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

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A*bstract*. 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

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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-

[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 dis-

tinguishes 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 gen-

der 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 packag-

es 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 refer-

ence 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: I*mpacts*, A*daptation and* V*ulnerability*, 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 E*merging Issues Report* 18, Brighton, Institute of Development Studies.

Cattaneo U., Schwarzer H., Razavi S., Visentin A. (2024), F*inancing 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), P*ublic 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", P*roc Natl Acad Sci* USA, vol. 116, n. 35, pp. 17219-17224.

Council of the European Union (2017), C*ouncil 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 W*orking Papers*, vol. 320, pp. 1-37.

Davies M., Oswald K., Mitchell T., Tanner T. (2008), C*limate 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", D*evelopment Policy Review*, vol. 31, n. 1, pp. 27-58.

De Schutter O. (2012), W*omen'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 H*unger, 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) L*everaging 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), T*he future of Social Protection and of the Welfare State in the* EU, Luxembourg, European Union.

HLPE (2012), S*ocial Protection for Food Security*. A R*eport 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), P*romotion 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), C*limate Change* 2022: I*mpacts, 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 I*n 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", N*atural Resource Perspective*, London, Overseas Development Institute, vol. 95, pp. 1-6.

Levy S. (2005) (ed.), S*tarter Packs*: A S*trategy to Fight Hunger in Developing Countries*? L*essons 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 F*uture of Work Research Paper Series*, R*esearch 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), C*limate Change and Land*: A*n* IPCC S*pecial 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* (MCNHRP), 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.