<br>dissatisfie<br>d | 0     | 23       | 1               | 100 | 5   | 38.4 |                         | 0   | 7     | 22.2 | 1                   | 100 | 6   | 42.0 | 1                 | 50  |  |  |
| Somewha<br>t satisfied                          | 18    | 46.1     | ļ               | 100 | 3   | 23   |                         | 0   | 10    | 23.3 | 0                   | 100 | 6   | 42.8 | '                 | 0   |  |  |
| Very<br>Satisfied                               | 8     | 20.5     |                 | 0   | 1   | 7.6  |                         | 0   | 6     | 20   | 0                   | 0   | 1   | 7.1  |                   | 0   |  |  |
| No<br>response                                  |       | 0        |                 | 0   |     | 0    | 1                       | 100 | 3     | 10   | 0                   | 0   |     | 0    |                   | 0   |  |  |
| TOTAL   | 39    | 100      | 1               | 100 | 13  | 100  | 1                       | 100 | 30    | 100  | 1                   | 100 | 14  | 100  | 2                 | 100 |  |  |

Table 5: Participants in consumer behavioural change innovations among students in both the "baseline" and "post-demonstration" phases disaggregated by sex and satisfaction





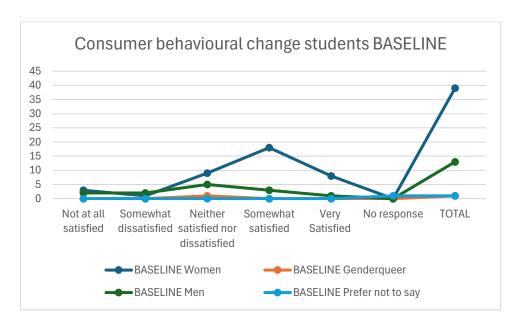


Figure 11: Participants in consumer behavioural change innovations among students in the "baseline" phase disaggregated by sex and satisfaction (Number of respondents=54)

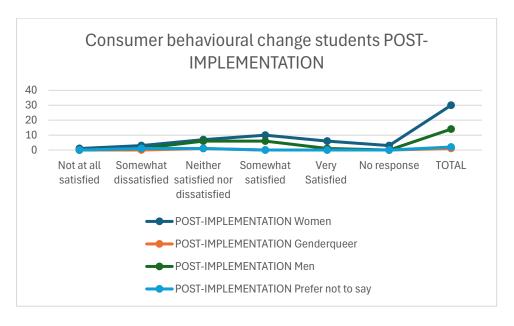


Figure 12: Participants in consumer behavioural change innovations among students in the "post-demonstration" phase disaggregated by sex and satisfaction (Number of respondents=47)





#### Supply chain efficiency innovations' gender analysis

In the supply chain efficiency category, there are four innovations: *Kitro, Sales forecasting, Foodtracks* and *Mitakus*. They are considered mostly technological innovations.

Among the participants, there is an equilibrium in the baseline with slightly more women responding. However, this changed between the two phases, with women dropping from 30 at baseline to 11 in the post-demonstration phases, increasing the proportion of men from 24 to 14. In the post-demonstration two respondents chose to answer 'prefer not to say'.

As for satisfaction, we observe an increase among women and a decrease among men, with the latter reporting higher satisfaction in the baseline and lower satisfaction after the demonstration. The two people who have chosen 'prefer not to say' in the post-demonstration are neither satisfied nor dissatisfied.

|              |     | BAS  | ELINE |       | POST-IMPLEMENTATION |      |    |       |            |     |  |  |  |
|--------------|-----|------|-------|-------|---------------------|------|----|-------|------------|-----|--|--|--|
| Supply       |     |      | _     |       |                     |      |    |       | Prefer not |     |  |  |  |
| chain        |     | Men  | \     | Nomen |                     | Men  | W  | /omen | to say     |     |  |  |  |
| efficiency   | N % |      | N     | N %   |                     | %    | N  | %     | N          | %   |  |  |  |
| Not at all   |     |      |       |       |                     |      |    |       |            |     |  |  |  |
| satisfied    | 0   | 0    | 0     | 0     | 1                   | 7.1  | 0  | 0     |            | 0   |  |  |  |
| Somewhat     |     |      |       |       |                     |      |    |       |            |     |  |  |  |
| dissatisfied | 3   | 12.5 | 0     | 0     | 0                   | 0    | 0  | 0     |            | 0   |  |  |  |
| Neither      |     |      |       |       |                     |      |    |       |            |     |  |  |  |
| satisfied    |     |      |       |       |                     |      |    |       |            |     |  |  |  |
| nor          |     |      |       |       |                     |      |    |       |            |     |  |  |  |
| dissatisfied | 5   | 20.8 | 12    | 40    | 3                   | 21.4 | 2  | 18.1  | 2          | 100 |  |  |  |
| Somewhat     |     |      |       |       |                     |      |    |       |            |     |  |  |  |
| satisfied    | 4   | 16.6 | 11    | 36.6  | 5                   | 35.7 | 5  | 45.4  |            | 0   |  |  |  |
| Very         |     |      |       |       |                     |      |    |       |            |     |  |  |  |
| Satisfied    | 10  | 41.6 | 5     | 16.6  | 5                   | 35.7 | 3  | 27.2  |            | 0   |  |  |  |
| No           |     |      |       |       |                     |      |    |       |            |     |  |  |  |
| response     | 2   | 8.3  | 2     | 6.6   | 0                   | 0    | 1  | 9     |            | 0   |  |  |  |
| TOTAL        | 24  | 100  | 30    | 100   | 14                  | 100  | 11 | 100   | 2          | 100 |  |  |  |

Table 6: Participants in supply chain efficiency in both the "baseline" and "post-demonstration" phases disaggregated by sex and satisfaction





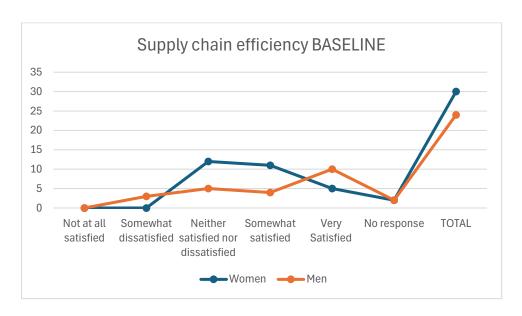


Figure 13: Participants in supply chain efficiency in the "baseline" phase disaggregated by sex and satisfaction (Number of respondents=54)

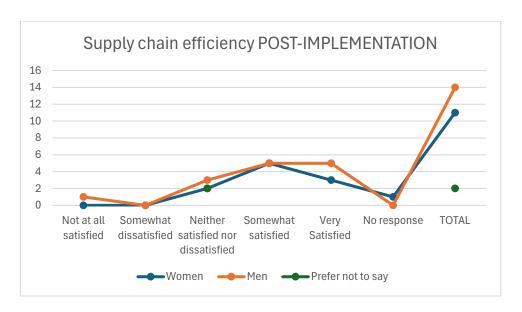


Figure 14: Participants in supply chain efficiency in the "post-implementation" phase disaggregated by sex and satisfaction (Number of respondents=27)





#### Food redistribution actions gender analysis

In the food redistribution actions' category there are three innovations: *Regional online platform, Regusto* and Unverschwendet. They are considered organisational innovations.

Between women and men the participation is quite balanced in the two phases, but it is worth noting that in the baseline women are slightly more (11 in the baseline, and 9 in the post-demonstration) and in the post-demonstration the other way round, the participation of men goes up (6 in the baseline, and 11 in the post-demonstration). It is noteworthy that 7 people chose 'prefer not to say' in the baseline but none in the post-demonstration.

As for satisfaction, both women and men are satisfied in both phases. As for those who chose 'prefer not to say', almost all of them preferred not to answer, except for one who was very satisfied in the baseline.

|  |   |      | BA    | SELINE |                         |      | POST_IMPLEMENTATION |      |   |       |                         |   |  |  |  |
|--|---|------|-------|--------|-------------------------|------|---------------------|------|---|-------|-------------------------|---|--|--|--|
| Food<br>redistribution<br>actions        |   | Men  | Women |        | Prefer<br>not to<br>say |      |                     | Men  | W | lomen | Prefer<br>not to<br>say |   |  |  |  |
|  | N | %    | N     | %      | N                       | %    | N                   | %    | N | %     | N                       | % |  |  |  |
| Not at all satisfied                     | 0 | 0    | 0     | 0      | 0                       | 0    | 0                   | 0    | 0 | 0     | 0                       | 0 |  |  |  |
| Somewhat<br>dissatisfied                 | 1 | 16.6 | 0     | 0      | 0                       | 0    | 0                   | 0    | 0 | 0     | 0                       | 0 |  |  |  |
| Neither<br>satisfied nor<br>dissatisfied | 3 | 50   | 1     | 9      | 0                       | 0    | 3                   | 27.2 | 1 | 11.1  | 0                       | 0 |  |  |  |
| Somewhat satisfied                       | 0 | 0    | 4     | 36.3   | 0                       | 0    | 4                   | 36.3 | 2 | 22.2  | 0                       | 0 |  |  |  |
| Very Satisfied                           | 2 | 33.3 | 6     | 54.5   | 1                       | 14.2 | 4                   | 36.3 | 6 | 66.6  | 0                       | 0 |  |  |  |
| No response                              | 0 | 0    | 0     | 0      | 6                       | 85.7 | 0                   | 0    | 0 | 0     | 0                       | 0 |  |  |  |
| TOTAL                                    | 6 | 100  | 11    | 100    | 7                       | 100  | 11                  | 100  | 9 | 100   | 0                       | 0 |  |  |  |

Table 7: Participants in food redistribution actions in both the "baseline" and "postdemonstration" phases disaggregated by sex and satisfaction





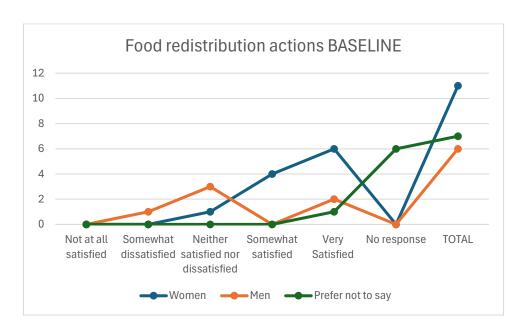


Figure 15: Participants in food redistribution actions in the "baseline" phase disaggregated by sex and satisfaction (Number of respondents=24)

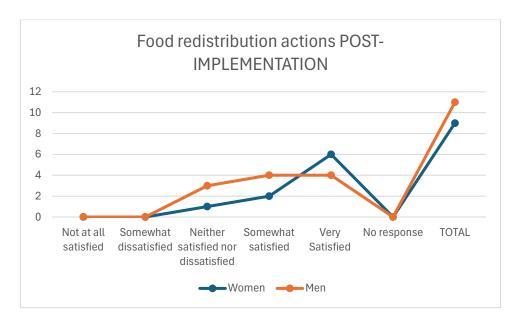


Figure 16: Participants in food redistribution actions in the "post-implementation" phase disaggregated by sex and satisfaction (Number of respondents=20)





# Vertical segregation in all categories

Vertical segregation has been analysed in general terms, taking into account all employees in all categories as a whole (therefore, the 12 innovations) and the two phases altogether (baseline and post-implementation), otherwise the sample is too small and not relevant. The jobs have been divided into four groups, each with their specific jobs: direction, managers, staff and non-permanent staff.

The number of employees is balanced between women and men, with women being slightly more. A total of 226 employees took part, of which 132 were women (58%), 92 men (40%) and 2 people preferred not to specify (0.8%).

See table 8 with all data on all jobs:

|                         | wo | MEN  | ı  | MEN  |   | FER NOT<br>O SAY | 1  | TOTAL |
|-------------------------|----|------|----|------|---|------------------|----|-------|
|                         | N  | %    | N  | %    | N | %                | N  | %     |
| DIRECTION               |    |      |    |      |   |                  |    |       |
| Owner                   | 10 | 38.4 | 16 | 61.5 |   |                  | 26 | 100   |
| President               | 1_ | 100  | 0  | 0    |   |                  | 1  | 100   |
| TOTAL                   | 11 | 40.7 | 16 | 59.2 |   |                  | 27 | 12.5  |
| MANAGERS                |    |      |    |      |   |                  |    |       |
| Manager                 | 2  | 66.6 | 1  | 33.3 |   |                  | 3  | 100   |
| Food manager            |    | 0    | 1  | 100  |   |                  | 1  | 100   |
| Kitchen manager         |    | 0    | 1  | 100  |   |                  | 1  | 100   |
| Sector or department    |    |      |    |      |   |                  |    |       |
| manager                 | 18 | 54.5 | 14 | 42.4 | 1 | 3                | 33 | 100   |
| Executive level manager | 5  | 16.6 | 25 | 83.3 |   |                  | 30 | 100   |
| TOTAL                   | 25 | 36.7 | 42 | 61.7 | 1 | 3                | 68 | 30    |
| STAFF                   |    |      |    |      |   |                  |    |       |
| Canteen staff           | 1  | 100  |    | 0    |   |                  | 1  | 100   |
| Cook                    | 4  | 50   | 4  | 50   |   |                  | 8  | 100   |
| Employee                | 5  | 100  |    | 0    |   |                  | 5  | 100   |
| Food distributor        | 1  | 100  |    | 0    |   |                  | 1  | 100   |
| Kitchen staff           | 6  | 100  |    | 0    |   |                  | 6  | 100   |
| Secretary               | 1  | 100  |    | 0    |   |                  | 1  | 100   |
| Permanent staff         | 36 | 72   | 14 | 28   |   |                  | 50 | 100   |
| TOTAL                   | 54 | 93.1 | 18 | 24.1 | 0 | 0                | 72 | 32    |

Table 8: All employees of the innovations disaggregated by sex and jobs





| NON-PERMANENT STAFF |     |      |    |      |   |     |     |      |
|---------------------|-----|------|----|------|---|-----|-----|------|
| Temporary staff     | 22  | 75.8 | 7  | 24.1 |   |     | 29  | 100  |
| Intern or student   |     |      |    |      |   |     |     |      |
| placement           | 19  | 57.5 | 13 | 39.3 | 1 | 3   | 33  | 100  |
| Trainee             | 1   | 100  |    | 0    |   |     | 1   | 100  |
| TOTAL               | 42  | 66.6 | 20 | 31.7 | 1 | 3   | 63  | 29.1 |
| GRANT TOTAL         | 132 | 57.3 | 92 | 41.7 | 2 | 0.8 | 230 | 100  |

Table 8 (continues): All employees of the innovations disaggregated by sex and jobs

In **direction** positions men are more than women (11 women, 16 men) with one woman as president and the others as owners.



Table 17: Employees at direction positions disaggregated by sex

As for **managers**, here too, segregation is evident, as men occupy more jobs (25 women, 42 men) and especially executive level manager positions (5 women, 25 men). One person in the department manager position preferred not to define the sex.





Table 18: Employees at manager positions disaggregated by sex

In the next two groups the proportions change completely. In the **staff** group, women are much more numerous (54 women, 18 men); most women and men belong to the permanent staff position but women are more diversified (canteen, cook, employee, food distributor, kitchen, secretary).



Table 19: Employees at staff positions disaggregated by sex





According to **non-permanent staff**, there are twice as many women as men (42 women, 20 men) and one person at intern or student placement position prefers not to specify.

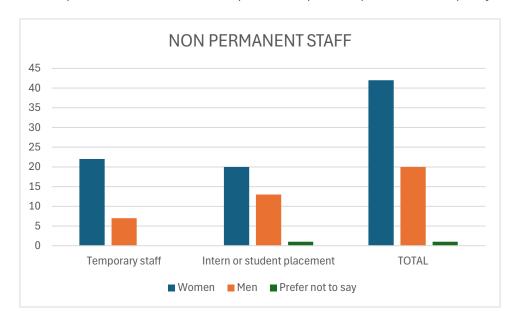


Table 20: Employees at non-permanent staff positions disaggregated by sex

**Vertical segregation is clear among employees** who have participated in the implementation of the 12 LOWINFOOD innovations. In the first two groups (direction and managers), men are predominant, while in the other two groups (staff and non-permanent staff), the number of women is much higher.

### 4. Gender-sensitive and inclusive communication

Elhuyar is the partner responsible for communication and has taken care to maintain a gender-sensitive and non-stereotypical language to both the general public and stakeholders. This approach has had an affect both in the contents disseminated and the way those contents have been disseminated. This include avoiding reinforcing traditional gender roles such as women as main care-givers, household responsible, and men as main community representatives, leading SMEs or decision-makers...The balanced composition of LOWINFOOD's consortium has helped to communicate balanced images and women actively taking part, leading and also making men co-responsible in order to respond to different social needs (and not to be blind to some of them) and not to increase the current gender biases.

In the materials produced, the presence and importance of men and women has been balanced (photos, videos). Gender equality messages have been launched on website and social networks on International Women's Day (March 8) and Women and Girls in Science Day (February 11).





# **International Days**

On the 2022 International Day of Women and Girls in Science a post was published on LOWINFOOD social media channels with this message: "The #Lowinfood project is supported by many female researchers and innovators. Let's continue to break stereotypes, challenge gender biases and make women scientists visible".



Image: The message and image published on 11 February of 2022 at LOWINFOOD social networks.

On the occasion of the 2023 International Day of Women and Girls in Science a <u>news</u> item was created in the website and a social media campaign was conducted where testimonies of LOWINFOOD women scientists were disseminated. The aim was to give a voice to these women and to visualise the situation of female researchers while at the same time giving a boost to gender equality in the field of science. The campaign was successful, in fact, it was one of the most successful publications of the LinkedIn channel.





Image: The four images created for the networks with the testimonies and photos of the LOWINFOOD women scientists.

One month later, on 8 March 2023, the campaign closed with the compilation of the four testimonies and this message on social media: "Despite the difficulties they encounter as women scientists, their persistence to work in research is exemplary".





Image: The message and image published on 8 March of 2023 with the compilation of the women researchers' testimonies at LOWINFOOD social networks.

One year later, on 2024, in the framework of the International Day of Women and Girls in Science, LOWINFOOD asked several female project members working in research institutions this question: what message would you give to young women who dream of working in science and research? With the answers it was created a <u>video</u>.

One month later, on 8 March 2024, a post was published on social media with the main idea pointed out in the video by the women members of LOWINFOOD: "Follow your dreams, don't let you go down, think big, create networks and find support to break this glassy link, you can do it!"





Image: The message and image published on 8 March of 2024 at social networks with the idea pointed out by LOWINFOOD women members.

By extension, the same inclusive criteria have been applied to other groups potentially excluded or marginalised on the basis of race or disability, or any other minority group, thus avoiding discriminatory language or imagery. To give a simple detail, emoticons used on social media such as people or hand symbols have been of varying skin colour.



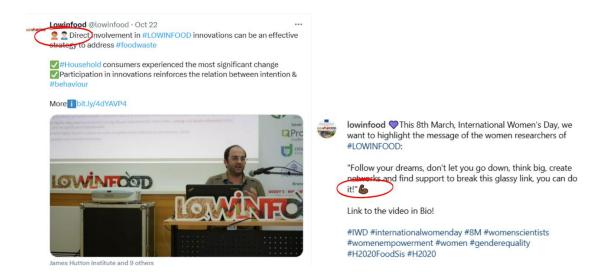
Finally, a round table on the potential of innovations for policy impact was held with partners leading work in each of the value chains. Christina Strotmann, Mattias Eriksson, Luca Falasconi and Nazli Köseoglu discussed the most appropriate strategies to support the diffusion of innovations in each value chain from the policy level, which gave rise to very interesting debates among the partners.

For more information and photos read the news in the bio

#FinalMeeting #Greece #results #lessonslearned #foodwaste #foodloss #innovation #sustainability #EUGreenDeal #H2020FoodSis #H2020







#### Social media followers

The Meta company, Facebook and Instagram owner, offers statistical data disaggregated by sex and age too. These data allow figuring out what the "most common Facebook and Instagram users" are and in the case of LOWINFOOD they are women of different ages. Facebook followers are women between 35 and 45 years, and in Instagram, women between 18 and 35 years old.

#### LOWINFOOD followers in FB and IG disaggregated by sex and age

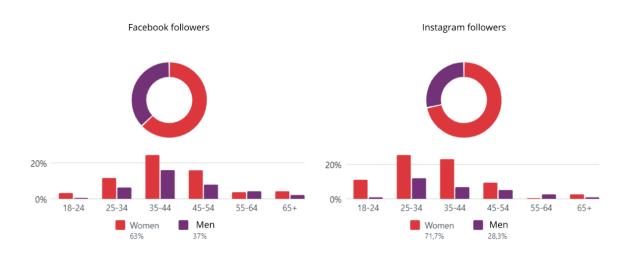


Image: Followers in Facebook and Instagram accounts of LOWINFOOD disaggregated by sex and age.





### ANNEX I.

# **GUIDELINES FOR GENDER EQUALITY**

## **GENDER EQUALITY - THE MISSION OF TASK 7.4**

LOWINFOOD addresses the gender issue supporting gender balance in research teams and decision-making processes and by integrating gender analysis in the demonstration activities related to the innovations against food waste addressed by the project.

The gender perspective will have special relevance on the following phases of the project:

- When **involving the actors** of the food chains (paying special attention to the feminized sectors).
- When **evaluating the socio-economic impact** of the innovations developed (considering the specific impact on women and men, and neutralizing possible negative effects on women).
- In the activities aimed at informing consumers (without deepening the current gender-sensitive division of labour and also making men co-responsible).
- **Gender-sensitive and inclusive communication** will be carried out and the use of sexist and stereotyped language, messages and images is avoided.

## **HOW ARE WE GOING TO WORK?**

ELHUYAR will incorporate the gender perspective throughout the project with the contribution of all partners. This effort encompasses the definition and design of the project, the implementation and the evaluation phase.

We should think on specific strategies depending on the target audience. To this end, we propose to establish direct contact with WP2, WP3, WP4 and WP5 and together analyse the situation and needs of each area. Therefore, we will contact each WP leader for a first round of meetings before summer while in WP1 we will make our contribution specifically in Task 1.3 (evaluation of economic and social impact). Our role will be to assist and help partners to include the gender perspective so do not hesitate to contact ELHUYAR.

issues, meaning having dealt with gender equality in previous projects/experiences, having specific training on gender issues or even just having a special interest in the topic. Please let us know.





## WHY DO WE NEED TAKE GENDER INTO ACCOUNT?

**What we do is not neutral** and it has an effect regarding gender equality. It can make the situation improve, it could make it worse or maintain the existing inequalities. It is advisable to promote gender equality with our action. Sharpen the view, by paying special attention to the specific realities of women and men.

Working with a gender perspective means to analyse women's and men's specific experiences, realities, difficulties and interests, to make women's as well as men's concerns and experiences **an integral dimension** of the design, implementation, monitoring and evaluation of policies and programmes.

We need to rethink our clientele, knowing their priorities, whether they are men, whether they are women, and what impact gender has on their reality. We must rethink standards and reference models and do so with women and men in mind, **taking into account the potential of all people**.



By working from a gender perspective we will promote more egalitarian models and **greater social justice**.



## WHAT DOES IT MEAN IN PRACTICE?

- All data should be collected **disaggregated by sex** (woman, man, non-binary), so that it can then be analysed from a gender perspective in order to identify the possible differences between women and men.
- Apart from the gender variable, it is also necessary to include multiple inequality indicators for cross-checking purposes. For example: age, nationality, ethnicity, socio-economic background, level of education, disability or time spent on unpaid care labour (care responsibility & housework). So that we can then cross-reference the different variables.
- We should guarantee participation of women and men. When we make contact, offer cooperation or involve different actors like stakeholders, research community, scholars, supermarkets, restaurants...we should keep in mind that women should also participate. A representation is considered to be balanced between women and men when the percentage indicating the presence of each sex ranges between 40% and 60% of the total.
- ❖ When designing **surveys** we have to take into account these aspects:
  - > Designing questions from a gender perspective.
  - All data should be analysed disaggregated by sex in order to identify the possible differences between women and men.
  - > The sample should be gender balanced.
- When designing webinars, in-person meetings, in-depth interviews or group discussions we have to take into account these aspects:
  - ➤ We should guarantee participation of women and men of different socioeconomic backgrounds.
  - > We should ensure a good presence of women among the interviewed people.
  - > We should guarantee the specific needs of women and men are accommodated.
  - ➤ We should make sure to create an environment in which women feel secure to participate and give their views (apart from parity, the age or language of the participants can be taken into account, or not to mix employees with company heads, for example).
  - > Issues such as time and accessibility should also be taken into account.





- ❖ Gender-sensitive use of language must be ensured in the design, collection and analysis of data. When we emphasize the need to use non-sexist language we are not saying that the language itself is sexist but the use we make of it. We call non-sexist language that which is sensitive to diversity and integrates the multiple realities that we find in the social context. We call sexist language the exclusive use of one of the two genders (traditionally the masculine gender) to refer to the other gender. Thus, we exclude it from the language and we make it invisible in our expression. In short, just as there are different ways of looking there are also different ways of speaking.
  - > Therefore, it is recommended to mention both genders or to use generic or abstract names such as: citizens, people surveyed, respondents...
  - Avoid reinforcing traditional gender roles such as women as main caregivers, household responsible, and men as main community representatives, leading SMEs...
  - ➤ When possible, visualize balanced images and women actively taking part.
  - Not only focus on women, but try to also interpellate men. For examples, in at-home consumption.
  - ➤ In at-home consumption it would be interesting to identify different family models, not just the nuclear family model but also single-parent families or families with two mothers and/or fathers or people living alone, etc.
  - ❖ For the **evaluation**, to know the socio-economic impact of the innovations it is very important to have some **gender indicators**. We should be able to measure the specific impact of the project for women and men to know if it is boosting gender equality. This list of indicators is indicative, as you can use the indicators that seem relevant to you in the surveys, interviews or other activities that you are going to carry out. The data and information provided by these indicators are necessary to have a general picture of the context and therefore to make a gender analysis. For WP1 a specific proposal is being worked on.





| Indicator                           | Objective                     | Type of data   |
|-------------------------------------|-------------------------------|--|
| All data <b>disaggregated by</b>    | Analyse from a gender         | Woman  |
| sex                                 | perspective                   | Man  |
|                                     |                               | Non-binary   |
| Multiple inequality                 | For cross-checking            | Age  |
| ndicators                           | purposes                      | Nationality  |
|                                     |                               | Ethnicity  |
|                                     |                               | Socio-economic   |
|                                     |                               | background   |
|                                     |                               | Level of education   |
|                                     |                               | Disability   |
|                                     |                               | Time spent on unpaid care labour (care responsibility & housework) |
| As for the members who              | Vertical segregation          | To be specified  |
| will participate in the inno-       |                               |  |
| vations, the proportion of          |                               |  |
| women and men in the                |                               |  |
| decision-making posi-<br>tions      |                               |  |
| As for the members who              | Horizontal segregation        | To be specified  |
| will participate in the inno-       | 110112011141 3081 08411011    | 10 de specimen   |
| vations, distribution of            |                               |  |
| women and men by the                |                               |  |
| area of work, discipline            |                               |  |
| or department                       |                               |  |
| Type of work                        | To identify the rate of femi- | To be specified  |
|                                     | nised and masculinised        |  |
| - C 1                               | jobs                          | E. H. C.   |
| Type of <b>working day</b> (con-    | To measure precariousness     | Full time  |
| tract hours without reduc-<br>tion) |                               | Part time  |
| tion                                |                               | Split working day  |
|                                     |                               | Night working day Other. Which one?                                |
| Type of contract                    | To measure precariousness     | Permanent  |
| Type of contract                    | To measure precamousiless     | Indefinite   |
|                                     |                               | Temporary (specify time  |
|                                     |                               | period)  |
|                                     |                               | Interim  |



|  |   | Internship  |
|--|---|---|
|  |   | Relief contract   |
|  |   | Other. Which one?   |
| Telework or face-to-face                             | To measure availability for   | Fully teleworking   |
| work   | certain activities  | Share telework and face-to-   |
| WOIK   |   | face  |
|  |   | Fully face-to-face  |
| Unpaid care labour: care responsibility & house-work | Time spent in unpaid care work by both women and men                            | Care responsibilities:  - Older people - Children (0-3 age, 3-6 age, 6-12 age, >12) - People with special needs |
|  |   | Housework   |
| The work-life balance                                | To find out how flexible the participants are in balancing work and family life | Reduction in working hours  |
|  |   | Flexibility in working hours  |
|  |   | Maternity/paternity leave   |
| Family model (for WP5)                               | To identify plural families   | Nuclear family  |
|  |   | Two mothers family  |
|  |   | Two fathers family  |
|  |   | Single-parent family  |
|  |   | (mother or father)  |
|  |   | Living alone  |
|  |   | Flat sharing  |
|  |   | Other. Which one?   |
| Ways of participating                                | To cross-reference the way in which participants have participated with gender  | Passive   |
|  |   | Active  |
| How did they feel partici-                           | To cross-reference with   | Comfortable   |
| pating and giving their views                        | gender the comfort or discomfort of participation.                              | Uncomfortable   |

Would be interesting the participation of a women's association or collective, for example at WP5.





# QUESTIONS WE SHOULD ASK TO CHECK IF WE ARE TAKING THE GENDER-PERSPECTIVE INTO ACCOUNT

The aim of these questions is that we have **the gender perspective present during the whole working process**. Therefore, we would have to ask ourselves:

1. Did we pay attention to women's specific needs, interests and realities? 2. Are we promoting women's participation and referentiality?

3. Are we improving women's living conditions with what we are doing?

4. What do women think about the work we are developing?

Equality officer: Eider Olazar Elduaien <a href="mailto:e.olazar@elhuyar.eus">e.olazar@elhuyar.eus</a>

## References for further information:

European Institute for Gender Equality, gender mainstreaming. Available at: <a href="https://eige.europa.eu/gender-mainstreaming">https://eige.europa.eu/gender-mainstreaming</a>

European Institute for Gender Equality, methods and tools. Available at: <a href="https://eige.europa.eu/gender-mainstreaming/methods-tools">https://eige.europa.eu/gender-mainstreaming/methods-tools</a>

Eurostat, SDG-5 Gender equality. Available at: <a href="https://ec.europa.eu/eurostat/statistics-explained/index.php?title=SDG-5">https://ec.europa.eu/eurostat/statistics-explained/index.php?title=SDG-5</a> - Gender equality#Gender equality in the EU: overview and key trends





### **CHECKLIST**

# To do before the activity starts

- Remember, what we do is not neutral, and it has an effect regarding gender equality. Sharpen the view, by paying special attention to the specific realities of women and men.
- ❖ We need to rethink our clientele, standards and reference models and do so with women and men in mind, **taking into account the potential of all people**.

# To do during the activity

- ❖ All data should be collected **disaggregated by sex** (woman, man, non-binary), so that it can then be analysed from a gender perspective.
- It is also necessary to include multiple inequality indicators for cross-checking purposes: age, nationality, ethnicity, socio-economic background, level of education, disability, and time spent on unpaid care labour (care responsibility & housework).
- ❖ We should keep in mind that women should also participate. A representation is considered to be balanced when the presence of each sex ranges between 40% and 60% of the total.
- ❖ When designing **surveys** we have to take into account these aspects:
  - > **Designing questions** from a gender perspective.
  - > All data should be analysed **disaggregated by sex**.
  - > We should use the **indicators proposed** in the document to collect information and data.
  - > The sample should be gender balanced.
- When designing webinars, in-person meetings, in-depth interviews or group discussions we have to take into account these aspects:
  - > Guarantee participation of women and men of **different socio-economic backgrounds**.
  - Ensure a **good presence of women** among the interviewed people.
  - **Guarantee the specific needs** of women and men are accommodated.
  - Create an environment in which women feel secure to participate and give their views.
  - > Issues such as time and accessibility.





# To do during the activity (continues)

- ❖ **Gender-sensitive use of language** must be ensured in the design, collection and analysis of data.
  - > Mention both genders or use generic or abstract names.
  - > Avoid reinforcing traditional gender roles.
  - Visualize balanced images and women actively taking part.
  - Not only focus on women, but try to also **interpellate men**.

# To do after the activity

- ❖ For the evaluation to know the socio-economic impact of the innovations, it is very important to include some **gender indicators** (defined in WP1) such us:
  - > Type of work: feminised and masculinised jobs
  - > Vertical segregation
  - > Horizontal segregation
  - > Type of working day: full time/part time
  - > Type of contract
  - > Unpaid care labour: care responsibilities & housework
  - > Reconciliation measures
  - > Family models (for WP5)





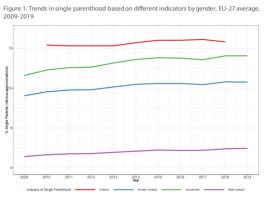
### **ANNEX II**

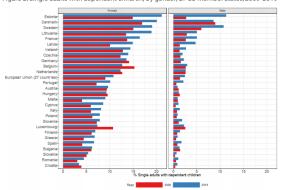
## **KEY PERCENTAGES FOR TYPE OF HOUSEHOLDS**

The following are some percentages of the different types of households in the total population of the European Union.

14% households with children headed by a single adult

11% single women heading a household with dependent children3% single men heading a household with dependent children





Source: Labour force survey (table: Ifst\_hhaceda). Countries are sorted by the percentage of single adult women with dependent children in 2019. Data for Denmark 2010 and 2019.

Two important conclusions can be derived from these data:

- single parenthood seems to be rising in the EU
- single parenthood is strongly gendered, as many more single women live with children than single men do

34% single adult without children

24% couple without children

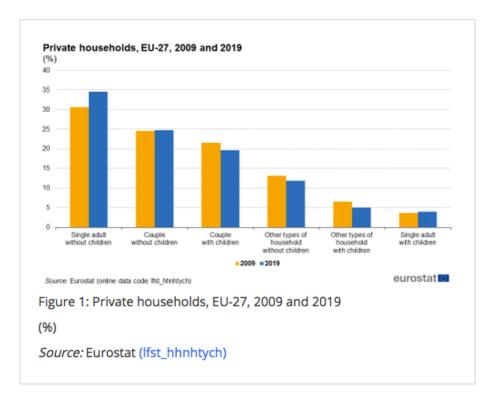
20% couple with children

13% other type of households without children (e.g. elderly person living with other members of the family, economically independent room mates, an economically independent adult child living with one or two parents)

5% other type of households with children







Within the couples it is very difficult to know how many are heterosexual couples and how many are homosexual couples. There are no censuses for this data. The data that is available is that of marriages between people of the same sex but it depends on each country, there is no data at European level because marriage between people of the same sex is not legalised in all countries, moreover, the homophobic policies of Poland and Hungary would greatly unbalance the reality of the other countries. That is why Spanish data are provided, which could be orientative:

|   | 10% homosexual couples (half gay and half lesbian) |                                  |
|---|--|----------------------------------|
| Of these homosexual couples 30% have children | 1/3 male couples with children                     |                                  |
|   |  | 2/3 female couples with children |

#### References for further information:

https://www.europarl.europa.eu/RegData/etudes/STUD/2020/659870/IPOL\_STU(2020)659870\_STUD/2020/659870/IPOL\_STU(2020)659870\_STUD/2020/659870/IPOL\_STU(2020)659870\_STUD/2020/659870/IPOL\_STU(2020)659870\_STUD/2020/659870/IPOL\_STU(2020)659870\_STUD/2020/659870/IPOL\_STU(2020)659870\_STUD/2020/65980\_STUD/2020/659800\_STU

https://ec.europa.eu/eurostat/statisticsexplained/index.php?title=Household\_composition\_statistics

https://ec.europa.eu/eurostat/statisticsexplained/index.php?title=Being young in Europe today - family and society

