



Mental health in agriculture: preventing and managing psychosocial risks for farmers and farm workers

Report

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List of Abbreviations

AI	Artificial Intelligence
CAP	Common Agricultural Policy
CH	Switzerland
EC	European Commission
ECWS	European Working Conditions Survey
EEA	European Environment Agency
EESC	European Economic and Social Committee
EFFAT	European Federation of Food, Agriculture and Tourism Trade Unions
ELA	European Labour Authority
EP	European Parliament
ES	Spain
ESENER	European Survey of Enterprises on New and Emerging Risks

ETUI	European Trade Union Institute
EU	European Union
EU-OSHA	European Agency for Safety and Health at Work
FI	Finland
GMOs	Genetically Modified Organisms
HOCCA	House of Commons Canada
IE	Ireland
IEEP	Institute for European Environmental Policy
ILO	International Labour Organisation
LGBTQ+	Lesbian, Gay, Bisexual, Transgender, Queer and Others
LRF	Lantbrukarnas Riksförbund (Swedish Federation of Farmers)
LSES	Low Socioeconomic Status
LTO	Land- en Tuinbouw Organisatie Noord (Agricultural and Horticultural Association North)
MSA	Mutualité Sociale Agricole
MSD	Musculoskeletal Disease
NO	Norway
OSH	Occupational Safety and Health
RABI	Royal Agricultural Benevolent Institution
RAMHP	Rural Adversity Mental Health Programme
SACURIMA	Safety Culture and Risk Management in Agriculture
SAWEE	Swedish Agency for Work Environment Expertise
SSRN	Social Science Research Network
UK	United Kingdom
WHO	World Health Organization

Executive Summary

This report investigates the impact of psychosocial risk exposure for farmers and farm workers using a combination of desk-based research and interviews with key stakeholders from the sector. Good practice examples show the range of prevention and intervention measures that can be implemented to improve the mental wellbeing of farmers and farm workers. Finally, a list of considerations and policy pointers for improving occupational safety and health (OSH) in the agricultural sector are presented based upon the findings.

Psychosocial risks in the agricultural sector are complex

Self-employed farmers form the majority of the agricultural workforce. 93% of the EU farms are family farms where 50% or more of the agricultural labour force is provided by family workers. The workforce of more industrialised farm businesses are farm workers with a high percentage of migrant or seasonal farm workers. Most of the psychosocial risks identified in this study concern both categories with some risks specifically affecting farm workers.

In general, psychosocial risks in agriculture, may emerge from poor working conditions relative to work design, organisation, management and/or the workplace's social context. Psychosocial risks, stress and mental health issues are important challenges facing the sector, as up to half of farmers and farm workers exceed 48-hour weeks. Rates of stress, anxiety, burnout, suicide and depression are high. For example, one in four Irish farmers face burnout, and in France, one farmer suicide takes place every two days. Furthermore, agricultural work is labelled as one of the most hazardous occupations in Europe, with the sector being amongst those with the most fatal accidents in 2021.

Psychosocial risks within agriculture are complex, given the specific characteristics of the sector, such as the seasonal nature of agricultural produce, animal care, the need to be constantly available for work and the general remoteness of farms.

Additional psychosocial risks in the agricultural sector include equipment breakdown, ergonomics, financial instability and insecurity, regulatory pressures, health concerns, and professional status. Risk differs according to farming typology (e.g. dairy farming versus crop production), as some farmers and farm workers are more impacted by chemical exposure and others are more impacted by risks associated with animal husbandry.

Social isolation and inability to rest cause distress

Farming cultures often evoke images of resilient individuals embodying values such as stoicism, strength, and traditional ideologies of masculinity and patriarchy, who persist despite adversity. These cultural narratives have deep roots in the historical and social contexts of agricultural communities, where survival and success depend heavily on hard work, endurance and the ability to withstand challenging conditions.

Difficult working conditions mean workloads are often unrelenting. Added to this, lone working in isolated rural areas and the constant need to be available – cause feelings of loneliness and social isolation, significant factors impacting overall wellbeing. The requirement to be constantly available is a tangible risk to social relationships, can lead to family conflict, and is detrimental to the psychosocial wellbeing of farmers and farm workers. There are limited opportunities for rest and relaxation, a major cause of occupational stress impacting farmers' and farm workers' fatigue levels, leisure time and mental wellness. A lack of infrastructural investment in rural areas and the rise in autonomous, isolated working are exacerbating these risks.

Furthermore, values and behaviours associated with traditional farmer cultures influence help-seeking behaviours and mental health stigma, as masculine stereotypes, stoicism and rural socio-cultural norms (e.g. gender division of labour) are internalised by males and females alike. This may again contribute to farmers and farm workers withdrawing and self-isolating, and farmers' reticence to discuss problems, combined with a tendency to self-isolate, means issues worsen over time. Additionally, farmer prejudice and stigma, associated with public beliefs that farming practices are harmful for animals and the environment, are causing feelings of alienation. According to sector stakeholders, public attitudes are having a profound impact on farmers' and farm workers' feelings of dignity, value, importance, and

physical and psychological safety, influencing the decisions of potential newcomers and farmers' children to remain in or enter the sector.

Economic, regulatory and administrative pressures are critical stressors

Financial insecurity contributes to feelings of uncertainty and unpredictability among farmers and farm workers. This risk is more likely to impact farmers than farm workers, as farmers have ultimate responsibility for farm and business survival. In some cases, regulatory compliance, controls of exports, food prices and the receipt of subsidies (e.g. the EU's common agricultural policy) are shaping farmers' livelihoods and the agricultural market. Economic policy, market pressures, credit accessibility, reductions in bargaining power and the inability to control the return on investments lead to adverse mental health outcomes including stress, depression and, in worst-case scenarios, suicide. Fear of financial disaster precipitating business failure and farm loss, pressure to continuously invest to sustain productivity levels, tight profit margins, low incomes and wages, job loss and farm profitability contribute to financial strain. For example, in France, twice as many farming households live below the poverty threshold as the national average.

Economic, environmental and regulatory policies impact farmers' administrative burdens with increasing regulations becoming a significant source of stress. Proper understanding and implementation of these policies are crucial for income stability and farming practices.

Moreover, financial insecurity and regulatory pressures challenge farm succession. Thus, safeguarding against farm loss is a significant concern, particularly for older farmers. Downward pressure on farm owners is contributing to a trend of farm consolidation and business restructuring. However, initial financial gains from larger farming enterprises may eventually lead to more intensive production as farmers need to produce more to survive economically. Additional risks associated with farm consolidation include increased management responsibilities and reduced social support due to rural population decline.

A sector experiencing profound transformation

Transformations in agriculture, influenced by increased capital intensity, digitalisation, climate change, demographic decline and rising demand for organic produce, give rise to additional stressors. The demographic profile of the stereotypical male farmer is changing as farmers and farm workers exit the sector and women and migrants take up vacant roles. Meanwhile, digitalisation is underway, although unevenly spread across the EU. Likewise, converting to organic agriculture is a growing trend associated with increasing demand for organic produce, among other factors. Universal requirements linked with each of these trends, including climate change, involve altering work practices, and making financial investments and upskilling necessary.

Unique stressors are also inherent in each of these trends. Climate change, evident by the increased incidence of prolonged heatwaves, leading to drought, and number of floodings, poses risks to productivity, reduces farming businesses, limits access to essential services, and affects the health of animals, crops, farmers and farm workers. Workloads increase and new tasks (e.g. night-time watering) emerge, further impacting resting time. Mental health outcomes linked to climate change include an increased risk of depression, hopelessness, trauma and solastalgia. Meanwhile, policy measures attempting to counteract the negative effects of climate change increase feelings of stress and uncertainty. Additionally, new technologies increase cognitive workload, result in feelings of monotony and loneliness, trigger concerns about data privacy and security, and cause an overall loss of autonomy and control associated with dependence on external providers for rectifying issues linked to new digital tools.

Amid this backdrop, concern for agriculture's future is leading some farm owners to convert to organic farming. Farm conversion can take up to three years, and stressors encountered during this period can include reduced yields, adapting to stronger ethical accountabilities, financial uncertainty, higher workloads, reorganisation of labour and food production, and scepticism among support networks. These factors can trigger feelings of anxiety, nervousness and incidences of severe stress.

Demographic factors and farming type increase psychosocial risk exposure

Groups more vulnerable to psychosocial risks in agriculture are women, seasonal and migrant workers, and younger and older adults, according to the literature and sector stakeholders. Additionally, belonging to a farming family and engagement in specialised, industrial and conventional agricultural production (e.g. pig farming, dairy production) are associated with higher exposure to psychosocial risks compared to practising diverse or organic farming.

Specific risks for women farm workers are twofold. Firstly, women's role in farming families and the associated social expectations, along with the household burden they bear, can cause role conflict and stress. Meanwhile, the risk of domestic violence in remote, rural locations is an additional vulnerability factor. In conjunction with these stressors, female farmers and farm workers, who make up almost one-third of the workforce, must deal with challenges including land rights and succession planning, professional recognition and inclusion, income inequality, and discrimination to access agriculture-related education, finance and technology. Furthermore, as gender roles evolve, conflict may arise between males and females in the sector, further impacting the mental and emotional health of both groups.

Young and older farmers, as well as farm workers, experience specific psychosocial risks. For example, work experience levels are correlated with coping mechanisms and resilience levels. For younger farmers, specific risks include a lack of farming experience and challenges associated with the continuation of family farming. This latter factor is specifically linked to bureaucratic and legal hurdles. Additionally, farmers' children are exposed to work–family conflicts from an early age and intergenerational conflict associated with farm modernisation may be a contributing factor to family conflicts. Farm succession and income concerns during retirement are also stressors for older farmers, which cause them to work beyond retirement. As such, physiological changes and comorbidities impact older farmers' and farm workers' physical capacity and increase their risk of experiencing an occupational injury, itself a mental health stressor.

Migrant and seasonal farm workers are making up a growing proportion of the agriculture workforce. Challenges experienced by this group of workers include physically, psychologically and/or sexually abusive work and living conditions, liberty restrictions, and irregular, sometimes illegal employment. Rural areas are known to be 'medical deserts'. Thus, limited healthcare combined with legal issues, exacerbated by language and cultural barriers, intensifies the significant impact of these risk factors. Furthermore, episodes of discrimination and racism from the local population and family separation increase the likelihood of distress, worsening stressors associated with loneliness and social isolation. Low-skilled farm workers have higher concerns about workplace conflict and are more vulnerable to psychological violence from employers. Income and job insecurity further impact migrant, seasonal and low-skilled workers' stress levels.

Lesbian, gay, bisexual, transgender, queer and other (LGBTQ+) individuals may also be at heightened risk of developing mental health problems; however, neither the literature nor sectoral stakeholders discussed this factor.

Mental health problems are widespread

Studies indicate a statistically higher occurrence of **suicide** rates in the EU and globally among farmers and farm workers compared to other occupations. In one study 20% of farmers experienced suicidal thoughts. Risk factors for suicide completion include long working hours, financial precarity, poor social relationships, and access to lethal means (e.g. chemicals, medication, guns and ropes). Unforeseen events, such as economic recessions, can increase suicidality, and changes to income subsidies may be an additional stressor for farmers. Equally, prolonged adverse climate events might also contribute to suicide outcomes.

Stress is the most prevalent response to psychosocial stressors, with financial insecurity being the primary driver. Contributing factors are regulatory and administrative pressures, disruptive global issues (e.g. war in Ukraine), safeguarding the farm for future generations and agriculture's unique position in the macroeconomic system. **Fatigue** is consistently associated with negative mental health outcomes, with disturbed sleep patterns increasing the risk of injury and illness; thus, initiatives available in some EU Member States that provide respite and replacement workers are invaluable supports for farmers

and farm workers. Furthermore, social isolation, alienation and a lack of social support significantly exacerbate distress levels. These factors are worsened by public prejudice towards farmers and internalised values in farming cultures, influencing help-seeking behaviours, and where mental health issues arise and distress intensifies, self-isolation can increase. This may further impact help-seeking ability, already influenced by the low availability of community resources and cultural norms in rural areas.

Depression, burnout and anxiety are other prevalent negative mental health outcomes. According to surveys nearly half of interviewed farmers and farm workers showed symptoms of depression, one in four respondents faced burnout and one in five had symptoms of depression. Work–family conflict, legacy issues, high workloads, financial insecurity, task design, a lack of social support, social relations, and pressure from economic and environmental policies contribute to depression and burnout. Women are more likely to be diagnosed with **anxiety disorders** than men, and a plethora of worries regarding health — whether it be the health of animals, plants, farmers or family members — are potent contributors to feelings of anxiety. Other health outcomes linked to psychosocial risks in the agricultural sector included substance misuse, feelings of anger and frustration, and the development of musculoskeletal diseases.

Extrapolating findings on the impact of mental health on farm businesses is challenging as nine out of 10 EU farms are family-owned where at least half of the activities are carried out by farmers, their children, relatives and partners. Most farmers are also employed elsewhere, muddying the waters further. Indeed, literature on organisational outcomes arising from farmers' and farm workers' mental health problems is scarce. From what is available, absenteeism, job turnover and the allocation of disability pensions are indicated as potential negative outcomes threatening business survival, fiscal expenditures and employee turnover rates.

A lack of comprehensive data makes it challenging to quantify the prevalence of psychosocial risks and the extent of other mental health issues in the sector, despite the fact that awareness of the importance of mental health is growing.

Address the sources of risk to protect farmers' and farm workers' mental health

To improve mental health in the sector, addressing the sources of risk — production, organisational, reputational (i.e. public perception of farming practices), financial and human (e.g. stigma) — is paramount. Some countries have already taken steps in this direction via specific policy initiatives and research projects. These countries aim to tackle the sources of risk by providing programmes, public resources and recommendations enhancing mental health outcomes. Most of the good practices identified in this report favoured individual interventions by providing important services such as specialist farmer helplines (e.g. *Lebensqualität Bauernhof*, Austria), respite programmes (France and Finland), awareness-raising and training about mental health and psychosocial wellbeing at work (e.g. RAPSY, Belgium), and the provision of peer networks (e.g. *Bondekompisar*, Sweden; *Agro Woman*, Poland). Specific tools at the disposal of farmers and employers include the Farm Safety Foundation's 'Little Book of Minding Your Head', a resource defining different mental health problems, providing practical advice, including a tool for users to identify and cope with stress. Additionally, time-limited EU-funded projects, such as FARMWELL, providing a range of tools for farmers and farm workers across the EU, were also highlighted for their cost-effective interventions.

Protecting farmers' mental health is inherently linked to job satisfaction. Thus, a thriving farm, having a secure succession plan, financial security and income stability, business efficacy and entrepreneurial competency were all found to have a positive effect on mental health outcomes. Equally, making farm improvements, whether by implementing digital tools or converting farm type, mitigates a range of psychosocial risks. This includes improving workloads, increasing autonomy and control, stabilising incomes and reducing costs, and increasing attachment with farms and nature.

Further guidance and research

Tackling psychosocial risks in the agricultural workforce requires political intervention, and the support of intermediary organisations such as farmers' and farm workers' representatives. Considerations that emerged from this study include:

Considerations for farmers and employers

- **Evaluate psychosocial risks** in agriculture and develop action plans addressing those risks by using practical online tools such as the EU agricultural OiRA tool.
- Develop, implement and enforce **workplace OSH policies**, including policies addressing psychosocial risk factors.
- Invest in **OSH training** including modules on psychosocial risk and mental wellbeing.
- **Diversify** farming practices which benefits farm production, farm profits, health and ecological outcomes.
- Ensure **migrant and seasonal workers** are employed according to local laws and regulations and provided with adequate accommodation, support and supervision.

Considerations for sectoral, intermediary organisations and education services

- Develop and maintain solid and **supportive networks**.
- **Promote agriculture's reputation** by enhancing appreciation among citizens to reduce stigma.
- **Train and provide tools** to recognise the signs and symptoms of mental health issues.
- **Develop and promote easy-to-use online risk assessment tools** for farmers and farm workers such as the EU agriculture OiRA tool.
- **Increase mental health awareness** through communication activities by creating group activities and culturally appropriate campaigns.
- **Strengthen resilience, skills and digital literacy** through personalised training and individual career coaching.
- **Address financial security** by supporting farmers to develop comprehensive business management plans.
- Provide tailored support and **assistance with setting up a farm**.
- **Promote gender equality and diversity** via tailored training addressing diversity and inclusion.
- **Integrate migrant workers** via initiatives that include language training and ensure the provision of safe and secure accommodation.

Policy pointers

- Improve **infrastructure and access to healthcare in rural areas**, including domestic violence services.
- Enhance **access to public support programmes** and provide specialised services tailored to agricultural challenges.
- **Enhance cooperation** between national agriculture, occupational health, and health and social care departments.
- Prioritise **reducing elevated suicide rates** and mental health issues within farming communities.
- Address financial insecurity to **guarantee fair pricing for agricultural produce** and farmers' revenues.
- Support **farm inheritance** by providing legal guidance and financial assistance to young farmers to help alleviate succession concerns.
- Establish specially designed **support services for farming women and other groups** (e.g. migrants, young and older farmers and farm workers).
- Create opportunities for **rest and relaxation** through **specific substitute programmes**.
- Support **farm conversions** and the diversification of farming practices and raise awareness of the benefits of non-conventional, organic farming.
- Support **legislative initiatives and programmes** that address regulatory bottlenecks and reduce administrative burdens.

Future research directions

- Collect more comprehensive EU-level data on mental health outcomes in the agricultural sector.
- Close research gaps related to climate change, digitalisation, and specific risks for LGBTQ+ workers, female farmers and non-owner farm workers.

1 Introduction

1.1 Background

This report examines psychosocial risk factors and their corresponding mental health outcomes among farmers and farm workers in the agricultural sector following a call by the European Commission for more initiatives tackling psychosocial risks at work. This call, published in the Commission's 2023 Communication on a comprehensive approach to mental health, underscored the need to focus on new and previously overlooked occupational sectors, including agriculture.

Psychosocial hazards, according to Cox and Griffiths (1995), are defined as 'those aspects of work design and the organisation and management of work, and their social and environmental context, which may have the potential to cause psychological or physical harm'. These aspects may be related to job content and design, workload and work pace, job control, environment and equipment, organisational roles, home–work interface, organisational culture, interpersonal workplace relationships and career development (International Labour Organization [ILO], 2022).

In agriculture, work-related psychosocial risks stem from physical (e.g. animal handling and crop planting), structural (e.g. agricultural and related legislation and policies), and relational factors (e.g. social support and rural context). In the context of poor physical and environmental working conditions, psychosocial risks typically interact with ergonomic-related risks, inducing musculoskeletal diseases (MSDs) such as arthritis and back pain (Arjona-Fuentes et al., 2019; EU-OSHA, 2023a).

Psychosocial risks, mental health and stress are perceived as important challenges facing the sector. Almost half of farmers and farm workers (45%) work 10-hour days, exceeding a 48-hour week, which is starkly above the EU-27 average of 25% (EU-OSHA, 2013). Mental health problems are widespread, for example, in Finland, a survey of farms found that 55% of respondents experienced stress in farm work (EU-OSHA, 2013), in England and Wales, 31% of surveyed farmers and farm workers reported problems with anxiety/depression (Wheeler & Lobley, 2022), in Ireland, one in four farmers faced burnout (O'Hagan et al., 2024), and in France, suicide among male farmers and farm workers is 20% higher than the average national suicide rate of other professions (EU-OSHA, 2023a).

Against this backdrop, this report delves into the impact and implications of psychosocial risk exposure for farmers and farm workers. Building on previous European Agency for Safety and Health at Work (EU-OSHA) (e.g., EU-OSHA, 2013, 2021a), this report outlines the main psychosocial risks in the sector, investigates how these exposures affect farmers' and farm workers' health, and additionally examines the interplay between psychosocial risk factors. To this end, qualitative research was conducted to investigate psychosocial risks in the sector and identify a collection of good practices for their prevention and management. Finally, the report concludes with considerations for future research and policy pointers.

1.2 Methodology

This study employed a mixed methodology comprised of a scoping review of the scientific and grey literature¹ and semi-structured interviews with selected stakeholders to collect data relative to all sections of the report.

¹ The process for the scoping literature review involved the selection of an agreed list of keywords to be employed for scoping through three literature-specific databases (i.e. PubMed, Scopus and Google Scholar). The keywords were introduced following flexible combinations in the search engines. The desk search for the grey literature involved a comprehensive web search across various platforms (e.g. Google, Elsevier, ResearchGate, Social Science Research Network) to locate relevant documents. Additionally, snowballing, a method wherein initial literature is used to identify subsequent studies, exploration of websites from relevant networks and organisations, references to documents of interest from interviewed stakeholders and direct suggestions from EU-OSHA were included in the literature overview. Relevant publications from both searches were introduced into an Excel dataset for in-depth screening and selection. The research team reviewed the full publications and completed a series of control fields relative to document content (e.g. sociodemographic, specific occupations observed, design and study sample, psychosocial risks, outcomes, evidence of protective factors, possible recommendations) to decide on their eligibility for inclusion. Eligible publications were finally exploited in multiple chapters of this study.

For the semi-structured interviews, relevant EU- and national-level sector stakeholders were identified, including social partners, public organisations, industry representatives, networks, and organisations with potential expertise and interest in the topic.² Thematic analysis allowed for the systematic identification of themes and patterns across the interviews, adding insights to the findings of the scoping review.

Good practices were identified based on the scoping review and interviews. The analysis prioritised prevention, rehabilitation and mental health promotion initiatives targeted at the organisational level and initiated by employers in the agricultural sector. Second-level criteria included information availability, an emphasis on wellbeing and mental health, and evidence of concrete initiatives and interventions improving farmers' and farm workers' mental health outcomes. The list of considerations and policy pointers in the last part of the report were compiled drawing from the key findings that emerged from the literature review and stakeholder interviews and combined with evidence from the good practices included in this report.

1.3 Understanding the European agricultural sector

Self-employed farmers form the majority of the agricultural workforce. In 2020, 93% of the 9.1 million farms in the EU were family farms, which are defined as farms where 50% or more of the agricultural labour is provided by family members working to help run the agricultural business. Fifty-seven per cent of these family farms are operated only by the holder and family members with less than one-third of the owners being women (Eurostat, 2023b; European Commission [EC], 2021b).³ Family farms account for at least 80% of all farms in all EU Member States, except for Estonia (65%) and France (58%). As regards farming activities, 58% of all farms were classified as specialist crop farms, 22% of the EU's farms were specialist livestock farms, and 19% had mixed production (multiple crops and/or livestock) (Eurostat, 2023b). Within crop farming, organic farming in the EU corresponded to 9.1% of the total utilised agricultural area, with Austria (25%), Estonia (22%) and Sweden (20%) accounting for the highest number of organic farm areas (Eurostat, 2023b). Although non-family farms only represented about 7% of all farms in the EU in 2020, they accounted for 39% of the amount of land used for agricultural production, 45% of livestock units and 44% of standard output (Eurostat 2023b). Since this category of farm businesses employs a considerable number of farm workers - about 22% of the total labour force – with a high percentage being migrant or seasonal farm workers - this report highlights findings specific to farm workers when available in the research.

Farming across the EU is changing and diversifying. For example, organic farming is becoming increasingly popular for a multitude of reasons (Eurostat, 2024). Farm sizes are growing, and the total number of farms is decreasing, with farm consolidations resulting in more intensive farming activities (EU-OSHA, 2023a). The workforce is also changing as the labour force rapidly ages: in 2023, 57.6% of farmers were at least 55 years old (Eurostat, 2023b). From 2011 to 2017, over 1.3 million national farmers left the sector, and a further decline of 7.7 million is expected by 2030 (European Parliament [EP], 2021). Given evident workforce shortages, the demographic profile of the stereotypical male family farmer is evolving as more women and migrants enter the sector (EP, 2021; EC, 2021a; Eurostat, 2023b; Cedefop, 2023). Yet, despite these positive changes, female farmers, farm workers and migrant workers alike



² All interviews were conducted in English and audio-recorded for verbatim transcription. The interview guide contained a mix of open-ended questions for in-depth exploration of participants' experiences and perceptions, as well as specific prompts to ensure that essential topics were covered consistently across interviews.

³ The amount of family farms varies within the EU. 2.9 million family-farm holdings (the equivalent of 31.8%) were in Romania, which has twice the number of farms compared to any other Member State. There were 1.3 million farms in Poland (the equivalent of 14.4% of the EU total), 1.1 million farms in Italy (12.5%) and 0.9 million in Spain (10.1%).

experience discrimination and challenges connected to integration and working conditions (POLITICO, 2022).

Agricultural work is labelled as being one of the most hazardous occupations in Europe; the sector is generally known as having physically and mentally demanding roles with high rates of occupational accidents (EU-OSHA, 2000, 2013, 2021a, 2021d). And in surveys, people, working in the sector, report that their work impacts their health (e.g. EU-OSHA, 2013, 2000). This finding is not unfounded, as the combined sectors of agriculture, forestry and fishing were among the only two witnessing an increase in non-fatal work accidents in 2020 (Eurostat, 2023a). In 2021, the sector was listed as one of the most fatal sectors, with 382 cases recorded (Eurostat, 2023a). However, estimates suggest these figures could be at least three times higher (European Federation of Food, Agriculture and Tourism Trade Unions [EFFAT], 2019). Exposure to accidents may encompass long-term consequences such as side effects of pesticide use, the development of MSDs and even enduring mental health outcomes (EFFAT, 2019; EU-OSHA, 2000). However, fatal and non-fatal accidents are often not recognised as occupational in nature.

While all employers in the EU, including farmers employing workers, must carry out comprehensive risk assessments and put preventive measures in place, this may not occur in practice (see SACURIMA – Leppala et al., 2021 for further information). Specific risks to be covered in assessments include chemicals, biological agents and manual handling, for example. Psychosocial risks and MSDs are also areas covered by the OSH Framework Directive 89/391/EEC.⁴

The different professional categories in the agricultural sector - farmers and farm workers – are dealing with both common and sector-specific challenges. For example, farm owners face growing regulatory and administrative burdens, diminished control over their work, the intensification of production and a simultaneous weakening of the farm economy (Kallioniemi et al., 2016). Both farmers and farm workers are further vulnerable to stressors derived from risks such as farming tasks and working conditions. Migrant farm workers struggle with social relations and cultural adjustment adding to their psychosocial risks. Young workers are being driven away from the sector due to difficult working conditions, heavy workloads, and blurred boundaries between work and personal life. Climate change impacts the attractiveness of the sector, with reduced rainfalls, more frequent droughts, forest fires and flooding (Tondo, 2024). Additionally, the automation and digitalisation of the sector are facilitating smart farming practices, resulting in fewer jobs, which require more advanced, specialised skill sets (Leppala et al., 2021; Eurostat, 2023b). European agriculture operates within a highly regulated framework, primarily governed by subsidies and oversight of production activities, thanks to the EU's common agricultural policy (CAP) and other related legislation.

The agricultural sector and its workforce are rapidly changing under the impetus of climate change, digitalisation, automation, and growing regulatory and administrative burdens. These evolving trends and challenges further complicate the already difficult working conditions and emphasise the need for increased attention within the scientific and political communities.

⁴ Directive 89/391 - OSH "Framework Directive" of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work – "Framework Directive": <https://osha.europa.eu/en/legislation/directives/the-osh-framework-directive/the-osh-framework-directive-introduction>

2 Overview of psychosocial risk factors and mental health in agriculture

2.1 Previous overviews

Previous research has endeavoured to provide comprehensive overviews of the psychosocial risk factors affecting European agriculture farmers' and farm workers' mental health (EU-OSHA, 2000; Fraser et al., 2005; Thelin & Donham, 2016; FARMRes, 2023).

Drawing from this literature, the sector imposes high job demands, both physically and mentally, departing from the typical five-day working week. Farmwork is characterised by tasks often carried out in relative isolation, requiring long working hours as animal and crop care demand constant availability. This means farmers and farmer workers have continuous shifts and are exposed to time pressures, particularly during harvest seasons, with limited time for recovery. As farming is frequently carried out on the same land where farmers' family homes are located, work patterns and the farm's location can blur the boundaries between work and family life. Safeguarding the farm from diseases, the effects of climate change or physical damage, such as rural crime that sabotages infrastructure, adds to stress levels.

Structural factors inherent to the role of agriculture in cultural, social, economic and political contexts also contribute to stress. Farming remains embedded in rural communities shaped by traditional values of a patriarchal and stoic nature. Running a farming business generates stress due to concerns about financial instability, driven by the need for constant raw material purchases, generating hard debt, and the inability to control return on investments affected by unpredictable events, including weather, market fluctuations and occupational accidents. Additionally, regulatory and administrative pressures compel farmers to adapt to new standards and regulate prices based on macroeconomic policies. Meanwhile, farmer stigmatisation is on the rise, fuelled by some media portrayals depicting them as profit-driven individuals who disregard the welfare of plants and animals.

Global issues, and their effects on the labour market, can also introduce new stressors for professionals in the sector. This can hold true whether in terms of disruptive circumstances (like the COVID-19 public health crisis), long-term trends like the adoption of advanced mechanisation and digitalisation technologies, or challenges posed by climate change. Risk factors also vary according to professional status (e.g. farmers versus farm workers) or the specific nature of vulnerable worker groups (e.g. additional risks for women or migrants).

Efforts have been made to systematically categorise and classify the psychosocial risk factors and the groups of workers affected in agriculture. For instance, the FARMRes project identified three groups of risk factors categorised as economic-sectoral risks (e.g. financial uncertainties, regulation and administrative burden), personal-family risk factors (e.g. farmer culture risks, work-family balance, loneliness and stigma), and professional-labour factors (e.g. the unique nature of the profession, specific working conditions) (FARMRes, 2023).

An overview by Thelin and Donham (2016) identified that sources of stress in agriculture included the economy, relationships with governmental authorities, neighbours and family members, and psychosocial or physical workplace factors. They also established that these risk factors can simultaneously be protective factors, countering detrimental health outcomes linked to physical health and mental wellbeing. Fraser et al. (2005) identified and classified the effects of psychosocial hazards based on criteria, such as gender, age and farm family versus seasonal worker status, concluding that an array of stressors related to economic uncertainty, the physical environment and the structure of farming families are potentially detrimental to farmers' and farm workers' mental health.

Ramos et al. (2021) identified up to five categories of vulnerable workers in European agriculture, including foreign-born farm workers (distinguished between third-country nationals and EU seasonal migrants), entry-level farmers (young workers or newcomers to the sector), farm families, and farm workers with either physical or intellectual disabilities. Recent work from the Swedish Agency for Work Environment Expertise (2022) aligns more closely with the scope of the current overview, as it not only included traditional reviews of known risk factors but also provided an initial overview of structural factors

and trends (e.g. rural crime, policy pressure, climate change) while focusing on vulnerable categories, such as gender norms and differences.

An important limitation revealed by this literature overview is that most research on mental health and psychosocial conditions relies on cross-sectional or observational studies, characterised by one-time surveys with no follow-up of workers. These studies have limited ability to identify causal associations (Thelin & Donham, 2016). Longitudinal studies, observing the same workers repeatedly over a period of time, are scarce in the literature, mirroring a trend observed in other professional sectors (EU-OSHA, 2023a). Furthermore, it is noted that findings on psychosocial risk exposure and mental health outcomes of farmers and farm workers in Europe often concentrate on a smaller selection of countries, such as Finland, Ireland, Norway and Spain. This underscores the need for comparative research encompassing worker samples across European countries, as suggested in the considerations.

Another limitation in the research was the interchangeable use of the term farmer with the term farm 'worker' (e.g., Demos et al, 2013; Du et al, 2021; Fraser et al; 2005). Some studies grouped these occupational groups together (e.g., Bower et al., 2021), while others disaggregated findings between the two groups (e.g., Hagen et al, 2019; Brigance 2018). While most studies focused on farmers' psychological wellbeing, studies that investigated both occupational groups suggest that minimal differences exist in psychosocial risks and mental health outcomes across these professional categories. Given that both farmers and farm workers operate in similar physical and environmental conditions, most findings in this report can be extrapolated to both groups. However, when available findings in the research specific to farm workers are highlighted.

The subsequent sections of this report explore the evidence on psychosocial risks and their potential mental health consequences using an enhanced framework. The framework used here, inspired by Harvey et al. (2017), recognises three categories of risks affecting the agricultural sector: farming tasks and working conditions, social and cultural relations, and structural factors (e.g. financial insecurity). The following subsections provide EU-specific evidence on exposure, analysing the most common mental health outcomes derived from this, and emphasise also findings related to societal trends and vulnerable worker groups.

2.2 Tasks and working conditions

Farming is a demanding occupation characterised by intensive physical activity, the continual need to care for plants or animals, infrastructure maintenance and the use of specialised equipment. The types of farming activities, animal-based, crop harvesting or organic farming, pose different risks to farmers and farm workers. Additionally, farming tasks occur either in an open environment or within enclosed spaces with specific conditions (e.g. greenhouses, cowsheds). Consequently, this section provides an overview of the risks associated with the specific design and management of tasks in farm work, as well as the risks that are associated with the working conditions under which these tasks are performed.



The prevailing literature acknowledges that farming is a profession demanding long working hours, often extending beyond the traditional eight-hour workday (EU-OSHA, 2021a, 2000; Fraser et al., 2005; Elliot et al., 2022; Brennan et al., 2021). Past evidence from the European Federation for the Improvement of Living and Working Conditions (Eurofound) supports this, as both farmers and farm workers in the agricultural sector frequently report working overtime, with shifts commonly exceeding 10 hours and a weekly workload surpassing 48 hours (Parent-Thirion et al., 2007, p.19). Furthermore, there is a pronounced prevalence of shift work and the requirement for constant availability, extending into night-time, weekends and holiday seasons (EU-OSHA, 2000, 2013; Elliot et al., 2022).

Long working hours are associated with reduced sleep as well as less time to rest or relax at the end of a shift (EU-OSHA, 2000, 2013; Elliot et al., 2022; Mattila et al., 2022). A lack of rest is a significant cause of occupational stress and physical and mental fatigue. These risks are compounded by the seasonality

of the job, with time pressure arising from the essential need to complete tasks within specified deadlines (EU-OSHA, 2000, 2013; Elliot et al., 2022; Brennan et al., 2021; Daghigh Yazd et al., 2019) as agricultural tasks are dictated by the life cycles of plants and animals, requiring attention and maintenance throughout their lifespans. Examples include the life cycle of crops (e.g. seeding, watering, plant harvesting) and the demands of animal care (e.g. feeding, breeding, dairy milking).

Exposure to environmental stressors such as light, weather, temperature and noise contribute to fatigue and stress (EU-OSHA, 2000, 2013; Daghigh Yazd et al., 2019). Seasonality also plays a major role in these exposures and the resulting stress (e.g. summer seasons with hot days and high UV concentration in the field, or cold/damp environments in greenhouses or animal sheds). Additionally, equipment used during task execution exposes all worker categories to further risks. A common example in the literature is the exposure to chemical agents frequently used for pest control (EU-OSHA, 2000; Deipenbrock et al., 2015). In the context of forestry-dedicated production, Kallioniemi et al. (2009) suggest that the extensive use of pesticides and workers' inexperience in handling complex occupational injuries specific to this line of work can be significant risk factors contributing to adverse mental health outcomes. While claims have been made about the neurotoxic effects of these substances leading to mental health problems, the literature still faces contested evidence amid ongoing scientific debates.

2.2.1 Association between MSDs and psychosocial risk

The literature also considers the dual impact of high workloads on the physical and mental health of farmers and farm workers. Excessive physical strain and ergonomic demands are closely linked to the development of MSDs (e.g. arthritis), which, in turn, can have mental health implications (EU-OSHA, 2013; Ramos et al., 2021; Urrego-Parra et al., 2022; Mattila et al., 2022; Du et al., 2022; Osborne et al., 2011).

MSDs encompass a range of inflammatory and degenerative diseases affecting various body areas due to the physical strain associated with manually demanding jobs. Causes include heavy lifting, exposure to full-body vibrations, improper posture, sudden and forceful movements, direct mechanical pressure on body tissues and exposure to unfavourable outdoor conditions (e.g. low temperature) (EU-OSHA, 2019; EFFAT, 2019).

The relationship between psychosocial risks and MSDs is bidirectional (EU-OSHA, 2021a). On the one hand, stress, manifested through physical tension in the body, increases vulnerability to MSDs, as long working hours, working under pressure, repetitive and monotonous activities, and intensive shift work contribute to stress and MSD onset (EFFAT, 2019). On the other hand, MSDs, and in particular the persistent pain and sometimes disability resulting from them, can cause or exacerbate psychological problems such as anxiety and depression. For example, a cross-sectional study of farmers established a connection between ergonomic hazards (forceful exertions, repetitive tasks, awkward postures, frequent manual labour and vibration) and the development of exhaustion, sleep deprivation and high levels of stress all contributing to the onset of MSDs (Du et al., 2022). Furthermore, the development of MSDs not only stems from ergonomic hazards but also contributes to mental health issues. Research has used the concepts of physical pain or the diagnosis of MSDs to estimate their contribution to the appearance of negative mental health outcomes (Urrego-Parra et al., 2022; Osborne et al., 2011). This creates a downward spiral where stress causes MSDs, and the resulting discomfort contributes to further stress, impacting the worker's mental wellbeing.

2.3 Farming cultures and social relations

Farms, due to their need for large spaces and incompatibility with heavily urbanised areas, are often situated in rural locations, limiting access to social spaces. Moreover, farm work is often performed alone (such as tractor use) and, because of long working hours, leaves little room for leisure and social activities. The physical separation from broader society and the unique nature of farming have contributed to the development of a distinct farm culture — one that is grounded in traditional and conservative principles.



This section delves into three factors that can contribute to a worsening of mental health in farmers and farm workers: social relations, work–life balance, and culture and identity.

2.3.1 Social relations and work–life balance

Farming is often a solitary profession, especially given regular lone working and recent advancements in digitalisation and mechanisation practices (EU-OSHA, 2000, 2013; Wheeler et al., 2023). Many routine operations require farmers and farm workers to operate equipment alone, fostering a sense of loneliness and a lack of workplace support when facing difficulties. Beyond the work context, the farming profession can contribute to persistent feelings of isolation, leaving individuals with a sense of having no one to turn to in times of trouble (Royal Agricultural Benevolent Institution [RABI], 2021; Kallioniemi et al., 2016; Wheeler et al., 2023). Longitudinal studies identify low social support as a key factor contributing to negative mental health outcomes in farmers and farm workers (e.g. Brew et al., 2016).

Physical remoteness plays a major role in the low levels of social support experienced by farmers and farm workers (EU-OSHA, 2013; Brew et al., 2016). The literature emphasises the need for constant work availability and the resulting work–life conflict as tangible risks impeding farmers' social relations (EU-OSHA, 2000, 2013; House of Commons Canada [HOCCA], 2019; Fraser et al., 2005). With a persistent 'my home is my business' attitude, farmers can often find themselves compelled to overlook leisure and relationships with non-family members. This can lead to a diminished presence of, or infrequent interactions with, friends, neighbours and peers.

Having little connection with the outside world increases the likelihood that family relationships play a major role in farmers' overall wellbeing. Connected to this is the fact that family farms remain among the most prevalent types of farming businesses in the EU. Consequently, the risk of work–family conflict, especially with family members actively involved in farming operations, is regarded as a significant threat to farmers' mental wellbeing (Fraser et al., 2005).

Some studies have, however, suggested a relatively low impact of workplace risks related to social and workplace relationships for family farmers (e.g. organisational justice, worker-to-worker conflict) (Thelin & Donham, 2016). While this observation may hold true considering the prevalence of family-run farms, further insights into these risks are provided for other farm worker categories in the section discussing professional status below.

2.3.2 Culture and identity

For centuries, farmers have played a pivotal role in shaping a set of traditional and conservative values associated with the image of resilient individuals who persevere in their profession despite various adversities, such as animal disease and challenging production seasons. Still today, farm culture is seen as a complex interplay of masculinity, patriarchy, strength and stoicism reminiscent of Greek ideals (Chiswell, 2022; Hammersley et al., 2023; Brew et al., 2016; Wheeler et al., 2023). While such cultural attitudes are not universally viewed as negative, certain values and behaviours within this culture can interact with psychosocial risks. First, farmers are less likely to report work-related psychosocial risk factors than other professional groups despite the high prevalence of mental health problems. (EU-OSHA, 2024d). Second, farmers have some of the highest rates of discomfort when it comes to discussing mental health issues. This may be related to inherent cultural factors such as ideas about endurance and stoicism. Perceptions about masculinity and strength may lead to a reluctance to seek help during stressful times, both personally and professionally, due to fear of stigma and discrimination against perceived signs of weakness (Le Progres, 2024; HOCCA, 2019; Fraser et al., 2005). Traditional values may also give rise to toxic masculinity and discrimination against women farmers and farm workers.

2.4 Structural factors

Additional factors of a more structural nature contribute to psychosocial risks in farm work. These factors are inherent aspects of the profession that influence and shape the agricultural sector and, by extension, farmers and farm workers. Seven structural factors emerged from the literature:

- Regulatory pressure
- Financial instability and insecurity
- Farm succession and the future of agriculture
- Rurality
- Health concerns
- Farming type
- Professional status

The United Kingdom's (UK) Big Farming Survey (RABI, 2021) dedicated an entire section to the causes of stress in the farming community, aligning with those above. Causes of stress reported by farmers and farm workers included financial pressures, the future of the farm/farming, public/policy pressure, loss of subsidies/future trade deals and rural crimes. Further, the study highlights their combined potential to cause stress, with farmers being exposed on average to six distinct sources of stress simultaneously.

2.4.1 Regulatory pressure

Farmers are facing substantial regulatory pressure. Calls for environmental protection, animal rights, technological progress and even market regulation have translated into a series of stringent policies that all farmers must adhere to when producing and conducting business. The correct understanding and implementation of these policies are significant sources of stress for farm owners and farm workers alike. Regulatory pressure involves compliance with a broad set of EU legislation enforced in the European Single Market (EU-OSHA, 2000, 2013; Brennan et al., 2021; Kallioniemi et al., 2016; Daghagh Yazd et al., 2019; Hammersley et al., 2023). This encompasses norms related to food safety, animal health, biotechnology, genetically modified organisms, and environmental standards concerning resource use (e.g. water) and pollution control. Furthermore, at the European level, OSH is increasingly promoted throughout the entire agri-food supply chain through 'contractual governance', which involves various forms of formal tendering, contracting, auditing and monitoring of suppliers' work processes through acknowledged schemes of standards (e.g. the EU Code of Conduct on Responsible Food Business and Marketing Practices) (EU-OSHA, 2023b).

The European agricultural sector is also influenced by one of the few macroeconomic policies strictly coordinated by European institutions. For historical and economic reasons, the CAP had established a robust link between public regulation and agriculture, subsidising production as well as regulating export and sales prices for food products (Janker et al., 2021). Consequently, farmers experience stress arising from economic policy and market pressure (EU-OSHA, 2000, 2013; Brennan et al., 2021; Daghagh Yazd et al., 2019; Kallioniemi et al., 2016; Hammersley et al., 2023; Janker et al., 2021). This connection is even more evident considering that CAP compliance involves duties and obligations (e.g. adherence to production quotas) to receive subsidies. Farmers need to closely monitor EU-level reforms and continuously align with EU-level plans aimed at sustainability and innovation, such as the Farm to Fork Strategy.⁵

The profound impact of sector-specific regulatory pressure on the psychosocial response of farmers can be illustrated by the removal of the EU Milk Quota System in 2015. Established in 1984, this system safeguarded milk prices from lower-priced competition outside of Europe. The system allocated national quotas to EU Member States, imposed limits, regulated surplus production and implemented levies for excessive producers. Although it stabilised prices for almost 13 years, the 2007-2015 economic crisis caused considerable market price variability, leading legislators to abandon quotas by 2015. The effects of policy interventions were evident in their capacity to shape financial stability. While the removal of market-distorting restrictions aimed to reduce food dumping and encourage greater production, dairy farmers instead face increasing financial uncertainty regarding how much to produce and at what price. This uncertainty has become a significant cause for concern, triggering tangible stress responses (Furey et al., 2016).

Another risk factor stemming from regulatory and financial pressure is the increase in farm businesses restructuring, which can impact farmers' mental health (Deipenbrock et al., 2015; Hammersley et al., 2023). As outlined in the introduction, a significant reduction in the total number of agricultural

⁵ The Farm to Fork Strategy is one of the key actions under the EU's Green Deal Agenda that aims to achieve climate neutrality by 2050. The strategy intends to transition agri-food systems to a fairer, healthier and environmentally friendly food system by reducing the use of pesticides and antimicrobials, improving soil quality and increasing the number of organic farms (see https://food.ec.europa.eu/horizontal-topics/farm-fork-strategy_en for more information).

businesses has occurred in recent years. The survival strategy for remaining businesses has involved the physical expansion of farms and intensifying production to meet high demand. While farm consolidation may seem economically profitable due to declining competition, the literature highlights the need for farmers to produce more to survive economically and sustain income (World Health Organization [WHO], 2024; France 24, 2024). Furthermore, stress responses are triggered by broader management responsibilities and reduced social relations resulting from diminished peer support and shrinking farming communities.

2.4.2 Financial instability and insecurity

Economic and financial stability is intricately tied to overall sector performance. This is greatly influenced by commercial actors and agricultural market dynamics at European and global levels. The inherent nature of agricultural production makes farms highly dependent on raw materials. Pricing practices, such as keeping product prices artificially low (e.g. beef) for consumer purposes, force farmers to sell below their production costs (WHO, 2024). This creates a delicate economic balance for farms, where maintaining high investments in materials and productivity, efficient cost management, and reliance on EU subsidies from the CAP become crucial for survival. In France, the share of farming households living below the poverty threshold is twice as high as the national average (Institut national de la statistique et des études économique [INSEE], 2021), while significant variations exist among European Member States in terms of income, agricultural land rents, and prices (EC, 2021c; FARMRes, 2023).



Thus, legislative initiatives such as France's EGalim laws⁶ are critical to countering financial stress and rebalancing the relationship between farmers, distributors and supermarkets. EGalim legislation fixes farmers revenues ensuring that production costs are included in the purchase price of farm produce by commercial actors. Other measures include industrial price transparency, capping food promotions, and labelling the country of origin on food products (see [French Ministry of Agriculture and Food Sovereignty](#) (2024) for further information).

The literature highlights four psychosocial risks associated with financial and economic challenges. The foremost and most pervasive risk is the sense of financial insecurity experienced by farmers in managing their farms (EU-OSHA, 2000, 2013; Fraser et al., 2005; Brennan et al., 2021; Daghigh Yazd et al., 2019). This insecurity stems from the inability to stabilise income and control profits and is closely intertwined with other trends and structural risk factors. Financial risks are closely associated with economic damage and business failure and, ultimately, the loss of a long-held family farm represents a profound stressor for farmers. Numerous studies underscore the significance of financial threats for farmers' mental wellbeing, with some studies specifically dedicated to investigating their direct association with mental health (Furey et al., 2016).

From a similar perspective, the perception of constant financial pressure due to the influence of economic and market policy is an additional risk factor (EU-OSHA, 2000, 2013; HOCCA, 2019; WHO, 2024). Farmers' reduced bargaining power due to increasing market and policy regulation limits their ability to increase margins and navigate adversity. The need for continuous investments and the pressure to meet commercial demands to sustain productivity make farmers susceptible to high levels of indebtedness and dependent on public subsidies for financial support (HOCCA, 2019; Brennan et al., 2021; WHO, 2024). Worrying about access to credit, whether through private banking loans or public subsidies, elevates stress levels and impacts mental wellbeing as farmers strive to secure the financial resources needed for farm survival and business sustainability.

⁶ The 'EGalim' laws or the law to balance commercial relations between the farming and food sectors and for long-term, healthy and accessible food was first enacted by the French government in 2018. Since then, two updates to the law have been released, EGalim 2 (2021) and EGalim 3 (2023). Following farmer protests in early 2024, work is underway to strengthen the law further (see Le Monde, March 2024, *Loi EGalim 4: les travaux pour encadrer les relations commerciales entre distributeurs et industriels démarrent* [Act EGalim 4: work to frame commercial relations between distributors and industrialists begins], available at: https://www.lemonde.fr/economie/article/2024/03/13/loi-egalim-4-les-travaux-demarrent_6221841_3234.html).

Farm workers (non-owners and non-family members of the farm business) are also exposed to risks arising from financial strain. However, the negative effects on mental health are contingent on job stability and salary conditions.

2.4.3 Farm succession and the future of agriculture

Farmers are becoming increasingly vulnerable to anxieties about the legacy and future of agriculture due to financial concerns and regulatory pressure. An existential crisis is occurring in the sector as farming activities and the farmer lifestyle are no longer seen as professionally attractive (EU-OSHA, 2000; HOCCA, 2019; Kallioniemi et al., 2016, 2018). Associated with this is a loss of culture, heritage and labour practices, along with concrete doubts arising about the possibility of securing family farms for the next generation (Kallioniemi, 2016, 2018). Tangible facts, such as declining rates in the local workforce, a lack of newcomers entering the sector, farmers' children abandoning the profession and an increased reliance on foreign labour contribute to worry and concern (HOCCA, 2019; EU-OSHA, 2000).

The stigmatisation of farmers, a phenomenon also referred to as 'agri-bashing' or 'farmer bashing' where members of the public pressure farmers to adhere to environmental and ethical standards, is exacerbating the situation (Euractiv, 2019). Public stigma is reinforced by the negative media depictions of farmers as selfish, ruthless profit-makers which, in some cases, is even associated with concrete physical and psychological threats to their property and personal.

2.4.4 Rurality

The remoteness and rurality of farms is another source of psychosocial risk for farmers and farm workers. On the one hand, sparsely populated rural environments generally lack access to essential services such as healthcare, education, retail and leisure establishments, generating stress (HOCCA, 2019). On the other hand, vulnerability to rural crime is an often overlooked but considerable stressor for farmers, deserving more attention in the literature (Smith, 2020). Due to their rural setting and the availability of various farm equipment, farms are frequently targeted for criminal activities, including theft, vandalism, trespassing, livestock injury or slaughter, crop damage, fraud, and even threats of violence, which can escalate to physical attacks (EU-OSHA, 2000; Smith, 2020).



The possibility of encountering such dangers extends beyond stress to induce feelings including helplessness and despair in the face of unexpected crimes, financial stress due to repair and replacement costs, safety concerns stemming from fear and vulnerability, and intense experiences of paranoia or outright anger and frustration. Risk from criminal activities can also harm social relations among farmers, damaging social support and trust within the farm community, extending to a decline in farmers' trust in society and its institutions. While it is assumed that age and rural culture, in the form of lived experience and stoic acceptance of unpredictable events, can act as protective factors for mental health when facing criminal threats, a strong mitigating factor against poor wellbeing is a proactive response from service providers (such as the police and professional support networks) (Smith, 2020).

2.4.5 Health concerns

A sub-category of risk factors pertains to health concerns, encompassing animal, human and plant health, which is essential for production and indispensable for the execution of farming activities. This category is considered structural and inherent to the farming sector. Health concerns about animal and plant health are crucial, given the significant impact that diseases (e.g. outbreaks, epidemics, plagues) can have on farm finances and business survival (EU-OSHA, 2000). Equally important are concerns about the health of farmers and farm workers, as sickness not only hinders availability for work but also affects individual productivity and efficiency (Thelin & Donham, 2016). Physical health anxieties are not unwarranted as research has established a clear link between the onset of cardiovascular diseases (CVDs) and work-related psychosocial risk factors. Long work hours increase mortality rates and the risk of pre-mature death (EU-OSHA, 2023d). Job strain — defined as low control and high demands — long working hours, job insecurity, physically demanding work with very little rest, working in high

temperatures, working with chemicals and undertaking physically demanding tasks increase the incidence of heart disease and stroke. Whether the focus is on the health of the farm owner, farm workers or family members, these concerns can act as potent contributors to stress and anxiety.

2.4.6 Farming type

Recent research warns against the risks associated with engaging in conventional farming and non-diversified production, as this farming type may increase vulnerability to various stressors and negative mental health effects in the face of unforeseen circumstances (Janker et al., 2021). Livestock production generally heightens vulnerability to factors such as high workloads, financial insecurity and regulatory pressure (Brennan et al., 2021; O’Shaughnessy et al., 2022). Studies show that people working in livestock-related fields — such as lowland grazing, grazing in less-favourable areas, dairy farming and especially pig farming — exhibit the highest levels of poor mental health and depression (RABI, 2021).

Pig farming, in particular, poses an increased vulnerability to mental health outcomes. This is possibly linked to concerns about animal health, including the frequency of epidemics due to specific farming conditions (Hagen et al., 2021; RABI, 2021). Dairy farming is identified as a psychosocially challenging work environment with numerous stressors including an elevated risk of MSDs and related mental health



concerns, which are associated with the physically demanding work and animal handling risks (Osborne et al., 2011). Additionally, there is an increased vulnerability to crimes involving animals, which are crucial for farm viability and survival (Smith, 2020).

Furthermore, studies indicate that farmers and farm workers in specialised farms are generally more at risk and less satisfied compared to those involved in structured and diversified agricultural businesses (FARMRes, 2023). Conversely, cross-sectional analyses of farmers primarily engaged in off-farm activities, such as farmers’ markets, animal processing, workshops and marketing, reveal that these individuals are less likely to experience occupational stress than their counterparts engaged in on-farm activities (Brennan et al., 2021).

According to Lunner-Kolstrup et al. (2023), risk factors for farmers in family-sized traditional dairy farms are related to social and cultural factors, such as work–life balance, work–family conflict, social isolation, loneliness and a lack of social support. They are also more vulnerable to structural changes in business size, such as farm expansion and herd increases. In contrast, farm workers in industrial dairy farming demonstrate a higher susceptibility to the use of automation technologies and risk factors associated with digitalisation (Lunner-Kolstrup et al., 2023).

Organic farming, while generally considered positive for farmers’ mental health, is not without its potential stressors. Risks include a lack of social and financial support, strong ethical, regulatory and brand accountability, changes to farm, yields and labour organisation, and reskilling (Brigance et al., 2018; Bouttes et al., 2019; Mattila et al., 2022; Darwish, 2023; Government of Ireland, 2024). The benefits and risks of this farming type are discussed in more detail in the section on organic farming.

2.4.7 Professional status

In terms of farmers’ professional status, research focusing on farm entrepreneurs has identified additional psychosocial risks and vulnerabilities for this group. The findings suggest that farm owners are more affected by structural factors, such as regulatory and economic policy pressures or the administrative burdens related to farm management, than traditional task-related factors like high workloads (Kallioniemi et al., 2016). Given the prevalence of family-led businesses in the sector, the study also emphasises that farm owners may be increasingly vulnerable to a lack of family support, which can impact their mental wellbeing (Kallioniemi et al., 2016).

Literature often overlooks organisational psychosocial risk exposure concerning low-skilled farm workers’ workplace relations. However, research from Latvia indicates that workers, who are non-farm owners, express higher concerns about workplace conflict, varying in degrees from employers, colleagues and clients. Additionally, these workers are more vulnerable to psychological violence from

employers, and factors such as low financial remuneration, payment and job precarity contribute to their stress levels (Kozlova & Lakisa, 2016; EFFAT, 2019).

Seasonal and migrant workers often fill low-skilled, low-wage farm jobs shunned by local workers. Literature shows that these workers, who are frequently hired on a temporary basis and experience a multitude of psychosocial risks linked to the seasonality of agricultural work. Job instability, payment delays, residency status, and poor working and living conditions are factors found to be linked to anxiety, stress and depression for this group of workers (Urrego-Parra et al., 2022).

2.5 Psychosocial risks for specific groups of workers

2.5.1 Gender and sexuality

The literature has long called for an examination of the psychosocial risk factors affecting the mental health of female farmers and farm workers (Fraser et al., 2005). A widely recognised risk factor is the presence of additional work–life conflict manifested in the heavier household burden and care responsibilities that farm women bear (Fraser et al., 2005; Wheeler & Lobley, 2023; Budge & Shortall, 2023; Reissig et al., 2019; FARMRes, 2023). In addition to their farm duties when collaborating with companions or spouses, the traditional and conservative values of farmer culture create highly stressful situations. Female farmers and farm workers are often expected to shoulder pressure in a patriarchal manner, often without recognition and family support to execute tasks and resolve domestic problems (Alston et al., 2018; Hagen et al., 2021). Toxic masculinity relations in farm environments can expose women to domestic violence (Wheeler & Lobley, 2023). The remoteness of rural life can exacerbate gender-based violence, as isolation and seclusion reduce accessibility to services and social supports, narrow escape options, and increase psychological, physical, and social control and isolation (Farhall et al., 2020).

Occupational stress for women in farming extends to the broader business environment. Women are more likely to be engaged in organic farming and more committed to sustainability. As a result, they are more likely to struggle with income inequality and business survival (Euractiv, 2019; Fanelli, 2022). Studies further show that female farmers face discrimination in accessing finance, technology, education and training (Corteva, 2018), while the male-dominated environment in policymaking contributes to gender inequities in the sector (Institute for European Environmental Policy, 2021). Moreover, as agricultural lands traditionally pass to male heirs, female farmers often lack land property rights and are relegated to a ‘tag-along’ role as spouses, companions or farm workers, perpetuating an external lack of professional recognition (Alston et al., 2018; Food and Agriculture Organization of the United Nations, 2018; Corteva, 2018). Consequently, studies have observed that female farmers feel more professionally isolated than men (Euractiv, 2019). Reinforcing this finding, another study shows that when women own their farms or represent the business openly, a lack of associational support is an additional stressor as they are not granted a significant voice or role in sectoral gatherings (Hagen et al., 2021).



Another risk factor is the emotional conflict arising from the struggle between traditional gender roles in agriculture (Hammersley et al., 2023; Wheeler & Lobley, 2023; FARMRes, 2023). For women, this means that despite their increasing presence, male farmers, driven by their traditional role identity in the farming community, resist and challenge this cultural change.

The literature also addresses the flip side of this emotional and cultural struggle by recognising men’s vulnerability as they may grapple with identity and cultural changes associated with women’s evolving role in agriculture (Hammersley et al., 2023). In contrast to the traditional masculine roles depicting male farmers as stoic, strong, emotionally resistant and patriarchal leaders of the farm (Fraser et al., 2005), men may feel a shift in their historical dominance as women progressively take on more responsibilities and play a larger role in farm management.

Lastly, the literature has yet to extensively address the psychosocial risks faced by LGBTQ+ farmers and farm workers on a global and European level, pointing to a notable research gap (O'Shaughnessy et al., 2022; Wypler & Hoffelmeyer, 2020). The scarcity of adequate statistical data and the influence of traditional cultural factors hindering the visibility of this worker category underline the need for renewed efforts to identify stressors affecting LGBTQ+ farmers and farm workers in rural environments through targeted analyses (EU-OSHA, 2021e).

2.5.2 Age

Younger and older people are two categories of farmers and farm workers often portrayed as exhibiting additional vulnerability to stressors in the sector as they seem to be more susceptible to various mental health vulnerabilities, including: the execution of farm tasks and associated working conditions (Elliott et al., 2022; Rudolphi et al., 2020); the onset of MSDs and the risk of corresponding mental health outcomes resulting from injuries (Osborne et al., 2011); workplace conflicts arising from workplace relations; financial stress due to limited economic support (Rudolphi et al., 2020); an increased sense of loneliness; a lack of proper social support in rural areas (RABI, 2021); and heightened vulnerability to climate stressors, particularly drought. In relation to climate factors, one piece of research attributes this factor's connection to a greater vulnerability to financial security, lower individual resilience, and social pressure from family and relationships (Austin et al., 2018).

At the core of these vulnerabilities lies a risk factor that magnifies all others: a lack of workplace experience (FARMRes, 2023). **Young farmers** and farm workers new to the sector who have not encountered the adversities inherent in farm work are more exposed to occupational physical and mental injury due to insufficient resilience and personal tools to manage stressors. Targeted interventions may include specific training to raise awareness about the dangers of psychosocial risk exposure. For young people with farming backgrounds, access to land, bureaucracy, financial barriers, uncertainty and the quality of rural infrastructure are key obstacles and stressors for family farm renewal (Euractiv, 2019; France 24, 2024). These factors may heighten psychosocial stressors identified elsewhere in this overview. Risks are even more pronounced in the case of young women, who, in many instances, face a combination of the stressors mentioned above (Wheeler & Loble, 2023; Hagen et al., 2021; Fraser et al., 2005; Reissig et al., 2019; Smith, 2020). Additionally, the family farming context can act as an additional stressor for farm children. From an early age, farmers' children contribute to work on family farms, may be exposed to work–family life conflicts and bear the moral weight of the farm's future, all concerns adding to the wellbeing challenges faced by young people in farming families (Fraser et al., 2005).

The literature has also shed light on the increased vulnerability of **older farmers** to two categories of risks: heightened susceptibility to farm tasks and working conditions (Elliott et al., 2022) and increased responsiveness to stressors arising from structural factors, particularly those related to the farm's future (FARMRes, 2023). The former is closely linked to a decline in physical capacity and an increased vulnerability to the development of MSDs, as ageing and reduced mobility and strength make it more likely that an individual may experience occupational injuries. This issue is further compounded by the tendency of older farmers to work beyond retirement age due to farm responsibilities and concerns related to the future of agriculture (Fraser et al., 2005). Meanwhile, farmers over the age of 50 generally become more attuned to the future of the business, its legacy and its continuation. This gives rise to a cynical and pragmatic perspective wherein farmers express growing concerns and are less inclined to make investments with the future in mind (e.g. digitalisation). Addressing this issue should prompt considerations on how to best design interventions to ensure the continued viability of farm businesses in the future.

2.5.3 Migrant and seasonal workers

The reliance on non-native workforces in modern European agriculture, particularly for manual and low-skilled positions, has become more pronounced due to a decline in local agricultural farm workers. The working conditions of migrant labour in European agriculture have come under scrutiny, with media coverage and scientific studies exposing instances of labour exploitation in several EU Member States (EP, 2021; Urrego-Parra et al., 2022; Escrivà et al., 2022; Montoya-García et al., 2013; Fialkowska & Matuszczyk, 2021). While attention has primarily focused on the physical conditions and abuse of migrant workers, this overview emphasises the hazardous psychosocial work environment that a significant proportion of migrant workers in agriculture endure. The identified categories of farm workers encompass **European seasonal workers**, who reside in another country during peak seasons such as harvesting, and **non-EU migrants**, usually employed over more extended periods. Abundant evidence shows additional, increased and exacerbated exposure to psychosocial factors across three main categories: farm tasks and working conditions, social relations and cultural factors, and financial and job insecurity. Limited evidence on structural factors and trends is acknowledged, as these factors typically concern native workers, farm owners, professionals, managers and farm families.



Migrant workers face challenging occupational contexts, exposed to various risks, including excessive physical strain, long working hours, intensive shifts, the need for constant availability for work and an inability to recover (EU-OSHA, 2013, 2023c; EP, 2021; Vosko et al., 2022; Urrego-Parra et al., 2022; Escrivà et al., 2022; Fialkowska & Matuszczyk, 2021; Montoya-García et al., 2013). The literature emphasises lower job control and job autonomy in task development for migrant workers, who often occupy lower-responsibility manual occupations and handle simple yet physically demanding tasks (Urrego-Parra et al., 2022; Montoya-García et al., 2013). As intensive farmwork and residential status frequently require migrant workers to live either on-site or near farms, the hazardous psychosocial context extends beyond the workplace to living conditions. Migrants may face unsafe living conditions on workplace sites, including forced shared housing and restrictions on movement and access to spaces (Vosko et al., 2022; Urrego-Parra et al., 2022). The intersection of rurality, migrant status and mobility restrictions exacerbates the lack of access to healthcare (both physical and mental) compared to local farmers and European farm workers (EU-OSHA, 2013; EP, 2021; Escrivà et al., 2022). Seasonal work mobility, as a temporary status, limits access to services, and third-country nationality results in a lack of regular residence permits and registration in healthcare systems. Press reports have highlighted abusive conditions for migrant workers in certain parts of Spain's fruit sector, particularly strawberry field picking, and in Italy. These conditions include threats to salary retention, withholding of identity documents and even denying permission to use toilet facilities (Giuffrida, 2024; Kassam & Chavez, 2023; Escrivà et al., 2022). In worst-case scenarios, employers may refuse access to urgent healthcare, resulting in farm workers dying and employers being arrested (Tondo, 2024; Independent, 2024).

The psychosocial risks for migrant farm workers also extend to social and cultural relations, with evidence indicating higher-than-average exposure to these stressors. Cultural factors play a significant role in influencing work relations for migrants in the agricultural sector. Language barriers and challenges in cultural adaptation within the workplace are manifested through difficulties in communication and a lack of cultural integration, encompassing beliefs, values and practices in work relationships (EU-OSHA, 2013; Escrivà et al., 2022; Montoya-García et al., 2013). These factors can also lead to conflicts with the local population.

Occupying low-skilled positions in the sector renders these workers more vulnerable to a lack of organisational justice compared to local farm workers (Vosko et al., 2022; Urrego-Parra et al., 2022; Montoya-García et al., 2013). This vulnerability includes exposure to intolerance, workplace harassment, discrimination, racism and a general lack of recognition for their work. This creates a poor social context for support from employers or other farm workers. Low socioeconomic status (LSES) and legal issues contribute to weaker occupational representation for migrant workers, such as less access to trade union support, compared to local workers (EU-OSHA, 2013, 2023c).

Non-EU migrant farm workers also face heightened financial and job insecurity as a significant aspect of their worsened working conditions. (Urrego-Parra et al., 2022). Exposure to job insecurity is closely tied to legal issues and migrant status (Vosko et al., 2022; Urrego-Parra et al., 2022), creating a fear of deportation and labour exploitation where employers may hold workers hostage due to their temporary or illegal resident status. Additionally, high financial insecurity, linked to low contractual stability or uncontracted working, the frequent receipt of salary underpayments and other exploitative conditions, is recognised as a common mental health stressor (EU-OSHA, 2013; EP, 2021; Montoya-García et al., 2013).

The literature documents frequent exposure to verbal, physical, psychological and even sexual violence (EU-OSHA, 2013; Vosko et al., 2022; Urrego-Parra et al., 2022; Montoya-García et al., 2013). The example of strawberry pickers in Spain illustrates the dire situations female migrant workers encounter, including sexual assault, harassment, rape and coercion into sex in exchange for necessities. Some women reported being pressured into prostitution by local men waiting near the farm at night (Kelly, 2019; Escrivà et al., 2022). Similar incidents have been reported in Italy, with national media attention highlighting cases of sexual harassment, and violence, including extreme cases of rape (European Trade Union Confederation, 2017).

The necessity to migrate for job opportunities, coupled with cultural barriers, contributes to mental health risks related to a lack of family support (EP, 2021; Montoya-García et al., 2013). Feelings of loneliness and isolation increase the likelihood of experiencing distress and a profound sense of home nostalgia (Urrego-Parra et al., 2022). While not explicitly addressed in occupational literature, another significant risk factor that can heighten vulnerability in employment settings is the personal burden and traumatic experiences, preceding the workers' arrival (Caroppo et al., 2014). Migrants often grapple with extremely stressful and traumatic experiences both in their home countries and during the migration process.

Lastly, a study by Montoya-García et al. (2013) delved deeper into the variations of psychosocial risks among native farm workers, seasonal EU workers and third-country migrants. In a cross-sectional study conducted with a broad sample of greenhouse staff in Spain, they found that work harassment (mobbing) was more prevalent among third-country workers in general. Cultural and language barriers were more common among African workers as third-country nationals. Lack of job autonomy was a more significant mental burden for higher-educated migrants, especially seasonal EU farm workers and native farm workers. European farm workers reported poorer mental health than their migrant counterparts which raised concerns about under-reporting and lack of awareness and help-seeking behaviours by non-EU migrant workers, as the need to appear healthy retains their economic value for employers. This theme has been echoed in EU-OSHA's 2023 LSES considerations (EU-OSHA, 2023a).

2.6 Recent disruptors and societal trends

2.6.1 Digitalisation

The integration of technology in agriculture, including mechanisation and digitalisation, is transforming the sector and impacting the daily tasks and experiences of both farmers and farm workers. For example, the dairy sector has seen significant advancements through the adoption of automated milking systems technology. Norway, for example, experienced a substantial increase in the use of robot systems for milking between 2006 and 2016, with 44.5% of total milk produced in the country being milked through robot systems in 1,726 farms by the end of 2016 (Holte et al., 2018). However, this shift is not uniform across regions, with northern Europe exhibiting more advanced digitalisation compared to southern Europe, as highlighted in reports from the European Economic and Social Committee (EESC, 2022).



Digitalisation encompasses various aspects of farm management, including the use of advanced machines and sensors for monitoring the health status of crops and farm animals. These technologies offer opportunities to increase efficiency, optimise resource use and improve overall productivity in agriculture as well as to reduce OSH risk factors and improve the working environment (EU-OSHA, 2020). However, their introduction also brings challenges.

Firstly, the adoption of various new technologies, including cobots, alarm systems and intricate data management tools, has been linked to an upsurge in cognitive workload for both farmers and farm workers. This heightened mental demand is reported to potentially lead to emotional concerns, as indicated in studies by Holte et al. (2018), Hostiou et al. (2017), Goller et al. (2021) and EU-OSHA (2000). Another significant stressor revolves around the lack of training and expertise in utilising these new technologies. The proficiency required for efficient production places an additional burden on all professionals in agriculture, emphasising the importance of comprehensive training programmes (Nicholson, 2023; Holte et al., 2018; Hostiou et al., 2017; Goller et al., 2021). Moreover, the extensive use of technologies designed to reduce the necessity for human presence has been associated with increased feelings of monotony and loneliness (EU-OSHA, 2000; Holte et al., 2018).

Organisational shifts and language barriers represent further challenges. The adoption of digitalisation in agriculture necessitates alterations in organisational practices, impacting the physical work environment. Language barriers, exemplified by the challenges faced by migrant farm workers attempting to adjust the language settings of automated milking systems, can pose additional hurdles (Holte et al., 2018).

Data vulnerability and dependence emerge as critical stressors for farm owners. Relying on digital solutions renders them vulnerable to issues related to data control, interpretation and potential external hacking. The dependence on manufacturers or service providers for digital solutions is recognised as a stress-inducing factor, limiting the degree of control over farm management (Nicholson, 2023; EU-OSHA, 2000). Furthermore, the implementation of digitalised means of production can result in intensified agriculture operations, requiring increased work shifts, monitoring, and general availability from both farmers and farm workers. There are also concerns expressed about potential job precarity and fears of job loss due to automation (Holte et al., 2018; Hostiou et al., 2017; Goller et al., 2021; Nicholson, 2023).

Calls to digitalise agricultural practices may pose additional financial stressors for farmers. Given the business margins associated with farm size, investing in digitalisation is dependent on financial resources. Evidence shows that upfront investments in new technologies are high and may not show immediate payoffs, while hidden maintenance costs contribute to financial concerns (Long et al., 2016; Ferrari et al., 2022; Bellon-Maruel, et al., 2023). Additionally, the cost of investing in technology also requires investments in modernising farm practices, which may require the complete reconstruction of farms (Ferrari et al., 2022). Furthermore, such changes may be resisted by older farmers, leading to intra-familial generational conflicts (Fragomieli et al., 2024).

2.6.2 Extreme weather conditions and climate change



The agricultural sector is widely regarded as one of the most vulnerable industries to risks brought about by climate change (ILO, 2024b; European Environment Agency [EEA], 2024). Agriculture is dependent on regular and predictable weather conditions. Seasonal cycles play a crucial role in the prosperity of crops, while animal pastures depend on appropriate climatic conditions. It is evident that adverse and extreme weather conditions can act as a significant mental health stressor for farmers, given their potential to disrupt farm productivity. This specific risk factor is identified as the inability to control the uncertainty and unpredictability of weather events (EU-OSHA, 2013, 2020; Fraser et al., 2005; Daghigh Yazd et al., 2019). This lack of control not only results in stress and concern but is also intricately linked to financial insecurity, amplifying the overall impact on mental wellbeing.

The psychological vulnerability of farmers to adverse weather conditions, such as bad seasons⁷ affecting agricultural production, is a well-established concern (Brennan et al., 2021). This issue has long been recognised, considering the inherent variability in weather patterns that can impact certain agricultural products during production cycles. This risk category has gained increased attention given growing concerns and acknowledgement of climate change.

The gradual **rise in global temperatures** poses an additional risk to the physical and psychological health of farmers and farm workers. The resulting disruptions to farm productivity and farming practices present tangible dangers to both economic stability and mental wellbeing. While a substantial portion of research on the psychological effects of extreme weather events originates from non-EU Member States, such as Australia, Canada and the United States (US), evidence from Ireland, as demonstrated by Brennan et al. (2021), contributes to our understanding of the psychological impact of unfavourable seasons on European farmers.

In Europe, rising temperatures are causing heat stress, which is adversely affecting animals, crops, farmers and farm workers. **Drought and water scarcity** can have devastating effects on physical health and farm productivity. Farmers and farm workers are 35 times more likely to die from heat stress (Gubernot et al., 2015) and susceptible to various associated physical and emotional outcomes, according to a recent guide on heat at work published by EU-OSHA (2023c). Water scarcity, a consequence of climate-related conditions, carries far-reaching implications for farmers, directly impacting crop yields and livestock conditions, thus raising immediate financial concerns and increasing input costs for production (Fennel et al., 2016). Moreover, farmers often face **increased workloads to address productivity challenges** arising from drought, requiring measures such as night watering or acquiring and transporting additional water (Alston et al., 2018; Fennel et al., 2016). These challenges typically affect all farming family members, leading to potential conflicts and increased social isolation for those heavily involved in farm activities. Other notable trends include crop losses (EEA, 2019), suspension of agricultural activities and significant declines in worker hours (EEA, 2024). To mitigate risks to crop yields, animal health, income security and overall farm stability, farm practices must adapt. Thus, farmers are likely to feel compelled to adapt to climate conditions by diversifying farming typologies. As the impacts of climate change become more widespread, pressure to change farming practices and production may induce stress, given the symbiotic relationship between income and production. Investments will be necessary to offset these hazards, along with financing to cover increased energy and water costs (EU-OSHA, 2021d; EEA, 2024).

This complex scenario unfolds against the backdrop of policy pressures, such as regulations on water access, pesticide use and nature restoration. Cross-compliance of environmental protection measures with CAP, impacting payments, is one of the important organisational changes affecting farmers who already manage significant administrative burdens (EU-OSHA, 2021a). Adding to this, media coverage may contribute to a lack of understanding for farmers' predicament, adding to worries about unforeseen events like unpredictable weather patterns and disease outbreaks in plants and animals. The cumulative impact of these factors includes stress directly linked to financial pressures and an overarching sense of uncertainty about the future.

In response to climate adversities in farm environments, there is a notable connection to social and cultural risk factors and farm stoicism, reflecting a strong reluctance to acknowledge issues and seek help (Berry et al., 2011). Some farmers feel pressured to endure the struggle against nature without admitting vulnerability. Concurrently, frequent or severe weather events can contribute to the decline of rural communities, introducing a dual negative impact (Berry et al., 2011; Austin et al., 2018). In instances of prolonged or extreme weather conditions, climate-related events may lead to the contraction of farming communities, such as **farm businesses exiting the market**. This shrinkage also results in a reduction of essential services and social resources, including diminished retail and trade, fewer schools and limited health services in rural areas. Consequently, overall social support for farmers and farm workers diminishes. Moreover, climate-related events can lead to income erosion, increased

⁷ Agriculture is heavily dependent on weather conditions, and a bad weather season can have a significant impact on crop yields and quality. A bad weather season in agriculture can be characterised by a combination of factors such as excessive rainfall, drought, frost, hail and high winds (Bureau of Meteorology, 2023).

costs, capital depreciation, and increased personal and business debt. These financial insecurities translate into greater vulnerability to financial strain, carrying associated consequences for mental health (Berry et al., 2011; Austin et al., 2018; Fennel et al., 2016).

While evolving climate patterns add an additional layer of complexity to the psychosocial risks faced by farmers and farm workers, literature on the psychological effects of climate change on their mental health is somewhat limited. This underscores the importance of additional research contributions in this specific domain. As climate change continues to exert its influence on weather patterns and agricultural practices, a deeper understanding of its repercussions on the mental wellbeing of farmers and farm workers in the EU is crucial as proactive measures and support mechanisms will be necessitated.

2.6.3 Organic farming

Conversion to organic farming and demand for organic produce in Europe are growing. Recent figures show that from 2012 to 2020 organic farming increased by more than 50% in the EU (Darwish, 2023), while organic retail sales also doubled in the past decade. Converting to organic farming is influenced by farmers' concern for their own health, the environment, policy and regulation (e.g. European Green Deal,⁸ Action plan for organic production in the EU⁹) and growing consumer demand for organic produce (EP, 2022; EC, 2023a, 2023b). For example, in France, market turbulence and deregulation impacting farmers' economic security, farm preservation and sustainability, and the pressure to create economies of scale were stressors influencing conventional farmers to change to organic farming (Bouttes et al., 2019).



Transitioning to organic farming can take up to three years (Eurostat, 2024) and is associated with multiple pressures such as reduced yields, capital investments and inspection costs, loss of some direct payment supports, inability to command premium prices, acquisition of new skills and professional competence, and the reorganisation of labour and crop production, which may result in severe stress (Government of Ireland, 2024; Mattila et al., 2022). Other stressors are family and peers' scepticism of organic farming practices (Bouttes et al., 2019; Siepmann & Nicolas, 2018), feelings of nervousness and stress, as product quantity and quality may initially decrease with potential impacts on farm profitability (Bouttes et al., 2020), increased time pressures and labour intensity (EC, 2023b; Mattila et al., 2022), fluctuations in consumer demand (linked to affordability), regulatory pressure to protect the environment (EC, 2023b; Siepmann & Nicolas, 2018), and the strong ethical accountability and 'brand' responsibility that needs to be upheld during the produce's life cycle (Brigance et al., 2018).

Those transitioning to organic farming may face stress due to radical changes in organisational practices and techniques (Mattila et al., 2022) and higher administrative burden. Additionally, the ability to switch to organic farming can be constrained by national infrastructure and resources, as disparities exist between EU Member States, presenting additional stressors for farm owners (Darwish, 2023). Moreover, the heightened exposure to vibration, resulting from the more frequent use of mechanical rather than chemical agents, raises concerns about an increased risk of developing MSDs and subsequent mental health outcomes related to occupational injury (Mattila et al., 2022).

2.6.4 The COVID-19 pandemic

Stressors for farm owners and their families during the COVID-19 pandemic were primarily linked to supply chain disruptions, affecting workers, raw materials and equipment for farm production, as well as challenges in ensuring the production of agricultural products (Leppala et al., 2021; Thompson et al., 2022). Despite these challenges, farmers faced political and business pressures to maintain steady production to ensure a continuous food supply to sustain society (Leppala et al., 2021). The literature emphasises the crucial role placed on farm managers during health crises, involving the establishment

⁸ The European Green Deal, the Commission's policy agenda for a sustainable, climate-neutral Europe by 2050. The Green Deal, with various strategies under its umbrella, is key to managing the transition towards a more sustainable food system and to strengthening farmers' efforts to protect the environment, preserve biodiversity and tackle climate change.

⁹ Available at: https://agriculture.ec.europa.eu/farming/organic-farming/organic-action-plan_en

and enforcement of virus-specific OSH practices on farms for safety purposes (Leppala et al., 2021; EP, 2021).

All these responsibilities occurred amid increased fears of financial insecurity and high debt due to the economic downturn caused by the pandemic (Thompson et al., 2022), heightened community isolation due to social distancing measures (Thompson et al., 2022; O'Reilly et al., 2023), persistent concerns and worries about virus contagion (O'Reilly et al., 2023), and a general context of social anxiety experienced through media reports in the rural world (Thompson et al., 2022). Some authors also highlighted that female farmers and farm workers experienced additional psychosocial vulnerabilities as work–life conflict increased due to increased farm management, household and childcare responsibilities (arising from school closures) (Thompson et al., 2022; Budge & Shortall, 2023).

Meanwhile, findings indicate that farm workers, particularly migrants and seasonal workers, experienced a general deterioration of working conditions as a direct consequence of COVID-19 disruptions, leading to an intensification of workload, increased working hours and additional time pressure (Vosko et al., 2022; EP, 2021). For farm workers residing on farm premises, confinement measures resulted in heightened concerns about the risk of the virus spreading due to close contact among multiple farm workers. The inability to spend time off from work by visiting rural towns and leisure facilities further exacerbated stress and limited opportunities for recovery (Vosko et al., 2022).

The restricted mobility and lack of recovery options increased workplace and housing conflict for farm workers, leading to arguments and incidents in farm environments (Vosko et al., 2022; EP, 2021). Farm workers in precarious conditions faced higher financial uncertainty and potential loss of income due to infection and quarantine measures, particularly when contractual arrangements were based on daily pay and could be suspended during periods of inability to work. Migrant and seasonal farm workers also experienced additional concerns about the health and wellbeing of their families located afar (Vosko et al., 2022). In some instances, the health emergency exacerbated discrimination and racism against non-native farm workers by the local population. For example, in Spain, migrant workers were perceived as agents of virus spread and abusers of the strained public health system, leading to negative attitudes from the local population (Escrivà et al., 2022).

2.7 Impact of psychosocial risks on workers' health and workplaces

The association between psychosocial risk exposure and adverse mental health outcomes in farmers and farm workers has been the subject of investigation. Previous systematic literature reviews have consistently identified a correlation between exposure to psychosocial risks and the development of mental health issues among farmers and farm workers (for example, Hagen et al., 2019; Daghigh Yazd et al., 2019). This section gathers evidence of the types of adverse health outcomes, including psychological health outcomes, physical and behavioural responses, and their impacts on farm businesses.

2.7.1 Effects on mental health

This overview identifies a variety of mental health symptoms and unfavourable outcomes, encompassing emotional and cognitive symptoms as well as mental health illnesses and suicide.

2.7.1.1 Emotional and cognitive mental health symptoms

At an emotional level, stress emerged as the most prevalent initial response to all stressors. Various risk factors were identified as triggers for occupational stress, along with their interconnections, inducing distress through circumstances like uncertainty, limited control and financial anxieties. This was supported by multiple sources (HOCCA, 2019; Hagen et al., 2019; Hammersley et al., 2023). In terms of concrete evidence from EU Member States and European countries, Brennan et al. (2021) conducted a cross-sectional study of 736 farm enterprises in Ireland, noting a significant rise in farmer and farm worker's stress levels compared to earlier inquiries with 57% of respondents experiencing stress resulting from their farm work. Key sources of stress included "poor weather" (47%), "workload" (32%) and "financial" concerns (28%). Furey et al.'s (2016) study of 121 dairy



farmers in Ireland revealed that financial insecurity is a primary driver of mental distress, leading among other factors to increased expectations of injury.

Feelings of anxiety or associated persistent disorders were other commonly cited mental health outcomes (Hagen et al., 2019; RABI, 2021). Forty-seven per cent of UK farmers and farm workers have experienced some form of anxiety, while a worrying minority shared that they experienced either moderate (12%) or severe (6%) anxiety levels (RABI, 2021). Fatigue, strongly linked to work design and working conditions, was consistently associated with worse mental outcomes (Fraser et al., 2005; Elliott et al., 2022; Mattila et al., 2022; Daghagh Yazd et al., 2019). Sleep disturbance patterns, including sleep deprivation or outright insomnia, were also recognised (Daghagh Yazd et al., 2019; O’Shaughnessy et al., 2022). Elliott et al. (2022), for instance, established an association between sleep deprivation, fatigue, and an increased risk of injury or illness.

Recent findings also demonstrated that female farmers and farm workers are more likely than men to experience poor mental health and wellbeing. A significant 43% of women in the sample were diagnosed with possible or probable depression, in contrast to 33% of men. Moreover, over half of women (58%) experienced mild, moderate or severe anxiety, compared to 44% of men (RABI, 2021). Another comprehensive cross-sectional study of farmers and farm workers in the country revealed that nearly a quarter (23.3%) of women in the sample reached thresholds for generalised anxiety disorders (Wheeler & Lobley, 2023). In the scoping review conducted by Urrego-Parra et al. (2022), which focused on European migrants in agriculture, anxiety, stress and depression were found to be the most prevalent mental health outcomes associated with exposure to psychosocial risks. The study also highlighted that female migrant farm workers were particularly susceptible to experiencing these symptoms, emphasising their heightened vulnerability.

Feelings of fear and despair were also generally noted as emotional symptoms for different groups of farmers and farm workers alike, often associated with poor working conditions and a detrimental psychosocial context, such as in cases of migrant worker exploitation or instances of personal insecurity (e.g. rural crime victims) (Escrivà et al., 2022; Smith, 2020). The inability to control unforeseen circumstances or specific events (e.g. illness, machinery breakdown, extreme weather events) was linked to feelings of long-term powerlessness, perceptions of hopelessness, and sensations of suffocation or entrapment (Truchot & Andela, 2018; Daghagh Yazd et al., 2019; Mattila et al., 2022; Hammersley et al., 2023). To a lesser extent, the literature also refers to general states of nervousness (akin to restlessness at work and in life) and to the loss of self-esteem, including loss of self-value, feelings of shame and a sense of inadequateness (Daghagh Yazd et al., 2019).

On a cognitive level, the primary focus in the literature is the emergence of cynicism strongly associated with farm owners and entrepreneurs as a reaction to financial, structural and trend-related factors (Kallioniemi et al., 2016; Thompson et al., 2022; O’Shaughnessy et al., 2022; Hammersley et al., 2023). A secondary outcome, encountered to a lesser extent, was the inability to function in occupational roles, stemming from stressors that can lead to distraction and a general decrease in farmer productivity (Daghagh Yazd et al., 2019).

2.7.1.2 Mental health problems and suicide

Concerning specific mental health problems, prevalent negative outcomes included **depression** (Hagen et al., 2019; RABI, 2021). Over one in five farmers and farm workers showed symptoms of depression, and 36% of respondents had mental wellbeing scores low enough to raise concern for the risk of developing depression (RABI, 2021).



Burnout, typically defined as prolonged occupational stress resulting in emotional exhaustion, lack of professional efficacy and cynicism, was also frequently described as an adverse mental health outcome (Deipenbrock et al., 2015; Hagen et al., 2019; Truchot & Andela, 2018; Kallioniemi et al., 2016; O’Shaughnessy et al., 2022). Estimates from Switzerland suggest that around 12% of national farmers and farm workers may be suffering from burnout, with financial insecurity and factors related to task design (e.g. workload, time pressure) and social relations (e.g. strained work–family relationships, social isolation) contributing to the development of mental symptoms (Reissig et al., 2019). High workload and financial insecurity were highlighted in other studies as predominant factors in the development of burnout (Deipenbrock et al., 2015; Truchot & Andela, 2018; O’Shaughnessy et al., 2022). For example, a French study ranked workload and time pressures, followed by a lack of social support and pressure from economic and environmental policies, as the most significant factors contributing to burnout and hopelessness among farmers and farm workers (Truchot & Andela, 2018). Similarly, research in Norway emphasised the combined role of these factors in farmers’ mental health, resulting in a general increase in mental health complaints (Logstein, 2016). Direct associations between high workloads and mental health complaints were also observed in a recent cross-sectional study in Norwegian, indicating a positive association between risk factors associated with elevated job demands and various mental health complaints, including fear, nervousness, hopelessness and worry (Logstein, 2021). In a Swiss study, male farmers and farm workers show increased vulnerability to time pressure, leading to a greater risk of developing burnout (Reissig et al., 2019). Equally, studies in Finland identified factors such as autonomy, workload, loneliness, work and living environment, and for dairy farmers and farm workers herd size and milk production as risks contributing to burnout levels (Kallioniemi et al., 2016; Janker et al., 2021). Meanwhile, conventional farming had higher burnout levels compared to diversified farming (Janker et al., 2021). And in Ireland, older farmers and those with children are at higher risk of burnout compared to their younger, child-free counterparts (O’Connor et al., 2024).

Suicide is one of the most severe outcomes in terms of mental health. Media coverage (Euractiv, 2017), grey literature (Business in the Community, 2017) and scientific studies collectively indicate a statistically higher occurrence of suicide rates among the agricultural working population at both the European and global levels. Klingelschmidt et al.’s (2018) meta-analysis suggested an excess risk of suicide among farmers and farm workers in agriculture, forestry and fishing compared to other occupations. The urgency of the matter is further underscored by data from Slovenia, where the national agricultural sector has become the second-most hazardous industry in terms of work-related accidents and health difficulties, with a crude suicide rate of 57 per 100,000 employed persons in 2016 (Roy & Knežević Hočevar, 2019). Equally, in a recent Irish survey, 20% of farmers and farm workers reported experiencing suicidal thoughts in the previous two weeks (Russell et al., 2023), and in France, one farmer suicide takes place every two days (Franceinfo, 2023). A closer examination of French data shows that agricultural users of the French health system aged between 15 and 64 years have a 43.2% higher risk of suicide compared to other users, and the risk for farmers and farm workers aged 65 and older is more than twice that of the general population (Mutualité Sociale Agricole, 2021). Similar findings on the increased suicide risks for farmers and farm workers were observed in Italy (Alicandro et al. (2021).

An in-depth systematic review, differentiating between accomplished suicide, suicidal ideation and suicide attempts, identified a combination of factors such as a lack of social support, financial insecurity, and structural and sector-specific elements (e.g. large livestock) as potential triggers leading to suicide (Santos et al., 2021). This study also highlighted higher completed suicide rates in men who tend to use more violent methods compared with the more frequent, non-lethal attempts of women. A statistical study on suicide risk and the typology of suicide among the farming community in France supported the argument regarding the use of lethal means. Hanging and drowning were the most frequent methods for both genders, with men preferring firearms use compared to women who preferred to use poison (Bossard et al., 2016). More recent studies reinforce this finding, suggesting that the ready availability of lethal substances and equipment commonly used in agriculture (e.g. chemicals, hunting equipment,

water tanks and ropes) could facilitate and contribute to increased suicide rates among farmers and farm workers (HOCCA, 2019; Klingelschmidt et al., 2018; Alicandro et al., 2021; Chiswell, 2022).

Social determinants such as being male, single and education level were identified as crucial risk factors. Other risk factors including working conditions, long working hours, social and cultural factors, financial precarity were considered as significant factors in the suicidal process (Klingelschmidt et al., 2018; Alicandro et al., 2021; Chiswell, 2022). Moreover, evidence suggests that stressors can be exacerbated by unforeseen circumstances, such as severe economic recessions, which was found to be an extraordinary stressor in French research (Bossard et al., 2016). During the 2008 financial crisis, it was estimated that suicide risk increased by 28% for men and 22% for women farmers. Additionally, findings from this study suggest that dairy farming might contribute to an elevated suicide rate (Bossard et al., 2016). However, beyond attributing the higher stress levels in dairy farming to increased dependency on animal care and health, the research highlights that the data primarily came from self-employed farmers and their partners who were active during the study years (2007, 2008 and 2009) in metropolitan France. Thus, the study also suggests that economic hardships resulting from the European financial crisis and the transition towards the removal of EU-level milk quotas may have influenced the results (see also Structural factors in section 2 and particularly Furey et al., 2016).

A **higher exposure to death**, particularly of animal life, has also been identified as a potential risk factor (Klingelschmidt et al., 2018). Continuous slaughtering operations and the constant exposure to the natural life cycle on farms may desensitise farmers and farm workers to the concept of death. Finally, exposure to pesticides and other agricultural chemicals has been considered a potential influencer on suicide risk through the stimulation of neurotoxicity. However, this last factor is subject to debate due to conflicting evidence (Santos et al., 2021).

Global studies have also suggested a potential connection between the impacts of climate change in agriculture and farmer suicides (Odabasi et al., 2021). While this issue initially gained more attention in India, with media coverage highlighting the distress faced by farmers (McCarthy, 2017; DownToEarth, 2023), recent contributions have begun to raise similar concerns in Australia, especially in the context of climate change-induced drought (Hanigan et al., 2022). Chiswell (2022) has opened an intriguing avenue for research to enhance the understanding of suicide in agriculture. She underscores that the scientific discourse on evidence pertaining to a mental health crisis in farming sharply contrasts with globally acknowledged rates of farmer suicides. Moreover, she observes that available data strongly suggest that the suicidal process, from ideation to execution, may be more acute and rapid for farmers and farm workers than for professionals in other occupations. A pivotal factor in this process could be the general reluctance to seek help and the cultural resistance to displaying symptoms of mental health issues before resorting to suicide. Additionally, individuals working in agriculture are often conditioned by small community environments and workplaces and may be influenced by the transmission of suicidal ideation within their social networks (e.g. family members, colleagues and other professionals in the sector). As discussions about suicide become more prevalent among peers, this life-ending option may appear more viable to mentally distressed individuals (Chiswell, 2022).

2.7.1.3 Substance abuse

A second subgroup of outcomes encompasses a range of detrimental behaviours that may either indicate or contribute to poor mental health. Substance abuse, with a particular emphasis on alcohol, emerges as one of the most discussed outcomes (FARMRes, 2023; Fialkowska & Matuszczyk, 2021 for seasonal farm workers in Germany and Poland; Thompson et al., 2022; Daghagh Yazd et al., 2019; Watanabe-Galloway et al., 2022). Notably, research on this outcome outlines that contributing risk factors include a lack of social support, pressure, expectations from the farming community, easy access to these substances in rural settings and a lack of access to recreational activities. Common social determinants are often gender, age, marriage and low socio-economic status (Watanabe-Galloway et al., 2022). However, contrasting evidence suggests that severe substance abuse, which is harmful for farmers and farm workers, is less frequent in agriculture than in other occupations, given its extremely negative consequences for farm management and business survival (Thelin & Donham, 2016).

2.7.2 Other health outcomes linked with psychosocial risks at work

The findings on outcomes resembling either pre-existing or emerging negative mental health can be categorised into physical and behavioural subgroups. Physical outcomes pertain to the onset of MSDs and CVDs. Farmers and farm workers have an elevated risk of experiencing occupational injuries leading to MSDs as a direct result of exposure to psychosocial risks (EFFAT, 2019; Fialkowska & Matuszczyk, 2021 for seasonal farm workers; Mattila et al., 2022; Elliot et al., 2022; Furey et al., 2016). The underlying mechanisms explaining the associations between these outcomes and mental wellbeing have been extensively discussed. Both farmers and farm workers have an increased risk of heart disease and stroke that is associated with job strain, long working hours, job insecurity, physically demanding work, work and private life stress, and working with chemicals and in high temperatures (EU-OSHA, 2023d).

Other adverse social behaviours include the manifestation of aggressiveness, rage and a loss of control leading to violence as a response to tension and frustration, especially when facing the inability to control events in farm management (FARMRes, 2023; Daghigh Yazd et al., 2019). Additionally, there are processes of voluntary isolation in which farmers and farm workers avoid and withdraw from social and community activities (Daghigh Yazd et al., 2019). As mental distress intensifies, individuals tend to retreat and confront other members of their community, thereby increasing isolation and impacting social support. Finally, one study focused on the unwillingness to seek help as a behavioural outcome rather than a risk factor, identifying that a combination of high job demands and time pressure, values in the farming culture and even financial insecurity all contribute to steering farmers and farm workers away from seeking assistance in times of trouble (Vayro et al., 2019).

2.7.3 Outcomes associated with recent disruptors and societal trends

Comprehensive surveys linking specific risk factors between digitalisation and mental health outcomes seem to be lacking. However, there is a consensus in the literature regarding a general increase in stress levels for farmers and farm workers exposed to digitalisation-related challenges (Hostiou et al., 2017; Goller et al., 2021; EU-OSHA, 2000). There is also a recurring acknowledgement of the potentially protective role of well-implemented digitalisation. Correctly executed digitalisation strategies can ease working conditions, particularly by reducing physical demands, with the ultimate potential to positively impact mental health outcomes.

Extreme weather events associated with climate change can lead to various adverse mental health outcomes for farmers and farm workers. These include an increased risk of developing depression, feelings of hopelessness, and even experiences of trauma, such as post-traumatic stress disorder and solastalgia¹⁰ (Berry et al., 2011).

While the reviewed studies generally did not establish a statistical association between COVID-19 stressors and specific health outcomes for farmers and farm workers, they unanimously described increased stress rates and poorer mental health symptoms as responses to this extraordinary context. It is worth noting that some studies suggested that open fieldwork, the farm lifestyle and various forms of social support within the farm community were beneficial and protective factors when compared to urban workers (Thompson et al., 2022; O'Reilly et al., 2023). For migrant farm workers, at least in some instances, the health emergency seemed to exacerbate discrimination and racism towards non-native farm workers from the local population. The emotional responses of this category of farm workers to these challenges included increased stress, rising anxiety, and feelings of fear and despair (Escrivà et al., 2022; Vosko et al., 2022).

2.7.4 Impact on farm businesses

Research on the adverse organisational impact of workers' mental health on farms and agricultural businesses was generally scarcer compared to the literature focusing on individual health outcomes. This scarcity could be attributed to the predominant focus on farmers and family farm workers as the

¹⁰ Solastalgia is defined as a form of homesickness experienced when residing in a familiar environment that has been profoundly altered by natural disasters or other events, making it feel unfamiliar (Barry et al., 2011).

specific unit of analysis, as opposed to research in other professional sectors that adopts a broader focus on various occupations. However, this overview identified up to three outcomes in this domain.

The first was absenteeism, defined as the prolonged absence of a worker from work beyond what is considered reasonable and customary (Merriam-Webster, n.d.). Absenteeism from the farm was noted as a potential and highly detrimental consequence of poor mental health (FARMRes, 2023). The emergence of adverse mental health symptoms and outcomes can result in certified leave, keeping farmers and farm workers away from the workplace. This challenges the necessity for constant availability in farm work and poses a threat to business survival.

Second, job turnover was identified as a negative outcome for agricultural businesses that depend on seasonal farm workers (Fialkowska & Matuszczyk, 2021). Job turnover refers to worker's reported willingness to leave their organisation within a given period (Lazzari et al., 2022). The research suggests that a mix of work–life conflict, feelings of isolation and unsafe working conditions contributes to a reluctance to repeat the work experience and leads to a high turnover in seasonal workers.

Third, the allocation of disability pensions has also been noted as a negative organisational outcome linked to both physical and mental occupational injuries. Disability pensions serve as a source of income for farmers when they are unable to work due to a long-term disability, typically lasting at least a year (Karttunen et al., 2015). A Finnish study used data from the Finnish Farmers' Social Insurance Institution (Mela) to examine disability pensions among self-employed farmers over a five-year period (2008–2012). Analysing 4,088 cases of permanent or temporary disability pensions within this population, the study highlighted a significant impact on public resources. The findings indicated a total of almost 6,800 person-years lost due to disability and €60.2 million in pension costs, which were ultimately covered by taxpayers. The primary adverse health outcomes leading to the provision of financial assistance were associated with MSDs (44.6% of the total), followed by mental and behavioural problems (17.5%), and severe injuries or other types of chronic diseases (Karttunen et al., 2015). The study did not directly compare self-employed farmers' outcomes with those of the wider Finnish population; however, by referencing similar research in the general workforce conducted in 2009, it suggests that farmers are more likely to develop musculoskeletal disorders (MSDs).

2.8 Protective factors and determinants of job engagement and satisfaction

While the primary focus of the reviewed literature was on identifying psychosocial risk factors contributing to adverse mental health outcomes, certain occupational factors may also counteract the negative effects stemming from the psychosocial working environment. Given the fundamental notion that employment and work generally improve mental health and wellbeing for most individuals (Waddell & Burton, 2006), studies have delved into identifying specific determinants of 'meaningful' work on farms. These studies explore the connections between individual, task-related, organisational and social/societal-level factors.

The comprehensive review of the literature in this study has led to the identification of five categories of protective factors against psychosocial risk exposure for farmers and farm workers:

- Individual engagement and resilience
- Social relationships
- Business and job success
- Positive farm environment
- Organic farming

These factors can counteract the effects of the main risk categories (and even the trends) identified in this study. A deeper understanding of the roles, outcomes and protective factors related to psychosocial risk exposure facilitates the development of successful workplace interventions to promote better mental health on farms (Harvey et al., 2017).

Furthermore, there is a moral rationale for exploring additional ways to maintain high job satisfaction for farmers and farm workers, especially considering recent indicators reflecting the impact of economic and financial challenges. A recent inquiry on post-pandemic job satisfaction in the sector shows that

only 47% of respondents are satisfied with their jobs. This same study revealed that the most satisfied individuals were young adults, entrepreneurs, large farmers and crop farmers (FARMRes, 2023).

2.8.1 Individual engagement and resilience

Identified protective factors are related to features that promote individual engagement and resilience in farm workplaces such as job autonomy, control and flexibility (Deipenbrock et al., 2015; Lunner-Kolstrup et al., 2023; O'Shaughnessy et al., 2022; Janker et al., 2021; Logstein, 2021). Having flexibility to choose how and when to approach tasks, along with the opportunity to shift priorities and take short breaks from farm responsibilities, assists in mitigating intensive workloads. Time off from farm duties is also considered highly beneficial for worker engagement (Kallioniemi et al., 2016), as is having substitutes available in case of forced absence or the ability to pursue leisure activities and personal hobbies beyond work (i.e. the ability to recover). It is essential to note, however, that the last two protective factors may not be universally applicable to all types of farming. For instance, livestock care may limit the possibility of taking extra time for recovery.

Job satisfaction emerges as another protective factor for both farmers and farm workers (Deipenbrock et al., 2015; Thelin & Donham, 2016; Logstein, 2021). It encompasses a combination of job stability and continuity and the assurance of regular, stable salaries and income (Thelin & Donham, 2016). Individual resilience and personal efficiency are also identified as protective factors crucial for mental health across various studies (Hagen et al., 2019; Lunner-Kolstrup et al., 2023; Thompson et al., 2022; Brew et al., 2016; Logstein, 2021). The ability to withstand hardship, find creative solutions to problems, and maintain a relaxed, positive and accepting attitude in the face of adversity contributes significantly to protecting against mental distress. Some authors even suggest that, despite the potential risks associated with stoic farmer cultures, certain inherent values in this cultural identity may foster resilience against adversity and provide a foundation for resisting stressors (Brew et al., 2016; Smith, 2020).

2.8.2 Social relationships

The second category of protective factors revolves around the availability of social support in relationships with fellow farmers or neighbours, which plays a fundamentally valuable role for farmers (Kallioniemi et al., 2016, 2018; Deegan & Dunne, 2022; Thelin & Donham, 2016; Brigance et al., 2018; Furey et al., 2016). This is closely followed by social support from the family network (e.g. immediate family, children, spouse or partner), which fosters close relationships, community trust, a sense of shared identity and reliance on a set of acknowledged skills deeply embedded within the family core (Fraser et al., 2005; Kallioniemi et al., 2016, 2018; Deegan & Dunne, 2022; Thelin & Donham, 2016).

Despite the emphasis on familial or friendly relations, the literature indicates that the sense of belonging and the perception of identity within a rural farming community are also crucial protective factors (Deipenbrock et al., 2015). Although family support may alleviate financial stress, peer support offers a higher level of overall protection for the farmer's and farm workers wellbeing. Research from Ireland underscored the value of social support for mitigating mental distress caused by financial insecurity (Furey et al., 2016). Another Irish study involving 196 farmers also highlighted a significant distinction between family support and social support from friends and/or significant others, with the latter being more influential in ensuring the psychological wellbeing of individuals (Deegan & Dunne, 2022). Furthermore, additional research suggests that membership in or affiliation with a sectoral farming organisation could also have a protective effect against mental health stressors such as financial strain or rural crime (Deegan & Dunne, 2022; Smith, 2020).

2.8.3 Business and job success



The third cluster of determinants revolves around aspects of a healthy farm business and job success. Farms are fundamentally businesses that must ensure stability and consistent profit and income for the wellbeing of their owners and farm workers. Therefore, the literature indicates that having a thriving farm enterprise, possessing a secure legacy for one's own farm and the profession, and the sense of actively providing for the family are all protective factors in the mindset of farm owners and even farm workers (Deipenbrock et al., 2015; Kallioniemi et al., 2016; Vosko et al., 2022). Implementing positive developments derived from sector trends can also be beneficial. The regulated and controlled use of advanced digitalisation and mechanisation technologies can lead to tangible improvements in OSH both at the ergonomic level and as a reducer of occupational stress (Nicholson, 2023; Goller et al., 2021).

Research has also investigated whether having an entrepreneurial attitude is a protective factor for farmer mental health (O'Shaughnessy et al., 2022; Janker et al., 2021). Business success not only enhances individual wellbeing but also fosters societal recognition. It is beneficial for personal self-esteem, as overseeing a broader and more complex business can instil positive feelings of job autonomy. To elaborate on this protective factor, Janker et al. (2021) conducted a large-scale study of over 3,000 farmers, focusing on farmer entrepreneurs in Finland. They extensively discussed the protective effects of entrepreneurial identity and business activity in farming. Their study identified three categories of farm owners based on levels of business diversification:

1. conventional farmers (individual production with fewer customers);
2. diversified farmers (multiple production); and
3. rural business owners (engaging in various agri-food activities).

When comparing burnout scores across the three categories, conventional farmers experienced less job satisfaction, more stressful work–life dynamics, greater symptoms of cynicism, and lower self-efficacy and personal control. Conversely, they found that entrepreneurial identity acts as a protective factor, enhancing wellbeing and stimulating societal recognition.

2.8.4 Positive farm environment

The fourth category of protective factors has implications for the overall occupational context, fostering a positive farm environment. In contrast to previously discussed stressors, ensuring animal health on the farm and developing affection towards farm animals through close contact with them were identified as specific protective factors for dairy farmers (Kallioniemi et al., 2018; Thelin & Donham, 2016).

Despite multiple mentions of the risks of rurality, a stable and socially active farmer lifestyle environment was also considered beneficial to mental health (Deipenbrock et al., 2015; Kallioniemi et al., 2016). Positive aspects include working near nature in a familiar and friendly work atmosphere, living a greener and healthier lifestyle compared to urban areas, and engaging in diversified tasks to maintain attention and high motivation at the workplace.

2.8.5 Organic farming

A final protective factor entails transitioning to organic farming and wholeheartedly embracing social and environmental responsibility in farm production (Brigance et al., 2018; Logstein, 2021; Mattila et al., 2022). Organic farming can limit exposure to harmful chemicals and diminish instances of farmer bashing by instilling renewed responsibility and meaning in production. In fact, overall, the mental health and job satisfaction levels of organic farmers and farm workers are better than those of their counterparts working in conventional farming (David et al., 2021; David et al., 2024).

Multiple studies from France show that organic farmers and farm workers have better psychological and physical health, experience less anxiety, have lower depression scores and more positive emotions than conventional farmers (David et al., 2021; David et al., 2024). These differences may be explained by increased task diversity in organic farms and lower psychological demand and conformity, which are generally associated with conventional farming practices (Brigance et al., 2018). Other benefits associated with organic farming include greater job autonomy and control, feelings of pride and social and ecological responsibility, better, more stable incomes, reduced production and veterinary costs, increased farm attachment and feelings of interconnection with nature (Bouttes et al., 2019; David et al., 2021; EC, 2023a).

Moreover, skill development for organic farming is warmly welcomed by farmers and farm workers in multiple studies, and depending on farm typology (e.g. animal husbandry), labour loads are perceived as lighter (see Bouttes et al., 2019; David et al., 2021). Consequently, operating in a manner that safeguards the environment and contributes to the benefit of society at large is also capable of generating a positive outlook and instilling feelings of pride and honour in farming.



Box 1: Initiatives supporting farm conversion

In response to farmer need, several not-for-profit and for-profit organisations specialise in enabling transitions to organic and regenerative farming.

One such organisation, [Regenerative Farming Greece](#), enables and supports Greek farmers to convert to regenerative farming using a combination of online tools, training materials, in-person events and farmer networks. These resources teach farmers principles grounded in biodiversity and circularity. The soil and plant health and nutrient diversity of pilot farms — farms that are designed with each farmer to support conversion — are monitored for five years in collaboration with academic institutions and universities. Materials, guidance and training courses are developed and shared using online platforms (free) and in-person events. Furthermore, farmer networks, available in all major agricultural regions, bring together farmers to share learning, farming practices, experiences and challenges, providing comprehensive support during this time of transition.

Elsewhere, a French company, [Milpa](#) operated by two ex-farmers, assures financial risk coverage of up to €370 per hectare to support farmers' transition to regenerative, organic farming. Under this model, the company provides farmers with financial guidance, strategic and administrative support and guarantees fixed farm revenues for a minimum of five years from the first year of transition. In good harvesting seasons, the enterprise and farmers share the farm's surplus profits.¹¹ Tailored support is also available for young farmers and newcomers wishing to uptake organic, regenerative farming.

¹¹ Further information gathered from Franceinfo (2024, 5 July). *Agriculture : le bio se réinvente*, available at: https://www.francetvinfo.fr/economie/emploi/metiers/agriculture/agriculture-le-bio-se-reinvente_6648261.html

3 Stakeholder interviews

3.1 Background and participants

Nine short, semi-structured interviews of an approximate duration of one hour were conducted virtually to gather the views on the topic of psychosocial risks and mental health at work from key stakeholders from the sector at national and European levels such as farm trade unions, farmers representatives, agricultural associations, and farmer support organisations.

Participants described the impact of psychosocial risk factors on farmers and farm workers. Examples of approaches for tackling psychosocial risk factors and promoting positive mental health in the sector were provided. Demographics, farming typology and organisational vulnerabilities were also alluded to by participants, and a short analysis of the challenges faced by specific subgroups and agricultural types is further outlined in the analysis below. The conclusions presented in this section are based on the answers to a small number of interviews and are therefore anonymised by relevant topics or areas.

3.2 Psychosocial risk factors

3.2.1 Farming tasks and working conditions

Corresponding with the literature, work–life balance, which is intertwined with farming tasks and working conditions, was recognised by the majority of interviewees as a pressing issue and a significant difficulty. Achieving a satisfactory work–life balance is a particular challenge for all farmers and farm workers, considering high workloads, long working hours and the constant requirement to be on call for farming activities.

“The work–life balance for farmers is currently challenging, presenting distinct difficulties for both younger and older generations. Older farmers find themselves working longer and harder as younger generations are reluctant to return to farming, leading to an ageing demographic with an average age of 57. Instead of easing into retirement, older farmers are forced to maintain their workload due to the lack of successors. Conversely, younger farmers, particularly those in dairy farming, face relentless work schedules, often working day and night ... ”.

The cumulative effects of these factors can contribute to physical and mental fatigue, another significant difficulty, according to interviewees, straining family relationships and limiting time for a personal life. Like the literature, interview responses suggest that rest time is a significant challenge for the sector. Living at the workplace may be beneficial for the work–life balance of farmers with families was commented; however, balancing work–family time is a difficulty when there is a need for constant presence in the workplace.

Farm work’s arduous working conditions are well known, and most respondents rated the physical demands of farm work as having a high to significant impact on mental health outcomes. Replicating literature findings, the physically demanding nature of the work and the associated risks vary according to agriculture type. Some commented that mechanisation and machinery have somewhat eased the physical burden and demands of some agricultural work overtime.

Exposure to environmental hazards was not identified by most respondents as a contributing factor to psychosocial risk outcomes; some participants rated this as having a low to no impact but noted that risk exposure increases with age. For those who rated exposure to environmental hazards as having a high impact, concern was largely expressed about the use and exposure to chemical agents on long-term physical and mental health outcomes.

3.2.2 Socio-cultural norms and interpersonal relations

The unique aspects of working in agriculture, including secluded working environments, working conditions (indoor or outdoor working depending on farm typology), the distorted work–life balance (interdependence of work and living environments), entrenched social norms, stereotyping (traditional stereotypes and agri-bashing), and the prevalence of seasonal work, are some of the multiple factors contributing to mental health challenges in the farming community was noted.

Most respondents believed that social and cultural norms are very impactful psychosocial risks. Acknowledging mental health issues may be resisted due to societal expectations. Additionally, participants noted that a combination of blurred work–life boundaries, reluctance to disclose problems and isolation can worsen issues over time. Farmers may even refrain from discussing problems with family and qualified health professionals. Like the literature, stoicism and stereotypes of masculinity were noted to influence help-seeking behaviour and exacerbate issues. Likewise, internalised stigma associated with traditional, stereotypical views of maleness can inhibit discussions concerning psychosocial risks.

“We definitely have social stigma when talking about psychosocial risks ... I believe that’s part of the problem is that people are not willing to talk about it”.

Interview responses suggested that the internalisation of stereotypes and stigma, also viewed as highly impactful on mental health outcomes, may aggravate risks.

“Farmers frequently choose not to discuss their challenges, leading to self-isolation ...”.

The inherent isolation in rural areas contributes to feelings of isolation, was noted. Frequently interconnected, issues of isolation and loneliness for respondents are linked to psychosocial risk factors including work–life balance, isolated working and rurality. All respondents felt that isolation and loneliness have a significant impact on farmers’ wellbeing. Structural issues such as a lack of investment and the relative isolation of rural environments, combined with farmers’ stoicism, were viewed as worsening feelings of isolation and loneliness.

Social and cultural norms were considered to have a significant impact on women’s wellbeing, particularly on migrant women farm workers. In comparison, for non-migrant women farm workers, the shift in traditional patterns in the division of labour within farming households was believed to be slightly impactful on mental health outcomes.

“Some families face challenges when women request help with household responsibilities, but men prioritise farm work. However, there are gradual changes, with daughters of farmers increasingly taking over farm responsibilities”.

For some respondents, the evolving and changing role of women in farming was seen as a protective factor for male farmers, alleviating workload and legacy concerns.

“A notable cultural shift within farming is observed, particularly in the increasing involvement of young females, primarily in the dairy sector ... Discussions surrounding inheritance and succession are evolving, moving away from the traditional expectation of the eldest son inheriting the farm. Instead, there is increasing openness to considering daughters or younger siblings as successors ...”.

Respondents underlined that attitudes towards mental health in rural areas are changing for the better, and a noticeable shift is underway with communities becoming more vocal about mental health issues and related services in general with farmers increasingly seeking help for mental stress and illness, signalling a positive shift towards an awareness of mental health issues in farming communities.

The predominant theme that emerged repeatedly throughout the interviews regarding social stigma concerned the public’s perception of farming’s impact on the environment. This stigma, or farmer bashing as labelled by the literature, was considered highly impactful on the sector by most interviewees since prejudice and misinformation about farming practices can even generate episodes of violence. For most of the respondents, demands for climate-friendly practices and opinions about the impact of farming practices on the environment and climate change are negatively impacting the sector.

“Yes, there is a strong stigma, and yes, it affects the sector greatly because it prevents new generations from entering it. There are a lot of false prejudices about it. The sector seems to be under attack now by certain parts of society, especially those who are more like climate activist”.

Consequently, prejudice towards farming communities about environmental issues is also affecting the attraction and retention of the workforce, according to participants was stated.

3.2.3 Uncertainty, farm security and financial stability

Mirroring the literature on the topic, uncertainty and unpredictability were viewed as important stress factors for farmers, farm managers and farm workers alike by most respondents. Additionally, the overall situation of the European agricultural sector is believed to be a root cause for underlying mental health issues.

Financial uncertainty linked to weather conditions, energy prices and the inability to set prices has a significant impact on the sector. Participants outlined the impact financial uncertainties coupled with tight profit margins and low-income levels have on job security, wages and farm profitability. Other factors contributing to financial uncertainty were price fluctuations, investment costs, climate change and income during retirement. All these issues are significant contributors to mental health outcomes.

“... fluctuating prices or uncertainty about the prices, along with external factors like weather conditions (linked to climate change), significantly impact the sector. The socioeconomic situation in the country, coupled with a low-income level, could also influence outcomes. External factors such as high energy prices add to the challenge”.

“Setting the price of products is challenging for farmers, creating a significant uncertainty. For instance, the price of milk has dropped from €0.60 to €0.35 per litre in the past year”.

As demonstrated by the literature, financial pressures are highly impactful on mental health outcomes, according to most interviewees. Fluctuating prices, uncertain incomes, rising labour costs and energy costs were named as additional contributing factors. Some agricultural industries are more affected by these factors than others were pointed out. Animal husbandry, for example, is one industry that experiences higher financial benefits.

“Financial pressures rank prominently among the challenges faced by the farming community, often leading to significant impacts on mental health ...”.

Therefore, increasing investment returns and ensuring fair compensation for produce were considered essential to securing the sector’s future. Concerns about intergenerational succession, which is dependent and meshed with financial anxieties, were another stressor for farmers. While members of traditional farming families remain attracted to the work, the added impact of regulatory changes, administrative burdens and prejudice was noted to impact this decision. One participant remarked that only a tiny fraction of farmers (12%) has someone to succeed them, despite the attraction of maintaining family farming.

Seasonal workers are also affected by financial security concerns, as job insecurity combined with unclear employment structures can have a significant impact on this group’s mental health outcomes.

“The type of employment, especially for seasonal workers, significantly impacts their wellbeing. The uncertainty associated with this employment structure can have a notable effect on mental health”.

3.2.4 Regulatory and administrative pressures

The burgeoning administrative workload associated with increased regulation is another significant factor affecting the sector. Growing regulatory pressures are creating significant stress for farmers and farm workers, according to most interviewees. Likewise, the change in climate¹² and the lack of clarity in legislation and rules were identified as creating ‘substantial uncertainty’ in the agricultural sector.

“Members consistently highlight administrative and policy challenges during regular meetings. Even when mental health isn’t the primary focus, these issues are consistently raised, indicating significant stress associated with bureaucracy and policy hurdles”.

¹² Examples of regulations surrounding climate change include law and policy falling under the umbrella of the European Green Deal. These include the European climate law, regulations to improve the protection and management of land and forests, and the nature restoration law. See [here](#) for further information.

Furthermore, feelings of frustration arise when farmers are excluded from policy and legislative formulation concerning their work practices was noted. As regulatory compliance is crucial for income maintenance, constant regulatory changes may lead to overwhelm and contribute to the overall uncertainty faced by farmers, farm workers and support entities. An additional challenge observed by participants is the disconnect between regulatory bodies and the regulated. The need for a shift to a farmer-friendly, cooperative approach was underscored in order to move away from the current 'adversarial' dynamic. Collaboration between governments and farmers was highlighted to build a more supportive environment for the overall wellbeing in the sector. Existing networks should also be enhanced and optimised to provide support for regulatory challenges and other bottlenecks.

"Farmers express frustration with regulations and laws that pertain to them but are perceived to be formulated without involving their perspective. This lack of engagement creates difficulty, particularly in the context of licensing issues".

3.2.5 Climate change

Conflicting views were shared on the relationship between climate change and mental health outcomes. Two interviewees said that it is highly impactful, and three people thought that it is somewhat to not impactful. For those who considered it impactful, regulations surrounding climate change¹³ and the stigma related to the issue, rather than the impact of climate change itself, were identified as challenges encountered by farmers. One respondent pointed out that weather conditions, such as constant rain or drought, can exacerbate mental health issues. For other respondents, the effect of climate change is minimal given that protective measures are in place for working in extreme weather conditions. Moreover, production losses, delays and changes in the harvesting seasons were noted to have an impact in the broader agricultural context rather than having an impact on the mental health and wellbeing of the agricultural workforce.

In contrast to literature - the emergence of new tasks and roles identified in the literature, such as transporting water and night-time watering, mitigating the effects of adverse climate events such as drought did not emerge as concerns within the interviews.

3.2.6 The fourth industrial revolution

3.2.6.1 Automation and digitalisation

It was noted that advantages equated with the sector's emerging digitalisation include mitigating workforce shortages, eliminating undesirable jobs, improving the work-life balance and, potentially, having a positive impact on the farm's profitability. However, the rapid pace of digitalisation may be a stressor for farmers and farm workers alike, as pressure to keep up with technological advancements may contribute to feelings of stress and anxiety. Thus, time to adapt to these changes was emphasised.

"Acknowledging that digitalisation is inevitable, farmers understand the need for change but emphasise the importance of allowing them time to adapt. Changes must be safe, clear and respectful, providing a framework for farmers to integrate digital tools at their own pace. Currently, many farmers face difficulties with new regulations and digitalisation as the pace of change is perceived as too rapid. Given that the average age of a farmer, e.g. in Belgium, is 55/56, some struggle to

¹³ As above.

adapt to new instruments, with instances where farmers do not even own a mobile phone”.

An additional stressor with this transition is generational gaps in technology use, which can lead to strained relationships between older and younger farmers, according to interviewees. Hence, a key characteristic of the current revolution is the need to ensure that workers are properly trained to operate new technologies. Thus, even though younger farmers may be more educated than their older peers, access to education and skill training programmes is required.

Other challenges associated with the digital transformation include the upfront investments demanded to automate and digitalise farming practices. Additionally, concerns about infringements on workers' right to privacy were also raised, as in some instances, digital tools are used to impose greater surveillance on workers.

“Digitalisation is an emerging trend with both positive and negative impacts on employment, depending on its application. Unfortunately, in some cases, employers are leveraging digitalisation to exert greater control over workers, leading to increased pressure on productivity and closer supervision. This is evident in sectors like the platform economy and agriculture, where digital tools are used to monitor tasks, such as measuring the weight of crop boxes and calculating wages, intensifying workload and pressure on workers ...”.

While the digital transformation presents a unique opportunity for the sector, care must be taken to ensure that these challenges are appropriately addressed, said respondents, given that they are likely to escalate stress and contribute to negative mental health outcomes.

3.2.6.2 The green transition

Another key feature of the current revolution is the emphasis on sustainability. In the context of the interviews, pressure was noted to come from external forces in this regard. While it was noted that greening the economy could have positive effects on psychosocial risks, other interviewees consistently highlighted stressors associated with the green transition.

“... greening of the economy, while having potential positive implications for work environments and reducing psychosocial risks, also needs careful consideration of how these trends impact working conditions”.

Notably, consumer demand for organic produce and rising demand for sustainable farming practices are cultural changes requiring extra resources. Therefore, support, investment and policy measures to sustain the sector, support the green transition and improve farmers' wellbeing were called for. Equally, concerns about implementing EU legislation promoting environmentally friendly farming (e.g. skills and financial resources) were a consistent theme within interviews. Pressure from regulatory measures imposed in response to climate change is perceived as burdensome and potentially detrimental to farmers' livelihoods. Despite their willingness to adapt and collaborate with environmental initiatives, such measures are a primary concern for farmers, according to one respondent.

3.2.6.3 Other risk factors

Investment in rural areas, the availability and continuity of public funds, time-limited project interventions, health and safety training, and Internet connectivity were identified as further factors impacting farmers' health and wellbeing. The availability and accessibility of physical and mental health services in rural areas and the effect of the health and care workforce crisis¹⁴ were also noted to have an impact on mental health outcomes by respondents. Medical deserts, which are increasingly common in rural areas, are a particular concern that can have significant impacts on farmers' and farm workers' mental health outcomes.

“The lack of services, including healthcare, is a characteristic issue in rural areas, and it particularly affects farmers ...”.

Other trends in the sector, such as irregular working, working time and the illegal employment of migrant workers, were highlighted as challenges and opportunities whose psychosocial effects need to be monitored. The urgent requirement to address workforce shortages and the need to upskill workers were also raised. The complexity of upskilling workers, particularly migrants with specific cultural, housing and language needs, was underscored.

3.2.7 Groups at higher risk of psychosocial risks

Variables impacting psychosocial risks include age, gender, migrant status, knowledge, skill and experience levels. Indeed, interviewees spoke at length about the greater exposure of migrant workers and older farmers to psychosocial challenges due to specific factors.

3.2.7.1 Migrant workers

Distinct challenges to migrants' wellbeing mirrored the well-documented challenges in the literature and were referenced throughout the interviews. These included, but were not limited to, adequate accommodation, fair wages, residency status, employment practices, family separation, training, language and cultural barriers, dependence on employers and social integration. Interviewees felt that job insecurity, legal status and unclear employment structures significantly impact migrant workers' wellbeing. Equally, the availability and access to adequate support services, already limited in some areas, worsen migrant workers' mental health outcomes. The need to legalise and regularise the illegal employment of migrant workers was identified interviewees. The vulnerability of female migrants was underlined, considering any potential dependencies they may have on their employers. Examples of such dependencies include employers retaining the documentation of female migrant workers.

“Migrant workers, including undocumented workers, especially female migrant workers, face vulnerability due to various risk factors. These individuals come from abroad, lacking familiarity with the host country's circumstances and language. They are dependent on their employers, with some having documentation provided by the employer. Female farm workers, being subordinate and

¹⁴ All WHO European Region countries are facing severe challenges related to their health and care workforce. The health workforce crisis, acknowledged by the WHO (2022), is defined by a declining, ageing workforce, which is exacerbated by workforce shortages, recruitment and retention levels. The effects of the health and care workforce crisis particularly impact rural areas, many of which are becoming known as 'medical deserts'. See WHO. (2022). *Health and care workforce in Europe; Time to act*, available at: <https://iris.who.int/handle/10665/362379>. Further numbers concerning the workforce crisis are available [here](#).

vulnerable, remain dependent on their employers or supervisors. Unfortunately, these cases often go unreported”.

“... The prevalence of undeclared work, particularly in southern Europe, involves asylum seekers, undocumented individuals or those without residential status. The uncertainty or absence of legal status adds to the mental burden on workers, impacting their wellbeing. Additionally, the employment conditions in rural areas compound the challenges, as these areas lack adequate support services and infrastructure for individuals experiencing mental health problems and psychosocial risks”.

3.2.7.2 Older workers

As the farming workforce ages, several participants perceived older farmers as a higher-risk group. This was associated with the demographic and technological transition, social isolation, loneliness, and the health and individual physiological changes that occur as the body ages. Older farmers' income security concerns upon retirement, farm succession and legacy, health complications and adaptability to changes were considered by most interviewees as common factors that can contribute to or exacerbate existing psychosocial stressors. Generational clashes, associated with the current industrial revolution, may also be a factor contributing to family stressors. It is possible that these stressors are linked to higher rates of suicide in this group, with one participant underscoring that studies indicate elevated rates of suicide among older farmers.

“Additionally, older farmers face elevated risks, with studies indicating higher rates of suicide among this demographic. While younger farmers may experience greater suicidal ideation, older farmers are more likely to act on these thoughts”.

3.2.7.3 Other groups

While discussion of the specific risks faced by other groups was limited, small farmers, women, younger farmers and new entrants to the sector were also identified by the interviewees as groups being at higher risk of experiencing psychosocial challenges. The vulnerabilities of new entrants and young farmers were largely associated with their experience, skill levels and knowledge base. Gender-based harassment was identified as a risk for all females in the sector. Women's household roles were also considered a risk factor, especially where conflict may arise concerning labour division and when help is requested with household responsibilities.

“Female workers, especially female migrant workers, report instances of harassment by male superiors, contributing to mental health concerns ...”.

While not overtly identified as a group with greater exposure to psychosocial risks, some interviewees stated that risks to farm workers were associated with their farmers' managerial ability and contract types. As for LGBTQ+ individuals, like the literature, this group was not identified as being at greater risk of psychosocial challenges in the sector.

3.3 Challenges in addressing psychosocial risks in the sector

Challenges in addressing psychosocial risks in the sector are perceived to be particularly severe for small farmers. Larger farms are believed to be more resilient due to having more financial and human resources to navigate psychosocial risks more effectively. Equally, quantifying the prevalence of psychosocial risks in the sector is compounded by a lack of comprehensive data. Under-reporting of mental health complaints combined with resource constraints leads to a limited evidence base ascertaining links between workforce challenges and mental health outcomes. However, anecdotal evidence suggests that positive changes are occurring in certain areas, with the value of community-based support programmes perceived to be particularly impactful.

“Support initiatives, such as networks that engage with farmers to discuss psychological risks, have emerged. These networks aim to encourage farmers to speak openly about their mental health, offering potential connections to counsellors or psychologists”.

Participants believed that economic and social factors such as stigma, financial uncertainty and administrative burdens affect help-seeking behaviours in the sector. Raising awareness of psychosocial issues is essential. Enforcing regulations to ensure the mental wellbeing of the workforce should be prioritised. While awareness of the importance of mental health is increasing in the community, ongoing work is needed to promote a culture promoting open dialogue in farming was stressed.

3.4 Workplace risk assessment on psychosocial risks

Often, risk assessments focus on the risks and hazards associated with physical work, agricultural practices and machinery operations. Psychosocial risk is often not assessed, although under the OSH Framework Directive, psychosocial risks must be included in risk assessments.

A persistent challenge is that farmers often struggle to conduct risk assessments covering all risks on their farms. One interviewee noted that the multiple roles farmers play (e.g. employer, safety officer) can lead to complacency due to the complexity of managing these responsibilities. Despite progress, ongoing efforts are necessary to promote risk assessment and implementing preventive measures on farms. The elaboration of an online risk assessment tool¹⁵ at EU level by the EU social partners with the assistance of EU-OSHA exemplifies efforts to facilitate risk assessments.

“... The collaboration between employer associations, EFFAT and EU-OSHA, launching an EU online risk assessment (OiRA) tool for farmers, exemplifies efforts to facilitate risk assessments by putting at the disposal of farmers a practical online tool for free use”.

While online self-assessment tools developed in collaboration with EU-OSHA are available, their use is hindered by farmers' reluctance to access online digital resources was noted.

3.5 Psychosocial risks and mental health management

Some interviewees highlighted examples of good practice interventions which included for example developing and enabling access to prevention, detection and first aid tools, which are currently being developed in Ireland. Moreover, for example, in Spain, trade union initiatives are focusing on sexual

¹⁵ The EU agricultural OiRA tool is available for free at: <https://oira.osha.europa.eu/oira-tools/eu/eu-agriculture/oira-agriculture>

harassment at work, with collective agreements¹⁶ addressing cases of workplace sexual harassment and defining procedures for filing complaints. In Belgium, farmers have the option to attend a community group to engage with peers via various social activities. The group's objective is to alleviate feelings of isolation by fostering peer-to-peer conversations. EU projects such as FARMWELL and SafeHabitat aimed at improving the mental, physical and social wellbeing of farmers were other good practice initiatives mentioned by interviewees.

Suggested approaches, for managing and preventing psychosocial risks demonstrated the importance of bio-psycho-social interventions.¹⁷ Fitting with this model, the availability of well-established local systems and networks, including specialist mental health and peer support services, that can readily reach farmers was emphasised. Furthermore, the need to promote healthcare access, whether via providing financial assistance or free at-the-point-of delivery,¹⁸ was stressed.

“Establishing a network is a key innovation in initiatives like Farmers at Crossroads. Collaborating with a broad network of health providers requires a locally well-established system to readily reach farmers. Those in close contact with farmers, as well as supporting organisations, should undergo training to recognise signs of mental health problems, preventing severe outcomes such as suicide. Communication plays a vital role, and special courses are designed to train individuals on initiating conversations about mental health issues”.

Raising awareness, building capacity and providing training were mentioned as keys to empowering individuals and organisations to address psychosocial risks and promote mental health. For participants, awareness-raising efforts are the starting point to first reduce mental health-related stigma and, second, to understand and overcome barriers connected with accessing resources and services. Thus, providing farmers with knowledge and know-how on how to manage mental issues was considered crucial. Equally, raising awareness among farmers, workers and employers is essential to tackle stigma and normalise open discussions on the topic. Likewise, support and ancillary organisations should be trained to recognise signs and symptoms of mental ill health and, where necessary, feel confident to conduct suicide prevention interventions.

Raising awareness about issues in the agricultural sector should not be limited to mental health but also include efforts to enhance the general public's knowledge about the challenges facing farming professionals, particularly those related to climate change. Public art exhibitions raising awareness among experts, researchers, universities and organisations of the challenges faced by farmers were suggested examples.

“... Breaking societal stigmas related to farmers and their work is crucial, particularly concerning issues like climate change ...”.

¹⁶ See: [Spain: Publication of the V Agreement for Employment and Collective Bargaining \(V AENC\) | Garrigues: Guía Sindical de Actuación Ante el Acoso Sexual Y Acoso Por Razón De Sexo en el Ámbito Laboral and PREVENCIÓN ACOSO SEXUAL LABORAL SECTOR AGRARIO \(coag.org\)](#) for further information.

¹⁷ Bio-psycho-social interventions address overall wellbeing by combining medical (e.g. drug treatment), psychological and social (e.g. peer support) approaches. These interventions consider biological, psychological and social factors to protect wellbeing and support recovery.

¹⁸ Free at-the-point-of-delivery resources are services provided to users at no cost. This ensures that essential services or information are accessible to everyone without financial barriers at the moment of use.

The use of communication tools, such as cultural activities and the arts, to engage the farming community is also believed to consistently improve wellbeing. The positive impact of such initiatives was felt to extend to the wider community, as they can foster a sense of shared identity and promote collaboration on initiatives. Additionally, enabling and supporting innovation and research was mentioned as imperative for raising awareness and policymaking activities. Further research, for example, is needed to establish a clear link between precarious work and mental wellbeing.

Next, addressing the social determinants of health should be concentrated on. Legislating for adequate income and wages, creating robust industrial policies, ensuring collective bargaining and social dialogue, and promoting supportive EU, national and local-level policies were some suggestions put forward to address concerns about remuneration, job security and work conditions. Additionally, simplifying policies, which contribute to perceptions of high administrative burdens, would help to reduce the complexities associated with the policy domain.

“On the policy front, simplification is key. Policies often appear complex, especially for those not working in the policy domain, requiring extensive administrative procedures and compliance with numerous norms and laws ...”.

Equally, improving access to business knowledge and skills development was highlighted as essential. Preparing future farmers and farm workers with ‘tips and tricks’ beyond traditional agricultural skills upon entering the profession could increase both resilience and resources. Such skill development could include the business and technical aspects of agricultural activities. Likewise, supporting issues concerning agricultural diversification, small-scale production, enabling networking, inter-sectoral and cross-sectoral knowledge exchange, and collaborations within and between the farming community were suggested.

Considering the specific needs of migrant workers, holistic interventions encompassing agricultural skills training, navigating legal barriers, irregular work and facilitating access to the healthcare system were recommended. Employer associations initiatives promoting integration of migrant workers through language training and housing were highlighted. Regarding female farmers, initiatives included cooperatives, awards recognising the contribution of women to the sector, and including gender-related issues in collective bargaining and equity plans.

Significant variations in cultural norms towards mental health can be found between rural and urban communities and EU Member States. Therefore, comprehensive strategies that account for population differences will be essential – was noted, as a generic approach will prove ineffective in addressing psychosocial risks and managing mental health outcomes in the agricultural sector.

4 Selection of good practices on psychosocial risks prevention, management and intervention for the agricultural sector

In the context of psychosocial risks, good practices refer to effective approaches and principles that organisations and employers, including farmers, can adopt to promote positive mental health, wellbeing and safety in the workplace. They can be direct actions, including organisational planning (for prevention), management (of existing exposure) and intervention (consequences of poor psychosocial environments) to mitigate exposure to psychosocial hazards at work. Good practices can also include a series of strategic policies, measures, programmes, projects and other initiatives by public authorities in the three previously described fields of action. Activities in the latter category are designed to support both employers and employees and stimulate better psychosocial environments in the targeted sector.

Key features that contribute to the effectiveness of good practices include, among others, an evidence-based approach, proper adaptation to the specific context, a holistic approach that goes beyond isolated aspects, participatory methods, clear communication of their purpose, and a leadership commitment to promote and model the activities.

Previous attempts at mapping the **typologies of good practices** for psychosocial risk management in agriculture exist in the literature. Younker et al. (2021) performed a systematic review mapping mental health interventions over the past 50 years targeting farmers' and farm workers' mental health. Their classification system of existing activities included:

- **Mental Health and/or Crisis Literacy:** This broad category encompasses all forms of training materials and activities directed at farmers and/or farm workers. It can include the development of educational courses, workshop meetings (usually lasting between 4 and 12 hours), training and promotional materials, and other sources developed for online learning. This item also includes *Mental and Physical Health Literacy Promotion* integrating both health and wellbeing in support actions, and *Mental Health Literacy and Crisis Training for Healthcare Providers*, focusing on the protagonist role of local professionals in rural areas who are often non-mental health specialists.
- **Peer and Paraprofessional Support:** Developing listening and discussion spaces for sharing mental health complaints and other difficulties in professional and personal life. It can include: creating *Farmer-Specific Support Groups and 'Peer Listening'* (either group sessions or one-to-one 'buddy' sessions); setting-up *Paraprofessional Crisis Hotlines* (telephone or online services, also foreseeing anonymity if requested); *training other local professionals* not trained in mental health who provide services to farmers (e.g. veterinarians, financial consultants), thus enabling them to become 'accidental counsellors'; and activities of *Other Paraprofessionals and Volunteer Interventions* (e.g. community programmes, NGOs) that support farmers in distress.
- **Direct Clinical Interventions:** Developing programmes led by professional mental health clinicians, whether directly or through cooperation with skilled social workers or other community-based services.

It is worth underscoring that, despite a broad classification under 'Other Interventions' and a looser connection to mental health, Younker et al. (2021) acknowledge the potential benefits of other supporting activities. These include **financial and material aid in times of distress**, organisational network development, agroecological education, refined higher education and reskilling programmes, political and advocacy action for farmers and farm workers, new research initiatives about farmers' and farm workers' mental health, the development of nation-wide occupational safety programmes for the sector, and even the introduction of technological innovations in the production process.

Analysis of the literature and the interventions' geographical distribution tends to confirm a **broader attention to mental health interventions for farmers in Anglo-Saxon countries** (e.g. Australia, Canada, US) (Younker et al., 2021; Hagen et al., 2019). Notwithstanding, this current report is not the first body of evidence in Europe to address the matter of good practices for mental health in agriculture.

A recent example of an EU-level initiative is the Horizon Europe SafeHabitus project, which aims to advance safer practices on farms across the EU.¹⁹

European countries exhibit **diverse approaches** to awareness and management of psychosocial risks in the farming sector (Euractive, 2022). For instance, countries such as Germany, Ireland and France clearly demonstrate a more pronounced commitment to their policy agendas. In Germany, research highlights that 17% of all sick leave in agriculture in 2017 resulted from mental health issues, particularly affecting female farmers and farm workers. This acknowledgment prompted interventions, including free consultations, crisis hotlines and online courses. In France, a surge in suicides in the sector (529 cases in 2016) led to several actions in recent years. This included a roadmap designed to prevent mental distress and provide support for farmers and farm workers in difficulty, which entails three overarching actions:

- creating active **intra-sectoral dialogues** between farmers, farmer organisations and elected officials via special regional committees to identify, share and resolve various psychosocial risks, including financial stress, administrative burden and negative perceptions of farming;
- developing and strengthening **farmer contact and support networks** to provide mental health prevention and intervention actions, such as engaging with local health services, increasing income, reducing financial stress and assessing capacity to return to work following an accident; and
- **preventing economic and social difficulties** among young farmers and their families by simplifying bureaucracy, increasing financial aid and financial support for replacements in the event of an accident or illness, improving access to specialist mental health professionals, and providing paid parental, including paternity, leave (Gouvernement de France, 2021).

Ireland prioritises farmers' and farm workers' mental health by supporting scientific and institutional research and engaging in multiple activities such as training agricultural advisors in mental health issues, developing educational materials and organising awareness-raising initiatives. More recently, a research project commissioned by the National Office for Suicide Prevention, Dying to Farm, provides a list of practical recommendations for policymakers, health services and frontline practitioners, some of which mirror the French initiative (Russell et al., 2023). Recommendations for health professionals and practitioners include ensuring that they become familiar with and understand farming challenges for successful mental health interventions. Sectoral understanding projects targeting farmers' and farm workers' mental health appear to be growing with examples also found in Spain and Austria (Euractiv, 2023).

There are also studies which have sought to understand farmers' preferences for tailoring interventions for a specific audience. For example, Gunn et al. (2021) chose small-sample, semi-structured interviews to understand the tastes and desires of these workers in Australia when receiving digital training for mental health. Participants openly expressed willingness to engage with new tools but clearly expressed certain requirements. For instance, in terms of content and visualisation, they preferred authentic, positive, masculine-leaning content accompanied by graphical information and pictures showing farmer diversity. Simple layouts and fonts, as well as 'natural' colours (particularly green), were preferred. Language should be casual, positive, empowering and carefully humorous. Technical features could include the option of offline consultation due to unreliable Internet connections, while limited data plans and compatibility with multiple devices should be considered. This kind of exploratory research could be very useful to refine the acceptability of interventions. There seems to be a certain tendency in the EU to rely on European and national-level public support programmes and projects; it seems that there are more programmes available in northern and central Europe when compared to southern Europe. Advice and good practices on how employers can support individuals experiencing mental health problems in the workplace are available from EU-OSHA and include advice for suicide prevention (see EU-OSHA, 2024a, 2024b, 2024c). Still, practical advice for employers of farm workers is required given the impact

¹⁹ Further information on the safehabitus project is available at <https://www.safehabitus.eu/>

that mental health stigma and stoicism has on farmers' and farm workers' willingness to discuss, and disclose, mental issues (for further information, see EU-OSHA, 2024d).

Nevertheless, as previously mentioned, all employers, including farmers employing workers, must carry out a risk assessment and implement preventive measures since **psychosocial risks are covered in the OSH Framework Directive 89/391/EEC**. Employers, including farmers and agribusinesses employing workers, should implement workplace policies that identify and mitigate psychosocial risks (see for example the EU agriculture OiRA tool²⁰, or EU-OSHA, 2013). Equally, the ILO (2014) provides practical and easy-to-implement solutions concerning ergonomic checkpoints in agriculture,²¹ and the Food and Agriculture Organization of the United Nations (FAO) provides a practical guide²² on managing psychosocial risks in farming with a section dedicated to human resources that farmers and employers of farm workers can refer to (Kahan, 2008). While the latter guide's target audience is farmers in developing countries, the guide is transferable to the EU context given the common sources of risk between the two regions (e.g. weather conditions, financial adversity and management, equipment breakdown). Finally, inspiration for OSH risk management can be taken from other sectors that work in similar strenuous conditions (e.g. construction, forestry and fishing).

Against this background, this research scoped multiple European countries to identify concrete **examples of private and public-supported actions** intervening in farmers' and farm workers mental health. The 14 good practices presented below adhere to the classification patterns illustrated by Younker et al. (2021). Twelve examples come from European countries, one is from New Zealand and the final example is Australian. Successful interventions are carried out by public programmes, joint projects, sectoral stakeholders and agricultural companies with the objective of improving the management of workplace psychosocial risks in agriculture. The sample aims to show the promising approaches to identifying, assessing, preventing and managing these hazards, including policies, strategies and workplace practices. Data and information on the good practices have been retrieved from external sources (desk research), and in some cases information was provided by experts and sectoral stakeholders.

²⁰ The EU agricultural OiRA tool is available for free at: <https://oira.osha.europa.eu/oira-tools/eu/eu-agriculture/oira-agriculture>

²¹ Niu, S., & Kogi, K. (2014). Ergonomic checkpoints in agriculture: Practical and easy-to-implement solutions for improving safety, health and working conditions in agriculture (2nd ed.). International Labour Office, International Ergonomics Association. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed_protect/@protrav/@safework/documents/instructionalmaterialia/wcms_176923.pdf

²² Kahan, D. (2008). *Farm management extension guide: Managing risk in farming*. Food and Agriculture Organization of the United Nations. <https://www.fao.org/uploads/media/3-ManagingRiskInternLores.pdf>

Example 1: **The Suicide Prevention Plan for Farmers**

Type of initiative	Prevention and intervention
Countries involved	France
Initiator/organisations involved	Mutualité Sociale Agricole
Level of intervention	Individual and organisational

Description

The Mutualité Sociale Agricole (MSA) is the compulsory social protection scheme for salaried and self-employed persons in the agricultural professions. It offers various mental health schemes and initiatives to support farmers and farm workers in managing their mental wellbeing as part of its suicide prevention plan in agriculture. The MSA has 35 prevention units, comprising social workers, medical advisors, occupational health physicians, and other health and safety professionals from health or technical services (contributions, benefits).

Two of the initiatives included in the suicide prevention plan adopt an individual approach and one a collective approach:

- **The Agri'écoute Service: Professionals Listening to Farmers in Distress:** Agri'écoute is a free helpline accessible 24/7, allowing any MSA member to anonymously engage in dialogue with listeners at any time, including weekends and nights. The service includes remote support and personalised follow-up for severe cases. Members have the option of lifting their anonymity to receive further support from MSA's multidisciplinary prevention units. Agri'écoute offers up to five appointments with the same psychologist, ensuring continuity of care, prioritising personalised follow-up, and facilitating connection between individuals and MSA prevention units.

In terms of figures, Agri'écoute keeps record of the types of phone calls received to further understand the impact of their services. Since the beginning of 2021, Agri'écoute has received a total of 2,904 calls, averaging 280 calls per month. The emergency system was activated five times to manage suicidal crises in one year, resulting in 210 individuals being referred to MSA multidisciplinary prevention units. Among the callers, 62% were farm operators, while 38% were farm workers. Around 28% were in the 51-60 age group, while the categories of 31-40, 41-50 and 61-70 each represented 18% of callers. Personal issues, such as issues with their partners in the farm, accounted for 70% of calls, surpassing professional issues at 30%. Testimonials from service users include: 'if I had to meet a professional in person, I would never have gone', 'I couldn't see a way out of my situation and you gave me courage', and 'I wouldn't have dared to speak, but with Agri'écoute it's different because it's on the phone and anonymous.'

- **Respite Assistance to prevent professional burnout:** The respite support programme aims to prevent professional burnouts for all active individuals in the agricultural sector, both non-salaried and salaried, through replacement assistance and social support. Two key actions are implemented:
 - Respite Assistance: Provides funding for replacement days on the farm. Replacement can be arranged through a replacement service or, if unavailable, through the direct employment of a salaried worker. For non-salaried individuals making their first request, the replacement assistance can extend up to 14 days, with

the possibility of renewal depending on the situations (limited to one renewal per year).

- Social Support: After a social evaluation of each situation, a social worker proposes a co-constructed social support plan tailored to the member's specific difficulties. This support can take the form of assistance for vacation or leisure activities with family, preventive actions and respite support. These activities aim to address burnout and encourage a step back, including respite stays, family days, physical or dietary activity sessions, psychological consultations and support groups.
- ***Et si on parlait du travail? (And if we talked about work?): The approach to preventing psychosocial risks***, facilitated by the MSA in collaboration with professionals specialised in training, project development and cultivation practices, has garnered active participation from farmers across France since its adoption in 2016. With over 3,000 individuals engaging in discussion meetings, this collective endeavour brings together farmers from various roles, including directors, managers and operators, to collectively address the psychosocial risks inherent in agricultural work. Through these interactive sessions and training workshops, farmers gain insight into the risks associated with their profession and explore strategies to improve their work–life balance. The programme emphasises the importance of integrating health into the work-centred approach, fostering a dynamic process of exchange and action among participants.

An evaluation conducted by Planète Publique in 2019 revealed significant achievements resulting from farmers' participation in *Et si on parlait du travail?* (ESOPT) discussion meetings. This evaluation revealed that a significant majority of beneficiaries experienced heightened awareness of the risks associated with their profession, particularly in relation to their health and work dynamics. Specifically, 80% of participants frequently reconsidered the topics discussed during ESOPT discussion meetings, demonstrating proactive engagement with the programme's objectives. Furthermore, 70% of farmers reflected on the constraints inherent in their agricultural activities, demonstrating a growing recognition of the challenges they face. Importantly, over half of the participants took concrete steps to address their challenges, with 55% focused on regulating their workload, 44% modifying the organisation of their leisure time and 32% adapting their work organisation.

References and resources

- Online discussion platform: <https://agrieécoute.fr/>
- Agri'écoute in figures: '[Agri'écoute, le service d'écoute des actifs agricoles en difficulté devient également une plateforme de discussion en ligne : agrieécoute.fr](#)'

Example 2: **RAPSY service**

Type of initiative	Prevention
Countries involved	Belgium
Initiator/organisations involved	IDEWE Group
Level of intervention	Individual and organisational

Description

The IDEWE Group is an external service for prevention and protection at work. It comprises 11 regional offices and over 1,000 employees. It supports more than 35,000 employers and around 860,000 employees in creating a healthy and safe working environment. The group provides services that address the needs of both small and large agricultural businesses.

A guide, 'Psychosocial Well-Being at Work', is available online for smaller agricultural companies. It provides a structured approach to understanding these challenges and offers practical advice on how to plan and seek help effectively. IDEWE also publishes a quarterly magazine titled 'IDEWE Informs You'. The magazine is packed with tips and information designed to improve workplace safety, health and wellbeing, enabling smaller agricultural companies to provide better protection for their farm workers. All magazine issues are available on the group's website.

Larger agricultural companies can opt for the RAPSY psychosocial risk analysis service. The primary objective is to help employers identify potential obstacles to workers wellbeing while reinforcing available resources. The psychosocial risk analysis is grounded in assessing two critical dimensions of the workplace: obstacles and resources. Obstacles, such as conflicts and job insecurity, can drain workers motivation and energy, while resources, such as social support and autonomy, provide energising and motivating effects. The analysis focuses on five risk factors that play a significant role in shaping the workplace environment: work organisation, work content, working conditions, work–life conditions and interpersonal relationships.

The RASPY tool provides organisations with a comprehensive assessment of psychosocial wellbeing. It uses a standardised questionnaire developed by IDEWE in collaboration with KU Leuven. These insights aim to help organisations make decisions to implement effective wellbeing policies.

The application of the tool comprises six steps:

1. First Meeting: Discuss preferences with the psychosocial prevention advisor, such as electronic or paper format, segmentation by department or age, and adding specific questions (e.g. leadership style, absenteeism). Decide if workers should receive immediate individual feedback after completing the questionnaire.
2. Preparation: The research department handles the organisational aspects of the analysis, and the questionnaire is finalised once approved by the client.
3. Launch: workers are given two to four weeks to complete the questionnaire. Multiple reminders are sent to increase participation.
4. Treatment: The research team analyses the data, comparing it to Flemish and Walloon regional reference groups or national ones. Data privacy is maintained throughout the process.
5. Report: Group results and conclusions are presented with supporting figures, graphs and text, revealing strengths and areas of improvement. The prevention advisor or a research department member explains the results.

6. Aftercare: Targeted actions to improve wellbeing based on the report need to be taken. The employer provides guidance for implementing these actions effectively.

In terms of prevention, IDEWE offers the ToWorkSafe package, collaborating with farmers and employers in the agricultural and horticultural sectors, with a particular focus on supporting migrant farm workers as it has been specifically created to bridge language barriers. This package supports the onboarding of migrant farm workers using brochures, checklists, videos and emergency instructions. The instruction box serves as a tool for delivering safety guidelines to new workers, while an online platform allows workers to complete OSH training independently. Furthermore, a group report for employers is generated via the online OSH instruction tool. IDEWE also offers various training sessions, including fire safety, first aid and forklift operation, all focused on promoting an OSH culture.

References and resources

- [ToWorkSafe](#): A visual package tailored to your industry to get started safely.
- IDEWE guide: '[Psychosocial Well-Being at Work](#)'
- IDEWE services for the agricultural and horticultural sectors: '[Working safely in agriculture and horticulture](#)'

Example 3: **Mit uns im Gleichgewicht (In Balance with Us campaign)**

Type of initiative	Prevention and intervention
Countries involved	Germany
Initiator/organisations involved	Social Insurance for Agriculture, Forestry and Horticulture
Level of intervention	Individual and organisational

Description

The Social Insurance for Agriculture, Forestry and Horticulture (SVLFG) implements the farmers' health insurance and has been in place since 1972 to support entrepreneurs and their families in the agricultural, forestry and horticultural sectors. In addition, it provides a large variety of services focused on awareness, prevention and management of health-related issues. The initiative uses a mixture of individual and collective approaches.

Among the several projects it supports, the project *Mit uns im Gleichgewicht* (In Balance with Us) aims to promote and maintain mental health among farmers, foresters and horticulturists. Its innovative approach relies on the use of Internet and mobile-based interventions (IMIs) to support farmers. IMIs are self-guided psychosocial interventions delivered through an online programme or mobile app, designed for people seeking health support.

Moreover, to maintain and promote the mental health of farmers, foresters and horticulturists, the SVLFG also offers group activities, online courses, telephone counselling and crisis assistance:

- For individuals experiencing high stress levels, the SVLFG provides **intensive individual coaching through telephone support**. Led by a personal coach, typically a trained psychologist, this coaching extends over a period of up to six months. The objective is to collaboratively explore coping strategies for stressful situations, crises or fears, ultimately aiming to sustainably improve quality of life.
- In situations of acute crises, a **24/7 crisis hotline staffed by experienced psychologists** is available. Callers can arrange further discussions until their personal situation stabilises. The goal is to offer targeted support to those with the greatest need, deploying a personal coach to defuse the situation and motivate the caller to address the crisis independently.
- For **companies seeking guidance on conducting risk assessments for mental stress, the SVLFG provides various tools, including seminars, brochures and a toolbox**. These resources assist in performing mental health risk assessments in small companies and larger organisations.
- The 'Risk Assessment Psychological Stress' seminar targets employers, managers and occupational safety specialists. Participants learn how to implement mental harassment prevention effectively, sensibly and lawfully in their companies. Additionally, participants can deepen their knowledge through various online training courses, enabling early detection of mental stress and the strengthening of individual health.

The guided IMIs were scientifically evaluated by the Friedrich-Alexander University Erlangen-Nuremberg and the University of Ulm. The qualitative analysis indicated overall acceptance and satisfaction with the IMI programme aimed at preventing depression among farmers and related professions. Participants emphasised the value of e-coach guidance in the preventive context and expressed preferences for individualised content and usage, highlighting the advantages of anonymous, flexible and location-independent access.

References and resources

- URL: [SVLFG | Equilibrium](#)
- Freund, J., Buntrock, C., Braun, L., Thielecke, J., Baumeister, H., Berking, M., Ebert, D. D., & Titzler, I. (2022). Digital prevention of depression for farmers? A qualitative study on participants' experiences regarding determinants of acceptance and satisfaction with a tailored guided Internet intervention programme. *Internet Interventions*, 29, 100566. <https://doi.org/10.1016/j.invent.2022.100566>

Example 4: **Farming Resilience Page**

Type of initiative	Prevention
Countries involved	Ireland
Initiator/organisations involved	Teagasc and the Irish Farming Association
Level of intervention	Individual

Description

The Farming Resilience Page was launched by Teagasc, the national body in Ireland responsible for research and development, training and advisory services in the agri-food sector, and the Irish Farming Association. The initiative aims to improve the mental health and wellbeing of Irish farmers through online resources tailored to their unique needs. It seeks to provide farmers with accessible tools and information to enhance their resilience and support their emotional and physical health.

The page focuses on several key themes:

- The 'Mental Health Stress Management and Mindfulness' section aims to offer **strategies for alleviating stress and anxiety**. These tools, presented through a series led by trained professionals, provide practical techniques that farmers can seamlessly integrate into their daily routines, particularly during solitary moments on the farm.
- The '**Five Ways to Well-being**' section outlines a proven strategy developed by the New Economics Foundation in response to economic hardships. This approach emphasises five core actions centred on social relationships, physical activity, awareness, learning and giving — all of which play pivotal roles in influencing wellbeing.
- The page provides resources on the importance of maintaining **both physical and mental wellbeing to effectively manage a farm enterprise**. Recognising the physically demanding nature of farming, including long working hours, isolation and poor lifestyle habits, the initiative provides practical guidance and resources. Similar to addressing issues with livestock or machinery promptly, taking proactive steps to address physical and emotional challenges can significantly impact farmers' overall quality of life and sustainability.
- Lastly, the page **features relevant contact information for farmers and their families** to access support during times of crisis, further highlighting the initiative's commitment to fostering resilience and wellbeing within the farming community.

References and resources

- URL: [Farming Resilience – Mental Health Ireland](#)
- ['Staying Fit for Farming – A health booklet for farmers'](#)

Example 5: **Bondekompisar (Farmer Buddies)**

Type of initiative	Prevention and intervention
Countries involved	Sweden
Initiator/organisations involved	Lantbrukarnas Riksförbund (Swedish Federation of Farmers)
Level of intervention	Individual

Description

Lantbrukarnas Riksförbund (LRF) is an organisation representing the interests of farmers, rural entrepreneurs and agricultural professionals across Sweden. Founded in 1896, the LRF has played a pivotal role in shaping agricultural policies, promoting sustainable farming practices and advocating for the welfare of its members.

Within the LRF, a comprehensive support system is in place to assist members who may be facing challenges. To become a member, farmers need to pay a fee. However, the mental health initiative is available to anyone who needs it.

Operated by LRF Skåne, Farmer Buddies is specifically designed to provide **support and guidance to individuals within the farming community who may be experiencing difficulties**. The buddies are experienced farmers themselves who understand the challenges of agricultural work. They offer help on a voluntary basis, allowing farmers to reach out anonymously to discuss their challenges.

The shared experience, mutual trust and cultural context within farming communities can create a supportive environment, where talking about mental health with a fellow farmer feels more natural and less intimidating than seeking help from a professional outsider. Their role is to offer support to farmers, their colleagues, family members or farm workers who may be struggling with various issues, including sudden events, financial concerns, relationship issues, animal welfare challenges and mental health issues.

Some of the programme's key components:

- **Trusting relationships:** Farmer Buddies establish professional yet empathetic relationships with those seeking support.
- **Providing guidance and assistance:** Farmer Buddies offer guidance and support to individuals in need, helping them navigate challenging situations and providing assistance in finding appropriate resources or professional help.
- **Confidentiality:** The entire support process is built on a foundation of trust and confidentiality. While Farmer Buddies do not have a legal obligation to maintain confidentiality, they handle all information sensitively and use it solely for the purpose of providing support.
- **Leveraging networks:** Farmer Buddies leverage their extensive network of contacts to connect individuals with relevant resources and services. They can refer individuals to professional support services as needed, ensuring they receive the assistance they require.

References and resources

- URL: [Bondekompis – Lantbrukarnas Riksförbund](#)

Example 6: **TABOER**

Type of initiative	Prevention
Countries involved	The Netherlands
Initiator/organisations involved	Land- en Tuinbouw Organisatie Noord (Agricultural and Horticultural Association North)
Level of intervention	Individual

Description

Funded by Land- en Tuinbouw Organisatie (LTO) Noord in 2023, TABOER operates under the umbrella of LTO Nederland, the largest farmers' organisation in the Netherlands, with LTO Noord representing farmers in the northern regions.

TABOER is a unique programme aimed at breaking taboos surrounding mental health issues among farmers and horticulturists. It addresses the challenges faced by individuals in the agricultural sector, as well as tensions within families, businesses and the broader community. The initiative emphasises the importance of talking about mental health within a sector where this is still very challenging.

Recognising the **reluctance to discuss mental health concerns within the industry**, TABOER offers a range of tools, communication resources and workshops to support farmers and horticulturists.

The workshops and training courses are designed to equip individuals with the skills and knowledge to address mental health concerns effectively. The sessions cover a wide range of topics, including:

- **Balancing family dynamics:** The workshop 'How do we keep it fun at the kitchen table?' focuses on maintaining positive family dynamics and communication strategies to foster a healthy and supportive environment within farming households.
- **Problem-solving:** The workshop 'How do we solve it?' provides participants with problem-solving techniques and strategies for addressing challenges related to mental health and wellbeing in agriculture.
- **Building resilience:** The training 'Getting a grip on the future' explores methods for coping with uncertainty and building resilience for tackling future challenges and supporting participants to develop proactive approaches to manage stress and anxiety.
- **Stress management:** The workshop 'Dealing with stress' offers practical tools and techniques for managing stress and promoting mental wellbeing in agricultural settings.
- **Adapting to change:** The workshop 'What's next? Staying in control in uncertain times' focuses on developing strategies for adapting to change and maintaining a sense of control during uncertain times, empowering participants to navigate their way through challenges.

Lastly, the **TABOER Toolbox** can be ordered free of charge by users through the website and includes tools and communication resources, such as pens, notepads, roll-up banners and beer mats, **designed to facilitate discussions about mental health concerns**. These resources serve as tangible reminders of the importance of addressing mental wellbeing and breaking the stigma surrounding mental health issues in agriculture.

References and resources

- URL: [Home – Taboer.nl](https://www.taboer.nl)

Example 7: **Enhancing Cooperation among FARMing entrepreneurs (CO-FARM)**

Type of initiative	Prevention
Countries involved	Belgium, Czech Republic, Germany, Ireland, Spain, Italy and Slovenia
Initiator/organisations involved	Technological University of the Shannon
Level of intervention	Individual

Description

The CO-FARM project, launched in 2016 and finalised in 2019 over a period of 30 months, represented a collaborative effort involving eight partners from several EU Member States. Addressing the significant psychological risk factors such as isolation and loneliness faced by farmers, particularly those residing in rural areas, this initiative aimed to empower farmers with the knowledge and skills necessary for cooperative environments.

The project is based on practical **case studies, recommendations on how to set up and manage cooperative farms**. These recommendations are available as a **training course**. The summary report and several case studies have also identified key topics and fields requiring training.

The project aims to enhance farmers' capacity and willingness to cooperate at a farm level and emphasises the importance of vocational educational training as an alternative for accessing information and education. To facilitate easier access to training and to overcome barriers, the CO-FARM project provides flexible training materials via a free app.

The modules are available on the website for anyone who wants to follow them. They cover various aspects essential for cooperation processes in family farming:

- European framework for cooperation: Provides basic information about the European framework for cooperation in family farming, offering insights into the overall background and concepts.
- Principles and benefits of farm-level cooperation: Explores the types and concepts of cooperation and presents real-life entrepreneurial experiences to understand the principles and benefits of farm-level cooperation.
- Factors supporting successful cooperation: Examines cultural, legal, financial, administrative and attitudinal aspects that support successful cooperation, helping participants identify strengths and opportunities.
- Factors hindering successful cooperation: Discusses factors that hinder successful cooperation, including cultural, legal, financial, administrative and attitudinal aspects, enabling participants to identify weaknesses and threats.
- Steps to creating a successful partnership (initiation): Outlines the steps required to initiate a successful cooperation partnership, drawing from theoretical knowledge and real-life experiences.
- Steps to creating a successful partnership (implementation): Details the steps involved in implementing a successful cooperation partnership, providing practical guidance and insights.
- Managing disagreement, risk and partnership failure: Covers communication structures, conflict management, and strategies for handling disagreement, risk and partnership failure.

The duration of each module varies, but it is recommended that each module be a minimum of 60 minutes to ensure thorough engagement and understanding. The modules are designed to be used iteratively, allowing participants to revisit topics as needed and to explore them individually or in groups.

The project's published summary analysed the levels of cooperation among farming entrepreneurs in the CO-FARM partner countries and the EU. These cooperation activities have demonstrated a range of significant benefits for farmers' and rural entrepreneurs' mental health and wellbeing.

The summary included testimonials from farmers highlighting the benefits of cooperative farms for their wellbeing. Farmers reported:

- having more rest time,
- reduced work stress, and
- ability to expand their operations without negatively impacting their lifestyle.

Furthermore, the activities help to alleviate feelings of isolation by fostering collaboration and community among farmers. By increasing leisure time and involving spouses and children in farming activities, they enhance the overall satisfaction with farming life. Moreover, due to fewer problems related to illness or the inability to work, this improves resilience and wellbeing. They also contribute to building confidence among participants and facilitate knowledge sharing within the farming community. Additionally, they allow older farmers to reduce their workload while remaining active in the agricultural sector, ensuring the continuity of farming traditions and expertise.

References and resources

- URL: [CO-FARM](#)
- ['SUMMARY REPORT'](#)
['CO-FARM: Enhancing COoperation Amongst FARMing Entrepreneurs'](#)

Example 8: **Agro Woman**

Type of initiative	Prevention
Countries involved	Poland
Initiator/organisations involved	Association for Sustainable Agriculture & Food in Poland
Level of intervention	Individual and organisational

Description

Established in 2014, the Association for Sustainable Agriculture & Food in Poland is a non-commercial initiative comprising companies and individuals from various sectors of the food chain. Members representing brands across the food responsibility spectrum share a common commitment to enhancing the quality of food and strengthening the agricultural sector in Poland.

The Agro Woman initiative, which was launched in mid-2023, aims to **create a platform for women to share their experiences** and stories, and to develop a space for discussing the role of sustainability in agriculture, innovation, management and the challenges of the future. The initiative uses a mixture of individual and collective approaches.

The activities of the initiative are based on three pillars: economic, environmental and social. The social pillar focuses on the rarely addressed issue of mental wellbeing, work–life balance and burnout, which affect all farmers but have specific impacts on women. The programme acknowledges that the subject is still taboo in the rural community, and access to support in rural areas is still limited.

Agro Woman has already launched two programmes:

- **Conferences and expert meetings aimed to promote and exchange knowledge between different participants in the agri-food sector on the challenges in agriculture, with a particular focus on the role of women and their mental health.** The first conference dedicated to the topic of farmers' mental wellbeing was held in December 2023 in response to the problems and challenges identified under the social pillar. In addition, the Agro Woman Programme Council meets several times a year to discuss issues selected with the support of external experts.

During the December conference, specific good practices were also discussed:

- **Digital agriculture:** This approach offers greater predictability in agricultural production, helping farmers to better manage their operations.
- **Standardisation of mental wellbeing support** to make it easier for people to get help.
- The second is a **mentoring programme aimed at supporting women** in the food production sector as they face challenges related to running a business. Participation in the programme helps **define an individual development path or implement an alternative goal chosen jointly by the mentor and the mentee.** While the programme is a response to the challenges related to the economic pillar, it has embedded an aspect of the social pillar, as the pressures and consequent stress from managing a farm will be taken into consideration. The programme will also consider the expectations of women in rural communities, such as the possibility of remote online meetings.

References and resources

- URL: [Agro Woman](#)
- First conference of the Agro Woman initiative dedicated to the mental wellbeing of farmers: [Association for Sustainable Agriculture & Food in Poland](#)

Example 9: **Lebensqualität Bauernhof (Quality of Life Farm)**

Type of initiative	Prevention, management and intervention
Countries involved	Austria
Initiator/organisations involved	Austrian federal and regional governments – The European Agricultural Fund for Rural Development
Level of intervention	Individual

Description

Lebensqualität Bauernhof is a project co-financed by the Austrian federal and regional governments and the European Agricultural Fund for Rural Development that aims to ensure the psychosocial wellbeing of those living and working on farms.

The programme is based on three pillars: a farmers’ helpline; psychosocial counselling; and educational offers such as courses, seminars and lectures:

- **A rural helpline** was set up throughout Austria to support farmers in difficult life situations over 10 years ago and has taken 7,000 calls. The helpline is often the first step to receive help and those answering have had psychosocial training to listen, provide competent information and point out possible solutions. The helpline is available Monday to Friday and deals particularly with problems that may arise on farms, such as generational issues and retirement.
- **Psychosocial advice is given by experts** at the Chambers of Agriculture in four Austrian regions. There are various forms of professional counselling, support and therapy. All these possibilities are intended to help farmers to better cope with their everyday lives and deal with difficult situations. The focus is also on necessary changes to improve quality of life and actively shape the future of the farm.
- **Educational offers** range across different issues that impact farmers’ mental health and wellbeing. The seminars tackle issues such as farm handover, looking after one’s mental health, communication and personal relationships on the farm, and living with a partner as a couple on the farm.

According to the latest annual report published in May 2023, feedback conversations with helpline counsellors revealed that not only do these discussions last longer than in previous years, as evidenced by statistical analysis, but also that the issues faced by those seeking help are more profound. Women account for 72% of callers, a consistent proportion in recent years. The primary counselling topics include generational conflicts, which accounted for 31%, followed by relationship problems at 15% and farm handovers at 12%. In 2022, 1,631 advisory contacts were recorded, nearly 5% more than the previous year. The concerns of those seeking assistance have remained mostly unchanged over recent years.

References and resources

- URL: [Home | LFI LQB](#)
- [‘Annual Report: “Quality of Life on the Farm”](#)

Example 10: **Act on Farm Relief Services**

Type of initiative	Prevention
Countries involved	Finland
Initiator/organisations involved	Finish government
Level of intervention	Individual

Description

The Act on Farm Relief Services was first introduced in 1996 by the Finish Parliament under the official designation (1231/1996) with the aim **to provide farm replacement services** to enhance farmers' social security, support their workplace resilience and extend their careers. The act has since undergone several updates and changes. The latest changes were implemented in August 2022, primarily adjusting how benefits under the Health Insurance Act apply to farmers. The adjustment made to the regulations ensures that the benefits provided to farmers are governed by the most up-to-date provisions of the Health Insurance Act at the time the law was enacted. Two main updates were:

- Section 7b, which allows farmers to receive **substitute assistance when they need to care for a child** under 10 who suddenly falls ill, for up to seven days per illness. This also extends to farmers tending to the care or rehabilitation of a sick or disabled child, for a duration covered by the special care allowance of the Health Insurance Act.
- Section 7c, which provides substitute **assistance for farmers women during pregnancy**, childbirth and childcare, corresponding to the period they receive special pregnancy or parental allowances under the Health Insurance Act. A brief interruption (up to three days) in these allowances does not affect the continuation of substitute assistance.

The services under the act include provisions for annual leave, substitute assistance and compensated intermediary help:

- Farmers can choose their replacement services by either having an **agricultural intermediary** assigned to them or by receiving compensation for the costs of replacement services they arrange independently. It aims to support the wellbeing and sustainability of agricultural entrepreneurs by ensuring they can take necessary breaks without compromising their farming activities.
- The service includes provisions for replacement during annual holidays, illness or other absences. Local municipalities employ replacement farm workers who **step in to manage daily tasks such as animal care**, which are critical for continuous farm operation. This service not only helps maintain animal welfare, it also ensures that other farm operations proceed smoothly during the farmer's absence.

Eligibility for these services requires farmers to meet specific criteria such as having a minimum number of livestock units, being taxed under the Agricultural Income Tax Act, and having the compulsory MYEL (pension insurance for farmers) insurance coverage. The initiative is tailored to accommodate various types of farms, including those with smaller numbers of livestock, by adjusting eligibility thresholds.

References and resources

- URL: [Act on Farm Replacement Services 1231/1996 - Up-to-date legislation - FINLEX®](#)
- [Health Insurance Act \(1224/2004\)](#)

Example 11: **The FARMWELL Toolbox**

Type of initiative	Prevention and intervention
Countries involved	Belgium, Ireland, Greece, Italy, Hungary, Poland and Romania
Initiator/organisations involved	Coordinated by the E40 Group
Level of intervention	Individual and organisational

Description

FARMWELL was a European Thematic Network project funded by the EU's Horizon 2020 research and innovation programme between 2021 and 2023. The project's primary goal was to address and mitigate the social challenges faced by farmers and farming communities, including mental health difficulties, like depression, arising from psychosocial risks including isolation, physical hazards, farmer prejudice, farm succession concerns and gender-related issues, by making social innovations more accessible. FARMWELL was led by the E40 Group, an international consultancy in rural development, and involved collaborative efforts from farm advisory and research organisations from six partner countries.

The **FARMWELL Toolbox** is a comprehensive resource designed to support the mental health and wellbeing of farmers across various European countries. The toolbox includes a variety of practical tools and resources aimed at addressing the unique stressors faced by those in the agricultural sector. These resources include mental health first aid kits, stress management strategies and peer support networks. Additionally, it offers educational materials, workshops, and online support platforms tailored to farmers' and farm worker's needs.

Selected country initiatives and their key components:

- Belgium: 'Farmers at a Crossroads' Project
 - This initiative provides workshops and a helpline to make discussions on mental health issues more acceptable, offering farmers a safe space to talk about their problems and receive guidance.
 - Helpline: Provides immediate support and connections to mental health services.
 - Workshops: Educates farmers on recognising signs of mental distress in themselves and others, promoting early intervention.
- Greece: Myrmidones Energy Community
 - This initiative addresses the **energy challenges** faced by farmers due to high energy prices and climate change effects by forming an energy cooperative. The Myrmidones Energy Community, established by farmers from the Stevia Hellas Coop, focuses on producing energy collectively to reduce costs and improve economic resilience.
 - Collaborative efforts: The initiative engages local farmers in a cooperative model, promoting decentralised and democratic control over energy production. This cooperation helps farmers mitigate the impacts of rising energy costs and enhances their economic stability.

- Hungary: Zala Valley Open Farms
 - This initiative improves the **financial sustainability and social recognition of small-scale farming through farm and food producer cooperation**. It fosters a local network of farmers who share problems, ideas, knowledge and costs.
 - Networking: Engages local farmers in regular meetings and professional programmes with invited speakers to promote cooperation and knowledge exchange.
 - Support: Provides access to training and support services, which include study trips, lectures, educational programmes and product demonstrations.
- Italy: Humus Job
 - This initiative, targeting both workers and employers, is a social enterprise focused on **regularising employment** through a system where multiple farmers form a network to collectively hire workers and assign them to different farms as needed, employing them on a rotational basis throughout the year. This approach assists farmers in recruiting workers legally and ethically, ensuring stable jobs and fair working conditions.
 - Collaborative network: Engages farms and employers in a structured system to share employment costs and resources, facilitating the legal and ethical recruitment of workers.
 - Job continuity: Allows farmers to benefit from a greater continuity of regularly employed (trained) workers throughout the year and ensures workers' regular contracts and the possibility of greater job continuity.
- Poland: Home Hospice Care
 - This project provides **healthcare services for elderly, terminally and chronically ill rural people**. It offers home-based palliative care, reducing the burden on farmers and their families.
 - Healthcare services: Delivers flexible and tailored hospice care in collaboration with NGOs and the public sector.
 - Support: The hospice supports families in caring for their elderly members by providing respite care, education and advice to those caring for their loved ones so that they can better cope with the new reality, and advise to help them cope with the challenges of caregiving.
- Romania: Women's Neighbourhood Association of Saschiz
 - This initiative **empowers women in farming communities** by building an informational network and bringing knowledge and resources into the community. For instance, the association engages in collaborations and partnerships with local administration, NGOs and community members and organises various educational activities to equip women with the necessary knowledge and skills to effectively manage their farms and engage in community activities.
 - Knowledge exchange: Facilitates the sharing of experiences and ideas among women farmers to address common challenges and develop the community.

The FARMWELL Toolbox has been evaluated using the social return on investment (SROI) methodology. These evaluations focus on the effectiveness of the tools in reducing stress and improving overall mental wellbeing among farmers and their workers. Preliminary results have shown a positive impact, with participants reporting increased awareness of mental health issues and better access to support services.

Main findings include:

- **Belgium (Farming at the Crossroads):** The SROI analysis showed a significant return on investment, with a ratio of 1:4.8, meaning for every €1 invested, there was a return of €4.8 in social value. Farmers reported increased mental wellbeing and reduced stress levels.
- **Poland (Independently Not Alone Care Farming):** This initiative demonstrated improvements in the mental health of both the elderly and the farmers providing care, showing how social farming can integrate people with disabilities into society.
- **Hungary (Zala Valley Open Farm Network):** Farmers involved in the network reported enhanced social connections, reduced feelings of isolation and better mental health.
- **Greece (Social and Community Development of the Myrmidones Energy Cooperative):** This initiative highlights the economic and mental health benefits of community energy projects for farmers.
- **Romania (Saschiz Women's Association):** This initiative has also shown positive impact in improving the economic and social wellbeing of the female farming community.

References and resources

- [FARMWELL Policy Factsheet](#)
- [Catalogue of FARMWELL social innovations](#)
- Courtney, P., Powell, J., Kubinakova, K., & Baker, C. (2023). *Social return on investment (SROI) findings – Synthesis report*. FARMWELL project. https://farmwell-h2020.eu/wp-content/uploads/FARMWELL_D4.2_Final-December-2023.pdf

Example 12: **The ‘Little Book of Minding Your Head’**

Type of initiative	Prevention and intervention
Countries involved	United Kingdom
Initiator/organisations involved	Farm Safety Foundation (Yellow Wellies)
Level of intervention	Individual and organisational

Description

The ‘Little Book of Minding Your Head’ is an initiative by the Farm Safety Foundation (Yellow Wellies) aimed at enhancing the mental health and wellbeing of farmers in the UK. It was funded in 2014 in response to the high rate of accidents and fatalities in the farming industry. The foundation focuses on raising awareness about farm safety and mental health issues within the agricultural community. This booklet serves as a practical tool, providing a wide range of strategies, tips and resources to support mental health and wellbeing in the farming community.

The booklet emphasises the importance of **open discussions** about mental health and addressing the stigma surrounding it. To help achieve this, it defines what mental health is, highlighting the factors that influence it. It offers detailed descriptions of various mental health problems, including anxiety, depression and bipolar illness, outlining their symptoms and effects.

It also discusses the impact of menopause on **women’s mental health**, providing tips for managing the emotional and psychological changes during this period, such as:

- understanding that mood changes may accompany other menopausal symptoms;
- keeping track of mood patterns and their relation to sleep and stress levels;
- getting professional assistance if symptoms become severe and interfere with daily life;
- increasing exercise, getting adequate sleep and managing stress to reduce symptoms;
- knowing that mood changes during menopause are typically temporary; and
- seeking support from others to avoid isolation and frustration.

Next, it identifies common triggers and warning signs of mental health issues, helping readers recognise when they or someone else might need help. These include:

Common Triggers

- Significant events like life-changing injuries, health scares, physical illness, bereavement, relationship breakdowns and having children.
- Starting a new job or tenancy, increased workload, poor relationships with colleagues or supervisors, redundancy fears, and uncertainty with weather or market conditions can contribute to mental stress.
- Physical stress from late nights, binge drinking, drug misuse, poor diet, lack of exercise; emotional stress from relationship problems, peer pressure

Warning Signs

- Irritability, aggression, tearfulness, withdrawal from social activities, increased aggression or conflict, increased consumption of caffeine, alcohol, cigarettes, sedatives, indecision, inability to concentrate, erratic behaviour, loss of confidence, difficulty remembering things and loss of sense of humour.
- Increased mistakes at work, missing deadlines, forgetting tasks, taking on too much work, arriving late, working excessive hours, increased sickness absence, and negative changes in communication or socialising habits.

and high emotional expression within the family; and environmental stress from poor housing, unemployment and adjusting to new environments.

- Frequent headaches or stomach upsets, suffering from frequent minor illnesses, difficulty sleeping or constant tiredness, being run down, lack of care over appearance, and sudden weight loss or gain.

Moreover, the booklet defines stress, its causes, and its impact on physical and mental health, emphasising the importance of managing stress. It offers practical advice for coping with stress, including:

- **relaxation techniques**, such as mindfulness and breathing exercises;
- **exercise**, encouraging farmers to engage in regular physical activity;
- **healthy eating** and maintaining a balanced diet; and
- **taking breaks** from work to rest and recharge.

An **interactive section** encourages readers to list their worries and categorise them into what they can and cannot control, providing a structured approach to managing stress. The booklet provides a detailed explanation of depression, its symptoms and the different levels of severity, offering guidance on recognising and understanding its impact on daily life.

It provides practical tips for initiating conversations about mental health, including how to talk, listen and support someone who may be struggling. At the end of the booklet, readers can find various organisations and resources available for mental health support, including helplines, websites and professional services, along with the contact information for national and regional support groups.

Equally, the charity provides [an online tool](#) where farmers and farm owners can build a tailored Health & Safety Policy. It emphasises the importance of having a written policy to demonstrate a commitment to the safety and welfare of workers, customers and contractors. The tool guides users through defining responsibilities, building business confidence and gaining accreditation. It ensures the policy is straightforward, specific to the farm's needs, and regularly updated to reflect changes in management or operations. This tool simplifies the process of creating and maintaining an effective Health & Safety Policy, promoting a safer working environment.

The tool consists of three elements:

- Section one is designed to help users input essential information to create a customised Health & Safety Policy.
- Section two ensures that all aspects of farm safety, including risk assessments, training, emergency procedures and working conditions, are thoroughly evaluated and managed. This section helps in identifying potential hazards, providing appropriate training, ensuring workers' health and safety, and establishing clear emergency protocols, thereby promoting a safer working environment on the farm.
- The final step provides the output of the tool, which produces a structured and detailed Health & Safety Policy document that covers all essential aspects of farm safety, including risk assessments, training, emergency procedures, working conditions and first aid. It ensures that responsibilities are clearly defined and all necessary measures are in place to maintain a safe working environment. It includes a section for all staff to sign to record that they have been made aware of the organisation's arrangements for health and safety and will comply with the requirements outlined.

References and resources

- URL: [Farm Safety Foundation \(Yellow Wellies\)](#)
- Farm Safety Foundation (Yellow Wellies). (2022). *Little book of minding your head* (5th ed.) https://www.yellowwellies.org/LittleBookOfMindingYourHead_5thEdition_1122/?page=40
- Farm Safety Foundation (Yellow Wellies). (n.d.). *Build your own Health & Safety Policy*. <https://builder.yellowwellies.org/>

Example 13: **GoodYarn**

Type of initiative	Prevention
Countries involved	New Zealand
Initiator/organisations involved	Good Programmes Trust
Level of intervention	Organisational

Description

The Good Programmes Trust was established in December 2017 and gained charitable status in July 2018. It is overseen by a board of six trustees with diverse backgrounds in health and agriculture. The GoodYarn programme was originally developed by DairyNZ and WellSouth Primary Health Network in collaboration with rural organisations to address mental health challenges faced by farming communities. As demand increased and positive feedback grew, it expanded to a broader audience. The Good Programmes Trust was established to manage and scale the programme.

GoodYarn is an **evidence-based, peer-delivered mental health literacy programme** aimed at increasing awareness, building confidence in starting conversations about mental health concerns and improving knowledge of available support resources. A key aspect is its peer-delivered approach, where the programme is facilitated by individuals within the organisation rather than external experts. This approach fosters a ripple effect, with trained facilitators disseminating knowledge and skills to peers and colleagues, thereby creating a caring workplace culture and empowering employees to prioritise mental wellbeing. It also increases the long-term effects rather than being a one-time intervention.

Organisations nominate individuals to become GoodYarn facilitators. Typically, two to four facilitators per organisation undergo intensive two-day training. Once licensed, facilitators receive all necessary resources to deliver the programme within their workplace. This approach fosters a ripple effect, with trained facilitators disseminating knowledge and skills to peers and colleagues, thereby creating a caring workplace culture and empowering employees to prioritise mental wellbeing. GoodYarn is ideally suited for organisations with 50 or more employees and is relevant to individuals at all levels and roles within the workplace.

GoodYarn reports that regular monitoring and evaluation of the programme indicate its positive impact:

- creation of a more caring workplace culture,
- personal development opportunities for staff,
- enhanced ability of staff to maintain wellbeing, and
- promotion of a sense of contribution and collaboration among participants.

Feedback from participants underscores the programme's efficacy, with 99% reporting significant improvement in awareness of signs and symptoms of common mental illnesses. Moreover, 98% of participants showed good improvement in knowledge about where and how to get help. Lastly, 98% of participants also showed improved confidence to start a conversation with someone they may be concerned about.

References and resources

- URL: [GoodYarn Programme | Mental Health Literacy](#)
- Morgaine, K., Thompson, L., Jahnke, K., & Llewellyn, R. (2017). GoodYarn: Building mental health literacy in New Zealand's rural workforce. *Journal of Public Mental Health*, 16(4), 180-190. <https://doi.org/10.1108/JPMH-07-2017-0027>
- Feedback from facilitators and participants: [GoodYarn Just Got Gooder](#)

Example 14: **The Rural Adversity Mental Health Programme**

Type of initiative	Prevention and intervention
Countries involved	Australia
Initiator/organisations involved	Grand Pacific Health
Level of intervention	Individual

Description

The Rural Adversity Mental Health Programme (RAMHP) was established in 2007 to address mental health challenges faced by regional, rural and remote communities in New South Wales. Originating during a period of drought, the programme has since expanded its scope while maintaining its commitment to supporting individuals and communities reliant on primary production and agriculture, as well as other priority populations vulnerable to mental health issues. It is managed by Grand Pacific Health, a not-for-profit, primary healthcare organisation in Australia.

RAMHP's unique approach operates through a network of 20 coordinators employed by local health districts across the state. These **coordinators are deeply embedded within the communities** they serve, possessing first-hand knowledge and understanding of the strengths, challenges and unique characteristics of rural life.

RAMHP stands out due to several distinctive features:

- **Local integration:** RAMHP employs local coordinators across regional, rural and remote areas of New South Wales. These coordinators are a part of their communities, which helps tailor the programme's approach to the specific needs and challenges of these areas. For instance, RAMHP provides various resources to support mental health challenges during periods of drought, including access to local coordinators, downloadable stress management guides, decision-making tools, tips on coping with uncertainty, and podcasts on topics such as staying connected, environmental anxiety and supporting others.
- **Diverse engagement strategies:** RAMHP adapts its strategies to a variety of local issues and populations, using a flexible approach that allows coordinators to leverage their specific skills, whether clinical or in health promotion, to address local issues effectively. For instance, coordinators with clinical experience may focus on working directly with clinicians, while those with health promotion backgrounds might engage more with community outreach.
- **Programme logic model (PLM):** The development of this type of model has been a key feature in refining RAMHP's focus and strategies. This model helps to map out the intended causal links between activities and outcomes, ensuring that the programme's efforts are aligned with strategic priorities such as connecting people to mental health services tailored to their needs.
 - Components of the PLM:
 - Inputs: Available to the programme, such as funding, staff and partnerships.
 - Activities: The actual tasks or interventions carried out by the programme, such as training workshops, community outreach and information sessions.
 - Outputs: The direct results of the activities, such as the number of workshops delivered.
 - Outcomes: The changes or benefits that result from the activities and outputs.
- **Technological integration:** RAMHP has also developed a mobile app to enhance data collection and programme evaluation. The app integrates data collection with the overall information management system, helping coordinators provide up-to-date and location-specific information about mental health services. Additionally, through the app and the

RAMHP website, individuals can use a postcode search to find the nearest coordinator or relevant health services, making it easier to connect with local resources quickly.

The RAMHP programme was evaluated in 2021 by the Centre for Rural and Remote Mental Health at the University of Newcastle. RAMHP provides mental health training to residents in rural and remote areas of New South Wales. This training model is based on the premise that enhancing the skills of as many individuals as possible, across various geographic and demographic segments, will bolster the community's ability to support one another in addressing mental health issues. The sample was comprised of 10,208 residents across rural New South Wales. The RAMHP training targeted two main groups: non-clinical roles (community members, to support their own wellbeing and assist family, friends, colleagues and clients); and clinical roles (gatekeepers, professionals who regularly interact with individuals at risk of mental illness). Participants were categorised into clinical and non-clinical roles for follow-up survey analysis. This separation is due to those in clinical roles being more likely to discuss mental health with their clients. It was aimed at being able to accurately examine whether non-clinical community members engaged in mental health conversations post-training.

The research found that the training received positive feedback, with a significant majority of respondents (91-95%) reporting increased understanding of mental health and a greater willingness to assist others. Kirkpatrick's levels²³ 1-3 were utilised. Level 1 assesses participants' reactions regarding the usefulness, engagement and relevance of the training. Level 2 measures the acquisition of skills, attitudes and knowledge. Level 3 evaluates the application of learnings by participants after training. However, level 4, which assesses the achievement of targeted outcomes, was not used due to limited evaluation resources.

Following the training, the follow-up survey revealed that 53% (n = 301) of respondents had engaged with a total of 2,252 individuals regarding their mental health within two months. Furthermore, over half of survey participants (59%, n = 339) indicated that they had taken more proactive steps to prioritise their own mental wellbeing in the two months subsequent to the training.

References and resources

- URL: [RAMHP - Rural Adversity Mental Health Programme](#)
- Maddox, S., Powell, N. N., Booth, A., Handley, T., Dalton, H., & Perkins D. (2022). Effects of mental health training on capacity, willingness and engagement in peer-to-peer support in rural New South Wales. *Health Promotion Journal of Australia*, 33(2), 451-459. <https://doi.org/10.1002/hpia.515>

²³ Kirkpatrick's four-level model evaluates training effectiveness as follows: 1) Reaction: Participant satisfaction and engagement, assessed via surveys; 2) Learning: Knowledge and skill acquisition, measured through tests and assessments; 3) Behaviour: Application of learned skills on the job, observed through performance evaluations; and 4) Results: Impact on organisational outcomes, such as productivity and quality, evaluated through key performance indicators.

5 Conclusions

5.1 Discussion of results

The main aim of this study is to investigate the impact of psychosocial risk exposure on farmers' and farm workers' psychological wellbeing. Information from the literature was complemented by interviews with key stakeholders from the sector and good practices that have been instigated.

Some limitations of the available research on the association between psychosocial risk exposure and mental health outcomes in the European agricultural sector are that it often concentrates on specific countries, such as Ireland and Finland. While studies from larger EU Member States are included in the overview, more research across all EU Member States is needed as few pan-European studies exist. Studies are heterogeneous, sometimes small in terms of sample size, and include a large variety of operational definitions, research objectives, variables and methodologies. Another limitation in the research was the interchangeable use of the term farmer with the term farm 'worker' (e.g., Demos et al, 2013; Du et al, 2021; Fraser et al; 2005), the lack of disaggregated data comparing the two worker categories and a larger concentration of studies focusing on farmers' psychological wellbeing. Additionally, no longitudinal studies were identified that assess the effects of psychosocial risks on mental health outcomes in the same population over time. The most common research design found was cross-sectional studies, often obtained from surveys. Research predated the COVID-19 pandemic, and no post-pandemic studies were available on psychosocial risks in the sector. Equally, no research was found on the impact of the war in Ukraine and its contribution to psychosocial risks in the sector despite widespread political attention to this factor given recent farmer protests.

Finally, this section presents a series of considerations and policy pointers to stimulate further action and research.

5.1.1 Psychosocial risk factors and mental health in agriculture

Overall findings from both the literature and interviews highlighted that **long working hours and the constant on-call nature of farm work** often carried out independently in isolated rural areas characterise the agricultural sector and impact mental health outcomes. In interviews it was stressed that psychosocial risks associated with economic, regulatory and policy pressures connected to land use and production impact farmers and farm workers alike. Furthermore, literature highlighted the changing nature of farm tasks and agricultural work linked to climate change, digitalisation and mechanisation (see for example, Holte et al., 2018; ILO, 2024a; EU-OSHA, 2021a, 2021b). In some instances, solitary work increases (Holte et al., 2018), new or compensatory tasks, such as night-time watering, water acquisition and transportation, arise (Alston et al., 2018), or further obligations emerge as new policies and legislation are adopted. Hence, farmers and farm workers need to continuously adapt to the sometimes unpredictable changes occurring in the sector.

Long working hours and the constant need to be available for work influence workload pressure and workload levels. These factors impact the **ability to rest**, a significant cause of occupational stress, according to both literature and sector stakeholders. The requirement to be constantly available for work is a tangible risk to relationships. Work–life balance is also impacted, contributing to physical and mental fatigue. Moreover, workload and time pressures are significant factors leading to burnout (see for example, Reissig et al., 2019; O'Hagan et al., 2024). Thus, initiatives such as those in France and Finland, which provide respite and replacement workers to cover sickness, family changes and other crises, are invaluable supports for farmers and their families (see section 4 for further information).

Growing **regulatory pressures and the associated administrative burdens** are key psychosocial risks, according to the literature and interviews, and significant stressors for farmers and farm workers alike. Correctly implementing various policies at the same time (e.g. economic, OSH, environmental protection, animal health) in farming processes are significant sources of stress, with research showing that farm owners are more affected by regulatory and policy pressures and administrative burdens than farm workers (Kallioniemi et al., 2016). Furthermore, farmers feel frustrated when they are excluded from policy and legislation activities affecting their business, and their work practices, as demonstrated

by recent farmer protests throughout the EU. Linked to this, **financial uncertainty and insecurity** were highlighted by the literature and interviews alike as significant contributors to poor mental health outcomes.

Many farming households live below the poverty threshold, and significant variations in terms of income, agricultural land rents and prices exist among EU Member States (INSEE, 2021; EC, 2021c; FARMRes, 2023). Farm workers' financial strain is linked to job insecurity and salary concerns that are interconnected with stable farm incomes. For farmers and farm owners, economic policy, market pressures, such as the imposition of low produce prices, credit accessibility, reductions in bargaining power and the inability to control the return on investments impact income stability, leading to stress, depression and, in worst-case scenarios, suicide (HOCCA, 2019; Brennan et al., 2021). Economic pressure and associated concerns affect **family farm succession and the future of agriculture**, which are stressors identified in this study. Intergenerational succession is influenced by financial anxieties, placing the future of the sector in doubt. Family farm succession pressures impact young people's wellbeing, and safeguarding against farm loss is a significant concern for older farmers. Thus, an ongoing challenge for the sector is attracting newcomers and retaining farming families (Fraser et al., 2005; HOCCA, 2019; Euractiv, 2019; EU-OSHA, 2000).

Another consequence emerging from the downward pressure on farm owners is **business restructuring and farm consolidation** (Deipenbrock et al., 2015; Hammersley et al., 2023). Consolidating farms may be linked with increased profits and thus may be used as a business strategy to enhance the farm's resilience to future challenges. However, literature highlights that farmers need to produce more to survive economically and sustain income (WHO, 2024; France 24, 2024). Notwithstanding, downward pressure from regulations, policy and commercial actors may also impact business decisions about farming typology, contributing to intensive production practices that increase farm management responsibilities. Moreover, consolidated farms reduce social support levels and negatively impact interpersonal relationships, key psychosocial risk factors with a significant impact on wellbeing (Hammersley et al., 2023; WHO, 2021; Deipenbrock et al., 2015). Other factors impacting the availability of social support include the decline of farming, rurality, lone working, and the rise of digitalisation and mechanisation. Moreover, falling rural populations and a lack of investment in rural areas contribute to the decline and desertification of health, education and retail services in rural areas, weakening social structures and posing tangible mental health risks.

A significant finding that arose was the **perception of alienation** between farmers and wider society. Prejudice and stigmatisation of agriculture production and farmers appear to be growing, according to interviewees. Consequently, farmers' feelings of dignity, value and importance are negatively impacted by negative discourse about the impact of agricultural practices on the environment. Also, **mental health stigma and gender stereotyping** are well-recognised factors influencing mental health outcomes. Cultural values such as stoicism and ideas of masculinity influence help-seeking behaviours and healthcare decision-making (Berry et al., 2011). The internalisation of male stereotypes, associated with perceptions of strength and weakness, appears to impact the level of mental health stigma and overall outcomes. Indeed, for interviewees, farmers' reticence to discuss problems, combined with a tendency to self-isolate, means issues worsen over time.

Other psychosocial risks identified from the literature and interviews impacting mental health outcomes include professional status, the availability and continuity of public funds, health and safety training, vulnerability to crime, Internet connectivity, rising consumer demand for organic produce, globalised food chains and the urgent requirement to address workforce shortages, all of which increase feelings of stress and anxiety.

5.1.2 Digitalisation, climate change and the COVID-19 pandemic

Disruptive global issues (e.g. the COVID-19 pandemic, war in Ukraine) and long-term trends (e.g. digitalisation, climate change, farming conversion) introduce new stressors. Common psychosocial stressors associated with these trends include cognitive demands, training and expertise, financial stress (e.g. investment costs), fears linked to job precarity and automation, social isolation and loneliness, organisational challenges (e.g. change management, farm restructuring), dependency and

control issues (e.g. data vulnerability, unpredictable weather), family conflict and generational differences.

Although a consensus exists in the literature regarding exposure to digitalisation-related challenges and a general increase in stress levels for farmers and farm workers, the integration of **digital technologies** in the sector was generally met with mixed responses within interviews. On the one hand, emerging digital tools and mechanisation can eliminate monotonous, repetitive work, reduce workloads and hazards associated with farming tasks, and negate workforce shortages. Positive impacts on work–life balance and farm profitability may also occur, according to interviewees. However, on the other hand, the literature shows that stress increases due to an upsurge in cognitive workloads and the need to upskill to deploy and operate new tools and machinery (Nicholson, 2023; Hostiou et al., 2017). Additionally, feelings of social isolation may arise as new tools eliminate the need for multiple, simultaneous workers (EU-OSHA, 2000). More universal stressors are likely to be financing, and other costs required to modernise farms (see for example, Ferrari et al., 2022; Bellon-Maruel et al., 2023). Equally, an additional cost, and hence a stressor, will be dependence on external providers for data protection, security and solutions in the case of breakdowns (Nicholson, 2023). These latter issues can be considered critical stressors given the impact malfunctioning technology can have on farm hazards and productivity. Likewise, unlike older technology, the skill sets required to resolve these issues require extensive, specialist training.

Little is also known about the impact of **climate change** on the mental health of European farmers and farm workers. What research does exist is mainly based in non-European Anglo-Saxon countries, which indicates a connection between climate change and farmer suicide (Odabasi et al., 2021). EU-level research and grey literature shows that unfavourable seasons cause heat exhaustion (Gubernot et al., 2015; EU-OSHA, 2021b, 2021c), increase workloads (Alston et al., 2018), and have the potential to reduce family support and diminish farmer populations, thus increasing loneliness and social isolation and intensifying desertification of crucial services in rural areas. Extreme weather events are associated with various mental health outcomes, including depression, hopelessness, trauma and solastalgia (Giuffrida, 2024; Berry et al., 2011). However, the impact of adverse weather events on farmers' wellbeing was not unanimous among interview participants. Some interview participants perceived the impact of climate change as low, although this could be specific to particular countries and warrants further investigation. Farmers have significant concerns for financial, animal and crop health; thus, adverse climate-related events are highly likely to be considerable stressors for farmers and farm workers alike. Europe is now the fastest-warming continent in the world (Le Monde, 2023), and the visible weather disturbances the continent has experienced in recent years (e.g. extreme, prolonged heatwaves and flooding) have caused production losses, delays and changes to harvesting seasons, impacting the wider agricultural context (EU-OSHA, 2023c).

Likewise, public pressure to mitigate the effects of the climate crisis is growing. Consequently, policies and regulations negating the worst effects of climate change contribute to the challenges faced by farmers. Concerns about the environment are increasing the uptake of **organic farming**, which can take up to three years to complete. Like digitalisation, concerns about financial barriers to change to organic farming emerged in the literature (see for example, Király et al., 2022). Furthermore, transitioning to organic farming involves multiple stressors, including reduced yields, strong ethical accountability linked to production responsibilities, financial investment, skill development, higher workloads, reorganisation of labour and food production, and scepticism among support networks. All these factors can trigger feelings of anxiety, nervousness and incidences of severe stress (Bouttes et al., 2019; Siepmann & Nicolas, 2018; Mattila et al., 2022).

Limited literature exists on the impact of the **COVID-19 pandemic**, which was not a concerning factor in the interviews. It is possible that COVID-19 is considered a one-off, low-probability event and therefore not a current and ongoing psychosocial stressor. Indeed, in the research reviewed, increased stress rates and poorer mental health symptoms were associated with the public health emergency. Although, these outcomes may also be associated with challenges that arose due to production and supply chain disruptions (Thompson et al., 2022; O'Reilly et al., 2023). Otherwise, the main groups affected by the pandemic were women, migrants and seasonal workers. Additional stressors for these groups were associated with lockdown and infection control measures: financial insecurity and caring, respectively, increased, and opportunities for recreation and social interaction were reduced.

5.1.3 Demographic factors and farming typology

Heightened exposure to risk factors varies based on professional status, farming typology and demographic category. For instance, anxiety, stress and depression are recurring issues for migrants, and female farmers and female migrant farm workers have an increased vulnerability to developing mental health symptoms.

Changing gender norms is a factor in occupational stress for men and women alike. As women increasingly take on farmer roles, responsibilities shift, and conflicts about role expectations arise. In contexts defined by conservative and traditional norms and values, feelings of stress and frustration surface, especially where individuals struggle with identity changes. An additional risk factor for women in farming families is exposure to domestic violence. Risks are exacerbated by the lack of access to essential services (e.g. healthcare, social services) due to service desertification, as well as the general remoteness of rural areas.

Occupational risks for female farmers and female farm workers include income inequality, discrimination in accessing finance, technology, education and training (Corteva, 2018), land property rights and professional isolation (Alston et al., 2018; Euractiv, 2019; Hagen et al., 2021). Subtle gender biases and micro-aggressions can exacerbate feelings of stress and frustration, as is the case for women excluded from sectoral gatherings and unrepresented in policymaking activities. Studies examining psychosocial risk factors and their association with other gender identities and sexual orientation were limited (e.g. O'Shaughnessy et al., 2022; Wypler & Hoffelmeyer, 2020), a finding replicated in interviews. Thus, a targeted analysis is required to explore stressors affecting LGBTQ+ farmers and farm workers.

Both the literature and interviews offer evidence that the **age–experience trade-off** renders individuals more susceptible to various mental health vulnerabilities. Work experience, and thus resilience and coping mechanisms increase with age (Austin et al., 2018; FARMRes, 2023). On the other hand, physical health and physiological capacity generally decline as people age. Indeed, young age heightens exposure to poor mental health outcomes, while for older farmers working beyond retirement age, the presence of comorbidities and physical hazards amplify psychosocial risks (Elliott et al., 2022). Furthermore, children of farming families experience additional psychosocial risk exposure given the likelihood of early exposure to work–family life conflicts (Fraser et al., 2005).

Literature segregates **migrant workers** into two groups: seasonal migrants (EU citizens) and foreign-born, non-EU migrant workers with both groups being at greater risk of psychosocial risk exposure which is related to their working and employment conditions, residency and legal status, combined with cultural and language barriers. Access to equitable wages, healthcare and support services depend on these factors (Escrivà et al., 2022). Especially migrant women farm workers, are at greater risk of experiencing psychosocial challenges. These challenges are compounded by poor living conditions, incidences of racism and discrimination, and exposure to psychological and, in some cases, sexual assault and harassment (Kelly, 2019; Escrivà et al., 2022). Meanwhile, studies on psychosocial risks for low-skilled farm workers are limited, but those available show higher concerns about workplace conflict and increased susceptibility to psychological violence from employers, while low pay and job insecurity influence stress levels (Kozlova & Lakisa, 2016; EFFAT, 2019).

Different types of farming are associated with specific risks (e.g. chemical exposure in crop farming, animal handling in dairy farming) affecting farmers' and farm workers' stress levels and mental health outcomes. For example, farmers and farm workers in large-scale industrial dairy farming face additional psychosocial challenges and are more susceptible to risks associated with digitalisation and automated technologies, along with structural changes in business size. Meanwhile, depression and poor mental health are highest among farmers and farm workers involved in livestock production, and those involved in specialised production and conventional farming are less satisfied and at higher risk of adverse mental health problems (Janker et al., 2021; FARMRes, 2023). In comparison, the mental health and job satisfaction levels of organic farmers and farm workers are better than those of their counterparts working in conventional farming. Multiple studies show that organic farmers and farm workers have better psychological and physical health outcomes, experience less anxiety, have lower depression scores and have more positive emotions than conventional farmers and farm workers (Cross et al., 2008; David et al., 2021; David et al., 2024). Furthermore, while family farms are the most prevalent

agricultural businesses, the risk of work–family conflict was regarded by the literature as significantly detrimental to psychosocial wellbeing (Fraser et al., 2005).

5.1.4 The impact of psychosocial risks on farmers' and farm workers' mental health

Quantifying the prevalence of psychosocial risks in agriculture is compounded by a lack of comprehensive data at the European level estimating the prevalence of mental health outcomes according to occupational category. Furthermore, according to sector stakeholders, under-reporting of mental health complaints combined with resource constraints leads to a limited evidence base for ascertaining links between workforce challenges and mental health outcomes. Drawing on the factors identified within the literature and the interviews, estimating the actual prevalence of mental health conditions is further complicated by the low rates of OSH risk assessment on farms and in farming businesses, the stigmatisation of mental health, poor quality mental health treatments, ideas of masculinity and a culture of stoicism in the sector.

However, findings in this report show that **stress** is the most prevalent emotional response to all psychosocial stressors, and according to the literature it is on the rise (Brennan et al., 2021). A significant cause of occupational stress, according to both literature and interviews, is the **difficulty or inability to rest** due to work design, working hours, workload and working conditions (see for example, Elliot et al., 2022; Mattila et al., 2022). Social isolation, workloads and working conditions, financial and regulatory uncertainty, and a lack of control are additional risk factors that trigger occupational stress. Indeed, literature from Ireland shows that financial insecurity is a primary driver of mental distress among dairy farmers and farm workers (Furey et al., 2016). Interviewees did not allude to other mental health outcomes aside from suicide. This is likely associated with the high visibility and related stigmatisation of suicide, which is also identified by the literature. Additionally, stress arguably has the lowest level of social stigma and is one of the most common mental health outcomes that almost every individual experiences over their life course. On the other hand, while awareness of mental health conditions, such as anxiety, depression and burnout, is growing, the ability for non-mental health-trained individuals to recognise the warning signs and symptoms associated with these conditions is limited.

Feelings of **anxiety** and associated persistent issues were also commonly cited in the literature as mental health outcomes, with evidence demonstrating the heightened vulnerability of women (see RABI, 2021; Wheeler & Loble, 2023). Female farmers and farm workers are more likely to experience poor mental health than men. In the UK, for instance, 10% more women than men (43% versus 33%) disclosed experiencing poor mental health and wellbeing outcomes (RABI, 2021). A plethora of worries regarding health — whether it be the health of animals, the farmers or their families themselves, or plants — are potent contributors to stress and anxiety (Thelin & Donham, 2016; Kallioniemi et al., 2018). **Fatigue**, a symptom of anxiety and depression, is also consistently associated with poor mental health outcomes, which can influence sleep problems and increase the risk of illness and injury (see Daghigh Yazd et al., 2019; Elliott et al., 2022).

Depression and burnout are additional prevalent negative mental health outcomes in the literature (Deipenbrock et al., 2015; Kallioniemi et al., 2016; Hagen et al., 2019; O'Shaughnessy et al., 2022). European surveys suggest that up to one in four farmers and farm workers face burnout (O'Hagan et al., 2024) and one in five respondents have symptoms of depression (RABI, 2021). Work–family conflict, legacy issues, high workloads, financial insecurity, task design, a lack of social support, social relations, and pressure from economic and environmental policies are found to contribute to the development of mental health symptoms such as depression and burnout (e.g. Deipenbrock et al., 2015; Truchot & Andela, 2018). However, the prevalence of these conditions is based on estimates that vary across the EU and elsewhere in Europe. Therefore, further research on the extent of mental health problems in the farming community, which clearly disaggregates professional demographics, is required.

Suicide is believed to be a significant issue in the farming community and is not receiving sufficient political attention, according to interviewees. The literature appears to back up this argument, as the agricultural working population has a statistically higher occurrence of suicide at both the European and global levels. In Italy, excess mortality from suicide was observed among farmers and farm workers

(Alicandro et al., 2021). Data from various EU Member States show that suicide rates are higher than national suicide rate of other professions. Occupational factors, including long working hours, financial precarity, and access to lethal means (e.g. chemicals, medication, guns and ropes), are deemed significant risk factors in the literature (Alicandro et al., 2021). Traditional stressors can be worsened by unforeseen events, such as economic recessions, as demonstrated by a 2016 French study (Bossard et al., 2016). Dependence on farming subsidies, which are subject to policy changes, may be an additional stressor for farmers and farm workers, contributing to elevated suicide rates (Bossard et al., 2016). However, this factor requires further investigation. Adverse climate events might also contribute to suicide outcomes, although no research was found on this risk factor at the European level.

Behavioural outcomes, such as **substance abuse**, notably alcohol, were also frequently discussed in the literature (FARMRes, 2023; Fialkowska & Matuszczyk, 2021; Thompson et al., 2022; Daghigh Yazd et al., 2019; Watanabe-Galloway et al., 2022). Demographic elements are common social determinants where alcohol use, for example, often declines with age.

Manifestations of aggressiveness, rage and loss of control leading to violence are other adverse social behaviours emerging in response to tension, frustration and feelings of powerlessness. As mental distress intensifies, self-isolation increases, and the willingness to seek help may be influenced by cultural norms (e.g. stoicism and stereotypes) and resources (e.g. time and health services). However, when these elements are considered as a whole and occur in tandem, they may be early indicators of an underlying mental health issue. Therefore, it is important to handle these variables with sensitivity and care.

Finally, correlations have been found between the working conditions in agriculture and the **onset of CVDs and MSDs**. In the former case, long working hours, job strain, job insecurity, physically demanding work with very little rest, working in high temperatures, working with chemicals and undertaking physically demanding tasks increase the incidence of heart disease and stroke and ultimately mortality rates (EU-OSHA, 2023d). For the latter, a key finding is that psychosocial risk exposure plays a significant role in MSD development, with stress increasing vulnerability to physical causes (EFFAT, 2019). Factors such as long working hours, repetitive tasks and financial insecurity contribute to stress levels among farmers (EFFAT, 2019). Animal handling adds to the elevated risk of MSD onset (Osborne et al., 2011). Ergonomic factors like forceful exertions and awkward postures are linked to exhaustion and stress, exacerbating the onset of MSDs (Du et al., 2022). Moreover, MSDs also contribute to further mental health issues, creating a downward spiral of stress, pain and discomfort.

5.1.5 The impact of farmers' and farm workers' mental health on farm businesses

While an abundance of literature focuses on individual mental health outcomes, research on the association between mental health and organisational outcomes is scarce. This focus may be explained by the dominance of small, family-run farms in the sector. Furthermore, family farms may be more likely to use family resources in times of crisis.

Literature on organisational outcomes highlights worker absenteeism as a highly detrimental consequence of poor mental health, potentially posing threats to business survival (FARMRes, 2023). The high turnover of seasonal positions in agricultural businesses reliant on seasonal farm workers was identified as another outcome having a negative effect on farming businesses (Fialkowska & Matuszczyk, 2021). At the societal level, only one study was found showing the impact on the public purse, demonstrating the need for health economic studies to investigate potential associations further.

5.1.6 Approaches for enhancing farmers' and farm workers' mental health outcomes

As previously discussed, specific demographic and farming factors can lead to higher risks for certain individuals. However, these factors can also protect against the adverse effects of mental health problems. Four additional protective features were identified as mitigating factors ameliorating the impact of psychosocial risks on mental health outcomes: individual engagement and resilience, strong social relations and networks, business and job success, and a positive farm environment.

Individual resilience and personal efficiency, such as the ability to withstand hardship, find creative solutions to problems, and maintain a relaxed, positive and accepting attitude in the face of adversity, significantly protect against mental distress (e.g. Hagen et al., 2019; Thompson et al., 2022). Additionally, studies show that **the possibility to use substitute workers** in case of forced absence or the ability to pursue leisure activities and personal hobbies beyond work is highly beneficial for farmers and farm workers (Kallioniemi et al., 2016). Such initiatives provide substantial support and opportunities to farmers, enabling them rest and relaxation, especially during times of change, illness or other crises. Job satisfaction, autonomy, control and flexibility are additional protective factors according to the literature.

Finding pleasure and satisfaction in one's work can also protect against adverse mental health outcomes. Security that the farm is thriving, having a secure **succession plan** and being able to provide for family needs are other protective factors in farmers' and farm workers' mindsets (Vosko et al., 2022). Likewise, entrepreneurial identity was found to act as a distinct protective factor for mental health, enhancing wellbeing and self-esteem, stimulating societal recognition and instilling positive feelings of **job autonomy** (O'Shaughnessy et al., 2022; Janker et al., 2021). Financial security can also provide farmers with the flexibility and security to instigate changes on the farm, such as introducing new digital and mechanical technologies, transitioning to organic farming or diversifying production. These changes were found to reduce exposure to harmful chemicals and reduce occupational stress (Brigance et al., 2018; Logstein, 2021; Mattila et al., 2022). The feeling that farming practices are safeguarding the environment and protecting the farm for future generations can generate a positive outlook, instil feelings of pride and honour, and foster job satisfaction. These feelings, in turn, can reduce anxiety and stress and thus enhance personal resilience.

Working in nature in a familiar work atmosphere and engaging in diversified tasks to maintain attention and motivation at the workplace are also considered beneficial to mental health, as well as affection and care for farm animals, which were identified as specific protective factors (Deipenbrock et al., 2015; Kallioniemi et al., 2016; Kallioniemi et al., 2018; Thelin & Donham, 2016). Likewise, converting to **organic farming** is associated with a variety of benefits, including greater job autonomy and control, feelings of pride and social and ecological responsibility, better, more stable incomes, reduced production and veterinary costs, increased farm attachment and feelings of interconnection with nature (Bouttes et al., 2019; David et al., 2021; EC, 2023b). These benefits can enhance feelings of financial wellbeing, self-worth and confidence and improve farmers' and farm workers' individual resilience against risks to their mental health.

Furthermore, **strong social relationships** can significantly protect against the worst effects of isolation and loneliness and contribute to a stable and socially active lifestyle. To this end, family, friends and peer relationships are highly valuable for farmers and farm workers, as they have been shown to foster a sense of community, provide mutual support and promote a sense of shared identity (Thelin & Donham, 2016; Deegan & Dunne, 2022). Belonging to farming organisations can also positively influence mental health.

5.2 Considerations

This section makes several suggestions based on findings from the literature review, the stakeholder interviews and the good practices which are directed at policymakers at all levels and organisations working with farmers and farm workers. Psychosocial risks and mental health affect not only farmers and farm workers but can have detrimental consequences for business continuity, farm viability and for the overall population as food availability and agricultural production fulfil basic human and societal needs. In the case of agriculture, the sector's sustainability is affected by the attractiveness of the sector, which could have wider implications for local, national and European cultures.

High levels of positive job engagement and reducing stigma towards farming practices (e.g. animal rearing, chemical use) may positively impact farmers' and farm workers' feelings of self-worth and meaningfulness. Ensuring financial stability and investing in rural areas may mitigate concerns about farm inheritance, family legacy and workforce shortages, which in turn could stimulate farmers' confidence to diversify farm activities and agricultural practices. Based on feedback from stakeholders

and a review of the literature and good practices, the following considerations are designed to tackle psychosocial risk factors in the sector and enhance protective factors associated with farming activities.

5.2.1 Lessons learned

This section provides a series of suggestions for practical measures that could be implemented by sectoral, intermediary organisations (e.g. farmers and farm employers' representatives, farm workers associations, NGOs, and educational bodies (e.g. agricultural colleges, universities). Some suggestions for further research are also made.

Considerations for farmers and employers:

- **Evaluate psychosocial risks in agriculture** and develop action plans addressing those risks. Practical online tools such as the EU agricultural OIRA tool²⁴ and the FAO's tool highlighted in this report can help to address and assess specific risks in agriculture and in that way complying with the legal obligation to carry out a risk assessment, including psychosocial risks, to protect the health and safety of the workers and to adopt preventive measures to prevent and mitigate the identified risks according to the OSH Framework Directive.
- **Develop, implement and enforce workplace health and safety policies.** Specific policies can cover issues such as lone working, working hours and breaks, and specific policies for migrant and seasonal workers. This includes **evaluating and updating of existing policies.** Assess for gaps in workplace OSH policies with a specific focus on workplace risks jeopardising workers' safety and health. This includes, among other things, animal handling, workloads, unsocial working hours, chemical exposure and working outdoors during adverse weather conditions (e.g. heatwaves, floods).
- **Invest in OSH training** for farm workers that encompasses modules on psychosocial risk and mental wellbeing. Smaller farm businesses could consider joint-procuring OSH training to reduce financial costs.
- **Diversify farming practices.** While challenging, this is proven to benefit farm production, farm profits, and health and ecological outcomes.
- **Ensure migrant and seasonal workers are employed according to local laws and regulations** and provided with adequate accommodation, support and supervision.

Considerations for sectoral, intermediary organisations and education services

- **Develop and maintain solid and supportive networks** for farmers and farm workers, ensuring regular interaction, giving advice on psychosocial risks in the sector, and promoting dialogue between farms, organisations, and local and national authorities (see CO-FARM in section 4 as an example). Farmers are more likely to share experience with other farmers, or people from a farming background, rather than organisations with no farming knowledge or experience. Farmer support networks could raise awareness about the connection between mental health and psychosocial risk factors and develop associated communication strategies. See *Bondekompisar* and *Et si on parlait du travail?* in section 4 as good practice examples.
- **Promote agriculture's reputation** by enhancing appreciation among citizens to reduce stigma and episodes of agri-bashing. Media outlets should be included in this effort, and educational programmes should be utilised to highlight farming's importance. This will have a positive spill-over effect on attracting and retaining workers to the sector.
- **Develop cross-organisational partnerships** between agricultural organisations, climate advocacy groups and other concerned stakeholders to improve communication and collaboration on common issues. Inspiration could be taken from France's intra-sectoral dialogues described in detailed in their roadmap for preventing distress and supporting farmers and farm workers in difficulty.

²⁴ Available at <https://oira.osha.europa.eu/oira-tools/eu/eu-agriculture/oira-agriculture/>

- **Train and provide tools** to farmers, their business partners (including ancillary organisations), family, friends and others in the farmyard to recognise the signs and symptoms of mental health issues, initiate conversations and conduct suicide prevention interventions. Furthermore, provide regular OSH upskilling sessions to employers and farm owners.
- **Develop and promote easy-to-use online tools** for farmers and farm workers to facilitate the assessment of risks relating to agriculture and their management. Ideas could be taken from the EU agricultural OiRA tool or the Farm Safety Foundation (Yellow Wellies) [online tool](#).
- **Increase mental health awareness through communication activities** by creating group activities and culturally appropriate campaigns that destigmatise mental health problems, promote help-seeking behaviours, and address depression, burnout, suicide risks and substance abuse in the sector. Improve knowledge of the links between mental health, MSDs and good farm management, focusing on stress management, risk and contingency planning, and farm management. Initiatives such as New Zealand's GoodYarn initiative could be used as a reference point (see section 4).
- **Strengthen resilience, skills and digital literacy** through personalised training and individual career coaching, along with the deployment of new forms of skills coaching. This should include comprehensive training programmes and user-friendly tools to enhance digital literacy and skills to facilitate the adoption of digital technologies, while also addressing stressors associated with digitalisation and automation. Furthermore, integrate awareness on mental health and associated psychosocial risks in training modules, including post-schooling and continuous education programmes, and improve teacher training in agricultural disciplines.
- **Address financial security** by supporting farmers to develop comprehensive business management plans and attend courses on financial management and planning encompassing strategies on managing economic uncertainty. Tailored entrepreneurial training could be specifically provided for those wishing to change farm type, including for transition to organic farming.
- **Provide tailored support and assistance with setting up a farm** that specifically addresses the specificities and gender dimension of farming particularly for females entering the sector.
- **Promote gender equality and diversity** via tailored training addressing diversity and inclusion in the agricultural sector and awareness campaigns that highlight the challenges faced by female farmers and farm workers and migrant workers and publicly recognising their contributions.
- **Integrate migrant workers** via initiatives that include language training and ensure the provision of safe and secure accommodation (see ToWorkSafe, Belgium, as a good practice example in section 4). Furthermore, ensure migrant workers are regularised and informed of their legal rights and entitlements. Examples of how to achieve this can be adopted from Humus Job, Italy, a tool within the European Thematic Network FARMWELL project (see section 4).

5.2.2 Policy pointers

The list below includes a broad selection of policy pointers for decision-makers at all levels of EU governance (from European institutions to regional and local governments according to competencies):

- **Improve infrastructure and access to healthcare in rural areas:** Enhance access to psychosocial supports, mental healthcare and occupational health services, particularly in areas classified as medical deserts. This includes improving transport and high-speed Internet infrastructure to facilitate access to administrative systems, mental health literacy and farm management training programmes. Expand private and third-sector healthcare support programmes and promote awareness of available healthcare resources.
- **Enhance access to public support programmes** and provide specialised services tailored to agricultural challenges. Consolidate first points of contact for farmers and farm workers.

Furthermore, ensure occupational health services are equipped to assess psychosocial risks and follow up on mental health issues.

- **Enhance cooperation between national agriculture, occupational health, and health and social care departments** to better coordinate mental health research, prevention and specific intervention activities targeting farmers and farm workers.
- **Prioritise the elevated rates of suicide** among farmers and farm workers by creating tailored suicide prevention strategies (e.g. see Ireland and France examples in section 4). Where possible, provide free suicide prevention and intervention training to members of farming communities that includes providing signposts to appropriate mental health services and support networks.
- **Address financial security and the financial position** of the agricultural workforce, by establishing strategies, in conjunction with farmers, farm workers and their representatives, focusing on managing economic uncertainty, stabilising incomes and supporting farm profitability. Actions could include addressing the commercial determinants of health²⁵ (see WHO (2024) for further information) by replicating France's EGalim laws in other EU Member States guaranteeing fixed income and fair pricing for agricultural produce that reflects investment costs, ensuring equity between farmers and commercial actors. Furthermore, specific agricultural strategies could be developed to provide financial assistance and other supports to farmers during times of crisis. Equally, regarding farm workers ensure ongoing dialogue geared towards providing secure jobs with sufficient income, making clear the connection between precarious work and mental wellbeing.
- **Support farm inheritance:** Reduce bureaucracy and provide legal guidance and financial support to young farmers to help alleviate succession concerns. Elaborate strategies supporting young farmers in national agricultural plans.
- **Empower female farmers** by reducing income gaps and strengthening land inheritance rights. Encourage gender parity in farming and agricultural bodies and forums to ensure women's involvement in decision and policymaking activities.
- **Establish specially designed support services** for farm women and other groups (e.g. migrants, young and older farmers) whose mental health and overall wellbeing are particularly vulnerable. Specially designed support services could cater to various needs of the diverse groups such as female farmers and farm workers, farmers with addictions or physical/intellectual disabilities, specialised farm workers and older farmers anxious about farm succession.
- **Invest in rural domestic violence services**, raise awareness about the signs of domestic violence and the specific risks to women exposed to violence in farming communities. Support women's, and female farmers' and farm workers' dual roles in farming families to empower their position in agriculture.
- **Support farming conversion and raise awareness of the benefits of organic farming.** This can encompass media campaigns, training courses for farm conversion, and financial support (in the form of subsidies and grants). Such initiatives could be included in policies and plans targeting climate change and environmental sustainability.
- **Create opportunities for rest and relaxation.** Develop projects and initiatives that contribute to farmers' and farm workers' work–life balance. Examples can include organising local leisure activities and respite breaks that could be facilitated by social insurance contributions (e.g. France – see MSA example in section 4) or by a legal Act on Farm Relief Services (e.g. see good practices from Finland in section 4). Opportunities for work recovery should reflect the

²⁵ Commercial determinants of health are the private sector activities impacting public health, either positively or negatively, and the enabling political economic systems and norms. These include all products and services provided by private entities to gain a financial profit, as well as market strategies, working conditions, production externalities and political activities, such as misinformation, lobbying and donations (WHO, 2024). See: https://www.who.int/health-topics/commercial-determinants-of-health#tab=tab_1 for further information.

different requirements of agricultural groups depending on farming specialisation such as crop, dairy or pig farming.

- **Support legislative initiatives and programmes** that address regulatory bottlenecks and reduce administrative burdens. Where possible, co-design and co-produce accessible, understandable administrative procedures with farmers, farm workers and/or their representative organisations (consult the French roadmap, cited in section 4, for preventing distress and supporting farmers in difficulty). Ensure clear and accessible communication materials and provide support and feedback to farmers' questions during implementation.

5.2.3 Research gaps and future research directions

Finally, this study identified a series of important research gaps that should inspire future research directions for both academic and institutional research in the field of psychosocial risks exposure and associated mental health outcomes in agriculture. More specifically:

- **Geographical diversity:** Most European research on psychosocial risks exposure in the agricultural sector is currently focused on a small number of countries (e.g. IE, FI, ES for EU; NO, UK, CH for non-EU). Therefore, there is a great need for the development of further research encompassing worker samples from other EU Member States. EU-level comparatives across countries are also required.
- **Observational studies:** Such studies, which pose the same questions to the same study participants at different times, are scarce in the literature but would be useful to better understand the relationships between psychosocial risks and adverse mental health outcomes.
- **Randomised control trials:** In-depth intervention studies are urgently needed to monitor and evaluate the impact of interventions. An evidence base demonstrating the effectiveness of individual and organisational interventions showing the cost-effectiveness and impact on mitigating and managing psychosocial risks impacting workers and organisational outcomes and performance would provide important information for the sector.
- **Fourth industrial revolution:** Taking into account the key aspects related to the fourth industrial revolution, firstly, future research on digitalisation of agriculture should focus on exploring unexplored aspects of farm management, such as the use of advanced machines and sensors for crop and animal health monitoring and associations between technology exposure and mental health outcomes, such as anxiety.
- **Climate change and mental health:** Close the research gap exploring the relationship between climate change and farmers' and farm workers' mental health in European literature. With Europe being the fastest-warming continent and facing increasing climate disasters, there is an urgent need for research on the implications of events like droughts, floods and forest fires for the wellbeing of farmers and farm workers. Further studies are required on the impact of environmentally sustainable farming on mental health outcomes.
- **Minority groups of farmers and farm workers:** Further research is needed to explore the experiences, challenges and needs of specific groups within the agricultural sector. This includes studying the experiences of female farmers and farm workers (who make up a third of a male dominated workforce), addressing income inequality, role conflict and role management, as well as the exposure to and impact of domestic violence and sexual harassment.
- Additionally, there is a research gap in understanding the psychosocial risks faced by **LGBTQ+** farmers and farm workers and the additional mental health hardships they may encounter in a conservative sector.
- It is important to further investigate the specific psychosocial environment and mental health of **farm workers, with a focus on migrant and seasonal farm workers** and identify measures that farm managers must take to ensure their wellbeing.
- **Data on mental health outcomes:** Despite the increase in suicide in the agricultural sector, there is a lack of EU-level studies and updated statistics on this issue. Furthermore, there is a

need for more comprehensive research on mental health problems, burnout, and the link between psychosocial risk exposure and long-term health outcomes for farmers and farm workers since mental health problems can lead to long-term health issues. EU-level studies that consider farm type, size and demographic factors are particularly important. Research efforts should also include mental health challenges arising from recent crises such as the COVID-19 pandemic and of the war in Ukraine and its impact on farmers' and farm workers mental wellbeing.

- **Policy and regulatory challenges:** Given the significant concerns among interview participants on the impact of policy and legal obligations for the agricultural sector and its impact on mental health, studies investigating and quantifying this impact are required. Such studies should also investigate solutions to reduce administrative burden in the sector.

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7 Appendices

Appendix A — Semi-structured Interview Questionnaire

General questions

Name:	
Organisation:	
Job position:	
Sector:	

What is your professional background and experience regarding psychosocial risks (PSRs) and mental health in your industry?

Psychosocial risks and mental health

From our preliminary literature overview of relevant publications and EU-OSHA materials, we have created a non-exhaustive list of PSR categories specifically relevant in both the construction and agricultural sectors.

- 1) How do the following factors impact the mental wellbeing of workers in the construction sector?
 - Long working hours
 - Work pressure and deadlines
 - Job insecurity (e.g. posting or temporary contract)
 - Socio-cultural norms
 - Socioeconomic context
 - Physical demands
 - High-risk work
 - Noise and environmental hazards
 - Vulnerability to economic recessions
 - Skill gaps facing technological evolution

- 2) Could you please rate how each of them impacts the mental wellbeing of workers in the agricultural sector on a rating scale of 1-5, where 1 is 'not at all impactful' and 5 is 'very impactful'?

- 3) How do the following factors impact the mental wellbeing of workers in agriculture?
 - Isolation and loneliness
 - Uncertainty and unpredictability (e.g. seasonality impact, weather events, pest infestation)
 - Role conflict and work–life balance
 - Socio-cultural norms (the expectations of traditional family roles, male socialisation and models of masculinity)
 - Socioeconomic context
 - Social stigma
 - Financial pressures
 - Physical demands
 - Growing regulatory and administrative pressures
 - Exposure to environmental hazards
 - Lack of attractiveness of farming (due to unpopularity of the sector, so-called *farmer bashing*)
 - Vulnerability to climate change

- 4) Could you please rate how each of them impacts the mental wellbeing of workers in the agricultural sector on a rating scale of 1-5, where 1 is 'not at all impactful' and 5 is 'very impactful'?

- 5) Are there any other PSR factors in your sector? What are their main causes?
- 6) In your experience, how common are these PSRs in your sector? Have you noticed any changes over time? Do you have any relevant quantitative data to share in this regard?
- 7) To what extent are these factors unique for your sector?
- 8) What are the main challenges in addressing PSRs in your sector? To what extent are PSRs and mental health issues given due attention?
- 9) What are, from your experience, the emerging labour market trends and/or conditions that may affect PSRs and how will they affect them? (e.g. digitalisation, employment trends, etc.)?
- 10) How do the following factors positively impact the mental wellbeing of workers in your sector?
 - Job autonomy and flexibility
 - Job satisfaction (in the sense of 'providing for the family', particularly so for seasonal and migrant workers)
 - Farmer social support (having a shared identity, availability of close relations, community trust and so on)
 - Own family (partner, children, etc.)
 - Diversified work
 - Work and living environment
 - Support system (friends, neighbours)
 - Sufficient income
 - Sufficient free time
 - Own hobby
- 11) Could you please rate how each of them positively impacts the mental wellbeing of workers in your sector on a rating scale of 1-5, where 1 is 'not at all impactful' and 5 is 'very impactful'?

Psychosocial risks/Mental health management

- 12) Which strategies or approaches can be effective in managing and preventing PSRs in your sector?
- 13) What are success factors and the barriers to implementing these strategies and approaches? What could be done to facilitate their implementation (potential support, etc.)?
- 14) Do PSRs differ depending on the company size? Do they differ depending on the employment type? Do they differ based on other factors, and if so, which ones?
- 15) What are the requirements regarding risk assessment and management in the workplace regarding PSRs and/or mental health?
- 16) Do you think that PSRs are sufficiently addressed? If not, what could be done to increasingly address the issue?

Prevention and rehabilitation measures

- 17) Are you aware of any recommendations on addressing PSRs and promoting mental health in your sector?
- 18) How well are these recommendations applied by companies? What are the main success factors and challenges as regards application and uptake?
- 19) Are you aware of any interventions that could be defined as a good practice? Could you share any relevant information you have regarding these interventions and/or can you put us in touch with a contact person?

- 20) Could you give some more information about the(se) intervention(s)? What is the main objective? What did the intervention(s) consist of? What is the level of intervention (organisational, regional, etc.)? What is the target group? What is the status of the intervention(s) (duration, implemented, ongoing, etc.)? What were the main outcomes?
- 21) Is the intervention based on any existing recommendation?

Vulnerable groups

- 22) Are there specific subgroups of workers in the sector at greater risk for psychosocial challenges (e.g. migrant workers, unskilled workers, ageing workers, women, etc.)? If so, which ones?
- 23) What are your insights into how PSR factors may vary among different groups of workers in your sector? What are the main differences you observe, and what challenges arise in addressing these differences?
- 24) Are there any specific recommendations or initiatives aimed at different target groups? (e.g. migrant workers, unskilled workers, ageing workers, women, etc.)?
- 25) Are there any additional difficulties regarding social support that migrant workers face due to being away from their home countries?

Concluding questions

- 26) Based on your knowledge and experience, do you have any additional recommendations, or do you know of other innovative approaches for addressing PSRs and promoting mental health in your sector that may not be widely recognised or already mentioned?
- 27) Is there any other information and/or recommendations that you would like to share? Are there any stakeholders that you would recommend consulting for recommendations and the identification of good practices?

Appendix B — National social partners and industry associations

General questions

Name:	
Organisation:	
Job position:	
Sector:	

What is your professional background and experience regarding psychosocial risks (PSRs) and mental health in your industry?

Psychosocial risks and mental health

From our preliminary literature overview of relevant publications and EU-OSHA materials, we have created a non-exhaustive list of PSR categories specifically relevant in both the construction and agricultural sectors.

- 1) How do the following factors impact the mental wellbeing of workers in the construction sector?
 - Long working hours
 - Work pressure and deadlines
 - Job insecurity (e.g. posting or temporary contract)
 - Socio-cultural norms
 - Socioeconomic context
 - Physical demands
 - High-risk work
 - Noise and environmental hazards
 - Vulnerability to economic recessions
 - Skill gaps facing technological evolution

- 2) Could you please rate how each of them impacts the mental wellbeing of workers in the agricultural sector on a rating scale of 1-5, where 1 is 'not at all impactful' and 5 is 'very impactful'?

- 3) How do the following factors impact the mental wellbeing of workers in agriculture?
 - Isolation and loneliness
 - Uncertainty and unpredictability (e.g. seasonality impact, weather events, pest infestation)
 - Role conflict and work–life balance
 - Socio-cultural norms (the expectations of traditional family roles, male socialisation and models of masculinity)
 - Socioeconomic context
 - Social stigma
 - Financial pressures
 - Physical demands
 - Growing regulatory and administrative pressures
 - Exposure to environmental hazards
 - Lack of attractiveness of farming (due to unpopularity of the sector, so-called *farmer bashing*)
 - Vulnerability to climate change

- 4) Could you please rate how each of them impacts the mental wellbeing of workers in the agricultural sector on a rating scale of 1-5, where 1 is 'not at all impactful' and 5 is 'very impactful'?

- 5) Are there any other PSR factors in your sector? What are their main causes?

- 6) To what extent are these factors unique for your sector?
- 7) In your experience, how common are these PSRs in your sector? Have you noticed any changes over time? Do you have any relevant quantitative data to share in this regard?
- 8) What are the main challenges in addressing PSRs in your sector? To what extent are PSRs and mental health issues given due attention?
- 9) What are, from your experience, the emerging labour market trends and/or conditions that may affect PSRs and how will they affect them? (e.g. digitalisation, employment trends, etc.)?
- 10) How do the following factors positively impact the mental wellbeing of workers in your sector?
 - Job autonomy and flexibility
 - Job satisfaction (in the sense of 'providing for the family', particularly so for seasonal and migrant workers)
 - Farmer social support (having a shared identity, availability of close relations, community trust and so on)
 - Own family (partner, children, etc.)
 - Diversified work
 - Work and living environment
 - Support system (friends, neighbours)
 - Sufficient income
 - Sufficient free time
 - Own hobby
- 11) Could you please rate how each of them positively impacts the mental wellbeing of workers in your sector on a rating scale of 1-5, where 1 is 'not at all impactful' and 5 is 'very impactful'?

Psychosocial risks/Mental health management

- 12) Which strategies or approaches can be effective in managing and preventing PSRs in your sector?
- 13) What are success factors and the barriers to implementing these strategies and approaches? What could be done to facilitate their implementation (potential support, etc.)?
- 14) Do PSRs differ depending on the company size? Do they differ depending on the employment type? Do they differ based on other factors, and if so, which ones?
- 15) What are requirements regarding risk assessment and management in the workplace regarding PSRs and/or mental health?
- 16) Do you think that PSRs are sufficiently addressed? If not, what could be done to increasingly address the issue?

Prevention and rehabilitation measures

- 17) Are you aware of any recommendations on addressing PSRs and promoting mental health in your sector?
- 18) How well are these recommendations applied by companies? What are the main success factors and challenges as regards application and uptake?
- 19) Are you aware of any interventions that could be used as a good practice? Could you share any relevant information you have regarding these interventions and/or can you put us in touch with a contact person?

- 20) Could you give some more information about the(se) intervention(s)? What is the main objective? What did the intervention(s) consist of? What is the level of intervention (organisational, regional, etc.)? What is the target group? What is the status of the intervention(s) (duration, implemented, ongoing, etc.)? What were the main outcomes?
- 21) Is the intervention based on any existing recommendation?

Vulnerable groups

- 22) Are specific subgroups of workers in the sector at greater risk for psychosocial challenges (e.g. migrant workers, unskilled workers, ageing workers, women, etc.)? If so, which ones?
- 23) What are your insights into how PSR factors may vary among different groups of workers in your sector? What are the main differences you observe, and what challenges arise in addressing these differences?
- 24) Are there any specific recommendations or initiatives aimed at different target groups? (e.g. migrant workers, unskilled workers, ageing workers, women, etc.)? What are specific subgroups of workers in the sector who are at greater risk for psychosocial challenges (e.g. women, migrants)?

Concluding questions

- 25) Based on your knowledge and experience, do you have any additional recommendations, or do you know of other innovative approaches for addressing PSRs and promoting mental health in your sector that may not be widely recognised or already mentioned?
- 26) Is there any other information and/or recommendations that you would like to share? Are there any stakeholders that you would recommend consulting for recommendations and the identification of good practices?

Appendix C — Organisations and networks

General questions

Name:	
Organisation:	
Job position:	
Sector:	

What is your professional background and experience regarding psychosocial risks (PSRs) and mental health in your industry?

Psychosocial risks and mental health

From our preliminary literature overview of relevant publications and EU-OSHA materials, we have created a non-exhaustive list of PSR categories specifically relevant in both the construction and agricultural sectors.

- 1) How do the following factors impact the mental wellbeing of workers in the construction sector?
 - Long working hours
 - Work pressure and deadlines
 - Job insecurity (e.g. posting or temporary contract)
 - Socio-cultural norms
 - Socioeconomic context
 - Physical demands
 - High-risk work
 - Noise and environmental hazards
 - Vulnerability to economic recessions
 - Skill gaps facing technological evolution

- 2) Could you please rate how each of them impacts the mental wellbeing of workers in the agricultural sector on a rating scale of 1-5, where 1 is 'not at all impactful' and 5 is 'very impactful'?

- 3) How do the following factors impact the mental wellbeing of workers in agriculture?
 - Isolation and loneliness
 - Uncertainty and unpredictability (e.g. seasonality impact, weather events, pest infestation)
 - Role conflict and work–life balance
 - Socio-cultural norms (the expectations of traditional family roles, male socialisation and models of masculinity)
 - Socioeconomic context
 - Social stigma
 - Financial pressures
 - Physical demands
 - Growing regulatory and administrative pressures
 - Exposure to environmental hazards
 - Lack of attractiveness of farming (due to unpopularity of the sector, so-called *farmer bashing*)
 - Vulnerability to climate change

- 4) Could you please rate how each of them impacts the mental wellbeing of workers in the agricultural sector on a rating scale of 1-5, where 1 is 'not at all impactful' and 5 is 'very impactful'?

- 5) Are there any other PSR factors in your sector? What are their main causes?

- 6) To what extent are these factors unique for your sector?
- 7) What are, from your experience, the emerging labour market trends and/or conditions that may affect PSRs and how will they affect them? (e.g. digitalisation, employment trends, etc.)?
- 8) How do the following factors positively impact the mental wellbeing of workers in your sector?
 - Job autonomy and flexibility
 - Job satisfaction (in the sense of 'providing for the family', particularly so for seasonal and migrant workers)
 - Farmer social support (having a shared identity, availability of close relations, community trust and so on)
 - Own family (partner, children, etc.)
 - Diversified work
 - Work and living environment
 - Support system (friends, neighbours)
 - Sufficient income
 - Sufficient free time
 - Own hobby
- 9) Could you please rate how each of them positively impacts the mental wellbeing of workers in your sector on a rating scale of 1-5, where 1 is 'not at all impactful' and 5 is 'very impactful'?

Psychosocial risks/Mental health management

- 10) Which strategies or approaches can be effective in managing and preventing PSRs in your sector?
- 11) What are success factors and the barriers to implementing these strategies and approaches? What could be done to facilitate their implementation (potential support, etc.)?
- 12) Do PSRs differ depending on the company size? Do they differ depending on the employment type?
- 13) What are requirements regarding risk assessment and management in the workplace regarding PSRs and/or mental health?
- 14) Do you think that PSRs are sufficiently addressed? If not, what could be done to increasingly address the issue?

Prevention and rehabilitation measures

- 15) Are you aware of any recommendations on addressing PSRs and promoting mental health in your sector?
- 16) Are you aware of any interventions that could be used as a good practice? Could you share any relevant information you have regarding these interventions and/or can you put us in touch with a contact person?
- 17) Could you give some more information about the(se) intervention(s)? What is the main objective? What did the intervention(s) consist of? What is the level of intervention (organisational, regional, etc.)? What is the target group? What is the status of the intervention(s) (duration, implemented, ongoing, etc.)? What were the main outcomes?
- 18) Is the intervention based on any existing recommendation?

Vulnerable groups

- 19) Are specific subgroups of workers in the sector at greater risk for psychosocial challenges (e.g. migrant workers, unskilled workers, ageing workers, women, etc.)? If so, which ones?
- 20) What are your insights into how PSR factors may vary among different groups of workers in your sector? What are the main differences you observe, and what challenges arise in addressing these differences?
- 21) Are there any specific recommendations or initiatives aimed at different target groups? (e.g. migrant workers, unskilled workers, ageing workers, women, etc.)? What are specific subgroups of workers in the sector who are at greater risk for psychosocial challenges (e.g. women, migrants)?

Concluding questions

- 22) Based on your knowledge and experience, do you have any additional recommendations or do you know of other innovative approaches for addressing PSRs and promoting mental health in your sector that may not be widely recognised or already mentioned?
- 23) Is there any other information and/or recommendations that you would like to share? Are there any stakeholders that you would recommend consulting for recommendations and the identification of good practices?

The European Agency for Safety and Health at Work (EU-OSHA) contributes to making Europe a safer, healthier and more productive place to work. The Agency researches, develops, and distributes reliable, balanced, and impartial safety and health information and organises pan-European awareness raising campaigns. Set up by the European Union in 1994 and based in Bilbao, Spain, the Agency brings together representatives from the European Commission, Member State governments, and employers' and workers' organisations, as well as leading experts in each of the EU Member States and beyond.

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