**INPUTS OF**

**THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (FAO)**

Thematic report on the topic “access to information and human rights”

of the SPECIAL RAPPORTEUR ON THE PROMOTION AND PROTECTION OF HUMAN RIGHTS IN THE CONTEXT OF CLIMATE CHANGE

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This document does not reflect any official views of FAO Members.

This document contains information regarding FAO’s work, including projects, publications, tools, which are relevant to the questions raised in the [“Call for inputs: Access to information on climate change and human rights”](https://www.ohchr.org/en/calls-for-input/2024/call-inputs-access-information-climate-change-and-human-rights), issued by the Special Rapporteur on the Promotion and Protection of Human Rights in the Context of Climate Change.

1. *What kind of information should be collected and shared to identify and prevent negative impacts on human rights arising from climate change and climate change response measures? What kind of information can be particularly challenging to access and why?*
2. Preventing human rights violations, especially in the context of climate change, requires comprehensive and detailed information collection, in particular such information that can demonstrate differentiated impacts and specific vulnerabilities of various social groups. Age, gender, ethnicity, income levels, and population density are important parameters of data that could help to identify vulnerable groups. This data should cover various aspects to ensure that human rights are upheld and protected. For example, the following kinds of information could help identify and prevent climate change impacts on human rights:

* Climate and Weather Patterns: Data on temperature, precipitation, sea level rise, and extreme weather events to predict and mitigate impacts and information on deforestation, desertification, and loss of biodiversity.
* Economic Impact: Effects of climate change on agriculture, fisheries, and other industries that are crucial for livelihoods.
* Food Security: Data on crop yields, food prices, and availability of nutritious food.
* Displacement Statistics: Number of people displaced by climate events, reasons for displacement, and their living conditions and trends in migration due to climate impacts, including cross-border movements.
* Risk and Vulnerability Mapping: Identifying regions and populations at highest risk of climate-induced human rights violations and using indices that combine various data points to assess vulnerability levels.

In order to ensure that adverse impacts and corresponding response measures are well designed and targeted, data should be collected with the engagement of local communities, especially those most affected by climate change, regarding their needs and challenges and with the involvement of various stakeholders, including NGOs, governments, and private sectors, in data collection and decision-making processes.

Regular data-based assessments of the impacts of climate change and climate policies on human rights may prevent human rights violations.

1. Weather and climate data form key components of all response measures in agriculture. Such data are crucial for buffering the effects of climate change on food and nutrition security for vulnerable and marginalized groups.

Climate change response measures are broadly referred to as climate change adaptation. The information that is required for adaptation response is crucial for identifying measures responsible for preventing the negative impacts of climate change for the enjoyment of human rights including the right to food.

Adaptation consists of 5 general components, which are the observation of climatic and non-climatic variables; vulnerability impact assessment; planning; implementation and monitoring and evaluation of adaptation actions, all of which are critical in preventing negative impacts of climate change on food and nutrition security. Each of these components requires specific information and data:

* **Observation of climatic and non-climatic variables**: the observation over space and time of climatic and non-climatic stressors relevant to agriculture is a prerequisite for the vulnerability impact assessment and adaptation planning. Data relevant for this consists of terrestrial and aquatic observations, information on the status of the agrifood systems, agro-environmental variables, observed impacts of climatic stressors, and socio-economic variables (population growth, poverty levels, food insecurity – which exert pressure on natural resources and ecosystems). The collection, archiving and analysis of relevant data on climatic and non-climatic variables are part of the observation component of the adaptation process.
* **Vulnerability impact assessment:** climate change impacts natural resources and ecosystems (e.g. altering the water cycle, which affects agriculture and food security), livelihood assets and productive infrastructure, and plant, and animal health – through the spreading of pests and diseases. The assessment of the vulnerability of ecosystems or communities to climate risks and their impacts contributes to the planning and implementation of adaptation actions.
* **Adaptation planning**: this involves the identification and assessment of adaptation options to reduce climate change risks and vulnerabilities, and their integration into national and sector-specific policies, and strategies including agriculture. Adaptation planning is based on sound analysis of social and gender issues that influence adaptive capacity and access to adaptation technologies.
* **Implementation of adaptation measures:** it is the actual deployment of adaptation actions on the ground, and it can be through different means which include projects, programmes, policies and or strategies. It is based on the information acquired from the above-mentioned components.
* **Monitoring and evaluation**: this is the assessment of the progress towards adaptation goals and is done across all the components of adaptation. Monitoring and evaluation capture both stand-alone actions and actions fully integrated into the sectoral plans and strategies. Tracking ensures that monitoring and evaluation systems of adaptation projects, programmes and actions are adequately developed and implemented.

1. Drawing from the findings and lessons learned drawn from the [FAO (2023)](https://openknowledge.fao.org/server/api/core/bitstreams/c7d35c9e-2909-43ab-b767-00d94da60ec7/content) paper on The relations between climate change and child labour in agriculture – Evidence on children's work trends after climate-related events in Côte d'Ivoire, Ethiopia, Nepal and Peru, there is a need to collect better data to capture the incidence and intensity of child labour and how they are changing over time, as well as consistent data on changing weather patterns and on the implementation of early warning systems for extreme weather events. Specifically, information about forthcoming weather patterns can help farmers diversify and adapt their strategies to minimize the effects of climate shocks, which in turn can reduce the reliance on child labor as a coping strategy. Additionally, data on social norms and labor divisions, particularly the gender disaggregated impacts of climate events on child labor, are crucial.

Effective adaptation measures/responses require different kinds of information, which most of the time are scattered across different ministries and or departments. Collecting this information and synthesizing it into one integrated database for planning is one of the most challenging aspects of climate change adaptation. Furthermore, this data and information is often lacking as it is expensive to collect.

**Disaggregated data/ informed duty-bearers.** The right to food is universal, interdependent, interrelated and indivisible from other human rights, including the right to information, health, water, education, housing, land, social security, the fundamental right to be free from hunger and the right to life itself. It is a binding legal obligation set out in Article 11 of the International Covenant on Economic, Social and Cultural Rights (ICESCR). Under the Covenant, State Parties must take all appropriate steps, to the maximum of their available resources, to achieve the right to adequate food.

The right to adequate food must be respected, protected, and fulfilled by States. However, only informed duty-bearers can identify those rights-holders most in need and meet their demands for food security.

The diversity of individuals and their differing circumstances require different actions by governments to realize the right to food for all, which proves to be paramount when facing the far-ranging impacts of climate change – especially in pre-existing contexts of vulnerability, including conflicts and other disasters and due to structural factors leading to marginalization.

Food security and nutrition plans should be based on a thorough **socio-economic assessment** of people and their different groups’ situation with regard to realizing the right to food, with disaggregated data according to sex, age and ethnicity, for example. Those most likely to be food insecure should be identified, and the reasons for their vulnerability understood. Groups of people who tend to be particularly vulnerable include the elderly, infants and young children, pregnant and nursing women, the disabled and sick, particularly those living with HIV/ AIDS or other chronic diseases, victims of conflict, rural people in precarious livelihood situations and marginal populations in urban areas, and groups at risk of social marginalization and discrimination, such as Indigenous Peoples and ethnic minorities.

**HRBA/ informed rights holders.** A human rights-based approach (HRBA) is related to empowerment and agency, for all to be informed and claim their rights. It equally demands that any discriminatory processes in governance and power structures be detected and corrected.

The FAO produced a groundbreaking report on “[The unjust climate. Measuring the impacts of climate change on rural poor, women, and youth](https://www.fao.org/socioeconomic-research-analysis/resources/unjust-climate/the-unjust-climate/en)” (2023). It shows how climate change differently affects people, especially in rural areas. The report is based on over 109,000 households in 24 countries in 5 regions of the world, and 70 years of geo-referenced rainfall and temperature data. The publication illustrates that while climate change is a global crisis, its effects on countries, people and communities are highly unequal, affecting particularly women, youth, and people living in poverty. The data enables us to disentangle how different types of climate stressors affect people’s on-farm, off-farm and total incomes, labour allocations and adaptative actions, depending on their wealth, gender and age characteristics.

1. *Are existing approaches to collect, share and monitor information on climate change and human rights sufficient for the public to assess the magnitude of actual and potential negative impacts on their human rights, and the adequacy of States’ responses to these risks? How can these approaches be improved?*
2. The current approaches to collecting, sharing, and monitoring information on climate change and human rights are not fully sufficient. There is a need for more coordinated efforts between different government bodies and better data collection systems. It is also necessary to ensure decentralization of data, for example by empowering local governments with more resources and authority to collect and manage data relevant to their regions. Increasing public access to information through transparent and user-friendly platforms is also crucial. This includes ensuring that data is available in local languages and is easily understandable by non-experts (FAO, 2023).
3. In the context of developing countries, there is a lack of sufficient meteorological stations for collecting time series data for the climate-related variables applicable to food and agriculture. In the absence of reliable and even down-scalable data, it is challenging to assess the potential impacts of climate change on human rights including the right to food and thus the possibility of the states to respond to the risks posed by climate change. Determining the potential impact of climate change on livelihood options like agriculture requires reliable data which is location-specific.

In response to the lack of available data for climate change planning in agriculture, FAO developed the [Climate Risk Toolbox](https://data.apps.fao.org/crtb/?lang=en). This is an open-access resource platform developed to mainstream climate resilience within agricultural investment projects, policy plans, and decision-making processes, by allowing users worldwide (including policymakers, climate funds, and international development organizations and farmers) to perform climate risk screening. The toolbox supports climate-focused decision making, through the visualization of climate risk hotspots by identifying hazard probability, exposure and vulnerability of targeted agricultural systems and communities. The screening process results in tailored recommendations to promote agricultural transformation and adaptation to climate change and thus the protection of the right to food for the communities that are most at risk.

**Monitoring.** During implementation of national strategies, monitoring is essential to facilitate corrective measures. States should set verifiable benchmarks and develop a set of indicators. The process should be based on human rights principles where information gathering, management, analysis, interpretation and dissemination should be transparent and conducted with inclusive participation, particularly those groups and individuals most affected by the impacts of climate change, including food insecurity and the most marginalized.

See: FAO. 2008. Methods to monitor the human right to adequate food, [Volume I: Making the case for rights-focused and rights-based monitoring](https://www.fao.org/4/i0349e/i0349e00.htm). Rome.

Qualitative and quantitative indicators are needed to assess the progressive realization of economic, social and cultural rights referred to in Article 2(1) of the ICESCR.

To improve monitoring efforts, both in terms of quality and effectiveness, data collection and analysis should be enhanced, accountability mechanisms should be strengthened, transparency and inclusivity in monitoring processes should be promoted, and systemic barriers to monitoring human rights effectively should be addressed.

The **Special Rapporteur on the Right to Food** plays a significant role in collecting, sharing, and monitoring the realization of the right to adequate food, including through country visits where he engages with all actors to gather first-hand information. However, the scope and frequency of his country visits are dependent on resource constraints and logistical challenges. (See: [Activities of the Special Rapporteur on the Right to Food](https://www.ohchr.org/en/special-procedures/sr-food/about-mandate))

In 2004, the FAO Governing Council adopted unanimously the **Voluntary Guidelines to support the progressive realization of the right to adequate food in the context of national food security** (**Right to Food Guidelines**) which offers a multi-dimensional approach whihc promotes, among other things, transparency and accountability, as well as addressing the underlying structural causes of hunger and malnutrition. The Guideliens anticipated the urgency of today’s most pressing global challenges to achieving sustainable development, including climate change. They advocate for the human rights-based approach to development. Guideline 17 of the Right to Food Guidelines is on monitoring, indicators and benchmarks, while Guideline 18 is on national human rights institutions.

The **Committee on World Food Security (CFS)** is also a significant platform to collect, share and monitor information on human rights, especially the right to adequate food, including in the context of climate change. The right to food also provides a normative foundation for international cooperation and solidarity, and it has influenced the principles, objectives, and overall structure of the reformed CFS (2009) - since referred to as a model for inclusive decision-making. The CFS also provides a framework for assessing States’ compliance with their human rights obligations and accountability mechanisms and monitoring.

Celebrating its 50th anniversary in 2024 (created in 1974), as well as the 15th anniversary of its reform (reformed in 2009), the CFS new [Multi-Year Programme of Work MyPOW 2024-2027)](https://openknowledge.fao.org/server/api/core/bitstreams/c7db1c07-4e43-4230-918f-13a1bc131082/content) identified the promotion of agriculture and food systems actions that protect the planet as a cross-cutting theme. In 2025, an intersessional High-Level Forum titled “Tackling climate change, biodiversity loss and land degradation through the right to food” will be organized to take stock of the progress made, reflect on the challenges posed by climate change and biodiversity loss to the progressive realization of the right to adequate food, with a focus on promoting policies that support climate change adaptation and mitigation and biodiversity loss mitigation to lessen their impacts on people’s livelihoods and right to food.

The FAO Right to Food Team and the CFS Secretariat have jointly facilitated a [**call for inputs in 2023 on the realization of the human right to adequate food**](https://www.fao.org/fsnforum/index.php/call-submissions/20th-anniversary-right-food-guidelines), 20 years after the adoption of the Right to Food Guidelines (2004). More than 112 submissions and comments were received, including from 56 countries and regions. The results of this call will be disseminated in October 2024 through a Global Thematic Event at CFS 52 on advancing the uptake of the Right to Food Guidelines, as well as through CFS and FAO publications and events. The results of this call will help inform us of efforts made to realize the right to adequate food at local, national, regional and global levels, and provide an important stocktaking opportunity for countries and their people.

The FAO report on “[The unjust climate. Measuring the impacts of climate change on rural poor, women, and youth](https://www.fao.org/socioeconomic-research-analysis/resources/unjust-climate/the-unjust-climate/en)” (2023) stresses that developing policies to foster inclusive rural transformation processes requires better evidence on how climate change is affecting the livelihoods and economic behaviors of vulnerable rural people, including women, youth and people living in poverty. It highlights that there is little comparative, multi-country and multi-region evidence to understand how exposure to weather shocks and climate change affects the drivers of rural transformation and adaptative actions across different segments of rural societies and in different agro-ecological contexts. This evidence is essential because, while climate risk and adaptative actions are context specific and require local solutions, global evidence is important for identifying shared vulnerabilities and priority actions for scaling up effective responses.

The findings of the report highlight that:

* In an average year, poor households lose 5 percent of their total income due to heat stress relative to better-off households, and 4.4 percent due to floods.
* Every year, female-headed households experience income losses of 8 percent due to heat stress, and 3 percent due to floods, relative to male-headed households.
* In rural areas, floods widen the income gap between poor and non-poor households by approximately USD 21 billion a year, and heat stress by more than USD 20 billion a year.
* Long-term temperature rise leads to an increase in poor households’ dependency on climate-sensitive agriculture relative to that of non-poor households. A 1°C increase in average long-term temperatures leads to a 53 percent increase in the farm incomes of poor households and a 33 percent decrease in their off-farm incomes, relative to non-poor households.
* Heat stress widens the income gap between female-headed and male-headed households by USD 37 billion a year, and floods by USD 16 billion a year.
* A 1°C increase in long-term average temperatures is associated with a 34 percent reduction in the total incomes of female-headed households, relative to those of male-headed households.
* Extreme temperatures push children to increase their weekly working time by 49 minutes relative to prime-aged adults, mostly in the off-farm sector, closely mirroring the increase in the work burden of women.
* Rural people and their climate vulnerabilities are barely visible in national climate policies. In the nationally determined contributions (NDCs) and national adaptation plans (NAPs) of the 24 countries analysed in this report, only 6 percent of the 4164 climate actions proposed mention women, 2 percent explicitly mention youth, less than 1 percent mention poor people and about 6 percent refer to farmers in rural communities.
* Of the total tracked climate finance in 2017/18, only 7.5 percent goes towards climate change adaptation; less than 3 percent to agriculture, forestry and other land uses, or other agriculture-related investments; only 1.7 percent, amounting to roughly USD 10 billion, reached small-scale producers.

3. *Are there undue barriers to obtain access to information on human rights and climate change that is up to date? (eg, language and technical accessibility, use of technology, grounds for non-disclosure, other?)*

1. Barriers to accessing information include poor literacy rates, lack of access to mobile phones and connectivity, and geographical isolation of many farming communities. The use of technology, such as mobile phones, can be limited to remote areas, making it difficult for families to receive timely weather forecasts and other critical information. Radio broadcasts have been suggested as a potential solution to overcome some of these barriers, particularly in remote areas where literacy rates are low and mobile connectivity is poor (FAO, 2023).
2. Most times, information access barriers are associated with lack of, creation, sharing or appropriate use of data, information, and knowledge on how to use such data, especially with regards to adaptation within the agriculture sector. The challenge is that these elements are required for all the components of adaptation and often require close collaboration between research, policy, and practice, which does not always happen. The following are some of the information barriers:

- Lack of data at the state, regional and local levels.

- Issues with information generation, interpretation and sharing.

- Disconnect between information generation (research and requirements for use (policy and practice)

- Difficulties in identifying goals and objectives to measure success.

- Lack of regional assessments on the impact of climate change on livelihood options such as agriculture.

**Ensuring meaningful participation of affected populations in decision-making procedures.** Members of society affected by any given policy or legislative measures should be involved in their design, for example through prior consultation, or by directly including their representatives into policy and law-making processes. Participation depends on the full disclosure of relevant information, in a language and format accessible to affected communities.

4. *Are there examples in which international cooperation effectively supported public access to information on climate change and human rights? What are the challenges in implementing UNFCCC Articles 4 (public access to information) and 6 (public awareness), and Paris Agreement Article 12 (public access to information), and other international instruments and processes that can support/contribute to international cooperation on access to information on climate change and human rights?*

The principle of common but differentiated responsibilities and respective capacities under the UNFCCC encourages international cooperation among the parties of the convention in addressing climate change. Given these differences in capacities and socioeconomic conditions, different countries cooperate in addressing climate challenges through several avenues, including multilateral cooperation, of which FAO forms a part. As a convening body, FAO serves as a conduit through which international cooperation on climate change between its Member States happens.

As a specialized organization of the UN, FAO has one of the largest, open-access [databases](https://www.fao.org/countryprofiles/data-sources/en/) in the world on food and agriculture. By collecting data from different countries across the world, and maintaining these databases, FAO contributes to international cooperation on the public access to information on the issues of food, agriculture, and rural development as they interact with climate change.

**Leveraging the right to adequate food for international cooperation.** Considering the current acute need to internationally cooperate and coordinate a response to compounded crisis, including climate and food crisis, States should leverage on the right to adequate food as the only right in the International Covenant on Economic, Social and Cultural Rights (ICESCR) which includes international cooperation as an obligation.

The right to food is unique within the ICESCR as Article 11(2) obliges States to enact specific programs to eliminate hunger and fulfil the right to food. States must proactively address the needs of the marginalized and vulnerable populations and ensure freedom from hunger.

*5.* *Are there concrete examples of, or specific challenges for business to communicate information on risks, including in different countries, in relation to climate change and human rights? What are the barriers for the rights holders to access this information and to evaluate the adequacy of an enterprise’s response to these risks? Are there specific examples of State regulation that have significantly improved access to information held by private actors on climate change and human rights?*

[The UN Guiding Principles on Business and Human Rights](https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr_en.pdf) confirm that businesses also have human rights responsibilities. They affirm that all responsible actors should be held accountable for the negative impacts of their activities and that all actors share responsibility for remedying these impacts including sharing the risks of their activities. To benefit from the capacities of the private businesses and or private sector, FAO recently developed a [Private Sector Engagement Strategy (2021-2025)](https://openknowledge.fao.org/server/api/core/bitstreams/9d7d4a77-a9b2-46a9-ac11-49f0468131c1/content) which, among other things, seeks to support the private sector to recognize its social responsibility to: contribute to the food and nutrition security of the population through sustainable forms of production that minimize the impact on the environment, including the reduction of the negative impacts of climate change on vulnerable groups; generate data that can help accelerate innovation, evidence-based decision-making and SDG monitoring; contribute to adjustments in private sector priorities and business strategies which incorporate and promote sustainable practices that avoid violation of human rights. Cognizant of the influence of the private sector, FAO sees value in knowledge, technology, and innovation from the private sector. Private-sector partnerships can generate real-time knowledge, data, and best practices and facilitate the effective dissemination of information nationally and globally.

As businesses are also human rights duty-bearers, they must be accountable for their climate impacts and participate responsibly in climate change mitigation and adaptation efforts with full respect for human rights. See also the FAO Development Law Service [Legal Guide on due diligence obligations of legal professionals in the context of land aquisitions](https://openknowledge.fao.org/handle/20.500.14283/ca4709en).

In seeking to benefit from private businesses in the fight against climate change, FAO entered into a partnership with Google. The partnership aims to leverage Google’s technical expertise in geospatial products, such as the Google Earth Engine to enhance FAO-lead initiatives for the monitoring of natural resources, livelihoods, environment and climate change. This includes promoting the application of these tools through training and events, such as conferences and other fora. While this partnership does not encourage the private business to disclose information on how its activities affect communities to realize their human rights, it is nonetheless critical as it assists communities to access data and information that is used in mitigating and adapting to climate change, and thus their realization of right to food and a clean environment in the changing climate.

The focus of FAO’s work is on the right to adequate food, which is a legally binding human right in international law, enshrined in article 11 of the International Covenant on Economic, Social and Cultural Rights (ICESCR), adopted in 1966. To date, 171 States have ratified the ICESCR and there are 4 signatories. There are 24 State Parties and 25 Signatories of its Optional Protocol. 45 countries have recognized the right to adequate food in their constitutions. Almost 30 countries have an explicit recognition of the right to adequate food in their constitutions.

Additional legal guarantees have been afforded to specific groups, such as the Convention on the Elimination of all forms of Discrimination against Women (CEDAW) or the Convention on the Rights of the Child (CRC).

In 2004, FAO Member Nations adopted by consensus the [Voluntary guidelines to support the progressive realization of the right to adequate food in the context of national food security](https://www.fao.org/right-to-food/guidelines/en/) (Right to Food Guidelines), which provide guidance on ways to implement the right to adequate food. The Right to Food Guidelines is a policy tool endorsed by the Committee of World Food Security (CFS).

As such, the right to food is a legal obligation anchored in international law. In order to fulfill this obligation, many States and international organizations have led concrete actions to influence policies and laws for the realization of the right to food. Many countries have included the right to food as a concrete goal to achieve through policies, laws and strategies related to food security and nutrition.

They have also developed and strengthened governance and policy dialogue mechanisms to guarantee the participation of communities and civil society organizations in crucial decisions involving their nutrition and food security. Several countries have developed or adopted methodological tools to accurately measure whether a new policy, law or governance process is progressing as planned and meeting the expected results.

FAO, as the UN Specialized Agency mandated with the achievement of food security and nutrition, has supported Member Countries committed towards this important goal throughout the years. The Organization provides technical guidance and tools at the various stages of any given policy process to make sure every child, woman and man can enjoy adequate food at all times. Among the global tools that FAO uses to ful­fill its mandate, there are the [Right to Food Guidelines](https://www.fao.org/right-to-food/en/), adopted by its governing Council in 2004.

Ensuring the right to food requires not only the availability and accessibility of adequate food but also the provision of relevant information to all individuals. Access to information is a powerful tool that empowers people to make informed decisions, hold authorities accountable, and build resilient food systems. By integrating these two fundamental rights, we can work towards a world free from hunger and malnutrition.

*6.* *What are the impacts on human rights of inadequate access to information from public authorities and/or business? Are there concrete examples of, or specific challenges in, collecting and sharing information on disproportionate levels of actual and potential harm from climate change and climate change response measures (disaggregated data on Indigenous Peoples, women, children, local communities, persons with disabilities, older persons, persons living in extreme poverty, others)?*

Drawing from the findings and lessons learned from the FAO (2023) paper on [The relations between climate change and child labour in agriculture – Evidence on children's work trends after climate-related events in Côte d'Ivoire, Ethiopia, Nepal and Peru,](https://openknowledge.fao.org/items/18fdf74f-5c42-45b5-8e74-6aa22d93c214) inadequate access to information from public authorities and small-holder farmers can lead to increased child labor, as farming families are unable to prepare for and mitigate the effects of climate-related events. This lack of information exacerbates poverty and limits educational opportunities for children. The publication provides examples of disproportionate impacts on girls, who are more likely to enter child labor following climate events like heavy rains and dry spells.

While FAO does not have the authority to oblige businesses and states (both duty-bearers), to provide access to information to different groups of society , FAO has open access databases which could be used by different groups (including states, business, civic organizations, farmer groups etc.) to help them to plan for climate change responses. The following are some of the FAO’s open-access databases:

[FAOSTAT](https://www.fao.org/faostat/en/#home); provides free access to food and agriculture data for over 245 countries and territories and covers all FAO regional groupings from 1961 to the most recent year available. With different data domains, it includes greenhouse gas emissions from food and agriculture. FAOSTAT data on emissions contribute to the development of technical assessments such as IPCC Assessment Reports.

[AQUASTAT](https://www.fao.org/aquastat/en/databases/): through AQUASTAT, FAO collects, analyses, and disseminates data and information, by country, on water resources, water use, and agricultural water management, with emphasis on irrigated agriculture in Africa, Asia, Latin America, and the Caribbean. The goal is to support agricultural and rural development through sustainable use of water and land by providing the most accurate information presented in a consistent and standard way. This database can allow farmers to plan their irrigation schedules as a way of adapting to climate change and avoiding crop losses due to drought and thus realization of the right to food.

[FAOLEX](https://www.fao.org/faolex/en/): is a comprehensive and up-to-date legislative and policy database, one of the world’s largest online repositories of national laws, regulations and policies on food, agriculture, and natural resources management. Users of FAOLEX have direct access to the abstracts and indexing information about each text, as well full text of the legislation and policies contained in the database. FAOLEX also hosts several specialised sub-set legislative databases, such as AQUALEX, SOIL-LEX and TIMBER-LEX.

**Inclusion.** At a time of compounded crises, those living in precarious socioeconomic circumstances, such as people from marginalized groups and persons in vulnerable situations, are hit the hardest by the impacts of climate change. National Human Rights Institutions (NHRIs), civil society and local communities can assist in identifying people who may otherwise be left behind or excluded. This can be achieved by supporting the flow of accessible information to these groups and providing feedback to authorities on the impact of measures on communities and their access to adequate food.

**Remedies and accountability.** Victims (individuals, groups/communities) of violations of the right to adequate food should have access to effective judicial or other appropriate remedies. All victims are entitled to adequate reparation, which may take the form of restitution, compensation, satisfaction or guarantees of non-repetition. Reliable information containing well-founded indications of serious, grave or systematic violations is key, also to complaints mechanisms, investigations, remedies, corrective measures.