# Povertà alimentare e diritto al cibo: sfide, politiche e pratiche

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# Indice

# Introduzione

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Sulla scia delle crescenti disuguaglianze e delle crisi multiple che hanno caratterizzato gli ultimi decenni, la povertà e la grave deprivazione materiale sono emerse come questioni salienti e visibili anche in democrazie ad alto reddito, in cui porzioni più ampie e significative della popolazione faticano ad accedere a beni e servizi essenziali, tra cui il cibo. Pur essendo più grave e diffusa nel Sud globale – in particolare in Asia e nell'Africa subsahariana – l'insicurezza alimentare genera preoccupazione anche nei Paesi ad alto reddito e welfare avanzato, inclusa l'Europa (Davis, Geiger 2017; Gaisbauer *et al.* 2019; Madama 2025), dove il problema non è tanto la disponibilità di cibo, quanto piuttosto la sua accessibilità economica (O'Connor *et al.* 2016).

In particolare, nell'UE 27, una quota pari al 7,3% della popolazione dichiara di non potersi permettere un'alimentazione adeguata (Database Eurostat), con i minori che costituiscono un gruppo maggiormente vulnerabile e a rischio di esclusione alimentare (O'Connell, Brannen 2021; Palladino *et al.* 2024).

Le disuguaglianze e la povertà sono fenomeni complessi e multidimensionali, il cui rapporto con la povertà alimentare non è univoco, ma varia in maniera significativa non solo tra i diversi Paesi, ma anche tra contesti regionali o locali e tra gruppi sociali, con evidenti implicazioni sociali (Bartelmeß *et al.* 2022). Sebbene la povertà economica rappresenti una delle principali determinanti della povertà alimentare, l'evidenza empirica e il dibattito accademico suggeriscono che focalizzarsi esclusivamente su tale determinante non sia sufficiente per comprendere appieno il fenomeno. Esiste infatti una forte interdipendenza tra gli aspetti materiali e immateriali dell'esperienza di povertà alimentare (Martinez *et al.* 2020; Walker 2019), che rischia di essere trascurata se si fa riferimento unicamente a indicatori economici, che appaiono fortemente inadeguati.

Per colmare queste lacune e dare maggiore visibilità agli aspetti tuttora meno evidenti, la *special issue*, articolata in due numeri, intende confrontarsi con lo stato dell'arte della letteratura e le potenziali evoluzioni delle politiche per l'accesso al cibo, valorizzando una pluralità di prospettive analitiche. In particolare, l'attenzione si concentra sull'esplorazione delle dinamiche socio-culturali e delle politiche pubbliche che influenzano l'accesso al cibo, cercando di evidenziare come interventi integrati e mirati possano affrontare in maniera più efficace le complesse e interconnesse problematiche relative alla povertà, alla disuguaglianza e alla (in)sicurezza alimentare. Un'attenzione particolare viene inoltre riservata a modelli alternativi di accesso al cibo, come le iniziative comunitarie e quelle basate sulla solidarietà, che stanno guadagnando crescente attenzione in molte realtà locali, costituendo risposte innovative alle lacune del sistema di welfare, e mostrando come soluzioni di tipo collaborativo possano migliorare l'accesso a cibo sano e sufficiente anche in contesti di difficoltà economica.

## L*a doppia sfida della concettualizzazione e della misurazione*

Il primo dei due numeri di questa *special issue*, **il numero 3/2024**, si compone di quattro contributi che affrontano il tema della povertà alimentare da prospettive diverse ma complementari. A partire dal riconoscimento della multidimensionalità del fenomeno, espressione di vulnerabilità sociali e diseguaglianze strutturali, i contributi indagano l'evoluzione nella governance internazionale, le sfide legate alla misurazione e le implicazioni nei contesti nazionali e locali. Insieme al numero successivo, la struttura proposta mira così a coniugare una pluralità di approcci capaci di offrire a nostro avviso un contributo alla comprensione teorica e pratica di un fenomeno che meriterebbe maggiore attenzione nel dibattito pubblico e politico.

Più nel dettaglio, il numero si apre con un saggio che offre un inquadramento teorico e normativo della sicurezza alimentare utilizzando le lenti dei diritti umani e della giustizia sociale; a cui segue un'analisi dell'evoluzione del regime internazionale per la sicurezza alimentare e del ruolo della FAO in un contesto istituzionale sempre più frammentato. La seconda parte è dedicata alla questione della misurazione della povertà alimentare, attraverso uno studio che utilizza la scala FIES per misurare la *food insecurity* in un contesto urbano europeo; e un'analisi condotta a partire dai dati dell'indagine EU-SILC, che propone un nuovo indice per la misurazione della deprivazione alimentare in Italia.

In sintesi, il contributo di **Severi**, che apre il numero, analizza il nesso tra insicurezza alimentare e cambiamento climatico, sottolineando come eventi estremi, conflitti e disuguaglianze economiche stiano erodendo le basi della sicurezza alimentare globale. Il diritto al cibo viene interpretato come diritto fondamentale, riconosciuto a livello internazionale, ma ancora ampiamente disatteso nei fatti. A partire da questo quadro, l'articolo esplora il potenziale delle politiche di protezione sociale – e in particolare della Adaptive Social Protection – come strumento per affrontare le vulnerabilità alimentari. Attraverso l'analisi di casi studio, Severi evidenzia come trasferimenti economici, protezione contro i rischi del reddito e misure di *empowerment* possano contribuire a rafforzare la resilienza dei gruppi e contesti a rischio di maggiore fragilità. L'adozione di un approccio integrato che combini adattamento climatico, riduzione del rischio di disastri e protezione sociale appare, dunque, essenziale per affrontare una crisi alimentare che si configura sempre più come sistemica.

Il contributo di **Cerutti** approfondisce invece l'evoluzione istituzionale della governance globale della sicurezza alimentare, con un'attenzione particolare al ruolo della FAO. L'analisi si sviluppa a partire dal concetto di Complesso Istituzionale Ibrido (Hybrid Institutional Complex), illustrando come la moltiplicazione di attori e sedi decisionali abbia prodotto un regime frammentato, ma anche più flessibile e potenzialmente adattivo. Attraverso un'analisi dei meccanismi di cooperazione, competizione e intervento tra organizzazioni internazionali, l'articolo indaga le strategie adottate dalla FAO per mantenere la propria rilevanza e capacità di azione. In particolare, l'Autrice si concentra sulle prospettive di integrazione tra il regime della sicurezza alimentare e quello del cambiamento climatico, mettendo in luce sia le sinergie potenziali che le tensioni irrisolte tra i due ambiti. Il contributo rappresenta così un'importante riflessione sul funzionamento della governance multilivello e sulle opportunità e i limiti delle organizzazioni internazionali in contesti di crescente interdipendenza tematica e istituzionale.

Nel terzo articolo, **Bernaschi**, **Cafiero**, **Marino** e **Felici** propongono un'analisi empirica dell'insicurezza alimentare nel contesto urbano italiano, utilizzando la Food Insecurity Experience Scale (FIES) della FAO come strumento di rilevazione a livello locale. Lo studio, condotto nella città metropolitana di Roma, evidenzia come l'insicurezza alimentare non sia una prerogativa dei paesi a basso reddito, ma colpisca in forme specifiche anche le società ad alto reddito, filtrata da marcate disuguaglianze socio-economiche e territoriali. Il contributo sottolinea l'importanza di adottare strumenti sensibili agli aspetti esperienziali in grado di catturare le dimensioni soggettive e relazionali del fenomeno, mostrando come l'insicurezza alimentare incida sulla qualità della vita, sulla capacità di scelta, sulla dignità e sull'autonomia delle persone. In tal modo, il saggio contribuisce a ridefinire la questione della sicurezza alimentare come problema di giustizia sociale e diritto alla cittadinanza.

Infine, il contributo di **Ciancimino** e **Sensi** propone un approccio innovativo alla misurazione della deprivazione alimentare, sviluppando un indice composito che integra la dimensione materiale (possibilità economica di accedere a pasti adeguati) con quella sociale (capacità di partecipare ad attività conviviali legate al cibo). Sulla base dei dati raccolti nell'indagine EU-SILC 2022, lo studio analizza così la diffusione della deprivazione alimentare in Italia, individuandone i principali predittori socio-demografici – quali reddito, composizione familiare, cittadinanza e residenza geografica – e ne valuta l'impatto sul benessere psico-sociale. L'articolo evidenzia come la *food poverty* sia associata a una serie di effetti negativi sul piano della salute mentale, delle relazioni sociali e della percezione di sé, proponendo così una lettura integrata del fenomeno che va oltre la mera assenza di cibo per abbracciare le implicazioni simboliche, identitarie e relazionali della deprivazione alimentare.

Nel loro insieme, i contributi raccolti nel numero 3/2024 delineano un quadro complesso e preoccupante dell'insicurezza alimentare. Grazie ad approcci disciplinari differente, il numero fa luce sulla multidimensionalità del fenomeno rendendo evidente sia la necessità di un cambiamento di approccio – che riconosca il cibo non solo come bene materiale ma come diritto umano, esperienza sociale e fattore di coesione – sia l'urgenza di politiche pubbliche orientate alla costruzione di sistemi alimentari più equi, inclusivi e sostenibili.

## L*e risposte alla povertà alimentare: politiche, pratiche ed esperienze*

Come si risponde a questo fenomeno? Mancando una strategia nazionale e, di fatto, non essendo riconosciuto il diritto al cibo, enti locali e società civile si sono attivati dando vita a numerose azioni di contrasto alla povertà alimentare, che vengono raccontate nel **numero 1/2025** di questa doppia *special issue*.

Come spiegato nel primo contributo, nel processo di *policy reframing* innescato dall'emergere di nuove dimensioni del problema (sostenibilità, salute, qualità) e dalle recenti sperimentazioni di policy, manca ancora il diretto riconoscimento del diritto al cibo e la spinta conseguente a ridefinire e ricomporre politiche in grado di affrontare le disuguaglianze sistemiche legate alla povertà, non solo alimentare. Il cambio di passo per rafforzare il sistema di welfare alimentare e promuovere una governance più partecipativa e innovativa, in grado di affrontare le sfide emergenti con maggiore efficacia, secondo **Lizzi** e **Righettini**, dipende dalla capacità delle coalizioni di attori di formare nuove alleanze e attivare meccanismi per aumentare la consapevolezza e l'attenzione pubblica sul tema.

Il welfare alimentare poggia infatti su una costellazione di attori e interventi ispirati da logiche più o meno emergenziali e su organizzazioni più o meno strutturate. È quanto si vede, ad esempio, nel caso di Torino, oggetto di studio del secondo contributo. A partire dalla mappatura delle iniziative di contrasto alla povertà alimentare, che restituisce la pluralità e l'eterogeneità delle organizzazioni coinvolte in questo campo, **Allegretti** e **Toldo** propongono una categorizzazione dei modelli di welfare alimentare basata su due dimensioni: la natura emergenziale o meno dell'intervento e il grado di formalità organizzativa dei programmi e dei servizi in termini di struttura interna e relazioni con l'esterno. Tale categorizzazione non solo offre una chiave di lettura sistemica per il caso locale specifico, ma è applicabile a contesti urbani simili, contribuendo così alla lettura del diritto al cibo come parte integrante delle politiche sociali.

Sempre più spesso, inoltre, si prova a mettere in connessione le singole esperienze, costruendo reti, come nel caso della Rete Cibo Brescia, oggetto del terzo contributo. Oltre a raccontarne nascita ed evoluzione, gli Autori e le Autrici – **Megni**, **Danesi**, **David**, **Drera** e **Moraschi** – discutono il ruolo del Comune di Brescia nel coordinare le diverse organizzazioni, la costituzione di un tavolo di coordinamento, la costruzione del manifesto programmatico “Conta su di noi”, la formalizzazione di una governance orizzontale, fino all’adozione dei Patti di collaborazione per radicare e integrare gli interventi di contrasto alla povertà alimentare. Un’esperienza concreta che aiuta a riflettere sulla necessità di modelli di intervento più strutturati e su come gli enti locali possano agevolare questa azione.

La rete è infatti un obiettivo difficile da costruire, ma che agevola il lavoro degli operatori, ne amplifica l’efficacia dell’azione e capacità di *advocacy*, come si racconta nel quarto contributo, dedicato all’esperienza della Rete degli empori solidali dell’Emilia Romagna. Oltre ad esaminare l’evoluzione degli empori solidali in relazione alla costruzione di reti strutturate di collaborazione, **De Benedictis**, **Scarafoni** e **Sforzi** provano a identificare le dinamiche organizzative della Rete e il valore aggiunto derivante dall’azione collettiva, con particolare attenzione al miglioramento della qualità dei servizi erogati e al rafforzamento della capacità di *advocacy* nei confronti delle istituzioni pubbliche e degli attori privati.

Non manca, infine, l’attenzione ai destinatari finali di questi interventi. Chi sono? Quali sono il loro vissuto e le loro aspettative? Qual è la loro esperienza rispetto all’aiuto alimentare che ricevono? È su questo che si concentra l’ultimo contributo. Attraverso l’osservazione delle mense di Avellino, Cava de’ Tirreni e Salerno, **D’Ascenzio** racconta di un uso differenziato delle mense da parte di beneficiari con diverse biografie di vita e diversi gradi di vulnerabilità sociale. Un uso che è anche un mezzo attraverso cui attuare il “diritto a togliersi la fame” e che può essere declinato come una semplice azione di sostentamento economico, ma anche come una strategia di risparmio, reintegrazione sociale e rinegoziazione identitaria.

## *Riflessioni conclusive*

La riflessione sviluppata nei due numeri di questa *special issue* consente di riposizionare la questione della povertà alimentare e delle politiche di contrasto all’interno del più ampio dibattito sulle trasformazioni del welfare e sulla giustizia sociale (Blake 2019). I contributi raccolti evidenziano come il cibo rappresenti non solo un bisogno essenziale, ma anche una lente privilegiata per interrogare le dinamiche di esclusione, i limiti delle politiche pubbliche e le forme emergenti di solidarietà. La *food poverty*, intesa come condizione multidimensionale che combina deprivazione materiale, disuguaglianze strutturali e vulnerabilità relazionali, impone una ridefinizione delle categorie analitiche tradizionalmente utilizzate nello studio della povertà e delle politiche sociali. L'adozione di approcci interdisciplinari e di strumenti metodologici innovativi – dalla misurazione esperienziale alle analisi istituzionali multilivello – permette di ampliare lo spettro interpretativo e di mettere in luce le interdipendenze tra le sfere del bisogno, della cittadinanza e dei diritti sociali. In tal senso, l'accesso al cibo va inteso non solo come una questione distributiva, ma anche come problema di policy, che chiama in causa le modalità attraverso cui si costruiscono i confini dell'inclusione sociale e si articolano i diritti (Maino *et al.* 2016).

Le prospettive di sviluppo della ricerca sono molteplici e questa *special issue* lo testimonia. Sul piano teorico, si impone una riflessione più approfondita sul nesso tra diritto al cibo, welfare state e riconoscimento, nonché sulle implicazioni della *food insecurity* in contesti ad alto reddito. Sul piano empirico, si rende necessario indagare le configurazioni locali del welfare alimentare, i modelli di governance collaborativa e le forme di mobilitazione civica che stanno emergendo nei territori. Infine, in una fase storica segnata da crisi ecologiche, sanitarie ed economiche ricorrenti, la sicurezza alimentare si configura sempre più come snodo critico nella transizione verso sistemi socio-economici ed ambientali più equi, sostenibili e resilienti. Raccogliere e sistematizzare queste traiettorie di riflessione appare imprescindibile per restituire centralità a un tema che, pur nella sua apparente marginalità, interroga profondamente il futuro delle politiche pubbliche e della coesione sociale.

## *Bibliografia*

Bartelmeβ T., Jasiok S., Kühnel E., Yildiz J. (2022), "A scoping review of the social dimensions in food insecurity and poverty assessments", *Frontiers in Public Health*, vol. 10, 994368. https://doi.org/10.3389/fpubh.2022.994368

Blake M.K. (2019), "More than just food: Food insecurity and resilient place making through community self-organising", *Sustainability*, vol. 11, n. 10, 2942.

Davis O., Geiger B. (2017), "Did Food Insecurity rise across Europe after the 2008 Crisis? An analysis across welfare regimes", *Social Policy and Society*, vol. 16, n. 3, pp. 343-360, https://doi.org/10.1017/S1474746416000166.

Gaisbauer H., Schweiger G., Sedmak C. (a cura di) (2019), *Absolute Poverty in Europe: Interdisciplinary Perspectives on a Hidden Phenomenon* (1ª ed.), Bristol, Policy Press, https://doi.org/10.1332/policypress/9781447341284.001.0001.

Madama I. (2025), *The Politics of European Food Aid Policy from Delors to von der Leyen*, Cham, Palgrave-Macmillan.

Maino F., Lodi Rizzini C., Bandera L. (2016), *Povertà alimentare in Italia: le risposte del secondo welfare*, Bologna, il Mulino.

Martinez S.M., Frongillo E.A., Leung C., Ritchie L. (2020), "No food for thought: Food insecurity is related to poor mental health and lower academic performance among students in California's public university system", *Journal of Health Psychology*, vol. 25, n. 12, pp. 1930-1939, https://doi.org/10.1177/1359105318783028.

Moragues-Faus A., Sonnino R., Marsden T. (2017), "Exploring European food system vulnerabilities: Towards integrated food security governance", *Environmental Science & Policy*, vol. 75, pp. 184-215.

O'Connell R., Brannen J. (2021), *Families and Food in Hard Times: European Comparative Research*, London, UCL Press, doi: 10.14324/111.9781787356559**.**

O'Connor N., Farag K., Baines R. (2016), "What is food poverty? A conceptual framework", *British Food Journal*, vol. 118, n. 2, pp. 429-449, https://doi.org/10.1108/BFJ-06-2015-0222.

Palladino M., Cafiero C., Sensi R. (2024), "Understanding adolescents' lived experience of food poverty. A multi-method study among food aid recipient families in Italy", *Global Food Security*, vol. 41, 100762, https://doi.org/10.1016/j.gfs.2024.100762

Walker R. (2019), "Measuring absolute poverty: Shame is all you need", in H.P. Gaisbauer, G. Schweiger, C. Sedmak (a cura di), *Absolute Poverty in Europe: Interdisciplinary Perspectives on a Hidden Phenomenon*, Bristol, Bristol University Press, pp. 97-118.

# Human Rights and Social Protection. A Springboard for Food Security[1]

Claudia Severi

*Abstract*. This paper addresses the multifaceted issue of food insecurity, examining its key causes through a rights-based approach grounded in human rights principles. It highlights the profound impact of the COVID-19 pandemic, climate change, wars and social inequalities on global hunger and severe food insecurity. The paper advocates for a rights-based approach to development, emphasizing the importance of empowering individuals to assert and exercise their rights. It aligns with the Universal Declaration of Human Rights and aims to empower broader development goals, particularly the "Zero Hunger" goal among the 17 Sustainable Development Goals set for 2030. To ensure food security, the paper proposes the implementation of Social Protection (SP) measures, including cash and asset transfers, protection against livelihood risks, and enhancement of the social status of marginalized populations. A special focus is given to Adaptive Social Protection (ASP), an integrated approach combining SP with Climate Change Adaptation (CCA) and Disaster Risk Reduction (DRR). This approach aims to reduce

[1] I had the opportunity to engage in these reflections during the academic year 2023, at the Department of International Development at Maynooth University, Ireland, through the course on "Food, Nutrition and Climate Security", led by Prof. Tom Campbell, to whom I will always be grateful for the invaluable lessons, discussions, and the thoughtful advice provided throughout the course. Furthermore, I would like to thank Professor Thomas Casadei and Professor Gianfrancesco Zanetti for their constant support and for the opportunities for dialogue and discussion. Finally, I would like to extend special thanks to Professor Barbara Giovanna Bello, Professor Fernando H. Llano Alonso, Professor Attilio Pisanò, Professor Eleonora Anna Alexandra Dei Cas, for the time they dedicated to reading this article and for the invaluable suggestions they kindly provided.

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vulnerability to shocks through an integrated and holistic strategy that can bring significant benefits to communities most affected by food insecurity, according to this paper. By analyzing case studies such as the "Ipelegeng" program in Botswana and the "Starter Pack" program in Malawi, the paper demonstrates the potential effectiveness of Social Protection measures. Ultimately, it aims to propose actionable policies to eliminate or significantly reduce malnutrition, particularly in developing countries, by addressing the right to food as a fundamental social issue.

*Keywords*: food insecurity, climate change, human rights, inequality, social protection

## 1. *Introduction*

Food security is a multidimensional concept that promotes human dignity and well-being worldwide. As defined by the Food and Agriculture Organization (FAO) at the 1996 World Food Summit, food security exists when "all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life".[2] This definition emphasizes not only the availability of food but also the accessibility, stability, and utilization of food resources as key dimensions of food security.

The right to food, as recognized by the United Nations, is intrinsically linked to the broader human rights framework. Jean Ziegler, former UN Special Rapporteur on the Right to Food, powerfully stated that "the right to have regular, permanent and unrestricted access, either directly or by means of financial purchases, to quantitatively and qualitatively adequate and sufficient food corresponding to the cultural traditions of the people to which the consumer belongs, and which ensures a physical and mental, individual and collective, fulfilling and dignified life free of fear" (Human Rights Council 2008, § 17).

In contemporary discourse, food security is increasingly recognized as a complex issue that intertwines with several social, economic, and envi-

[2] Full text, along with all the documents related to the Summit, is available here: https://www.fao.org/4/w3548e/w3548e00.htm.

ronmental factors. Climate change, economic inequalities, and political instability exacerbate food insecurity, particularly in vulnerable populations (Califano 2023). Social protection policies are a key strategy for addressing food insecurity, offering mechanisms to safeguard against shocks and stresses that jeopardize food access. These policies, when designed and implemented properly, can serve as a springboard for enhancing food security, especially in regions particularly subject to frequent crises.

This article explores the intersection of human rights and social protection in relation to food security. By grounding the analysis in a human rights framework, indeed, this article aims to highlight the role of social protection not only as a means of providing immediate relief but also as a tool for addressing the underlying structural causes of food insecurity. At the same time, it explores how a rights-based approach can be used to prevent food insecurity.

More precisely, in the first paragraph the existing link between climate change and food security will be analyzed; the second paragraph will observe and address the issue of food security with a rights-based approach; then, the study presented in the third paragraph aims to outline the potential of social protection, particularly adaptive social protection, in addressing food insecurity; finally, the fourth paragraph seeks to present concrete examples of the application of social protection for food security.

## 2. *Climate change and food security*: A *multifaced challenge*

The intricate relationship between climate change and food security presents one of the most pressing challenges of our time, with far-reaching implications for global health, economic stability, and social equity. This complex interplay manifests in a bidirectional manner: climate change significantly impacts food security, while the food system itself is one of the causes of climate change, creating a feedback loop that demands urgent attention and comprehensive solutions (Mbow *et al.* 2019). On the one hand, high temperatures, rising sea levels, drought, heavy rains, and floods make agriculture more difficult, and further diminish harvests. On the other hand, global warming, along with wars and pandemic – such as, the recent Covid-19 pandemic – contributes to the rising of global food prices, which have reached record highs in the last years (FAO *et al.* 2023, VI-IX). For this reason, climate change, extensive poverty, and pervasive conflicts are now merging to create the so called "endemic and widespread" risks to global food security (Goering 2022) and this could make higher food prices the 'new normal', unless actions are taken to mitigate these threats.

Global warming profoundly influences all dimensions of food security, negatively impacting its four pillars: availability, that is, food production and its preparation for consumption through methods such as storage, processing, distribution, marketing, and/or trade; access, that is to say the capacity to reach food, encompassing the impacts of pricing; utilization, realizing food's potential through proper nutrition, culinary practices, and health measures; and stability, that is, the continuous availability and access to food without disruption (Mbow *et al.* 2019). The reasons for this negative influence are many, but here it is possible to mention two of them: the first one is directly related to $CO_2$ levels in the atmosphere, while the second one concerns extreme weather events. Regarding the first issue, high levels of carbon dioxide in the atmosphere are able to reduce the nutritional quality of food (Zhu *et al.* 2018) and this nutritional degradation poses significant challenges for global health, especially in regions already struggling with malnutrition (Semba *et al.* 2021). Concerning the second issue, the increasing frequency and intensity of extreme weather events, such as droughts, floods, and storms, threaten the stability of food systems by disrupting supply chains, damaging infrastructures, and causing sudden crop losses (Rosenzweig *et al.* 2021; Bezner Kerr *et al.* 2022), without mentioning other consequences, such as the ability of people to obtain and prepare food (Rao *et al.* 2016; FAO 2018).

Furthermore, as global temperatures rise and precipitation patterns shift, crop yields for major staples such as wheat, rice, and maize are projected to decline in many regions, particularly in sub-Saharan Africa and South Asia (Rezaei 2023). These changes not only affect food availability but also have cascading effects on access and stability: climate-induced supply shocks can lead to price volatility, disproportionately affecting low-income populations and exacerbating existing inequalities in food access (Van Mejil *et al.* 2018).

In fact, although it must be recognized that specific attributional studies are constrained by the intricate, multi-causal nature of food insecurity and the absence of long-term data (Cooper *et al.* 2019), existing indirect evidence indicates that extreme weather events may account for at least part of the current number of food-insecure people (FAO *et al.* 2021; IPCC 2023).

While climate change poses significant risks to food security, it is equally important to recognize that these two issues are inextricably linked in the opposite direction as well: food production is one of the major contributors to climate change (Califano 2023, 20), accounting for more than one-third of all human-generated greenhouse gas emissions (United Nations 2021). These emissions stem from various sources within the food system, including deforestation for agricultural expansion, methane from livestock and rice cultivation, nitrous oxide from fertilizer use, and carbon dioxide from food processing, transportation, and waste (FAO *et al.* 2023). In this regard, in particular, chemical fertilizers, heavy machinery, and other petroleum-dependent farm technologies contribute significantly to greenhouse gas emissions (O'Neill *et al.* 2022); the globalization of food systems has led to increased emissions through long-distance transportation and energy-intensive food processing and packaging; and food waste – which occurs at various stages of the food supply chain, from post-harvest losses in developing countries to consumer waste in developed nations – exacerbates the climate impact of food systems (Bhat 2021). Additionally, the food industry exacerbates the problem by destroying forests for animal feed, generating waste through excessive packaging, processing, refrigeration, and transportation (Steier, Ramdas 2024).

Furthermore, the intensive agricultural and farming practices adopted to meet growing global food demand often come at a significant environmental cost (Polidori, Rombaldoni 2023, 181-185).

A new food system could be a key driver of solutions to climate change. People around the world are involved in struggles to defend or create ways of growing and sharing food that are healthier for their communities and for the planet. In this regard, in 2020 the European Union adopted the "Farm to Fork Strategy. For a fair, healthy and environmentally-friendly food system", in the broader framework of the European Green Deal (2019), recognizing the inseparable connections between the well-being of people, societies, and the planet (European Union 2020, 4).

As this complex landscape is navigated, it is clear that ensuring food security in the face of climate change will require not only technological and agricultural innovations but also significant policy reforms and behavioral changes (von Braun *et al.* 2023).

In this context of climate uncertainty, it is unavoidable to question the – crucial – role of rights, in addressing food security.

## 3. F*rom right to food*, *to food security*: A *rights-based approach*

In order to address the issue of food insecurity, a rights-based approach appears the most suitable, since it empowers individuals to participate in decision-making processes, addresses the root causes of poverty, emphasizes dignity, equality, and social justice, and considers all actors responsible for human rights (De Schutter *et al.* 2013). Rights-based approaches to development are founded on international human rights standards, aiming to promote and protect these rights. They enable individuals to assert and exercise their rights while fulfilling their obligations. As mentioned above, key principles of these approaches include: ensuring people's right to participate in decision-making processes that impact their lives; identifying and addressing the underlying causes of poverty and hardship; recognizing the equal dignity and worth of every person, promoting tolerance, inclusion, non-discrimination, and social justice; holding all subjects engaged in development accountable for upholding, protecting, and fulfilling human rights, which is a collective responsibility (Pogge 2010; De Schutter *et al.* 2013).

This is a bottom-up approach, since it is rooted in the demands and needs of people (Pisanò 2022), thereby empowering them to advance broader development goals, in this case, Goal 2: "Zero Hunger", one of the 17 Sustainable development goals that should be reached by 2030. Particularly, within this goal it is possible to name some specific targets that aim to: eliminate hunger and ensure that all people, especially the poor and those in vulnerable situations, have access to food (target 2.1); eradicate every type of malnutrition (target 2.2); promote sustainable food production systems and adopt resilient agricultural practices that enhance productivity and yield, support ecosystem preservation, build capacity to adapt to climate change, extreme weather events, drought, flooding, and other disasters, and gradually improve land and soil quality (target 2.4); address and eliminate trade restrictions and distortions in global agricultural markets by simultaneously removing all types of agricultural export subsidies and any export measures that have a similar impact (target 2.7).

More broadly, the right to food is affirmed by the Universal Declaration of Human Rights (UDHR) of 1948 too, the principal base for the rights-based approach, which in the article 25 states: "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food […]". Furthermore, the principle of the indivisibility of human rights requires the integration of the right to food and nutrition into other international frameworks, reinforcing, among other things, the connection between the right to food and different other rights, such as health, fair employment and salaries, access to land and resources for food production, and the rights of peasants (Dias *et al*. 2022).

Later on, right to food was also addressed by the International Covenant on Economic, Social and Cultural Rights – a multilateral binding treaty adopted by the United Nations General Assembly in 1966 and entered into force in 1976 – which in the article 11, c.1 affirms: "The States Parties to the present Covenant recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, […] and to the continuous improvement of living conditions. The States Parties will take appropriate steps to ensure the realization of this right, recognizing to this effect the essential importance of international cooperation based on free consent". Nevertheless, as FIAN international[3] affirmed in 2018, the human right to proper food and nutrition is a crucial foundation of the right to life, even though it remains one of the most commonly violated human rights globally.

Indeed, the legal framework given by the 2030 Agenda, the Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights, is fundamental, since these documents give a vision, a pathway that States, Governments, civil society and individuals must follow, but they are not sufficient to put those rights in practice. To do so, there is the necessity of a legislation both at supranational and national level, in order to make some actions binding.

[3] FIAN international is a global human rights organization that advocates for the right to adequate food and nutrition (https://www.fian.org/en/).

At the European level, the reference framework is composed by the "General Food Regulation" (2002)[4] and the "European Green Deal" (2019). Concerning the first document, it does not focus on the right to food, but rather on human health and consumer interests regarding food, while supporting the internal market; it sets out common principles, responsibilities, and procedures for effective decision-making on food and feed safety, supported by a robust scientific foundation. Finally, it set up a dedicated European authority,[5] established certain procedures in the field of food security, and created key processes and tools for handling emergencies and crises, along with the rapid alert systems for food and feed (RASFF)[6] (European Commission 2022).

The last document, instead, addresses various issues related to sustainability and enhancing quality of life and, in doing so, with the goal of becoming the first climate-neutral continent by 2050, the European Commission launched the "Farm to Fork Strategy" in 2020. This decade-long plan is designed by the European Commission within the view of the European Green Deal, to guide the transition to a fair, healthy and environmentally friendly food system. More precisely, it aims to accelerate the shift towards a sustainable regime, that is to say a kind of food system that has a neutral or positive environmental impact. Moreover, it aims to mitigate climate change and adapt to its effects, reverse biodiversity loss, and food security, nutrition, and public health by providing everyone with access to adequate, safe, nutritious, and sustainable food. Finally, it focuses on maintaining food affordability, generating fairer economic returns, enhancing the competitiveness of the EU food sector, and promoting fair trade practices (European Commission 2020).

Nationally speaking, the right to food is not expressively recognized in Italy (Pitto 2024). By the way, moving from the Italian Constitution, thanks to the open structure of article 2 – which expressively recognizes the hu-

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[4] Art. 50 of Regulation (EC) n° 178/2002.

[5] The European Food Safety Authority (EFSA).

[6] Established on the legal base constituted by the General Food Regulation, it aims to facilitate the exchange of information among member countries, enabling a rapid response by food safety authorities in the event of public health risks arising from the food chain.

man fundamental rights –, and article number 32 – which guarantees health as a fundamental right and interest of the collectivity –, jointly with article 117 – that makes treaties and Conventions on right to food, signed by Italy, binding for the State itself – it can be argued that Italy does not lack of a legal framework about food security (Varricchio 2023).

From a legal-philosophical perspective, given for granted the principle of indivisibility of Human Rights,[7] the right to food has necessarily something to do with freedom. In fact, as Jeanne Hersch stated: "What is possible to achieve, and what the declaration demands, is that the pressure of vital needs (nutrition, housing, etc.) be tempered, for man and his loved ones, in order to increase his opportunities for freedom" (Hersch 2008, 78 [my translation]). This means that, in order to fulfil freedom which is – according to the philosopher – the real nature of human beings, the right to food must also be fulfilled.

Recognizing this legal framework is the first step for a rights-based approach to the right to food. Such an approach addresses not only the issue of food insecurity, but also that of inequality. Indeed, according to FAO, in 2023, while 735 million people worldwide were suffering from hunger and malnutrition, 570 million tons of food were lost and wasted along the whole food value chain. Thus, while the issues within the global food systems are broad, they are also unequally distributed (Bhat 2021). The iniquitous distribution of hunger and malnutrition is basically rooted in social, political, and economic power inequalities.

From a gender perspective, violations of the right to appropriate food and nutrition are deeply intertwined with gender-based violence and discrimination, as well as with the foreclosure of women's roles in the food system and the violation of their rights through different stages of their life. In this regard, Olivier De Schutter (2012, 5) pointed out: "discrimination against women as food producers is not only a violation of their rights, it also has society-wide consequences, because of the considerable productivity losses entailed".

A rights-based approach is crucial, because it considers the promotion of food security by governments as a duty, not an act of charity and

[7] In this regard, it is obligatory to recall Norberto Bobbio (1990), L'*età dei diritti*, Turin, Giulio Einaudi Editore.

it emphasizes the necessity to render responsible actors accountable to those entitled to these rights: this approach to good governance, indeed, prioritizes the active involvement of all stakeholders in policy-making, insists on government transparency, and ensures that people have access to effective remedies through an independent legal system whenever their rights are not fulfilled. Furthermore, with this approach, all individuals are recognized as rights-holders, whilst recognizing themselves as such, being able to behave consequently (FAO 2006). More in detail, in order to put rights into practice, FAO pointed out five fundamental points: firstly, advocacy and training, in order to raise awareness and education on the right to food and to build the capacity of those responsible to observe their obligations; secondly, information and assessment, while identifying the most vulnerable people to be empowered to claim their rights; thirdly, legislation and accountability, since the right to food can be realized at the national level only if those entitled to it can hold those responsible accountable; fourthly, strategy and coordination, since who has the duty can fulfill his obligations to enable people to feed themselves only through effective human rights-focused policies and coordinated rights-based strategies; finally, benchmarks and monitoring, since economic growth and development do not automatically ensure that everyone's human rights are respected, protected, or fulfilled.

Therefore, progress towards realizing the right to food must be closely monitored to assess whether the outcomes and the processes leading to them align with a rights-based approach, and whether programs effectively reach those in need (FAO 2006).

In the light of this legal framework, many actions can be put in practice in order to ensure a real right to food. One of these is Social Protection.

## 4. P*utting the rights in practice*: S*ocial* P*rotection*

Social Protection (SP) carries a range of definitions, due to the many themes it covers.

According to Norton *et al.* (2000), "Social protection refers to the public actions taken in response to levels of vulnerability, risk and deprivation which are deemed socially unacceptable within a given polity or society"; Ortiz (2003) affirmed that "Social protection is defined as the set of policies and programs designed to reduce poverty and vulnerability by promoting efficient labor markets, diminishing people's exposure to risks, and enhancing their capacity to protect themselves against hazards and interruption/loss of income"; while according to van Ginneken (1999), it is "the provision of benefits to households and individuals through public or collective arrangements to protect against low or declining living standards". Ferrera (1993, 64), on the other hand, referring to policies and social reforms in western democracies, discussed the concept of 'welfare state'. Within this framework, he distinguished among three main models: firstly, the 'residual welfare model' (or 'public assistance model'), where the state provides only limited and temporary interventions, in order to address individual needs, operating just when the market and the family systems enter into crisis; secondly, the 'industrial achievement-performance model' (or 'reward model', or 'handmaiden model'), in which public welfare programs are complementary to the economic system, and the forms of protection are proportional to people's credits and job performances; thirdly, the 'institutional redistributive model', whereby the public welfare programs are one of the key-institutions of the society, offering universal services, on the base of the individual needs, independently of the market performance.

Using a wide conception of SP, it can be defined as all public and private initiatives that provide income or consumption transfers to the poor, protect the vulnerable against livelihood risks and enhance the social status and rights of the marginalized (Devereux, Sabates-Wheeler 2004).

It is a broad definition, because there are several and different categories of people that need social protection, such as the chronically poor; those who are discriminated and isolated, like people who live with HIV or AIDS or refugees; the socially fragile, like people with disabilities, or ethnic minorities. In order to protect their livelihoods, each of these groups needs a different form of Social Protection, which can consist in social transfers, social services and social transformation (Vincent, Cull 2012). For instance, women constitute a particular vulnerable group that often needs SP, because of the lack of capital, significant pay differences and gendered work norms, enduring the responsibility for childcare, and exclusion from basic services. Furthermore, women's poverty increases during reproductive years when they have children and bear the responsibility of socially assigned care and domestic work. However, sometimes women are excluded from SP and, in order to cope with their domestic responsibilities, they either resign or work part time, often in insecure, lower paid, informal, and often 'invisible', sectors. The evidence shows that SP is able to improve gender equality, with a positive impact on women and children's health, girls' education, and women's knowledge levels and empowerment within the household and community. Furthermore, SP can reduce violence against women, with positive impacts on child marriage too (Al-Ahmadi *et al.* 2024).

Following a rights-based approach, SP is relevant, not only for its outcomes but, first of all, because it is a Human Right; indeed, article 22 of the Universal Declaration of Human Rights (1948) is entitled "Right of social security", arguing that "Everyone […] has the right to social security and is entitled to realization, through national effort and international cooperation […]". Moreover, the outcomes of SP coincide with many of the Sustainable Development Goals: no poverty, good health and wellbeing, gender equality,[8] decent work and economic growth and reduced inequalities. This is the reason why, in 2016, the World Bank and the International Labour Organization jointly adopted the "Universal Social Protection (USP) 2030 Call to Action", urging countries, international partners, and institutions to intensify their efforts to achieve the global goal of "social protection for all", also because there are many evidences that show the effective positive implications in adopting these measures, also in order to assure other Human Rights. First of all, the right to food: indeed, OHCR (2022) asserts that effective social assistance programs can alleviate chronic food insecurity and hunger; furthermore, the right to food and the right to Social Protection are complementary;

[8] I had the opportunity to address these issues multiple times thanks to the CRID – Interdepartmental Research Center on Discrimination and Vulnerability, most recently on the occasion of the Sustainability Night, organized by the Department of Law of the University of Modena and Reggio Emilia on May 10, 2024, titled "An Equitable, Inclusive, and Sustainable Society: A Sustainability Workshop through Playful Activities, Interactive Labs, Debates, and Screenings", in which CRID participated with a seminar initiative titled "Gender Equality, Decent Work, and Education: Towards an Equitable, Inclusive, and Sustainable Society: Educational Profiles and European Guidelines", https://www.crid.unimore.it/site/home/archivio-in-primo-piano/articolo1065069480.html.

moreover, the realization of both is more than a moral imperative, since it is fundamental to achieve the main purposes of economic growth and human development.

To be accurate, it must be specified that there is strong evidence of the positive impact of SP in many areas, such as poverty reduction, food security, diet diversity, and access to education and health services. On the other hand, evidence is weaker regarding certain aspects, such as newborn mortality rates and the nutritional and long-term educational outcomes, related to learning and cognitive development. However, the literature generally agrees on the importance and effectiveness of SP (Carter *et al.* 2019).

At global level, SP programs can be implemented both by international organizations and institutions or governments. These programs may be executed within a country's borders or through collaborative efforts established via multilateral or bilateral agreements.

In this regard, the United Nations Children's Fund (UNICEF) emphasizes the importance of SP which focuses on children, because of their disproportionate vulnerabilities, advocating for inclusive and integrated systems. Its approach extends beyond economic challenges, in order to include social vulnerabilities, willing to transform the lives of both children and their families (UNICEF 2019). Similarly, the World Bank's 2012-2022 Social Protection and Labour Strategy (2012) focused on building harmonized systems to enhance resilience to shocks, reduce poverty, and promote equitable opportunities in low-and middle-income countries. The strategy puts in connection SP with labor markets and employment as instruments for poverty reduction.

Governments also can (and should) prioritize SP in their policies. For example, Australia identifies social assistance as a key component of its aid program, with the objective of supporting the poor and vulnerable and improving the efficiency of partner governments' distribution systems. Likewise, the UK's Department for International Development (DFID) aligns its SP initiatives with goals such as tackling extreme poverty, enhancing resilience, and building inclusive systems, particularly for women, persons with disabilities, and the most vulnerable in fragile contexts.

Concerning the European Union, it promotes a basic level of SP, as a universal right, with a particular focus on children, vulnerable people in active working age, and old people. In this sense, the European Commission intends SP as an aid to reduce poverty and vulnerability and support inclusive and sustainable development. The EU is engaged in nationally sustaining SP policies, and in working both with civil society, the private sector, and governments in its partner countries. In 2017, the Council of the EU adopted conclusions, highlighting the cruciality of coordinating sustainable development, humanitarian action, conflict prevention and peace-building, to address "the underlying root causes of vulnerability, fragility and conflict while simultaneously meeting humanitarian needs and strengthening resilience" (Council of the EU 2017, 2). For its part, in 2021, the European Commission adopted a document called "The European Pillars of Social Rights Action Plan", in which it presented the three main pillars of SP, from its view: living in dignity, by promoting health and insurance care (European Commission 2021, 27-30).

However, the International Labour Organization highlights significant financial challenges in achieving universal SP coverage: in 2024, the financing gap for implementing SP in low-and middle-income countries is estimated at 3.3% of GDP annually. Bridging the gap across all low- and middle-income countries requires substantial government spending, representing an additional US $ 1.4 trillion per year (Cattaneo *et al.* 2024, 15). Therefore, promoting SP requires capital investments and economic availability and this is of course one of the most significant limits in promoting SP.

Anyway, referring to "Social Protection" is too general. In this respect, it is possible to number four macro-groups, which are: social assistance, social insurance, social care services and labor market programs (Barrientos 2010).

Social assistance is the most common type of SP in low-and middle-income countries. It often involves cash or in-kind transfers, which are frequently combined with additional programs, such as training (Hidrobo *et al.* 2023). Forms of social assistance mentioned by the World Bank (2018) include unconditional and conditional cash transfers, non-contributory social pensions, school feeding programs and public works programs.

Social insurance can take various forms, but generally it can be described as a contributory model, where the participants make regular payments to a scheme that will cover the costs related to the events linked to the course of life (Barrientos 2010). Some of them are old-age, survivor and disability pension, unemployment and health insurance and maternity/paternity benefits (UNDP 2016).

Concerning social care, it could be overlapped with the broader SP itself. However, UNICEF (2019) pointed out that the main feature that distinguishes the two is awareness because-providing adequate support also means addressing families directly to make them feel more understood.

Finally, labour market policies and interventions provide protection for poor people who are able to work, with the aim of ensuring basic standards and rights (Barrientos 2010).

For completeness, it is possible to distinguish further between contributory or non-contributory, passive or active interventions. For the latter, often in developing countries the measures can be blended. For example, training programmes can be joined with public works and some type of income support, since in those areas, the labour markets are characterized by informality and unemployment (Malo 2018, 3).

In the context of food security, food production can be enhanced through input subsidies, while crop insurance provides a safety net against harvest failures. Public works programs can offer short-term relief from unemployment by providing jobs, and simultaneously contribute to agricultural production over the long term. On a national scale, access to food can be improved through demand-side measures like food subsidies and supply-side strategies such as maintaining grain reserves. At the household level, cash and food transfers can directly increase food access and support human capital development, leading to sustained improvements in food and nutrition security (WFP 2024).

Devereux and Sabates-Wheeler (2004) highlighted that SP is built on four pillars: protection, prevention, promotion and transformation. 'Protection' refers to traditional or informal SP mechanisms that rely on community-based actions and social capital. These measures, deeply rooted in local cultural beliefs and often self-funded, play a crucial role in ensuring local security, although they typically have limited reach. The involvement of external actors, such as the state or donors, can help to formalize and strengthen these systems, though they remain susceptible to erosion by colonialism and commodification. 'Prevention' encompasses western-style social security systems, which are dependent on regular contributions from employers, such as unemployment insurance and occupational pensions. However, access to these benefits is often restricted to a small portion of the population, particularly in lower-income countries. 'Promotion' involves initiatives aimed at long-term poverty reduction, with school feeding programs serving as a prime example. These programs not only provide immediate nutritional support to children but also encourage school attendance, thereby fulfilling both protective and promotive roles. Finally, transformation expands the scope of social protection to include interventions that address broader social issues, such as poverty reduction through minimum wage policies. Transformative SP also encompasses efforts to combat social discrimination, such as campaigns against the stigma associated with HIV/AIDS.

Against this backdrop, it seems to be appropriate to highlight a special form of SP, that is to say the Adaptive Social Protection (ASP).

This particular mechanism consists in an integrated approach to reduce the vulnerability of poor people in developing countries, using the potential synergy that can derive by fostering a wide integration between Social Protection (SP), Climate Change Adaptation (CCA) and Disaster Risk Reduction (DRR).

More precisely, CCA is a way of adjusting and responding to the impacts of Climate Change, assuming the fact that extreme weather events will be more frequent in the next years, so the countries must be prepared to handle the negative effects (IPCC 2022); while, DRR focuses on preventing new disaster risks, reducing existing ones, and managing residual risks, collectively contributing to building resilience and advancing sustainable development (UNDRR 2024) – (Bowen *et al.* 2020).

Indeed, SP and DRR might not be enough to cope with the livelihood's resilience, in the longer term, if they do not deal with dependence on climate sensitive livelihoods (Davies *et al.* 2009); at the same time, CCA and DRR do not highlight vulnerability as a root on social causes, which, instead, SP is able to add.

In this regard, according to WFP (2023), in the last ten years, 1.7 billion people have been impacted by extreme weather events and climate-related disasters such as hurricanes, cyclones, and droughts and these events are increasingly pushing more families into severe hunger. Furthermore, shocks disproportionately affect poorer households due to their greater exposure and vulnerability, which stems from a lack of capacity to prepare for, cope with, and adapt to these events (Hallegatte *et al.* 2016). The disaster community has responded to Climate Change impacts on natural risks, focusing beyond the humanitarian rescue and rehabilitation activities, going towards a way to prevent, or at least reduce, the disasters. Experience has proved that Social Protection can effectively contribute to poverty reduction and move people into productive livelihoods (Davies *et al.* 2008).

In this context, the World Bank (2020a) affirms that "[a]daptive social protection helps to build the resilience of poor and vulnerable households by investing in their capacity to prepare for, cope with, and adapt to shocks: protecting their wellbeing and ensuring that they do not fall into poverty or become trapped in poverty as a result of the impacts". Along the same line of thoughts, Leavy and Gorman (2012) affirmed that integrating SP, DRR and CCA policy or interventions should be a priority, in order to increase livelihoods resilience and, as a matter of fact, SP has already become a key policy response to risks and vulnerability in the agricultural sector (Dorward *et al.* 2007).

According to Davies *et al.* (2009), the focus should be on transforming productive livelihoods and addressing the challenges posed by changing climate conditions, rather than merely strengthening existing coping mechanisms. It is essential to understand the structural root causes of poverty within specific regions or sectors, which allows for more effective targeting of vulnerabilities to various shocks and stresses. This approach should also be grounded in a rights-based perspective, emphasizing the importance of equity and justice in addressing chronic poverty and climate change adaptation, alongside considerations of economic efficiency. Additionally, there should be more emphasis on integrating research from both natural and social sciences to guide the development and implementation of SP policies. Finally, SP strategies should adopt a long-term perspective that takes into account the evolving nature of shocks and stresses. Clearly, in order to do that, there is a need for cooperation between the three disciplines mentioned above, which is in the intrinsic nature of ASP itself. Having said that, what follows is desirable: a collaboration between national and international actors; improving the evidences about lessons learned, poverty impact, growth linkage and cost effectiveness; developing tools and resources; capacity building; funding for ASP; and last but not least, encouraging the dialogue among the disciplines (Davies *et al.* 2008).

Moreover, according to Bee *et al.* (2013), the approach of ASP holds significant promise for integrating a gender perspective, as it prioritizes empowering the voices of the poor over merely offering technical or environmental solutions to climate change. ASP seeks to address and transform the unequal social relations that underpin vulnerabilities, thus aligning with a gender transformation framework. Regarding this matter, Bee *et al.* (2013) identified three key reasons for ASP's relevance to gender justice: its emphasis on addressing dynamic and multi-dimensional vulnerabilities, its adoption of a rights-based framework that highlights equity and justice, and its focus on transformative strategies to address the structural causes of vulnerability.

For all these reasons it has been suggested that CCA, SP and DRR can be combined, in order to reach more efficient and positive impacts, underlying causes of vulnerability, and promoting adaptive capacity (Davies *et al*. 2013).

These actions are the exemplification of a holistic approach, which takes into account not only the many forms that vulnerability can take, but also the increasingly complex context that the society is going to face. By addressing the root causes of these issues, this approach aims to tackle structural poverty and drive long-term transformations in livelihoods.

## 5. *Case studies of Social Protection*

While SP programs alone cannot be sufficient in achieving the broad and complex goal of food security, this section will present four case studies specifically selected because they could illustrate the way SP systems can be tailored to suit the food security context of different groups of food-insecure individuals and communities.

First and foremost, in Botswana – where a major concern has been unemployment – the government implemented many protection programs, leading to comprehensive social assistance provided by several ministers to different groups of vulnerable populations, financing the SP Programs from its own resources, while the government allocated a significant part of its GDP to this effort.

This program showed how SP services can be delivered by multiple line ministries even in the absence of a national SP strategy. In particular, the Ministry of Local Government set up a public works scheme, "Ipelegeng" (literally "carry your own weight", underlying the idea of self-sufficiency), providing only temporary jobs, which increase as an intervention during drought years. A program was designed by the Department of Social Services, targeted to very poor people, involving cash transfer and food distribution and assumed to ensure a nutritionally balanced diet; the

Ministry of Education operated an extended School Feeding Program; and finally, the Ministry of Health defined a "vulnerable group feeding programme", to distribute food in clinics with malnourished children under six years and pregnant and lactating women (The World Bank, BIDPA 2013). In this sense, EuropeAid (2012) stated that it is necessary to harmonize, rationalize, and consolidate these national SP programs with the numerous projects that arose in response to political and social imperatives. Specifically, with regard to the Ipelegeng Program, while there were many difficulties (mainly due to low coverage: indeed, even if the budget has increased, the demands have been consistently higher than the resources available. This has led to some lottery systems to select the participants and, according to some reports, some of the financed projects have been of rather low quality (The World Bank, BIDPA 2013), it may be argued that a significant number of vulnerable people have benefitted from the program, as the number of people employed increased from 9.069 in 2005/2006 to 18.085 in 2008/2009 (Ministry of Local Government 2010). Most importantly, it provided a valuable safety net for the unemployed poor and achieved a remarkable reach among women, with female participation exceeding 70%, which is significant considering that women have lower labor market participation rates than men.

Another good example of the SP program is Malawi, where the food staple is maize and the cash crops are coffee, sugar, and tobacco. Until the mid-1990s, in Malawi, smallholder farmers received subsidies on fertilizers and hybrid maize seeds, which allowed larger small-scale producers to purchase these inputs. However, due to the agricultural liberalization process, subsidies on fertilizers and hybrid seeds were eliminated by 1996 and agricultural markets were also fully liberalized. This had severe implications for maize production, because declining soil fertility had rendered smallholders even more dependent on fertilizers and improved maize seed technologies to maintain yields. By 1998, chronic food insecurity was recognized as a result of reduced maize production capacity. While medium-term solutions, such as organic methods for restoring soil fertility and diversifying food crops, offered potential benefits, they were labor-intensive and inadequate for addressing immediate food shortages (Levy *et al.* 2004).

Therefore, the government launched a program known as "Starter Pack" that provided each smallholder with seed and fertilizer packages free of charge, which increased the maize production by 100-150 kg per household, diminished the annual food gap, and stabilized the food prices (Levy 2005).

Although the program failed to satisfy the expectations that had been set at its beginning (for instance, it did not promote significant agricultural growth, because post-liberalization reforms in the mid-1990s had rendered the conditions in the agricultural sector increasingly less favorable for a strategy based on commercial maize farming), it met the objectives and goals of the limited resource constraints of smallholder farmers in the country. The savings from the diversion of subsidized agricultural inputs enabled the productive use of higher-value crop returns, but in a climate of recognized enhanced resource competition and associated change in policy. The use of Starter Pack at a broad geographic scale demonstrated itself to be a successful strategy to improve chronic food insecurity: by allowing resource-poor farmers to produce their own food, the intervention alleviated demand pressures on the market and also stabilized the price of food products in the hunger season. In this respect, Levy, Barahona, and Chinsinga (2004) contended that Starter Pack substantially improved SP and laid a good basis for economic growth and poverty reduction by reducing the incidence of food crises.

Another more recent case mentioned by WFP is the one of The Republic of Gambia, the smallest African country on the mainland with a population of almost 2 million people, which is particularly challenged by poverty and food security. Gambia is a low-income country, with a high poverty rate, especially in rural areas where 73.9% of the population lives below the poverty line, compared to 32.7% in urban areas. Additionally, male-headed households are more multidimensionally poor than female-headed ones. The economy's dependence on rain-fed agriculture, tourism, and remittances means that it is vulnerable to disruption, while climate change poses a longer-term threat to agricultural productivity and the economy's stability. Gambia's per capita GDP fell by 20% between 2013 and 2016, indicating rising poverty levels. Food insecurity and nutrient malnutrition continue to be pressing concerns, with 10% of the population food insecure and 45% being vulnerable to food insecurity. Stunting prevalence at the national level is 24.9% and can reach even higher levels in some districts.

Food and nutrition insecurity in Gambia is largely attributed to the economy's vulnerability to shocks, poor practices around land use, and heavy dependence on imported food. These challenges are compounded by climate change, which increases the intensity and frequency of climate-related shocks that threaten food production and access. Poor sanitation and limited access to clean water also restrict food utilization, resulting in higher food/nutrition insecurity. As such, it is therefore important to note that SP is becoming an increasingly important policy tool in Gambia to reduce vulnerability and build resilience to food and nutrition insecurity in light of these challenges. This has helped promote collaboration between different ministries and with international organizations through the National Social Protection Steering Committee (NSPSC), which was set up in 2012. The National Social Protection Policy 2015-2025 (NSPP) was developed by the NSPSC to guide interventions in social protection related to our four pillars, protection, prevention, promotion, and transformation. These are: unconditional cash transfers (UCTs) to the poorest, expanded social insurances, public works programs, and legislative measures to prevent discrimination and abuse.

One specific example of such an SP program in Gambia is entitled "Maternal and Child Nutrition and Health Results Project (MCNHRP)" promoted by the Ministry of Health and Social Welfare (MoHSW) & National Nutrition Agency (NaNA) and it lasted for six years from 2014 to 2020. Launched against this backdrop, the program is one of the flagship projects of this framework, aiming to inject conditional cash transfers (CCTs) to pregnant women in the countries with the highest food insecurity, with the goal of improving maternal and child health outcomes. Also included are capacity-building efforts for health facilities as well as performance-based financing. With continued economic instability in mind, the MCNHRP was scaled up to include UCTs to help the neediest of households. It ranges in Gambia's five most food-at-risk areas and, through community involvement, serves as a vehicle for delivery. Despite these initiatives, barriers persist, including inadequate antenatal care attendance in pregnant women to optimize the impact of the program. The need for social protection programs will remain paramount as Gambia faces ongoing challenges around poverty, food security, and climate change (World Bank 2020b).

As for Brazil, it is another good case in this regard: for many years, indeed, it had structural problems of inequality and poverty, extreme levels of hunger, especially in the favelas, the slums surrounding large cities like São Paulo and Rio de Janeiro. In particular, in the period from 1995 to 2003, the World Bank reported the number of people living under the international poverty line in Brazil to be about 11% of the welfare population. In the 1980s, Brazil was the world's second most unequal country when it came to income, and failed social safety nets left low-income groups poorly protected. For many poorer Brazilian people in the short run, economic needs were permanent barriers to their capacity to escape poverty in the long run, resulting in cycles of poverty that span generations. These interventions were not fully realized, however, as low-income Godavari children were unable to avail of education and young mothers were unable to access needed health services, resulting in poor maternal and child health overall. The prevalence of chronic illnesses like diabetes and high child mortality rates added significant financial strain to already vulnerable low-income families.

Given this socio-economic backdrop, the Brazilian federal government, through President Luiz Inácio Lula da Silva, launched the P*rograma* B*olsa* F*amília* (PBF) in October 2003. On 20 July 2004, Brazil implemented a nationwide conditional cash transfer (CCT) program that consisted of local management under a federal framework where it combined four existing initiatives (Bolsa Escola, Bolsa Alimentação, Cartão Alimentação, and Auxílio-Gás) and the so-called "Programa de Erradicação do Trabalho Infantil", a Child Labor Eradication Program, in 2006. The PBF sought to improve the effectiveness and coherence of Brazil's social safety net and to scale-up support toward universal coverage for the poorest populations of the country.

Bolsa Família aimed to: firstly, reduce poverty and inequality by ensuring a minimum income for extremely poor families; secondly, break the cycle of poverty through conditional cash transfers that required families to meet certain responsibilities, such as ensuring children's school attendance and accessing healthcare services (this approach sought to promote investments in human capital); thirdly, empower beneficiaries by linking them to complementary services, including employment training and social assistance programs.

Although some debates persist around the program's effects on health and educational achievements, given that critics argue that the program does not directly address the quality of public services, which is still a different conversation from the CCT one, Bolsa Família is a reference worldwide: it reached annual 11.1 million families (over 46 million individuals) which makes it the largest CCT initiative in the world. Across access and reach, poverty and inequality reduction, hunger alleviation, and health and education outcomes, the program has shown significant success. Between 2003 and 2015, the proportion of Brazilians living below the international poverty line decreased from 13% to 3% (7 million), highlighting the program's significant role in poverty and inequality reduction in Brazil (Ćirković 2019).

## 6. *Conclusions*

Concluding, strengthening food security in the context of increasing global challenges requires a multidimensional strategy that integrates human rights principles with effective SP systems. The right to food, as codified in international human rights law, must be at the core of these efforts. When designed with a rights-based approach, SP policies can be both immediate and long-term solutions to food insecurity, addressing not only the symptoms of vulnerability, but also the root of its causes.

The analysis presented in this article calls for the importance of viewing food security through a human rights lens. SP instruments, such as input subsidies, crop insurance, public works programs, and cash transfers, play a crucial role in enhancing food access, promoting agricultural production, and supporting human capital development. If adequately implemented, these measures can help mitigate the impacts of shocks, stabilize food availability, and ultimately contribute to a more resilient and food-secure world.

Particularly, the case studies presented in the fourth paragraph have the aim to demonstrate that SP systems, albeit imperfect, are extremely useful as a springboard out of poverty. In Botswana, the Ipelegeng program provided temporary employment during drought years and offered safety nets for vulnerable groups, achieving high female participation, despite limited resources. Malawi's Starter Pack program helped smallholder farmers improve maize production through free distribution of seeds and fertilizers, stabilizing food prices and mitigating food crises. In Gambia, the Maternal and Child Nutrition and Health Results Project (MCNHRP) provided conditional cash transfers to pregnant women in food-insecure regions, improving maternal and child health outcomes. Finally, Brazil's Bolsa Família program significantly reduced poverty and inequality by combining conditional cash transfers with access to education and healthcare. In this respect, if a brief comparison with western countries wants to be done, SP assumes a different shade: in Europe, for instance, the High-Level Group on the future of social protection and of the welfare state in the EU looks at the SP issue through the lens of welfare, focusing on building a new concept of social justice (which goes beyond fair compensation). For instance, looking at the new society's structure – characterized by more diverse working and family lives, higher migration rates and accelerated population aging –, they emphasize the role of the employment and labor market, aiming to help people of working age through more care services and support for work-life balance. Indeed, they argue that the welfare provision should not focus merely on material impacts, but also on "fostering people's capability to fulfil personal aspirations" (High-Level Group on the future of social protection and of the welfare state in the EU 2023, 81).

Of course, these programs do not represent an endpoint, but rather a starting point, from which poor people can try to empower themselves and improve their lives.

In any case, the success of SP interventions in achieving food security depends on several factors, including political will, institutional capacity, and the ability to target the most vulnerable populations. For this reason, it is essential that SP programs are designed to be inclusive, equitable, and adaptable to changing circumstances. Moreover, a long-term perspective is necessary to address the dynamic nature of food insecurity, particularly in the context of climate change and economic instability.

In this context, climate change represents a great challenge to global food security, exacerbating vulnerabilities and intensifying the risks to populations already in a critical situation. The increasing frequency and severity of extreme weather events, such as droughts, floods, and hurricanes, disrupt food production and supply chains, leading to spikes in food prices and diminished access to essential resources. Social protection measures must therefore be designed to not only provide immediate relief but also to build resilience against the long-term impacts of climate change. This includes supporting sustainable agricultural practices, promoting climate-resilient livelihoods, and ensuring that social protection systems are flexible enough to respond to the evolving nature of climate-related shocks. At the same time, through the lens of human rights, the issue of climate change must be addressed in an optic of prevention, recognizing that a stable and safe climate is a fundamental human right. Therefore, States, governments, private sector and civil society must collaborate in order to prevent the effects of climate change, by tackling the root causes of global warming.

Moving forward, there is a need for continued research and dialogue on the linkages between social protection, human rights, food security, and climate change. Policymakers, practitioners, and scholars must work together to develop and implement strategies that not only provide immediate relief but also empower individuals and communities to build resilience in the face of environmental challenges. Additionally, it is crucial to educate communities on behaviors and practices that can help prevent certain effects of climate change, fostering awareness and proactive actions to mitigate its impacts and combat global warming. By putting human rights at the heart of food security and by tackling the climate crisis, we can take a step toward a world where every person, everywhere has the right to a life free from hunger and malnutrition, not least in the context of a changing climate and a changing world.

## *References*

Al Ahmadi A., Heinemann A., Mossman L., Rawlings A. (2024), *Accelerating Gender Equality Through Social Protection*, World Bank Gender Thematic Policy Notes Series Washington D.C., World Bank Group.

Barrientos A. (2010), *Social Protection and Poverty*, UNRISD 1020(8208), https://www.unrisd.org/en/library/publications/social-protection-and-poverty.

Bee B., Biermann M., Tschakert P. (2013), "Gender, development, and rights-based approaches: Lessons for climate change adaptation and adaptive social protection", in M. Alston, K. Whittenbury (eds), *Research, Action and Policy: Addressing the Gendered Impacts of Climate Change*, Dordrecht, Springer, pp. 95-108.

Bezner Kerr R., Hasegawa T., Lasco R., Bhatt I., Deryng D., Farrell A., Gurney-Smith H., Ju H., Lluch-Cota S., Meza F., Nelson G., Neufeldt H., Thornton P. (2022), "Food, fibre, and other ecosystem products", in H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds), *Climate*

*Change 2022: Impacts, Adaptation and Vulnerability*, Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, New York - Cambridge, Cambridge University Press, pp. 713-906.

Bhat R. (2021) (ed.), *Valorization of Agri-Food Wastes and By-Products. Recent Trends, Innovations, and Sustainability Challenges*, Oxford, Academic Press.

Bowen T., del Ninno C., Andrews C., Coll-Black S., Gentilini U., Johnson K., Kawasoe Y., Kryeziu A, Maher B., Williams A. (2020), *Adaptive Social Protection Building Resilience to Shocks*, Washington D.C., World Bank.

Califano L. (2023) (ed.), *Food Security, Right to Food, Ethics of Sustainability. Legal, Economic and Social Policises*, Milano, Franco Angeli.

Carter B., Roelen K., Enfield S., Avis W. (2019), *Social Protection Topic Guide. Revised Edition*. K4D *Emerging Issues Report* 18, Brighton, Institute of Development Studies.

Cattaneo U., Schwarzer H., Razavi S., Visentin A. (2024), *Financing Gap for Universal Social Protection: Global, Regional and National Estimates and Strategies for Creating Fiscal Space*, ILO Working Paper 113, Geneva, ILO.

Ćirković S. (2019), *Public Impact Fundamentals. Bolsa Família in Brazil*, Centre for Public Impact: https://centreforpublicimpact.org/public-impact-fundamentals/bolsa-familia-in-brazil/#The-initiative [last access: 10/01/2025].

Cooper M.W., Brown M.E., Hochrainer-Stigler S., Pflug G., McCallum I., Fritz S., Silva J., Zvoleff A. (2019), "Mapping the effects of drought on child stunting", *Proc Natl Acad Sci* USA, vol. 116, n. 35, pp. 17219-17224.

Council of the European Union (2017), *Council Conclusions. Operationalising the Humanitarian-Development Nexus*, Brussels.

Davies M., Guenther B., Leavy J., Mitchell T., Tanner T. (2009), "Climate change adaptation, disaster risk reduction and social protection: Complementary roles in agriculture and rural growth?", IDS *Working Papers*, vol. 320, pp. 1-37.

Davies M., Oswald K., Mitchell T., Tanner T. (2008), *Climate Change Adaptation, Disaster Risk Reduction and Social Protection*, University of Sussex Brighton, Centre for Social Protection Climate Change and Development Centre Institute of Development Studies.

Davies M., Béné C., Arnall A., Tanner T., Newsham A., Coirolo, C. (2013), "Promoting resilient livelihoods through adaptive social protection: Lessons from 124 programmes in South Asia", *Development Policy Review*, vol. 31, n. 1, pp. 27-58.

De Schutter O. (2012), *Women's Rights and the Right to Food*, Report submitted by the Special Rapporteur on the right to food (A/HRC/22/50), Human Rights Council.

De Schutter O., Robinson M., Shine T. (2013), "Human rights: Their role in achieving climate justice and food and nutrition security", in *Hunger, Nu-*

*trition, Climate Justice. A New Dialogue: Putting People at the Heart of Global Development*, https://www.mrfcj.org/media/pdf/Human-Rights-FNS-Climate-Justice.pdf.

Devereux S., Sabates-Wheeler R. (2004), *Transformative Social Protection*, Brighton, Institute of Development Studies, IDS Working Paper 232, pp. i-30.

Dias J., Rocha S., Neves N. (2022), *Legal and Institutional Frameworks for The Right to Food and Nutrition*, Portugal, Fian.

Dorward A., Sabates Wheeler R., MacAuslan I., Penrose Buckley C., Kydd J., Chirwa, E. (2007), "Promoting agriculture for social protection or social protection for agriculture?", *Policy Approaches and Emerging Questions, Future Agricultures Briefing*, vol. 2, pp. 1-49.

EuropeAid (2012), *Social Transfers in the Fight Against Hunger: A Resource for Development Practitioners, Tools and Methods Series*, EC Reference Document, Brussels, European Commission.

European Commission (2022), *General Food Law*, https://food.ec.europa.eu/horizontal-topics/general-food-law_en.

– (2021), *The European Pillars of Social Rights Action Plan*, European Commission.

– (2020), *Farm to Fork Strategy. For A Fair, Healthy and Environmentally-Friendly Food System*, European Commission.

European Parliament, Regulation (EC) n° 178/2002.

FAO - Food and Agricultural Organization of United Nations (2018), *The Future of Food and Agriculture: Alternative Pathways to 2050*, Roma, FAO.

– (2006), *The Right to Food in Practice. Implementation at the National Level*, Roma, FAO.

FAO, IFAD, UNICEF, WFP, WHO (2023), *The State of Food Security and Nutrition in the World 2023. Urbanization, Agrifood Systems Transformation and Healthy Diets Across The Rural-Urban Continuum*, Roma, FAO.

– (2021), *The State of Food Security and Nutrition in the World. Transforming Food Systems For Food Security, Improved Nutrition And Affordable Healthy Diets For All*, Roma, FAO.

Ferrera M. (1993), *Modelli di solidarietà. Politica e riforme sociali nelle democrazie*, Bologna, il Mulino.

FIAN International (2018), *Annual Report 2018*, Fian.

Goering L. (2022), "As Conflicts and Climate Change Bite, Are High Food Prices Here to Stay?", *Context. Know Better. Do Better*, Tomson Reuter Foundation, https://www.context.news/climate-risks/conflict-to-climate-change-are-high-food-prices-here-to-stay [last access: 10/01/2025].

Hallegatte S., Bangalore M., Bonzanigo L., Fay M., Kane T., Narloch U., Rozenberg J., Treguer D., Vogt-Schlib A. (2016), *Shock Waves: Managing the Impacts of Climate Change on Poverty*, Washington, World Bank.

Hersch J. (2008), I *diritti umani da un punto di vista filosofico*, ed. by F. De Vecchi, prefazione di R. de Monticelli, Milano, Mondadori.

Hidrobo M., Bryan E., Laderach P., Mueller V., Navia B., Nesbitt-Ahmed Z., Roy S. (2023) *Leveraging Social Protection to Support Women's and Girls' Climate Resilience in Low- And Middle-Income Countries*, Presentation. Washington, International Food Policy Research Institute (IFPRI).

High-Level Group on the future of social protection and of the welfare state in the EU (2023), *The future of Social Protection and of the Welfare State in the* EU, Luxembourg, European Union.

HLPE (2012), *Social Protection for Food Security. A Report by the High Level Panel of Experts on Food Security and Nutrition*, Roma, Committee on World Food Security High Level Panel of Experts on Food Security and Nutrition.

Human Rights Council (2008), *Promotion and Protection of All Human Rights, Civil, Political, Economic, Social and Cultural Rights, Including the Right to Development*, Report of the Special Rapporteur on the right to food, Jean Ziegler [A/HRC/7/5], New York, United Nations.

IPCC (2023), *Climate Change* 2022: *Impacts, Adaptation and Vulnerability*, Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, ed. by H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama, New York - Cambridge, Cambridge University Press.

Leavy J., Gorman C. (2012), "Realising the potential of adaptive social protection", in Y. Azgad (ed.), IDS *In Focus Policy Briefing*, issue 28.

Levy S., Barahona C., Chinsinga B. (2004), "Food security, social protection, growth and poverty reduction synergies: The starter pack programme in Malawi", *Natural Resource Perspective*, London, Overseas Development Institute, vol. 95, pp. 1-6.

Levy S. (2005) (ed.), *Starter Packs: A Strategy to Fight Hunger in Developing Countries? Lessons from the Malawi Experience* 1998-2003, Wallingford, CABI.

Malo M.Á. (2018), "Finding proactive features in labour market policies: A reflection based on the evidence", ILO *Future of Work Research Paper Series, Research Paper*, vol. 8.

Mbow C., Rosenzweig C., Barioni L.G., Benton T.G., Herrero M., Krishnapillai M., Liwenga E., Pradhan P., Rivera-Ferre M.G., Sapkota T., Tubiello F.N., Xu Y. (2019), "Food security", in P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.-O. Pörtner, D.C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, K. Kissick, M. Belkacemi, J. Malley (eds), *Climate Change and Land: An IPCC Special Report on Climate Change, Desertification, Land Degradation,* *Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems*, IPCC.

Ministry of Local Government (2010), *Social Development Policy Framework for Botswana. Phase I Situation Analysis. May*.

Norton A., Conway T., Foster M. (2000), "Social Protection Concepts and Approaches: Implications for Policy and Practice in International Development", Working Paper 143, London, *Centre for Aid and Public Expenditure*, Overseas Development Institute (ODI).

O'Neill B., van Aalst M., Zaiton Ibrahim Z., Berrang Ford L., Bhadwal S., Buhaug H., Diaz D., Frieler K., Garschagen M., Magnan A., Midgley G., Mirzabaev A., Thomas A., Warren R. (2022), "Key risks across sectors and regions", in H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds), *Climate Change* 2022: *Impacts, Adaptation and Vulnerability*, Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, New York - Cambridge, Cambridge University Press.

Ortiz I. (2003) (ed.), *Social Protection in Asia and the Pacific*, Manila, Asian Development Bank (ADB).

Pisanò A. (2022), *Il diritto al clima. Il ruolo dei diritti nei contenziosi climatici europei*, Napoli, Edizioni Scientifiche Italiane.

Pitto S. (2024), *La rilevanza costituzionale e globale della sicurezza alimentare: una lettura olistica e comparata della food security*, Napoli, Editoriale Scientifica.

Pogge T. (2010), *Povertà mondiale e diritti umani: responsabilità e riforme cosmopolite*, in Id., Caranti L. (ed.), translation by Botti D., Roma-Bari, Laterza.

Polidori P., Rombaldoni R. (2023), "Green transition in the food supply chain. The meat sector", in L. Califano (ed.), *Food Security, Right to Food, Ethics of Sustainability. Legal, Economic and Social Policises*, Milano, FrancoAngeli.

Rama Rao C.A., Raju B.M.K., Subba Rao A.V.M., Rao K.V., Rao V.U.M., Kausalya Ramachandran, Venkateswarlu B., Sikka A.K., Srinivasa Rao M., Maheswari M., Srinivasa Rao Ch., (1998), "A district level assessment of vulnerability of Indian agriculture to climate change", *Current Science*, vol. 110, n. 10, pp. 1939-1946.

Rao C.H., Ray S.K., Subbarao K. (1988), *Unstable Agriculture and Droughts: Implications for Policy*, Delhi, Vikas.

Rao C.A.R. *et al.* (2016) "A district level assessment of vulnerability of Indian agriculture to climate change", *Current Science*, vol. 110, pp. 1939-1946, doi:10.18520/cs/v110/i10/1939-1946.

Rezaei E.E., Webber H., Asseng S., Boote K., Durand J.L., Ewert F., Martre P., MacCarthy D.S. (2023), "Climate change impacts on crop yields", *Nature Reviews Earth & Environment*, vol. 4, pp. 831-846.

Rosenzweig C., Mutter C.Z., Contreras E.M. (2021) (eds), *Handbook of Climate Change and Agroecosystems – Climate Change and Farming System Planning in Africa and South Asia*: *AgMIP Stakeholder-driven Research* (in 2 Parts), in *Series on Climate Change Impacts, Adaptation, and Mitigation*, vol. 5, Singapore, World Scientific Publishing Europe Ltd.

Semba R.D., Askari S., Gibson S., Bloem M.W., Kraemer K. (2021), "The potential impact of climate change on the micronutrient-rich food supply", *Advances in Nutrition*, vol. 13, n. 1, pp. 80-100.

Steier G., Ramdas S. (2024), *Farm Animal Welfare Law: International Perspectives on Sustainable Agriculture and Wildlife Regulation*, Boca Raton, CRC Press.

The World Bank, BIDPA – Botswana Institute for Development Policy Analysis (2013), *Botswana Social Protection Assessment*, The World Bank.

United Nation Office for Disaster Risk Reduction (2024), *Disaster Risk Reduction*, DDR.

United Nations (2021), "Food systems account for over one-third of global greenhouse gas emissions", *Un News*.

– (2015), *Transforming Our World: The 2030 Agenda for Sustainable Development*.

– (1948), *Universal Declaration of Human Rights*.

UNICEF - United Nations Children's Fund (2019), *UNICEF's Global Social Protection Programme Framework*, New York, UNICEF.

United Nations Development Programme (2016), *Leaving No One Behind: A Social Protection Primer for Practitioners*, UNDP.

Van Ginneken W. (1999) (ed.), *Social Security for the Excluded Majority: Case Studies of Developing Countries*, Geneva, International Labour Office (ILO).

Van Meijl H., Havlik P., Lotze-Campen H., Stehfest E., Witzke P., Domínguez I.P., Bodirsky B.L., Van Dijk M., Doelman J., Fellmann T., Humpenöder F., Koopman J.F.L., Müller C., Popp A., Tabeau A., Valin H., Van Zeist M.J. (2018), "Comparing Impacts of Climate Change and Mitigation on Global Agriculture by 2050", *Environmental Research Letters*, vol. 13, n. 6.

Varricchio A. (2023), "Il diritto al cibo e alla sicurezza alimentare quali diritti fondamentali dei minorenni: un inquadramento normativo", *Rassegna giuridica focus tematici*, vol. 2.

Vincent K., Cull T. (2012), "Adaptive Social Protection. Making Concepts a Reality, Guidance Notes for Practitioners", Brighton, Institute Of Development Studies at The University of Sussex (retrieved march, 20).

Von Braun J., Afsana K., Fresco L.O., Ali Hassan M.H. (2023) (eds), *Science and Innovations for Food Systems Transformation*, Dordrecht, Springer.

World Bank (2020a), *Adaptive Social Protection: Building Resilience to Shocks*, *World Bank Group*, https://www.worldbank.org/en/publication/human-ca pital/publication/adaptive-social-protection-building-resilience-to-shocks-key-findings [last access: 12/09/2024].

– (2020b), *Gambia – Maternal and Child Nutrition and Health Results Project* (MC-NHRP), Washington, World Bank Group.

– (2018), *Poverty and Shared Prosperity 2018: Piecing Together the Poverty Puzzle*, Roma, World Bank.

– (2012), *Resilience, Equity and Opportunity. The World Bank's Social Protection and Labor Strategy* 2012-2022, Washington, World Bank Group.

World Food Programme (2024), *WFP's Support to Strengthening Social Protection Systems Around the Globe*, Roma, WFP.

– (2018), *Case Studies on Social Protection and Food And Nutrition Security Ethiopia, The Gambia, Kenya, Mozambique and Zambia*, Roma, WFP.

Zhu C., Kobayashi C., Loladze I., Zhu J., Jiang Q., Xu X., Liu G., Seneweera S., Ebi K.L., Drewnowski A., Fukagawa N.K., Ziska L.H. (2018), "Carbon dioxide ($CO_2$) levels this century will alter the protein, micronutrients, and vitamin content of rice grains with potential health consequences for the poorest rice-dependent countries", *Science Advances*, vol. 4, n. 5.

# Il regime internazionale per la sicurezza alimentare: prospettive per il XXI secolo

Francesca Cerutti

*Abstract*. Poverty and food insecurity continue to be significant challenges in the modern world. Over the past five years, factors such as the economic impact of the COVID-19 pandemic, heightened military conflicts in key food-producing regions, and the effects of climate change have worsened existing critical issues (World Bank Group 2023). Addressing undernourishment, malnutrition, and food crises like other global challenges requires effective international cooperation. This article delves into the Food Security Regime complex, tracing its evolution from its inception with the Food and Agricultural Organization (FAO) to the present day. Utilizing the theory of Regime complexes as a suitable framework (Raustiala, Victor 2004; Alter, Meunier 2009; Alter, Raustiala 2018), it highlights how food security governance has evolved and transformed specifically after the 1990s, encompassing principles, norms, rules, and practices across various issue areas of International Relations. These nested and partially overlapping institutions now extend beyond traditional international food assistance to include areas, such as international trade, human rights, and climate change and the environment. Given that food systems contribute significantly to global greenhouse gas emissions, on the one hand, and climate change poses a threat to food security, on the other hand, understanding and improving the ongoing dialogue between these two regimes is not only beneficial but essential.

*Keywords*: food security, International regime complexes, food assistance, Food and Agricultural Organization, climate change

## 1. *Introduzione e metodo*

Nel 2025, ancora 800 milioni di persone soffrono la fame nel mondo disperse in più di 70 Paesi, dei quali un terzo vessa in una condizione di grave crisi alimentare. Il Secondo Obiettivo dell'Agenda per lo Sviluppo Sostenibile, «porre fine alla fame», non potrà essere raggiunto entro il 2030[1].

Dopo un miglioramento significativo della situazione alimentare globale, registrato tra gli anni Settanta e Novanta, le mediane di sottonutrizione e malnutrizione hanno ripreso a crescere senza soluzione di continuità malgrado il costante incremento nella produzione e circolazione di beni alimentari (Godfrey *et al.* 2010; FAO, WFP 2022).

Tale contingenza ha reso evidente che gli ostacoli al raggiungimento della sicurezza alimentare non si esauriscono nella disponibilità di cibo e acqua, ma comprendono oltre a quelli materiali, fattori ambientali, sociali, antropologici ed economici che agiscono a livello familiare, nazionale e globale (FAO 2009c). Una complessità di "cause", e quindi di potenziali aree di intervento, che si è riflessa nella governance globale della sicurezza alimentare, intesa come l'insieme delle istituzioni che intervengono per mitigare, ridurre o eliminare il problema della fame nel mondo.

Dalla sua origine, con la fondazione della Food and Agricultural Organization (FAO) nel 1945, il Regime per la Sicurezza Alimentare (RSA) si è trasformato in un Complesso Istituzionale Ibrido (HIC) composto, oggi, da almeno 20 elementi individuali, i quali oltre a esprimere un alto grado di eterogeneità interistituzionale (mandato, membership, design, risorse, indipendenza) operano all'interfaccia tra molteplici campi tematici delle relazioni internazionali quali nutrizione, produzione agricola, commercio, food safety, diritti umani, sviluppo, e cambiamento climatico, nella tassonomia proposta da Margulis (2021).

Ciononostante, la ricerca internazionalista sulla sicurezza alimentare è stata per lo più confinata a momenti di "crisi" e ha mancato di produrre studi longitudinali completi che consentano di cogliere appieno l'evoluzione del Regime per la Sicurezza Alimentare (Margulis 2016, 2).

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[1] Dati del WFP, WFP *Global Operational Response Plan: Update #11 – June* 2024, https://www.wfp.org/publications/wfp-global-operational-response-plan.

Il persistente impoverimento della situazione alimentare globale, le recenti discussioni in seno al Consiglio di Sicurezza delle Nazioni Unite (UNSC 2024), i modesti risultati dell'ultima Conferenza delle Parti a Baku lo scorso novembre (COP29, 2024) e la nuova presidenza americana rappresentano un vivido promemoria della necessità e dell'urgenza di invertire la rotta.

Oltre a discutere l'evoluzione dell'Regime per la Sicurezza alimentare dal 1945 ai nostri giorni (origine, trasformazione e composizione), la presente ricerca contribuisce anche tangenzialmente a espandere la conoscenza sui meccanismi che caratterizzano le relazioni interistituzionali nei regimi complessi, descrivendo una specifica forma di intervento istituzionale.

La prima parte dell'articolo introduce brevemente la letteratura sui Regimi Complessi e sui Complessi Istituzionali Ibridi (HIC) con particolare riferimento a quei contributi che considerano le Organizzazioni Internazionali (OIs) attori indipendenti e che investigano precisamente le strategie adoperate dai loro Segretariati nei rapporti interistituzionali allo scopo di perseguire obiettivi autonomi (Biermann, Koops 2017).

Attingendo agli strumenti offerti dalla letteratura, la seconda parte dell'articolo analizza il Regime e la FAO come sua organizzazione focale, e la sua trasformazione da Regime semplice a Complesso Istituzionale Ibrido. Inoltre, investiga le implicazioni di tale evoluzione per i rapporti interistituzionali specialmente in riferimento ai tre temi qualificanti i primi 60 anni di vita del regime: la centralità degli interessi dei Paesi donatori, il conflitto tra assistenza umanitaria e liberalizzazione commerciale, e l'effettività del regime rispetto al miglioramento delle condizioni alimentari globali (Delaville 2023).

L'ultima sezione dell'articolo ragiona, in via preliminare, sulla prospettiva di integrazione tra il Regime sulla Sicurezza Alimentare e quello relativo al Cambiamento Climatico, giustificata dal più che significativo contributo che i sistemi alimentari apportano alle emissioni globali di gas serra (Crippa *et al.* 2021).

Lo studio dei regimi complessi richiede un approccio metodologico plurale e sinergico. Le Teorie dell'interdipendenza complessa (TdR), la Principal Agent Theory e la Network Analysis hanno fornito l'inquadramento teorico e definito il perimetro analitico del caso in esame. Il *process-tracing* è stato impiegato per ricostruire sequenze di eventi critici, individuare meccanismi causali, descrivere specifici esiti, verificare le ipotesi teoriche e/o per identificare spiegazioni alternative (Bates *et al.* 1998, Buthe 2002).

Un campionamento per rilevanza tematica ha guidato la selezione delle fonti su sicurezza alimentare, nutrizione, commercio, diritti umani e cambiamento climatico. I criteri di inclusione hanno privilegiato fonti prodotte da attori istituzionali primari in particolare la FAO, il World Food Programme (WFP), l'Organizzazione Mondiale del Commercio (OMC), a altre organizzazioni multilaterali rilevanti, nella forma di documenti programmatici, relazioni, decisioni, verbali, rapporti, e notizie pubblicate nei siti delle agenzie specializzate dal 1945 a oggi, con l'obiettivo di massimizzare la rappresentatività rispetto ai temi di interesse. I documenti sono stati sottoposti a un processo di codifica iterativa utilizzando sia codici deduttivi che induttivi, anche mediante l'uso di software di analisi assistita (Nvivo, QualCoder e RQDA).

## 2. L*a Teoria dei* R*egimi complessi e le relazioni interistituzionali nel* C*omplesso* I*stituzionale* I*brido* (HIC)

### 2.1. Regimi Complessi, Complessi Istituzionali Ibridi, e le conseguenze della complessità

Nell'ambito della Teoria dei Regimi, l'introduzione del concetto di Regime Complesso (Raustiala, Victor 2004) ha rappresentato una svolta concettuale necessaria oltre che significativa, dal momento che la complessità della e nella governance internazionale, intesa come sovrapposizione e stratificazione di strumenti istituzionali nuovi su quelli esistenti, è diventata la regola e non l'eccezione della vita internazionale ed è il prodotto di ormai consolidate tendenze della politica globale contemporanea (Alter, Raustiala 2018, 329). Il termine di Regime complesso è usato per descrivere quei conglomerati di istituzioni internazionali nell'ambito dei quali non è possibile riconoscere una formale, rigida e univoca organizzazione gerarchica tra le sue componenti individuali che, in pratica, operano anche a cavallo tra diverse aree tematiche tradizionali delle Relazioni internazionali (sicurezza, economia, valori)[2]. Dato che i Regimi Complessi esprimono più spesso che no una membership diversificata ed eterogenea, più recentemente, Abbott e Faude (2022) hanno introdotto il concetto di "Complesso Istituzionale Ibrido" (HIC) il quale non comprende, come nelle interpretazioni più ortodosse della nozione di Regime Complesso, solo i trattati multilaterali e le organizzazioni internazionali o intergovernative formali (FIGO), ma anche organizzazioni intergovernative informali (IIGO), reti transgovernative (TGN), partenariati transazionali pubblico-privati (TPPP/TGIs); associazioni transazionali di governi subnazionali, organizzazioni transnazionali private di regolamentazione (PTRO) e altri tipi di istituzioni, come le coalizioni ad hoc[3].

Se la complessità è dunque un dato di fatto, gli effetti che essa ha sul funzionamento delle istituzioni che al complesso istituzionale partecipano sono vari e spesso difficilmente prevedibili.

Combinata con l'assenza di un ordine gerarchico, la complessità può avere conseguenze negative sul funzionamento del regime quali la perdita di focalizzazione e autorità delle istituzioni che compongono il regime, complicare il precedente giudiziario, fino a rendere impossibile la soluzione di conflitti normativi, e incentivare la diffusione di pratiche viziose come il *forum shopping* (con le quali gli attori scelgono di aderire solo ai fora più favorevoli ai propri interessi) (Murphy, Kello 2013). Inoltre, la complessità favorisce la dispersione di risorse materiali, tecniche ed epistemiche penalizzando gli attori meno potenti. Infine, "frammentando" gli effetti reputazioni di un'eventuale violazione, la complessità può anche incentivare gli indecisi ad "assumersi il rischio" della trasgressione (Drezner 2009, 66).

Nondimeno, l'anarchia all'interno del complesso istituzionale può essere opportunatamente mitigata da meccanismi informali di orche-

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[2] L'assenza di gerarchia non deve essere confusa con la mancanza di una qualsivoglia forma di "orchestrazione" o "focalità" esercitata a vari gradi da uno o più elementi istituzionali sugli altri.

[3] Un caso esemplificativo è quello del cambiamento climatico sul quale insiste un insieme eterogeneo di istituzioni che vanno dai gruppi scientifici internazionali alle reti globali di città dove ogni istituzione o gruppo di istituzioni ha la propria concezione/declinazione del problema in una fitta rete di altri attori internazionali (Gómez-Mera *et al.* 2020, 137).

strazione e di differenziazione funzionale indotti dalla distribuzione dell'autorità, da attributi di design (*institutional design for complementarity*) o da procedimenti di organizzazione strategica (*strategic ordering*). Tali meccanismi sono particolarmente efficienti nei complessi istituzionali ibridi per l'eterogeneità che caratterizza le loro componenti individuali (Abbott, Faude 2022).

Infine, la complessità può anche produrre effetti autenticamente benefici. Infatti, un sistema istituzionale composito consente sia un migliore *substantive fit* del regime, poiché diverse istituzioni possono affrontare specifici sotto-aspetti di problemi complessi, che un migliore *political fit*, offrendo pacchetti specifici di benefici, costi, rischi, membership e obiettivi e conferendo al regime una maggiore resilienza (Faude 2020). La complessità accresce anche la rilevanza del contributo degli esperti e della comunità epistemica, rendendo le organizzazioni internazionali più agili nello svincolarsi dalla presa degli stati forti e elevando il loro ruolo di mediatori internazionali specialmente su questioni tecniche e scientifiche (Alter e Meunier 2009). Infine, la frammentazione del diritto internazionale, derivante dalla complessità, può creare un terreno fertile per la presentazione di istanze alternative e la contestazione di norme superate che rispecchiano una distribuzione di interessi e poteri non più sostenibile oltre che anacronistica e favorendo, invece, l'adozione di regole più adeguate alle esigenze contemporanee (Alter 2018).

Proprio dall'equilibrio dinamico che esita dal bilanciamento tra ricadute negative e positive della complessità scaturisce la spiegazione più riuscita dell'attuale tendenza dell'ecosistema istituzionale internazionale verso la proliferazione e il continuo infittimento e incremento di densità.

### 2.2. Cooperazione, contestazione e intervento

La letteratura specialistica ha dedicato una significativa attenzione alle strategie politiche messe in atto dagli stati per gestire la complessità istituzionale (Alter, Meunier 2009,16) chiedendosi, per esempio, se la complessità rappresenti un incentivo o un disincentivo alla cooperazione (Hofmann 2019). Viceversa, pur riconoscendo alle organizzazioni la capacità di agire in modo indipendente, la questione di come le

Organizzazioni Internazionali (IOs) "navighino" il regime (per mitigare o approfittare degli effetti dell'anarchia) resta relativamente inesplorata (Margulis 2021, 873-874).

Nondimeno, almeno tre categorie di comportamenti sono state identificate e descritte.-

La *cooperazione* implica che le IOs lavorino insieme per raggiungere obiettivi comuni o affrontare sfide condivise, coordinando politiche e attività, condividendo risorse, e impegnandosi in processi decisionali comuni (Gehring, Faude 2014). Meccanismi cooperativi includono lo scambio di informazioni, la coproduzione di conoscenza, la cooperazione tecnica sul campo e la co-sponsorizzazione di campagne internazionali, di *advocay*, *side events* altre attività per la mobilizzazione di sostegno politico e finanziario (Margulis 2013). Anche la mobilità del personale tra organizzazioni (*secondement*) facilita informalmente la cooperazione[4]. Per Heucher (2019) che ha analizzato le strategie di armonizzazione tra le Organizzazioni Internazionali di uno stesso regime, sono le Organizzazioni Centrali, quelle cioè che godono di un elevato capitale simbolico e sociale, ad avere la maggior responsabilità nella promozione della coerenza e l'ordine all'interno del "campo organizzativo" tramite strategie quali la assegnazione/definizione di ruoli e attribuzioni che possono portare a vantaggi comparati per ciascuna organizzazione, il coordinamento delle collaborazioni, e la loro implementazione. La cooperazione è più probabile quando le IOs condividono valori e norme, hanno mandati differenziati, una cultura organizzativa favorevole e il supporto degli stati forti.

Al contrario, la *competizione* tra i segretariati delle IOs è tipicamente caratterizzata dalla rivalità per i mandati, i membri, le risorse e la focalizzazione (Lipson 2017), ma può anche manifestarsi in conflitti aperti per l'influenza politica globale. Betts (2013, 76) sostiene che i complessi di regime incoraggino la competizione esattamente perché forniscono agli Stati più scelte «in termini di quali istituzioni utilizzare per affrontare un determinato problema» acuendo la rivalità tra le stesse istituzioni del regime. Le IOs rispondono alle pressioni competitive difendendo il proprio mandato (Kranke 2022),

[4] Il distacco (*secondement*) è un fenomeno molto diffuso nelle risorse umane delle Organizzazioni Internazionali e tra le Agenzie specializzate delle Nazioni Unite e consta tipicamente di un accordo mediante il quale un'agenzia assegna temporaneamente un dipendente a una nuova posizione presso un'altra agenzia.

espandendolo tramite un processo noto come "*mission creep*" (Kreuder-Sonnen 2019), ampliando la membership o minacciando di creare istituzioni rivali ("*competitive regime creation*" in Morse, Keohane 2014).

Nel 2021, Margulis ha descritto una terza e autonoma tipologia di relazione interistituzionale. L'*intervento* si differenzia dalla cooperazione perché non implica una concertazione tra due Segretariati per il raggiungimento di un obiettivo comune, ma piuttosto che un'Organizzazione Internazionale cerchi di inserirsi nella politica decisionale di un'altra a essa parzialmente sovrapposta per influenzarne gli obiettivi e le attività (Margulis 2021). A differenza della competizione, tuttavia, l'intervento non appare come un gioco a somma zero per il controllo di un mandato, di membri o risorse. Nonostante abbia luogo nella compagine della propria organizzazione, influenza le attività di un'altra istituzione del regime mediante almeno tre micromeccanismi o strategie: la mobilizzazione diretta dei membri dell'istituzione bersaglio (*mobilizing states*), smascherando il contenuto inappropriato di una decisione prima che venga presa (*public shaming*), o facendo riferimento a quadri giuridici alternativi per alimentare la preoccupazione/percezione nei membri dell'organizzazione che l'approvazione di una decisione porterebbe loro a disattendere precedenti o contestuali impegni internazionali (*advocacy*) (Kreuder-Sonnen, Zürn 2020).

## 3. Il *Regime per la* Sicurezza Alimentare*: da semplice a complesso istituzionale ibrido*

Dopo la Seconda guerra mondiale, nel 1945 la creazione della Organizzazione delle Nazioni Unite per l'Alimentazione e l'Agricoltura (FAO) coincide con la nascita del regime sulla sicurezza alimentare contemporaneo (Shaw 2007, Margulis 2013, 55)[5]. In un contesto internazionale segnato dalla volontà di ricostruire e prevenire futuri conflitti, l'iniziativa è legittimata dalla convin-

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[5] Una forma embrionale di regime alimentare era esistita tra la fine del XIX e l'inizio del XX secolo. Emerso nel contesto del colonialismo europeo e della crescente globalizzazione dei mercati del grano, tale regime si era caratterizzato per un'enfasi quasi esclusiva sulla produzione e il trasporto di generi alimentari dalle colonie ai Paesi industrializzati, una traiettoria bruscamente interrotta dalla Grande Depressione degli anni Trenta.

zione, soprattutto americana e occidentale, che la comunità internazionale avesse la "responsabilità" di intervenire per (1) combattere la denutrizione e la malnutrizione, (2) migliorare la produttività e la distribuzione alimentare e, appunto, (3) porre fine alla fame nel mondo (Christoffersen *et al.* 2008). L'entusiasmo è tale che, un anno dopo, viene proposta la creazione di un Consiglio Alimentare Mondiale, il quale avrebbe assegnato alla FAO l'autorità delegata e le risorse finanziarie per gestire la produzione e il consumo di cibo a livello mondiale, in coordinamento con la Banca Internazionale per la ricostruzione e lo sviluppo (BIRS, poi World Bank), al Fondo Monetario Internazionale e all'Organizzazione Internazionale del Commercio (OIT). Nei fatti, sia la realizzazione del Consiglio che la proposta successiva di istituire un mercato alimentare comune gestito dalla FAO si scontrano con la resistenza degli Stati Uniti e degli altri maggiori produttori di cereali, interessati soprattutto, a sfruttare i vantaggi del libero mercato (Margulis 2013).

Anche il Codice di Condotta per lo Smaltimento delle Eccedenze Alimentari (Principles for Food Disposal) che la FAO diffonde nel 1954 allo scopo di scongiurare il ridimensionamento dell'assistenza alimentare, finisce per salvaguardare principalmente le necessità dei Paesi donatori per i quali, infatti, prevede opportune garanzie (*interalia* il Principio di Addizionalità e di U*sual* M*arket* R*equirement*) (Delaville 2023, 172).

La pressione dei grandi produttori spinge la FAO a (ri)orientare la propria attività di sensibilizzazione e negoziazione interstatale su temi meno controversi quali la gestione delle forniture alimentari e l'approvvigionamento alimentare nei PVS e l'incremento della produzione locale, anche mediante la promozione di pratiche agricole più efficienti.

Negli anni Sessanta complici gli scenari paventati dai modelli malthusiani, l'incessante aumento demografico e la ancora modesta capacità produttiva del Sud globale, il tema della fame nel mondo torna a essere centrale ed è naturalmente la FAO a portarlo alla ribalta con la campagna F*reedom from* H*unger*, alla quale partecipano molte altre agenzie delle Nazioni Unite, in un caso manualistico di collaborazione interistituzionale (Margulis 2016, 7). Per la FAO è l'occasione per diffondere formalmente il principio fondamentale alla base del neonato regime sulla sicurezza alimentare: sradicare la fame e ridurre il numero di persone che ne muoiono. Contestualmente, la Campagna serve per creare un ponte tra questi obiettivi e quelli della salute globale, della povertà, e del lavoro, oltre che per orientare l'agenda internazionale e sedimentare la "responsabilità collettiva" nei confronti dell'assistenza alimentare (Shaw 2007, 82-84). Ed è proprio su questo tema che si registra la più produttiva convergenza di interessi tra le necessità del Regime e le ambizioni economiche e diplomatiche degli Stati Uniti. Con il pieno sostegno del candidato alla presidenza J.F. Kennedy, l'allora Direttore del già attivo programma americano Food for Peace, Ewan McGregor inaugura le discussioni che portano alla nascita del World Food Programme (WFP) l'anno successivo (Riley 2017). Seppure nella compagine della FAO, il WFP viene dotato di un proprio budget e di uno specifico compito, quello di consegnare prodotti alimentari a Paesi travolti da crisi nazionali, catastrofi naturali, guerre e carestie, al quale si aggiunge successivamente quello di avviare programmi di sviluppo (Delaville 2023). L'iniziativa è seguita rapidamente dall'impegno di altri maggiori produttori di grano e cereali (in Europa, Canada e Australia) a redigere accordi multilaterali, importante la Food Aid Convention (FAC) del 1967, e bilaterali che prevedano nuove formule di supporto alla produzione nei PVS tramite il trasferimento di capacità tecnologiche e tecniche agricole, l'introduzione di nuove piante, e la condivisione di seminativi, fertilizzanti e pesticidi di ultima generazione. È la "Rivoluzione verde" che fa ottenere a uno dei suoi principali esponenti, il genetista americano Norman Borlaug nel 1970, il premio Nobel per la pace (Cullather 2004).

Nel 1972, causata dalla siccità e dal calo dei raccolti, e amplificata dall'incremento del costo dell'energia associato allo shock petrolifero del 1973, una gravissima crisi alimentare colpisce la società internazionale rendendo palesi i limiti del neonato RSA che la crisi non aveva potuto prevedere né prevenire[6]. Le maggiori criticità riguardano la mancanza di indipendenza della FAO dai grandi produttori, la natura degli aiuti alimentari, fino a quel momento distribuiti prevalentemente in natura (*in kind*), e quindi non logicamente adeguati alle necessità dei beneficiari, e l'insufficiente mobilitazione generale a sostegno della causa della sicurezza alimentare. Coerentemente con le aspettative teoriche, alla crisi segue una prima ristrutturazione del regime.

Il numero dei finanziatori aumenta con l'allungamento dell'elenco dei donatori ad includere oltre a quelli tradizionali (Stati Uniti, Canada e Australia e Regno Unito) anche Giappone e Comunità Europea e così

[6] Per approfondire le cause e le caratteristiche della Crisi alimentare del 1972-1974 si possono consultare Weiss e Jordan (1976) e Hopkins e Puchala (1978).

si amplia anche la lista delle Organizzazioni che vi operano. Da un lato, emergono nuovi istituti di cooperazione come il Fondo internazionale per lo sviluppo agricolo (IFAD) che diventa il principale ente finanziario internazionale del Regime, il World Food Council che sopravvive fino al 1994 con lo scopo di mantenere prioritarie le necessità della sicurezza alimentare nelle agende politiche dei governi, e lo Standing Committee on Food and Nutrition creato come organo sussidiario della FAO per assicurare coerenza alle politiche adottate dai vari strumenti individuali del regime (Weiss, Jordan 1976; Shaw 2007). Dall'altro, organi esistenti, ma con mandati diversi (UNDP, UNCTAD, World Bank, CGIAR[7]) iniziano ad occuparsi di sicurezza alimentare, producendo l'ulteriore allargamento di quello che Hopkins e Puchala già definiscono il "UN Food Network" (Hopkins, Puchala 1978).

Complice la leadership assertiva e indipendente di Edouard Saouma, anche la FAO entra in un periodo di intensa attività con il lancio di importanti iniziative politiche di sviluppo agricolo e sostegno alimentare avviate anche in assenza di una consultazione preliminare o il pieno consenso degli stati membri (Shaw 2007; Davies 2013). Una trasformazione che conclude la sua prima fase, nel 1996, con il Vertice Mondiale sull'Alimentazione (WFS). Il Vertice, convocato dalla FAO, si differenzia dalle precedenti Conferenze internazionali sull'alimentazione perché non è associato a una specifica situazione di emergenza (Shaw, Clay 1998, 60). Nondimeno, come nota Margulis (2016), la cooperazione interorganizzativa è magistrale, con la partecipazione di moltissime agenzie (IFAD, WFP, UNHCR, UNICEF, OMS, WMO, WTO/OMC, UNDP, UNEP, UNFPA, UNHCR e IEAA) a tutti gli incontri consultivi dei 18 mesi che precedono la conferenza (Margulis 2016, 8). L'esito più importante del summit è la produzione e accettazione consensuale di una definizione di sicurezza alimentare più completa e organica che fa riferimento a quattro pilastri: la disponibilità di alimenti, l'accesso (fisico, economico e sociale), l'utilizzo (inclusi gli aspetti igienici di conservazione, preparazione e confezionamento) e la stabilità dell'offerta (intesa come indipendenza da fattori contingenti) (FAO 1996).

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[7] Il Consultative Group on International Agricultural Research fu formato nel 1972 fuori dalla compagine delle Nazioni Unite per coordinare gli sforzi di ricerca in ambito agricolo con lo scopo di ridurre la povertà nel mondo e migliorare la sicurezza alimentare nei PVS.

In quest'ottica la fame nel mondo diventa un problema non solo, o meglio non tanto, di approvvigionamento ma soprattutto una questione di produzione, distribuzione, fruizione e quindi di "accesso" regolare al cibo. Una faccenda che il mero "trasferimento" di generi alimentari (assistenza alimentare) non poteva risolvere.

Oltre a riflettere le osservazioni di sociologi ed economisti, la definizione rispecchia soprattutto l'evoluzione del regime da semplice a complesso.

Per tutti gli anni Ottanta e Novanta, infatti, pur mantenendo la sua centralità come organizzazione focale del Regime, la FAO si confronta continuamente con altre parti istituzionali che interferiscono, nel bene o nel male, con la realizzazione dei suoi obiettivi.

In questo contesto si consumano le prime frizioni e contestazioni tra la FAO e il WFP, la Banca Mondiale, le istituzioni del GATT prima e il WTO in merito alle priorità, ai tempi, e ai modi con i quali risolvere il problema della fame nel mondo.

Nel primo caso, le differenze tra l'approccio di lungo periodo della FAO (sviluppo agricolo sostenibile) e le esigenze immediate del WPF (fornitura di generi alimentari in situazioni contingenti) fomentano la concorrenza per le risorse e la leadership del Regime da parte delle due istituzioni che, combinata con le dinamiche di potere operanti nel sistema UN, rende alla fine inevitabile la separazione dei due istituti. In un tipico caso di contestazione, il WFP raggiunge l'indipendenza nei primi anni Novanta (Shaw 2001, Margulis 2016, Margulis 2021).

Invece, nei rapporti con gli istituti monetari e commerciali si materializza il più insidioso e irriducibile contrasto tra le esigenze dell'assistenza allo sviluppo, della liberalizzazione del commercio e dell'assistenza alimentare.

Quando la Banca Mondiale avvia i propri programmi di aggiustamento strutturale nel Terzo Mondo, con l'obiettivo di ridurre il sostegno statale all'agricoltura (in termini di fornitura di credito, fattori di produzione, e i servizi di commercializzazione gestiti dallo stato), la FAO non si trattiene da render note le conseguenze negative che tali interventi producono sul concomitante sforzo del RSA a sostegno dello sviluppo rurale (Shaw, Clay 1998). Allo stesso modo, quando l'impostazione tutta liberale del regime commerciale viene riconfermata dall'*Accordo sulle Misure Sanitarie e Fitosanitarie* nel 1994 (SPS), e dall'entrata in vigore dell'*Ac-*

*cordo sull'Agricoltura* (AoA), l'anno successivo, la FAO e il WFP esprimono vocalmente i rischi di una liberalizzazione incontrollata del mercato per i piccoli produttori, la biodiversità, la sovranità alimentare e i diritti umani (Orford 2015, 55).[8]

Con l'aumentare della complessità istituzionale, si genera infatti anche l'occasione per le prime sinergie. Sono esattamente gli anni tra il 1994 e il 1996 ad aprire le porte alla comunicazione diretta e alla sovrapposizione parziale tra il regime per la sicurezza alimentare e quello sui diritti umani. Il diritto al cibo era stato articolato per la prima volta nell'ambito della *Dichiarazione Universale dei Diritti Umani* nel 1948 e aveva assunto una valenza vincolante nel 1966 con la *Convenzione Internazionale sui diritti economici sociali e culturali*, la quale obbligava le parti a raggiungere, progressivamente, un'equa distribuzione delle risorse alimentari. Dopo il summit del 1996 e su richiesta degli Stati che vi avevano partecipato, il neonato Ufficio dell'Alto Commissariato per i diritti umani (OHCHR) entra nel merito, insiste sul profilo vincolante della norma e mette in luce più chiaramente le prerogative e i doveri che il diritto al cibo implicava. Nonostante privo di una capacità esecutiva, e in parte proprio per questa ragione, l'Alto Commissariato gode di una notevole indipendenza e autorità morale, agendo come una sorta di "coscienza del mondo" (Gaer, Broecker 2013).

L'inquadramento offerto dall'OHCHR dialoga direttamente con l'RSA, dal momento che promuove un approccio olistico alla sicurezza alimentare e sposta l'attenzione della comunità internazionale dal contenuto del

[8] L'*Accordo* SPS, che aveva lo scopo di garantire che l'utilizzo di misure sanitarie e fitosanitarie non producessero barriere commerciali ingiustificate, era rilevante per la sicurezza alimentare perché il suo contenuto (legalmente vincolante e associato ad un efficace organismo di implementazione e monitoraggio), seppur con l'obiettivo di proteggere la salute umana e animale, condizionava l'accessibilità agli alimenti nel mondo. Si prestava, in particolare, ad essere strumentalizzato dai Paesi più avanzati che avrebbero potuto così proteggere i propri mercati dalla concorrenza dei PVS. Infatti, adeguarsi a nuovi (e più alti) standard alimentari, avrebbe significato fronteggiare sfide economiche (l'aumento dei costi di produzione) e tecnologiche, oltre che la gestione di un certo grado di incertezza operativa (le norme potevano variare nel tempo e da un Paese all'altro) insostenibili per un produttore basato in un Paese del Sud globale a danno dei consumatori locali e del loro diritto al cibo (Margulis 2013; 2016).

primo pilastro, la disponibilità di cibo, agli altri tre, cioè a quei fattori che ne impediscono il pieno godimento, rafforzando, tra l'altro, la responsabilità degli Stati nel dare attuazione al diritto al cibo (Margulis 2016, 9).

Una sinergia sostanziale che porta la FAO e l'OHCR a sviluppare congiuntamente delle Linee guida volontarie per facilitare l'implementazione del diritto al cibo, oltre a influenzare significativamente i primi anni di vita dei Negoziati di Doha (Ziegler *et al.* 2011)[9].

Nel 2003 con lo scopo di "contestare" la bozza di accordo presentata alla quinta conferenza interministeriale a Cancun da Stati Uniti e Unione Europea e influenzarne il relativo processo deliberativo, il Commissario Sérgio Vieira de Mello indirizza ai ministri del commercio comunicazione non ufficiale intitolata T*rade and* H*uman* R*ights*. La comunicazione pensata «per assistere i responsabili politici che potrebbero non avere familiarità con il sistema internazionale dei diritti umani», di fatto mira a mettere in luce l'incompatibilità giuridica di alcune misure in discussione (le restrizioni alle donazioni alimentari) (OHCHR 2003, 2).

Se durante i negoziati di Doha, la FAO che vi partecipa da "osservatore", mantiene un profilo collaborativo con l'OMC e non cerca di proiettare la propria autorità o espandere il suo mandato (Saab 2018), non manca nemmeno di portare l'attenzione sulla persistente propensione del Segretariato dell'OMC a mettere in secondo piano le istanze dei Paesi in via di sviluppo/emergenti, con particolare riferimento alle misure di salvaguardia e alla questione dell'abolizione degli aiuti "in natura"[10].

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[9] Tra queste, la "Linea Guida 15" sottolineava esattamente che l'assistenza alimentare internazionale dovesse essere condotta in conformità con le misure nazionali già attuate dallo Stato beneficiario. Enfatizzava inoltre che l'assistenza alimentare doveva essere basata su una solida valutazione dei bisogni del beneficiario e che tale processo di valutazione avrebbe dovuto essere partecipativo. Così anche la fornitura di aiuti alimentari in situazioni di emergenza avrebbe dovuto considerare gli obiettivi di sviluppo a lungo termine e quindi essere adottata in modo da non comprometterli, intrecciando e complicando ulteriormente le priorità del Regime.

[10] L'argomento era delicato per due motivi. Da un lato, i PVS ritenevano il ricorso agli aiuti alimentari *in kind* unicamente strumentale allo smaltimento delle eccedenze agricole dei grandi esportatori e lesivo della produzione locale. Dall'altro, il fronte dei produttori era tutt'altro che coeso. Infatti, EU, Canada, Australia, Argentina e Brasile ritenevano i negoziati di Doha una nuova occasione per disciplinarne

Sul tema degli aiuti in natura, nel 2005, il giorno dell'apertura della conferenza interministeriale di Hong Kong il direttore del WFP fa pubblicare un articolo sul *Financial Times* nel quale esplicitamente accusa i convenuti intenzionati a bandirli di abbandonare nella disperazione milioni di esseri umani la cui sopravvivenza dipendeva integralmente dagli aiuti alimentari (Margulis 2021, 889).

Tre anni più tardi, proprio nel momento più critico del Ciclo di Doha, quando cioè le negoziazioni si interrompono a Potsdam per l'impasse sulla questione della riduzione di tariffe e sussidi per il settore agricolo provocato dall'irriducibilità tra le posizioni di Stati Uniti, da un lato, ed Europa e India dall'altro, una nuova crisi travolge il Regime per la Sicurezza Alimentare.

La crisi alimentare del 2008 scaturisce dalla combinazione di diversi fattori economici, politici, e sociali e il suo impatto valica decisamente quello del mercato alimentare, dal momento che è proprio l'aumento dei prezzi dei generi di prima necessità la scintilla che avvia in Egitto e Tunisia le rivolte contro i governi autoritari di Mubarak e Ben Ali e quindi l'ondata di proteste della Primavera Araba (Cohen, Clapp 2009).

Come per la crisi del 1972, quella del 2008 genera lo spazio per un'ulteriore ristrutturazione del Regime per Sicurezza Alimentare. Il G8 risponde alla crisi con il lancio dell'Aquila Food Security Initiative (AFSI) e si impegna a stanziare 22 miliardi in tre anni. Nel 2012 l'AFSI si trasforma nella Nuova Alleanza per la Sicurezza Alimentare e la Nutrizione, che mira a sostenere la sicurezza alimentare mediante la promozione di una crescita agricola sostenibile e inclusiva attraverso ricerca e sviluppo tecnologico, con l'obiettivo di far uscire dalla povertà 50 milioni di persone in Africa di lì a dieci anni. Nello stesso periodo nasce il Global Agricultural and Food Security Program (GASP), un fondo fiduciario multi-donatore gestito dalla Banca Mondiale per sostenere investimenti agricoli pubblici e privati nei PVS; iniziative regionali simili sono promosse da organizzazioni come l'Unione Africana e l'ASEAN[11].

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il programma americano Food for Peace che, in quanto "vincolato" ai prodotti e alla logistica americana, gli altri esportatori equiparavano a una forma di "sovvenzione alle esportazioni nazionali" con effetti distorsivi sul mercato globale.

[11] Per approfondire, si consulti il sito dedicato all'indirizzo https://www.gafspfund.org.

Nel 2008, nasce l'High-level Task Force (HLTF) per coordinare le politiche e gli interventi relativi alla sicurezza alimentare globale. Un organismo che include 22 istituzioni, tra cui le agenzie delle Nazioni Unite, le istituzioni di Bretton Woods, e l'Agricultural Market Information System (AMIS) che, a sua volta, coinvolge dieci organizzazioni dedicate alla promozione della trasparenza nel mercato alimentare (Margulis 2016, 9). Nell'ottica di una maggiore armonizzazione tra le componenti del Regime è stato riformato, nel 2009, anche il Comitato per la Sicurezza Alimentare Mondiale (originariamente istituito, come si è brevemente accennato più sopra nel 1974). Il Comitato si è trasformato da organismo interstatale con funzioni limitate alla raccolta e condivisione di informazioni, in uno più centrale e inclusivo tramite il quale anche organizzazioni internazionali, la società civile e il settore privato possono partecipare direttamente alla definizione dell'agenda politica[12].

Coerentemente, la revisione della C*onvenzione sugli aiuti alimentari* (FAC 2012) ha cercato di migliorare il coordinamento multilaterale e di facilitare la partecipazione degli attori non statali alle discussioni in seno al suo Comitato.

Anche la FAO e il WFP hanno saputo imbrigliare la reciproca sfiducia ufficializzando l'istituzione di un Cluster per la Sicurezza Alimentare (FSC) che, nella pratica, già dal 2001 coordinava la risposta alle emergenze su scala mondiale (FAO 2001). Il Cluster ha trasformato una collaborazione occasionale in una struttura formalizzata allo scopo di velocizzare la risposta durante le crisi umanitarie[13], stabilire migliori pratiche

[12] Dopo la riforma del Comitato, quest'ultimo ha operato in sinergia con l'HLTF: mentre il CFS fornisce un forum permanente per la discussione e il processo decisionale sulla sicurezza alimentare, l'HLTF si è concentrato sul coordinamento delle azioni concrete e la promozione della risposta collettiva alla crisi (Margulis 2012; Barling, Duncan 2015). Viceversa, l'assunzione da parte del G20 della leadership politica globale per la sicurezza alimentare ha provocato un raffreddamento dei dibattiti politici in seno al Comitato (Clapp, Murphy 2013).

[13] FAO e WFP coproducono anche i rapporti sui raccolti, Croop and Food Security Assessment Mission (CAFSAM), per stimare la disponibilità e il fabbisogno alimentare di un Paese che informano il tipo e l'entità di assistenza alimentare che loro viene destinata in situazioni di emergenza.

e protocolli d'azione, oltre che agevolare la condivisione e la coerenza delle informazioni all'interno del sistema delle Nazioni Unite e con altre ONG e attori rilevanti (Maxwell, Parker 2012)[14]. A quanto indicato alla pagina dedicata, il Cluster comprende oggi più di 1000 partner attivi, collabora con altri cluster globali (come quelli sulla Salute, Nutrizione e WASH) ed è dotato di meccanismi di *accountability*[15].

## 4. La FAO *tra sicurezza alimentare e cambiamento climatico*: *da spettatore a interprete*

Nell'articolazione dei temi che caratterizzano il Regime sulla sicurezza alimentare, la questione del cambiamento climatico ha il potenziale di profilarsi come un *game-changer* per gli equilibri/disequilibri esistenti. La relazione tra clima, agricoltura e alimentazione ha da sempre influenzato l'evoluzione umana, ma solo recentemente la relazione è diventata un tema centrale nel sistema di governance alimentare (Graddy-Lovelace *et al.* 2024).[16] Un ritardo attribuito alla lunga assenza di dati sull'origine antropogenica del cambiamento climatico, alla difficoltà di visualizzare la connessione esistente tra il clima e il cibo che viene consumato quotidianamente, e alla priorità riservata dai decisori politici agli obiettivi di breve termine, come l'aumento della produzione alimentare (FAO 2009b, FAO 2022).

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[14] I*nteralia*, nel 2014, la FAO e l'UNEP hanno firmato un Memorandum d'Intesa (MoU) per un periodo di cinque anni (https://www.unep.org/resources/publication/quadripartite-memorandum-understanding-mou-signed-new-era-one-health). Il protocollo d'intesa è stato prorogato per altri cinque anni nel 2019 e ha aperto le porte a un Memorandum a quattro tra FAO, OIE, WHO, e UNEP. Il Memorandum d'intesa definisce le seguenti aree generali come priorità della collaborazione rafforzata tra FAO e UNEP che continua con la proroga: Sistemi alimentari sostenibili; Servizi ecosistemici e biodiversità in agricoltura, silvicoltura e pesca; Dati e statistiche; Strumenti legali internazionali, legislazione e questioni normative.

[15] Per approfondire si consulti il sito https://www.fao.org/partnerships/fao-un-system/UN-Partners/fao-and-wfp/en.

[16] Per una rassegna si consulti il numero speciale dedicato all'argomento del B*ulletin of* A*tomic* S*cientists*, maggio 2024, https://thebulletin.org/magazine/2024-05/ [ultimo accesso 15 gennaio 2025].

La relazione tra cambiamento climatico e sicurezza alimentare esiste ed è bidirezionale.

In primo luogo, il cambiamento climatico compromette i quattro pilastri della sicurezza alimentare: disponibilità, accesso, utilizzo e stabilità. Poiché il mutamento delle temperature e dei modelli delle precipitazioni si associano alla siccità, alle inondazioni, alla diffusione di parassiti e malattie, alla distribuzione degli impollinatori, naturalmente il cambiamento climatico diminuisce la produttività delle colture, la resa dell'allevamento e della pesca, oltre a "erodere" le risorse genetiche minacciando la biodiversità e quindi la capacità di adattamento dei sistemi alimentari agli ulteriori cambiamenti ambientali (*interalia* FAO 2008b, FAO 2015). Oltre ad aumentare la volatilità del mercato, gli effetti del cambiamento climatico possono determinare l'interruzione delle catene di approvvigionamento (FAO 2015, FAO 2022) e la riduzione della qualità del cibo, dal momento che l'aumento delle temperature riduce disponibilità di acqua potabile essenziale per una corretta nutrizione e preparazione degli alimenti, oltre che portare a una riduzione del contenuto proteico di molte colture (FAO 2022). Nel complesso la stabilità dell'intero sistema è compromessa dalla precarietà dei redditi agricoli e dall'aumento della frequenza e dell'intensità degli eventi estremi con un impatto sempre maggiore sulle popolazioni vulnerabili (FAO 2019).

In secondo luogo, i sistemi alimentari contribuiscono significativamente al cambiamento climatico, generando circa un terzo delle emissioni globali di gas serra. Le pratiche agricole, come la deforestazione, l'uso di fertilizzanti e l'allevamento, giocano un ruolo cruciale, mentre il trasporto e lo stoccaggio degli alimenti intensificano le emissioni. Infine, lo spreco alimentare aggrava la situazione, generando metano e altri gas serra durante la decomposizione degli scarti.

Nonostante la pervasività di tali connessioni, fino alla firma della *Convenzione Quadro sui Cambiamenti Climatici* nel 1992 (UNFCCC), e del *Protocollo di Kyoto* due anni più tardi, il Regime sulla sicurezza alimentare conferisce alle questioni ambientali un ruolo marginale, con poche eccezioni. Ancora al Vertice mondiale sull'alimentazione del 1996, la comunità internazionale tradisce una certa mancanza di consapevolezza circa i vari meccanismi coinvolti nei processi di surriscaldamento terrestre, delle relazioni causali esistenti tra essi e delle soluzioni che devono e possono essere adottate (FAO 1996).

Solo nel 2008, contestualmente alla crisi economica e alimentare mondiale, la FAO pubblica uno studio pionieristico interamente dedicato al tema e intitolato *Climate Change: Implication for Food Safety* (FAO 2008a). Il rapporto fornisce una panoramica generale dei vari effetti del cambiamento climatico sulla sicurezza alimentare, ma senz'altro esprime la necessità di affrontare il cambiamento climatico come parte integrante dell'agenda globale per lo sviluppo. Nello stesso anno, la FAO, in collaborazione con il Gruppo consultivo per la ricerca agricola internazionale e il WFP, organizza una conferenza dal titolo *Sicurezza alimentare mondiale: le sfide del cambiamento climatico e delle bioenergie*, a Roma (FAO 2008b). Nel documento *Coping with a changing climate: considerations for adaptation and mitigation in agriculture*, l'Organizzazione evidenzia l'importanza di aumentare la produzione agricola per soddisfare la crescente domanda e garantire la sicurezza alimentare seppur preservando le risorse naturali e rispondendo alla sfida del cambiamento climatico attraverso misure di adattamento e mitigazione (FAO 2009a; FAO 2009b). Negli ultimi dieci anni, proprio intorno alla complessità di realizzare entrambi questi obiettivi si è articolata la sovrapposizione tra i regimi sulla sicurezza alimentare e cambiamento climatico.

Dopo il 2010, la FAO ha continuato a studiare l'evoluzione dei sistemi agroalimentari non più solo in relazione al contesto socioeconomico, ma anche e soprattutto in relazione a quello ambientale.

L'Organizzazione ha prodotto e pubblicato strategie e piani di azione, tra cui l'ultima *Strategia FAO sul cambiamento climatico* 2022-2031 che mira a supportare i Paesi nell'attuazione degli *Accordi di Parigi* (FAO 2022). La FAO ha anche lanciato il Climate Change Knowledge Hub (per migliorare le conoscenze e le capacità dei Paesi nell'attuazione dei loro obiettivi climatici e di sviluppo sostenibile e che raccoglie le conoscenze e le risorse esistenti sul cambiamento climatico nei settori dell'agricoltura e uso del suolo[17].

Nell'ambito di questa intensa attività, la FAO ha agito in modo complementare e supplementare agli obiettivi del UNFCCC, del *Protocollo di Kyoto* e del sopraggiunto *Accordo di Parigi* (2015), ma non ha tralasciato di inserire nell'agenda climatica anche le proprie priorità sulla sicurezza alimentare e a portare avanti le istanze degli affamati del mondo.

[17] Accesso al sito https://www.fao.org/climate-change/knowledge-hub/en.

La FAO ha riconosciuto l'adattamento al cambiamento climatico come un elemento essenziale per il raggiungimento della sicurezza alimentare e lo ha dunque integrato nello svolgimento del suo mandato, con approcci proattivi e anticipatori che affrontano sia gli impatti di breve che quelli di lungo periodo derivanti da cambiamenti nelle temperature medie, nelle precipitazioni, nella salinità e nei livelli del mare.

Tuttavia, l'Organizzazione ha anche reso evidente che le misure di adattamento non possono avere carattere "universale", ma devono essere adattate alle condizioni locali e integrate in tutti i settori (approccio multisettoriale) e le scale spazio-temporali pertinenti alla pianificazione e allo sviluppo.

Se da un lato la FAO ha promosso azioni *no-regrets* e cioè da adottarsi in via precauzionale anche in condizioni di incertezza, non ha nascosto le preoccupazioni circa l'impatto negativo che misure drastiche pro-futuro possono apportare allo stato attuale della sicurezza alimentare (FAO 2009a).

La FAO ha identificato diverse aree di azione prioritaria in termini di "adattamento" al cambiamento climatico che includono: la produzione di una conoscenza affidabile per supportare i decisori politici nazionali, la resilienza dei mezzi di sussistenza (gestione sostenibile del territorio e delle risorse idriche e delle attività di sostentamento), il ricorso a tecnologie innovative, la realizzazione di quadri di governance e politiche flessibili e l'incremento della comprensione dei servizi ecosistemici forniti dalla biodiversità agricola e acquatica e la priorità della gestione del rischio di catastrofi (FAO 2009b; FAO 2019; FAO 2022; FAO 2023).

Nell'approccio promosso dalla FAO, con *mitigation* si intendono, invece, quelle azioni orientate a ridurre le emissioni di gas serra associate al settore alimentare. La FAO ha sostenuto l'inclusione dell'agricoltura, silvicoltura e dell'uso del suolo (AFOLU) nell'International Mitigation Regime e ha supportato la messa a punto di un sistema di monitoraggio, reporting e verifica. Ma, anche in questo caso, non ha mancato di mettere in luce la necessità di adottare misure che salvaguardino i diritti e la sicurezza della proprietà fondiaria delle popolazioni indigene, dei gruppi emarginati e delle comunità locali, garantendo la loro partecipazione alla pianificazione e all'attuazione delle attività di mitigazione del regime (FAO 2009a; FAO 2019).

La FAO ha cioè supportato un approccio olistico, integrato e multifattoriale al problema del cambiamento climatico che coinvolga i pianificatori politici, le istituzioni, ma anche le comunità locali, specialmente i segmenti più vulnerabili della popolazione (UNFCCC 2022; FAO 2022).

L'organizzazione ha contribuito a mantenere centrale il tema dello sviluppo sostenibile nel dibattito cercando sinergie tra le diverse priorità della sicurezza alimentare, del clima e della sostenibilità (UNGA 2024). In questo senso le azioni della FAO hanno un campo d'azione ampio e capillare. A livello globale e regionale la FAO ha facilitato l'integrazione del cambiamento climatico nelle politiche sulla sicurezza alimentare promuovendo l'interazione e la coerenza tra le convenzioni, i negoziati internazionali, le politiche nazionali, le piattaforme alle quali partecipano ONG, fondazioni, attori privati e le associazioni professionali.

L'adozione del *Koronivia Joint Work on agriculture* durante la Conference of the Parties (COP23) nel 2017 ha rappresentato un punto cruciale per l'agricoltura e per la FAO nel discorso internazionale sul clima, a seguito della decisione del 90 per cento dei Paesi di includere i settori agricoli (colture, allevamento, pesca, acquacoltura e silvicoltura, nei loro *National determined contribution* (NAD) nell'ambito degli *Accordi di Parigi* (FAO 2021).

A livello nazionale la FAO fornisce supporto tecnico per la formulazione e attuazione di programmi nazionali di "adattamento" (NAPAs) e *mitigation* (NAMAs) nonché di strategie nazionali per la riduzione delle emissioni derivanti dalle deforestazioni e dal degrado forestale (REDD+) (FAO 2019; FAO 2022).

Alla COP28 tenutasi lo scorso anno a Dubai, che ha ospitato anche centinaia di eventi collaterali sui sistemi alimentari, l'annuncio della *Dichiarazione degli Emirati Arabi Uniti sull'agricoltura sostenibile, sui sistemi alimentari resilienti e sull'azione per il clima* da parte della presidenza della COP, poi firmata da 159 Paesi, ha rappresentato un ulteriore passo significativo per la trasformazione dei sistemi alimentari (COP28 2023). Contestualmente, la FAO ha presentato una roadmap per raggiungere il Secondo degli obiettivi dello sviluppo sostenibile del millennio (Bauck 2023). L'impegno della FAO è stato ancora più intenso nell'ultimo anno. L'Organizzazione ha lanciato un nuovo sito web (Enhanced Transparecy Framework on Climate Change) per assistere i Paesi nel rendicontare il rispetto degli impegni sottoscritti con gli *Accordi di Parigi*. Un ruolo fondamentale nel migliorare la compliance del Regime sul Cambiamento Climatico in vista della scadenza della prima presentazione dei BTR (*Biennial Transparency Report* 2024). Parallelamente al rafforzamento dei sistemi di trasparenza e monitoraggio la FAO ha continuato a supportare praticamente i Paesi nell'attuazione dei loro impegni in materia di clima, lavorando per mettere a punto strategie di resilienza dei sistemi alimentari e riduzione delle emissioni di gas serra che, al contempo, garantiscano la sicurezza alimentare delle generazioni presenti e future. Un'assistenza che ha incorporato anche l'appoggio nell'accesso ai finanziamenti, anche mediante la promozione di partenariati strategici, e la diffusione di know-how, buone pratiche e tecnologie innovative. In questa compagine si inserisce la promozione della Baku Harmoniya Climate initiative, ideata per gli agricoltori e che è stata lanciata durante uno dei *side event* dell'ultima COP29, organizzata appunto dalla FAO con il supporto di Banca Mondiale, dell'Azerbaijan, dell'Italia e degli Emirati Arabi Uniti ed è già presentata all'Assemblea Generale delle Nazioni Unite lo scorso settembre (UNGA 2024)[18].

## *Considerazioni e conclusioni*

Sono 150 tra Premi Nobel e altri vincitori del prestigioso World Food Prize ad aver inaugurato il 2025 con un appello senza precedenti a sostegno della causa della fame nel mondo: in assenza di una rapida e sostanziale mobilitazione di risorse politiche, finanziarie e tecnologiche, l'umanità è destinata a precipitare in una spirale di insicurezza alimentare e conflitto[19].

Il Regime per la Sicurezza Alimentare, evoluto in un complesso eterogeneo di istituzioni e norme, resta il cuore pulsante della risposta multilaterale al problema della fame nel mondo.

Tuttavia la complessità di attori, obiettivi, codici di condotta, e priorità strategiche che lo caratterizza rappresenta tanto un'opportunità quanto una sfida operativa per le istituzioni che vi partecipano.

In questo senso, la FAO, come organizzazione focale del Regime, ha un ruolo cruciale. Fin dagli anni Sessanta l'Organizzazione ha valorizzato la propria autorità e legittimità per salvaguardare la coerenza del

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[18] Per approfondire, UN R*ome-based* A*gencies and* COP P*residencies mobilise for climate action and finance in fragile contexts ahead of* COP29, https://www.fao.org/climate-change/fao-at-cop-29/fao-at-cop29-news/en e https://www.wfp.org/news/un-rome-based-agencies-and-cop-presidencies-mobilise-climate-action-and-finance-fragile.

[19] Il testo completo della petizione è disponibile alla pagina https://www.worldfoodprize.org/index.cfm?nodeID=96854&audienceID=1.

Regime e "orchestrarne" le priorità rispetto all'obiettivo di porre fine alla fame nel mondo. Una missione che ancora oggi continua a plasmare la "cultura organizzativa" dell'Agenzia, la sua identità e i valori professionali del suo personale (Christoffersen *et al.* 2008).

Parallelamente alle sue attività di negoziazione interstatale, sensibilizzazione, distribuzione di dati e produzione di informazione qualificata, la FAO ha infatti continuato a insistere sulla promozione della cooperazione interistituzionale mediante la cosponsorizzazione di campagne internazionali, il coordinamento di progetti trasversali, la collaborazione tecnica, e la coproduzione di una conoscenza condivisa. Mantenere aperto il dialogo tra le diverse anime del Regime ha consentito, per esempio, il raggiungimento della "definizione di consenso" di sicurezza alimentare formalizzata nel 1996 durante il secondo Vertice Mondiale sulla Sicurezza Alimentare.

Con rispetto alle agenzie più affini per mandato e valori, l'Agenzia ha protetto la propria posizione focale tramite una chiara divisione dei ruoli (differenziazione funzionale) e l'impiego di meccanismi di organizzazione strategica e complementarità (come per il Cluster di Roma).

Nei rapporti con le istituzioni focali di regimi diversi ma sovrapposti, quali quello commerciale e dei diritti umani, specialmente a partire dagli anni Ottanta, la FAO ha prediletto strategie indipendenti di mediazione e "intervento" allo scopo di mitigare conflitti e valorizzare opportune sinergie (esemplare il caso dell'OHCHR).

Un tale equilibrio ha consentito di portare aventi le istanze della sicurezza alimentare anche in quei momenti critici nei quali le decisioni adottate nell'ambito di altri regimi avrebbero avuto conseguenze catastrofiche per "gli affamati" nel mondo, come nel caso delle discussioni sui meccanismi di salvaguardia o degli aiuti *in kind* a Doha, pur senza risolvere in via definitiva la tensione tra le necessità di liberalizzazione del mercato agricolo e l'obiettivo assistenziale e di sviluppo sostenibile delle Nazioni Unite (Delaville 2023).

Dopo la crisi del 2008, il rinnovato interesse per il sistema di governance della sicurezza alimentare ha prodotto una nuova mobilizzazione di fondi e una seconda "ondata" di moltiplicazione istituzionale. Tale proliferazione ha manifestato due caratteri relativamente originali. Una membership più variegata, la quale ha visto la partecipazione di attori non convenzionali (network informali, il settore privato, la finanza, ecc.), cosa che ha qualificato il Regime come Complesso Istituzionale Ibrido.

E l'intersezione con una nuova area tematica delle Relazioni internazionali, il cambiamento climatico.

Con riferimento al primo punto, l'analisi ha messo in luce come il tema del coordinamento sia rimasto cruciale.

Nonostante l'eterogeneità delle componenti individuali del regime sia di per sé un elemento ordinativo, si è comunque osservata la costituzione di organi (o la riconfigurazione di quelli esistenti) esattamente allo scopo di garantire l'armonizzazione delle politiche e degli interventi per la sicurezza sanitaria globale (è il caso dell'HLTF, del Comitato per la Sicurezza Alimentare, e della FAC).

Più profonde e irriducibili restano le rivalità che hanno visto il coinvolgimento dell'Organizzazione Mondiale del Commercio e l'Alto Commissariato per i Diritti Umani per la spiccata priorità rispettivamente assegnata alla liberalizzazione del settore agricolo l'una e alla tutela dei diritti umani l'altra. Infatti, anche le iniziative più virtuose, perché aderenti ai cinque principi di Roma per la sicurezza alimentare sostenibile e allineate con i principi della D*ichiarazione di* P*arigi* sull'efficacia degli aiuti, non sono state esenti da critiche per l'impostazione liberista e i deboli sistemi di monitoraggio (La Chimia 2016, 131-132).

Nell'ambito dell'interazione con il Regime associato al Cambiamento Climatico, quello della Sicurezza Alimentare ha visto, di nuovo, nella FAO l'interlocutore di elezione, dato che proprio dal suo Segretariato sono stati prodotti i documenti programmatici più numerosi e significativi. Superate le timidezze degli anni Settanta e Ottanta ed entrata in vigore la Convezione quadro sui cambiamenti climatici (UNFCCC), la FAO ha definito chiaramente il perimetro e i connotati della partecipazione dell'Agenzia all'obiettivo della riduzione delle emissioni (*mitigation*) e a quello della resilienza dei sistemi alimentari (*adaptation*). Soprattutto, la FAO non ha mancato di esprimere le necessità e le priorità della sicurezza alimentare nel confronto con quelle del cambiamento climatico, come in passato aveva fatto in rapporto a quelle della liberalizzazione commerciale. In tal senso ha utilizzato i classici strumenti di cooperazione interistituzionale e *intervento*, in sinergia con le istituzioni della controparte (come nel caso dell'UNEP e delle COP) oltre al supporto tecnico nell'ambito dei principali negoziati sul clima, come nel caso del CCK-Hub.

Non solo, la FAO si è resa protagonista di interessanti e nuove strategie di ingerenza non ancora tematizzate organicamente nella letteratura sui meccanismi di *intervento* interistituzionale.

Un esempio è stato il *supporto all'implementazione* delle disposizioni del Regime sul Cambiamento Climatico attraverso meccanismi di *assistenza alla compliance* quali i NAPAs, i NAMAs, e i REDD+ e gli Enhanced transparency Framework on Climate change.

La partecipazione della FAO alla COP29 ha confermato le aspettative circa la centralità dell'Organizzazione nel testimoniare il ruolo indispensabile dei sistemi alimentari, e in particolare di quelli agricoli, nella lotta contro il cambiamento climatico, ma anche nel tutelare gli interessi della sicurezza alimentare dei segmenti più fragili della popolazione tramite un incremento della quantità e della qualità dei finanziamenti, il potenziamento e la valorizzazione delle soluzione tecnologiche, e il consolidamento e l'ampliamento delle partnerships interorganizzative[20].

Il ruolo dell'Organizzazione nel rappresentare gli interessi delle popolazioni più vulnerabili rimane quello più importante per sviluppare efficienti sinergie tra sicurezza alimentare e azione climatica, ma anche quello più difficile da perseguire in considerazione dell'alto grado di volatilità intra- e interistituzionale che qualifica il momento presente.

## *Bibliografia*

Abbott K.W., Faude B. (2022), "Hybrid Institutional Complexes in global governance", *The Review of International Organizations*, vol. 17, n. 2, pp. 263-291.

Alter K.J., Meunier S. (2009), "The politics of International Regime Complexity", *Perspectives on Politics*, vol. 7, n. 1, pp.13-24.

Alter K.J., Raustiala K. (2018), "The rise of International Regime Complexity", *Annual Review of Law and Social Science*, vol. 14, n. 1, pp. 329-349.

Barling D., Duncan J. (2015), "The dynamics of the contemporary governance of the world's food supply and the challenges of policy redirection", *Food Security*, vol. 7, n. 2, pp. 1-13.

Bates R., Greif A., Levi M., Rosenthal J.L., Weingast B. (1998), *Analytic Narratives*, Princeton, Princeton University Press.

[20] https://www.fao.org/climate-change/fao-at-cop29.

Bauck W. (2023), "Food is finally on the table: Cop28 addressed agriculture in a real way", *The Guardian*, 17 dicembre 2023, sez. Environment, https://www.theguardian.com/environment/2023/dec/17/cop28-sustainable-agriculture-food-greenhouse-gases [ultimo accesso 19 gennaio 2025].

Betts A. (2013), "Regime complexity and International Organizations: UNHCR as a challenged institution", *Global Governance*, vol. 19, n. 1, pp. 69-81.

Biermann R., Koops J.A. (2017), "Studying relations among International Organizations in world politics: Core concepts and challenges", in J.A. Koops, R. Biermann (a cura di),*Palgrave Handbook of Inter-Organizational Relations in World Politics*, London, Palgrave Macmillan, pp. 1-46.

Büthe T. (2002), "Taking temporality seriously: Modeling history and the use of narratives as evidence", *American Political Science Review*, vol. 96, n. 3, pp.481-493.

Christoffersen L.E., Bezanson K., Lele K., Davies M., Pérez del Castillo C., Awori T. (2008), *The Challenge of Renewal: An Independent External Evaluation of the Food and Agriculture Organization*, Roma, FAO.

Clapp J., Murphy S. (2013), "The G20 and food security: a mismatch in global governance?", *Global Policy*, vol. 4, n. 2, pp.129-138.

Cohen J.C., Clapp J. (2009), *The Global Food Crisis*, Wilfrid Laurier University Press.

Crippa M., Solazzo E., Guizzardi D., Monforti-Ferrario F., Tubiello F.N., Leip A. (2021), "Food systems are responsible for a third of global anthropogenic GHG emissions", *Nature Food*, vol. 2, n. 3, pp. 198-209.

Cullather N. (2004), "Miracles of modernization: The Green Revolution and the apotheosis of technology", *Diplomatic History*, vol. 28, n. 2, pp.227-254.

Davies M.D.V. (2013), "Saouma, Edouard Victor", in B. Reinalda, K.J. Kille, J. Eisenberg (a cura di), IO BIO: *Biographical Dictionary of Secretaries-General of International Organizations*.

Delaville C. (2023), "A Regime complex for food assistance: International law regulating international food assistance", *Journal of International Trade Law and Policy*, vol. 22, n. 3, pp.167-191.

Drezner D.W. (2009), "The power and peril of International Regime Complexity", *Perspectives on Politics*, vol. 7, n. 1, pp. 65-70.

Faude B. (2020), "International Institutions in hard times: How institutional complexity increases resilience", *Complexity, Governance & Networks*, vol. 6, n. 1, pp. 46-54.

Gaer F.D., Broecker C.L. (2013), *The United Nations High Commissioner for Human Rights: Conscience for the World*, Leiden-Boston, Martinus Nijhoff.

Gehring T., Faude B. (2014), "A theory of emerging order within institutional complexes: How competition among regulatory international institutions leads to institutional adaptation and division of labor", *The Review of International Organizations*, vol. 9, n. 4, pp.471-498.

Godfray C., Reddington J.R., Crute I.R, Haddad L., Lawrence D., Muir J.F., Pretty J., Robinson S., Thomas S., Toulmin C. (2010), "Food security: The challenge of feeding 9 billion people", *Science*, vol. 327, pp. 812-818.

Gómez-Mera L. (2020), "International Regime Complexity", SSRN Scholarly Paper Rochester, NY.

Graddy-Lovelace G., Brock S., Bhamini J. (2024), "Agrarianizing climate accords & discord: Food, agriculture & agrarian movements at UNFCCC Conference of The Parties", *Climate and Development*, vol. 10, n. 24, pp. 892-906.

Heucher A. (2019), "Position in the organizational field matters: Analyzing International Organizations' perceptions and responses in global food security governance", JIOS, vol. 10, n. 1.

Hopkins R.F., Puchala D.J. (1978), "Perspectives on the international relations of food", *International Organization*, vol. 32, n. 3, pp. 581-616.

Kranke M. (2022), "Exclusive expertise: The boundary work of International Organizations", *Review of International Political Economy*, vol. 29, n. 2, pp. 453-476.

Kreuder-Sonnen C. (2019), "International authority and the emergency problematique: IO empowerment through crises", *International Theory*, vol. 11, n. 2, pp. 182-210.

Kreuder-Sonnen C., Zürn M. (2020), "After fragmentation: Norm collisions, interface conflicts, and conflict management", *Global Constitutionalism*, vol. 9, n. 2, pp. 241-267.

La Chimia A. (2016), "Food security and the right to food: Finding balance in the 212 Food Assistance Convention", *International & Comparative Law Quarterly*, vol. 65, n. 1, pp. 99-137.

Lipson M. (2017), "Organization theory and cooperation and conflict among International Organizations", in J.A. Koops, R. Biermann (a cura di), *Palgrave Handbook of Inter-organizational Relations in World Politics*, London, Palgrave Macmillan, UK.

Margulis M.E. (2021), "Intervention by International Organizations in regime complexes", *The Review of International Organizations*, vol. 16, pp. 871-902.

– (2016/2017), "The global governance of food security", in J. Koops, R. Biermann (a cura di), *Handbook of Inter-Organizational Relations*, London, Palgrave MacMillan.

– (2013) "Food security: Implications for the global hunger challenge", *Global Governance*, vol. 19, n. 1, pp. 53-67.

Maxwell D., Parker J (2012), "Coordination in food security crises: A stakeholder analysis of the challenges facing the global food security cluster", *Food Security*, vol. 4, n. 1, pp. 25-40.

Morse J.C., Keohane R.O. (2014), "Contested multilateralism", *The Review of International Organizations*, vol. 9, n. 4, pp.385-412.

Murphy H., Kellow A. (2013), "Forum shopping in global governance: Understanding states, business and NGOs in multiple arenas», *Global Policy*, vol. 4, n. 2, pp.139-149.

Orford, A. (2015), "Food security, free trade, and the battle for the state", *Journal of International Law and International Relations*, vol. 11, n. 2, pp. 155-180.

Raustiala K., Victor D.G. (2004), "The regime complex for plant genetic resources", *International Organization*, vol. 58, n. 2, pp. 277-309.

Riley B. (2017), *The Political History of American Food Aid: An Uneasy Benevolence*, Oxford - New York, Oxford University Press.

Saab A. (2018), "An international law approach to food regime theory", *Leiden Journal of International Law*, vol. 31, n. 2, pp.251-265.

Shaw D.J. (2007), "FAO's Origins", in D. John Shaw (a cura di), *World Food Security: A History since 1945*, London, Palgrave Macmillan, pp. 3-11.

– (2001), *The UN World Food Programme and the Development of Food Aid*, Springer Nature, Palgrave Macmillan, UK.

Shaw D.J., Clay J.E. (1998), "Global hunger and food security after the World Food Summit", *Canadian Journal of Development Studies / Revue canadienne d'etudes du developpement*, vol. 19, n. 4, pp. 55-76.

Weiss T.G., Jordan R.S. (1976), "Bureaucratic politics and the World Food Conference: The international policy process", *World Politics*, vol. 28, n. 3, pp. 422-439.

World Bank Group (2023), *Protecting and Strengthening Human Capital Amidst a Global Food and Nutrition Crisis*, https://thedocs.worldbank.org/en/doc/4b153adb216c13de566b4ea51c76f04c-0140062023/original/HCP-Policy-Brief-2023-V3-WEB.pdf.

Ziegler J., Golay C., Mahon C., Way S. (2011), *The Fight for the Right to Food: Lessons Learned*, New York, Palgrave Macmillan.

COP28 (2023), *Declaration on Food and Agriculture*, UAE Consensus, https://www.cop28.com/en/food-and-agriculture.

COP29 (2024), *In Solidarity for a Green World*, https://cop29.az/en/home

FAO (2023), 2022–2025 FAO *Action Plan for the Implementation of the Fao Strategy on Climate Change*, Roma.

– (2022), *Thinking about the Future of Food Safety. A Foresight Report*, Roma.

– (2021), *Understanding The Future of Koronivia Joint Work on Agriculture*, Roma, https://openknowledge.fao.org/server/api/core/bitstreams/26717f2d-3504-40ea-804b-64ee413f7729/content.

– (2019), *FAO's Work on Climate Change*, United Nations Climate Change Conference 2019, Roma.

– (2015), *Climate Change and Food Security: Risks and Responses*, Roma.

– (2009a), *FAO Profile for Climate Change*, Roma.

– (2009b), *Food and Agriculture Organization of the United Nations*, Roma.

– (2009c), *The State of Food and Agriculture*, Roma, https://www.fao.org/4/i0680e/i0680e00.htm.

– (2008)a, *Climate Change: Implications for Food Safety*, Roma.

– (2008)b, *Declaration of the High-Level Conference on World Food Security: the Challenges of Climate Change and Bioenergy*, 5 giugno 2008, Roma, https://www.fao.org/fileadmin/user_upload/foodclimate/HLCdocs/declaration-E.pdf.

– (2001), *Working Together*, Roma, https://openknowledge.fao.org/server/api/core/bitstreams/d2ffe861-9deb-4683-a20a-cb8942594d75/content.

– (1996), *World Food Summit Report*, Roma, https://digitallibrary.un.org/record/246386?ln=en.

FAO, WFP (2022), *Hunger Hotspots*, https://docs.wfp.org/api/documents/WFP-0000142656/download/.

OCHCR (2003), *Human Rights, Trade and Investment: Report of the High Commissioner for Human Rights*, https://digitallibrary.un.org/record/500177?ln=en&v=pdf.

UNFCCC (2022), *Joint Work on Implementation of Climate Action on Agriculture and Food Security*, FCCC/CP/2022/L.4, 18 novembre 2022, https://unfccc.int/sites/default/files/resource/cp2022_L04E.pdf.

UNGA (2024), *FAO Chief Emphasizes the Centrality of Climate Solutions for Agrifood Systems Transformation*, https://www.fao.org/newsroom/detail/unga79--fao-chief-emphasizes-the-centrality-of-climate-solutions-for-agrifood-systems-transformation/en.

UNSC SC/15589 (2024), *Climate Action Can Help Fight Hunger, Avoid Conflicts, Official Tells Security Council, Urging Greater Investment in Adaptation, Resilience, Clean Energy*, 13 febbraio 2024, https://press.un.org/en/2024/sc15589.doc.htm.

# Food Insecurity in Affluent Societies: A Local Analysis Using the FIES

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*Abstract*. Food insecurity is a global and multifaceted issue, not only confined to low-income countries but also increasingly evident in affluent nations. The Committee on World Food Security (2012) defines it as a condition in which individuals always have consistent access to adequate food, encompassing physical, social, and economic dimensions. Recent data from FAO, IFAD, UNICEF, WFP, and WHO (2024) indicate that approximately 700 million people experienced hunger in 2023, with 30% of the global population facing varying degrees of food insecurity. In Europe, Eurostat (2024) reports that 9.5% of the EU population experienced severe food deprivation in 2023, struggling to afford a protein-rich meal every two days. This prevalence underscores the persistence of food insecurity, even in high-income countries, where factors such as economic downturns, the socio-economic impacts of the COVID-19 pandemic, climate change, and geopolitical instability further exacerbate the issue (Marino 2024). These challenges deepen poverty and social marginalisation, making food insecurity a key indicator of broader societal inequalities (Bernaschi 2020). The pioneering research of Sen (1981) and Dreze and Sen (1990) highlights the significant role of entitlements and socio-economic conditions in either constraining or facilitating access to food. Over time, research has increasingly recognised the need to address not only food availability but also its experiential and emotional dimensions (Radimer *et al*. 1990; HLPE, 2023). In this context, the FAO's Food Insecurity Experience Scale (FIES) has become pivotal in capturing these aspects, offering critical insights into the lived realities of those affected (Cafiero *et al*. 2018). While FIES is generally used at the national level, this article applies it to assess food insecurity at a local level, focusing on the metropolitan city of Rome, Italy, where economic inequalities intersect with social and territorial disparities. The findings reveal significant territorial

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inequalities, with marginalised populations being more vulnerable to food insecurity. These insights highlight the importance of targeted interventions and policies to address local disparities, emphasising the need to integrate experiential measures into food security assessments to foster social equity.

*Keywords*: food insecurity; FIES; experiential measure; agency; local measurement

## 1. *Introduction: The relevance of measuring the underside of food insecurity*

Food insecurity is widely perceived as a challenge primarily affecting low-income countries, often attributed to inadequate food availability. However, it represents a complex and intricate issue. As highlighted by Hendriks (2015), it encompasses a range of experiences, from severe cases like starvation to achieving a complete state of food security. This state is defined as ensuring that *"all people at all times have physical, social, and economic access to food, which is safe and consumed in sufficient quantity and quality to meet their dietary needs and food preferences, and is supported by an environment of adequate sanitation, health services, and care, allowing for a healthy and active life"* (Committee on World Food Security 2012, 8).

According to data released by the Food and Agriculture Organization (FAO) in 2024, approximately 700 million people worldwide experienced hunger in 2023, while 30% of the global population faced some degree of food insecurity (FAO, IFAD, UNICEF, WFP, WHO 2024). Furthermore, in 2021, a staggering 42% of individuals were unable to afford a nutritious diet (FAO, IFAD, UNICEF, WFP, WHO 2023), leading to notable adverse effects on children's health, evident in alarming increases in malnutrition rates, including wasting and overweight (USAID 2022; UNICEF 2020; World Bank 2023).

In 2023, Eurostat reported that 9.5% of the European Union's population, approximately 42.5 million individuals, could not afford a meal containing meat, fish, or a vegetarian equivalent every other day, up from 8.3% in 2022 (Eurostat 2024). This trend underscores escalating challenges in food accessibility across the EU, reflecting broader socio-economic vulnerabilities. In Italy, 8.4% of the population, or about 4.9 million people, experienced material food deprivation in 2023, an increase from 7.5% in 2022, when around 4.4 million individuals faced similar hardships (Eurostat 2024; ActionAid 2023).

These data underscore that food insecurity is not confined to low-income nations but also extends to affluent countries with abundant food supplies. This phenomenon, often referred to as the *food paradox* (Berti *et al.* 2021), illustrates a specific example of the broader concept of *scarcity within abundance* (Campiglio, Rovati 2009). It highlights the paradoxical coexistence of food insecurity – where individuals lack stable access to adequate food – and a persistent food surplus, much of which is wasted despite efforts to redistribute it through solidarity initiatives (Galli *et al.* 2019; Papargyropoulou *et al.* 2018; Caplan 2017; Riches 2018; Barrera, Hertel 2021).

However, this paradox does not exist in isolation but is further exacerbated by broader socio-economic challenges. Economic downturns, the socio-economic repercussions of the COVID-19 pandemic, the escalating threats of climate change, and geopolitical instability collectively contribute to rising poverty, social marginalisation, and food insecurity – even within wealthier societies (Maino *et al.* 2023). Amidst this societal turbulence, food insecurity serves as a stark indicator of deepening inequalities within communities (Bernaschi *et al.* 2023a).

This interplay between socio-economic factors and food insecurity has been extensively explored in economic theory. Groundbreaking studies by Amartya Sen (1981) and Dreze and Sen (1990) shed light on how compromised entitlements hinder individuals from attaining regular and sufficient food access. Subsequent research (HLPE 2023; Swinburn *et al.* 2019; Loopstra *et al.* 2016) supports this notion, indicating that in contexts of socio-economic insecurity, family or personal budgets are strained by essential expenses (such as rent, mortgage, etc.), often resulting in compromises in food expenditure (Dowler, O'Connor 2012; Friel *et al.* 2014; Poppendieck 2014; Purdam *et al.* 2016; Riches 2002).

In response to growing food insecurity, food assistance has emerged as a key mechanism to mitigate its effects, yet it remains an insufficient solution. The rise of food insecurity coincides with an increase in food assistance, reflecting a response to escalating poverty and economic instability (Dickinson 2019; Blake 2019). While food aid has become one of the crucial indicators of the extent of food insecurity (Caraher, Furey 2018), it only scratches the surface of a multidimensional problem that encompasses agency and capabilities (Grimaccia, Naccarato 2018; Bernaschi 2020).

Beyond the material aspects of food insecurity, its experiential and emotional dimensions further underscore the profound impact on individual well-being. The latent dimension of food insecurity encompasses undiscovered facets, entailing the deprivation of substantive freedoms, such as control and autonomy regarding food choices and nutritional capabilities (Bernaschi 2020). As a result, this entails a notable emotional and experiential dimension associated with deprivation and social exclusion, eliciting anxieties and apprehensions regarding self-reliance for both oneself and one's family (Siefert *et al.* 2001; Heflin *et al.* 2005; Tarasuk *et al.* 2019; Eisenberger *et al.* 2003; Palladino *et al.* 2024).

In light of this complexity, measuring food insecurity cannot be limited to its economic and material aspects but must also incorporate approaches that capture its experiential dimension. Within the scope of the multidimensional concept of food insecurity and the different approaches to its evaluation and measurement (Barrett 2010; Fanzo *et al.* 2021), this article aims to investigate the less uncovered dimensions of food insecurity, exploring the contribution of experiential measures, particularly the Food Insecurity Experience Scale (FIES) developed by the FAO, utilised comparatively across more than 150 countries and employed in monitoring Goal 2 of the UN 2030 Agenda (Nord *et al.* 2016; Cafiero *et al.* 2018).

The article introduces two primary aims. Firstly, it aims to measure food insecurity as an experiential phenomenon, moving beyond considerations about food production, economic access, and food prices, to comprehend and capture the experience and ramifications of food insecurity (Saint Ville *et al.* 2019). Since the 1970s, both academic and international agency efforts have focused on measuring and monitoring food insecurity's causes and social determinants. Over time, the need to humanise those experiencing food insecurity has emerged, recognizing their rights beyond charity (De Schutter 2014a). The debate on subjective elements that may contribute to measuring social phenomena highlights their importance in understanding quality of life, encompassing social and psychological well-being (Stiglitz *et al.* 2009; Jones 2017; Pérez-Escamilla, Segall-Corrêa 2008; Gundersen, Ziliak 2015). Countering food insecurity is a restorative act of dignity, enhancing people's agency and capabilities (Bernaschi 2020). Measurement tools like the Food Insecurity Experience Scale (FIES) capture food insecurity through the lived experiences of people, emphasising the crucial link between agency, nutritional outcomes, and social inequalities (Cafiero *et al.* 2024).

Given that large-scale analyses are essential for identifying general trends, applying tools like FIES at the local level enables the detection of territorial inequalities and the identification of populations most vulnerable to food insecurity. Therefore, the second aim of this article is to apply the FIES, typically used by the FAO at the national level for global comparisons, at a local level. While broad-scale analyses of food insecurity can reveal similarities across various contexts (Graham *et al.* 2019; Smith *et al.* 2017), examining food insecurity on a local scale allows for the detection of its intensity and scope within specific areas, highlighting regions and populations most vulnerable to food insecurity.

By considering the local dimension of food insecurity, it becomes possible to examine spatial inequalities within a single country – inequalities intertwined with the food environment that either facilitate or constrain food choices and access to nutritious food (Loopstra, Tarasuk 2012). Using the FIES alongside local-level variables such as access to social services (e.g., transportation and food retail), as well as income and education, allows for the identification of populations most vulnerable to socioeconomic disruptions within the local food system (Grimaccia, Naccarato 2018; Tadesse *et al.* 2020; Cook *et al.* 2006).

These considerations have led to the focus of this research on a local case study: the metropolitan city of Rome, the largest agricultural municipality in Europe. This metropolitan area consists of 121 municipalities, where economic inequalities intersect with social and territorial ones (Celata, Lucciarini 2016; Marino *et al.* 2022; Felici *et al.* 2022). Urbanisation has occurred at varying intensities, creating territorial discrepancies in access to resources and exacerbating inequalities, particularly affecting women and young couples who relocate to the outer and peripheral areas of the city.

The article is structured as follows: Section 2 outlines the evolution of the definition and measurement of food insecurity, with particular emphasis on the experiential dimension and its crucial role in enhancing and expanding individuals' agency. Section 3 presents a local case study, focusing on Rome as the pilot city for the application of the Food Insecurity Experience Scale (FIES). Section 4 discusses the key findings from the FIES implementation in Rome in detail. The concluding Section explores the challenges of measuring food insecurity, the importance of experience-based metrics like FIES, and the need for data-driven policies to address systemic gaps.

## 2. *Changes in the definition and measurement of food insecurity*

Hendriks (2015, 610) argues that the understanding of food insecurity is a cumulative process and that the way in which we define food insecurity has a crucial impact on how it is measured (Candel 2014). Over time, the analysis of food insecurity has evolved significantly, with an increasing awareness of its multifaceted nature (Maxwell *et al.* 1998; Swaminathan 1996; Clapp *et al.* 2022). Early recognition of the importance of food supply, aside from Malthus' seminal work in the late 1700s, can be traced back to the late 1930s. In their 1939 work *Our Food Problem and Its Relation to Our National Defences*, Le Gros Clark and Titmus highlighted the strategic role of food availability and distribution in ensuring national security and stability.

However, explicit reference to the concept of food insecurity only emerged in the early 1940s. At the UN Conference on Food and Agriculture held in 1943, it was stated that "a safe, adequate and appropriate food supply should be a cardinal objective in every country" (UN 1943, 173). Until the 1980s, the prevailing definition of food insecurity emphasised food availability, i.e., agricultural productivity. This led to a focus on measures assessing food availability to meet energy needs, such as food balance sheets (Hendriks 2015; Webb *et al.* 2006; Pinstrup-Andersen 2009; Upton *et al.* 2016).

In the 1980s, Amartya Sen's (1981) work marked a significant turning point, emphasising that access to food – determined by food entitlements – was just as critical as food availability. This shift broadened the focus to include factors such as income, social transfers, pricing policies, market conditions, and coping strategies (Burchi, De Muro 2016, 13). As Hendriks (2015) and others point out, food availability is necessary but insufficient for access, and access is necessary but insufficient for effective food utilisation. Consequently, the 1990s saw an increased emphasis on the preferences and nutritional dimensions of food insecurity, including how the broader food environment shapes life chances (Clay 2003; Barrett 2010; Caballero 2005; Townsend *et al.* 2001; McKinnon *et al.* 2009).

The focus then shifted towards understanding both the internal and external vulnerabilities that shape individuals' ability to secure food. Hart (2009) highlights how socio-economic and environmental factors interact to influence people's food security. Central to this evolving conceptualisation[1] were the studies of Radimer *et al.* (1990), which expanded the definition of food insecurity to include emotional and experiential dimensions. These dimensions encompass not only the absence of diverse and nutritious food but also feelings of fear, anxiety, frustration, alienation, and distress related to a lack of control over one's food supply (Frongillo 2013).

Hendriks (2015) further discusses how the fear of not being able to afford food long-term often signals the onset of food insecurity. This fear is exacerbated by market disruptions and price instability, prompting people to adopt precautionary strategies. As food insecurity deepens, individuals may reduce or skip meals, or opt for cheaper, processed foods (Headey, Alderman 2019). The shift from mild to severe food insecurity illustrates the emotional toll that food insecurity can have on individuals (Ballard *et al.* 2014; Hendriks 2015; Saint Ville *et al.* 2019).

The emotional/experiential dimension thus provides valuable insights into how food insecurity is experienced over time, allowing for a deeper understanding of its intensity, magnitude, and managed processes. Grimaccia and Naccarato (2018) further argue that, when combined with personal, familial, social, and territorial factors, this approach provides a richer understanding of the risks and consequences of food insecurity. This focus on intensity also enables the identification of potential interventions to prevent severe forms of insecurity and vulnerability (Devereux 2009).

## 2.1. Experiential dimension of food Insecurity: Humanising the experience of food insecurity

Since the 1970s, there has been considerable interest in both scholarly literature and the work carried out by international agencies in measuring and monitoring the causes and social determinants of food insecurity (Sassi, 2018). However, as discussed in the previous section, there has

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[1] This stage was also marked by the UN International Conference on Nutrition held in 1992.

also been a growing recognition of the need to give a face and a voice to those experiencing food insecurity. As Fassin (2018) puts it, this perspective emphasises a right beyond any obligation or charitable approach to social inequality.

In this context, the role of subjective elements in measuring food insecurity has been widely debated. These elements, which provide key insights into people's quality of life, extend beyond material well-being to encompass social and psychological factors (Alkire *et al.* 2015; Stiglitz *et al.* 2009; Grimaccia, Naccarato 2018; Fukuda-Parr 2003; Ibrahim and Alkire 2007). As Wilkinson and Pickett (2009) argue, improving people's quality of life is crucial in addressing social inequalities, with food insecurity being a fundamental issue of inequality (Lang, Caraher 1998). In this sense, addressing food insecurity becomes a restorative act of dignity, expanding and enhancing people's agency and capabilities (Cardoso 2002; Coates *et al.* 2006; Pollard, Booth 2019).

Agency, as Clapp *et al.* (2022, 4) highlight, is central to food insecurity, as it concerns both individuals' ability to control their food choices and broader life circumstances. Moreover, it involves the capacity of individuals and communities to have their voices heard and actively participate in the food system (Burchi, De Muro 2016; Drèze, Sen 1990).

Clapp *et al.* (2022) note that there are various important examples of measures aimed at highlighting the relationship between agency and food insecurity. These measures provide valuable insights into the connection between agency and nutritional outcomes, with a particular focus on gender inequalities. Measures such as the Food Insecurity Experience Scale (FIES), which capture the lived experiences of individuals – including feelings of anxiety and instability related to a lack of control over food choices – integrate these subjective elements into the very definition of food insecurity (Coates 2013; Quisumbing *et al.* 2021; Cafiero *et al.* 2018).

### 2.1.1. M*easuring food insecurity using the* FIES *scale*

The measurement of food insecurity remains a debated issue in social research, largely due to the varying definitions and interpretations of the concept among scholars (Barrett 2010). One of the most recent developments in this field defines food insecurity as the limited or uncertain ability to acquire healthy and nutritious food on a regular basis – a condition affecting both individuals and households (FAO, IFAD, UNICEF, WFP, WHO, 2022).

Sometimes the inability to access food has also been referred to as food poverty, although the two terms are not synonymous. Food poverty refers mainly and specifically to the economic constraints that limit individuals' ability to access sufficient and nutritious food, positioning it as a subset of monetary poverty. However, following Sen's capabilities approach, food poverty should perhaps not be viewed solely as a lack of financial resources but as a broader deprivation that restricts people's capabilities to secure adequate nutrition and maintain a healthy life (Drèze, Sen, 2013; Nussbaum 2000; De Schutter 2014b; Dowler 2003).

This consideration leads the way towards considering food insecurity, which is a broader concept that extends beyond financial limitations to include structural, social, and behavioural barriers to food access (Lowe *et al.* 2009; Lytle, Sokol 2017; McCarthy *et al.* 2001). These may include physical inaccessibility (e.g. food deserts), lack of nutritional knowledge, cultural dietary restrictions, psychological stress, or social exclusion (Drèze, Sen 1990; Brady *et al.* 2021; Ver Ploeg 2010). Therefore, while food poverty is directly linked to monetary poverty, food insecurity can exist independently of financial status. Even individuals who are not classified as economically poor may experience food insecurity due to factors such as high living costs, health conditions, or a lack of access to adequate food sources (Stuff *et al.* 2004; Kirkpatrick *et al.* 2010).

This distinction is critical for designing effective policy interventions. Recognising food insecurity as a complex, latent condition – one that is not always directly observable only in terms of material deprivations – highlights the limitations of traditional economic indicators such as monetary poverty, income, expenditure, and food consumption patterns in fully capturing the issue (Jones *et al.* 2013). For a long time, researchers and analysts relied on these indirect measures, leading to challenges in accurately assessing food insecurity.

A major breakthrough in the measurement of food insecurity occurred in the late 1980s, following the pioneering work of Kathy Radimer and colleagues at Cornell University (Radimer *et al.* 1990). Their ethnographic research provided insight into how individuals actually experience difficulties in accessing food. Radimer and her colleagues identified a set of recurring experiences and conditions reported by individuals and suggested that they be used in measuring the severity of food insecurity in a way similar to the way symptoms described by a patient are used in diagnosing an illness and assessing its severity, so that treatment could be best designed. This work laid the foundation for the development of direct measures of the severity of food insecurity, shifting the field away from purely economic indicators towards an experience-based approach.

The next step, achieved through research conducted by the United States Department of Agriculture's Economic Research Service (USDA-ERS) from 1992 onwards, involved processing the response data collected through questionnaires using the Rasch model, an analytical tool specifically developed for measuring latent traits (Rasch 1993). The approach adopted by the USDA-ERS, embodied in the implementation of the *Household Food Security Survey Module* (HFSSM) within a food security supplement of the annual continuous US population survey, has since been extended to other countries worldwide. This began in Latin America (e.g., in Brazil with the *Escala Brasileira de Insegurança Alimentar* - EBIA, and in Mexico with the *Escala Mexicana de Seguridad Alimentaria* - EMSA) and subsequently spread globally (Bickel *et al*. 2000; Pérez-Escamilla, Segall-Corrêa 2008).

In 2012, as part of the Voices of the Hungry project, FAO headquarters in Rome developed the Food Insecurity Experience Scale (FIES) as a complete measurement system, including also a global reference scale, along with the necessary procedures to calibrate the measures obtained in each country, to ensure global comparability of estimates (FAO 2016). To date, the FIES survey module has been translated into more than 200 languages and dialects and applied in almost every country in the world (FAO, IFAD, UNICEF, WFP, WHO 2021). In October 2015, the FIES was adopted as one of the indicators for measuring a specific target related to Goal 2 of the Sustainable Development Goals (SDGs) included in the UN 2030 Agenda (United Nations 2015).

## 3. *Zooming into the case study: territorial inequalities intertwined with food insecurity*

According to the *European Food Security Crisis Preparedness and Response Mechanism* (EFSCM) research, published in 2024, which qualitatively analyses the state of food insecurity in Europe based on inputs from a panel of experts, the disposable income emerges as one of the key determinants of food insecurity. Households at risk of poverty are more than twice as likely to be unable to afford an adequate meal compared to middle-income households (19.7% vs 8.3% in 2022).

Moreover, households with children – especially single-parent households – women, the elderly, and young adults are more at risk of poverty than other household types. In 2022, 12% of elderly households and 15% of single-parent households with average incomes stated that they could not afford an adequate meal every second day; the figures were 20% for all households at risk of poverty, 21% for low-income elderly households, and 23% for low-income single-parent households.

The national structure in Italy essentially mirrors the European one. The latest ActionAid report (2023) adds further dimensions to the issue, showing how material or social food deprivation[2] is more prevalent among those without job stability (economic security), those with low levels of education, those who live in rented accommodation, and people residing in metropolitan areas.

Metropolitan areas present an interesting case study for investigating the issue of food insecurity and its various territorial distributions. This prompted the research to focus on a local case study, namely the metropolitan city of Rome, which is the largest agricultural municipality in Europe. The metropolitan city consists of 121 municipalities, where economic inequalities are intertwined with social and territorial ones (Celata, Lucciarini 2016; Felici *et al.* 2022).

In accordance with the recent publication *Rome at your Fingertips: The 15-Minute City* (2024) by the Department of Roma Capitale for the City of 15 Minutes, there has been a profound demographic and territorial shift since the 1970s. Urbanisation has occurred with varying degrees of intensity, resulting in territorial discrepancies in resource access and subsequent inequalities, particularly impacting women and young couples who relocate to the outer and peripheral areas of the city (Chiaradia *et al.* 2024).

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[2] It is assessed by the inability to enjoy a complete meal with meat, chicken, fish, or a vegetarian alternative at least once every two days, as well as the inability to socialise with friends or relatives for a meal or drink at least once a month.

As highlighted by several studies (Caritas 2022; Lelo *et al.* 2021), residents in wealthier districts exhibit higher levels of education and better health conditions compared to those in poorer districts. This disparity is further evidenced by the distribution of COVID-19 infections, which are more prevalent in the city's most vulnerable areas. Additionally, there are concerning statistics regarding the rise in material deprivation, with 23.6% of Romans living in economically challenging conditions, earning less than €15,000 annually, and 10.3% experiencing severe material deprivation (Caritas 2022).

The increase in material deprivation can also translate into a rise in the demand for food aid. According to the latest 2023 report from the Observatory on Poverty and Food Insecurity in Rome[3], which utilises data from the Fund for European Aid to the Most Deprived (FEAD) to assess food assistance within the Roman territory for the year 2022, there are a total of 451 territorial food assistance organisations in Rome. The distribution of these organisations is uneven, with initiatives primarily concentrated in Municipalities I and VII, while Municipality XI has the fewest territorial assistance organisations.

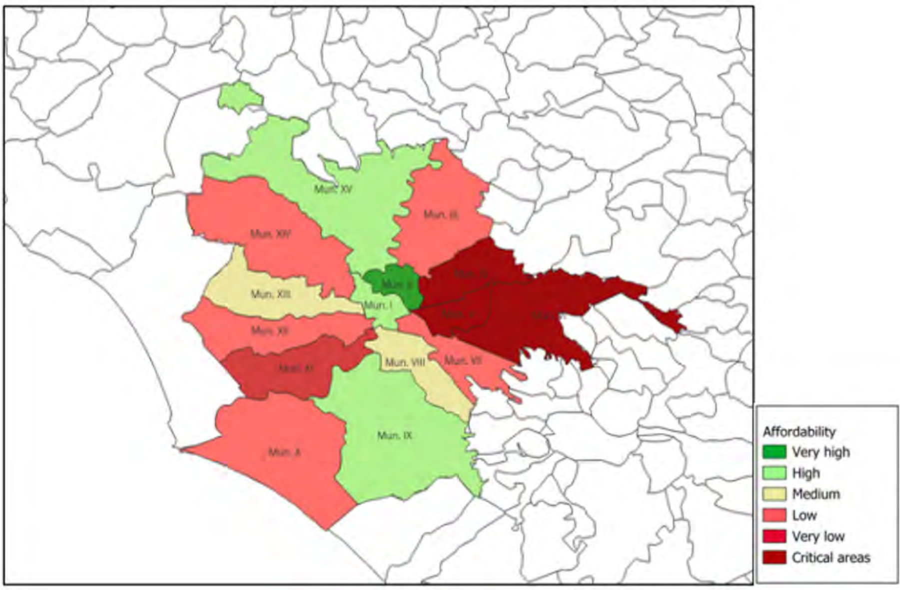
Regarding intervention methods, the majority of food products are distributed through food parcels, with only 3% allocated to solidarity emporiums (i.e., social grocery shops), which aim to promote a new, dignified form of food distribution. Based on FEAD data, a Food Precariousness Index has been calculated to measure the number of interventions by solidarity food assistance organisations relative to the population of each municipality. This index has an average value of 6.16%. This percentage

[3] The Food Affordability Index (FAI) is a new instrument developed by the Observatory to measure the local economic accessibility of healthy diets. Based on CREA's "Healthy Diet Guidelines," the FAI establishes a monthly diet plan for a family of four and carries out pricing surveys across Rome. It assesses the proportion of monthly household spending dedicated to healthy diets relative to overall consumption, and contrasts this with national averages provided by ISTAT. A higher FAI value reflects increased difficulty in accessing sustainable diets. An index value of 1 indicates that no additional adjustments are necessary for maintaining a healthy diet, whereas values above 1 suggest that residents may need to cut back on other expenses to afford a nutritious diet. In contrast, values below 1 denote that a healthy diet can be maintained along with other expenditures without significant compromise.

represents the proportion of residents who rely on food assistance, indicating the level of food insecurity within the municipalities of Rome.

The impact of disposable income on food insecurity is significant, as evidenced by recent research (Bernaschi *et al.* 2023a). These studies highlight critical areas where residents, given their economic resources and the cost of food, struggle to afford a healthy and sustainable diet. As illustrated in Figure 1, only four municipalities demonstrate high affordability, suggesting that in the remaining areas of the city, incomes may be inadequate. This insufficiency compels residents to either reallocate funds from other expenditures or seek substantial increases in income to obtain nutritious and sustainable food.

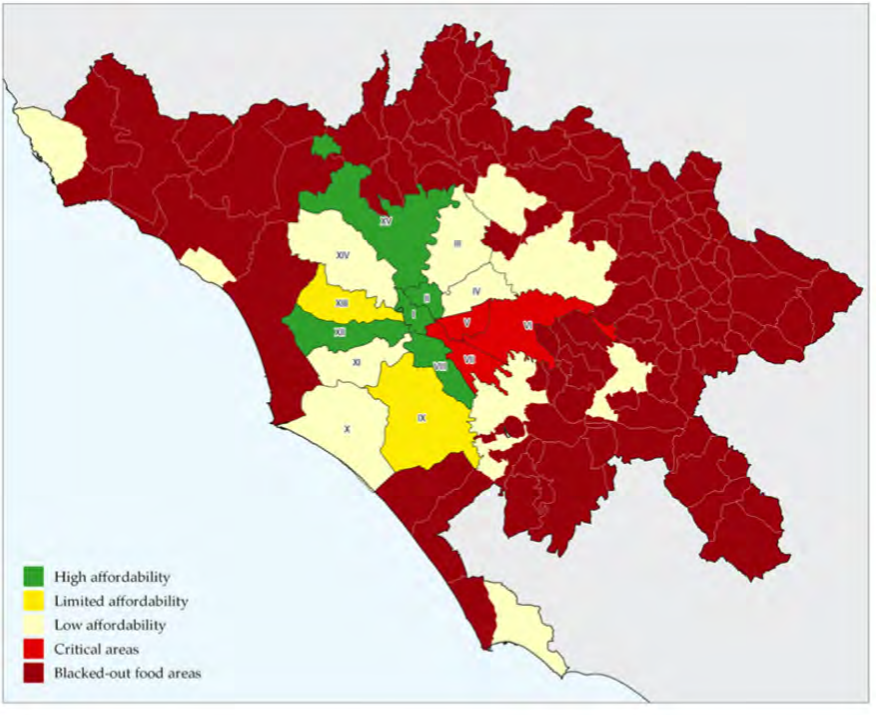
Figure 1 • The affordability of healthy and sustainable diet in Rome




Source: Bernaschi *et al.* (2023a)

Going into more detail, the research identifies specific areas within the metropolitan city of Rome where families not only face insufficient economic resources to access a healthy and sustainable diet but also lack food outlets and solidarity initiatives, such as food aid programs, to address food insecurity. These regions are characterised by a convergence of vulnerabilities – economic, physical, and a lack of community support – resulting in what are termed 'blacked-out food areas' (Bernaschi *et al.* 2023b). These areas (see Fig. 2) are marked by significant social exclusion, where residents experience markedly reduced access to food compared to other parts of the city. Essentially, these 'blacked-out food areas' represent zones where the food system goes into a state of blackout, with multiple vulnerabilities – such as economic, social, and physical fragilities – overlapping, creating territories of social exclusion. In these spaces, the inability to access food is intertwined with broader socio-economic challenges, amplifying inequalities and exacerbating social exclusion.

Figure 2 • The distribution of blacked-out food area in the Metropolitan City of Rome




Source: Bernaschi *et al.* (2023b)

## 4. FIES *in Rome: Approach to data collection and analysis*

### 4.1. Methodology

In this study, a brief questionnaire consisting of the eight questions translated from the standard FIES module used by FAO, was administered to individuals interviewed outside retail outlets in various locations across the metropolitan area of Rome. The aim was to assess the severity of food insecurity as experienced over the preceding 12 months by the people interviewed.

Table 1 • English version of the Food Insecurity Experience Scale

| N. | Short reference | Question wording |
|---|---|---|
| 1 | WORRIED | During the last 12 MONTHS, was there a time when you were worried you would not have enough food to eat because of a lack of money or other resources? |
| 2 | HEALTHY | Still thinking about the last 12 MONTHS, was there a time when you were unable to eat healthy and nutritious food because of a lack of money or other resources? |
| 3 | FEWFOODS | Was there a time when you ate only a few kinds of foods because of a lack of money or other resources? |
| 4 | SKIPPED | Was there a time when you had to skip a meal because there was not enough money or other resources to get food? |
| 5 | ATELESS | Still thinking about the last 12 MONTHS, was there a time when you ate less than you thought you should because of a lack of money or other resources? |
| 6 | RANOUT | Was there a time when your household ran out of food because of a lack of money or other resources? |
| 7 | HUNGRY | Was there a time when you were hungry but did not eat because there was not enough money or other resources for food? |
| 8 | WHOLEDAY | During the last 12 MONTHS, was there a time when you went without eating for a whole day because of a lack of money or other resources? |

Source: Cafiero *et al.* 2018

Respondents were asked to provide simple 'yes' or 'no' responses indicating whether the conditions outlined in the questions, typically associated with limited economic access to food, had occurred during the past year. The data collected in this manner were analysed to derive severity measures following the Rasch model-based analytic approach, which could be compared against the standard reference threshold defined with the global Food Insecurity Experience Scale (FIES), facilitating the estimation of the prevalence of moderate to severe food insecurity within the sampled population.

### 4.2. The main findings

In 2021, a total of 127 questionnaires were collected, followed by 331 in 2022, resulting in 458 cases overall. Among these, 371 responses were obtained from municipalities within Rome, with the remaining 87 coming from suburban municipalities (referred to as the 'belt area'). The sample, primarily acquired by intercepting individuals exiting food establishments, consists predominantly of single individuals (35.4%) and single parents (20.5%), with couples (18%), couples with adult children (15.5%), and couples with minors (10.6%) comprising the rest.

The study focuses on the municipalities under the jurisdiction of the Rome City Council, categorising them into different levels of Human Development Index (low, medium, medium-high, high) according to the classification by Lelo *et al.* (2021).

Table 2 • Distribution of the sample according to the Human Development Index of Municipalities

| Human Development Index | Municipalities | N° interviewees |
|---|---|---|
| High | I; II; XV | 73 |
| Medium-high | XII; VIII; IX | 53 |
| Medium | III; VII; XIV | 103 |
| Low | IV; V; VI; XIII; XI | 142 |

The sample is predominantly drawn from municipalities characterised by a 'low' and 'medium' Human Development Index, with additional representation from 'belt' municipalities, while also displaying a balanced distribution across municipalities with a 'medium-high' and 'high' Human Development Index. Moreover, the research indicates that couples (41.3%) and single individuals (32.1%) predominantly reside in municipalities with a 'medium' Human Development Index, whereas couples with adult children (32%) are more commonly found in municipalities with a 'medium-high' Index. Couples with minor children are concentrated in 'belt' municipalities (47%), while single parents (32.1%) are more likely to reside in municipalities with a 'low' Index.

In our examination, none of the questions posed presented comprehension challenges. Analysis of the consistency in the structure of responses obtained from our sample, in accordance with the Rasch measurement model conditions, indicates a strong fit (with a reliability factor of 75%), ensuring the statistical validity of measures on a one-dimensional scale. Subsequently, the measurements were easily aligned with the global reference scale, yielding a prevalence estimate of 7%

in this sample, which exceeds the FAO-reported figure for the Italian population (5.7% for the 2020-22 period).

Further analysis, while acknowledging the constraints imposed by the limited sample size – which affect both the precision of estimates and the comparability across different samples – reveals a notably higher estimated prevalence in 2021 (8.45%) compared to 2022 (6.45%). Conversely, no significant variance appears between the prevalence rates obtained from data collected within the city and those from surrounding municipalities.

## 5. *Concluding remarks: Measuring the unseen – Food insecurity as an experiential and policy challenge*

Food insecurity is a complex and context-dependent issue, particularly in affluent nations, where it often remains hidden and inadequately measured. Rather than relying on direct, continuous monitoring, proxy indicators such as poverty thresholds, food aid recipient numbers, and welfare entitlements are commonly used. However, as Moragues-Faus *et al.* (2024) argue, the absence of direct measurement allows food insecurity to evade effective control, perpetuating inaction (Varzakas, Smaoui 2024; Caraher *et al.* 2023; Parsons, Hawkes 2019). This lack of direct measurement not only limits our understanding of food insecurity but also raises questions about the effectiveness of existing policy responses.

There is no single, perfect metric for food insecurity. Instead, various measures offer insights into different interconnected aspects of the phenomenon. Recognising food insecurity as a critical element of social welfare allows for a more comprehensive approach, moving beyond reactive policies to address its multidimensional and dynamic nature (Saint Ville *et al.* 2019). By exploring these less visible aspects, we can identify and monitor social vulnerabilities, paving the way for more equitable interventions that aim to reduce societal disparities (Placzek 2021). While these various measures provide valuable insights, they do not fully capture the lived experience of food insecurity, which remains a critical dimension of the issue.

However, capturing the subjective experience of food insecurity presents its own challenges. As Amartya Sen (1999) notes, individuals' adaptive capacities – their ability to adjust to adverse circumstances – can distort measurements of food insecurity that rely solely on subjective perceptions, as these adaptations may lead individuals to underestimate the severity of their situation. Nevertheless, by acknowledging the difficulty of handling these measures, calibrating them to different contexts, and integrating them with other socio-economic indicators, experience-based measures such as the Food Insecurity Experience Scale (FIES) provide valuable insights into perceived vulnerability from a forward-looking perspective. These measures capture the stress, anxiety, and uncertainty individuals face, acting as early indicators of potential long-term issues (Jolliffe *et al.* 2018; Maitra, Rao 2014). Qualitative studies (e.g., Heltberg *et al.* 2012) have shown that food price crises, for example, induce high levels of stress, significantly impacting psychological and physical well-being.

In this paper, which focuses on the local implementation of the FIES, we highlight the importance of considering food insecurity as an experiential construct, and stress the difference between food insecurity and some of its causes – such as monetary poverty – and consequences – such as possible forms of malnutrition. By relying on an experience-based food insecurity scale, we also recognize that, while individuals may appear food secure if assessed simply based on availability, access, and utilisation at a given moment, they may still perceive vulnerability and instability in both the short and long term.

Despite its simple structure, the FIES enables robust quantification of food insecurity severity, thanks to sophisticated analytic protocols. It allows for cross-country and intra-territorial comparisons, offering a flexible framework that can be adapted to specific social and cultural contexts (Cafiero *et al.* 2018; Grimaccia, Naccarato, 2018; Tadesse *et al.* 2020). Despite the availability of tools like the FIES, translating data into effective policy remains a challenge, as seen in the case of Rome.

Data-driven policies are essential for effectively addressing food insecurity. This principle is particularly relevant in the context of the food policy process initiated in Rome in 2018, which sought to develop a strategic approach to food insecurity at the municipal level. However, despite efforts such as the creation of the Rome Food Council and the approval of Delibera dell'Assemblea Capitolina n. 38 in 2021, the lack of a comprehensive municipal food plan prevents a systematic and evidence-based response to food insecurity. The absence of a robust, data-driven framework – like the FIES – hinders the ability to monitor and address food insecurity on a more granular, local scale. The broader Metropolitan Food Strategy, which initially recognised food as a common good, has not yet been fully applied, and the implementation of effective, targeted interventions remains a challenge. While previous analyses described Rome's approach as a "policy without politics" (Mazzocchi, Marino 2020), the current situation could be viewed as "politics without policy," underscoring the gap between the city's food security initiatives and the data-driven approach that the FIES offers to accurately measure and respond to food insecurity.

## *References*

ActionAid (2023), *Frammenti da ricomporre. Numeri, strategie e approcci in cerca di una politica*, https://www.actionaid.it/poverta-alimentare-in-italia/

Alkire S., Roche J. M., Ballon P., Foster J., Santos M.E., Seth S. (2015), *Multidimensional Poverty Measurement and Analysis*, Oxford, Oxford University Press.

Ballard T. J., Kepple A.W., Cafiero C., Schmidhuber J. (2014), "Better measurement of food insecurity in the context of enhancing nutrition", *Ernahrungs Umschau*, vol. 61, n. 2, pp. 38-41.

Barrera E.L., Hertel T.W. (2021), "Global food waste across the income spectrum: Implications for food prices, production and resource use", *Food Policy*, vol. 98, 101874, https://doi.org/10.1016/j.foodpol.2020.101874.

Barrett C.B. (2010), "Measuring food insecurity", *Science*, vol. 327, n. 5967, pp. 825-828.

Bernaschi D. (2020), *Collective Actions of Solidarity Against Food Insecurity*, Wiesbaden, Springer Fachmedien.

Bernaschi D., Marino D., Felici F. (2023a), "Measuring food insecurity: Food Affordability Index as a measure of territorial inequalities", *Italian Review of Agricultural Economics*, vol. 78, n. 3, pp. 79-91.

Bernaschi D., Marino D., Cimini A., Mazzocchi G. (2023b), "The social exclusion perspective of food insecurity: The case of blacked-out food areas", *Sustainability*, vol. 15, n. 4, 2974.

Berti G., Giordano C., Mininni M.V. (2021), "Assessing the transformative potential of food banks: The case study of Magazzini Sociali (Italy)", *Agriculture*, vol. 11, n. 3, 249.

Bickel G., Nord M., Price C., Hamilton W., Cook J. (2000), *Guide to Measuring Household Food Security*, Revised 2000, U.S. Department of Agriculture, Food and Nutrition Service, https://www.fns.usda.gov/guide-measuring-household-food-security-revised-2000.

Blake M.K. (2019), "More than just food: Food insecurity and resilient place making through community self-organising", *Sustainability*, vol. 11, n. 10, 2942.

Brady P.J., Askelson N.M., Ashida S., Nothwehr F., Janssen B., Frisvold D. (2021), "The relationship between political, economic, social, and cultural vulnerability and food insecurity among adults aged 50 years and older", *Nutrients*, vol. 13, n. 11, 3896, https://doi.org/10.3390/nu13113896.

Burchi F., De Muro P. (2016), "From food availability to nutritional capabilities: Advancing food security analysis", *Food policy*, vol. 60, pp. 10-19.

Caballero B. (2005), "A nutrition paradox – underweight and obesity in developing countries", *The New England Journal of Medicine*, vol. 352, n. 15, pp. 1514-1516.

Cafiero C., Gheri F., Viviani S. (2024), "Validating the food insecurity experience scale for use in analyses of recent food insecurity", *Global Food Security*, vol. 42, 100783.

Cafiero C., Viviani S., Nord M. (2018), "Food security measurement in a global context: The food insecurity experience scale", *Measurement*, vol. 116, pp. 146-152, https://doi.org/10.1016/j.measurement.2017.10.065.

Candel J.J. (2014), "Food security governance: A systematic literature review", *Food Security*, vol. 6, pp. 585-601.

Campiglio L., Rovati G. (2009), *La povertà alimentare in Italia: Prima indagine quantitativa e qualitativa*, Milano, Guerini e Associati.

Caplan P. (2017), "Win-win? Food poverty, food aid and food surplus in the UK today", *Anthropology Today*, vol. 33, n. 3, pp. 17-22.

Caraher M., Furey S. (2018), *The Economics of Emergency Food Aid Provision*, Cham, Springer.

Caraher M., Furey S., Wells R. (2023), *Food Policy in the United Kingdom: An Introduction*, London, Routledge.

Cardoso A.C. (2002), "Life chances and modern poverty", *Urban Design International*, vol. 7, pp. 223-236.

Caritas Italiana (2022), *L'anello debole: Rapporto 2022 su povertà ed esclusione sociale in Italia*, Roma, Caritas Italiana.

Celata F., Lucciarini S. (2016), *Atlante delle disuguaglianze a Roma* [*Atlas of Inequalities in Rome*], Camera di Commercio Industria Artigianato e Agricoltura di Roma.

Chiaradia F., Lelo K., Monni S., Tomassi F. (2024), "The 15-Minute City: An attempt to measure proximity to urban services in Rome", *Sustainability*, vol. 16, n. 21, 9432.

Clapp J., Moseley W.G., Burlingame B., Termine P. (2022), "The case for a six-dimensional food security framework", *Food Policy*, vol. 106, 102164.

Clay E.J. (2003), "Responding to change: WFP and the global food aid system", *Development Policy Review*, vol. 21, nn. 5-6, pp. 697-709.

Coates J. (2013), "Build it back better: Deconstructing food security for improved measurement and action", *Global Food Security*, vol. 2, n. 3, pp. 188-194.

Coates J., Frongillo E.A., Rogers B.L., Webb P., Wilde P.E., Houser R. (2006), "Commonalities in the experience of household food insecurity across cultures: what are measures missing?", *The Journal of Nutrition*, vol. 136, n. 5, pp. 1438S-1448S.

Committee on World Food Security (2012), *Coming to terms with terminology: Food security, nutrition security, food security and nutrition, food and nutrition security*, Proceedings of the 39th Session of the Committee on World Food Security.

Cook J.T., Frank D.A., Levenson S.M., Neault N.B., Heeren T.C., Black M.M., Chilton M. (2006), "Child food insecurity increases risks posed by household food insecurity to young children's health", *The Journal of nutrition*, vol. 136, n. 4, pp. 1073-1076.

Devereux S. (2009), "Why does famine persist in Africa?", *Food security*, vol. 1, pp. 25-35.

De Schutter O. (2014a), *Report of the Special Rapporteur on the Right to Food: Final Report: the Transformative Potential of the Right to Food*, United Nations General Assembly.

– (2014b), "The specter of productivism and food democracy", *Wisconsin Law Review*, n. 2, p. 199-233.

Dickinson M. (2019), *Feeding the Crisis: Care and Abandonment in America's Food Safety net*, vol. 71, Berkeley, University of California Press.

Dowler E. (2003), "Food and poverty: Insights from the 'North'", *Development Policy Review*, vol. 21, nn. 5-6, pp. 569-580.

Dowler E.A., O'Connor D. (2012), "Rights-based approaches to addressing food poverty and food insecurity in Ireland and UK", *Social science & medicine*, vol. 74, n. 1, pp. 44-51.

Drèze J., Sen A. (2013), *An Uncertain Glory: India and its Contradictions*, Princeton, Princeton University Press.

– (1990), *Hunger and Public Action*, Oxford, Clarendon Press.

Eisenberger N.I., Lieberman M.D., Williams K.D. (2003), "Does rejection hurt? An fMRI study of social exclusion", *Science*, vol. 302, n. 5643, pp. 290-292.

European Food Security Crisis Preparedness and Response Mechanism (EFSCM) (2024), *State of food security in the EU: A qualitative assessment of food supply and food security in the EU within the framework of the EFSCM*, European Commission, https://agriculture.ec.europa.eu/document/download/a91b3841-6021-489e-b877-7f0f5278c88c_en?filename=efscm-assessment-spring-2024_en.pdf.

Eurostat (2024), *Almost 1 out of 10 in the EU could not afford proper meal*, https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20240712-1.

FAO, IFAD, UNICEF, WFP, WHO (2024), *The state of food security and nutrition in the world 2024: Financing to end hunger, food insecurity and malnutrition in all its forms*, Food and Agriculture Organization, https://doi.org/10.4060/cd1254en.

– (2023), *The State of Food Security and Nutrition in the World 2023*, Food and Agriculture Organization, http://www.fao.org/publications/sofi/2023/en/.

– (2022), The State of Food Security and Nutrition in the World 2022: Repurposing food and agricultural policies to make healthy diets more affordable, Food and Agriculture Organization, https://doi.org/10.4060/cc0639en.

– (2021), *The State of Food Security and Nutrition in the World 2021: Transforming food systems for food security, improved nutrition, and affordable healthy diets for all*, Food and Agriculture Organization, https://doi.org/10.4060/cb4474en.

FAO (2016), *Voices of the Hungry project: Development of the Food Insecurity Experience Scale* (FIES), Food and Agriculture, https://www.fao.org/in-action/voices-of-the-hungry/en/.

Fanzo J., Haddad L., Schneider K.R., Béné C., Covic N.M., Guarin A., Moncayo J.R. (2021), "Rigorous monitoring is necessary to guide food system transformation in the countdown to the 2030 global goals", *Food Policy*, vol. 104, 102163.

Fassin D. (2018), *Ragione umanitaria. Una storia morale del presente*, Roma-Bari, Laterza.

Felici F.B., Bernaschi D., Marino D.L. (2022), *Povertà Alimentare a Roma: Una Prima Analisi Dell'impatto dei Prezzi*, Roma, Cursa.

Friel S., Berry H., Dinh H., O'Brien L., Walls H.L. (2014), "The impact of drought on the association between food security and mental health in a nationally representative Australian sample", BMC *public health*, vol. 14, pp. 1-11.

Frongillo E.A. (2013), "Confronting myths about household food insecurity and excess weight", *Cadernos de saude publica*, vol. 29, pp. 229-230.

Fukuda-Parr S. (2003), "The human development paradigm: operationalizing Sen's ideas on capabilities", *Feminist economics*, vol. 9, nn. 2-3, pp. 301-317.

Galli F., Cavicchi A., Brunori G. (2019), "Food waste reduction and food poverty alleviation: a system dynamics conceptual model", *Agriculture and Human Values*, vol. 36, pp. 289-300.

Graham E., Dallmann D., Melgar-Quiñonez H. (2019), "Gender disparities in perceived life satisfaction within food insecure populations", *Food Security*, vol. 11, pp. 493-502.

Grimaccia E., Naccarato A. (2018), "Food Insecurity Individual Experience: A Comparison of Economic and Social Characteristics of the Most Vulnerable Groups in the World", *Social Indicators Research*, vol. 136, n. 1, pp. 1-19, https://doi.org/10.1007/s11205-016-1534-0.

Gundersen C., Ziliak J.P. (2015), "Food insecurity and health outcomes", *Health affairs*, vol. 34, n. 11, pp. 1830-1839.

Hart T.G. (2009), "Exploring definitions of food insecurity and vulnerability: time to refocus assessments", *Agrekon*, vol. 48, n. 4, pp. 362-383.

Headey D.D., Alderman H.H. (2019), "The relative caloric prices of healthy and unhealthy foods differ systematically across income levels and continents", *The Journal of nutrition*, vol. 149, n. 11, pp. 2020-2033.

Heflin C.M., Siefert K., Williams D.R. (2005), "Food insufficiency and women's mental health: findings from a 3-year panel of welfare recipients", *Social science & medicine*, vol. 61. n. 9, pp. 1971-1982.

Heltberg R., Hossain N., Reva A. (eds) (2012), *Living through Crises: How the Food, Fuel, and Financial Shocks Affect the Poor*, Washington DC, The World Bank, https://doi.org/10.1596/978-0-8213-8830-5.

Hendriks S.L. (2015), "The food security continuum: a novel tool for understanding food insecurity as a range of experiences", *Food Security*, vol. 7, n. 3, pp. 609-619, https://doi.org/10.1007/s12571-015-0457-6.

Committee on World Food Security, High Level Panel of Experts on Food Security and Nutrition (2023), *Reducing inequalities for food security and nutrition*, https://www.fao.org/cfs/cfs-hlpe/insights/news-insights/news-detail/launch-of-the-report-on-reducing-inequalities-for-food-security-and-nutrition-15-june-2023/en.

Ibrahim S., Alkire S. (2007), "Agency and empowerment: A proposal for internationally comparable indicators", *Oxford development studies*, vol. 35, n. 4, pp. 379-403.

Jolliffe D., Krznaric I., Prydz J., Corral P.A. (2018), "Socioeconomic Transformation and Gender Disparities in Child Nutrition: Evidence from Rwanda", The World Bank, https://doi.org/10.1596/1813-9450-8555.

Jones A.D. (2017), "Food insecurity and mental health status: a global analysis of 149 countries", *American journal of preventive medicine*, vol. 53, n. 2, pp. 264-273.

Jones A.D., Ngure F.M., Pelto G., Young S.L. (2013), "What are we assessing when we measure food security? A compendium and review of current metrics", *Advances in nutrition*, vol. 4, n. 5, pp. 481-505.

Kirkpatrick S.I., McIntyre L., Potestio M.L. (2010), "Child hunger and long-term adverse consequences for health", *Archives of pediatrics & adolescent medicine*, vol. 164, n. 8, pp. 754-762.

Lang T., Caraher M. (1998), "Access to healthy foods: part II. Food poverty and shopping deserts: what are the implications for health promotion policy and practice?", *Health Education Journal*, vol. 57, n. 3, pp. 202-211.

Lelo K., Monni S., Tomassi F. (2021), *Le mappe della disuguaglianza: una geografia sociale metropolitana*, Roma, Donzelli.

Le Gros Clark F., Titmus R.M. (1939), *Our Food problem and its relation to our national defences*, *Harmondsworth*, Penguin Books.

Loopstra R., Reeves A., McKee M., Stuckler D. (2016), "Food insecurity and social protection in Europe: quasi-natural experiment of Europe's great recessions 2004-2012", *Preventive medicine*, vol. 89, pp. 44-50.

Loopstra R., Tarasuk V. (2012), "The relationship between food banks and household food insecurity among low-income Toronto families", *Canadian Public Policy*, vol. 38, n. 4, pp. 497-514.

Lowe M.R., Butryn M.L., Didie E.R., Annunziato R.A., Thomas J.G., Crerand C.E., Halford J. (2009), "The Power of Food Scale. A new measure of the psychological influence of the food environment", *Appetite*, vol. 53, n. 1, pp. 114-118.

Lytle L.A., Sokol R.L. (2017), "Measures of the food environment: A systematic review of the field, 2007–2015", *Health and place*, vol. 44, pp. 8-34.

Maino F., Lodi Rizzini C., De Tommaso C.V., Bozzi M. (2023), Il contrasto alla povertà alimentare: un sistema multilivello e multiattore in cerca di coordinamento. In *Frammenti da ricomporre: Numeri, strategie e approcci in cerca di una politica: Quarto rapporto sulla povertà alimentare in Italia*, ActionAid Italia, pp. 56-99.

Maitra C., Rao D.S.P. (2014), "Poverty–Food Security Nexus: Evidence from a Survey of Urban Slum Dwellers in Kolkata", *World Development*, vol. 60, pp. 123-143, https://doi.org/10.1016/j.worlddev.2014.03.009.

Marino D. (2024), *La narrazione delle politiche del cibo in Italia. Città, temi, attori*, Milano, FrancoAngeli.

Marino D., Bernaschi D., Cimini A., D'Amico G., Gallo G., Giovanelli G., Giustozzi D., Kollamparambil A., Lirosi L., Mazzocchi G., Minotti B., Pagano G., Stella G., Tarra S. (ed.) (2022), *Atlante del cibo. Uno strumento per le politiche locali del cibo, Città metropolitana di Roma Capitale*, Roma, Cursa.

Maxwell D., Levin C., Csete J. (1998), "Does urban agriculture help prevent malnutrition? Evidence from Kampala", *Food policy*, vol. 23, n. 5, pp. 411-424.

Mazzocchi G., Marino D. (2020), "Rome, a Policy without Politics: The Participatory Process for a Metropolitan Scale Food Policy", *International Journal of Environmental Research and Public Health*, vol. 17, n. 2, pp. 479-496, https://doi.org/10.3390/ijerph17020479.

McCarthy S.N., Harrington K.E., Kiely M., Flynn A., Robson P.J., Livingstone M.B.E., Gibney M.J. (2001), "Analyses of the anthropometric data from the North/South Ireland food consumption survey", *Public Health Nutrition*, vol. 4, n. 5a, pp. 1099-1106.

McKinnon R.A., Reedy J., Morrissette M.A., Lytle L.A., Yaroch A.L. (2009), "Measures of the food environment: a compilation of the literature, 1990–2007", *American journal of preventive medicine*, vol. 36, n. 4, pp. S124-S133.

Moragues-Faus A., Clark J.K., Battersby J., Davies A.R. (2024), "The potential of urban food governance to transform lives, cities, and the planet", *Global Food Security*, vol. 40, 100751.

Nord M., Cafiero C., Viviani S. (2016), "Methods for estimating comparable prevalence rates of food insecurity experienced by adults in 147 countries and areas", *Journal of Physics: Conference Series*, vol. 772, n. 1, 012060.

Nussbaum M.C. (2000), *Women and human development: The capabilities approach*. Cambidge, Cambridge University Press.

Palladino M., Cafiero C., Sensi R. (2024), "Understanding adolescents' lived experience of food poverty. A multi-method study among food aid recipient families in Italy", *Global Food Security*, vol. 41, 100762.

Papargyropoulou E., Lozano R., Steinberger J.K., Wright N., Ujang Z.B. (2018), "The food waste hierarchy as a framework for the management of food surplus and food waste", *Journal of Cleaner Production*, vol. 76, pp. 106-115, https://doi.org/10.1016/j.jclepro.2014.04.020.

Parsons K., Hawkes C. (2019), *Policy Coherence in Food Systems*, London, Centre for Food Policy, City University.

Pérez-Escamilla R., Segall-Corrêa A.M. (2008), "Food insecurity measurement and indicators", *Revista de Nutrição*, vol. 21, pp. 15s-26s.

Pinstrup-Andersen P. (2009), "Food security: definition and measurement", *Food security*, vol. 1, pp. 5-7.

Placzek O. (2021), "Socio-economic and demographic aspects of food security and nutrition", OECD *Food, Agriculture and Fisheries Papers*, n.150, Paris, OECD, https://doi.org/10.1787/49d7059f-en.

Pollard C.M., Booth S. (2019), "Food insecurity and hunger in rich countries – it is time for action against inequality", *International journal of environmental research and public health*, vol. 16, n. 10, 1804.

Poppendieck J. (2014), "Food assistance, hunger and the end of welfare in the USA", in *First World Hunger Revisited: Food Charity or the Right to Food?*, London, Palgrave Macmillan, pp. 176-190.

Purdam K., Garratt E.A., Esmail A. (2016), "Hungry? Food insecurity, social stigma and embarrassment in the UK, *Sociology*, vol. 50, n. 6, pp. 1072-1088.

Quisumbing A.R., Sproule K., Martinez E.M., Malapit H. (2021), "Do tradeoffs among dimensions of women's empowerment and nutrition outcomes exist? Evidence from six countries in Africa and Asia", *Food Policy*, vol. 100, 102001.

Radimer K.L., Olson C.M., Campbell C.C. (1990), "Development of indicators to assess hunger", *The Journal of Nutrition*, vol. 120, pp. 1544-1548.

Rasch G. (1993), *Probabilistic Models for Some Intelligence and Attainment Tests*, Chicago, MESA Press.

Riches G. (2018), "Food Bank Nations: Poverty, Corporate Charity and the Right to Food", Routledge, https://doi.org/10.4324/9781315184012.

– (2002), "Food banks and food security: welfare reform, human rights and social policy. Lessons from Canada?", *Social Policy & Administration*, vol. 36, n. 6, pp. 648-663.

– Saint Ville A., Po J.Y.T., Sen A., Bui A., Melgar-Quiñonez H. (2019), "Food security and the Food Insecurity Experience Scale (FIES): ensuring progress by 2030", *Food Security*, vol. 11, pp. 483-491.

Sassi M. (2018), *Understanding Food Insecurity*, Springer.

Sen A. 1999. *Development as Freedom*, Oxford University Press.

– (1981), *Poverty and Famines: An Essay on Entitlement and Deprivation*, Oxford, Oxford University Press.

Siefert K., Heflin C.M., Corcoran M.E., Williams D.R. (2001), "Food insufficiency and the physical and mental health of low-income women", *Women & health*, vol. 32, nn. 1-2, pp. 159-177.

Smith M.D., Kassa W., Winters P. (2017), Assessing food insecurity in Latin America and the Caribbean using FAO's food insecurity experience scale", *Food policy*, vol. 71, pp. 48-61.

Stiglitz J.E., Sen A., Fitoussi J.P. (2009), *The Measurement of Economic Performance and Social Progress Revisited*, Paris, Commission on the Measurement of Economic Performance and Social Progress.

Stuff J.E., Casey P.H., Szeto K.L., Gossett J.M., Robbins J.M., Simpson P.M., Bogle M.L. (2004), "Household food insecurity is associated with adult health status", *The Journal of Nutrition*, vol. 134, n. 9, pp. 2330-2335.

Swaminathan M. (1996), "Structural adjustment, food security and system of public distribution of food", *Economic and Political Weekly*, vol. 31, n. 26, pp. 1665-1672.

Swinburn B.A., Kraak V.I., Allender S., Atkins V.J., Baker P.I., Bogard J.R., Dietz W.H. (2019), "The global syndemic of obesity, undernutrition, and climate change: the Lancet Commission report", *The Lancet*, vol. 393, n. 10173, pp. 791-846.

Tadesse G., Algieri B., Qaim M., Von Braun J. (2020), "Drivers and Triggers of International Food Price Spikes and Volatility", *Food Policy*, vol. 47, pp. 117-128, https://doi.org/10.1016/j.foodpol.2020.101854.

Tarasuk V., Li N., Dachner N., Mitchell A. (2019), "Household food insecurity in Ontario during a period of poverty reduction 2005-2014", *Canadian Public Policy*, vol. 45, n. 1, pp. 93-104.

Townsend M.S., Peerson J., Love B., Achterberg C., Murphy S.P. (2001), "Food insecurity is positively related to overweight in women, *The Journal of Nutrition*, vol. 131, n. 6, pp. 1738-1745.

UNICEF (2020), *The State of the World's Children* 2019: *Children, Food and Nutrition: Growing well in a changing world* (UNICEF Report), https://www.unicef.org/media/106506/file/The%20State%20of%20the%20World's%20Children%20 2019.pdf.

United Nations (2015), *Transforming our world: The* 2030 *Agenda for Sustainable Development*, https://www.un.org/sustainabledevelopment/sustainable-consumption-production/.

– (1943), *United Nations Conference on Food and Agriculture: Hot Springs, Virginia, May* 18 *- June* 3, 1943: *Final Act and Section Reports*, Washington D.C., Government Printing Office.

Upton J.B., Cissé J.D., Barrett C.B. (2016), "Food security as resilience: reconciling definition and measurement", *Agricultural Economics*, vol. 47, S1, pp. 135-147.

USAID (2022), 2022 *Global Nutrition Report*, https://www.usaid.gov/global-health/health-areas/nutrition/global-nutrition-report-2022.

Varzakas T., Smaoui S. (2024), "Global food security and sustainability issues: the road to 2030 from nutrition and sustainable healthy diets to food systems change", *Foods*, vol. 13, n. 2, 306.

Ver Ploeg M. (2010), *Access to Affordable, Nutritious Food is Limited in 'Food Deserts'*, Amber Waves, U.S. Department of Agriculture, Economic Research Service, https://www.ers.usda.gov/amber-waves/2010/march/access-to-affordable-nutritious-food-is-limited-in-food-deserts.

Webb P., Coates J., Frongillo E.A., Rogers B.L., Swindale A., Bilinsky P. (2006), "Measuring household food insecurity: why it's so important and yet so difficult to do", *The Journal of Nutrition*, vol. 136, n. 5, pp. 1404S-1408S.

Wilkinson R.G., Pickett K.E. (2009), "Income inequality and social dysfunction", *Annual Review of Sociology*, vol. 35, n. 1, pp. 493-511.

World Bank (2023), *Levels and Trends in Child Malnutrition*: UNICEF/WHO/*The World Bank Joint Child Malnutrition Estimates*, https://datatopics.worldbank.org/child-malnutrition.

# Unveiling Food Deprivation in Italy: Socio-demographic Predictors and Immaterial Effects

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*Abstract*. Despite growing global attention to food poverty and advancements in measurement tools, Italy still lacks a comprehensive system for collecting and monitoring relevant data. This gap limits the ability to accurately assess the extent of food deprivation and evaluate the effectiveness of related policies. The integration of the FAO's Food Insecurity Experience Scale (FIES) into the 2022 EU-SILC survey is a positive step forward, but it provides only a partial view of the issue. To deepen the understanding of the prevalence and dynamics of food poverty in Italy, this study introduces a novel Food Deprivation Index that incorporates both the material and social dimensions of food access. The study aims to estimate the prevalence of food deprivation, analysing its distribution across sociodemographic groups and Italian macro-areas. Additionally, through logistic regression models, the study identifies key sociodemographic determinants of food deprivation and explores its impact on psychosocial well-being, controlling for sociodemographic, economic, and social variables. The findings provide key insights for shaping future social policies that ensure secure access to adequate food, addressing both the material dimension – in terms of quantity, quality, and variety – and the social aspects.

*Keywords*: food poverty, food deprivation, predictors, psychosocial well-being, EU-SILC

## 1. *Introduction*

The Food and Agriculture Organization (FAO) provides the most widely accepted definition of food security: "all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (FAO 2001). Food poverty, or food insecurity, occurs when one or more of these conditions are unmet.

In recent years, particularly in the wake of the pandemic and rising inflation, global attention to food poverty has surged. However, this growing awareness has not been accompanied by systematic efforts to monitor the issue in most countries. While the United States and Canada have been tracking food poverty since 1995 and 2004 respectively, only a few European nations, such as the United Kingdom, Greece, and Portugal, have recently introduced specific measurement tools in national surveys (Carrillo-Álvarez 2023; Beacom *et al.* 2021). The lack of comprehensive data infrastructures limits the ability to accurately gauge the prevalence and severity of food poverty, as well as to assess the effectiveness of policy responses. This problem is linked to a broader failure to fully recognize the right to adequate and sufficient food, as outlined in the Universal Declaration of Human Rights.[1]

The present study serves a dual purpose. First, it develops a novel Food Deprivation Index that captures both the material and social dimensions of the phenomenon. Second, it seeks to advance the understanding of food poverty in Italy by identifying the main drivers of food deprivation and assessing its impact on the psychosocial well-being of the population.

Monitoring food poverty in high-income countries presents unique challenges, due to its multidimensional nature. Food poverty is deeply linked with economic, cultural, social, and psychological factors, which vary across geographic contexts. Additionally, the lack of a consistent definition and the proliferation of measurement tools over the past 50 years has made it even more difficult to quantify the phenomenon (Berry *et al.* 2015).

Historically, food poverty discourse was largely centred on developing countries. However, in the mid-1970s, the issue began gaining traction in high-income nations, with early discussions focusing on food supply and market price instability (FAO 1974). By the 1980s, the emphasis had shifted towards food accessibility, both physical and economic (FAO

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[1] Article 25 of the Universal Declaration of Human Rights adopted by the United Nations General Assembly on December 10, 1948.

1983). Nutritional and cultural considerations were introduced in the 1990s (FAO 1996), with the social dimension formally added in 2001. This marked the development of the current, widely used FAO definition of food security, incorporating physical, social, and economic dimensions. More recently, the High-Level Panel of Experts on Food Security and Nutrition (HLPE-FSN), under the Committee on World Food Security (CFS), has expanded the food security framework to include the dimensions of agency and sustainability (HLPE 2020). These additions reflect the growing recognition of the importance of individuals' and communities' ability to make informed food choices, influence food systems, and ensure that food security is maintained for future generations without compromising economic, social, and environmental sustainability.

This multidimensional framework has significantly influenced the design of measurement tools for detecting food poverty, resulting in the development of various indicators, indices, and scales. These tools generally fall into three main categories: experience-based scales, dietary diversity indicators, and coping strategy indices (Beacom *et al.* 2021). Among the tools in the first category, the Food Insecurity Experience Scale (FIES) is widely used to assess food insecurity. It consists of eight questions that examine behaviours and emotional responses related to difficulties in accessing food due to financial constraints (Ballard *et al.* 2013; Cafiero *et al.* 2018). The inclusion of the FIES scale in the 2022 Italian edition of the European Union Statistics on Income and Living Conditions (EU-SILC) survey marked a significant step forward in the country's efforts to monitor food poverty. Estimates for 2023 reveal that 1.5% of the Italian population experienced moderate or severe food insecurity, a decrease from 2.3% in 2022. However, significant regional disparities persist, with 2.7% of the population affected in the South, compared to 1% in Central Italy and 0.8% in the North (ISTAT 2024). While these findings offer valuable insights into the distribution of food poverty in Italy, they provide only a partial view of the broader issue. Given the multidimensional nature of the phenomenon, a more comprehensive framework is required to fully capture its extent. Such a framework should include indicators that address both the material and social dimensions of food adequacy, such as participation in food-sharing events and awareness of nutritional content.

In this study, the term 'food poverty' will be used, defined as "the inability to acquire or consume an adequate quality or sufficient quantity of food in socially acceptable ways, or the uncertainty that one will be able to do so" (Radimer 1990). The choice to use the term 'poverty' rather than 'insecurity', in line with the British sociological debate, aims to highlight the economic dimension of the issue and to explore its connection with other forms of deprivation that significantly impact access to food. In high-income countries like Italy, where food availability is generally not a major concern, economic factors represent the primary – though not the only – cause of inadequate access to sufficient and appropriate food (O'Connor *et al.* 2016; O'Connell, Brannen 2021). Although economic access is a prevalent dimension, the recognition of the multidimensional nature of food poverty conceptually brings this term closer to that of food security. The difference between the two terms is more historical and socio-economic than conceptual (ActionAid 2023). The notion of "food insecurity" is predominantly used in the United States, where it is measured by the USDA's Household Food Security Survey Module and focuses on economic and physical access to adequate food (Coleman-Jensen *et al.* 2017). The term 'food poverty' made its way in Europe from the beginning of the second decade of the 21st century, following the financial crisis of 2007-2008 and the sovereign debt crisis of 2010-2011. The increase in poverty led to greater food deprivation and a rise in the demand for aid from Food Banks. These phenomena have been seen as closely connected in terms of cause and effect, explaining the success of the term 'poverty' over 'food insecurity' (Caraher, Coveney 2016).

In this regard, numerous studies have identified the primary drivers of food poverty in high-income countries as economic factors, such as income level, employment status, and financial stability. Specifically, low income, precarious employment, and high housing costs significantly increase the risk of food insecurity (Baker *et al.* 2024; Gallegos *et al.* 2023; Coleman-Jensen *et al.* 2017). Furthermore, specific sociodemographic characteristics, including female gender, foreign citizenship, low educational attainment, single-parent households, one-person households, and residence in rural areas, have been found to be consistently associated with an increased risk of food poverty (Gallegos *et al.* 2022; Garratt 2020; Grimaccia, Naccarato 2019).

In terms of consequences, food poverty extends beyond mere nutritional deficiencies, profoundly affecting both psychological and social well-being. Research has shown that individuals experiencing food insecurity are at a higher risk of mental health issues, including depression and anxiety (Leung *et al.* 2022; Frongillo *et al.* 2017). Food plays a crucial role in social contexts, being deeply intertwined with identity and culture, and significantly contributing to relational well-being (Martin *et al.* 2016). The inability to participate in social food-related experiences, such as dining out with friends or celebrating special occasions, can have severe psychological repercussions, exacerbating social isolation caused by material deprivation and increasing psychological distress (Meshkat *et al.* 2024; Hanna *et al.* 2023; Wolfson *et al.* 2021). Recent qualitative research conducted in Italy has highlighted the psycho-emotional dimension of food poverty, emphasizing the importance of food as a social connector, particularly among adolescents (Palladino *et al.* 2024).

Given the absence of specific monitoring for food poverty, most studies estimating its prevalence in Italy have relied on official statistics and data from household expenditure surveys (HBS) conducted by the Italian National Statistics Institute (ISTAT). In some cases, these studies have established regional thresholds for food expenditure, while in others they have analysed the gap between actual expenditure on a healthy diet and the average food expenditure, offering valuable insights into the phenomenon in the country (Benedetti *et al.* 2024; Bernaschi *et al.* 2023; Marchetti, Secondi 2022; Campiglio, Rovati 2009).

In line with these research efforts, the present is based on EU-SILC data collected in Italy in 2022 by ISTAT and combines  the inability to afford adequate food and the exclusion from food-related social activities. The findings are intended to inform the development of more nuanced policies that address both the material and social dimensions of food deprivation.

## 2. M*aterials and methods*

This study is based on data from the EU-SILC survey, specifically from the Italian subset collected in 2022.[2] EU-SILC is a comprehensive European

[2] The analyses were conducted using the Italian microdata from the 2022 EUSILC survey, made freely available by ISTAT. It should be noted that the results and opinions expressed in this work are solely the responsibility of the authors, do not constitute official statistics, and do not and do not in any way implicate ISTAT.

survey coordinated by Eurostat that provides detailed cross-sectional and longitudinal data on various socio-economic indicators, including income distribution, inequality, poverty, material and social deprivation, social exclusion, and quality of life. The harmonised methodology employed by EU-SILC ensures comparability across EU member states, allowing for robust and cross-national analyses.

The Italian segment of the EU-SILC survey focuses on households and their members residing within Italy. The sampling design is a two-stage composite random sampling method, incorporating stratification in the first stage to enhance the representativeness of the sample. This approach allows for accurate cross-sectional estimates, which are representative at the regional level. Data collection is conducted through a combination of Computer-Assisted Personal Interviews (CAPI) and Computer-Assisted Telephone Interviews (CATI).

The survey comprises three main components: a general household questionnaire collecting demographic information about all household members; a family questionnaire that gathers diverse data on the households; and an individual questionnaire completed by all family members aged 16 and over. Annually, the survey samples approximately 40,000 households, encompassing around 80,000 individuals across roughly 900 Italian municipalities. This extensive sample is strategically selected to represent the Italian population accurately. The dataset offers valuable insights into food deprivation and allows for a comparison with other indicators of poverty, deprivation, and social exclusion.

### 2.1. Data analysis

The analysis was carried out using SPSS software (version 28, IBM, Chicago, IL, USA) and was structured in two main stages to thoroughly examine food deprivation in Italy, including its prevalence, predictors, and implications for well-being.

Initially, we created a composite index of food deprivation using two indicators: the inability to have a proper meal at least every second day due to economic reasons, and the inability to meet with relatives or friends for a meal or a drink at least once a month. This index captures both the material and social aspects of food deprivation (for details see the measures paragraph).

Subsequently, a bivariate analysis was conducted to examine the variations in food deprivation in relation to specific socio-demographic variables. To explore the main predictors of food deprivation, we conducted a binary logistic regression analysis. In this model, food deprivation was the dependent variable, and the independent variables included factors such as the ability to make ends meet, poverty indicator, household type, level of urbanisation, tenure status, geographical region, employment status, educational attainment level, citizenship, and age. The selection of these variables was guided by evidence from the literature, which consistently identifies economic factors, such as income and employment status, and sociodemographic characteristics, such as household composition, educational attainment, and citizenship, as key predictors of food poverty in high-income countries (Baker *et al.* 2024; Gallegos *et al.* 2023; Coleman-Jensen *et al.* 2017, Garratt 2020; Grimaccia, Naccarato 2019). These variables capture both structural and individual determinants of food deprivation, aligning with the study's objectives. The final model achieved a Nagelkerke $R^2$ of 0.323, indicating that the model explained 32.3% of the variance in food deprivation.

In the second step, we aimed to investigate how food deprivation affects psychosocial well-being. We first used categorical principal component analysis (CATPCA) to create a composite measure of psychosocial well-being(for details see the measures paragraph). The CATPCA method was chosen for its ability to synthesize categorical and ordinal variables into a single composite measure, making it well-suited for capturing the multifaceted nature of psychosocial well-being.

To assess the impact of food deprivation on poor psychosocial well-being, we employed a binary logistic regression model. The model includes key sociodemographic factors identified in the literature as significant predictors of psychosocial well-being, such as age, citizenship, region of residence, poverty status, difficulty in making ends meet, and educational attainment – that have consistently been associated with mental health outcomes (Ruggeri *et al.* 2020; Pourmotabbed *et al.* 2020). Furthermore, we include other socially oriented factors, such as perceived health, access to help from others, and frequency of getting together with friends, which the literature identifies as crucial determinants of psychosocial well-being (Holt-Lunstad *et al.* 2022; Prince *et al.* 2007). By controlling for both sociodemographic factors and these critical social and health-related predictors, we can more reliably assess the net contribution of food deprivation to psychosocial well-being. The final model achieved a Nagelkerke $R^2$ of 0.202, indicating that the model explained 20.2% of the variance in poor psychosocial well-being. The relatively moderate $R^2$ reflects the multifactorial nature of psychosocial well-being, suggesting that additional unmeasured variables, such as self-esteem, mental distress or broader societal factors, may contribute significantly to the variance of individual psychosocial well-being.

Both regression models were conducted using a stepwise forward Wald method, which involves adding predictors one at a time based on their statistical significance. This approach allows for the most important predictors to be identified while controlling for potential confounders, as less significant variables are excluded from the final model. The models provided an "odds ratio" (OR) for each predictor's effect on the dependent variable, taking into account the simultaneous influence of other predictors (Stoltzfus 2011). Predictors that did not reach statistical significance were systematically excluded during the stepwise process. The confidence level for the odds ratios (Exp(B) values) was set at 95%, meaning that predictors with p-values $\leq 0.05$ were considered statistically significant. This threshold ensures that there is a 95% confidence that the true value of the odds ratio lies within the calculated range, with a 5% or less probability that this result occurred by chance.

## 2.2. Measures

*The Food Deprivation Index*. The index was developed to detect specific aspects of food poverty by integrating both material and social dimensions of deprivation, using two of the 13 indicators from the new Material and Social Deprivation (MSD) EU framework for measuring deprivation (Guio *et al.* 2017).

> Material food deprivation. This indicator is widely used to compare food deprivation among European countries and captures the ability to afford a complete meal – including meat, fish, or an equivalent vegetarian option – at least every two days. This measure is collected at the household level and extended to all members of the household, reflecting the financial constraints that prevent regular access to sufficient and nutritious food. By focusing on dietary adequacy, this indi-

cator highlights the economic barriers to maintaining a balanced and healthy diet.

Social food deprivation. This indicator measures ability to meet with friends or family for a meal or drinks at least once a month. It is collected at the individual level for those aged 16 and older, highlighting how food-related social activities are integral to maintaining social relationships and cultural identity (O'Connell *et al.* 2019). Participating in such social activities is crucial, as the inability to engage in them can intensify feelings of social isolation and exacerbate the effects of material deprivation (Martin *et al.* 2016; Palladino *et al.* 2024).

To construct the Food Deprivation Index, these indicators were combined into a binary format: individuals were assigned a value of 1 if they experienced at least one form of deprivation (material or social), and 0 if they did not experience either. This binary approach enables the index to comprehensively capture both the material and social aspects of food deprivation. It is specifically designed for individuals aged 16 and older, as the social food deprivation indicator was administered to this age group. This binary classification also facilitates the application of binary logistic regression, allowing for a detailed analysis of the predictors of food deprivation and its broader impacts on psychosocial well-being.

P*oor psychosocial well-being*. This index was developed using categorical principal component analysis (CATPCA) to synthesise six key indicators of social and psychosocial well-being. These indicators include life satisfaction, happiness, loneliness, satisfaction with personal relationships, trust in others, and satisfaction with leisure time. These variables were chosen because they represent widely recognized dimensions of psychosocial well-being and are commonly used in studies exploring the intersection of social and mental health (Saeri *et al.* 2018; Holt-Lunstad, Steptoe 2022). The first component identified through CATPCA explained 40.6% of the total variance, capturing the most representative aspects of psychosocial well-being. High scores on this dimension are indicative of higher levels of overall life satisfaction, happiness, and satisfaction with personal relationships, while reflecting lower feelings of loneliness. This component was subsequently divided into quartiles, to identify individuals with varying levels of well-being. The lowest 25% of the distribution was used to classify individuals experiencing poor psychosocial well-being. This binary classification, distinguishing between poor well-being and better well-being, enabled the creation of a dummy variable for use in our logistic regression analysis.

The six indicators included in this composite measure were:

Happiness. Respondents were asked how often they felt happy over the past four weeks, using a five-step scale from "All of the time" to "None of the time". This measure reflects the frequency of positive emotional experiences.

Loneliness. This indicator assessed how often respondents felt lonely in the past four weeks, using a five-step scale from "All of the time" to "None of the time". It captures feelings of isolation and disconnectedness.

Overall life satisfaction. Participants aged 16 and older rated their satisfaction with life on a scale from 0 (not at all satisfied) to 10 (completely satisfied). This indicator evaluates individuals' general contentment with their lives.

Satisfaction with personal relationships. Participants rated their satisfaction with relationships with family, friends, and others on a scale from 0 (not at all satisfied) to 10 (completely satisfied). This measure reflects the quality of social interactions and support.

Trust in others. Respondents rated their general trust in people on a scale from 0 (no trust at all) to 10 (most people can be trusted). This indicator measures perceptions of social trust and moral standards in society.

Satisfaction with leisure time. Participants rated their satisfaction with the amount of time available for enjoyable activities on a scale from 0 (not at all satisfied) to 10 (completely satisfied). This measure assesses how well individuals feel their leisure time meets their needs for personal enjoyment.

## 3. *Results*

Results relating to the prevalence of food deprivation according to the newly proposed index are first presented. The percentages refer to individuals aged 16 and over, as social food deprivation is measured at the individual level for this age group and cannot be generalised to the entire household, unlike material food deprivation, which is assessed at the household level. This will be followed by a bivariate analysis results examining index and indicators distribution across key sociodemographic variables and psychosocial well-being component. Finally, the results of two logistic regression models will be presented to identify predictors and impacts on psychosocial well-being of food deprivation.

### 3.1. Prevalence of food deprivation in Italy

In 2022, 7.5% of the Italian population aged 16 and over reported experiencing material food deprivation, meaning they were unable to afford a meal containing meat, fish, or a vegetarian equivalent every second day. Additionally, 4.8% experienced social food deprivation, being unable to get together with family or friends for a drink or meal at least once a month. When accounting for those experiencing either or both forms of deprivation, the overall incidence of the Food Deprivation Index rises to 10.5%, affecting approximately 5.3 million individuals.

More specifically, around 2.9 million people, or 5.7% of the population, reported experiencing only material food deprivation, while 3% of the population, or about 1.5 million individuals, experienced only social food deprivation. Furthermore, 1.8% of the population – around nine hundred thousand people – suffered from both forms of deprivation simultaneously (Table 1).

Table 1 • Prevalence of food deprivation among people aged 16 and over

| | |
|---|---|
| People experiencing material food deprivation (unable to afford a meal containing meat, fish, or a vegetarian equivalent every second day) | 7.5% |
| People experiencing social food deprivation (unable to afford to get together with family or friends for a drink or meal once a month) | 4.8% |
| People experiencing both forms of food deprivation | 1.8% |
| People experiencing at least one form of food deprivation (Food Deprivation Index) | 10.5% |

### 3.2. Bivariate analysis results

The bivariate analysis revealed notable patterns and differences between the aggregated Food Deprivation Index and its two components – material food deprivation and social food deprivation – across various socio-demographic and geographic variables. As shown in Table 2, While the overall prevalence of food deprivation showed little difference between males and females, with slightly higher rates for females, the disaggregated indicators reveal contrasting trends. Material food deprivation is marginally higher among males, whereas social food deprivation is more prevalent among females. Age also showed minimal variation, with food deprivation incidences ranging from 8.6% among those aged 18-24 years to 12.1% among those aged 35-44 years. Material deprivation follows a similar trend, while social deprivation shows higher prevalence among individuals in their mid-life years, particularly aged 35–44 years.

In contrast, significant disparities were observed based on citizenship status. Foreign nationals, particularly those from non-EU countries, experienced much higher food deprivation compared to Italian citizens and EU citizens. Material food deprivation is particularly pronounced among extra-EU nationals, while social food deprivation is equally high among both EU and extra-EU nationals. A clear inverse relationship is evident between education and food deprivation. Tertiary-educated individuals exhibit the lowest levels of food deprivation across all measures, with social deprivation being virtually absent. Conversely, those with no formal or only early education face significantly higher risks, especially for social deprivation.

The highest incidences of food deprivation were found among the unemployed and those unable to work due to health issues with both material and social dimensions contributing significantly In comparison, employed individuals and students show the lowest levels of deprivation across all dimensions. Household characteristics also revealed significant differences in the distribution of food deprivation (Table 3). Single-parent households and larger families with three or more dependent children are among the most affected. Notably, larger families show significantly higher social deprivation. Furthermore, tenants face more than double the prevalence of food deprivation compared to homeowners. Material deprivation is particularly pronounced among them, but social deprivation also remains significantly elevated.

Since the index specifically addresses both the affordability of food and related social experiences, significant variation in food deprivation was observed based on economic conditions. People living in households with a total income below 60% of the median – considered at risk of poverty according to the Eurostat definition – faced a much higher prevalence of food deprivation  compared to those living in households not considered at risk . Nearly half of individuals in households reporting great difficulty making ends meet experience both material and social deprivation, highlighting the interdependence of economic and social vulnerabilities. Table 4 illustrates notable geographic disparities in food deprivation, with the highest prevalence of food deprivation observed in Southern  and Insular Italy . Material food deprivation drives much of this disparity, but social deprivation is also notably elevated in these regions. In terms of urbanization, the analysis revealed that food deprivation rates were relatively consistent across different types of areas, with cities experiencing slightly higher rates of both material and social deprivation compared to towns and rural areas.

Finally, Table 5 presents the average scores of our CATPCA-derived psychosocial well-being dimension, broken down by material food deprivation, social food deprivation, and the aggregated Food Deprivation Index. In all three cases, individuals classified as deprived register significantly lower mean scores compared to their non-deprived counterparts. Notably, the social dimension shows the largest gap between deprived and non-deprived groups, but this difference remains within a limited range.

Table 2 • Prevalence of food deprivation by sociodemographic individual variables

| *Variable* | *Category* | *Food Deprivation Index* | *Material food deprivation* | *Social food deprivation* |
|---|---|---|---|---|
| Sex | Male | 10.2% | 7.6% | 4.4% |
| | Female | 10.8% | 7.4% | 5.2% |
| Age | 16-24 years | 8.8% | 6.6% | 3.5% |
| | 25-34 years | 10.2% | 8.1% | 4.8% |
| | 35-44 years | 12.1% | 8.3% | 6.4% |
| | 45-54 years | 10.6% | 7.0% | 5.1% |
| | 55-64 years | 10.7% | 7.7% | 4.7% |
| | 65-74 years | 11.0% | 7.4% | 5.4% |
| | 75 and over | 9.5% | 7.2% | 3.6% |
| Citizenship | Italian | 9.6% | 7.0% | 4.2% |
| | Foreign (UE) | 16.5% | 12.5% | 12.3% |
| | Foreign (extra UE) | 23.5% | 14.3% | 12.7% |
| Educational attainment level | Early childhood education | 19.4% | 12.0% | 11.6% |
| | Primary education | 15.1% | 10.2% | 7.3% |
| | Lower secondary education | 14.7% | 10.3% | 7.8% |
| | Upper secondary education | 8.1% | 5.8% | 3.2% |
| | Post-secondary non-tertiary education | 5.7% | 4.9% | 1.1% |
| | Tertiary education | 4.6% | 4.1% | 0.8% |
| Occupational status | Employed | 7.5% | 5.4% | 3.1% |
| | Unemployed | 27.7% | 18.4% | 16.8% |
| | Retired | 8.7% | 6.6% | 3.3% |
| | Unable to work due to long-standing health problems | 26.6% | 18.4% | 14.1% |
| | Student, pupil | 7.3% | 5.3% | 2.7% |
| | Fulfilling domestic tasks | 17.0% | 11.5% | 9.3% |

Table 3 • Prevalence of food deprivation by sociodemographic household variables

| *Variable* | *Category* | *Food Deprivation Index* | *Material food deprivation* | *Social food deprivation* |
|---|---|---|---|---|
| Household type | One person household | 12.3% | 9.5% | 5.1% |
| | 2 adults, no dependent children, both adults under 65 years | 11.5% | 8.1% | 5.9% |
| | 2 adults, no dependent children, at least one adult 65 years or more | 9.1% | 6.0% | 4.6% |
| | Other households without dependent children | 10.3% | 7.2% | 3.9% |
| | Single parent household, one or more dependent children | 13.9% | 10.7% | 6.0% |
| | 2 adults, one dependent child | 9.6% | 6.8% | 5.5% |
| | 2 adults, two dependent children | 7.5% | 5.4% | 3.7% |
| | 2 adults, three or more dependent children | 16.0% | 5.7% | 11.8% |
| Tenure status | Owner | 8.3% | 6.0% | 3.5% |
| | Tenant | 20.2% | 14.3% | 10.9% |
| Risk of poverty | Yes | 24.0% | 15.7% | 13.5% |
| | Not | 7.3% | 5.5% | 2.8% |
| Ability to make ends meet | With great difficulty | 49.1% | 33.2% | 32.2% |
| | With difficulty | 24.9% | 18.2% | 10.1% |
| | With some difficulty | 7.1% | 5.0% | 2.5% |
| | Fairly easily | 1.3% | 1.2% | 0.1% |
| | Easily | 0.6% | 0.5% | 0.1% |
| | Very easily | 0.8% | 0.2% | 0.6% |

Table 4 • Prevalence of food deprivation by geographic variables

| *Variable* | *Category* | *Food Deprivation Index* | *Material food deprivation* | *Social food deprivation* |
|---|---|---|---|---|
| Geographical area | Northwest Italy | 6.9% | 4.4% | 3.0% |
| | Northeast Italy | 5.7% | 3.5% | 2.6% |
| | Central Italy | 10.2% | 8.0% | 3.1% |
| | South Italy | 18.3% | 13.5% | 9.9% |
| | Insular Italy | 12.3% | 8.6% | 5.9% |
| Degree of urbanisation | Cities | 11.3% | 8.6% | 5.4% |
| | Towns and suburbs | 9.9% | 6.7% | 4.6% |
| | Rural areas | 10.5% | 7.3% | 4.2% |

Table 5 • Mean CATPCA scores of psychosocial well-being by food deprivation

| *Dimension* | *Group* | *Psychosocial Well-Being (Mean)* |
|---|---|---|
| Material food deprivation | Not deprived | 0.032 |
| | Deprived | – 0.621 |
| Social food deprivation | Not deprived | 0.022 |
| | Deprived | – 0.785 |
| Food Deprivation Index | Non-deprived | 0.056 |
| | Deprived | – 0.641 |

## 3.3. Results of binomial logistic regression on predictive factors of food deprivation

The results from the logistic regression analysis, with food deprivation as the dependent variable, identify several significant predictors. The model incorporated a range of variables previously examined in bivariate analysis, and sex was ultimately excluded due to its minimal effect, despite being statistically significant, in favour of focusing on more impactful predictors.

Table 6 presents the odds ratios (Exp(B)), significance levels, and confidence intervals for each predictor in the final model. The analysed predictors can be categorized into three main groups: economic, demographic, and geographic factors. Economic factors. Financial hardship emerged as the strongest predictor of food deprivation. Individuals reporting severe difficulty in making ends meet were over 40 times more likely to experience food deprivation compared to those without financial difficulties. Similarly, the poverty indicator – households with incomes below 60% of the national median – was significantly associated with a higher likelihood of food deprivation, nearly doubling the risk. Tenure status emerges as a significant determinant of food deprivation, with tenants facing a risk nearly 40% higher than homeowners. Demographic factors. Educational attainment showed a strong protective effect, with individuals possessing tertiary education exhibiting the lowest risk of food deprivation. Conversely, those with lower secondary education or less faced significantly higher probabilities. Employment status was another critical factor: unemployed individuals and those unable to work due to health issues had more than double the likelihood of food deprivation compared to employed individuals. Single-person households and families with three or more dependent children also demonstrated elevated risks, while single-parent households showed a more moderate increase. Foreign citizenship further compounded vulnerability, with non-EU citizens facing a 40% higher probability of experiencing food deprivation compared to Italian citizens. Age also played a significant role, with individuals aged 35-44 years and 45-54 years experiencing the highest risks. The likelihood of food deprivation decreased among the youngest (16-24 years) and the oldest age groups (75 years and over), indicating that middle-aged adults may face greater economic pressures.

Geographic factors. Marked regional disparities were observed, with individuals residing in Central and Southern Italy displaying the highest prevalence of food deprivation. Residents of the Islands and Northeast also showed elevated risks compared to the Northwest. Regarding urbanization, rural areas and cities exhibited slightly higher risks of food deprivation than towns and suburbs.

Table 6 • Results of the logistic regression model with food deprivation as dependent variable

| *Variable* | *Category* | *Significance* | *Exp*(B) | 95% CI *for* *Exp*(B) |
|---|---|---|---|---|
| Ability to make ends meet | No difficulty | <0.001 | Ref. | - |
| | With great difficulty | <0.001 | 44.488 | 44.265–44.712 |
| | With difficulty | <0.001 | 18.379 | 18.292–18.466 |
| | With some difficulty | <0.001 | 5.115 | 5.092–5.139 |
| Poverty indicator | Not at risk of poverty | <0.001 | Ref. | - |
| | At risk of poverty | <0.001 | 1.729 | 1.725–1.733 |
| Tenure status | Owner | <0.001 | Ref. | - |
| | Tenant | <0.001 | 1.397 | 1.394–1.401 |
| Household type | Couple with one or two children | <0.001 | Ref. | - |
| | Couple without children | <0.001 | 1.300 | 1.296–1.303 |
| | Single-person household | <0.001 | 1.390 | 1.385–1.394 |
| | Single-parent household | <0.001 | 1.238 | 1.231–1.244 |
| | Couple with three or more children | <0.001 | 1.223 | 1.217–1.230 |
| Educational attainment | Tertiary education | <0.001 | Ref. | - |
| | Up to lower secondary education | <0.001 | 1.345 | 1.340–1.350 |
| | Upper secondary education | <0.001 | 1.050 | 1.046–1.054 |
| Main activity status | Employed | <0.001 | Ref. | - |
| | Unemployed | <0.001 | 2.237 | 2.229–2.246 |
| | Retired | <0.001 | 1.343 | 1.337–1.349 |
| | Unable to work due to health issues | <0.001 | 2.233 | 2.220–2.245 |
| | Student, pupil | <0.001 | 1.159 | 1.152–1.166 |
| | Domestic tasks | <0.001 | 1.309 | 1.304–1.313 |

| | | | | |
|---|---|---|---|---|
| Citizenship | Italian | <0.001 | Ref. | - |
| | Foreign (EU) | <0.001 | 1.033 | 1.027–1.039 |
| | Foreign (non-EU) | <0.001 | 1.457 | 1.451–1.462 |
| Age | 16–24 years | <0.001 | Ref. | - |
| | 25–34 years | <0.001 | 1.374 | 1.366–1.382 |
| | 35–44 years | <0.001 | 1.678 | 1.668–1.688 |
| | 45–54 years | <0.001 | 1.460 | 1.452–1.469 |
| | 55–64 years | <0.001 | 1.520 | 1.511–1.529 |
| | 65–74 years | <0.001 | 1.445 | 1.435–1.455 |
| | 75 years and over | <0.001 | 1.091 | 1.083–1.099 |
| Geographical region | Northwest | <0.001 | Ref. | - |
| | South | <0.001 | 1.547 | 1.542–1.551 |
| | Islands | <0.001 | 1.086 | 1.082–1.090 |
| | Northeast | <0.001 | 1.089 | 1.085–1.093 |
| | Central | <0.001 | 1.663 | 1.658–1.669 |
| Degree of urbanisation | Towns and suburbs | <0.001 | Ref. | - |
| | Cities | <0.001 | 1.104 | 1.101–1.106 |
| | Rural areas | <0.001 | 1.265 | 1.262–1.269 |

### 3.4. Results of binomial logistic regression on the impact of food deprivation on psychosocial well-being

Our analysis of the impact of food deprivation on psychosocial well-being highlights several important findings. The logistic regression model included a range of variables, such as socio-demographic characteristics (age, citizenship, region of residence, poverty status, difficulty in making ends meet, educational attainment and employment status), as well as perceived health, access to help from others, and frequency of getting together with friends. The initial model also included gender and physical activity; however, these were subsequently excluded due to their minimal effect sizes. Table 7 presents the odds ratios (Exp(B)), significance levels, and confidence intervals for each significant predictor in the final model. To enhance clarity and readability, after showing the effect of food deprivation and perceived health, the variables are grouped into economic, demographic, and social factors, reflecting their relevance.

Food deprivation emerged as a significant determinant of psychosocial well-being, with those experiencing food deprivation being about 55% more likely to report poor psychosocial outcomes compared to individuals who are not food deprived. Among the predictors, perceived poor health was found to have the strongest impact on psychosocial well-being. Individuals who rated their health as poor were approximately 3 times more likely to experience negative psychosocial conditions, illustrating the profound link between physical health and mental well-being.

Economic factors. Severe financial hardship more than doubles the risk of poor psychosocial well-being. Those with moderate financial difficulties also exhibit significantly increased odds. Similarly, individuals at risk of poverty were about 20% more likely to report poor psychosocial well-being.

Sociodemographic factors. Age appeared to be closely linked to psychosocial well-being, with the likelihood of experiencing poor mental health increasing with age. For instance, individuals aged 75 and over were almost twice as likely to report poor psychosocial outcomes compared to those aged 16-24.Regarding the educational attainment, those with only elementary education were around 40% more likely to report poor psychosocial well-being compared to individuals with tertiary education. Unemployed or economically inactive individuals show significantly higher odds of poor well-being than those who are employed, whereas categories such as retirees, those fulfilling domestic tasks, and other activities show smaller but still significant increases. Notably, students have a lower risk of poor well-being compared to employed individuals, potentially reflecting age-related factors or other mitigating circumstances. Foreign citizenship shows higher odds of poor well-being, potentially due to social isolation and cultural barriers. Regional disparities were also notable, with residents of the northeastern region being 37% more likely to experience poor psychosocial well-being than those in the northwest. People living in the South and on the Islands also showed elevated risks.

Social factors. Individuals who never meet their friends, or did so only once a year, were twice as likely to report poor psychosocial well-being compared to those who met with friends daily. Lastly, the presence of social support networks played a crucial role. Individuals who lacked access to help from friends, relatives, or neighbours were about twice as likely to report poor psychosocial well-being compared to those who could rely on others for support.

Table 7 • Results of the logistic regression model with psychosocial well-being as dependent variable

| *Variable* | *Category* | *Significance* | *Exp*(B) | 95% CI *for* *Exp*(B) |
|---|---|---|---|---|
| Food deprivation | Not deprived (Ref.) | <0.001 | Ref. | - |
| | Deprived | <0.001 | 1.551 | 1.547–1.554 |
| Perceived poor health | No | <0.001 | Ref. | - |
| | Yes | <0.001 | 3.284 | 3.276–3.293 |
| Difficulty in making ends meet | No difficulty (Ref.) | <0.001 | Ref. | - |
| | Great difficulty | <0.001 | 2.506 | 2.499–2.514 |
| | Difficulty | <0.001 | 2.861 | 2.854–2.867 |
| | Some difficulty | <0.001 | 1.713 | 1.710–1.716 |
| Poverty indicator | Not at risk (Ref.) | <0.001 | Ref. | - |
| | At risk of poverty | <0.001 | 1.192 | 1.189–1.194 |
| Age | 16–24 (Ref.) | <0.001 | Ref. | - |
| | 25–34 years | <0.001 | 1.303 | 1.297–1.308 |
| | 35–44 years | <0.001 | 1.227 | 1.222–1.233 |
| | 45–54 years | <0.001 | 1.395 | 1.389–1.401 |
| | 55–64 years | <0.001 | 1.761 | 1.754–1.769 |
| | 65–74 years | <0.001 | 1.750 | 1.742–1.758 |
| | 75+ years | <0.001 | 1.946 | 1.936–1.955 |
| Educational attainment | Tertiary (Ref.) | <0.001 | Ref. | - |
| | Elementary | <0.001 | 1.399 | 1.395–1.402 |
| | Upper Secondary | <0.001 | 1.143 | 1.141–1.146 |
| Employment status | Employed (Ref.) | <0.001 | Ref. | - |
| | Unemployed | <0.001 | 1.659 | 1.654–1.664 |
| | Retired | <0.001 | 1.051 | 1.048–1.054 |
| | Unable to work | <0.001 | 1.858 | 1.849–1.867 |
| | Student | <0.001 | 0.752 | 0.748–0.755 |
| | Domestic tasks | <0.001 | 1.012 | 1.010–1.015 |
| | Other | <0.001 | 1.555 | 1.548–1.562 |

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| | | | | |
|---|---|---|---|---|
| Citizenship | Italian | <0.001 | Ref. | - |
| | Foreign (EU) | <0.001 | 1.288 | 1.282–1.293 |
| | Foreign (non-EU) | <0.001 | 1.211 | 1.207–1.214 |
| Region of residence | Northwest (Ref.) | <0.001 | Ref. | - |
| | South | <0.001 | 1.320 | 1.317–1.322 |
| | Islands | <0.001 | 1.282 | 1.278–1.285 |
| | Centre | <0.001 | 1.205 | 1.203–1.208 |
| | Northeast | <0.001 | 1.377 | 1.374–1.380 |
| Frequency of getting together with friends | Daily (Ref.) | <0.001 | Ref. | - |
| | Every week | <0.001 | 1.345 | 1.342–1.348 |
| | Several times a month | <0.001 | 1.324 | 1.320–1.327 |
| | Several times a year | <0.001 | 1.769 | 1.764–1.775 |
| | Once a year | <0.001 | 2.148 | 2.140–2.156 |
| | Never | <0.001 | 1.982 | 1.975–1.988 |
| Help from others | Has help (Ref.) | <0.001 | Ref. | - |
| | No | <0.001 | 1.825 | 1.822–1.828 |

## 4. *Discussion*

This study provides a novel and comprehensive analysis of food deprivation in Italy by examining its prevalence, identifying key socio-demographic predictors, and exploring its impact on psychosocial well-being. In particular, we introduce a new Food Deprivation Index that captures both material deprivation and social exclusion in food-related activities, offering a more nuanced understanding of food poverty and its patterns in the Italian context. In terms of prevalence, when comparing the Food Deprivation Index with the Food Insecurity Experience Scale (FIES), distinct patterns emerge. While FIES estimates that 2.3% of the Italian population faced moderate or severe food insecurity in 2022, our multidimensional index reveals a much higher incidence, with 10.5% of the population experiencing material or social food deprivation. Despite the fact that a direct comparison of these figures is not possible, as the

FIES results are not available in the microdata file released by ISTAT for 2022, this discrepancy suggests that the two measures capture different aspects of food poverty. FIES focuses on personal food insecurity and the emotional stress related to it, while the Food Deprivation Index reflects both the affordability of a complete meal and participation in food-related social activities. Moreover, results show that material deprivation (7.5%) is more prevalent than social deprivation (4.8%), with a notable proportion of individuals (1.8%) experiencing both dimensions simultaneously. This illustrates the compounding nature of these forms of deprivation. The bivariate analysis suggests that the material dimension is more frequently observed among individuals with characteristics such as poverty risk, specific housing tenure, and certain employment statuses. For example, individuals in households facing great difficulty making ends meet are over five times more likely to be represented among those experiencing material deprivation compared to those in households managing easily. Social food deprivation, while also influenced by economic factors, emerges as a distinct dimension reflecting challenges in maintaining social connections and cultural practices. This form of deprivation is particularly prevalent among foreigners and larger families, indicating that social exclusion may be compounded by cultural and structural barriers. These findings underline the importance of considering social food deprivation, as it reveals vulnerabilities that might otherwise be overlooked by measures focused solely on material deprivation.

These results underscore the intricate relationship between economic, cultural, demographic, and geographic factors in shaping food deprivation. Consistent with existing literature, the findings highlight financial hardship as a pivotal driver of food deprivation, corroborating research across high-income countries that identifies income inequality and economic instability as key contributors to food poverty (Gatton, Gallegos 2023; Beacom *et al.* 2022; O'Connell, Brannen 2021; Loopstra *et al.* 2019; Dowler 2003). In this regard, the multivariate analysis reveals that while the national poverty threshold (income below 60% of the median income) is a significant predictor of food deprivation, a stronger association emerges with the subjective measure of households' perceived ability to make ends meet. In periods of high inflation, such subjective assessments of economic difficulty can become even more pertinent, as standardised national measures often lag in capturing rapid price increases and regional cost-of-living variations. Consequently, individuals in households facing severe financial difficulties are substantially more likely to experience food deprivation, underscoring the importance of integrating subjective poverty assessments with objective income thresholds. Indeed, standardised national measures often fail to account for variations in the cost of living and local food habits, which are deeply rooted in cultural contexts (Biggeri, Pratesi 2017).

Furthermore, other socio-demographic factors significantly shape the risk of food deprivation, revealing the most vulnerable groups. In line with the findings of recent studies on food poverty predictors (Lund *et al.* 2018; Smith *et al.* 2017), our results indicates that single-person households, individuals with lower educational attainment, the unemployed or economically inactive, and non-EU foreign citizens face a heightened risk of food deprivation. Additionally, regional disparities exacerbate these issues, due to entrenched socio-economic inequalities, including lower employment opportunities and weaker social safety nets (Saraceno *et al.* 2022).

In terms of psychosocial well-being, our bivariate results reveal that both the material and social dimensions of food deprivation are associated with lower mean scores. Although the social component shows the largest gap, the differences remain relatively modest, suggesting a nuanced impact of food-related deprivation on well-being. To capture the combined effects of material and social deprivation, we opted to use the aggregated index as a unified measure in the second logistic regression model. This approach provides a more holistic perspective on food deprivation and its implications, allowing us to account for the interplay between these dimensions within a single framework. The results confirm that individuals classified as food-deprived are approximately 55% more likely to report poor psychosocial well-being compared to those who can afford a proper meal every second day and participate in food-related social occasions. This finding is consistent with existing literature, which highlights a strong association between food insecurity and negative mental health outcomes, such as increased stress, anxiety, and depression (Bergmans *et al.* 2019; Tevie, Shaya 2018; Tarasuk *et al.* 2018; Gundersen, Ziliak 2015; Weaver, Hadley 2009). Among the other variables in the model, perceived health emerges as a major predictor of psychosocial well-being. Individuals who report poor physical health are approximately 3 times more likely to experience poor psychosocial well-being, reinforcing the bidirectional relationship between physical and mental health (Fiorillo *et al.* 2023; Butcher *et al.* 2018; Prince *et al.* 2007). As several studies have highlighted, social connectedness is a key protective factor against poor mental health (Holt-Lunstad *et al.* 2022; Saeri *et al.* 2018). In our study, individuals who never meet their friends or lack access to support from family, friends, or neighbours report significantly worse psychosocial outcomes. By incorporating these additional variables that influence psychosocial well-being, the robustness of the observed impact of food deprivation is enhanced (Greenland *et al.* 1999).

While socio-demographic factors such as education level and employment status do impact well-being, their influence is comparatively less pronounced than the effects of food deprivation, perceived health, and social connectedness. Individuals with lower educational attainment and those who are unemployed face increased risks of poor well-being, as education and stable employment are crucial for accessing resources and maintaining social connections (Gutiérrez-García *et al.* 2018; Ross, Mirowsky 2013). Furthermore, foreign citizenship is associated with elevated risks of poor well-being, highlighting the additional hurdles faced by migrants, including social isolation and difficulties in accessing essential services (Gingell *et al.* 2022; Sesti *et al.* 2022; Priebe *et al.* 2016).

## 5. L*imitation*

This study has some limitations. The choice to use the term 'food deprivation' instead of 'food poverty' reflects the recognition that the available indicators focus primarily on economic access to adequate food and are insufficient to fully capture the multiple dimensions of the issue. Furthermore, it is worth noting that the indicator for meal affordability does not differentiate between different types of protein, which vary significantly in cost, while the measure of social food-related deprivation treats different experiences, such as sharing a drink or a meal, as equivalent, without accounting for their distinct financial, social, and cultural significance.

Moreover, the use of cross-sectional data limits the ability to draw strong causal links and restricts the analysis to a snapshot of food deprivation at a single point in time. This prevents an examination of temporal trends that could provide deeper insights into the evolution of food deprivation, particularly in the context of fluctuating poverty rates and economic conditions in Italy. Longitudinal data would allow for an exploration of how food deprivation evolves over time and interacts with broader socio-economic changes. Another limitation lies in the lack of data disaggregated below the macro-regional level, restricting our understanding of local dynamics that are crucial for more targeted interventions. Despite these constraints, this study provides valuable insights by examining both the material and social aspects of food deprivation, identifying the groups most at risk, and exploring the broader impact on psychosocial well-being. These findings lay the groundwork for future research to address these limitations, particularly through the use of longitudinal and more granular data, to better inform targeted and effective policy interventions.

## 6. *Conclusion*

This study highlights that food deprivation in Italy is intricately linked to monetary poverty, with significant portions of low-income individuals unable to access sufficient, varied, and socially acceptable food. However, the results show that the consequences of food deprivation extend beyond material hardship. Our findings reveal that the inability to afford a proper meal every second day is only one aspect of a broader phenomenon that also encompasses social participation in food-related activities. Policies addressing food poverty often focus on material provisions, but our study underscores the need to also consider the social implications of food deprivation.

Addressing food deprivation effectively requires the development of tailored indicators informed by qualitative research. Such research should capture the nuanced needs and experiences of various vulnerable groups, differentiating by age, gender, disability, and ethnic background. By incorporating the perspectives of those most affected, it could be possible to create context-specific measurement tools that address the diverse manifestations and dynamics of food poverty in Italy. In the short term, integrating existing data sources – such as the FAO's Food Insecurity Experience Scale (FIES) – with our novel Food Deprivation Index could provide more accurate prevalence estimates and enable a critical evaluation of recent food policy changes.

The results underscore the importance of addressing the root causes of food deprivation, such as income inequality, inadequate access to affordable housing, and barriers to education and employment. Effective interventions must aim to dismantle these systemic barriers, ensuring that policies address not only quantity and quality of food but also its social acceptability, cultural relevance, and alignment with individual preferences. By tackling these broader issues, based on the right to food, it will be possible to develop comprehensive strategies that provide immediate relief and foster long-term food well-being for all.

## *References*

ActionAid (2023), *Frammenti da ricomporre. Numeri, strategie, approcci in cerca di una politica*, Milano.

Baker S., Gallegos D., Rebuli M.A., Taylor A.J., Mahoney R. (2024), "Food Insecurity Screening in High-Income Countries, Tool Validity, and Implementation: A Scoping Review", *Nutrients*, vol. 16, n. 11, 1684.

Ballard T.J., Kepple A.W., Cafiero C. (2013), "The Food Insecurity Experience Scale. Development of a Global Standard for Monitoring Hunger Worldwide", Rome, Food and Agriculture Organization of the United Nations.

Beacom E., Furey S., Hollywood L.E., Humphreys P. (2021), "Stakeholder-informed considerations for a food poverty definition", *British Food Journal*, vol. 123, n. 2, pp. 441-454.

Beacom E., McLaughlin C., Furey S., Hollywood L.E., Humphreys P. (2022), "Investigating the prevalence and predictors of food insecurity: a comparison of HFSSM and EU-SILC indicators", *British Food Journal*, vol. 124, n. 9, pp. 2705-2721.

Benedetti, I., Crescenzi F., Laureti T., Secondi L. (2024), "Adopting the fuzzy approach to analyze food poverty in Italy: A study on vulnerable households using household budget survey data", *Socio-Economic Planning Sciences*, vol. 95, 102006.

Bergmans R.S., Sadler R.C., Wolfson J.A., Jones A.D., Kruger D. (2019), "Moderation of the association between individual food security and poor mental health by the local food environment among adult residents of Flint, Michigan", *Health Equity*, vol. 3, n. 1, pp. 264-274.

Bernaschi D., Marino D., Felici F. (2023), "Measuring food insecurity: Food Affordability Index as a measure of territorial inequalities", *Italian Review of Agricultural Economics*, vol. 78, n. 3, pp. 79-91.

Berry E.M., Dernini S., Burlingame B., Meybeck A., Conforti P. (2015), "Food security and sustainability: can one exist without the other?", *Public Health Nutrition*, vol. 18, n. 13, pp. 2293-2302.

Biggeri L., Pratesi M. (2017, July), "Monetary poverty indicators at local level: definitions, methods of estimations and comparisons in real terms", in *Proceedings of the 60th World Statistics Congress of the International Statistical Institute*, pp. 16-21.

Butcher L.M., O'Sullivan T.A., Ryan M.M., Lo J., Devine A. (2018), "Utilising a multi-item questionnaire to assess household food security in Australia", *Health Promotion Journal of Australia*, vol. 30, pp. 9-17.

Cafiero C., Viviani S., Nord M. (2018), "Food security measurement in a global context: The food insecurity experience scale", *Measurement*, vol. 116, pp. 146-152.

Campiglio L., Rovati G. (2009), *La Povertà Alimentare in Italia: Prima Indagine Quantitativa e Qualitativa*, Milano, Guerini e Associati.

Caraher M., Coveney J. (eds) (2016), *Food Poverty and Insecurity: International Food Inequalities*, Cham, Springer

Carrillo-Álvarez E. (2023), "Perspective: Food and nutrition insecurity in Europe: Challenges and opportunities for dietitians", *Advances in Nutrition*, vol. 14, n. 5, pp. 995-1004.

Coleman-Jensen A., Rabbitt M.P., Gregory C.A., Singh A. (2017), "Household food security in the United States in 2016", *Economic Research Report*, n. 237. United States Department of Agriculture.

Dowler E. (2003), "Food and poverty in Britain: Rights and responsibilities", in E. Dowler, C. Jones Finer (eds), *Welfare of Food: Rights and Responsibilities in a Changing World*, Hoboken, Wiley-Blackwell.

FAO (2001), *The State of Food Insecurity in the World* 2001, Rome, Food and Agriculture Organization.

– (1996), *Rome Declaration on World Food Security and World Food Summit Plan of Action*, Rome, Food and Agriculture Organization.

– (1983), *World Food Security: A Reappraisal of the Concepts and Approaches. Director General's Report*, Rome, Food and Agriculture Organization.

– (1974), *World Food and Agriculture Situation*, Rome, Food and Agriculture Organization.

Fiorillo A., de Girolamo G., Simunovic I.F., Gureje O., Isaac M., Lloyd C., Mari J., Patel V., Reif A., Starostina E., Summergrad P., Sartorius N. (2023), (2023), "The relationship between physical and mental health: An update from the WPA Working Group on managing comorbidity of mental and physical health", *World Psychiatry*, vol. 22, n. 1, pp. 169-183.

Frongillo E.A., Nguyen H.T., Smith M.D., Coleman-Jensen A. (2017),"Food insecurity is associated with subjective well-being among individuals from 138 countries in the 2014 Gallup World Poll", *The Journal of Nutrition*, vol. 147, n. 4, pp. 680-687.

Gallegos D., Booth S., Pollard C.M., Chilton M., Kleve S. (2023), "Food security definition, measures and advocacy priorities in high-income countries: a Delphi consensus study", *Public Health Nutrition*, vol. 26, n. 10, pp. 1986-1996.

Gallegos D., McKechnie R., McAndrew R., Russell-Bennett R., Smith G. (2022), "How gender, education and nutrition knowledge contribute to food insecurity among adults in Australia", *Health & Social Care in the Community*, vol. 30, n. 5, pp. e2724-e2736.

Garratt E. (2020), "Food insecurity in Europe: Who is at risk, and how successful are social benefits in protecting against food insecurity?", *Journal of Social Policy*, vol. 49, n. 4, pp. 785-809.

Gatton M.L., Gallegos D. (2023), "A 5-year review of prevalence, temporal trends and characteristics of individuals experiencing moderate and severe food insecurity in 34 high income countries", BMC *Public Health*, vol. 23, n. 1, p. 2215.

Gingell T., Murray K., Correa-Velez I., Gallegos D. (2022), "Determinants of food security among people from refugee backgrounds resettled in high-income countries: A systematic review and thematic synthesis", PLOS ONE, vol. 17, n. 6, e0268830.

Greenland S., Robins J.M., Pearl J. (1999), "Confounding and collapsibility in causal inference", *Statistical Science*, vol. 14, n. 1, pp. 29-46, DOI:10.1214/ss/1009211805.

Grimaccia E., Naccarato A. (2019), "Food insecurity individual experience: a comparison of economic and social characteristics of the most vulnerable groups in the world", *Social Indicators Research*, vol. 143, pp. 391-410.

Guio A.-C., Gordon D., Najera H., Pomati M. (2017), *Revising the* EU *material deprivation variables* (Technical Report, Statistical working papers), Eurostat, Publications Office of the European Union.

Gundersen C., Ziliak J.P. (2015), "Food insecurity and health outcomes", *Health Affairs*, vol. 34, n. 11, pp. 1830-1839.

Gutiérrez-García R.A., Benjet C., Borges G., Méndez Ríos E., Medina-Mora M. E. (2018), "Emerging adults not in education, employment or training (NEET): socio-demographic characteristics, mental health and reasons for being NEET", BMC *Public Health*, vol. 18, pp. 1-11.

Hanna K., Cross J., Nicholls A., Gallegos D. (2023), "The association between loneliness or social isolation and food and eating behaviours: a scoping review", *Appetite*, 107051.

HLPE (2020), *Food Security and Nutrition: Building a Global Narrative towards 2030. A Report by the High-Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security*, Rome, FAO.

Holt-Lunstad J., Steptoe A. (2022), "Social isolation: An underappreciated determinant of physical health", *Current Opinion in Psychology*, vol. 43, pp. 232-237.

ISTAT (2024), *Rapporto SDGs 2024. Informazioni statistiche per l'Agenda 2030 in Italia*. Collana "Letture Statistiche-Temi", https://www.istat.it/storage/rapporti-tematici/sdgs/2024/Rapporto-SDGs2024-Ebook.pdf.

Leung C.W., Laraia B.A., Feiner C., Solis K., Stewart A.L., Adler N.E., Epel E.S. (2022), "The psychological distress of food insecurity: a qualitative study of the emotional experiences of parents and their coping strategies", *Journal of the Academy of Nutrition and Dietetics*, vol. 122, n. 10, pp. 1903-1910.

Loopstra R., Reeves A., Tarasuk V. (2019), "The rise of hunger among low-income households: an analysis of the risks of food insecurity between 2004 and 2016 in a population-based study of UK adults", *Journal of Epidemiology and Community Health*, vol. 73, n. 7, pp. 668-673.

Lund T.B., Holm L., Tetens I., Smed S., Nielsen A.L. (2018), "Food Insecurity in Denmark – socio-demographic determinants and associations with eating – and health-related variables", *The European Journal of Public Health*, vol. 28, n. 2, pp. 283-288.

Marchetti S., Secondi L. (2022), "The economic perspective of food poverty and (in)security: An analytical approach to measuring and estimation in Italy", *Social Indicators Research*, vol. 162, n. 3, pp. 995-1020.

Martin M.S., Maddocks E., Chen Y., Gilman S.E., Colman I. (2016), "Food insecurity and mental illness: Disproportionate impacts in the context of perceived stress and social isolation", *Public Health*, vol. 132, pp. 86-91.

Meshkat S., Pang H., Tassone V.K., Janssen-Aguilar R., Wu M., Jung H., Bhat V. (2024), "Depressive symptoms among adults is associated with decreased food security", PLOS ONE, vol. 19, n. 6, e0303345.

O'Connell R., Brannen J. (eds) (2021), *Families and Food in Hard Times*, London, UCL Press.

O'Connell R., Owen C., Padley M., Simon A., Brannen J. (2019), "Which types of family are at risk of food poverty in the UK? A relative deprivation approach", *Social Policy and Society*, vol. 18, n. 1, pp. 1-18.

O'Connor N., Farag K., Baines R. (2016), "What is food poverty? A conceptual framework", *British Food Journal*, vol. 118, n. 2, pp. 429-449.

Palladino M., Cafiero C., Sensi R. (2024), "Understanding adolescents" lived experience of food poverty. A multi-method study among food aid recipient families in Italy", *Global Food Security*, vol. 41, 100762.

Pourmotabbed A., Moradi S., Babaei A., Ghavami A., Mohammadi H., Jalili C., Miraghajani M. (2020), "Food insecurity and mental health: a systematic review and meta-analysis", *Public Health Nutrition*, vol. 23, n. 10, pp. 1778-1790.

Priebe S., Giacco D., El-Nagib R. (2016), *Public health aspects of mental health among migrants and refugees: a review of the evidence on mental health care for refugees, asylum seekers and irregular migrants in the WHO European Region*, World Health Organization, Regional Office for Europe.

Prince M., Patel V., Saxena S., Maj M., Maselko J., Phillips M.R., Rahman A. (2007), "No health without mental health", *The Lancet*, vol. 370, n. 9590, pp. 859-877.

Radimer K.L. (1990), *Understanding Hunger and Developing Indicators to Assess It*, Cornell University.

Ross C.E., Mirowsky J. (2013), "The sense of personal control: Social structural causes and emotional consequences", in S.C. Aneshensel, J.C. Phelan, A. Bierman (eds), *Handbook of the Sociology of Mental Health*, pp. 379-402.

Ruggeri K., Garcia-Garzon E., Maguire Á., Matz S., Huppert F.A. (2020), "Well-being is More than Happiness and Life Satisfaction: A Multidimensional Analysis of 21 Countries", *Health and quality of life outcomes*, vol. 18, n. 1, p. 192.

Saeri A.K., Cruwys T., Barlow F.K., Stronge S., Sibley C.G. (2018), "Social connectedness improves public mental health: Investigating bidirectional relationships in the New Zealand attitudes and values survey", *Australian & New Zealand Journal of Psychiatry*, vol. 52, n. 4, pp. 365-374.

Saraceno C., Morlicchio E., Benassi D. (2022), *La povertà in Italia: soggetti, meccanismi*, politiche Bologna, il Mulino.

Sesti F., Minardi V., Baglio G., Bell R., Goldblatt P., Marceca M., Marmot M. (2022), "Social determinants of mental health in Italy: the role of education in the comparison of migrant and Italian residents", *International Journal for Equity in Health*, vol. 21, n. 1, p. 116.

Smith M.D., Rabbitt M.P., Coleman-Jensen A. (2017), "Who are the World"s Food Insecure? New Evidence from the Food and Agriculture Organization"s Food Insecurity Experience Scale", *World Development*, vol. 93, pp. 402-412.

Stoltzfus J.C. (2011), "Logistic regression: a brief primer", *Academic Emergency Medicine*, vol. 18, n. 10, pp. 1099-1104.

Tarasuk V., Cheng J., Gundersen C., de Oliveira C., Kurdyak P. (2018), "The relation between food insecurity and mental health care service utilization in Ontario", *The Canadian Journal of Psychiatry*, vol. 63, n. 8, pp. 557-569.

Tevie J., Shaya F. (2018), "Does food security predict poor mental health?", *Journal of Public Mental Health*, vol. 17, n. 1, pp. 3-10.

Weaver L.J., Hadley C. (2009), "Moving beyond hunger and nutrition: a systematic review of the evidence linking food insecurity and mental health in developing countries", *Ecology of Food and Nutrition*, vol. 48, n. 4, pp. 263-284.

Wolfson J.A., Garcia T., Leung C.W. (2021), "Food insecurity is associated with depression, anxiety, and stress: evidence from the early days of the COVID-19 pandemic in the United States", H*ealth* E*quity*, vol. 5, n. 1, pp. 64-71.

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