

Jurnal Hubungan Internasional Indonesia

<http://jhii.fisip.unila.ac.id/ojs/index.php/jhii>

SDGS AND HUMAN RIGHTS TO FOOD: INTEGRATING FOOD SECURITY WITH CLIMATE CHANGE

Febryani Sabatira¹, Orima Melati Davey², Yuga Naura Khanza³, Ninda Mirantama⁴

¹Hukum Internasional, Universitas Lampung, Indonesia

²Hukum Internasional, Universitas Lampung, Indonesia

³Hukum Internasional, Universitas Lampung, Indonesia

⁴Hubungan Internasional, Universitas Lampung, Indonesia
mirantamaninda@gmail.com

Abstract

Food constitutes as the one of a fundamental need of humans and is thus regarded as a form of human rights. The right to food is recognized as a branch of human rights in Article 28H of the 1945 Constitution and the Rome Declaration through the 1996 World Food Summit. Food, as a basic human necessity, has a significant meaning and role in the life of a nation. Inability to sustain food availability to meet demand could cause economic instability. If food security is unbalanced, various social and political upheavals can occur. This critical food situation may jeopardize both economic and national stability. In this regard, Indonesia's efforts to achieve food security are hampered by a variety of crises, including environmental degradation exacerbated by climate change. Because food security is dependent on the production of agricultural products, the quality of the environment plays a significant role, making Indonesia laboriously impacted by climate change. Climate change could severely raise the number of hungers since it embodies an extreme change in weather that disrupts food production stability. Indonesia have been ignoring the real threat of climate change in many aspects including overlooks the risks of food insecurity, which results in non-fulfillment of the human right to food. In this regard, all parties must take the necessary steps to address the issue one way to approach is to implement the Sustainable Development Goals (SDGs).

Keywords: Climate Change, Food Security, Human Rights, SDGs

Introduction

Food is the primary basic need for humans that must be fulfilled at all times. The right to food itself is a form of human right, as stated in Article 28H of the 1945 Constitution and the Rome Declaration through the 1996 World Food Summit.¹ Moreover, the statement that determines the right to food as human rights underlie the consideration of the enactment of Law number 7 of 1996 on Food. As a basic need and one of the human rights, food has an essential meaning and role in the life of a nation. The failure to sustain food availability to meet the need can create economic

¹ OHCHR, "Human Rights and Poverty Reduction: A Conceptual Framework" (Geneva, December 2003).

fluctuation. Various social and political upheavals can also occur if food security is unbalanced. This critical food condition can even jeopardize economic stability and national stability. Thus, community food security must be one of the government's priority agendas annually.²

Food security refers to food availability and the capability to obtain it. The World Health Organization (WHO) defines food security as containing three main components: food availability, food accessibility, and food consumption.³ Food Availability refers to retaining an amount of food that is more than sufficient to meet basic needs.⁴ Access to food refers to having the financial and physical means to obtain healthy food. The capacity to use food elements correctly and proportionally is referred to as food utilization.⁵

Indonesia has enacted several regulations regarding food security. Law No. 18 of 2012 concerning Food regulates that food security is the state responsibility to provide food for individuals in sufficient quantity and quality, safe, diverse, nutritious, equitable, and affordable, also does not conflict with religion, belief, or community culture, so that people able to live healthy, active, and productive in the long run.⁶ In addition to Law No.18 of 2012 concerning Food, Government Regulation No. 17 of 2015 concerning Food Security and Nutrition more specifically relates to the provision of food availability.⁷ The Government Regulation defines food availability as the ability to sustain food supply through domestic production and National Food Reservation and conduct food imports if those two primary sources do not meet the demand.⁸

However, in an effort to increase food security, Indonesia has encountered many crises from various factors, including the environment. As an agricultural country, most Indonesian citizens work as farmers.⁹ Environmental quality affects the level of production and activities of farmers since food security is immensely dependent on the production of agricultural products that require good natural

² Prabowo and Rossi, "Kebijakan Pemerintah Dalam Mewujudkan Ketahanan Pangan Di Indonesia," *MEDIAGRO* 6, no. 2 (2010): 62–73.

³ Karen E Charlton, "Food Security, Food Systems and Food Sovereignty in the 21st Century: A New Paradigm Required to Meet Sustainable Development Goals," *Nutrition and Dietetics* 73, no. 1 (2016): 3–12, <http://ro.uow.edu.au/smhpapers/3477>.

⁴ United Nations Development Programme, "Poverty Reduction and Human Rights A Practice Note," June 2003.

⁵ Hilal Elver, "Human Rights Based Approach to Sustainable Agricultural Policies and Food Security," in *International Yearbook of Soil Law and Policy*, 2019, 347–72, https://doi.org/10.1007/978-3-030-00758-4_17.

⁶ Juli Panglima Saragih, "Kelembagaan Urusan Pangan Dari Masa Ke Masa Dan Kebijakan Ketahanan Pangan," *Jurnal Pangan* 26, no. 1 (July 2017): 57–80, <https://doi.org/10.33964/JP.V26I1.345>.

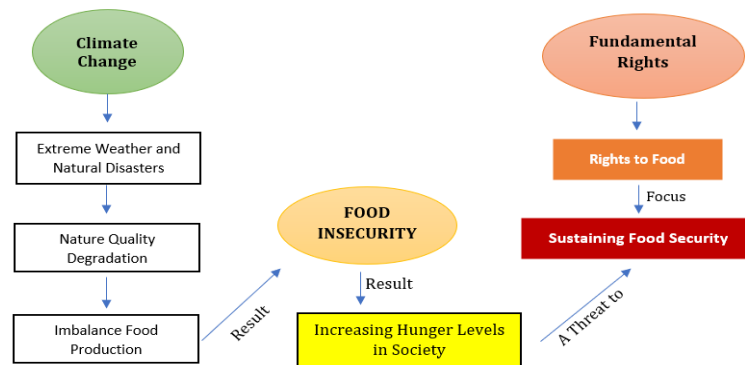
⁷ The Danish Institute For Human Rights, *A Human Rights Based Approach to the Means of Implementation of the Sustainable Development Goals* (The Danish Institute for Human Rights, 2020).

⁸ Saragih, "Kelembagaan Urusan Pangan Dari Masa Ke Masa Dan Kebijakan Ketahanan Pangan."

⁹ Perdinan et al., "Adaptasi Perubahan Iklim Dan Ketahanan Pangan: Telaah Inisiatif Dan Kebijakan," *Jurnal Hukum Lingkungan Indonesia* 5, no. 1 (January 2018): 60–87, <https://doi.org/10.38011/JHLI.V5I1.75>.

quality.¹⁰ As a result, Indonesia is laboriously impacted by climate change, which embodies extreme weather changes to disrupt food production stability and consequently increases the number of world hunger.¹¹ Climate change has a significant impact on the Indonesian economy because it directly threatens Indonesia's quality of the environment.¹² The association between food security in fulfilling fundamental human rights and the phenomenon of climate change can be illustrated as follows:

The Correlation of the Impact of Climate Change on the Fulfilment of the Right to Food as a Fundamental Human Rights



The illustration above clearly shows the correlation between the impact of climate change on food security in an effort to fulfill fundamental human rights. Poor natural quality will reduce the amount of natural food production and increase hunger levels which closely related to the non-fulfilment of fundamental human rights.¹³ Based on the 2021 Global Hunger Index (GHI), Indonesia ranks 73rd out of 116 countries with sufficient data to calculate the 2021 GHI score. With a score of 18.0, Indonesia has a moderate level of hunger.¹⁴ Even though this score is not considered dangerous, it is still threatening if associated with increasingly significant climate change. Indonesia is expected to improve its commitment to eradicating hunger through food security policies as an effort to eliminate this very issue.

One of Indonesia's approaches to improving food security is implementing Sustainable Development Goals (SDGs).¹⁵ SDGs ensure the continuity and

¹⁰ I Ketut Suratha, "Krisis Petani Berdampak pada Ketahanan Pangan di Indonesia", *Media Komunikasi Geografi* 16, no. 1, (2015):67-80, <http://dx.doi.org/10.23887/mkg.v16i1.10172>.

¹¹ Mariam Ulfa, "Persepsi Masyarakat Nelayan Dalam Menghadapi Perubahan Iklim (Ditinjau Dalam Aspek Sosial Ekonomi)", *Jurnal Pendidikan Geografi* 23, no. 1 (January 2018): 41-49, <https://doi.org/10.17977/um017v23i12018p041>.

¹² *Ibid.*

¹³ Cinta Lomba-fern, Josune Hernantes, and Leire Labaka, "Guide for Climate-Resilient Cities : An Urban Critical Infrastructures Approach," *Sustainability*, 2019, 2-19.

¹⁴ Global Hunger Index, "Indonesia", 2021, <https://www.globalhungerindex.org/indonesia.html>

¹⁵ Janet Fleetwood, "Social Justice, Food Loss, and the Sustainable Development Goals in the Era of COVID-19," *Sustainability (Switzerland)* 12, no. 12 (June 1, 2020), <https://doi.org/10.3390/su12125027>.

implementation of systems that can improve the quality of life amongst generations, improve the community's social life, and develop environmental quality.¹⁶ The SDGs are a form of global and national commitment to improving people's welfare which contains 17 goals. One of the 17 goals, "Goal 2: No Hunger" or "Goal 2: Zero Hunger", is in line with Indonesia's necessity to ensure food security as a form of fulfillment of fundamental human rights, and Goal 13: Climate Action as efforts to adapt to climate change. Furthermore, Indonesia has ratified the SDGs through Presidential Regulation No. 59 of 2017 concerning the Implementation of the Achievement of the Sustainable Development Goals.¹⁷ Therefore, this ratification act means that Indonesia is committed to completing these targets.

Based on the background description, the research will further discuss 2 (two) problems, namely, (1) The implementation of national food security policies in eradicating hunger as the fulfillment of fundamental human rights from the perspective of Sustainable Development Goals (2) The implementation of food security policies in adaptation to climate change. This article type of research is normative-analytical research which defines the problem and determines the research objectives. This article uses secondary data sources, including primary legal sources, secondary and tertiary legal materials.

Implementation of Indonesia's Food Security Policy as a Fulfillment of Fundamental Rights

Indonesia is a country that upholds human rights and guarantees the fulfillment of the right to food in its effort to eradicate hunger. Therefore, Indonesia must enforce a food security policy strategy to eliminate hunger through the implementation of SDGs targets.

Food Security as an Effort to Fulfill Fundamental Human Rights

Universal Declaration of Human Rights as the main instrument to universal human rights explicitly premises of rights from birth as well as other international sources relating to the right to life. The right to life possesses several basic needs of a human that are entitled to be met, including the right to food. The right to food is stated in Article 28H of the 1945 Constitution, which guarantees that everyone has the right to live in physical and spiritual prosperity. Recognition of food as a basic human need that most importantly underlies the formation of Law Number 18 of 2012 concerning

¹⁶ Kementerian PPN/BAPPENAS, "Sekilas SDGs: Latar Belakang SDGs", <http://sdgs.bappenas.go.id/sekilas-sdgs/>.

¹⁷ Juliana Dias Bernardes Gil et al., "Sustainable Development Goal 2: Improved Targets and Indicators for Agriculture and Food Security," *Ambio* 48, no. 7 (July 15, 2019): 685–98, <https://doi.org/10.1007/s13280-018-1101-4>.

Food.¹⁸ Through this law, food is considered as a primary component to create quality human resources. Furthermore, Indonesia as a ratifier of the International Covenant on Economic, Social, and Cultural Rights (ICESR) through Law No. 11 of 2005, directly implements the commitments contained in Article 11 paragraph (1) of the ICESR, which states that:¹⁹

“This instrument acknowledges the right of everyone to a sufficient standard of living for himself and his family, including sufficient food, clothing and housing, and the other improvement of living conditions. Therefore, States Parties must take the necessary steps to ensure the realization of this right and recognize the importance of international cooperation to achieve this goal.”

As the primary partaker in a country, the government has an obligation to fulfill the fundamental rights of its people, including the right to food through three main pillars, namely availability, access, and Eligibility.²⁰

- a. Availability means that food must be obtainable through natural food production or any other sources such as markets or shops
- b. Accessibility means the fulfillment of economic access to food. The state must ensure that every individual is able to obtain food without alleviating other fundamental needs.
- c. Eligibility means that everyone has the right to food that meets their dietary needs.

Therefore, to guarantee the right of everyone to food, these three pillars must be used as the ground for implementing national efforts in achieving food security through a rights-based approach. According to Arif Haryana, a right-based approach recognizes that all people, both men and women, possesses equal fundamental rights.²¹ Thus, recognizing food as a primary human right, it is essential to draw a line that this right must not be reduced by all means. Therefore, the non-fulfillment of the right to food is a violation of fundamental human rights. Moreover, A rights-based approach also means that the state is obliged to respect, protect, and fulfill its citizen’s fundamental

¹⁸ Josina Augustina Yvonne Wattimena and Vondaal Vidya Hattu, “Ketahanan Pangan Masyarakat Adat Sebagai Wujud Pemenuhan Ham Dalam Masa Pandemi Covid-19,” *SASI* 27, no. 2 (June 5, 2021): 247–66, <https://doi.org/10.47268/SASI.V27I2.448>.

¹⁹ Umbu Rauta, & Titon, and Slamet Kurnia, “Food Security And Local Government’s Role In Indonesia: Right-Based Approach In The Creation Of Local Regulation,” *European Journal of Molecular & Clinical Medicine* 7, no. 2 (2020).

²⁰ Iin Karita Sakharina et al., “Ketahanan Pangan Dan Budi Daya Pertanian Berkelanjutan Dalam Aspek Hak Asasi Manusia,” *Hermeneutika* 5, no. 2 (2021): 2021, <https://doi.org/10.33603/hermeneutika.v3i2>.

²¹ Sakharina et al.

rights.²² The nature of fundamental rights, which are incapable of standing alone but influencing each other, causing the non-fulfillment of one right, can affect the fulfillment of other rights.

Fundamental Human Rights Fulfilment in Eradicating Hunger under the Standpoint of Sustainable Development Goals

Human rights and the global Agenda 2030 through the Sustainable Development Goals (SDGs) are two elements that are closely related to one another. The 2030 global agenda is established on international human rights treaties, and all the 17 Goals aim to acknowledge human rights by 'leaving no one behind' (poorer states).²³ This attitude reflects fundamental human rights principles, particularly the principles of non-discrimination and equality. The correlation between fundamental human rights and SDGs provides the substantial possibility to support the effective implementation of both. In other words, if the state is committed to implementing the SDGs, it will directly contribute to the fulfillment of binding fundamental human rights.²⁴ The Institute for Human Rights in Denmark reported that more than 92% of all SDG targets are closely related to the specific provisions of international human rights instruments. The guidelines for implementing the 2030 Agenda are mostly based on human rights norms and mechanisms regulated by legal instruments binding international human rights treaties.²⁵

Through the 2030 SDGs Agenda, the eradication of food insecurity is carried out in order to fulfill fundamental human rights. The goals that are directly related to the fulfillment of the right to food are Goals 1 (No poverty) and 2 (Zero Hunger). As a fundamental human right, the right to food must be secured by the state, followed by good governance, accountability, transparency, equity, and other key principles that are important for achieving the SDGs.²⁶

The right to food as one of the fundamental human rights has been put as the main discussion at several international summits since 1948. In 1996, in the Rome Declaration on World Food Security, almost all countries except Australia and America

²² Putra Perdana Ahmad Saifulloh, "Gagasan Konstitusi Pangan: Urgensi Pengaturan Hak Atas Pangan Warga Negara Dalam Amandemen Kelima UUD 1945," *Jurnal HAM* 12, no. 2 (2021): 227, <https://doi.org/10.30641/ham.2021.12.227-244>.

²³ Sarah Rattray, "Human Rights and the SDGs - Two Sides of the Same Coin," United Nations Development Programme, July 5, 2019, <https://www.undp.org/blog/human-rights-and-sdgs-two-sides-same-coin>.

²⁴ Fleetwood, "Social Justice, Food Loss, and the Sustainable Development Goals in the Era of COVID-19."

²⁵ The Danish Institute For Human Rights, *A Human Rights Based Approach to the Means of Implementation of the Sustainable Development Goals*.

²⁶ Irene Hadiprayitno, "Poverty and International Human Rights Law," *SSRN Electronic Journal*, July 7, 2020, <https://doi.org/10.2139/ssrn.602321>.

consented that food is indeed a human right.²⁷ The association between SDGs, Strengthening Food Security, and Fulfillment of Basic Human Rights can be seen in the following table:

**Association Between SDGs Number 1 and 2 with Fundamental Rights
Fulfilment and Food Security**

Goal		Association with Fundamental Rights Fulfilment	Association with Food Security
1	End Poverty in all forms	Article 11 (2) of ICESR explicitly regulates the fundamental right of everyone to have a decent life, including freedom from hunger.	Poverty is the most significant determinant of food insecurity
2	Zero Hunger	Article 25 of the Universal Declaration of Human Rights regulates a broad range of rights, including the right to adequate food	This goal is directly related to improving food security and promoting sustainable agriculture

Indonesia's Food Policy in Sustaining Food Security

Food security is defined as availability in quantity, quality, and the ability to meet everyone's needs. This fulfilment is carried out by ensuring the easiness of the community to access food through supply security and distribution. In this case, the diversity and quality of food distributed are expected to be not only fulfilling but must be in an acceptable grade. The food distributed also needs to be safe for consumption without any harmful chemical or biological contamination.²⁸ Indonesia, through its law, regulated the matter of food security by enacting policies related to (a) Increasing diversity of food availability through fertilization of natural resources and (b) improving the surveillance of food scarcity to reduce hunger levels. The two policies are in the form of actions and strategies as follows:²⁹

- a. Bearing food scarcity through ensuring food availability
- b. Improving the welfare of small farmers
- c. Improving the quality of distribution agents in managing food resources and food price consistency
- d. Expanding the variety of food and the safety level of food consumption.

²⁷ Rauta, Titon, and Kurnia, "Food Security And Local Government's Role In Indonesia: Right-Based Approach In The Creation Of Local Regulation."

²⁸ Prabowo and Rossi, "Kebijakan Pemerintah Dalam Mewujudkan Ketahanan Pangan Di Indonesia."

²⁹ Badan Ketahanan Pangan, "Arah Kebijakan dan Strategi BKP", 2021, <http://bkp.pertanian.go.id/>.

As an implementing body in sustaining food security, the Food Security Council is entitled to issue the food security policy in Indonesia. The Indonesian Food Security Council authority is determined by Presidential Decree No. 132 of 2001 concerning the Food Security Council. The Food Security Council has the duty of formulating food security policies that focus on food distribution, availability, consumption, quality, and nutrition. In addition, the Food Security Council has the authority to evaluate the stabilization of food security. Some examples of food security policies are as follows:³⁰

a. Food diversification policies and strategies in Indonesia

Diversification of agricultural land converted into tourism, industrial and tourism land is a significant issue of food security. The government is intended to construct maps of the location of sector development, both local and national, using this information. This mapping strategy is in the form of agricultural data depending on the level of productivity of agricultural product-producing areas. Food diversification policies and strategies in Indonesia include:

- i. increasing food availability in Indonesia,
- ii. increasing public access to local food, and
- iii. encouraging the use of local food.

b. Food diversification program in Indonesia

The food diversification program in Indonesia is a decline from the food diversification strategy in Indonesia, which focuses on increasing productivity, expanding planting area, supply and price stability, expanding business scale and partnerships, education, and promotion.

c. Food independence

Food independence is a strategy conducted through the application concept of family farming. The Ministry of Agriculture has begun to implement the concept of a national food security movement through the “Food from the Yard” program.

d. Genetically Modified Organism (GMO) food policy

The Food Law indicates that before being commercialized in Indonesia, food ingredients derived from genetic engineering must be reviewed for food safety and approved first.

³⁰ Saragih, “Kelembagaan Urusan Pangan Dari Masa Ke Masa Dan Kebijakan Ketahanan Pangan.”

Implementation of Food Security Policy in Adaptation to Climate Change from the Perspective of Sustainable Development Goals

Climate change is impossible to avoid and has consequences in multiple areas of life. The extreme weather caused by climate change struck many places worldwide, including Indonesia. The climate change phenomenon is considered the beginning of food imbalance crises in the future. Climate change and its anomalies are actively impacting agricultural production capacity and dynamics and are a real threat to the sustainability of agriculture as a natural source of food products.³¹ Therefore, in increasing food security against the phenomenon of climate change, adaptation efforts are needed. This article will further explain the effort of Indonesia to sustain food security and its adaptation to climate change through national policies implementation.

Implementation of Indonesia's Food Security Policy as an Adaptation to Climate Change

The existing problem of climate change, drought, and floods will significantly impact Indonesia, as these events will reduce the food supply and its capacity. If there are no quick technological and non-technical solutions established through policies, Indonesia will face immense problems resulting from climate change. The contribution of 15% of Indonesia's gross domestic product (GDP) comes from the agricultural sector, which employs 41% of the country's workforce.³² In this case, food security intersects directly with the agricultural sector.³³ Therefore, adaptation to climate change is needed. Adaptation to these changes include:³⁴

- a. Develop and accelerate the adoption of productive agricultural technologies that able to withstand climate change
- b. Improving the effectiveness of infrastructure in the agricultural sector through the use of technology to adapt to climate change
- c. Develop information networks
- d. Development of farmer institutions as an effort to prevent and protect agricultural production from extreme climates.
- e. Policy on input and output prices for agricultural products.

³¹ Peter Rene Hosang et al., "Analisis Dampak Perubahan Iklim Terhadap Produksi Beras Provinsi Sulawesi Utara Tahun 2013-2030," *EUGENIA* 18, no. 3 (December 2012), <https://doi.org/10.35791/EUG.18.3.2012.4101>.

³² Achim Hagen, Juan Carlos Altamirano-Cabrera, and Hans Peter Weikard, "National Political Pressure Groups and the Stability of International Environmental Agreements," *International Environmental Agreements: Politics, Law and Economics*, December 2020, 1–21, <https://doi.org/10.1007/s10784-020-09520-5>.

³³ Robet Asnawi, "Perubahan Iklim Dan Kedaulatan Pangan Di Indonesia. Tinjauan Produksi Dan Kemiskinan," *Sosio Informa* 1, no. 3 (December 2015), <https://doi.org/10.33007/INF.V1I3.169>.

³⁴ Perdinan et al., "Adaptasi Perubahan Iklim Dan Ketahanan Pangan: Telaah Inisiatif Dan Kebijakan."

The climate change adaptation strategy is divided into two parts. The first type is structural, while the second type is non-structural. Operations to increase the resilience of food production systems to the impacts of climate change through efforts to improve physical conditions, such as construction and repair of irrigation networks, dams, and reservoirs, are structural. The Structural Plan is divided into the following:³⁵

- a. Mapping of irrigation network conditions in Java and outside Java
- b. Rehabilitation of watershed areas (DAS) in order to prepare resilience to floods and droughts.

Non-structural measures include developing climate-resilient agricultural technologies, strengthening institutions and regulations, and empowering farmers to use climate data to deal with and anticipate extreme weather events, which are becoming more common. Non-structural plans consist of the following:³⁶

- a. Establishing regulations concerning agricultural land conversion, creating a database of places at risk of conversion, and determining priority locations for food development.
- b. Preparing structured initiatives to encourage farmers to adopt new technologies resistant to extreme weather.
- c. Improving the use of strategic climate information technology development plans.
- d. Improving farmers' proficiency through the Development of Climate Field Schools (known as *Sekolah Lapang Iklim*).

Climate Change Adaptation through Indonesia's Food Security Policy from the Perspective of Sustainable Development Goals

The targets of the SDGs include poverty alleviation, elimination of inequality, and addressing the impacts of climate change.³⁷ Of the 17 targets, there are 2 (two) targets that are directly involved in food security and adaptation to climate change, namely "Sustainable Development Goal 2: Zero Hunger" and "Sustainable Development Goal 13: Climate Action". In practice, hunger and climate change are linked to food availability. Climate change has a direct impact on the environment. One form of climate change is extreme weather changes, which affect the harvest cycle of

³⁵ Badan Penelitian dan Pengembangan Pertanian Kementerian Pertanian, *Pedoman Umum: Adaptasi Perubahan Iklim Sektor Pertanian*, 2011, <https://www.litbang.pertanian.go.id/download/132/file/pedum-adaptasi.pdf>, pp. hlm 24-26.

³⁶ Hosang et al., "Analisis Dampak Perubahan Iklim Terhadap Produksi Beras Provinsi Sulawesi Utara Tahun 2013-2030."

³⁷ W. Leal Filho et al., "Using the Sustainable Development Goals towards a Better Understanding of Sustainability Challenges," *https://doi.org/10.1080/13504509.2018.1505674* 26, no. 2 (February 2018): 179–90, <https://doi.org/10.1080/13504509.2018.1505674>.

the farm or plantation. In addition, climate change has a high potential for natural disasters. Natural disasters such as floods, landslides, and cyclones will massively damage agriculture and plantations.³⁸ If such situation occurs continuously, agricultural production will be unstable, thus affecting food resources. Threats to food reserves can increase hunger levels. From the perspective of the SDGs, the relationship between hunger and climate change is studied further through the integration of "goal 2: no hunger" with "goal 13: tackling climate change":

Integration of “Goal 2: No Hunger” with “Goal 13: Climate Action” of Sustainable Development Goals

No.	Goal 2: No Hunger	Goal 13: Climate Action
1.	Eradicating hunger and ensuring access to food for everyone.	Increase resilience to natural disasters and extreme weathers as a form of climate change action
2.	Eliminate nutritional deficiencies	Integrate anticipatory climate change actions into national policies, strategies, and plans.
3.	Increase agricultural productivity and income of small-scale food producers	Ensuring the implementation of education, awareness, and human and institutional capacities related to climate change mitigation, adaptation, impact reduction, and early warning
4.	Strengthening climate change adaptation as an effort to guarantee the food production system.	Optimally operationalize the Green Climate Fund
5	Addressing the genetic diversity of seeds, livestock, domesticated animals, and related foreign species	Improving the effectiveness of developing country climate change planning and management.

Based on the table above, it can be concluded that although not directly related, Goal 2 is part of adaptation in the face of climate change. By this means, to achieve Goal 2, there is Goal 13, which serves as an indicator. Thus, Goal 2 and Goal 13 are linked to strategies that strengthen adaptation to climate change. There is more to be understood: the integration of SDGs is not limited to only 2 (two) goals since all 17 SDGs goals are interrelated.as illustrated through the following picture. Figure 1 has provided an overview of the interrelations between the SDGs, including Goal 2 and Goal 13, and other objectives. There are several perspectives for scrutinizing this affinity, one of which is between goals 13, 11, and 2. Climate change triggers severe weather changes, leading to natural disasters. Floods will destroy the agricultural sector

³⁸ World Food Program, “Two Minutes on Climate Change and Hunger: A Zero Hunger World Needs Climate Resilience,” 2018.

and cause failure to fulfil Goal 2: no hunger. Indirectly, natural disasters will perhaps impact public infrastructure, for instance, grocery stores that result in unavailable access to necessities, including food. Therefore, the association between goals is complementary.

Interrelation Amongst Goals in Sustainable Development Goals



Implementation of Indonesia's Food Security Policy towards Goal 2 of Sustainable Development Goals as the Fulfilment of Fundamental Human Rights and Adaptation to Climate Change

Goal 2 of the Sustainable Development Goals (SDGs) aligns with a broader conceptualization of a sustainable food system, organized around three main disciplines: ecology and agricultural science, nutrition and public health, and political economy perspectives. In each component of the discipline, we first summarize the state of knowledge on the most effective pathways to achieving "no hunger" while ensuring the food system's sustainability, using a variety of literature.³⁹ Indonesia has ratified the SDGs through Presidential Regulation No. 59 of 2017 concerning the Implementation of the Achievement of the Sustainable Development Goals. One thing that can be studied from the ratification is the fulfilment of food security policies in Indonesia with Goal 2 of the SDGs.

Fulfillment of Indonesia's Food Security Policy with Goal 2: No Hunger Sustainable Development Goals

³⁹ Jennifer Blesh et al., "Development Pathways toward 'Zero Hunger,'" *World Development* 118 (June 2019): 1–14, <https://doi.org/10.1016/J.WORLDDEV.2019.02.004>.

No.	Indicator Goal 2 SDGs	Indonesia's Food Security Policy
1.	Universal access to food and nutrition	Handling food scarcity through ensuring food accessibility
2.	Eliminate malnutrition	Implementation of the Food and Nutrition Awareness System
3.	Doubling the productivity and income of small food producers	Institutional commitment in the aspect of food reserve allocation through food price consistency
4.	Sustainable food production and resilient agricultural practices	Agricultural diversification
5.	Maintain genetic diversity in food production	Varied food diversity by taking into account the safety level of food consumption.
6.	Investment in rural infrastructure, agricultural research, genetic technology	Labels on genetically modified products
7.	Prevent agricultural trade restrictions, market distortions, and export subsidies	Supervision of food reserves and controlling food prices so as not to fluctuate.
8.	Ensure stable food commodity markets and timely access to information	Response and Anticipatory Studies of Food Distribution

Concluding Remarks

Based on the results of the study, there are 2 (two) conclusions as follows. *First*, Universal Declaration of Human Rights as the main instrument to universal human rights explicitly premises of rights from birth as well as other international sources relating to the right to life. The right to life possesses several basic needs of a human that are entitled to be met, including the right to food. The right to food is stated in Article 28H of the 1945 Constitution, which guarantees that everyone has the right to live in physical and spiritual prosperity, strengthened by Law Number 18 of 2012 concerning Food. Through this law, food is considered a fundamental component to creating quality human resources. As a fundamental human right, the right to food is set to become one of the global issues contained in the 2030 Agenda's Sustainability Goals. Implementation of the SDGs is directly related to fulfilling fundamental human rights.

Second, There are a series of threats to Indonesia's food security, one of which is the issue of climate change. The objective to eliminate hunger requires a food security policy that considers the need for climate change adaptation. Adaptation to climate change through Indonesia's food security policy from Sustainable Development Goals can be seen from the integration between goal 2 and goal 13. In addition, Indonesia's food security policy has met the indicator of goal 2 sustainable development goals in the aspects of availability, monitoring, reserves, diversity, innovation, and solving food problems. With the fulfillment of goal 13 indicators, Indonesia directly contributes to strengthening food security to fulfill the fundamental rights of its citizens.

Bibliography

- Blesh, Jennifer, Lesli Hoey, Andrew D. Jones, Harriet Friedmann, and Ivette Perfecto. "Development Pathways toward 'Zero Hunger.'" *World Development* 118 (June 2019): 1–14. <https://doi.org/10.1016/J.WORLDDEV.2019.02.004>.
- Charlton, Karen E. "Food Security, Food Systems and Food Sovereignty in the 21st Century: A New Paradigm Required to Meet Sustainable Development Goals." *Nutrition and Dietetics* 73, no. 1 (2016): 3–12. <http://ro.uow.edu.au/smhpapers/3477>.
- Elver, Hilal. "Human Rights Based Approach to Sustainable Agricultural Policies and Food Security." In *International Yearbook of Soil Law and Policy*, 347–72, 2019. https://doi.org/10.1007/978-3-030-00758-4_17.
- Filho, W. Leal, S. K. Tripathi, J. B. S. O. D. Andrade Guerra, R. Giné-Garriga, V. Orlovic Lovren, and J. Willats. "Using the Sustainable Development Goals towards a Better Understanding of Sustainability Challenges." *Https://Doi.Org/10.1080/13504509.2018.1505674* 26, no. 2 (February 2018): 179–90. <https://doi.org/10.1080/13504509.2018.1505674>.
- Fleetwood, Janet. "Social Justice, Food Loss, and the Sustainable Development Goals in the Era of COVID-19." *Sustainability (Switzerland)* 12, no. 12 (June 1, 2020). <https://doi.org/10.3390/su12125027>.
- Gil, Juliana Dias Bernardes, Pytrik Reidsma, Ken Giller, Lindsay Todman, Andrew Whitmore, and Martin van Ittersum. "Sustainable Development Goal 2: Improved Targets and Indicators for Agriculture and Food Security." *Ambio* 48, no. 7 (July 15, 2019): 685–98. <https://doi.org/10.1007/s13280-018-1101-4>.
- Hadiprayitno, Irene. "Poverty and International Human Rights Law." *SSRN Electronic Journal*, July 7, 2020. <https://doi.org/10.2139/ssrn.602321>.
- Hagen, Achim, Juan Carlos Altamirano-Cabrera, and Hans Peter Weikard. "National Political Pressure Groups and the Stability of International Environmental Agreements." *International Environmental Agreements: Politics, Law and Economics*, December 2020, 1–21. <https://doi.org/10.1007/s10784-020-09520-5>.
- Hosang, Peter Rene, J Tatu, Johannes E X Rogi, Badan Ketahanan, Pangan Provinsi, and

- Sulawesi Utara. “Analisis Dampak Perubahan Iklim Terhadap Produksi Beras Provinsi Sulawesi Utara Tahun 2013-2030.” *EUGENIA* 18, no. 3 (December 2012). <https://doi.org/10.35791/EUG.18.3.2012.4101>.
- Lomba-fern, Cinta, Josune Hernantes, and Leire Labaka. “Guide for Climate-Resilient Cities : An Urban Critical Infrastructures Approach.” *Sustainability*, 2019, 2–19.
- OHCHR. “Human Rights and Poverty Reduction: A Conceptual Framework.” Geneva, December 2003.
- Perdinan, Perdinan, Tri Atmaja, Rycy F Adi, and Woro Estiningtyas. “Adaptasi Perubahan Iklim Dan Ketahanan Pangan: Telaah Inisiatif Dan Kebijakan.” *Jurnal Hukum Lingkungan Indonesia* 5, no. 1 (January 2018): 60–87. <https://doi.org/10.38011/JHLI.V5I1.75>.
- Prabowo, and Rossi. “Kebijakan Pemerintah Dalam Mewujudkan Ketahanan Pangan Di Indonesia.” *MEDIAGRO* 6, no. 2 (2010): 62–73.
- Rattray, Sarah. “Human Rights and the SDGs - Two Sides of the Same Coin | United Nations Development Programme.” United Nations Development Programme, July 5, 2019. <https://www.undp.org/blog/human-rights-and-sdgs-two-sides-same-coin>.
- Rauta, Umbu, & Titon, and Slamet Kurnia. “Food Security And Local Government’s Role In Indonesia: Right-Based Approach In The Creation Of Local Regulation.” *European Journal of Molecular & Clinical Medicine* 7, no. 2 (2020).
- Robet Asnawi. “Perubahan Iklim Dan Kedaulatan Pangan Di Indonesia. Tinjauan Produksi Dan Kemiskinan.” *Sosio Informa* 1, no. 3 (December 2015). <https://doi.org/10.33007/INF.V1I3.169>.
- Saifulloh, Putra Perdana Ahmad. “Gagasan Konstitusi Pangan: Urgensi Pengaturan Hak Atas Pangan Warga Negara Dalam Amandemen Kelima UUD 1945.” *Jurnal HAM* 12, no. 2 (2021): 227. <https://doi.org/10.30641/ham.2021.12.227-244>.
- Sakharina, Iin Karita, S M Noor, Aidir Amin Daud, Trifenny Widayanti, Wahyudi Pratama, and Sardil Mutaallif. “Ketahanan Pangan Dan Budi Daya Pertanian Berkelanjutan Dalam Aspek Hak Asasi Manusia.” *Hermeneutika* 5, no. 2 (2021): 2021. <https://doi.org/10.33603/hermeneutika.v3i2>.
- Saragih, Juli Panglima. “Kelembagaan Urusan Pangan Dari Masa Ke Masa Dan Kebijakan Ketahanan Pangan.” *Jurnal Pangan* 26, no. 1 (July 2017): 57–80. <https://doi.org/10.33964/JP.V26I1.345>.
- The Danish Institute For Human Rights. *A Human Rights Based Approach to the Means of Implementation of the Sustainable Development Goals*. The Danish Institute for Human Rights, 2020.
- Ulfa, Mariam. “Persepsi Masyarakat Nelayan Dalam Menghadapi Perubahan Iklim (Ditinjau Dalam Aspek Sosial Ekonomi).” *Jurnal Pendidikan Geografi* 23, no. 1 (January 2018): 41–49. <https://doi.org/10.17977/um017v23i12018p041>.
- United Nations Development Programme. “Poverty Reduction and Human Rights A Practice Note,” June 2003.
- Wattimena, Josina Augustina Yvonne, and Vondaal Vidya Hattu. “Ketahanan Pangan Masyarakat Adat Sebagai Wujud Pemenuhan Ham Dalam Masa Pandemi Covid-19.”

SASI 27, no. 2 (June 5, 2021): 247–66. <https://doi.org/10.47268/SASI.V27I2.448>.
World Food Program. “Two Minutes on Climate Change and Hunger: A Zero Hunger World Needs Climate Resilience,” 2018.