

CLIMATE CHANGE AND HUMAN RIGHTS EDUCATION

for Youth in the Philippines



TAIWAN FOUNDATION
for DEMOCRACY
財團法人
臺灣民主基金會







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**Dominicans for Justice and Peace
(Order of Preachers) (UNOP)**

+41 (0)22 779 4010
37/39 Rue de Vermont
C.P. 104, 1211
Geneva 20, Switzerland
contact@un.op.org
www.un.op.org

**Dominican Family for Justice and Peace and
Care for Creation - Philippines (DFJPCC)**

+63 8282 6067
Sto Dominiko,
No. 8, Biak na Bato,
Santa Mesa Heights, Quezon City,
Metro Manila, Philippines 1114
opphjpcc@gmail.com

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(+632) 34061611 local 4030 | (+632) 8880 1668
G/F Thomas Aquinas Research Complex España Blvd.,
Manila, Philippines 1015
ccped@ust.edu.ph / ust_ccped@yahoo.com

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Mangrove coastal clean-up and educational tour organized as part of the bi-annual Community Service Day by UST SIMBAHAYAN Community Development Office in 2024.

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Foreword by Archbishop Socrates B. Villegas

Our hope is in the Lord: The Lord comes to us and stays with us in many, varied and mysterious ways—through the Church, through the Scriptures, through the whole of creation. The groan of creation is the groan of God the Creator. The moan of the poor and the violated and the oppressed brethren is the groan of Christ at Calvary. These moans of creation and the groan of the poor urge us to do what Christ would do.

How shall we attend to these moaning and groaning?

We must empower the children. We must empower the poor.

To empower is to form unto Christ. Empowerment is formation. Empowerment is not about power. To empower is to teach and to guide. Empowerment is helping to see with the eyes of Christ. Empowerment is letting Christ in us come forth and inviting Christ in others to come forth too.

This is an empowering book for the poor and children. Climate change and human rights abuses are glaring signs that we have failed in stewardship and in discipleship. There is no antidote to climate change separated from God. Human rights cannot be sustained and safeguarded without God in whose image all are created.

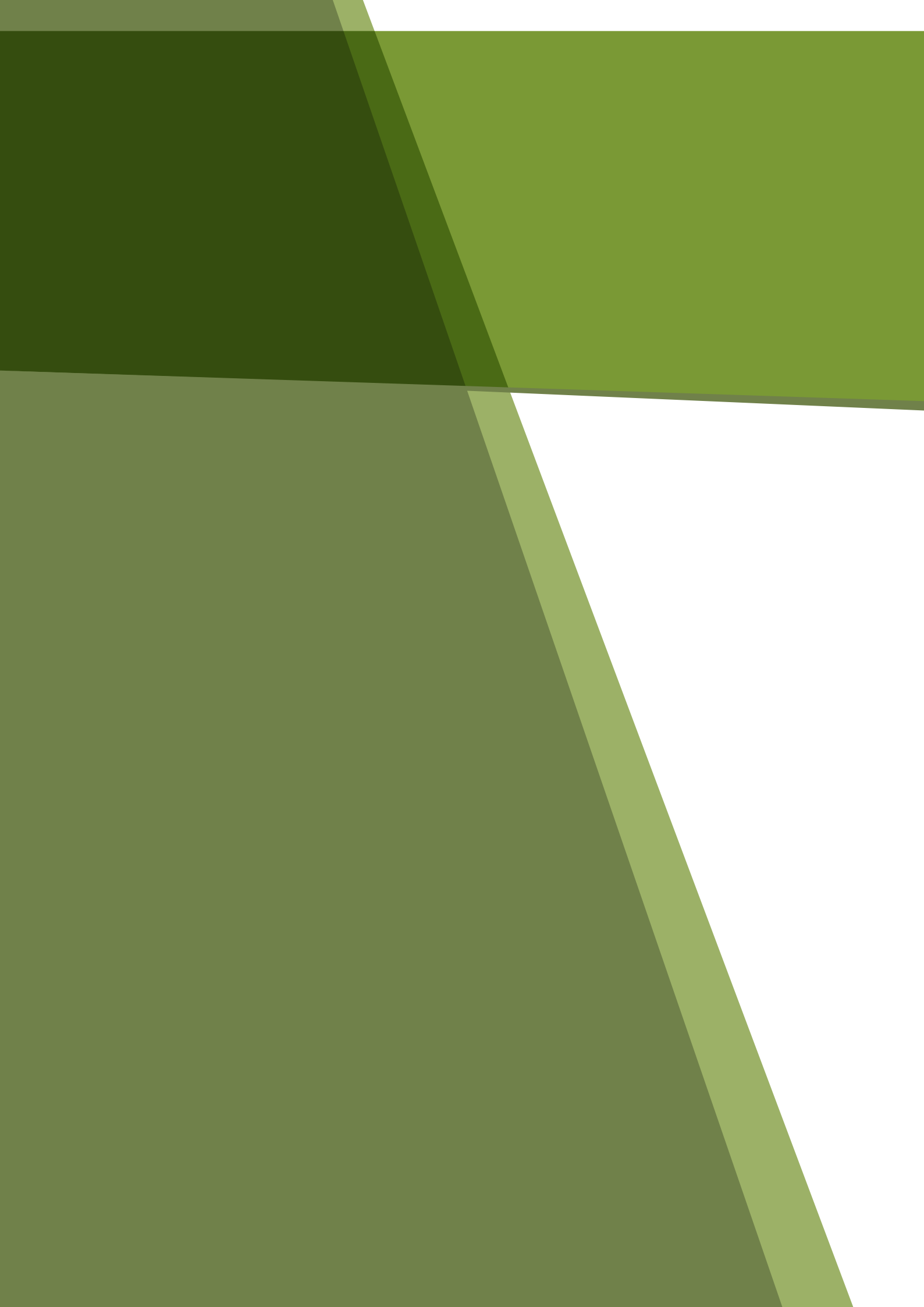
Fr. Aniedi Okure, OP, my Dominican brother, is the most unlikely person to stand by and join the bench of spectators as humanity groans and moans. Here, he stands up passionately for Mother Earth. Here, he stands up courageously to defend the abused and the oppressed. Here, he embraces, as he has always done, the mission of the Lord who has been anointed to set captives free (Luke 4:18); the Lord who casts down the mighty from their thrones (Luke 1:52). Here, Fr. Okure impels us to teach teachers and inspire children.

This book is God's gift to us who now see our Mother Earth bleeding from climate change and human oppression. Our hope is the Lord, indeed. The Lord speaks to us a message of mission and hope in this book. Ours is a mission of hope.

Take and read. Read and live. Live and be the change the world needs.

From the Cathedral of Saint John the Evangelist, Dagupan City, Philippines,
May 15, 2024, Memorial of Saint Isidore the Farmer.

++Socrates B. Villegas
Archbishop of Lingayen Dagupan



Message from Fr. Aniedi Okure, OP



Humans as Earth custodians

It is often said that our children are the future. The corollary being that the future belongs to our children. That is true. Yet we know that today is the future we discussed yesterday. The wisdom embedded in these sayings is a guide to the production of this handbook. It is designed to enable our children to be proactive in shaping an integral, wholesome future by preparing for it in the present, to understand the diverse ways that our human activities contribute to shaping the future. More specifically, it is intended to empower our children to take responsibility in fashioning a better tomorrow that will be theirs, by contributing to cultivating and caring for the Earth, our common home (Pope Francis, *Laudato Si'*).

The Scriptures emphasize our responsibility as caretakers of the Earth. After God created the Earth and commanded it to “...bring forth living creatures according to their kinds—livestock and crawling things and beasts of the earth according to their kinds” (Genesis 1:24), and trees whose “fruit will serve for food and their leaves for healing” (Ezekiel 47:12), God took Adam (representing human beings) and put him in the garden to cultivate and take care of it (Genesis 2:15).

By this act, God designated humans as custodians of the Earth. We therefore have the responsibility to preserve what God has created and entrusted to us. Failure to do so is to undermine God’s creation. An ancient indigenous wisdom captures our role as custodians of the Earth; “We who are alive now, we do not inherit the earth from our ancestors, we borrow it from our children.” One is obliged to take extra care of that which is borrowed, that which is given in trust. Let us live up to our responsibility as caretakers of the Earth.

We are grateful to all who made this handbook possible.

Fr. Aniedi Okure, OP

*Permanent Delegate of the Order of Preachers to the United Nations
Director, Dominicans for Justice and Peace*



Message from Sr. Teresa R. Dagdag, MM



Congratulations to all who made this handbook possible! Writing a Message for this handbook feels like watching a dream come true! The seed was sown more than two years ago when the concept of climate change and human rights was discussed among members of the Dominican Family for Justice, Peace and Care for Creation - Philippines. A good number of us joined the five sessions online. That inspiration pulled us through the challenges that followed.

Believing in the value of this handbook, teachers spent long hours presenting topics at a workshop at the Maryknoll Ecological Sanctuary, Baguio City on May 26–29, 2023, which fell on a Pentecost Sunday where the gifts of the Holy Spirit were shared with the participants. The next gathering was a writeshop in the same venue on October 20–23, 2023. Those hours and days have paid off and now we can share the handbook with as many educators and children as could be reached. I find it purposeful and exciting to see the result of a strong Dominican commitment to children’s wellness. Children’s rights to food, security, health, nutrition, education, development, survival, and the future are being endangered; these rights need to be protected, safeguarded, and enhanced.

Why focus on the children? The future of any species in the One Earth Community depends on the wellbeing of their offsprings. These offsprings can lead us to a healthy future if nurtured into responsible members of our Earth Community. *Laudato Si’* calls us to practice intergenerational justice to prepare for a sustainable future for the next generations. This handbook aims to empower children in whom we place our hopes to ensure that humans relate well with the Earth. Through this handbook, we invite creative knowledge and skills, and allow good practices to emerge so that these can help in the mitigation of and adaptation to climate change. It is our hope that these children will become future environmental defenders and leaders in the Earth Community. The Ecozoic Era is when humans have a friendly relationship with Earth; it is NOW!

Pope Francis talks about the common good and intergenerational justice in his encyclical *Laudato Si’*. Intergenerational solidarity is the notion of the common good extended to future generations. “Intergenerational solidarity is not optional, but rather a basic question of justice, since the world we have received also belongs to those who will follow us.” (LS: 159). We hope that this handbook would inspire the young to help us build a thriving planet with justice and peace.

The Environment Committee of the Dominican Family for Justice, Peace and Care for Creation – Philippines commits itself to a healthy planet through participation in projects that support life in all forms. One project that we undertook was the fact-finding mission in solidarity with the Zambales Ecological Network (ZEN). Formerly called Save Zambales Kalikasan Movement, this groundswell of efforts followed the struggles of peoples and communities in coastal towns of San Felipe and San Narciso in Zambales. That experience was a learning opportunity for us to be in solidarity with the fisher folk who have depended on a healthy coastal environment for their livelihood while also learning to call out government agencies to monitor environmental compliance to protect the black sand from illegal mining.

Dominican religious congregations have integral ecology as one of their priority ministries. Among them, the Maryknoll Ecological Sanctuary in Baguio of the Maryknoll Sisters of St. Dominic envisions a “mutually enriching Earth-human relationship that will enable future generations to care for a beautiful and thriving planet capable of supporting life with justice and peace for all.” It was a killer earthquake that led the Sisters to experience the dying and rising of the mission space in Baguio. We experienced firsthand the Paschal Mystery of death and resurrection; from the ruins of our demolished wooden house originally used as classrooms for elementary school children, to what emerged as the “risen” form of a 14-station meditative walk we now call the Cosmic Journey.

The Ecological Sanctuary protects the pine trees and their “children” saplings that provide oxygen to the city. Life from these trees has emerged from the devastation caused by the earthquake and invites the meditative trekker to find meaning and resonance in retracing the 5-billion-year evolution of our planet Earth through a connection with his/her own personal journey/or evolution.

We are all interrelated! Let us continue to thank God and one another for the inspiration to care for our One Earth Community. Let us facilitate the emergence of a lifestyle shift from mindless and selfish behavior to mindful attitudes and habits that express care for our Common Home. Let us invite the children to connect with the Earth, form a healthy relationship with it, and learn to love Earth as a Community to which we all belong. Allow me to share the song “Touch the Earth” by Kathy Sherman CSJ which expresses human interconnectedness with all that is.

Touch the Earth with gentleness

Touch the Earth with love,

Touch it with the future

by the way we live today

God has given us the power

to create our world anew

If we touch the Earth

together, me and you.

Sr. Teresa R. Dagdag, MM, PhD
Coordinator of Justice, Peace, and Care of Creation - Asia-Pacific 2019–2023

Message from Fr. Gilbert B. Sales, CICM



Advancing Climate Change and Human Rights in Education is becoming the new approach in evangelization.

At the onset of Pope Francis' encyclical *Laudato Si'* and the recent, *Laudate Deum*, Catholic faithful, especially the Catholic Schools, are called to be at the frontier to seriously take action in mitigating the ill effects of climate change, and to strongly promote environmental protection and preservation of our common home. This call is borne out of the vulnerables' struggle to live decent lives since they are the primary victims of the effects of climate change. By doing so, we take the lead in promoting the dignity of everyone, furthering our human rights advocacy in the education sector.

Saint Louis University, as the seat of the Catholic Educational Association of the Philippines in the Cordillera Administrative Region, leads Catholic schools in the region to integrate lessons on climate change and human rights in their daily teaching through the JEEPGY module specially crafted for them. We firmly believe that this handbook would be a GREAT help to our teachers and students for their in-depth understanding, appreciation, and concrete action towards elevating the concepts and lessons on climate change and human rights. This material would usher the conduct of more tangible and serious actions in relation to aforementioned advocacies, which are actually our fundamental responsibilities.

We then congratulate and express our gratitude to Dominicans for Justice and Peace as well as the Dominican Family for Justice and Peace and Care for Creation - Philippines for producing this one-of-a-kind handbook that will truly benefit our students and teachers, and eventually, the rest of our community.

In Christ,

Fr. Gilbert B. Sales, CICM, PhD
President, Saint Louis University
Regional Trustee, Catholic Educational Association of the Philippines – CAR
Regional Program Director – Private Education Assistance Committee

LIST OF ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
AFA	Agricultural and Fishery Arts
AHRD	ASEAN Human Rights Declaration
AP	Araling Panlipunan
ASEAN	Association of Southeast Asian Nations
AICHR	ASEAN Intergovernmental Commission on Human Rights
CAHRI	Climate Action and Human Rights Institute
CBCP	Catholic Bishops' Conference of the Philippines
CC	climate change
CCC	Catechism of the Catholic Church
CCHRE	Climate Change and Human Rights Education
CRC	Committee on the Rights of the Child
CESCR	Committee on Economic, Social, and Cultural Rights
CHED	Commission on Higher Education
CHR	Commission on Human Rights of the Philippines
CLN	Climate Litigation Network
COP	Conference of the Parties
CO2	carbon dioxide
CPD	continuous professional development
CRC	Committee on the Rights of the Child
CSDC	Compendium of the Social Doctrine of the Church
CTI	Coral Triangle Initiative
DECS	Department of Education, Culture and Sports
DENR	Department of Environment and Natural Resources
DepEd	Department of Education
DFJPCC	Dominican Family for Justice and Peace and Care for Creation
DRRM	disaster risk reduction and management
EHRD	environmental human rights defender
EPP/TLE	Edukasyong Pantahanan at Pangkabuhayan / Technology and Livelihood Education
FCS	family and consumer science
GDP	gross domestic product
GHG	greenhouse gas
GMSL	global mean sea level
GtC	gigatonnes of carbon

HR	human rights
HRC	United Nations Human Rights Council
IA	industrial arts
IPs	Indigenous Peoples
IBE-UNESCO	International Bureau of Education-United Nations Educational, Scientific and Cultural Organization
ICCPR	International Covenant on Civil and Political Rights
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICT	information and communication technology
IDIS	Interfacing Development Interventions for Sustainability
IDEALS, Inc.	Initiatives for Dialogue and Empowerment through Alternative Legal Services, Inc.
ILO	International Labour Organization
IPCC	Intergovernmental Panel on Climate Change
LGU	local government unit
MAPEH	Music, Arts, Physical Education, and Health
NSWMC	National Solid Waste Management Commission
NICC	National Inquiry on Climate Change
NGO	non-governmental organization
OHCHR	Office of the High Commissioner for Human Rights
PCW	Philippine Commission on Women
SC	Supreme Court
SDGs	Sustainable Development Goals
SLR	sea level rise
SST	sea surface temperature
TC	tropical cyclone
UDHR	Universal Declaration of Human Rights
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	Unit United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund
WHO	World Health Organization
WSA	whole-school approach

CHAPTER 1

INTRODUCTION

Mangrove coastal clean-up and educational tour organized as part of the bi-annual Community Service Day by UST SIMBAHAYAN Community Development Office in 2024.

Mangrove coastal clean-up and educational tour organized as part of the bi-annual Community Service Day by UST SIMBAHAYAN Community Development Office in 2024.



INTRODUCTION

After completing chapter 1, you will be able to:

- Understand why climate change is a human rights concern.
- Contemplate the social teachings of the Church on the care for creation, human dignity, and justice.
- Recognize the crucial role of educators in shaping the understanding of young generations regarding climate change and human rights.
- Gain a comprehensive overview of the concepts and topics covered in each chapter.



1.1 Climate Change is a Human Rights Issue



What are Human Rights?

Human rights shield individuals and groups against acts and omissions from state agents. They are universal and founded on the inherent worth and dignity of every person (Universal Declaration of Human Rights, 1948). By ratifying international human rights treaties and enacting human rights legislations within their territory, governments are legally required to respect, protect, and fulfill human rights, regardless of one's nationality, ethnic origin, sex, color, religion, language, or any other status (Office of the High Commissioner for Human Rights [OHCHR], n.d.).

In addressing the needs of every individual, human rights embody profound ethical and moral values. They also offer a means for securing and protecting the basic standard of living of vulnerable groups in society. They encompass civil and political rights (i.e., the right to life; freedom of opinion and expression; the prohibition of torture and cruel or degrading treatment or punishment; and freedom of association) as well as economic, social, and cultural rights (i.e., the right to health; adequate standard of living; education; and work).

Human rights are formalized in international conventions, such as the Universal Declaration of Human Rights (UDHR), the International Covenant on Civil and Political Rights (ICCPR), and the International Covenant on Economic, Social, and Cultural Rights (ICESCR). When States ratify international human rights treaties, they are sworn to adhere with the legal norms and standards established in those instruments. If they fail to comply, individuals whose rights have been violated are entitled to initiate proceedings to seek remedy before a competent court or other adjudicative body in accordance with the law (United Nations Children's Fund [UNICEF], n.d.).



Human Rights are Impacted by Climate Change

Climate change has become one of the major threats to human rights. There is no doubt that climate change has detrimental impacts on the daily lives of people, therefore affecting the enjoyment of human rights. Worldwide, climate change has significant impacts on the right to life, food, water, health, livelihood, housing, and education, among others.

The Philippines is no exception when it comes to climate change impacts. In particular, the country is vulnerable to rising temperatures, increased frequency of super typhoons, and rising sea levels, among others (United States Agency for International Development, 2017). Among the most vulnerable groups are coastal communities, young generations, Indigenous Peoples (IPs), women, and people living in precarious conditions who bear the brunt of extreme and more frequent weather events and natural hazards.

To respond to this pressing and growing challenge, the Philippines' efforts to address climate change should include a human rights-based approach (further discussed in [chapter 2](#)). Climate change is a human rights issue and human rights considerations must be an integral part of climate actions.





Foundations from Teachings of the Church

Teachings of the Church are rife with injunctions addressing climate change and human rights issues, which are encapsulated in the principles of environmental protection (care for creation) and in the importance of upholding human dignity and justice.

Biblical precepts for the care of creation

The relationship between humankind and the environment is rooted in the story of creation. According to the Book of Genesis, God fashioned all elements of the universe in accordance with His divine plan, encompassing their richness, diversity, and order. Prior to the creation of the first humans, nature was brought into existence, including the Earth, water, and sky, along with the sun, moon, and stars, as well as all fish, birds, and animals.

God looked at everything He has made, and He found it very good.

—The New American Bible [NAB], 2002, Genesis 1:31

God then created human beings above all other creatures, in His own image and likeness—endowing them with the capacities for self-awareness, self-control, and the ability to freely give of themselves and engage in communion with others (Catholic Church, 1993, Catechism of the Catholic Church [CCC] 357). In God’s plan, man and woman have the vocation of “subduing” the Earth as stewards of God (Catholic Church, 1993, CCC 373).

The creation narrative in the Book of Genesis indicates that human beings exist within three foundational and interconnected relationships—with God, with fellow humans, and with the natural world. The connection between humans and the environment forms an integral aspect of their identity, which, in turn, arises from a deeper relationship between humanity and the divine (Pontifical Council for Justice and Peace, 2004, Compendium of the Social Doctrine of the Church 452). The second creation story in the Book of Genesis weighs on this relationship.

God the Creator formed man out of the clay of the ground and blew into his nostrils the breath of life, and so man became a living being.

—NAB, 2002, Genesis 2:7

However, due to the first human beings’ disobedience to God, the original relationship between God, humanity, and nature was broken. Sin ruptured the harmony between humankind and nature. The privilege of “dominion” over the Earth given by God to

human beings was corrupted, and they began exploiting and destroying nature. This is the anthropocentric (humankind as the center of creation) interpretation of “dominion” to fill and subdue the Earth. This is a mistaken notion of humankind’s relationship towards nature. Human beings are but one more creation of God. The Earth existed before humankind. Human beings must always remember that God is the Creator and everything belongs to him (cf Toolan, 2001).

The earth is the Lord’s and all it holds, the world and those who live there. For God founded it on the seas, established it over the rivers.

—NAB, 2002, Psalms 24:1-2

In *Laudato Si’*, Pope Francis reminds us to accord a proper hermeneutic analysis of the injunction in Genesis 2:15 to ‘till and keep’ the garden of the world by understanding that to “‘tilling’ refers to cultivating, ploughing or working, while ‘keeping’ means caring, protecting, overseeing, and preserving. This underscores a mutual responsibility between human beings and nature” (Pope Francis, 2015, p. 49).

Other than being stewards of God’s creations, human beings are duty-bound to exercise responsible use of the Earth’s resources. Human beings must recognize and respect other living things’ intrinsic value—as God also gives value to them.

How varied are your works, Lord! In wisdom you have wrought them all; the earth is full of your creatures.

—NAB, 2002, Psalms 104:24

Thus, the precepts of the sabbatical year and the jubilee year were set by God to let the land rest every seventh and fiftieth year. It was not meant only to help maintain the balance in nature, but it was also meant for humankind to acknowledge that the goods of the Earth and its fruits belong to everyone.

—NAB, 2002, Leviticus 19:9-10; 25:1-7

Peace and prosperity in a society can only be achieved when there is order. Sin breaks this order. Thus, in the creation narrative in the Book of Genesis, the first human beings were thrown out of paradise—the world of peace and order, because they have sinned against God. A chaotic world is a disordered world. And when the world is disordered, the most affected are the poor and the marginalized. Their God-given human dignity is diminished. They are the first to be deprived of human rights.

In the New Testament, Jesus refers to the Father as the “Lord of Heaven and Earth”—God as Creator.

—NAB, 2002, Matthew 11:25

Jesus likewise emphasizes the caring attitude of the Father when he says:

Behold the birds of the air, they do not sow nor reap... and yet your heavenly Father feeds them.

—NAB, 2002, Matthew 8:27

The call therefore is for everyone to protect our common home by uniting the human family in seeking sustainable and integral development as expressed in *Laudato Si'* by Pope Francis. There is an intimate relationship between human beings and the planet. Everything in the world is interconnected.

Human rights and care for creation in the Christian tradition

While the notion of human rights is widely used in the modern times, it can be easily related to the aspects of justice and peace that are prevalent in the Old and New Testaments and elaborated further in the teachings of the Church.

As for the care for creation, Christian teaching takes much inspiration from St. Francis of Assisi, who maintained a reverent attitude towards all creation, as manifested in his *Canticle of the Sun* (Armstrong et. al., 2010). In it, St. Francis of Assisi refers to the “sister Mother Earth” and “brother Wind” or “sister Water” as all praising the Creator and he regarded all creatures with respect (Sewell, 2019). In 1979, John Paul II proclaimed St. Francis of Assisi as the patron of ecology who “revered nature as a wonderful gift of God to the human race” (pp. 1509-1510).

Following the Franciscan tradition, St. Bonaventure developed a creation theology where creation is an emanation out of the abundance of God’s love, who is a Trinity (Freyer, 2018). St. Dominic also preached of the goodness of God’s creation (Briscoe, 2021); it later inspired the Salamanca School to advocate for the rights of indigenous populations (Deeb et al., 2017). St. Thomas of Aquinas, a spiritual follower of St. Dominic, provided an elaborate theological and philosophical reflection on creation; his monumental opus, the *Summa Theologica*, expounded on the idea of God as the originator of the cosmos—the “first cause”—and whose governance provides a “plan of the order of things” (Knight, 2017).



Social Teachings of the Church on care for creation

The social teachings of the Church are rich in injunctions as to human activity related to caring for the Earth. The Vatican II document *Lumen Gentium* (Dogmatic Constitution on the Church, 1964) makes the directive that human labor should be used for the betterment of the world and “...to raise all of society, and even creation itself, to a better mode of existence” (Paul VI, 1964, Section 41).

Papal Encyclicals also sought to provide teachings to the faithful on various matters of social concern, including how they should treat creation. Below are some highlights.



1. *Populorum Progressio* (On the Progress of Peoples)

Pope Paul VI enjoins the faithful to use the goods of the Earth justly. While each person may make use of the Earth's resources to satisfy their needs, creation is for the good of all. "God intended the Earth and everything in it for the use of all human beings and peoples" (Paul VI, 1967, Section 22).



2. *Laborem Exercens* (On Human Labor)

Pope John Paul II reiterates that human work is participation in the activity of the Creator. He makes the instruction that the faithful "must learn the deepest meaning and the value of all creation, and its orientation to the praise of God." (John Paul II, 1981, Section 25). This will allow the permeation of Christ's Spirit into the world, bringing justice, charity and peace.



3. *Sollicitudo Rei Socialis* (On Social Concerns)

John Paul II proposes three considerations by virtue of which the moral character of development should render respect to the natural world or the cosmos and that one cannot simply exploit the Earth for one's economic needs without regard to the interrelationships bridging everything: "On the contrary, one must take into account the nature of each being and of its mutual connection in an ordered system, which is precisely the cosmos" (John Paul II, 1987, Section 10).



4. *Caritas in Veritate* (Charity in Truth)

Pope Benedict XVI teaches about our common responsibility for the environment, writing that "the environment is God's gift to everyone, and in our use of it we have a responsibility towards the poor, towards future generations and towards humanity as a whole" (Benedict XVI, 2009, Section 48). He further wrote:

"The Church has a responsibility towards creation and she must assert this responsibility in the public sphere. In so doing, she must defend not only earth, water and air as gifts of creation that belong to everyone. She must above all protect mankind from self-destruction"

(Benedict XVI, 2009, Section 51)

Aside from papal teachings, the World Council of Churches (WCC) has also issued various declarations with regard to the urgency of action on the climate issue (cf. WCC statements). Patriarch Bartholomew also issued a statement, reiterating that climate change is an issue involving justice: "For those who will most directly and severely be affected by climate change will be the poorer and more vulnerable nations (what Christian Scriptures refer to as our "neighbour") as well as the younger and future generations" (Patriarch Bartholomew, 2005).

The WCC (2005) made a call for the prevention of dangerous human interference with the climate system and reiterating the critical moment to act at present:

“Radical changes have to take place in order to make the transition to sustainability within the current century. This is the moment to decide on these changes. Let us acknowledge that the use of the atmosphere—being a global commons—has to be shared equally and justly.”

Declarations of the Church in the Philippines

In the face of the environmental and climate crisis, the Philippine Church has made strong calls to action through various pastoral letters. In 1988, the Catholic Bishops’ Conference of the Philippines (CBCP) first declared a clear demand for the respect and defense of life and the Earth. The pastoral letter titled “What is Happening to our Beautiful Land?” contains a stirring remark on the need for widespread education:

“We reap what we sow; the results of our attitude and activities are predictable and deadly... Our lands, forests and rivers cry out that they are being eroded, denuded and polluted. As bishops, we have tried to listen and respond to their cry. There is urgency about this issue which calls for widespread education and immediate action” (Legaspi, 1988).

Thirty years later, the CBCP made another call to action in a pastoral letter on ecology. “An Urgent Call for Ecological Conversion, Hope in the Face of Climate Emergency” emphasized the need to address the climate crisis:

“Today, ... we again call on everyone to care for the earth and for the poor and embrace ‘integral ecology’ for the sake of our common home. United in our commitment to the Universal Church, and truly convinced that integral ecology is inseparable from an integral society, we make a definitive pledge to respond to the climate crisis—securing a sustainable future for our people and our planet” (Valles, 2019, p. 7).

On March 23, 2023, Caritas Philippines and the Social Action Network were among the faith organizations, civil society activists, and environmental defenders who joined more than 70 countries and the United Nations in a worldwide declaration of climate emergency (CBCP News, 2023). Caritas Philippines listed eight commitments in solidarity with the declaration as it emphasized the need for urgent action in the onslaught of the climate crisis by saying:

“We cannot be business as usual. While we have institutionalized programs on agroecology, invested millions in natural farming, and strengthened our advocacies on environmental protection, we feel that these are still not enough. More intentional and synodal actions need to be in place to mitigate climate impacts, especially in vulnerable communities” (CBCP News, 2023, para. 4).



1.2

Engaging Schools and Educators



Climate Change and Human Rights Education for Youth in the Philippines (henceforth mentioned as CCHRE) is a handbook specifically developed to engage school administrators and teachers in the Philippines to discuss the impacts of climate change on human rights through education, in particular among Grades 3–10 students.

The role of school administrators and teachers is very important as their potential to shape the minds and attitudes of young generations towards understanding climate change and its impacts on human rights are undeniable. This is what CCHRE primarily aims to provide guidance and facilitate on.

There is a growing interest among teachers in educating and raising awareness about the climate reality, and students are becoming more willing to bring climate change considerations into almost every facet of their lives. Yet, the United Nations Educational, Scientific and Cultural Organization ([UNESCO], 2022b) found that the youth prefer experiential learning and activities outside the classroom; but so far, climate change education has been merely about “creating posters about climate change” (p. 9).

Addressing climate change in education is a worldwide ambition. In fact, the Berlin Declaration on Education for Sustainable Development was adopted by the international community with the ambitious goal of integrating climate action as a core curriculum component in education by 2025 (UNESCO, 2022a).

To help address current educational challenges and achieve the ambitious goal set in the Berlin Declaration, CCHRE seeks to support Philippine schools as it underscores, among other things, different teaching and learning approaches that teachers can explore to provide students with real-world or first-hand experiences. Experiential opportunities for climate change and human rights education can effectively capture the interest of students and inspire them to learn and be more involved in a greater cause.



1.3

CCHRE Overview



CCHRE is designed to assist school administrators and teachers in demonstrating how climate change is a human rights concern. It comprises six chapters that delve deeply into the intricate relationship between climate change and human rights.¹



Chapter 1 lays the groundwork by discussing climate change and human rights. It also underscores the significance of teachings of the Church in prodding actions towards ecological integrity and social justice. Central to CCHRE is the importance of engaging educators and school administrators in raising awareness on how climate change intersects with human rights.



Chapter 2 provides an exploration of the root causes and impacts of climate change based on scientific evidence, encompassing factors such as greenhouse gas (GHG) emissions, and global warming, while citing concrete examples specifically tailored to the Philippine context. It also underscores the fact that climate change transcends mere environmental concerns; it is a profound human rights issue. Climate change affects the rights to life, food, education, and health, among others.



Chapter 3 outlines the legal and policy framework pertaining to the environment along with implications on climate change and human rights in the Philippines. Specific laws, regulations, jurisprudence, concepts, and principles are presented.



Chapter 4 intends to help school administrators and teachers to take the crucial courses of action towards the integration of climate change and human rights in compulsory education, from the organizational and management levels to the academic curricula and actual implementation process. It is divided into three segments:

1. A **Whole-School Approach** discusses the crucial steps and strategies that school administrators and teachers can take to comprehensively incorporate climate change and human rights considerations for the benefit of the school community.

¹ Hereafter, “climate change and human rights” is used as a simpler and shorter reference to imply the impacts of climate change on human rights.

2. **Interdisciplinary Teaching and Learning Methods** offers creative and innovative means for teachers to encourage the engagement and participation of students towards learning, understanding, and advocating for climate change and human rights.
3. **Integration of Climate Change and Human Rights in Core Subjects** elaborates on a structured approach for integration with the new MATATAG Curriculum², specifically on four core subjects identified as important entry points for discussing climate change and human rights.



Chapter 5 identifies various ways to engage students in climate change and human rights advocacy initiatives both within and outside the classroom. It also highlights the potential of advocacy in driving long-term positive change in the Philippines.



Chapter 6 concludes with Key Takeaways, presenting the essential messages and important points to take into account in each chapter.



The **Annexes** contain relevant resources that can further guide and support school administrators and teachers:

Annex A contains a matrix of the relevant topics and learning competencies that can be used to correlate climate change and human rights with core subjects using the MATATAG Curriculum.

Annex B provides examples of exercises that can guide educators in effectively mainstreaming climate change and human rights in core subjects and corresponding lessons. The exercises are designed to empower teachers in delivering impactful and informed education. At the time of CCHRE's publication in 2024, the exercises primarily targeted Grades 4 and 7. As the MATATAG Curriculum is to be implemented over several years, annex B will be expanded to include exercises for other grade levels.

Annex C outlines how school administrators and teachers can collaborate and engage with the Commission on Human Rights (CHR) and it includes a non-exhaustive list of climate, human rights, and environmental organizations that they can build partnerships with for advocacy activities, initiatives, and programs.

² The Department of Education (DepEd) in the Philippines has introduced a revamped core curriculum aimed at streamlining competencies and prioritizing the cultivation of essential foundational skills. This revised curriculum places particular emphasis on language, reading, and literacy, alongside mathematics, patriotism, and the promotion of good manners and right conduct (Senate of the Philippines, 2023).

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CHAPTER 2

CLIMATE CHANGE AND ITS IMPACTS ON HUMAN RIGHTS



Fishermen communities in
Zambales Province.

Sand mining in
Zambales Province.



CLIMATE CHANGE AND ITS IMPACTS ON HUMAN RIGHTS

After completing chapter 2, you will be able to:

- Explain what climate change is, along with the key principles, basic terms, and definitions relevant to this topic.
- Discuss the impacts of climate change on human rights.
- Appreciate the need for States to adopt a human rights-based approach when dealing with climate change.



2.1 Understanding the Fundamentals of Climate Change



This section reviews basic notions that can support teachers when it comes to teaching the fundamentals of climate change. It is important to take note that the insights provided here are literature-based (i.e., scientific evidence is not comprehensively described, thus cannot be used as a basis for a definitive and exhaustive treatise on climate change science). Nonetheless, a list of references are provided for further reading and studies that can help strengthen teachers' knowledge and understanding of climate change. As decision-makers, mentors, and coaches, teachers can use this literature-based narrative as a model for helping students learn and recognize the fundamentals of climate change.

What is Climate Change?

According to the Intergovernmental Panel on Climate Change (IPCC):

"Climate refers to a change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due

to natural internal processes or external forcings such as modulations of the solar cycles, volcanic eruptions, and persistent anthropogenic changes in the composition of the atmosphere or in land use” (*Assessment Report on Climate Change 2014: Impacts, Adaptation, and Vulnerability*, 2018, p. 1760).

The Philippines ratified the United Nations Framework Convention on Climate Change (UNFCCC) on August 2, 1994. Article 1, para. 2 of the UNFCCC (1992) defines climate change as “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.”

The “Climate Dictionary” of the UN Development Programme (UNDP) (2023), on one hand, defines global warming as “an increase in the Earth’s average surface temperature that occurs when the concentration of greenhouse gases in the atmosphere increases”; whereas climate change, on the other hand, pertains to “the long-term changes in the Earth’s climate that are warming the atmosphere, ocean and land.”

Although the Earth’s temperatures are rising, on average, certain regions of the Philippines tend to cool down (La Viña & Guiao, 2013).



Over the decades, and with the rapid progress of science and technology, data have proven that climate change was not an imagined environmental threat. The United Nations Environmental Programme (UNEP) Climate Change Strategy for 2010-2011 quoted United Nations (UN) Secretary-General Ban Ki-Moon’s declaration that climate change is the “defining challenge of our age”, with evidence of melting ice caps and increased variability of temperature, rainfall, and storms everywhere (UNEP, 2008). Furthermore, the UN General Assembly described climate change as one of the greatest challenges of our time in its Resolution 70/1 adopting the 2030 Agenda for Sustainable Development (2015).

The report “2016 Philippine Climate Change Assessment: The Physical Science Basis” puts the spotlight on how climate change has severely damaged the environment, with a particular focus on GHG emissions:

“Human influence on the climate system is most evident from the increase in greenhouse gases (e.g., carbon dioxide or CO₂, methane or CH₄, and nitrous oxide or N₂O) at levels not seen in the past 800,000 years (IPCC, 2013b). In terms of CO₂ for instance, from 1750 to 2011, human activities—mainly from fossil fuel combustion, cement production, and land use change—released 555 ± 85 [gigatonnes of carbon] GtC into the atmosphere. The atmosphere has retained about 40% of this total, and the ocean about 30%, leading to ocean acidification, while the rest has been absorbed on land. Despite a number of climate change mitigation initiatives, the rate of anthropogenic GHG emission into the atmosphere continues to increase” (Villarin et al., 2016, p.4).

The volume titled *Climate Change 2021: The Physical Science Basis*, the contribution of Working Group I to the Sixth Assessment Report of the IPCC, presents substantial data and detailed findings on key indicators of climate change that “are increasingly at levels unseen in centuries to millennia, and are changing at rates unprecedented in at least 2000 years” (IPCC, 2021, p. 290).

Key indicators of climate change include changes in the atmosphere, oceans, and frequency of extreme weather events, which are discussed further as follows.



Atmosphere

Throughout recorded history, data showed that the 2000s has been the warmest decade so far; the last four decades prior to 2021 are notable for being successively warmer than ever since 1850 (IPCC, 2021, p. 5; and Villarín et al., 2016, p. 6). Furthermore, the IPCC (2021) revealed: “Global surface temperature was 1.09 [0.95 to 1.20] °C higher in 2011–2020 than 1850–1900, with larger increases over land (1.59 [1.34 to 1.83] °C) than over the ocean (0.88 [0.68 to 1.01] °C)” (p. 5). Villarín et al. (2016) emphasized that global warming (in particular, the global mean warming of 0.85°C recorded in 1880–2012) is not entirely a natural variability, but rather “*extremely likely* due to human activities” that fills the atmosphere with high concentrations of GHG.

In the Philippines, Villarín et al. (2016) described the period 1951–2010 during which “the annual mean temperature in the country increased by 0.65°C with a mean rate of 0.11°C per decade. In terms of temperature variability, more hot days and warm nights, and less cold days and nights have been observed over this period”; they also predicted “increases in annual mean temperatures ranging from 0.9°C to 1.1°C in the 2020s and 1.8°C to 2.2°C in the 2050s.”



Oceans

There is substantial evidence that various changes in oceans and marine ecosystems are clear indicators of climate change. Among the most apparent and critical are the occurrences briefly discussed as follows.

Ocean warming

The IPCC’s *Climate Change 2021: The Physical Science Basis* revealed that ocean surface temperature rose by 0.88°C, on average, between 1850–1900 and 2011–2020, with a 0.60°C increase occurring since 1980; also becoming more frequent, prolonged, and intense are marine heatwaves, which are sustained periods of high near-surface temperatures causing severe impacts on aquatic ecosystems (p. 1214). Villarín et al. (2016) noted: “Trends in sea surface temperature (SST) near the Philippines show that temperatures have been increasing by around 0.23°C ± 0.02°C per decade from 1981 to 2014. An estimate of the observed increase in global mean SST from 1979 to 2012 is 0.124°C ± 0.03°C for every decade.” Ocean warming causes significant losses and damage to coastal resources, including mass coral bleaching and decline in fish populations.

Sea Level Rise

“The global mean sea level (GMSL) rose faster in the 20th century than in any prior century over the last three millennia,” and it has been rising at an accelerated rate since the late 1960s—primarily due to thermal expansion and melting of glaciers and ice sheets (IPCC, 2021, p. 1216). Sea level rise (SLR) is a major threat to the Philippine archipelago, in particular for coastal communities and people living in lowlands. Despite limited available data on the country, experts confirm observed SLR since the 1970s, e.g., an average increase of 1.3 mm per year in Manila since the 1900s, which doubled to about 2.6 cm per year by the 1960s (Villarin et al., 2016).

Ocean Acidification

The *Climate Change 2021: The Physical Science Basis* emphasized that continuous human-caused emissions force the ocean to take up more CO₂, resulting in the strengthening of ocean acidification that significantly changes and disrupts seawater chemistry; the IPCC presents a collection of research data and findings along with future projections on ocean acidification and deoxygenation (Chapter 5.3, pp. 714–722). Ocean acidification and oxygen loss affect nutrient cycling and primary production along with marine life and fisheries; consequently, people’s source of food and livelihood are also compromised. Citing studies conducted on SSTs in the tropics and the Pacific as well as the Coral Triangle region, Villarin et al. (2016) stressed the fact that widespread coral bleaching and ocean acidification have also significant impacts on the Philippine archipelago, which takes pride in the rich marine ecosystem and biodiversity of its surrounding waters.



Frequency of Extreme Weather Events

According to the IPCC’s *Climate Change 2021: The Physical Science Basis* volume: “Human-induced climate change is already affecting many weather and climate extremes in every region across the globe.” It emphasized that the occurrences of “heatwaves, heavy precipitation, droughts, and tropical cyclones [TCs], and, in particular, their attribution to human influence, has strengthened” (IPCC, 2021, p. 8). Furthermore, the IPCC’s *Climate Change 2021: The Physical Science Basis* volume declared:

“It is *virtually* certain that hot extremes (including heatwaves) have become more frequent and more intense across most land regions since the 1950s, while cold extremes (including cold waves) have become less frequent and less severe, *with high confidence* that human-induced climate change is the main driver [responsible for more than 50%] of these changes. Some recent hot extremes observed over the past decade would have been *extremely unlikely* to occur without human influence on the climate system. Marine heatwaves have approximately doubled in frequency since the 1980s (*high confidence*), and human influence has very likely contributed to most of them since at least 2006” (p. 8).

In the Philippines, there is a significant increase in the frequency and intensity of heatwaves (Guadalupe and Ozaki, 2018). In 2024, the heat index forecast of the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) indicated that certain areas in the country experienced heat indices at the “danger” level, which include temperatures ranging from 42 to 51 degrees Celsius or 107.6 to 123.8 degrees Fahrenheit (Parungao, 2024; National Weather Service, n.d.).

Although the trends on TCs are inconclusive, projections lean towards drier seasons for the majority of the regions and increased rainfall during the wetter seasons (Villarin et al., 2016). TCs and super typhoons have been known to wreak havoc in the country, claiming lives, disrupting livelihoods, and destroying properties for decades. The country has experienced highly destructive typhoons almost annually for the past 10 years, with annual losses from typhoons estimated at 1.2% of gross domestic product (GDP) (UNDP, 2023).

2.2

How Climate Change is Affecting Human Rights



The consequences of climate change extend beyond ecological disruptions and affect the enjoyment of fundamental human rights, such as the rights to life, health, adequate housing, and others. Vulnerable groups in the Philippines, such as children, IPs, communities living in low-lying coastal lands, rural populations, and low-income households, are disproportionately affected. Vulnerable groups are particularly at higher risk or exposed to harm, and they can be affected individually and/or as a group (Nifosi-Sutton, 2017).

Some of the main human rights subject to climate change impacts are explored as follows.



Right to life

The most fundamental and universal human right is a person's inherent right to life—recognized in international instruments, treaties, and constitutions. The UN Human Rights Committee has recognized that climate change is one of the most severe threats to life (UN Human Rights Committee, 2019). According to the World Health Organization ([WHO], 2023), increasing malnutrition, disease, and heat stress due to climate change is projected to cause 250,000 deaths annually between 2023 and 2050. This is a clear manifestation of climate change impacts on the fundamental human right to life.

In the Philippines, the right to life is protected under Section 1, Article III, of the 1987 Constitution. Climate change impacts

on the right to life are evident in significant damage and loss of lives attributed to extreme weather events. Over the last two decades, extreme weather events and natural hazards that hit the country with severe impacts include Super Typhoon Yolanda (2013), Tropical Storm Sendong (2011), and Typhoon Ondoy (2009)—causing deaths, injuries, and damage to thousands of individuals and families (National Disaster Risk Reduction and Management Council [NDRRMC], 2009 and 2013; and Rasquinho et al., 2013).



Right to food

Article 25 of the UDHR (1948) and Article 11 of the ICESCR (1966) treat the right to food as part of the right to an adequate standard of living. The 1987 Constitution of the Philippines does not have a provision directly mentioning the right to food, but it recognizes the right to human dignity in several parts. Section 3, Article XV, of the 1987 Constitution affirms the need to defend children's right to proper nutrition.

According to OHCHR (2023), the four key elements that constitute the right to food are accessibility, availability, adequacy, and sustainability, which are impacted by climate change.

The pressure exerted by climate change on the availability of food and its accessibility will intensify, particularly in already vulnerable regions, thereby adversely impacting global food security and nutrition, according to projections of the IPCC in *Climate Change 2021: The Physical Science Basis* (p. 14). The UN Human Rights Council ([HRC], 2018) also expects extreme weather events and natural hazards, such as typhoons, to have negative impacts on food production, in particular agricultural crops, aquaculture and fisheries, and livestock—therefore impacting food sustainability. Rising sea levels and ocean acidification also pose significant threats to fisheries as well as other bodies of water that provide irrigation to agricultural lands. The exacerbation of droughts and floods is also likely to contribute to substantial declines in crop yields, disproportionately impacting rural populations heavily reliant on agriculture (Food and Agricultural Organization of the United Nations [FAO], 2015).

In 2022, the CHR's National Inquiry on Climate Change (NICC) Report published statements and evidence presented by experts showing that climate change impacts in the Philippines result in the decrease of agricultural produce and livelihood for fisherfolk; testimonials by community resource persons with first-hand experiences from their localities were also documented. Consequently, these trends lead to supply shortages, price hikes, increased malnutrition, and food insecurity. The NICC Report's significance to the legal and policy framework in the Philippines is discussed further in [chapter 3](#).



Right to water and sanitation

The UN General Assembly recognized the right to safe and clean drinking water and sanitation as fundamental for the full realization of life and various other human rights (UN, 2010). Furthermore, the CESCR (2022) adds that the human right to water is part of the right to an adequate standard of living and is closely linked to the rights to health, to adequate housing and to food (para. 3). While the 1987 Philippine Constitution does not explicitly recognize the right to water and sanitation, it underscores the importance of the protection of all the country's water resources (Article XII).

SLR and extreme weather events result in water scarcity and increased competition for clean water resources. Hotter climates increase energy demand for cooling, also exacerbating water shortages (Stringer et al., 2022). These factors disrupt sanitation systems, contaminate drinking water, and worsen the spread of diseases. The CHR (2022) confirmed during its community dialogues pursuant to the NICC that Filipinos are currently experiencing this, from saltwater intrusion into and contamination of freshwater sources in Calatagan to drying up of drinking water sources in several areas like Alabat Island, Quezon Province, and Marinduque.

Typhoons and other extreme weather events destroy water and sanitation infrastructures. The NICC Report of the CHR (2022) cited a testimonial of a survivor of Super Typhoon Yolanda who described how they lacked water, sanitation, and hygiene facilities due to Yolanda's devastation. Without these facilities in evacuation centers, the human right to water and sanitation of the survivors of these extreme weather events would be again violated.



Right to health

WHO (1946) defines health as an absence of disease and complete physical, mental, and social well-being. The right to health is defined as an entitlement to the highest attainable standard of physical and mental health and encompasses, among other things, access to healthcare services (OHCHR, 2014). It is recognized by and contained in several international human rights instruments, including the UDHR (1948, Article 25) and the ICESCR (1966, Article 12).

Climate change adversely impacts the right to health because humans are susceptible to alterations in climatic conditions (IPCC, 2014). A notable manifestation is the rising of temperatures or occurrences of extreme heat, bringing health complications such as dehydration, heat cramps, heat stroke, and potentially fatal outcomes. Additionally, temperature elevations can exacerbate the prevalence of water and foodborne illnesses, alongside diminishing air and water quality standards (CHR, 2022). Furthermore, climate change extends the duration and broadens the spatial reach of disease transmission seasons (OHCHR, 2016).

In the Philippines, Section 15, Article II of the 1987 Constitution recognizes the right to health. The direct impacts of climate change on the people's right to health is palpable. Instances of water, food, and vector-borne diseases have surged. The confluence of intense precipitation during the rainy season and heightened ambient temperatures amidst drought periods has led to a shortened viral incubation span, consequently amplifying the incidence of dengue fever across the nation (Anyamba et al., 2006). The emergence of additional vector-borne illnesses such as Chikungunya and Schistosomiasis has been attributed to the aftermath of severe weather phenomena such as typhoons (CHR, 2022).

The OHCHR (2016) noted that individuals who have experienced the loss of homes, loved ones, or have been exposed to life-threatening situations are more susceptible to developing stress, anxiety, depression, and post-traumatic stress disorder. The right to health encompasses mental health, as evident from the testimonies of Super Typhoon Yolanda survivors during the CHR investigation. These individuals reported experiencing psychological distress. Following the typhoons, mental health resources and services were depleted (CHR, 2022).



Right to adequate housing

The right to housing is a component of the right to an adequate standard of living as outlined in Article 11 of the ICESCR (1966). The UN Committee on Economic, Social, and Cultural Rights ([CESCR], 1991) further clarifies the right to adequate housing as the right to live in a place where there is security, peace, and dignity. It is not simply a roof over one's head or a place to rest; more than a shelter, the right to housing is the right to call a place home. Key considerations for adequate housing should include (1) the legal security of tenure; (2) the availability of services, materials, facilities, and infrastructure; (3) affordability; (4) habitability; (5) accessibility; (6) location; and (7) cultural adequacy (CESCR, 1991, para. 8).

Extreme weather occurrences such as super typhoons, floods, and rising sea levels severely undermine various facets of adequate housing. The IPCC (2014) underscored the direct impacts of storm surges and sea level elevation on low-lying island nations and coastal settlements. Post-disaster consequences, including shelter destruction and livelihood loss, often precipitate involuntary migration to perilous areas, resulting in informal settlement proliferation (HRC, 2009).

The right to adequate housing is recognized under Article XIII, Section 9, of the 1987 Constitution of the Philippines. Findings presented in the NICC Report underscored that climate change-induced internal displacement and homelessness are already affecting the country; 60% of the population resides in 832 coastal municipalities and 25 coastal cities grapple with displacement issues (e.g., coastal community displacement has

transpired due to SLR and soil erosion in Marinduque, while natural barriers have gradually submerged and heightened vulnerability to storm surges in the Verde Island Passage) (CHR, 2022).



Right to education

The right to education underscores education's status as a human right, as enshrined in Article 26 of the UDHR (1948) and Article 28 of the Convention on the Rights of the Child (UN, 1989) and alongside its safeguarding in the 1987 Philippine Constitution. Climate change significantly impacts the right to education, mainly through displacement caused by natural disasters and extreme weather events. Here are some of the critical impacts:

Infrastructure damage

Climate change can directly destroy schools and learning materials, making it difficult for children to continue their education (UNESCO, 2020).

Displacement

Families displaced by climate change may face saturated school capacities, linguistic barriers, and difficulties having past qualifications recognized, which can hinder children's access to education (UNESCO, 2020).

Economic impact

As climate disasters lead to more poverty, families may be forced to prioritize economic security over their children's education, increasing dropout rates (UNESCO, 2020).

Discrimination

Displaced individuals may face discrimination that can prevent them from accessing education (UNESCO, 2020).

Inequality

Climate change exacerbates existing educational disparities, with the financially disadvantaged, girls and women, rural communities, and persons with disabilities being the most vulnerable to climate-induced barriers to education (UNESCO, 2023).

Heatwaves in the Philippines, intensified by climate change, are another threat to the right to education. They have already severely disrupted the education sector, prompting widespread school closures and necessitating alternative delivery methods to safeguard students and educators from extreme heat. In 2024, the closure of over 5,000 schools due to heatwaves affected more than 3.6 million students across the country, impacting the right to education, particularly its accessibility (Agence France Presse, 2024).

As stated by the CESCR (1999), the right to education implies that "educational institutions and programmes have to be accessible to everyone, without discrimination" (para. 6).

Yet, the closure of schools disproportionately impacted marginalized communities as they face exacerbated social and economic inequalities that hinder educational access, such as difficult access to the internet and to digital devices.

Furthermore, heatwaves also pose substantial health risks, particularly to children, leading to increased absences in classrooms, diminished focus, and reduced academic performance. While the government of the Philippines has initiated measures like adjusting the school calendar, experts advocate for comprehensive strategies addressing climate change's root causes and its impacts on education (Save the Children, 2024).

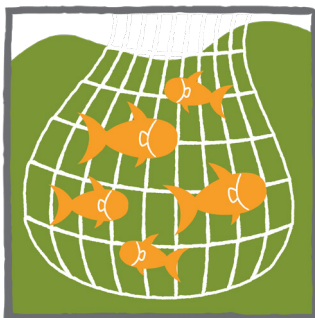


Right to a safe, clean, healthy, and sustainable environment

In October 2021, the international community acknowledged the right to a safe, clean, healthy, and sustainable environment (HRC, 2021). The right to a healthy environment—in simple terms—is essential for the enjoyment of other human rights. According to the CHR (2021), this recognition aligns with the constitutional guarantee bestowed upon Filipinos, ensuring their entitlement to a balanced and healthful ecology in accordance with the rhythm and harmony of nature (further elaborated in [chapter 3](#)).

The Human Rights Council (2019) emphasized that a safe and stable climate is at the core of the right to a healthy environment; access to climate stability, clean air, and potable water alongside healthy food sources, biodiversity, ecosystems, and non toxic environments are additional substantial elements of this right.

However, the current climate crisis that destabilizes these elements—causing the massive deterioration of biodiversity and the lack of healthy sources of food and water—undoubtedly puts this fundamental human right under threat, including in the Philippines.



Right to livelihood

The right to livelihood is encompassed within broader rights, such as the right to an adequate standard of living (Article 11, ICESCR, 1966) and the right to work (Article 6, ICESCR, 1966). In the Philippines, the 1987 Constitution, Article XIII, Section 3, recognizes the importance of labor, including the entitlement of all workers to security of tenure and a living wage.

Climate change affects access to and the quality of natural resources that sustain livelihoods (IPCC, 2014). In Southeast Asia, particularly Indonesia and the Philippines, farmers have experienced higher incidence of pests and diseases, low crop yield, increased labor costs, and low farm income (Tolentino & Landicho, 2013). Increased rainfall has also caused prolonged inundation and destruction of crop fields—particularly rice,

which is especially vulnerable to water stress (Peñalba et al., 2012). Findings of a study predicted that climate change can cause a decline of approximately 4% on total crop production in the Philippines by 2050, compared to projected levels under baseline conditions where climate change is not a factor (Rosegrant et al., 2015).

In the Region-Wide Early Action Plan for Climate Change Adaptation for the Nearshore Marine and Coastal Environment and Small Island Ecosystems published in 2011, the Coral Triangle Initiative for Coral Reefs, Fisheries and Food Security (CTI-CFF) outlined how rising SSTs and changing ocean circulation, along with ocean acidification, coral bleaching, and other indicators of climate change disrupt marine ecosystems, food webs, and biodiversity in the coral triangle (an area that encompasses the Philippines)—a clear indication of climate change impacts on the fishing sector, which provides an important source of income especially for coastal communities in the Philippines.



Right to take part in cultural life

The ICESCR (1966) recognizes everyone's right to take part in cultural life (Article 15). The concept of culture cannot be seen as "isolated manifestations or hermetic compartments" but should rather be understood as an "interactive process whereby individuals and communities, while preserving their specificities and purposes, give expression to the culture of humanity"; among others, it includes "ways of life, language, literature, religion or belief systems, rites and ceremonies, sport and games, and natural and man-made environments" (CESCR, 2009, paras. 12 & 13). Those belonging to ethnic, religious, or linguistic minorities must not be denied the right to enjoy their culture, to profess and practice their religion, or to use their language (ICCPR, 1966, Article 27).

The right to take part in cultural life is specifically articulated in the 1987 Constitution of the Philippines as protecting IPs' rights to their ancestral lands (Article XII, Section 5). Pursuant to this provision, Republic Act No. 8371 or the Indigenous Peoples' Rights Act of 1997 was enacted to recognize, respect, and protect the rights of IPs to preserve and develop their cultures, traditions, and institutions.

Republic Act No. 7356, April 03, 1992 or the Law Creating the National Commission for Culture and the Arts also recognizes that "culture is a manifestation of the freedom of belief and of expression and is a human right to be accorded due respect and allowed to flourish" (Title I, Section 2).

During the CHR's national inquiry, an expert witness underscored the profound impact of climate change on cultures deeply intertwined with nature (CHR, 2022). IP communities, whose customs and ancestral territories are intricately linked with natural ecosystems, are particularly susceptible to bearing disproportionate repercussions of

climate change, potentially endangering their very existence. For example, a member of the Aeta-Ambala indigenous community expressed fear during CHR's community dialogues regarding the potential loss of her people's cultural heritage. Climate change threatens to disrupt the availability of natural resources essential for traditional sustenance and medicinal practices that have been integral to their culture and way of life for generations (CHR, 2022).

Climate change can also represent a major threat to fishing traditions, directly impacting the right of fishing and coastal communities to take part in cultural life (UN, 2020). Climate change-induced extreme weather events and natural hazards, such as droughts, floods, rising temperatures, coastal land erosion, and SLR, can also force populations to migrate or relocate, posing a real threat to cultural heritage and practices with specific geographical attributes or links.



Children's rights

UNICEF has identified climate change as a paramount and escalating threat to present and future generations of children worldwide. According to General Comment No. 15 by the Committee on the Rights of the Child ([CRC], 2013), climate change constitutes one of the most significant hazards to children's health and exacerbates existing health disparities. The IPCC (2014) indicates that children are at higher risk for climate-related illnesses due to their increased vulnerability to diseases and food insecurity.

With the rapidly accelerating climate crisis, by the year 2050, virtually all children are expected to have been exposed to frequent heatwaves; they are disproportionately affected for being more vulnerable to heat-related illnesses (UNICEF, n.d.). Furthermore, children's brains are more likely to activate their stress response system during periods of heatwaves. If excessively activated during childhood, it can interfere with the development of emotional regulation circuits essential for their overall well-being and mental health (Harvard, 2024).

According to UNICEF (n.d.), several factors associated with this vulnerability include children's tendency to:

- produce less sweat per kilogram compared to adults;
- have a faster metabolism, leading them to heat up more quickly;
- more likely spend extended periods outdoors (often engaged in sports and play activities), thereby increasing their vulnerability to heat exposure; and
- be less inclined to rehydrate.

In the Philippines, beyond the immediate threats posed by extreme weather events, the right to access essential resources such as food, shelter, and water after such events disproportionately impacts children (CHR, 2022). Over the last two decades, 15 times as many infants have died in the 24 months after typhoons than in the typhoons themselves. Of those infants, 80 percent were girls (Choularton, 2017).



Women's rights

Women and girls are among the most vulnerable to climate change impacts, which further aggravate gender inequality (UN Women, 2022). In many countries, women bear the majority of household responsibilities. Consequently, they rely significantly on natural resources, making them more vulnerable to environmental disruptions caused by climate change.

Climate change impacts on women—particularly those already facing marginalization due to poverty, racial discrimination, and other disadvantages—are characterized by a unique set of gender-specific barriers and challenges that hinder their ability to adapt and cope with the changing climate. This vulnerability is not inherent to women but rather a result of the societal power dynamics that shape their experiences (Detraz, 2017).

For instance, women (particularly when pregnant) and girls are more likely to struggle in finding relief and assistance following extreme weather events and natural hazards, often because they face barriers in gaining access to information, in taking part in decision-making processes and in the freedom of movement (UN Women, 2022). In fact, women's mortality rate surpasses that of men in calamitous events, such as floods, storms, and droughts (CHR, 2022).

In the Philippines, climate change-related disasters and displacement heighten the risk of gender-based violence and sexual exploitation for women, particularly in evacuation centers; displaced women and children are often vulnerable to sexual violence while trying to meet their basic needs in post-disaster settings (Philippine Commission on Women [PCW], n.d.)



Rights of the people with disabilities

Michael Stein, a visiting professor of law at Harvard, observed that climate change amplifies the marginalization of persons with disabilities; it negatively affects their health and reduces access to healthcare services, food, water, and accessible infrastructure (Harvard University Center for the Environment, 2023).

The climate crisis disproportionately impacts more than one billion persons with disabilities globally. They face two to four times higher mortality rates and are at disproportionate risk despite having contributed little to global warming. This is due to their socioeconomic marginalization and invisibility to government and civil society (Stein et al., 2023).

Persons with disabilities are often most adversely affected in an emergency, sustaining higher rates of disease and death, and are among those least able to access emergency support. Climate change-related disasters like typhoons and floods can disrupt essential services and support networks that

people with disabilities rely on. On top of this, the majority of persons with disabilities live in poverty (OHCHR, 2020). Marginalization and poverty also make it harder for many to adapt or relocate when needed.

People with disabilities in the Philippines are also disproportionately affected by the impacts of climate change, which exacerbate existing inequalities. They face heightened risks to their health, food security, access to water and sanitation, and livelihoods (Schulte, 2020).

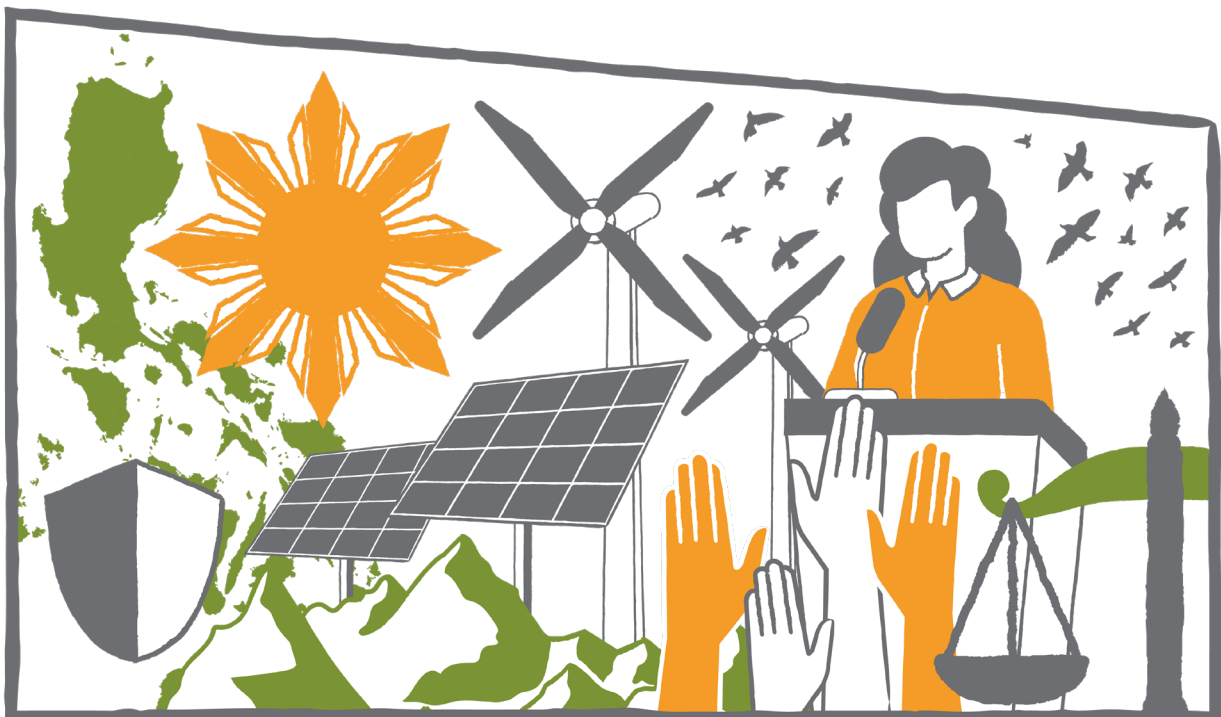


Rights of Indigenous Peoples

The UN Department of Economic and Social Affairs ([UN-DESA], n.d.) observed that IPs are at the frontlines of climate change due to their dependence on and unique relationship with the environment and its resources; their survival is threatened even though they contribute the least to GHG emissions.

Climate change compounds the difficulties faced by indigenous communities, including political and economic marginalization, loss of land and resources, evacuation and relocation, discrimination, and unemployment. In particular, evacuation or relocation as a result of climate change-induced extreme weather events becomes deeply problematic for IPs whose way of life is directly tied to their geographic location.

Between 14 million and 17 million Filipinos belong to more than 100 ethnolinguistic groups, mainly concentrated in Northern Luzon and Mindanao, with some groups in the Visayas area (UNDP, 2013). The CHR (2022) observed that climate change-caused environmental degradation has compound effects on indigenous communities' livelihood, survival, and cultural identity.



The Need for a Human Rights-Based Approach to Address Climate Change

Given the undeniable impacts of climate change on people, it is imperative that states undertake climate actions that respect, protect and fulfill human rights. As emphasized by the UN Special Rapporteur on the promotion and protection of human rights in the context of climate change, Ian Fry, during the UN General Assembly in 2023:

“There is a growing body of work linking responsibilities on climate change to human rights treaties. Nevertheless, many countries have yet to make the link between climate change and human rights, even though they have clear obligations under international law that must be guaranteed in both of those legal fields. As such, States cannot ignore their human rights responsibilities when addressing climate change; this is of critical importance given the impacts that climate change is having on the rights and freedoms of people across the globe.”

For instance, large-scale renewable energy projects, such as hydroelectric or solar panel projects, can lead to communities’ displacements, impacting their rights to housing, property, livelihood, water, etc. Consequently, governments must adopt a rights-based approach when addressing climate change, placing the people at the forefront of any climate action. Such an approach entails viewing climate change through the lens of human dignity and acknowledging its human costs, rather than merely treating it as a technical or scientific matter. The 2015 Paris Agreement represents a milestone in climate governance by recognizing the necessity of integrating human rights considerations into the climate discourse, with the preamble stating as follows:

“*Acknowledging* that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity...”

A human rights-centered approach to tackling climate change encompasses various measures, as outlined below (Duyck et al., n.d.):

- Safeguard the rights of IPs to land, territories, and natural resources.
- Facilitate public participation and representation, including of marginalized groups such as women, children, IPs, and individuals with disabilities, to enable their active involvement in climate decision-making and governance.
- Ensure access to information to foster transparent decision-making processes.
- Incorporate a gender-responsive approach into all climate actions.
- Ensure that those affected by climate change can seek a remedy and access justice.

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CHAPTER 3

CLIMATE CHANGE AND HUMAN RIGHTS LEGAL AND POLICY FRAMEWORK IN THE PHILIPPINES



United Nations in
Geneva, Switzerland.

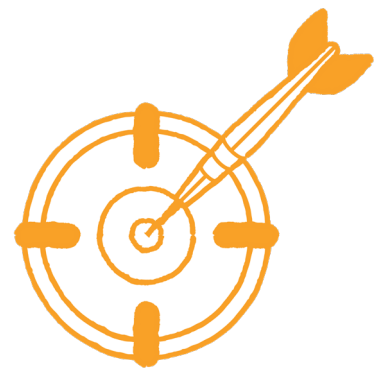
Dominicans for Justice and Peace's training on human rights in Iloilo, 2019.



CLIMATE CHANGE AND HUMAN RIGHTS LEGAL AND POLICY FRAMEWORK IN THE PHILIPPINES

After completing chapter 3, you will be able to:

- Gain an understanding of the current legal and policy framework on the protection of the environment and climate change in the Philippines.
- Acquire knowledge of important concepts and principles prevailing in law and jurisprudence regarding environmental protection and climate change.
- Recognize the importance of environmental and climate change education, as raised in various legislations.



The laws, policies, principles, doctrines, and jurisprudence currently in place in the Philippines and relevant to climate change are primarily focused on environmental protection. This chapter explores the current legal and policy framework by examining the Constitution and presenting a non-exhaustive list of rules, legislations, concepts, and principles relevant to the environment and/or climate change. It also investigates the intersection with human rights.

Constitution

Section 16, Article II of the Philippine Constitution of 1987 indicates: “The State shall protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature.” This right includes the need to protect the climate system. The Philippines pioneered to enshrine the human right to a balanced and healthful ecology in a country’s fundamental law (Davide Jr., 1998, p. 594).

The landmark case of *Oposa vs. Factoran, Jr.* (1993) demonstrates that the right to a balanced and healthful ecology is essentially the right to life and that a stable climate is imperative to uphold this right. The decision of the Supreme Court (SC) was implicit that Section 16, Article II is self-executing. It is immediately enforceable such that government agencies can be compelled to perform their mandated functions. This seminal decision is recognized internationally for introducing the concept of intergenerational responsibility, whereby the minors who filed the case represent themselves and generations yet unborn (La Viña, 2012).

In the case of *Zabal v. Pres. Duterte* (2019), the SC states that the right to a balanced and healthful ecology carries the correlative duty to refrain from impairing the environment.

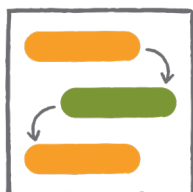


Rules of Procedure for Environmental Cases

The SC came up with the *Rules of Procedure for Environmental Cases* (AM No. 09-6-8-SC, 2010), the objectives of which are stated in Section 3 as follows:



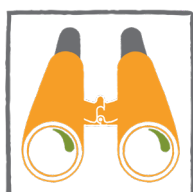
1. To protect and advance the constitutional right of the people to a balanced and healthful ecology;



2. To provide a simplified, speedy and inexpensive procedure for the enforcement of environmental rights and duties recognized under the Constitution, existing laws, rules and regulations, and international agreements;



3. To introduce and adopt innovations and best practices ensuring the effective enforcement of remedies and redress for violation of environmental laws; and



4. To enable the courts to monitor and exact compliance with orders and judgments in environmental cases.

The *Rules of Procedure for Environmental Cases* also introduced or further elaborated novel and innovative rules, such as the citizen suit, Writ of Kalikasan, and precautionary principle that are discussed further in the next section.

Legislation

In 1977, the human right to a healthy environment (referred to as the right to a balanced and healthful ecology in the Philippine Constitution) was first declared an environmental policy under Presidential Decree (PD) 1151, also known as the *Philippine Environmental Policy*. The government recognized the people's right to a healthy environment because, by then, the public and private sectors were aware that the unregulated exploitation of natural resources resulted in environmental destruction and threatened human safety (Zapa-Gasgonia, 2021).

The Philippine Environmental Policy has six goals, which are for the government to lead in promoting general welfare, and ultimately “so the the Nation may:

- (a) recognize, discharge and fulfil the responsibilities of each generation as trustee and guardian of the environment for succeeding generations;
- (b) assure the people of a safe, decent, healthful, productive and aesthetic environment;
- (c) encourage the widest exploitation of the environment without degrading it, or endangering human life, health and safety or creating conditions adverse to agriculture, commerce and industry;
- (d) preserve important historic and cultural aspects of the Philippine heritage;
- (e) attain a rational and orderly balance between population and resource use; and
- (f) improve the utilization of renewable and non-renewable resources.”

PD 1152, or the Philippine Environment Code of 1977 focuses on managing air quality, water quality, land use, natural resources, and waste. It also includes miscellaneous provisions addressing population-environment balance, education, research, and dissemination of environmental information, incentives, grants, preserving cultural heritage, environmental protection, and public hearings. Section 53 of the law mandates the former Department of Education, Culture and Sports (DECS) to integrate subjects on environmental education in its school curricula at all levels.

Republic Act 8749, or the Philippine Clean Air Act of 1999 establishes a comprehensive air pollution control policy by preserving and protecting air quality, establishing an air quality management system, prohibiting certain forms of waste disposal, and regulating emissions, as they are major causes of climate change. Chapter 1 explicitly recognizes the human right to breathe clean air and the “polluters must pay” principle. However, the law does not define the latter. Basically, the principle requires the polluter to bear the cost of preventing the pollution caused to harm people and the environment. It is recognized as a principle of international environmental law. Chapter 3 specifically mandates the Department of Environment and Natural Resources (DENR) to phase out ozone-depleting substances following international agreements. Likewise, environmental education, information, and public awareness campaigns on air quality issues and solutions are mandated.

The Philippine Clean Air Act of 1999 identifies two sources of air pollution: stationary and mobile. Factories and laboratories are the primary stationary sources, while vehicles and other modes of transportation are the mobile sources. The law provides fines and penalties for air pollution. Regarding the fumes caused by garbage burning, the SC clarified that the ban on incineration was not absolute and that it was limited to the incineration of wastes that emit poisonous substances (*Metro Manila Development Authority v. Jancom Environmental Corporation*, 2002). The law also stipulates that DECS shall promote a continuing air quality information and education campaign (Section 39).

The Ecological Solid Waste Management Act of 2000 (RA 9003, 2001) emphasizes that solid waste is an urgent and growing concern that must be addressed primarily by local governments. Waste mismanagement can affect several human rights, such as the right to water and the right to health, and can be a major source of GHG emissions and air pollution. RA 9003 defines solid waste as all discarded household, commercial, non-hazardous institutional and industrial waste, street sweepings, construction debris, agricultural waste, and other non-hazardous or non-toxic solid waste. The law excludes three types of wastes: hazardous, infectious, and mining. Solid waste that falls within the definitions must be collected by local government units (LGUs).

Collection, segregation, and proper disposal should be reflected in the solid waste management plans that LGUs submit to the National Solid Waste Management Commission (NSWMC) of DENR. As a component of the Local Government Solid Waste Management Plan, Section 17 (i) of RA 9003 tasks DECS and the Commission on Higher Education (CHED) with incorporating waste management into the primary, secondary, and college curricula.

Republic Act 9275, or the Clean Water Act of 2004 prohibits water pollution (Section 27, RA 9275) and aims to protect the country's water bodies from being polluted by land-based sources, directly affecting people's rights to water and health. The law provides a comprehensive and integrated strategy to prevent and minimize pollution by involving all stakeholders in a multi-sectoral and participatory approach to address the problem. In particular, Section 2 states that RA 9275 aims to "pursue a policy of economic growth in a manner consistent with the protection, preservation, and revival of the quality of our fresh, brackish, and marine waters". Section 28 mandates daily fines for violations and authorizes the filing of criminal charges against polluters.

Section 4 (pp) of RA 9275 defines water pollution as "any alteration of the physical, chemical biological or radiological properties of a water body resulting in the impairment of its purity or quality." Water pollution can alter aquatic ecosystems that are key in sequestering CO₂. The law also establishes the wastewater discharge system to exact fees from sources of wastewater pollution. Discharge permits are issued to check the effluent quota for industries discharging wastewater. Furthermore, an environmental guarantee fund shall be created to conserve, clean up, and rehabilitate affected watersheds and aquifers (Section 15).

Section 22 (f) of the law designates the Department of Education (DepEd; formerly DECS), among other agencies, to assist and coordinate in preparing and implementing a comprehensive and continuing public education and information program under the objectives of the Clean Water Act.

The Climate Change Act of 2009 (RA 9729, amended by RA 10174, 2012) presents a shift focusing on resilience. The policies in the law refer to sustainable development and intergenerational equity, and introduce the precautionary principle (discussed further in the next section). It adopts the Philippine Agenda 21 framework, pushing for sustainable development and maintaining the quality of the environment for current and future generations.

As a party to the UN Hyogo Framework for Action, a worldwide strategy to reduce disasters risks, the Philippines adopted the strategic goals to build national and local resilience to climate-related disasters—enjoining participation of national and local governments, non-governmental organizations (NGOs), businesses, local communities, and the public to prevent and reduce climate change impact.

The law likewise provides for systematic integration of the concept of climate change in various phases of policy formulation, development plans, poverty reduction strategies, and other developmental tools and techniques by all agencies of the government.

Section 3 (d) of RA 9729 defines climate change as “a change in climate that can be identified by changes in the mean and/or variability of its properties and that persists for an extended period typically decades or longer, whether due to natural variability or as a result of human activity.” Based on the objectives of the UNFCCC, the law focuses on stabilizing GHG concentrations in the atmosphere to a level that would prevent human-caused harm to the climate system. The law also provides that this should be done within a period that allows ecosystems to adapt naturally to climate change, ensuring food production and sustainable economic development.

The law likewise integrates a human rights-based approach by providing that the state must incorporate a gender-sensitive, pro-children, and pro-poor perspective in its climate change and renewable energy efforts, plans, and programs. It is important to note that Section 15 (a) of RA 9729 mandates the DepEd to integrate climate change into the primary and secondary education curriculums and subjects.

The Philippine Disaster Risk Reduction and Management Act (RA 10121, 2010) seeks to lessen the adverse impacts and possibility of disasters and avoid new or increased disaster risk. The law declares as a state policy the mainstreaming of issues related to disaster risk reduction and climate change in development processes, including education (Section 2 [g]).

National Inquiry on Climate Change Report

The most promising and categorical recognition of the critical connection between climate change and human rights is the CHR's NICC Report published in 2022. It stemmed from a petition filed by survivors and those tragically affected by Typhoon Haiyan—the most powerful tropical cyclone in recorded history, which hit the Philippines and claimed countless lives in 2013. The petitioners were assisted by environmental and civil society organizations including Greenpeace Philippines, which were co-petitioners.

The NICC Report contains findings of the CHR based on an investigation conducted as part of hearings organized following the petition, validating the correlation of climate change impacts with past and ongoing human rights violations. The CHR heard 65 witnesses (including survivors, farmers, indigenous communities, fisher folks, and others severely affected by Typhoon Haiyan) in the course of the 12 hearings held in Manila (eight), New York (two), and London (two). The investigation also involved the analysis of 239 documentary exhibits, including reports and studies by experts with different fields of specialization as well as amicus briefs from international human rights bodies and organizations (CHR, 2022).

Three critical findings emphasized in the NICC Report are the following:



Climate change is Real.

In simple terms, climate change is evidenced by global indicators, i.e., global warming, increasing ocean surface temperatures, cryosphere loss (melting of glaciers, icebergs, etc.), and extreme weather and climate events.



Climate change is Anthropogenic.

Human activities have an influence on climate and have caused significant changes on global indicators of climate change.



Climate change is a Grave and Urgent Human Rights Concern.

Climate change has impacts on individual and collective rights. Among those adversely affected include the rights to life; health; food security; water and sanitation; livelihood; adequate housing; preservation of culture; self-determination and development; equality and non-discrimination; safe, clean, healthy, and sustainable environment; and intergenerational equity.

In light of this, the CHR recalls that the most vulnerable groups include children, women, older persons, IPs, and those living in poverty. People with the least contribution to climate change are disproportionately affected by its impacts. The investigation also revealed that carbon majors, fossil fuel companies, and cement companies were responsible as they were aware that their products had a detrimental impact on the environment and the climate system. Nevertheless, they obscured climate science and obstructed global initiatives to mitigate carbon emissions (CHR, 2022).

Concepts and Principles



Intergenerational Equity

The principle of intergenerational equity can be traced back to the work of Professor Edith Brown Weiss, who said that the principle is an obligation of each generation to future generations to pass on the natural and cultural resources of the planet in no worse condition than received and to provide reasonable access to the legacy for the present condition (Quising, 2019). It is basic, fundamental, and essential, as is the right to life and the right to a balanced and healthful ecology. This aligns with the 1977 declaration in PD 1151 that the state is responsible as the trustee and guardian for succeeding generations.



Writ of Kalikasan

The Writ of Kalikasan aims to provide robust protection for the right to a balanced and healthful ecology, where established procedures on enforcement, implementation, and legislation, i.e., existing laws, have fallen short. The Writ of Kalikasan is meant to address the exponential nature of large-scale ecological threats whose very nature requires such an extraordinary remedy (*Segovia et al. v. Climate Change Commission*, 2017). In *Paje vs. Casiño* (2015), the SC said that the Writ of Kalikasan was an extraordinary remedy to provide judicial relief from threats and actual violations of the constitutional human right to a balanced and healthful ecology.



Precautionary Principle

The precautionary principle guides the climate change framework of the Philippines. According to Section 4 (f) of the *Rules of Procedure for Environmental Cases*: [the] “Precautionary principle states that when human activities may lead to threats of serious and irreversible damage to the environment that is scientifically plausible but uncertain, actions shall be taken to avoid or diminish that threat.” It calls for precautionary measures to be taken to anticipate, prevent, or minimize the causes of climate change and its adverse effects even if the predictability of the harm is minimal. Decision-makers must take positive action, such as restricting a product or activity despite the scientific uncertainty (Agcaoili, 2021).

The *Rules of Procedure for Environmental Cases* also provides that when complete scientific certainty is

not available to establish a causal link between human activity and environmental effects, the SC shall apply the precautionary principle in resolving the case before it and the enjoyment of the right to a balanced and healthful ecology is given the benefit of the doubt.

The following factors, among others, may be considered for the application of the precautionary principle:

1. threats to human life or health;
2. inequity to present or future generations; or
3. prejudice to the environment without legal consideration of the environmental rights of those affected.

These factors have a clear human rights dimension, directly correlating environmental threats with threats to human rights. It is important to take note that the precautionary principle applies when the link between the cause, the human activity sought to be prevented, and the effect (the damage to the environment) cannot be established with full scientific certainty. Hence, when the link between the cause and the impact of the damage to the environment is already established, the precautionary principle does not apply (Ingles, 2024).



Citizen Suit

Section 5 of the *Rules of Procedure for Environmental Cases* refers to a citizen suit in which any Filipino citizen may represent others, including minors or unborn generations, in enforcing rights or obligations under environmental laws. This concept is based on the principle that all humans are stewards of nature.



Environmental Justice

Environmental justice can refer to the fair treatment and meaningful involvement of all people—regardless of class, race, ethnicity, etc.—in developing, implementing, and enforcing environmental laws, rules, regulations, and policies (US Environmental Protection Agency, n.d.). This principle aims to protect people from the disproportionate impacts of environmental degradation—including in the context of climate change—and to ensure equitable access to a healthy environment. Agcaoili (2021) emphasized that environmental justice can be achieved when everyone has equal participation in the decision-making process to enjoy the right to a healthy environment and get protection from environmental and health hazards.

The concept of environmental justice in the Philippines is rooted in the country's Constitution, particularly Article II, Section 15, which indicates that "the State shall promote the conservation and protection of the environment." This provision has been interpreted by the SC to include the principle of environmental justice, which emphasizes the need to balance economic development with environmental protection and social welfare (Gonzalez, 2017).

Several laws in the Philippines aim to promote environmental justice, including the Environmental Impact Assessment (EIA) Law, the National Integrated Protected Areas System (NIPAS) Act, and the Philippine Environmental Policy Act. These laws require environmental assessments and impact studies to ensure that development projects do not harm the environment and the people who depend on it (Nyekwere et al., 2023).



Climate Justice

The Climate Dictionary of UNDP (2023) defines climate justice as "putting equity and human rights at the core of decision-making and action on climate change." This principle refers to the fair and equitable distribution of the costs and benefits of climate change mitigation and adaptation efforts. It involves addressing the disproportionate impacts of climate change on vulnerable populations such as low-income communities, IPs, and marginalized groups, who are often the least responsible for the problem but bear the greatest burden (Kang, 2019).

Climate justice has an intergenerational dimension as it states that the young generations do not bear the responsibility for climate change, yet they will be disproportionately impacted by it. The environmentally harmful decisions made by previous generations pose a real threat to the human rights of these young generations and therefore, their role in shaping climate decisions is central.

In the Philippines, the Climate Change Act of 2009 incorporates the principle of climate justice by driving resilient infrastructure development and community involvement in decision-making.

To summarize, the existing legal and policy framework in the Philippines primarily addresses climate change through the lens of environmental protection. Environmental degradation undoubtedly contributes to and worsens climate change impacts. To legislate on environmental protection therefore serves as a way to mitigate climate change and its effects.

Some Philippine laws recognize that harmful environmental practices have adverse consequences on human rights, including the rights to life, water, health, and a balanced and healthful ecology. Certain legislations emphasize the need to protect people from the adverse effects of the destruction of the environment and of climate-related disasters, therefore necessitating measures that protect the rights to life, health, water, food, etc.

Philippine agencies like the SC and the CHR are paving the way for the basis of a legal framework on climate change and human rights. Likewise, cases based on existing environmental protection legislations provide precedents and stepping stones towards a more solid climate change and human rights legal framework for the country.

An essential aspect consistently emphasized and reinforced by the aforementioned legislation and policies is the need for environmental awareness, education, and advocacy—which CCHRE intends to address through the integration of climate change and human rights to core subjects in schools' curricula.



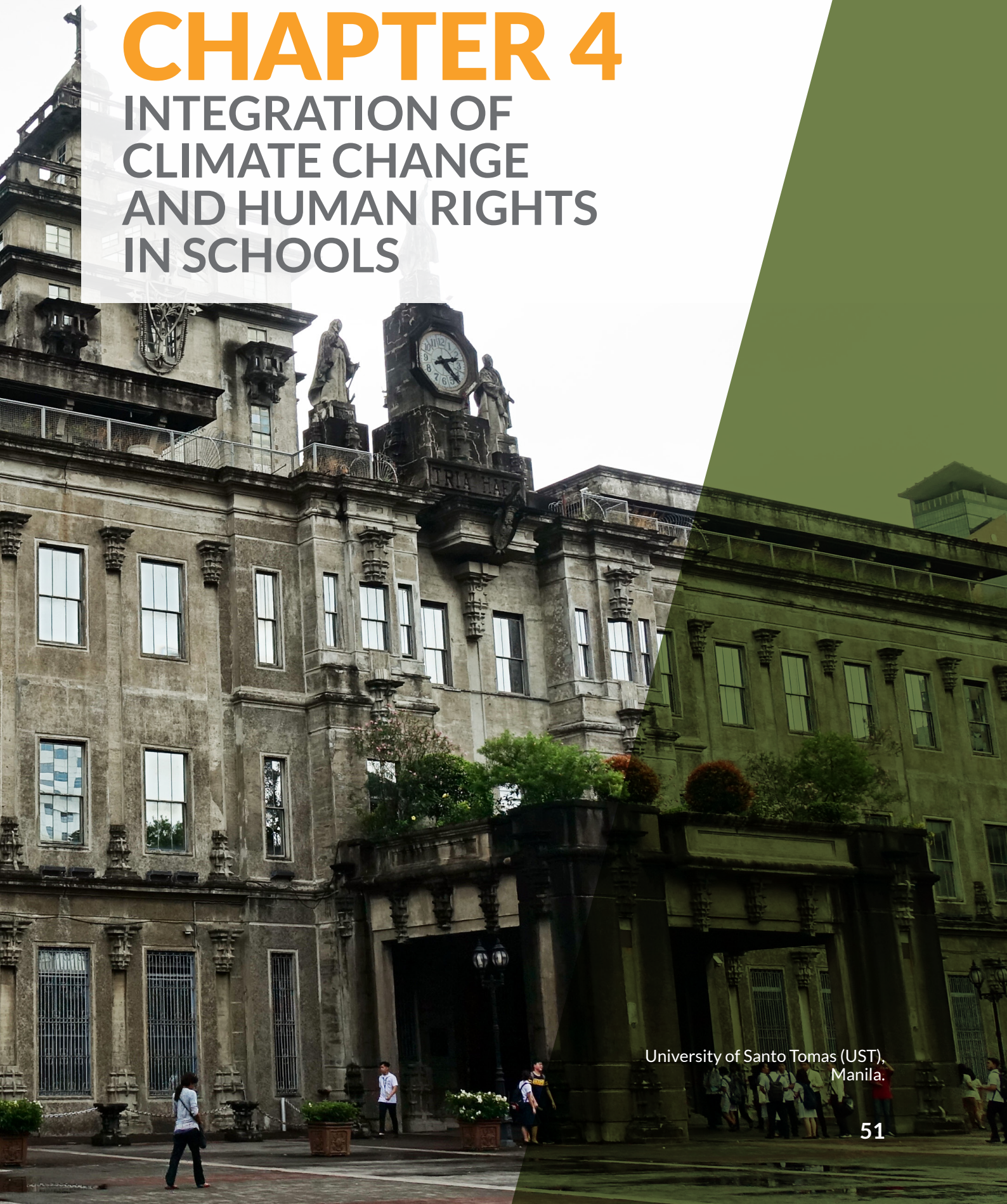
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CHAPTER 4

INTEGRATION OF CLIMATE CHANGE AND HUMAN RIGHTS IN SCHOOLS



University of Santo Tomas (UST),
Manila.

Maryknoll Ecological Sanctuary,
Baguio City.



INTEGRATION OF CLIMATE CHANGE AND HUMAN RIGHTS IN SCHOOLS

After completing chapter 4, you will be able to:

- Understand the role of whole-school approaches in helping school administrators and teachers to comprehensively integrate climate change and human rights in schools.
- Recognize the value of interdisciplinary teaching in effectively improving students' comprehension of climate change and human rights.
- Apply teaching and learning methods to incorporate climate change and human rights to the education of students.
- Integrate climate change and human rights in the MATATAG curriculum, by incorporating concrete lessons and practical exercises that demonstrate the correlation of climate change and human rights with EPP/TLE, MAPEH, Science, and Social Studies.



4.1 A Whole-School Approach



The involvement of all members of a school community is essential to a whole-school approach (WSA). It is designed to elevate both the quality and standards of education as well as address educational challenges to cultivate the positive development and progress of a school. Variations of WSAs can be customized and defined according to different education systems as well as the constantly evolving learning environment needs of schools (IBE-UNESCO, 2018).

Implementing a WSA requires partnerships among different stakeholders, from government agencies and health and social services to business entities, civil society organizations, and local community actors. This is crucial to effectively promote and

support the well-being of both the teachers and the students. The participation of various stakeholders also fosters collaboration and trust within the entire school community—including administrators, teachers, students, parents, and other family members—to be involved in promoting sustainability as part of learning and development as well as educational success. A WSA recognizes that schools can play a crucial role in extending the engagement of communities and providing practical experiences for teachers and students as well as bringing positive changes in school learning practices (European Commission, 2022).

The comprehensive and structured nature of a WSA makes it ideal for the integration of climate change and human rights in compulsory education. With a WSA, concepts can be integrated structurally and coherently into all aspects of the school organization, fostering a holistic approach to education (UNESCO, 2016). A WSA can enable students, teachers, and school administrators to engage and participate in outreach programs and sustainable projects that contribute to addressing climate change with human rights considerations within and beyond the school community. Learning opportunities that connect classroom knowledge with real-world applications can inspire students to become active advocates for environmental protection and human rights (American Psychological Association, n.d.).



CCHRE Integration Strategies

This section discusses integration strategies that administrators and teachers can develop to incorporate climate change and human rights considerations in schools. Along with a thorough understanding of climate change and its impacts on human rights, as discussed in [chapter 2](#), these tasks and activities should also be complemented by an analysis recognizing the differential impacts of climate change on the most vulnerable groups, children in particular. Integrating such a perspective can ensure an inclusive and equitable approach to addressing climate change and human rights in schools.



Vision, Mission, and Objectives

Clear vision and mission statements are the foundation of a school's credibility and reputation. On the other hand, specific objectives shape the educational standards and learning environment. Putting an emphasis on climate change and its impacts on human rights as part of the vision, mission, and objectives will influence the actions, decisions, and overall trajectory of an educational institution while better addressing the challenges and meeting the needs of the school community in the face of the climate crisis.



Research

Educational institutions should cultivate an enabling environment for research, more so for the effective integration of climate change and human rights considerations in teaching and learning. Research can serve as a catalyst for deepening understanding of the intersection between climate change and human rights (Simons, 2021). By synthesizing existing knowledge and generating new insights, research contributes to the development of innovative solutions to address environmental and societal challenges. Educators should conduct research to further enhance their understanding as well as ensure that their teaching approaches are evidence-based, pertinent, and aligned with the latest developments in climate change and human rights education.



Instruction

Topics focusing on climate change and human rights should be incorporated in the curriculum content in a manner that can capture the interest of students and help shape their knowledge, attitudes, skills, and behaviors. Through the integration of lesson plans, activities, and resources with dialogues on the impacts, schools can equip students with a thorough understanding of how and why the environment affects people and vice-versa. These initiatives enable students to emerge as knowledgeable global citizens dedicated to tackling the challenges posed by climate change and advocating for universal human rights (UNEP, 2015). See [annex B](#) for examples of exercises in which climate change and human rights can be integrated in selected core subjects for compulsory education.



Community Engagement

Community engagement initiatives, informed by instruction and research, prepare students for real-world situations by giving them the opportunity to engage in projects with local communities and with most vulnerable groups (American Psychological Association, n.d.).

By participating in community engagement activities, students can gain firsthand experience of the impacts of climate change on certain sectors of the population. This practical approach serves to connect theoretical understanding with practical application. Students can see how climate change exacerbates existing inequalities, affects access to basic necessities, and threatens livelihoods. In the process of engaging in community activities, they can interact with members of the community and learn from experience. Community engagement also promotes interdisciplinary research.

Before engaging in such activities, it is important for schools to develop community engagement plans with the government, civil society stakeholders, and other support groups to address climate change and human rights. Coordination, relationship building, good communication, and effective management between different

stakeholders are necessary to achieve concrete results (Abenir et. al., 2021). Partnership with concerned communities and the most vulnerable groups is also crucial, as it emphasizes collaboration with those on the ground who are directly affected by climate change. A community-based approach is essential to journey with them. Formal partnership agreements will ensure that programs, planned projects, and activities are well-established and implemented simultaneously (Abenir et. al., 2021).

In sum, when formally planned and well-coordinated, community engagement can contribute to the development of learning outcomes, increase the capacities of students as well as of schools, and sharpen the understanding and recognition of the roles of each stakeholder when addressing the impacts of climate change on human rights.



Collaboration and Networking

Collaboration and networking can aid the integration of climate change and human rights in schools. School administrators and educators can establish alliances and collaborate with government agencies and civil society stakeholders working on climate change, human rights, and environmental matters.

For instance, educational institutions can engage in networking events and extend invitations to environmental human rights defenders (EHRDs) as resource speakers to impart their personal experiences. According to UNEP (2024), EHRDs encompass individuals that work peacefully and in their personal or professional capacities to safeguard and advance human rights as well as protect the environment—including flora and fauna, air, land, and water. They can inspire and motivate students in their capacity to tackle climate change issues that have impacts on human rights.

Annex C contains a non-exhaustive list of organizations, movements, and coalitions focusing on climate change, human rights, and environmental issues and can offer opportunities for collaboration and networking to help address climate change and human rights considerations in schools.



Professional Development Programs

Professional development opportunities for teaching and non-teaching personnel, including school administrators, are crucial in the continuous growth of educational institutions. Schools should include training programs and workshops on climate change and human rights for teachers to deepen their understanding of relevant issues and equip them with effective teaching strategies and learning practices. Specialized training specific to these topics can be offered by partnering with higher educational institutions, government agencies, and NGOs (British Council, 2023).

This table provides an overview of the aforementioned strategies and target outcomes to facilitate climate change and human rights integration in schools.

Table 1: Strategies for Climate Change and Human Rights Integration in Schools

STRATEGY	PURPOSE	TARGET OUTCOMES
MISSION, VISION, AND OBJECTIVES	Emphasize the school's commitment to address the challenges posed by climate change and meet the learning needs of students relevant to the climate crisis.	Influence the actions, decisions, and overall trajectory of the school in climate change and human rights education.
RESEARCH	Synthesize existing knowledge and generate new insights to develop innovative teaching and learning methods incorporating climate change and human rights in compulsory education.	Generate and deliver pertinent content relevant to climate change impacts on human rights.
INSTRUCTION	Ensure that the curriculum content involves the alignment of lesson plans, activities, and resources with discussions on the impacts of climate change on human rights.	Topics are presented in a manner that can capture the interest of students and equip them with a thorough understanding of how and why the environment affects people and vice-versa.
COMMUNITY ENGAGEMENT	Bridge the gap between theoretical knowledge and practical experience while encouraging students' acquisition of real-world skills to identify and address climate change impacts on human rights.	Students can directly interact with members of the local communities and the most vulnerable groups and learn from experience when it comes to addressing climate change impacts on human rights.
COLLABORATION AND NETWORKING	Build alliances and collaborate with government agencies and civil society stakeholders to strengthen the involvement of the school community.	Expand opportunities for partnerships and maximize resources that the school can tap to facilitate the integration of climate change and human rights in compulsory education.
PROFESSIONAL DEVELOPMENT PROGRAMS	Stimulate continuous development and growth and empower both the school and educators in providing climate change and human rights education.	Training programs and workshops on climate change and human rights strengthen the capacity of teaching and non-teaching personnel to support students' comprehension and learning.

Source: Dominicans for Justice and Peace (2024)

4.2

Interdisciplinary Teaching and Learning Methods



Interdisciplinary Teaching

Klein (2015) defines interdisciplinary teaching as “a class that integrates the curriculum, concepts, tools, methods, and knowledge from two (or more) different content areas with the goal of having a better understanding of the topic.”

Interdisciplinary teaching is key to integrating complex socio-environmental issues into compulsory education. Scholarly sources emphasize that the interdisciplinary approach enables a holistic view of climate change, viewing it not solely as a scientific concern but also as a developmental, human rights, social, economic, and health issue.

By embracing insights from various disciplines, students can gain a nuanced understanding of the impacts of climate change on human rights (Yanniris, 2021). Additionally, Nyahunda and Tirivangasi (2021) posit that the interdisciplinary approach is considered the most effective method to integrate these concepts into the curriculum as it provides a comprehensive understanding of complex issues. It promotes collaboration and dialogue across academic disciplines, helping educators to adopt an inclusive and interconnected approach when addressing climate change and human rights.

Learning Methods

Teachers can employ a variety of learning methods to engage students effectively in learning about climate change and human rights. Incorporating the interdisciplinary approach within these methods can be particularly beneficial. Doing so collectively contributes to a comprehensive exploration of climate change and human rights, respecting individual opinions and upholding critical analysis. Some examples of learning methods are as follows:



Brainstorming

This allows for the generation of ideas without judgment, fostering creativity and the exploration of different approaches. In the context of climate change and human rights education, brainstorming can allow participants to engage in creative thinking and idea generation to address these issues effectively. This method encourages active participation and analysis of real-life situations.



Case studies

These can cover a wide range of topics, including those connected with climate change and human rights. They are suitable for learners of all ages as they facilitate a deeper understanding of these concepts by presenting concrete impacts of climate change on human rights that require analysis and reflection.

Case studies can be an interesting learning method for students when it comes to analyzing how climate change impacts vulnerable communities and understanding the importance of addressing climate justice. Through climate-related case studies, students can explore the complexities of climate justice, understand the link between environmental degradation and human rights violations, and develop advocacy messages to promote policies that foster sustainability and protect the rights of all individuals, especially those most affected by climate change.



Debates

Debates offer a platform for students to develop diverse perspectives on contentious matters. Multiple groups can deliberate and articulate arguments from varying standpoints, irrespective of personal beliefs. The primary aim of a debate is to encourage logical reasoning and comprehension of an issue while improving the communication skills of participants. Ideally, debates culminate with participants voting either in favor or against the proposition, followed by deliberations on their respective conclusions.

Debates can be formal or informal, with the former following structured techniques involving the preparation of positions, statements, rebuttals, summaries, and voting, and the latter enabling participants to take a stand on an issue and explain their positions.

When it comes to discussing the impacts of climate change on human rights, debates can be particularly relevant, as they provide an opportunity for students to analyze diverse viewpoints on the same issue and articulate their thoughts around it. This learning method can prepare students for future advocacy work as it helps develop their communication skills and confidence.



Dramatization

Dramatization, such as role-playing scenarios, cultivates empathy by allowing participants to embody various roles and experiences. Role-playing exercises in a negotiation process can help students clarify conflicting positions, leading to a settlement that both sides can accept. This learning exercise is crucial for future real-world conflict resolution and consensus building, especially when it comes to addressing the challenges posed by climate change on human rights (Flowers et al., 2000).



Films and documentaries

Films and documentaries that highlight climate change and human rights themes can stimulate discussion and reflection in class, enhancing students' understanding and awareness of these crucial issues. As a visual learning method, it can render content as more accessible and engaging for students. In particular, documentaries often present or portray real-life stories of people, including victims, thereby humanizing concepts that can sometimes seem distant from students' reality.



Project-based learning activities

These offer experiential learning opportunities for students and facilitate an interdisciplinary approach. Educators can encourage the active participation of students in identifying human rights friendly measures and solutions that can mitigate and adapt to climate change. This experiential approach not only enhances students' knowledge, but it also empowers them to take meaningful actions towards creating a more sustainable and equitable future. Through this immersive methodology, students are more likely to take ownership of their learning. Teachers can draw inspiration from the following examples (Harutyunyan & Khachatryan, 2022):

- Organizing and participating in community clean-up and conservation projects to address environmental issues and promote the rights of individuals to a clean and healthy environment.
- Collaborating with local advocacy groups to develop and implement initiatives that raise awareness about the disproportionate impact of climate change on marginalized populations, emphasizing the intersectionality of climate change and human rights issues.
- Creating multimedia presentations or documentaries that highlight the stories and experiences of individuals affected by climate change.
- Engaging in policy analysis and advocacy efforts to promote a human rights-based approach to climate change mitigation and adaptation at local, national, and international levels.



Service Learning

This is a first-hand learning method for students that aims to serve communities and the most vulnerable groups while providing a concrete learning experience to students. Unlike project-based learning activities, service learning is entirely geared towards the needs of communities and the most vulnerable groups.

Service learning is one of the different forms of community engagement. It is considered a learning method because it is integrated in the school curriculum and engagement entails formal evaluation. Service learning can encompass different approaches, such as the following (UCA, n.d.):

- **Direct engagement**

Students interact directly with communities and the most vulnerable groups, and the results can impact the individuals with whom students have engaged.

- **Indirect engagement**

Students gather information from communities and the most vulnerable groups, and produce learning output(s) that can serve them; but there is no direct interaction;

- **Research-based learning service**

Students conduct research aimed at serving communities.

- **Advocacy-oriented learning service**

Students take part in advocacy activities that will address the needs of communities. For concrete examples of advocacy activities, refer to [chapter 5](#).

From this learning process, students need to generate reflections guided by teachers. As such, it can also be used

for interdisciplinary teaching considering an increasing interest within the education sector to organize environmental service-learning activities. Incorporating a climate change component into these activities and exploring its impacts on human rights proves to be an ideal match. This can foster environmental and climate awareness, improve attitudes and behaviors towards nature, and strengthen the knowledge and skills of students in becoming stewards of the environment and society (Zamora, 2023).

The National Geographic's website offers useful resources that can help teachers and school administrators integrate climate change and human rights in school activities and events through easy yet practical ways, such as the following:

The **Field-Based Environmental Service Learning (2024)** provides a list of activities in which students can enjoy the outdoors while learning

- 1 to appreciate how simple actions can help address climate change and benefit people.

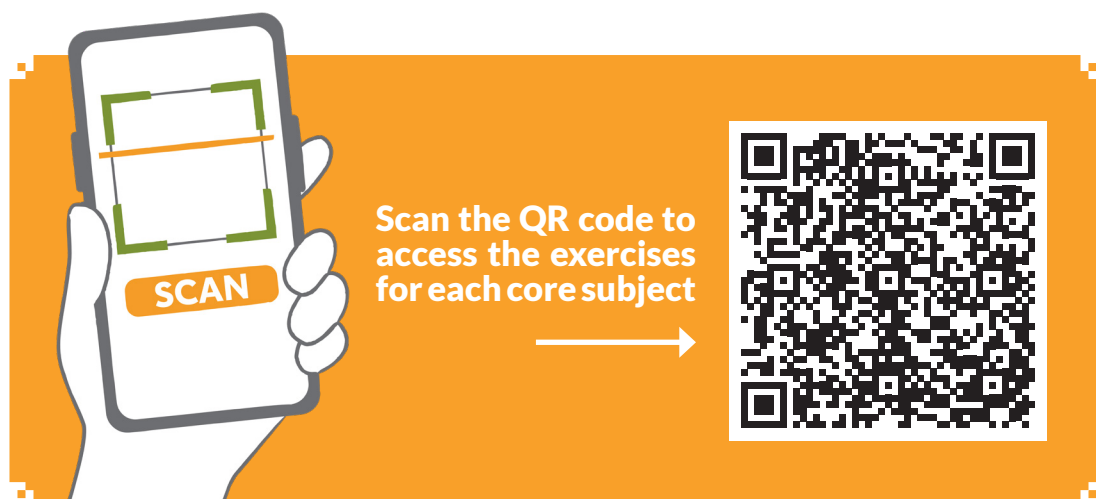
The **Service Learning Toolkit (2024)** is designed to encourage the involvement of the school community

- 2 by providing three guides (for educators, community partners, and families) and one workbook (for students) to support the development, planning, and implementation of service learning projects for the benefit of other individuals or communities.



4.3

Integration of Climate Change and Human Rights in Core Subjects



EPP/TLE

Edukasyong Pantahanan at Pangkabuhayan/Technology and Livelihood Education (EPP/TLE) aims to cultivate technological proficiency while emphasizing knowledge, entrepreneurial concepts, process delivery, work values, and life skills. The curriculum comprises four main components: Information and Communication Technology (ICT), Agricultural and Fishery Arts (AFA), Family and Consumer Science (FCS), and Industrial Arts (IA). Aligned with the Sustainable Development Goals (SDGs), the curriculum is designed to develop skills that address the identified components (DepEd, 2023).

AFA-related topics can serve as entry points for integrating climate change and human rights. Annex B provides EPP/TLE teachers with specific exercises they can implement to illustrate the impacts of climate change on the rights to food and to livelihood, using AFA learning competencies. Educating students on the importance of human rights in the context of the climate crisis can be paramount to help them understand food security and the challenges faced within the agricultural sector due to climate change.



MAPEH

Music, Arts, Physical Education, and Health (MAPEH) aims to help students develop a profound understanding of personal and cultural awareness, along with imparting essential skills for maintaining optimal physical well-being. By instilling these values, students are empowered to fulfill their roles as conscientious members of society. Aligned with the demands of the 21st century, MAPEH is designed to equip students with the requisite skills to effectively address societal needs (DepEd, 2023).

To complement the government's initiatives aimed at promoting physically and health-literate individuals, [annex B](#) provides practical exercises that underscore the importance of the right to health in the context of climate change. Integrating discussions on climate change into this framework is paramount, as it enables students to recognize the impact of the climate crisis on people's health. This approach not only enhances students' understanding of health and well-being, but it also underscores the interconnectedness between environmental sustainability and the right to health.



Science

Science is designed to provide a repertoire of competencies essential for scientific, technological, and environmental literacy. Students gain scientific knowledge with social, health, or environmental implications. This course aims to tackle disaster risk reduction and management, climate change, preservation and conservation of the environment, and sustainable development of resources and energy, including the utilization of renewable energy sources (DepEd, 2023).

Addressing climate change is a scientific matter that encompasses social and human dimensions. In conjunction with the objectives of Science as a core subject, the provided exercises in [annex B](#) are designed to deepen learners' comprehension of why climate change transcends mere environmental concerns, emphasizing its profound implications on human rights.



Social Studies

Social Studies (Araling Panlipunan) aims to cultivate civic competence among students so that they can become critical, reflective, productive and responsible members of society. Students can gain this profound understanding based on an appreciation of the global perspective and the critical social issues that the country is facing. As an integrative, interdisciplinary, and multidisciplinary subject, Social Studies utilizes different lenses and disciplines such as geography, history, sociology, science, politics, economics, and anthropology (DepEd, 2023).

While Social Studies already incorporates themes concerning climate change and human rights, they are often treated as separate discussions. To address this challenge, [annex B](#) includes exercises that illustrate how climate change affects the fulfillment of human rights.



Students at Colegio San Juan de Letran in Manila.

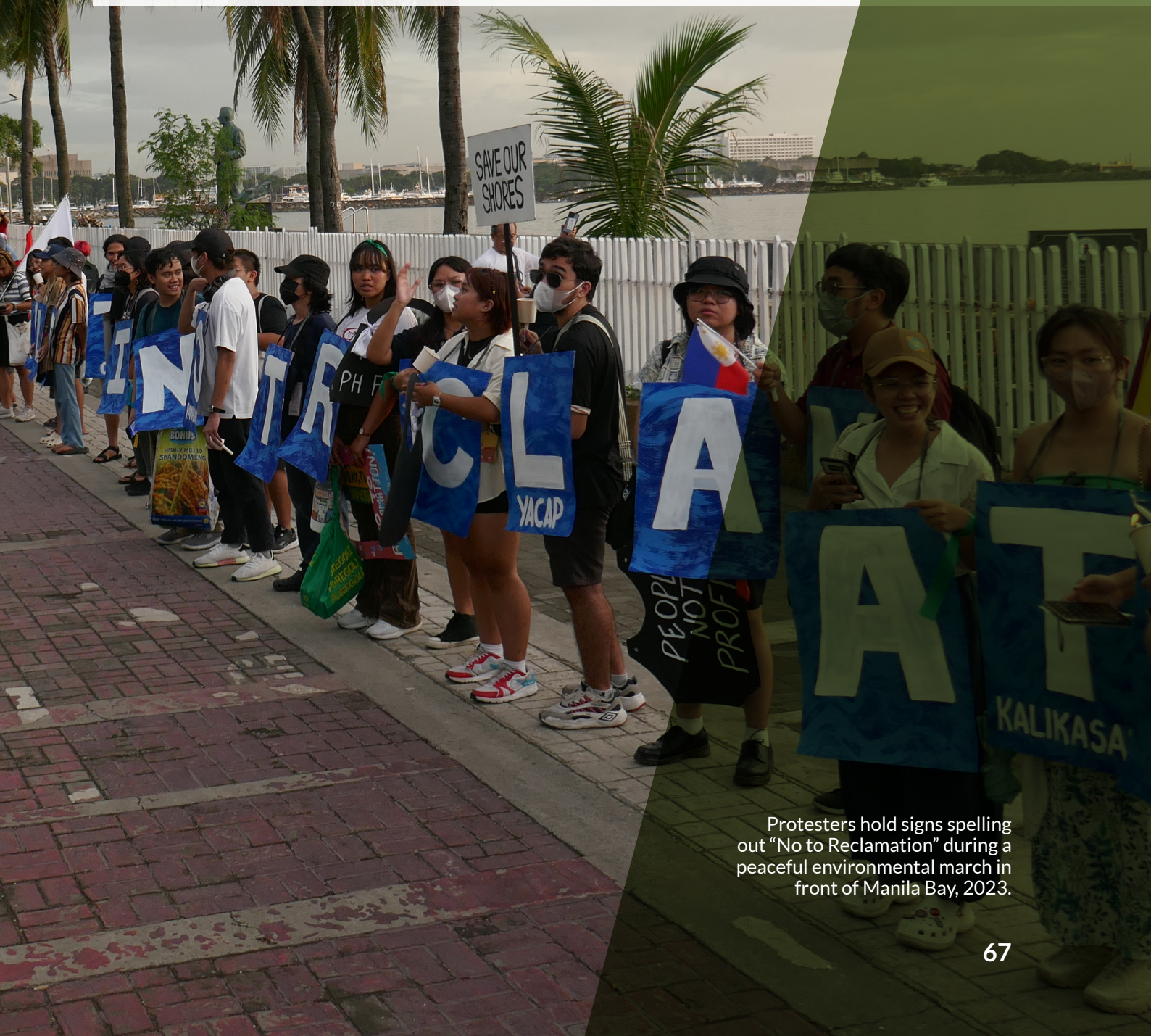
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CHAPTER 5

EMPOWERING STUDENTS AS CLIMATE ACTION AND HUMAN RIGHTS ADVOCATES



Protesters hold signs spelling out “No to Reclamation” during a peaceful environmental march in front of Manila Bay, 2023.

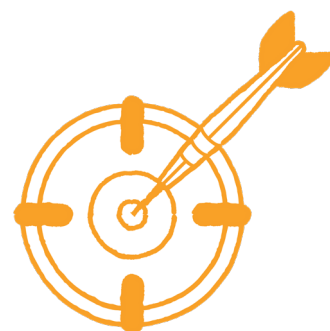
Opening Ritual of the Season of Creation, an ecumenical movement to focus on environmental stewardship and care for the Earth.



EMPOWERING STUDENTS AS CLIMATE ACTION AND HUMAN RIGHTS ADVOCATES

After completing chapter 5, you will be able to:

- Recognize the potential of schools and classrooms to be catalysts for engaging students in climate, environmental, and human rights advocacy.
- Generate a range of advocacy initiatives that can be undertaken with students to address climate change and human rights.



CCHRE is intended to inspire school administrators and teachers to empower students as proactive agents of positive change. Schools and classrooms can, in fact, serve as vital catalysts for engaging students in climate, environmental, and human rights advocacy actions; therefore, school administrators and teachers play a crucial role in guiding and supporting students in this endeavor.

Climate change and human rights advocacy can take place at the local, national, and international levels. This can foster the development and transformation of laws and policies to promote and protect human rights while addressing climate change. As highlighted in [chapter 2](#), policymakers have the duty to protect and promote human rights while tackling climate change. When organizing advocacy initiatives, educators can turn to this chapter as a guide to identify what requests can be transmitted to the authorities.

Advocacy Initiatives

In schools, advocacy initiatives can efficiently facilitate the integration of climate change and human rights in education by capturing the curiosity and interest of students in various ways. Some examples of advocacy initiatives that school administrators and teachers can undertake with students as part of activities and lessons in core subjects are discussed as follows:



Petition letters

Navarro-Castro and Nario-Galace (2008) indicate that writing to local authorities and signing petition letters can empower students to voice their concerns effectively. The potential positive impacts of petition letters can be achieved using digital and online channels, such as the one initiated with regard to the hydroelectric Kaliwa Dam Project. Initiated by the Stop Kaliwa Dam Network, the online petition letter was posted on Change.org in 2019 and urged President Ferdinand Marcos Jr. to stop the construction of the Kaliwa Dam Project due to environmental and social concerns (Stop Kaliwa Dam, 2019). As of 2023, the online petition letter gathered more than 200,000 signatures (Carias, 2023). Another example is Greenpeace, which has petitioned ASEAN governments for a strong global plastics treaty to limit plastic production and pollution (Greenpeace Southeast Asia, n.d.).

Drafting letters with key advocacy requests can be an engaging exercise for students, as it helps them organize their thoughts and develop compelling arguments.



Investigations and legal actions

Various organizations in the Philippines, including Greenpeace and other human rights advocacy groups, have initiated efforts to address climate change and its repercussions on human rights through investigations and legal actions targeting major contributors accountable for climate change-related human rights violations (Greenpeace, 2017). Greenpeace has supported the CHR's investigations into major fossil fuel companies' liability for climate change (CHR, 2022).

Investigations and legal actions offer a platform for affected communities to share their stories and seek climate justice and schools can support these actions, including through the use of media platforms to mobilize student communities and public support for these causes.



Campaigns

Educators can integrate advocacy components into core subjects by designing lesson plans and activities that encourage students to exercise critical thinking and problem-solving as they generate deliverable advocacy messages for campaigns. For example, the "Write for Rights" global campaign putting youth activists in the spotlight underscored the collective power of advocacy through letter writing while also advocating for climate action (Amnesty International, 2022). Campaigns can also serve as effective tools to raise awareness about a specific issue. Schools can host informative sessions for local communities and

most vulnerable groups to raise their awareness about climate change and human rights. Campaigns can be organized during school events and programs and can also be easily integrated in classes in the form of exercises (such as letter writing).



Volunteerism

As we are in a pivotal moment to call for climate justice worldwide, civil society stakeholders emphasize the necessity for enhanced activism to effectively combat the climate crisis (Greenpeace International, 2022).

Schools can engage students in volunteering with organizations who work on climate change and human rights advocacy. Such activity can build students' awareness, curiosity, mindfulness, sensitivity, and sense of responsibility, as individuals and members of society.



Camps and/or retreats

The facilitation of camps and retreats in climate change and human rights education can be immersive, insightful, and stimulating experiences for students. For instance, Greenpeace Philippines organized a series of camps in which 50 new young food activists helped raise awareness on the risks of meat consumption for our health and the planet (Greenpeace, 2020).

In 2022, the Philippines was among 60 countries represented by young activists at the Climate Justice Camp held in Tunisia (Amnesty International, 2022). A youth climate activist from Negros Occidental, Philippines, who attended the camp and later represented Amnesty International as a youth delegate at COP27 remarked, "Seeing everyone together, especially my fellow young climate activists from the most affected areas on Earth, was so powerful... I learned so much from the daily workshops and the sessions, and I'm now more motivated than ever."

School administrators and teachers should explore opportunities for memberships and/or sponsorships to enable the involvement and participation of students in these kinds of endeavors. These gatherings can also serve as a means and platform for students to explore their potential to become young climate action and human rights advocates by learning and sharing life experiences with others as well as collaborating in developing sustainable solutions.



Advocacy at the UN

Participation in UN forums presents a unique opportunity for students to engage in global discussions about climate change and human rights. The HRC, convening three times a year in Geneva, Switzerland, offers avenues for youth to actively engage, including through the delivery of oral and written statements. Organizations like Dominicans for Justice and Peace, holding ECOSOC status, can extend invitations and support youth participation in the HRC.

Similarly, the annual gatherings of the UNFCCC, such as the Conference of the Parties (COP), focus on climate change and offer opportunities

for meaningful youth participation. Such international gatherings recognize the increasingly important role of the youth in global climate governance (Thew et al., 2021). Civil society organizations, such as Dominicans for Justice and Peace, which hold the UNFCCC observer status, can also register youth delegates and allow them to attend sessions, participate in panels, and meet with States delegates and other stakeholders, among others.



Bilateral meetings

Teachers and school administrators can also organize bilateral meetings with authorities at different levels. Participating in such advocacy actions can allow students to voice their concerns about climate change directly to decision-makers and advocate for policy and legal changes. This type of activity can be organized in collaboration with civil society stakeholders who have the expertise in this field.

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CHAPTER 6

KEY TAKEAWAYS



Survey with affected coastal communities, Zambales Province, 2023.

Survey with affected
coastal communities,
Zambales Province, 2023.



KEY TAKEAWAYS

This concluding chapter highlights the essential insights and messages that CCHRE seeks to impart. It serves as a synthesis of the ideas, concepts, and topics discussed in the previous chapters to provide a clear and concise summary that teachers and school administrators may carry forward in their efforts to integrate climate change and human rights in compulsory education.

CHAPTER 1 With its profound impacts on the right to life, health, and education, among others, climate change should be understood as a critical human rights issue. The teachings of the Church underscore the ethical imperative to protect the environment, address climate change, and uphold human dignity. Central to addressing climate change and human rights is the commitment of teachers and school administrators, whose roles are vital in educating and preparing young generations.

CHAPTER 2 Climate change is a critical global concern that has been thoroughly supported by research, scientific evidence, and empirical data. It is also undeniable that climate change is a human rights issue. A broad range of human rights are impacted by climate change and will be in more severe ways in the future. States have the urgent task of not only mitigating and adapting to climate change but also of redressing the harm inflicted upon affected populations. By doing this, it is imperative that human rights considerations permeate all state's actions and measures.

CHAPTER 3 The right to a balanced and healthful ecology is extensively recognized as an important component to consider in the protection of the environment and in addressing climate change.

CHAPTER 4 Schools have a great potential to catalyze meaningful action. School administrators and teachers can do so by employing different strategies to incorporate climate change and human rights considerations in schools, by fostering interdisciplinary learning, and by being creative in the use of learning methods. Community engagement activities and service learning are key aspects of this approach.

CHAPTER 5 Through the promotion of advocacy initiatives, education plays a vital role in cultivating a generation of informed and empowered individuals who are committed to safeguarding human rights and protecting our planet for generations to come. Young generations can play a pivotal role in holding authorities accountable for upholding human rights while addressing climate change. Together, through concerted efforts and collective action, Philippine schools can forge a path towards a more just and sustainable future for current and future generations.





Afterword by Bishop Napoleon B. Sipalay Jr., OP

My involvement in the Dominican advocacy on climate change and human rights formally started in 2019, when Fr. Michael Deeb, OP, former Permanent Delegate of the Order of Preachers to the United Nations and General Promoter of Justice and Peace of the Order of Preachers, and Ms. Laurence Blattmer, from Dominicans for Justice and Peace, organized a training workshop on Human Rights and United Nations Mechanisms in Iloilo City. In that training, the DFJPCC was aided in being aware and informed on how to engage with United Nations Human Rights and Climate Change Mechanisms and the Sustainable Development Goals. It was for me a solid training to deepen my commitment to human rights issues and climate change, and to hold the government responsible by empowering citizens to know their rights.

I then opted to join one of the three committees formed following the training workshop: the Environment Committee of the DFJPCC. Sr. Teresa R. Dagdag, MM headed our committee, with many promoters of the Dominican Family and one member from the Fellowship for the Care of Creation Association, Inc. represented by Ms. Mylene Saluta. Our committee underwent many training sessions to capacitate members of the Dominican Family on climate change issues. With the University of Santo Tomas (UST) Community Development Office, UST SIMBAHAYAN, and their director, Asst. Prof. Froilan A. Alipao, we conducted different programs of the Season of Creation and promoted *Laudato Si'* and *Fratelli tutti* for the Dominican Family and collaborators during the height of the COVID-19 pandemic. However, we felt the need to share the awareness and knowledge we had received, especially with young people who are gravely affected by the climate emergency. We felt the intergenerational responsibility to share this awareness on climate change issues. But how do we do it?

Dominicans for Justice and Peace, through Mr. Benedict Rimando, surveyed our Dominican schools to see how climate change is integrated in the academic curriculum. Eventually, educators from Dominican schools were gathered for training and the decision was made to integrate climate change and human rights issues in the curriculum of our Dominican schools – and possibly to all schools in the Philippines. I was privileged to be present in most of the training sessions conducted by Dominicans for Justice and Peace in collaboration with the DFJPCC. Furthermore, our collaboration with many sectors that advocate for climate change has also aided us a lot in this preparation.

I am convinced that climate change is not only an issue, it is a grave responsibility. As Pope Francis calls it: a Climate Emergency. Climate change is affecting many of the poor sectors of our society. The cry of the Earth is the cry of the poor (*Laudato Si'* #49). The responsibility of those in government and big countries who are pollutants are called to take their responsibility.

The way forward is what the handbook envisions — to empower our students and all those who are concerned with the education of our young generations as part of intergenerational justice to have the knowledge and concrete response to the issue of human rights and climate change. This is to empower the youth who greatly suffer because of the effects of climate change. I understand that in the legal framework in the Philippines, much is to be expected to see laws connecting climate change and human rights. But the silver lining is there. In the National Inquiry on Climate Change Report 2022, the Commission on Human Rights Philippines emphasized the connection between human rights and climate change. At the same time, young people are starting to become empowered to help make this happen.

I became involved in this handbook when I joined the Writeshop of Dominicans for Justice and Peace on October 21-23, 2023, to continue the advocacy on climate change and human rights. The Writeshop was held at the Maryknoll Ecological Sanctuary in Baguio City. Also present were Fr. Aniedi Okure OP, General Promoter of Justice and Peace of the Order of Preachers and Permanent Delegate of the Order of Preachers to the United Nations; Fr. Victor Calvo, Jr., OP, Promoter of JPCC; Mr. Benedict Rimando and Ms. Laurence Blattmer from Dominicans for Justice and Peace; and the DFJPCC, along with teachers and administrators from Dominican Schools in the Philippines.

The goals of the Writeshop were to collaborate in developing a handbook that teachers and other educators can integrate into their lessons for students to understand and address the pressing issues of human rights and climate change as well as engage partners, for example, UST SIMBAHAYAN and Atty. Mario E. Maderazo, a distinguished human rights and environment lawyer. If the destruction of our environment is not abated and the human rights of the most vulnerable continue to be violated, then we are remiss in our responsibility of providing the future generations with what we are now enjoying, or not even enjoying because the effects of climate change are already so much felt. The sad reality is that most of those who are affected are the most vulnerable in our society.

This handbook is a product of a long, tedious process of our Dominicans at the international and local levels to raise awareness of our young people in schools. It aims to equip educators with the concepts, legal framework, and understanding of how this climate change impinges on human rights, especially those of the most vulnerable. The hope is that this will prepare our students, and schools, for them to have the knowledge and skills to concretely respond to climate change and human rights issues.

The sponsorship of Misesan Cara will help us impart awareness and knowledge on climate change and human rights issues in our schools, with the involvement of many of our educators in the Dominican schools and advocates who were involved and participated in all the training, reflections, and community outreach held in collaboration with different institutions, especially colleges and universities of the Dominican Family.

May this handbook be our drop in the ocean of climate change and human rights. And, may the ripples it creates bring inspiration to those who will become agents of hope, justice and peace in our country and the world.

+Napoleon B. Sipalay Jr., OP
Bishop of Alaminos

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Dominicans for Justice and Peace
Geneva, Switzerland

Fr. Victor Calvo, Jr., OP
DFJPCC
Philippines



CLIMATE CHANGE AND HUMAN RIGHTS EDUCATION

for Youth in the Philippines

ANNEXES

ANNEX A

Matrix Results: Mainstreaming CCHRE Using MATATAG Curriculum Guides for Core Subjects

Dominicans for Justice and
Peace's workshop on climate
change and human rights in
Baguio City, 2023.

GRADE 3

SCIENCE		
1 st QUARTER	CONTENT	Materials and their uses
	LEARNING COMPETENCY	Explain that changes in materials can be harmful to living and non-living things in the environment, such as trash disposal, and burning household materials; demonstrate proper handling and disposal of materials according to their properties, such as reusing objects, disposing of excess oil into garbage, and recycling paper, plastic or glass.
2 nd QUARTER	CONTENT	Characteristics of living things
	LEARNING COMPETENCY	Describe the characteristics of living things: they grow, respond, and reproduce; observe examples and explain how living things depend on one another and on the environment to meet their basic needs.
	CONTENT	Basic needs of living things
	LEARNING COMPETENCY	Observe examples and explain how living things depend on one another and on the environment to meet their basic needs; and recognize that there is a need to protect and conserve the environment for living things to survive.
3 rd QUARTER	CONTENT	Patterns in the weather
	LEARNING COMPETENCY	Describe how changes in the weather can affect daily activities and explain how some types of weather can be dangerous for people.

GRADE 4

EPP/TLE

2nd QUARTER	CONTENT	Kahalagahan ng paghahalaman (Importance of gardening)
	LEARNING COMPETENCY	Natatalakay ang mga kahalagahan at kabutihang dulot ng paghahalaman sa tao, hayop, at kalikasan o kapaligiran (Discuss the importance and benefits of gardening for humans, animals, and the environment or ecosystem).

MAPEH

4th QUARTER	CONTENT	Child's basic health rights
	LEARNING COMPETENCY	Discuss child's basic health rights for active living.

SCIENCE

1st QUARTER	CONTENT	Materials and their uses
	LEARNING COMPETENCY	Describe the chemical properties of materials, such as they can be burnt, react with other materials, or are degradable or biodegradable; describe changes in properties of materials when exposed to certain changes in temperature, such as changes when wood or coal are burned.
	CONTENT	Gathering scientific information
	LEARNING COMPETENCY	Identify issues and concerns in the local community and how they could be addressed by science, such as the treatment of waste; and apply science process skills and attitudes in conducting a guided survey about environmental issues and concerns including grouping and classifying, communicating, and open mindedness.
4th QUARTER	CONTENT	Characteristics of the weather
	LEARNING COMPETENCY	Identify some of the basic characteristics used to describe the weather, such as air temperature, air pressure, wind speed, wind direction, humidity, rain, and cloud cover; use weather instruments to measure and record some of the characteristics of weather during a school day.

SOCIAL STUDIES

4th QUARTER	CONTENT	Karapatan at Tungkulin ng Mamamayang Pilipino (Rights and duties of Filipino citizens) 1. Kahulugan (Definition of human rights) 2. Uri ng Karapatan (Types of rights) A. Karaptang Sibil (Civil rights) B. Karapatang Politikal (Political rights) C. Karapatang Panlipunan at Pangkabuhayan (Social and economic rights)
	LEARNING COMPETENCY	Natatalakay ang mga karapatan at tungkulin ng isang mamamayan (Discuss the rights and duties of citizens).

GRADE 5

EPP/TLE		
2 nd QUARTER	CONTENT	Kahalagahan at kabutihang dulot ng pag-aalaga ng poultry animals sa natural na pamamaraan. Kahalagahan sa pag-aalaga ng poultry animals (Importance and benefits of caring for poultry animals using natural methods. Importance of caring for poultry animals) <ul style="list-style-type: none"> • Karagdagang kita (Additional income) • Hanapbuhay (Livelihood/jobs) • Pagkain (Food)
	LEARNING COMPETENCY	Natatalakay ang kahalagahan at kabutihang dulot sa pag-aalaga ng poultry animals sa natural na pamamaraan (Discuss the importance and benefits of caring for poultry animals using natural methods).
MAPEH		
3 rd QUARTER	CONTENT	Dangers of gateway drugs
	LEARNING COMPETENCY	Analyze the negative effects of gateway drugs on the individual, family, and the community.
SCIENCE		
1 st QUARTER	CONTENT	Scientific investigation
	LEARNING COMPETENCY	Describe the steps of a simple science investigation: <ul style="list-style-type: none"> • What is the problem? • What materials do you need? • What do you need to do? • What have you found out/learned?
4 th QUARTER	CONTENT	Weather disturbances
	LEARNING COMPETENCY	Describe some effects of weather disturbances that occur in or near the Philippines; describe the weather conditions according to a Public Storm Warning Signal issued by the Philippine Atmospheric, Geological and Astronomical Services Administration (PAGASA).
SOCIAL STUDIES		
3 rd QUARTER	CONTENT	Pagbabagong pananaw at pagtugon ng mga Pilipino sa kolonyalismong Espanyol (Changing attitudes and responses of Filipinos to Spanish colonialism) 1. Mga paraan ng pagtugon ng mga Pilipino sa kolonyalismong Espanyol (Ways of Filipinos response to Spanish colonialism) A. Pag-aalsa (Revolt) B. Pagtanggap sa kapangyarihang kolonyal/pagsuko (Acceptance of colonial power/surrender) C. Paninirahan/pagtatago sa kabundukan (Living/hiding in the mountains)
	LEARNING COMPETENCY	Natatalakay ang katayuan ng kababaihan sa panahon ng kolonyalismong Espanyol (Discuss the status of women during Spanish colonialism).

GRADE 6

EPP/TLE		
2 nd QUARTER	CONTENT	<p>Importance and benefits of fish raising as source of:</p> <ul style="list-style-type: none"> • food • income • employment <p>Benefits of fish raising:</p> <ul style="list-style-type: none"> • values inculcation • health benefits • economic benefits
	LEARNING COMPETENCY	Discuss the importance and benefits in fish raising.
MAPEH		
4 th QUARTER	CONTENT	Understanding Environmental Concerns through One Health (Harmful Effects of Environmental Concerns on Human Health)
	LEARNING COMPETENCY	Discuss the nature and effects of environmental concerns using the concept of One Health.
SCIENCE		
2 nd QUARTER	CONTENT	Biotic and abiotic factors in an ecosystem
	LEARNING COMPETENCY	Describe living things, such as animals and plants, as biotic factors and light, water, temperature, and soil type, as abiotic factors of an ecosystem; and explain how interaction between living things and interactions between living and nonliving things may bring good or harm to the living things involved.
SOCIAL STUDIES		
4 th QUARTER	CONTENT	Politika; Mga Paglabag sa Karapatang Pantao (Politics; Human Rights Violations)
	LEARNING COMPETENCY	Nakabubuo ng kongklusyon ukol sa mga hamong politikal ng Pilipinas mula 1987 hanggang sa kasalukuyan (Drawing conclusions about political challenges of the Philippines from 1987 to the present).

GRADE 7

EPP/TLE		
2 nd QUARTER	CONTENT	Agricultural hazards and risks in farm operations
	LEARNING COMPETENCY	Discuss hazards and risks in farm operations.
MAPEH		
3 rd QUARTER	CONTENT	Importance of healthy eating during adolescence
	LEARNING COMPETENCY	Explain the importance of healthy eating during adolescence.
SCIENCE		
1 st QUARTER	CONTENT	Planning, following, and recording scientific investigations
	LEARNING COMPETENCY	Follow appropriate steps of a scientific investigation which includes: 1. Aim or problem, 2. Materials and equipment, 3. Method or procedures, 4. Results including data, and 5. Conclusion.
SOCIAL STUDIES		
4 th QUARTER	CONTENT	Kalagayang ng Karapatang Pantao sa Pilipinas at Timog Silangang Asya (Human Rights Situation in the Philippines and Southeast Asia) 1. Pagtatatag ng ASEAN Intergovernmental Commission on Human Rights (AICHR) (Establishment of the ASEAN Intergovernmental Commission on Human Rights) 2. ASEAN Human Rights Declaration (AHRD) 3. Mga Isyung hinaharap ng ASEAN kaugnay sa karapatang pantao (Current issues that ASEAN faces relating to human rights)
	LEARNING COMPETENCY	Nasusuri ang papel ng ASEAN sa usapin ng karapatang (Analyzing the role of ASEAN in addressing human rights issues).

GRADE 8

EPP/TLE		
3 rd QUARTER	CONTENT	Aquaculture and fisheries
	LEARNING COMPETENCY	Discuss the background of aquaculture and its relation to fisheries.
MAPEH		
4 th QUARTER	CONTENT	Strategies in evaluating health information, health products and health services
	LEARNING COMPETENCY	Examine health information, health products, health services, and health care providers.
SCIENCE		
3 rd QUARTER	CONTENT	Types of ecosystems in the Philippines
	LEARNING COMPETENCY	Use information from secondary sources to describe the possible effects of human activities, such as deforestation, pollution, and introduction of invasive species, on living things in an ecosystem; and plan to conduct a survey to explore the possibilities for minimizing the negative impacts of human activities on an ecosystem.
	CONTENT	Typhoons
	LEARNING COMPETENCY	Gather information from secondary sources to explain: 1. How typhoons develop, and 2. Why the Philippines is prone to typhoons
4 th QUARTER	CONTENT	Renewable energy
	LEARNING COMPETENCY	Gather information from secondary sources to explain how potential energy stored in lakes and dams in the Philippines is used to produce kinetic energy to generate electricity for use in homes, communities, and industry.
SOCIAL STUDIES		
3 rd QUARTER	CONTENT	Mga Isyung Pampolitika, Pangkabuhayan, at Pangkalikasan (Political, Economic and Environmental Issues)
	LEARNING COMPETENCY	Nasusuri ang mga isyung pampolitika, pangkabuhayan, at pangkalikasang kinakaharap ng daigdig (Political, economic and environmental issues facing the world are analyzed).

GRADE 9

EPP/TLE		
2 nd QUARTER	CONTENT	Agricultural practices in planting crops <ul style="list-style-type: none"> • Soil analysis • Land preparation • Mulching techniques • Planting • Transplanting
	LEARNING COMPETENCY	Perform agricultural practices in planting crops according to natural farming.
MAPEH		
3 rd QUARTER	CONTENT	Issues and trends in world music and arts in relation to Filipino culture (Social Justice and Democracy)
	LEARNING COMPETENCY	Produce creative works about the issues and trends in world performing and visual arts.
4 th QUARTER	CONTENT	Nature and effects of hazards and disasters
	LEARNING COMPETENCY	Analyze the nature and effects of hazards and disasters.
SCIENCE		
3 rd QUARTER	CONTENT	Types of ecosystems in the Philippines
	LEARNING COMPETENCY	Use information from secondary sources to describe the possible effects of human activities, such as deforestation, pollution, and introduction of invasive species, on living things in an ecosystem; and plan to conduct a survey to explore the possibilities for minimizing the negative impacts of human activities on an ecosystem.
SOCIAL STUDIES		
3 rd QUARTER	CONTENT	Kahirapan (Poverty)
	LEARNING COMPETENCY	Nasusuri ang mga dahilan, epekto ng kahirapan (poverty), at ang mga solusyon sa paglutas nito (The causes, effects of poverty, and the solutions to solve it are analyzed).
4 th QUARTER	CONTENT	Sektor ng Agrikultura (Food Security)
	LEARNING COMPETENCY	Nasusuri ang kasalukuyang kalagayan at bahaging ginagampanan ng sektor ng agrikultura sa pambansang ekonomiya (The current state and role of the agricultural sector in the national economy are analyzed).

GRADE 10

EPP/TLE		
1 st QUARTER	CONTENT	Protecting marine environment <ul style="list-style-type: none"> garbage disposal procedures guidelines and implementation
	LEARNING COMPETENCY	Discuss protecting the marine environment.
MAPEH		
2 nd QUARTER	CONTENT	Maternal and child health
	LEARNING COMPETENCY	Analyze ways to safeguard the health and wellbeing of mothers and children.
3 rd QUARTER	CONTENT	One Health
	LEARNING COMPETENCY	Integrate the concept of One Health in understanding the interdependence of human, animal, and environmental health.
SCIENCE		
1 st QUARTER	CONTENT	Global climate
	LEARNING COMPETENCY	Identify the role of greenhouse gases in enhanced global warming and climate change; describe how global climatic phenomena, such as the El Niño Southern Oscillation, may impact weather systems.
	CONTENT	Global interactions and local sustainability
	LEARNING COMPETENCY	Identify local impacts of global climate change and suggest ways that individuals can do to reduce the impact of global warming; and explain how increased societal uses of renewable energies could mitigate the effects of global climate change, including how the Philippines could make better use of its plentiful natural resources.
2 nd QUARTER	CONTENT	Renewable Energy and non-renewable energy
	LEARNING COMPETENCY	Gather information from secondary sources to evaluate how renewable and nonrenewable generation of electricity in the Philippines impacts human activities and the environment.

GRADE 10

SOCIAL STUDIES		
1 st QUARTER	CONTENT	<p>Konteksto ng suliraning pangkapaligiran (Context of the environmental problem)</p> <ol style="list-style-type: none"> 1. Man-made 2. Natural 3. Mga Sanhi ng Pagkaubos ng Likas na Yaman (Causes of depletion of natural resources) <ol style="list-style-type: none"> A. Illegal Logging B. Over-Mining C. Deforestation D. Forest degradation E. Illegal Fishing F. Illicit wildlife trade 4. Climate Change: Global Warming
	LEARNING COMPETENCY	Nasusuri ang mga sanhi at epekto ng mga suliraning pangkapaligiran ng daigdig (Analyzes the causes and effects of problems world environment).
4 th QUARTER	CONTENT	<p>Karapatang Pantao (Human rights)</p> <ol style="list-style-type: none"> 1. Konteksto: 1987 Constitution at UDHR (Context: 1987 Constitution and UDHR) 2. Uri (Type) 3. Kahalagahan (Importance)
	LEARNING COMPETENCY	Nasusuri ang kahalagahan ng pagsusulong at pangangalaga sa karapatang pantao sa pagtugon sa mga isyu at hamong panlipunan (Analyze the importance of promoting and protecting human rights in addressing social issues and challenges).
	CONTENT	<p>Mga Isyu at Hamon sa Pagkamamamayan (Issues and challenges in citizenship)</p> <ol style="list-style-type: none"> 1. Paglabag sa Karapatang Pantao (Violations of human rights) 2. Mga Samahang Nagtataguyod sa Karapatang Pantao (Organizations advocating for human rights)
	LEARNING COMPETENCY	Natatalakay ang mga isyu at hamon sa pagkamamamayan (Discussing issues and challenges in citizenship).

ANNEX B

Examples of CCHRE Exercises for EPP/TLE,
MAPEH, Science, and Social Studies



A fisherman in Manila Bay
with reclamation work in
the background.

EPP/TLE**LEVEL:** Grade 4**TERM:** 2nd Quarter**CONTENT:**

Kahalagahan ng paghahalaman (Importance of gardening)

LEARNING COMPETENCY:

Natatalakay ang mga kahalagahan at kabutihang dulot ng paghahalaman sa tao, hayop, at kalikasan o kapaligiran (Discuss the importance and benefits of gardening for humans, animals, and the environment or ecosystem).

EXERCISE:

Green thumbs and growing minds: Smart and climate-resilient gardens

OBJECTIVES:

1. Explore the importance and benefits of gardening for humans, animals, the environment, and the climate.
2. Demonstrate how smart and climate-resilient gardens can help communities adapt to changing environmental conditions by providing food security, enhancing resilience to climate-related disasters, and promoting sustainable livelihoods.
3. Promote interdisciplinary learning by connecting EPP/TLE with other subjects, such as science.

PROCEDURES:

1. Preparation:
 - a. Gather the necessary gardening tools and materials, such as pots, soil, seeds or seedlings, watering cans, and gardening gloves.
 - b. Set up a designated gardening area in the schoolyard or classroom with ample sunlight and access to water.
2. Introduction to gardening:
 - a. Discuss with the students the importance of gardening and plants.
 - b. Explain how gardening benefits humans by providing fresh food as well as a sense of connection to nature. Gardens and green areas also play an important role in capturing carbon dioxide (CO²) and releasing oxygen (O²).
 - c. Discuss the importance of gardens for animals as habitats and sources of food.
 - d. Emphasize the role of gardens in enhancing environmental conservation and biodiversity.
 - e. Explain to students how natural hazards and/or extreme weather events can destroy gardens, therefore affecting food production and impacting the right to food. Emphasize the importance of adopting gardening practices that can help enhance climate resilience, such as :
 - i. Planting drought-tolerant plants and harvesting rainwater to address droughts;

- ii. Preferring polyculture, native plants and crop diversity to ensure that if one crop dies, others can still thrive;
 - iii. Adding compost to the soil to improve its quality and provide nutrients to plants, thereby enhancing their climate stress' resistance; and
 - iv. Controlling rainwater runoff in case of heavy rainfall (University of Maryland Extension, 2024).
3. Selection of plants:
 - a. Introduce a variety of plants suitable for gardening in the local climate and environment.
 - b. Discuss the characteristics and requirements of different plants, including sunlight, water, and soil varieties.
 - c. Allow students to choose the plants they would like to grow based on their preferences and the available resources.
4. Planting activity:
 - a. Provide each student or group of students with a pot or designated area in the schoolyard.
 - b. Guide the students in planting seeds or seedlings according to the instructions provided for each plant species.
5. Gardening maintenance:
 - a. Explain the importance of caring for plants by watering them regularly, removing weeds, and protecting them from pests.
 - b. Demonstrate proper watering techniques and encourage students to take turns in watering the plants.
 - c. Discuss the role of composting and organic gardening practices in maintaining healthy soil and plants.
6. Observation and recording:
 - a. Encourage students to observe their plants regularly and record their growth along with any changes they notice.
 - b. Provide notebooks or journals that students can use for writing or drawing their observations, including plant height, leaf development, and the presence of flowers or fruits.
7. Reflection:
 - a. Gather the students together to reflect on their gardening experience.
 - b. Discuss potential challenges encountered during the activity and how they were addressed.
 - c. Encourage students to share their thoughts about their experiences as well as the importance of gardening for themselves, animals, the environment, and the climate.

RELEVANCE TO CLIMATE CHANGE AND HUMAN RIGHTS:

Climate change impacts are multiple and climate-resilient gardens can mitigate these effects by improving plants' resistance, managing stormwater, enhancing ecosystem resilience, and sequestering carbon, among others.

This experiential activity enables students to gain hands-on experience to better

understand why and how gardening can help guarantee the accessibility of food by providing fresh produce, which is a key element to the human right to food.

By fostering sustainable gardening practices, this exercise can contribute to raising awareness among students about climate change adaptation and mitigation along with the importance of enhancing food security, promoting environmental conservation, protecting biodiversity, and improving the welfare and well-being of people and communities. **Read more about climate change impacts on human rights in chapter 2 of CCHRE.**

Reference

University of Maryland Extension. (2024). Sustainable gardening: Solutions to climate change. <https://extension.umd.edu/resource/sustainable-gardening-solutions-climate-change/>

EPP/TLE**LEVEL:** Grade 7**TERM:** 2nd Quarter**CONTENT:**

Agricultural hazards and risks in farm operations

LEARNING COMPETENCY:

Discuss hazards and risks in farm operations.

EXERCISE:

Farm safety and climate resilience: Exploring hazards, risks, and adaptation strategies

OBJECTIVES:

1. Teach students about potential hazards and risks in farm operations, including those exacerbated by climate change.
2. Emphasize the importance of implementing risk assessment and mitigation strategies for farm safety management.
3. Raise awareness on climate change impacts on the workforce in the agricultural sector.

PROCEDURES:

1. Introduction:
 - a. Discuss the importance of farm operations in agricultural production and various tasks involved in farming.
 - b. Identify hazards and risks in farm operations and explain why and how certain activities and conditions pose potential dangers to farmers and other workers in the agricultural sector.
 - c. Explain how climate change significantly disrupts agriculture and food production, disproportionately affecting vulnerable groups, such as farmers, peasants, and women.
2. Brainstorming:
 - a. Divide the students into small groups.
 - b. Provide each group with a list of common farm operations and activities, such as:
 - i. Operation of machinery and equipment (tractors, harvesters, etc.);
 - ii. Handling and application of pesticides and fertilizers;
 - iii. Working with livestock (feeding, handling, etc.); and
 - iv. Manual labor tasks (planting, harvesting, etc.).
 - c. Encourage each group to identify and discuss potential hazards and risks associated with each activity. Prompt them to consider different factors, such as physical hazards, chemical exposure, ergonomic strain, and environmental conditions.

- d. Request students to consider climate change as a risk factor and analyze its implications on the workforce in the agricultural sector.
3. Discussion:
 - a. Reconvene as a class and facilitate a discussion based on the groups' findings.
 - b. Encourage students to share their insights and observations about the identified hazards and risks.
 - c. Discuss the potential consequences of these hazards, such as accidents, injuries, long-term health effects, and loss of livelihood.
 - d. Highlight the importance of risk assessment and mitigation strategies in farm safety management, including in light of the evolving challenges presented by climate change.
4. Case studies:
 - a. Present case studies or real-life scenarios depicting farm accidents or incidents related to hazards and risks previously discussed.
 - b. Encourage students to analyze each case study, identify contributing factors, and propose preventive measures to mitigate similar risks in the future.
5. Reflection and conclusion:
 - a. Ask students to reflect on what they learned about hazards and risks in farm operations.
 - b. Emphasize the importance of awareness, education, and proactive measures in ensuring the safety and well-being of farmers and workers.
 - c. Reflect on the significance of innovation through climate-smart practices that can enable the agriculture sector to identify and address current and future challenges brought about by climate change.
 - d. Summarize the key points discussed during the exercise and ask students how they can apply their understanding of farm safety in real-life situations.

RELEVANCE TO CLIMATE CHANGE AND HUMAN RIGHTS:

This exercise intersects climate change and agriculture by identifying and seeking to address hazards and risks in farm management and operations. It highlights how extreme weather events like floods and droughts, altered pest and disease patterns, and changes in water availability due to shifting precipitation patterns disrupt food production (Gobin et al., 2013). Additionally, rising temperatures increase the risk of heat stress for crops and workers.

Farmers' and peasants' right to livelihood is disproportionately impacted, as they depend on favorable natural conditions for their agricultural activities. The poorest communities relying on subsistence farming in remote areas have the least capacity to adapt to changing climatic conditions, as such their rights to food and livelihood can be negatively affected. Women in low-income and lower-middle-income countries are also particularly vulnerable to climate change as agriculture remains their main source of employment (International Labor Organization, 2016). Furthermore, variability in crop yields can cause food shortages and price volatility, disproportionately affecting poor and rural populations (Stuecker et al., 2018).

This exercise emphasizes the need for adaptation and resilience-building measures, including climate-smart agricultural practices to mitigate hazards and risks while helping ensure sustainable food production. By integrating these climate change

considerations, the exercise underscores the need for proactive measures to address climate-related hazards and promote farm safety and resilience. **Read more about climate change impacts on human rights in chapter 2 of CCHRE.**

References

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MAPEH**LEVEL:** Grade 4**TERM:** 4th Quarter**CONTENT:**

Child's basic health rights

LEARNING COMPETENCY:

Discuss child's basic health rights for active living.

EXERCISE:

Think - Pair - Share: Heatwaves affecting your health

OBJECTIVE:

Raise awareness about the occurrence of heatwaves and how it can negatively impact children's right to health in the Philippines.

PROCEDURES:

1. Introduction:
 - a. Define what heatwaves are and what causes them. Inform students about the potential symptoms and effects on health, especially on children (United Nations Children's Fund ([UNICEF], n.d.).
2. Think:
 - a. Each student will take 10 minutes to individually think about the following questions:
 - i. How can you cope with heatwaves (does it affect your appetite, concentration, sleep, etc.)?
 - ii. Do you tend to feel unwell when the weather is too hot (thirsty or dehydrated, headache, exhausted or tired, diarrhea, vomiting, etc.)?
 - iii. What did you do to feel better (drank water and/or medicine, rest, went to the clinic or hospital, consulted a doctor, etc.)?
 - iv. If you went to the clinic/hospital and consulted a doctor, do you think you were treated quickly and well?
 - v. If you have never experienced symptoms related to heatwaves, do you remember if any of your family members (siblings, cousins, etc.) has had health issues related to heatwaves? If yes, do you know if they went to any health facilities to get treatment? How was their experience? Was it quick?
3. Pair:
 - a. Ask students to work with a partner and let them take turns in sharing if and how they experienced heatwaves.
4. Share:
 - a. Ask each pair to share their reflections with the class.

- b. Expound on why and how children are more vulnerable to heatwaves and heat-related illnesses.
- c. Highlight the potential effects of heatwaves on children’s mental health.
- d. Lead a brainstorming session to identify ways that children can reduce their vulnerability to heatwaves. During the summer season or whenever the weather is hot and sunny, the United Nations Children’s Fund ([UNICEF], n.d.) suggested some ways to help children cope:
 - i. Play indoors;
 - ii. Reduce physical activity levels;
 - iii. Hydrate and drink water more often;
 - iv. Rest and cool off in the shade or in AC rooms when starting to feel hot; and
 - v. Inform parents, guardians, or teachers as soon as symptoms appear and/or are felt (dizziness, headache, tiredness, nauseous, etc.).

RELEVANCE TO CLIMATE CHANGE AND HUMAN RIGHTS:

Discussing children’s basic health rights directly intersects with climate change, particularly through the significant impact of heatwaves. This increasingly common consequence of climate change poses serious threats to children’s health and well-being.

According to Save the Children (2024), Filipino children are more and more suffering from a range of heat-related illnesses due to the rising frequency and intensity of heatwaves in the country. Heat cramps and heat exhaustion are among the common symptoms, manifesting as fatigue, dizziness, headache, vomiting, asthma, allergies, and light-headedness. Heatstroke is a severe, potentially life-threatening condition characterized by high body temperature, hot or dry skin, altered mental state, seizures, delirium, nausea, headache, rapid breathing, and muscle cramps. Heatwaves can also exacerbate existing cardiovascular and respiratory problems in children, further endangering their health (Montemayor, 2024; and Save the Children, 2024).

This exercise highlights the importance for the government to carefully consider and address the vulnerability of children when dealing with climate change impacts, such as heatwaves—the best interests of children should be prioritized in climate action. **Read more about climate change impacts on the right to health and children’s rights in [chapter 2](#) of CCHRE.**

References

- Montemayor, M. T. (2024). DOH warns Filipinos against heat stroke. *Philippine News Agency*. <https://www.pna.gov.ph/articles/1221899>
- Save the Children. (2024). Heatwaves pose health risks, disrupt students’ learning says Save the Children Philippines. *ReliefWeb*. <https://reliefweb.int/report/philippines/heatwaves-pose-health-risks-disrupt-students-learning-says-save-children-philippines>
- United Nations Children’s Fund (UNICEF). (n.d.). Heat waves and how they impact children. <https://www.unicef.org/stories/heat-waves-impact-children>

MAPEH**LEVEL:** Grade 7**TERM:** 3rd Quarter**CONTENT:**

Importance of healthy eating during adolescence

LEARNING COMPETENCY:

Explain the importance of healthy eating during adolescence.

EXERCISE:

Exploring nutrition, climate change, and human rights

OBJECTIVES:

1. Enable students to recognize the connection between eating healthy and crucial growth and development during adolescence.
2. Help students appreciate proper nutrition and develop healthy eating habits while understanding how their attitudes and behavior towards food are relevant to climate change and human rights.

PROCEDURES:

1. Introduction:
 - a. Explain why adolescence is a crucial life stage for growth and development as well as establishing lifelong habits, including healthy eating and proper nutrition.
 - b. Introduce the concept of climate change and its impact on food systems and nutrition. Discuss how climate change impacts the human rights to food and health by disrupting food production and supply (particularly in terms of availability and accessibility especially for vulnerable populations).
 - c. Ask students to share their ideas on how climate change impacts on human rights to food and health may have an influence to their current attitudes, behaviors, and habits when it comes to their food choices and preferences.
2. Film or documentary screening:
 - a. Schedule a school day when the class can watch a film or documentary focusing on climate change impacts on food and/or health. Below are some suggestions:

Food for the Future**Life in Syntropy****Will There be a Global Food Shortage?**

3. Discussion:

- a. After watching the film or documentary, engage students in a discussion focusing on how climate change is impacting the availability, accessibility, and quality of food.
- b. Ask students to reflect on the ideas, insights, and realizations they came up with from watching the film or documentary and provide concrete examples of how climate change impacts the rights to food and health—particularly on them being adolescents and their food choices and eating habits.
- c. Put an emphasis on issues relevant to climate change and human rights, such as food insecurity, malnutrition, and the increasing prevalence of diseases due to poor diet and eating habits.
- d. Encourage students to identify ways to promote proper nutrition and challenge them to commit to healthy eating habits moving forward.
- e. Ask students to identify potential solutions—individual actions and policy changes—to address the challenges posed by climate change on food security and nutrition for the benefit of adolescents.

RELEVANCE TO CLIMATE CHANGE AND HUMAN RIGHTS:

This exercise allows students to explore how the impacts of climate change on food systems in the Philippines pose significant challenges to human rights to food and health. Climate change-induced alterations in agricultural productivity and crop yields, compounded by sea-based hazards and rising temperatures, threaten food security and nutrition, particularly in rural areas heavily reliant on agriculture and fishing. These challenges contribute to food insecurity, compromising individuals' ability to access adequate and nutritious diets. Environmental degradation further exacerbates these issues, diminishing agricultural productivity and food quality (Bermejo, 2017).

According to the Philippine Department of Science and Technology (n.d.), vulnerable populations, including adolescents, face heightened risks of malnutrition and adverse health outcomes. The human right to food underscores the obligation of states to ensure food security for all, emphasizing sustainability, nutritional quality, and accessibility. Similarly, the right to health—closely intertwined with the right to food—emphasizes the importance of adequate nutrition for maintaining good health. Yet, climate change-induced disruptions disproportionately affect vulnerable populations like adolescents. **Read more about climate change impacts on the rights to food and health in chapter 2 of CCHRE.**

References

- Bermejo, K. (2017). Climate change will impact Philippines' ability to feed its people. *Eco-Business*. <https://www.eco-business.com/news/climate-change-will-impact-philippines-ability-to-feed-its-people/>
- Government of the Philippines, Department of Science and Technology. (n.d.). *Climate change, calamities affect food security of poor Pinoy households*. Food and Nutrition Research Institute. <https://fnri.dost.gov.ph/index.php/publications/writers-pool-corner/57-food-and-nutrition/854-climate-change-calamities-affect-food-security-of-poor-pinoy-households>

SCIENCE**LEVEL:** Grade 4**TERM:** 1st Quarter**CONTENT:**

Materials and their uses

LEARNING COMPETENCIES:

Describe the chemical properties of materials, such as they can be burned, react with other materials, or are degradable or biodegradable; describe changes in properties of materials when exposed to certain changes in temperature, such as changes when wood or coal are burned.

EXERCISE:

Nature walk and material scavenger hunt

OBJECTIVES:

1. Enhance students' understanding of the chemical properties of materials and their impacts on climate and the environment.
2. Help students recognize the importance and relevance of protecting the environment to improving and promoting the welfare and well-being of people.

PROCEDURES:

1. Preparatory session:
 - a. Begin with a classroom discussion on the importance of understanding the chemical properties of materials and their environmental implications.
 - b. Explain the objectives of the nature walk and material scavenger hunt, emphasizing the connection between material properties and the environment.
 - c. Elaborate on the safety guidelines for outdoor exploration and the collection of materials, including the appropriate clothing to wear and how to handle materials with care.
2. Nature walk:
 - a. Lead students on a guided nature walk in a nearby natural environment, such as a park, forest, or garden.
 - b. Encourage students to observe and collect various materials they encounter during the walk, such as leaves, twigs, rocks, soil samples, discarded items (like plastic bottles or wrappers), etc.
 - c. Provide guidance on ethical collection practices, reminding students to respect the environment and only take materials that are safe and legally permissible.
3. Material scavenger hunt:
 - a. After the nature walk, gather students in a designated area to examine and sort the collected materials.
 - b. Provide magnifying glasses, gloves, and other tools that can enable them to closely examine and observe the materials.

- c. Guide students in categorizing the materials based on their properties, such as organic (e.g., plant matter), inorganic (e.g., rocks), and synthetic (e.g., plastics).
 - d. Encourage students to discuss the properties of each material, including whether they can be burned, react with other materials, or are degradable or biodegradable.
4. Discussion:
- a. Using the materials collected and gathered as examples, discuss the chemical properties and changes, if any, along with their implications for the people and the environment. Encourage students to share their ideas and observations with regard to pollution.
 - b. Establish the connection of the chemical properties and changes in materials to climate change and environmental degradation. Put an emphasis on why and how even simple and small actions, such as reducing waste and using biodegradable materials, can contribute to addressing these global challenges.
 - c. Discuss the relevance of climate change impacts on the right to a healthy environment, highlighting the role and responsibility of governments in defending and protecting this human right.
5. Brainstorming:
- a. Encourage students to think and share insights on practical actions they can take to promote environmental sustainability in the community.

RELEVANCE TO CLIMATE CHANGE AND HUMAN RIGHTS:

As students explore the chemical properties of materials and their environmental implications, they gain insight on how these reactions can contribute to climate change. With this exercise, their first-hand experience can improve their understanding of (1) how greenhouse gas (GHGs) emissions are released by burning materials like coal, plastic, and wood; (2) the importance of proper waste management; and (3) excessive demand for raw materials, that can drive deforestation and amplify climate change.

At the same time, this exercise gives teachers the opportunity to help students realize that a stable climate is crucial for the right to a safe, clean, healthy, and sustainable environment. Efficient waste management practices and the sustainable exploitation of natural resources can help mitigate climate change impacts while ensuring that people can live and benefit from a healthy environment. **Read more about climate change impacts on the right to a safe, clean, healthy, and sustainable environment in [chapter 2](#) and about relevant legislations on waste management in [chapter 3](#) of CCHRE.**

SCIENCE**LEVEL:** Grade 4**TERM:** 1st Quarter**CONTENT:**

Gathering scientific information

LEARNING COMPETENCIES:

Identify issues and concerns in the local community and how they could be addressed by science, such as the treatment of waste; and apply science process skills and attitudes in conducting a guided survey about environmental issues and concerns, including grouping and classifying, communicating, and open mindedness.

EXERCISE:

Community survey on climate change and human rights

OBJECTIVES:

1. Enhance students' awareness and understanding of environmental and climate issues and their impacts on local communities through a service learning activity.
2. Provide practical knowledge on applying scientific process skills (e.g., effective communication, open-mindedness, teamwork, classification, etc.).
3. Promote students' proactive involvement in understanding the complexities surrounding environmental and climate problems as well as encourage their participation in collaborative efforts towards finding sustainable solutions within the community.

PROCEDURES:

1. Introduction:
 - a. Begin with a discussion on the importance of environmental and climate change awareness and the role of science in addressing community issues.
 - b. Inform students on how marginalized populations can be disproportionately affected by climate change.
 - c. Introduce the concept of a community survey and its purpose.
2. Group formation:
 - a. Divide the class into small groups.
3. Brainstorming:
 - a. In their respective groups, students brainstorm potential environmental and climate change concerns in one identified local community. Encourage them to think about issues such as waste management, pollution, habitat destruction, floodings, etc.
 - b. Explain how these issues can affect the health, well-being, and dignity of the community members, among other things.
4. Survey design:
 - a. Guide each group to select one issue from their brainstorming session.

- b. Instruct the students to design a simple questionnaire intended for community members. Explain its purpose as a survey to gather information about the selected issue.
 - c. Emphasize the importance of respectful and ethical data collection practices, including the formulation of clear, concise, and relevant questions for the survey.
5. Conducting the survey:
 - a. Each group will conduct the survey within the identified local community (with prior permission and supervision).
 - b. Students should approach individuals politely, explain the purpose of the survey, and record responses accurately.
6. Data analysis:
 - a. After completing the surveys, guide students in analyzing the collected data, focusing on patterns, trends, and common concerns related to the environmental issue investigated.
7. Group presentation:
 - a. Each group presents their findings to the class, including a summary of the environmental issue and how this affects the life of community members. Proposed solutions or actions will also be presented.
 - b. Encourage other classmates/groups to ask questions and engage in a constructive discussion.
8. Reflection and action plan:
 - a. Facilitate a reflective discussion on the survey experience. Encourage students to consider how science can contribute to addressing the identified environmental/climate issues.
 - b. Guide students in developing a simple action plan outlining steps they can take individually or as a class to address the environmental/climate concerns they surveyed.

RELEVANCE TO CLIMATE CHANGE AND HUMAN RIGHTS:

Through this service learning activity, students explore environmental and climate change issues that can disproportionately affect local communities. Flooding and rising sea levels particularly affect low-land and coastal communities, causing damages to properties and displacement, among others. Communities highly dependent on natural resources for their survival are disproportionately affected by climate-related crop yield reductions and ocean warming causing decline in fish populations. People living in precarious conditions are particularly vulnerable to heatwaves, as they often lack access to cooling systems at home.

This exercise enables students to identify and propose science-based solutions to environmental/climate issues at the local or community level, fostering awareness and collaborative efforts toward sustainability (Turrentine, 2022). **From CCHRE, read more about climate change impacts on human rights in [chapter 2](#) and service learning activities in [chapter 4](#).**

Reference

Turrentine, J. (2022). *What are the solutions to climate change?*. Natural Resources Defense Center. <https://www.nrdc.org/stories/what-are-solutions-climate-change>

SCIENCE**LEVEL:** Grade 4**TERM:** 4th Quarter**CONTENT:**

Characteristics of the weather

LEARNING COMPETENCIES:

Identify some of the basic characteristics used to describe the weather, such as air temperature, air pressure, wind speed, wind direction, humidity, rain, and cloud cover; use weather instruments to measure and record some of the characteristics of weather during a school day.

EXERCISE:

Weather watchers: understanding climate change and human rights

OBJECTIVES:

1. Deepen students' understanding of weather characteristics.
2. Demonstrate how changes in weather patterns affect human rights.
3. Guide students as they reflect on the importance for states to adequately address climate change for a sustainable future.

PROCEDURES:

1. Introduction:
 - a. Define and identify the differences between weather and climate.
 - b. Discuss the significance of the weather and climate to the environment and people, along with the relevance to climate change and its impacts on populations.
2. Weather and climate characteristics:
 - a. Review factors that characterize the different types of weather, such as air temperature, air pressure, wind speed, wind direction, humidity, rain, and cloud cover.
 - b. Discuss the importance of measuring these factors and how they are used for weather forecasting and climate analysis.
 - c. Explain how climate change affects and/or causes changes to these factors along with the shifts in weather and climate in different regions of the world.
3. Weather instruments and data analysis:
 - a. Identify and use weather instruments to measure and record some factors that characterize the weather during a school day.
 - b. Analyze the data gathered and discuss the trends and patterns observed.
 - c. Discuss how climate change may be affecting these trends and patterns over time.
4. Climate change and human rights discussion:
 - a. Identify the impacts of changes in weather and climate—climate change—on

- human rights, such as the rights to food, water, health, and housing.
 - b. Discuss the disproportionate impacts of climate change on vulnerable groups, such as women, children, Indigenous Peoples, and people living in precarious conditions.
 - c. Emphasize the crucial role of states in protecting human rights in the context of disaster risk management and climate change adaptation/mitigation.
5. Case study:
- a. Divide the class into groups.
 - b. Instruct each group to choose a weather phenomenon that can be attributed or exacerbated by climate change (i.e. typhoons, droughts, floods, rising sea levels).
 - c. The group will conduct a simple research on the chosen weather phenomenon, including on its basic characteristics, and analyze how the changing in weather phenomenon is impacting the rights of the people (i.e. food insecurity, water scarcity, destruction of houses and crops, and health issues).
 - d. Ask each group to prepare a presentation on their research and analysis.
6. Conclusion:
- a. Discuss the importance of understanding the relationship between weather and climate, along with climate change and human rights.
 - b. Emphasize the role of individuals and communities in calling on the government to adopt robust climate action that safeguards human rights.
 - c. Underscore the need for continued learning and engagement on these issues.

RELEVANCE TO CLIMATE CHANGE AND HUMAN RIGHTS:

This exercise highlights key climate change issues by linking different weather conditions and phenomena. It enables teachers to expound on rising temperatures, shifting wind patterns, altered rainfall, and increased humidity as well as illustrate how changes to these factors that characterize weather and climate can have negative impacts on food security, access to clean water, health, and housing, among others.

As an integrated teaching approach, the exercise encourages students to learn about the critical relationship between weather, climate change, and human rights. At the same time, it puts an emphasis on the disproportionate effects of climate change on vulnerable groups, including women, children, Indigenous Peoples, and people living in precarious conditions. Furthermore, students can gain awareness of the government's role in leading and implementing disaster risk management and climate change adaptation and mitigation efforts that can help build resilient communities and ensure equitable access to resources, therefore promoting human rights. **Read more about climate change impacts on human rights in [chapter 2](#).**

SCIENCE**LEVEL:** Grade 7**TERM:** 1st Quarter**CONTENT:**

Planning, following, and recording scientific investigations

LEARNING COMPETENCIES:

Follow appropriate steps of a scientific investigation, which includes:

- a. Aim or problem,
- b. Materials and equipment,
- c. Methods or procedures,
- d. Results, including data, and
- e. Conclusion.

EXERCISE:

Eco-innovation challenge

OBJECTIVES:

1. As a service learning activity, immerse learners in interactive guided explorations aimed at addressing community challenges at the nexus of climate change and human rights, utilizing accessible local resources.
2. Encourage learners to delve into real-world issues and foster a culture of inquiry and critical thinking.
3. Empower students to participate in investigations and actively engage on climate community concerns while helping raise awareness on human rights.

PROCEDURES:

1. Introduction:
 - a. Kick off with an interactive discussion on the importance of addressing community-based challenges linked to climate change.
 - b. Illustrate the direct impact of climate change on people's lives.
 - c. Emphasize the role of local action in driving meaningful change.
2. Problem identification:
 - a. Form groups and task learners with identifying specific climate issues within a chosen local community.
3. Guided investigations:
 - a. Provide structured guidance on conducting investigations using locally available materials.
4. Climate change and human rights discussion:
 - a. Engage learners in a reflective dialogue exploring climate change impacts on the rights of the local community.
 - b. Encourage critical thinking by probing on how these issues disproportionately

impact vulnerable groups, such as women, children, Indigenous Peoples, and people living in precarious conditions.

5. Eco-innovative solutions:

- a. Challenge each group to ideate and develop eco-innovative solutions to address the identified community problems.
- b. Foster creativity and resourcefulness by emphasizing the use of locally available materials and sustainable practices in their proposed solutions.

6. Group presentations:

- a. Guide groups in preparing dynamic presentations showcasing their investigations, the identified problems, and their eco-innovative solutions.
- b. Encourage the use of visual aids, models, or demonstrations to effectively communicate and illustrate their ideas as part of the presentation by each group.
- c. Facilitate a constructive discussion following each presentation, encouraging feedback and highlighting the potential impact of the proposed solutions on the community.
- d. Prompt learners to reflect on their learning journey and insights gained regarding the interconnectedness of climate change, human rights, and community issues.

7. Action plan:

- a. Guide them in developing actionable plans for implementing their eco-innovative solutions that can be further shared with the identified community.

RELEVANCE TO CLIMATE CHANGE AND HUMAN RIGHTS:

This service learning exercise engages students in proactively identifying and addressing community challenges at the intersection of climate change and human rights. Through guided investigations and structured research, students can explore how climate change impacts human rights, in particular the disproportionate effects on vulnerable groups.

By developing eco-innovative solutions tailored to the identified community and presenting their findings to the class, students can actively promote environmental stewardship, climate resilience, and help raise awareness on climate change impacts on human rights. **From CCHRE, read more about climate change impacts on human rights in [chapter 2](#) and service learning activities in [chapter 4](#).**

SOCIAL STUDIES**LEVEL:** Grade 4**TERM:** 4th Quarter**CONTENT:**

Karapatan at Tungkulin ng Mamamayang Pilipino (Rights and duties of Filipino citizens)

1. Kahulugan (Meaning)
2. Uri ng Karapatan (Types of rights)
 - a. Karapatang Sibil (Civil rights)
 - b. Karapatang Politikang (Political rights)
 - c. Karapatang Panlipunan at Pangkabuhayan (Social and economic rights)

LEARNING COMPETENCIES:

Natatalakay ang mga karapatan at tungkulin ng isang mamamayan (Discuss the rights and duties of citizens).

EXERCISE:

Exploring the tapestry of rights and responsibilities in the context of climate change: Unveiling the citizen's journey in the Philippines

OBJECTIVES:

1. Educate learners on various types of human rights (namely civil, political, economic, social, and cultural rights) and their significance in society. By providing examples and facilitating discussions, learners should gain understanding of the importance of human rights.
2. Enhance students' awareness of climate change impacts on human rights.
3. Help and empower learners to recognize that they—as citizens—can help address climate change and protect human rights by promoting positive change and being actively involved in their communities.

PROCEDURES:

1. Introduction:
 - a. Citing the United Nations (n.d.), provide an overview of the different categories of human rights, as follows:
 - i. Civil and political rights
 - ii. Economic, social, and cultural rights
 - b. Provide examples for each category of human rights based on relevant human rights legislations in the Philippines and international treaties (such as the International Covenant on Civil and Political Rights [ICCPR] and the International Covenant on Economic, Social, and Cultural Rights [ICESCR]).
 - c. Let students provide additional examples based on how they understood the categories of human rights, following through with an emphasis on their importance in society.
2. Brainstorming and debating on climate change and human rights:
 - a. Begin by asking the class what they know about climate change. Let them write

their responses on the whiteboard or a chart paper.

- b. Divide the class into groups and facilitate brainstorming on climate change impacts on human rights. Remind each group to take note of their answers. To help the students come up with ideas, provide examples such as the following:

- i. Civil and political rights:

- The right to life can be affected by more frequent natural hazards, extreme weather events and/or the spread of diseases (e.g., epidemics).

- ii. Economic, social and cultural rights:

- The rights to food and water can be affected by the decline in agricultural productivity and/or contamination of water sources.
- The right to housing can be affected when people are forced to leave their homes due to earthquakes, flooding, tsunamis, etc..

*The right to self-determination (falls within both categories of rights) can be affected if people and communities are disproportionately affected by the lack of adequate resources to adapt to climate change.

Note: If possible, kindly ask students to give examples based on real-world scenarios.

- c. Have each group appoint a representative to share and expound on their responses with the rest of the class. Encourage further discussion and debate to foster analysis and critical thinking while maintaining decorum, diplomacy and respect for everyone's opinion.

3. Reflection:

- a. Based on the answers given and discussed by the groups during the brainstorming session, reflect on the importance of protecting human rights in the context of climate change.
- b. Encourage students to ponder on how they can contribute to addressing climate change and protecting human rights in their daily lives. Some ideas might include the following:
 - i. Reduce carbon footprint by recycling/reusing to minimize waste, using energy-efficient appliances, and walking or biking instead of driving.
 - ii. Advocate for policies that address climate change and protect human rights.
 - iii. Raise awareness among peers and community members about simple acts that actually help address climate change and protect human rights.
- c. Have students commit to one action they will take to proactively address climate change and protect human rights.

RELEVANCE TO CLIMATE CHANGE AND HUMAN RIGHTS:

This exercise explores the rights and duties of students—as Filipino citizens—amidst climate challenges. Students learn to associate climate change impacts (e.g., heat waves, rising sea levels, droughts, floods, etc.) with fundamental human rights. Teachers can help students recognize and better understand how climate change is negatively impacting civil, political, economic, social, and cultural rights in the Philippines and the rest of the world.

As teachers encourage discussion and debate in this exercise, students can reflect

on why and how individual and collective efforts are crucial to addressing climate change and protecting human rights. Students also gain a better understanding of the obligations of states to respect, protect, and fulfill human rights as enshrined in national legislations and international treaties. Therefore, while addressing climate change, they must protect these rights. **From CCHRE, read more about climate change impacts on human rights in chapter 2 as well as the legal and policy framework in the Philippines in chapter 3.**

Reference

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SOCIAL STUDIES**LEVEL:** Grade 7**TERM:** 4th Quarter**CONTENT:**

Kalagayang ng Karapatang Pantao sa Pilipinas at Timog Silangang Asya (Human rights situation in the Philippines and Southeast Asia)

1. Pagtatatag ng ASEAN Intergovernmental Commission on Human Rights (AICHR) (Establishment of the ASEAN Intergovernmental Commission on Human Rights)
2. ASEAN Human Rights Declaration (AHRD)
3. Mga Isyung hinaharap ng ASEAN kaugnay sa karapatang pantao (Current issues that ASEAN faces relating to human rights)

LEARNING COMPETENCY:

Nasusuri ang papel ng ASEAN sa usapin ng karapatang (Analyzing the role of ASEAN in addressing human rights issues).

EXERCISE:

Understanding the role of ASEAN in addressing climate change and human rights

OBJECTIVES:

1. Explain to students the purpose and significance of the ASEAN Intergovernmental Commission on Human Rights (AICHR) and the ASEAN Human Rights Declaration (AHRD).
2. Inform students about the climate change impacts on human rights in the Southeast Asian region, where the Philippines is geographically located.
3. Help students develop a deeper understanding of how the Association of Southeast Asian Nations (ASEAN) can promote human rights while addressing climate change.

PROCEDURES:

1. Instructions:
 - a. Provide students with content and/or materials about the human rights situation in the Philippines, as well as the Southeast Asian region. In particular, focus on the establishment of the AICHR, the AHRD, and future challenges ASEAN can face with regard to climate change and human rights.
2. Discussion:
 - a. Ask students the following questions:
 - i. What is the purpose of the AICHR?
 - ii. Describe some human rights identified and/or specified in the AHRD.
 - iii. Why is the AHRD significant to Southeast Asia, and the Philippines in particular?
3. Brainstorming:
 - a. Review climate change impacts, and discuss its implications for Southeast Asia.
 - b. Ask students to identify at least two human rights included in the AHRD and explain how these are subject to climate change impacts.

- c. Let students reflect on the role of ASEAN and share their ideas on how the regional organization can ensure that human rights are protected while addressing climate change.

RELEVANCE TO CLIMATE CHANGE AND HUMAN RIGHTS:

This exercise provides the opportunity to discuss a broad spectrum of climate change impacts in Southeast Asia. The region faces rising temperatures and extreme weather events, such as heat waves, floods, and typhoons that alter rainfall patterns and water availability, among others (Prakash, 2018).

Climate change impacts on human rights in Southeast Asia are diverse because of reduced agricultural productivity, increased food insecurity, displacement of populations, and threatened water security and public health. According to the Asian Development Bank ([ADB], 2024), climate change-related hazards are reducing the ability of Southeast Asian countries to meet their SDGs, particularly on poverty reduction and food security.

The AHRD can guide ASEAN member states on how to uphold human rights while addressing climate change. For example, guaranteeing the participation of the population and access to justice in case of a breach of a human right are crucial in adequately addressing the climate crisis (United Nations Office of the High Commissioner for Human Rights [OHCHR], n.d.; Pearson, 2024; and Amnesty International, n.d.). A comprehensive understanding of the AHRD and effective strategies for addressing current and future human rights challenges is crucial for promoting human rights protection, accountability, dialogue, and cooperation as well as enhancing the regional human rights discourse within the Southeast Asian region (Bon Tai Soon and Vathanaganthan, 2023). Leveraging regional frameworks like the AHRD also becomes essential to strengthen human rights mechanisms and empower civil society, including in the context of the climate crisis (Bon Tai Soon and Vathanaganthan, 2023; United Nations Development Programme [UNDP], 2023; and ADB, 2024). **Read more about climate change impacts on human rights in [chapter 2](#).**

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ANNEX C

CCHRE Partnership and Networking Opportunities



The United Nations Office of the
High Commissioner for Human
Rights in Geneva, Switzerland.

Teachers and school administrators can partner and network with the Commission on Human Rights (CHR) along with climate, human rights, and environmental organizations in their efforts to engage students in activities and advocacy initiatives. These organizations can help schools address the climate crisis with a human rights perspective.



The Commission on Human Rights

The CHR is an independent constitutional office created under the 1987 Philippine Constitution. One of the mandates of the Commission is to promote human rights through the development of educational materials and training programs (CHR, 2018).

Teachers and school administrators can connect with the CHR Human Rights Education and Promotion Office (CHR HREPO) to explore possibilities of sharing materials and videos related to climate change and human rights.

Teachers and school administrators can also participate in CHR HREPO's free specialized course on "Climate Justice and Human Rights." CHR HREPO provides free continuous professional development (CPD) units after completing the course. Such activity can help them deepen their knowledge of climate change using a human rights-based approach.

Climate, Human Rights, and Environmental Organizations

Table 2 provides a non-exhaustive list of organizations, movements, and coalitions working on climate, human rights, and environmental issues that may offer opportunities for collaboration and support for teachers and school administrators in their activities and advocacy.

Table 2: CCHRE Partnership and Networking Opportunities

NAME OF ORGANIZATION	ADVOCACIES	WEBSITE
Aksyon Klima	Climate change adaptation, mitigation, loss and damage	aksyonklima.org
Alyansa Tigil Mina (ATM)	Protection of the environment and human rights against large-scale mining	alyansatigilmina.net

Ateneo Human Rights Center (AHRC)	Promotion and protection of human rights	ahrc.org.ph
Caritas Philippines	Humanitarian, development and advocacy work, including in the field of climate change and the protection of the environment	caritas.org/where-caritas-work/asia/philippines
Center for Energy, Ecology and Development (CEED)	Renewable energy transition	ceedphilippines.com
Climate Action and Human Rights Institute (CAHRI)	Protection of human rights under a stable climate system and promotion of a clean, healthy and sustainable environment	cahri.org
Conservation International Philippines	Protection of the environment	conservation.org/philippines
Dominican Family for Justice and Peace and Care for Creation (DFJPCC) - Philippines	Protection of the environment	facebook.com/OPjpccPh
Environmental Legal Assistance Center (ELAC)	Promotion of the right to a clean, healthy and sustainable environment	elacphilippines.org
Ecowaste Coalition	Promotion of sustainable solutions to waste and chemical issues	ecowastecoalition.org
Fellowship for the Care of Creation Association, Inc. (FCCAI)	Protection of the environment and advancement of ecological lifestyle	facebook.com/p/Fellowship-for-the-Care-of-Creation-Association-Inc-FCCAI-100063526702310/
Forest Foundation Philippines	Allocation of grants and technical assistance for projects in the field of forest conservation/restoration	forestfoundation.ph

Foundation for Agrarian Reform Cooperatives in Mindanao (FARMCOOP), Inc.	Organic farming	facebook.com/farmcoop95/
Foundation for the Philippine Environment (FPE)	Allocation of grants for projects in the field of biodiversity conservation, sustainable development and climate action	fpe.ph
Franciscan Movement for Justice Peace and Integrity of Creation (FSMJPIC)	Advocacy for justice and peace and for the protection of the environment	facebook.com/franciscansolidaritymovement
Greenpeace Philippines	Advocacy on issues related to climate, energy, food, oceans, plastic, and pollution	greenpeace.org/philippines
Interfacing Development Interventions for Sustainability (IDIS)	Protection and management of life-sustaining watersheds in South-Central Mindanao	idisphil.org
Initiatives for Dialogue and Empowerment through Alternative Legal Services (IDEALS), Inc.	Advocacy for marginalized, disempowered and vulnerable groups, and victims of human rights violations	ideals.org.ph
Laudato Si' Movement Pilipinas	Advocacy on themes related to ecological conservation, and renewable energy	facebook.com/laudatosimovement.pilipinas
Legal Rights and Natural Resources Center (LRC)	Recognition and protection of the rights of Indigenous Peoples and upland rural poor communities to land and environment	lrcksk.org
Living Laudato Si Philippines	Promotion of ecological lifestyle and sustainable development	livinglaudatosi.org.ph

Oxfam Pilipinas	Support of women and other vulnerable groups to enhance their resilience to crises, shocks and stresses, including in the context of climate change	philippines.oxfam.org
National Council of Churches in the Philippines (NCCP)	Promotion of human rights, including in the context of climate disasters	nccphilippines.org
National Rural Women Coalition (PKKK)	Advocacy for gender rights and for the protection of the environment among the youth in the different rural women communities	facebook.com/IndaySaRural
Philippine Alliance of Human Rights Advocates (PAHRA)	Promotion of human rights, environmental protection and sustainable development	philippinehumanrights.org
Philippine Misereor Partnership, Inc. (PMPI)	Advocacy for anti-mining campaign, sustainable agriculture and fisheries, climate change and disaster risk reduction management, rights of nature, and holistic development	pmpi.org.ph
Philippine Movement for Climate Justice (PMCJ)	Advancement of climate justice	climatejustice.ph
Philippine Human Rights Information Center (PhilRights)	Research, advocacy and training on human rights and development issues	philrights.org
Save Sierra Madre Network Alliance (SSMNA), Inc.	Protection of the environment in the Sierra Madre region	facebook.com/savesierramadre
Tambuyog Development Center	Promotion of sustainable fisheries and coastal communities rights	tambuyog.org

Tanggol Kalikasan Inc.	Empowerment of communities and institutions to manage their ecosystem	tanggolkalikasan.org
World Wide Fund (WWF)-Philippines	Advancement of a climate-resilient and zero-carbon world, powered by renewable energy	wwf.org.ph
Youth for Climate Hope (Y4CH)	Advocacy for a coal free Negros	facebook.com/YouthForClimateHope
FSMJPIC- Young Franciscan Advocates	Advocacy for the protection of the environment with the youth in the different communities	facebook.com/YFAdvocates
Youth Strike 4 Climate Philippines	Empowerment of young people to take action for the climate	facebook.com/youthstrike4climatePH
Save Zambales Ecological Network Inc.	Protection of the environment in Zambales against sand mining and river dredging	savezambaleskalikasan.org

Note: This is a non-exhaustive list of climate, environment, and human rights organizations in the Philippines.

Sources: Dominicans for Justice and Peace; and organizations' websites and profiles (2024).

Reference

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Dominicans for Justice and Peace (Order of Preachers) (UNOP)

is a faith-based non-profit and non-governmental organization (NGO) representing the Order of Preachers (Dominicans) at the United Nations (UN). Dominicans for Justice and Peace is dedicated to the promotion and protection of the integrity of Creation and of human rights for all, as an integral element of the Order's mission to seek truth and to bring Good News.

The Dominican Family for Justice and Peace and Care for Creation -

Philippines (DFJPCC) is a collaborative endeavor of the different branches of the Dominican Family (friars, apostolic sisters and the Dominican laity). While being anchored in the priorities of the Dominican Order in the Philippines, its aim is to preach the Gospel especially to the peripheries, promoting justice and peace and instilling transformative consciousness in the Care of Creation in the local Church setting and focusing on the needs and rights of its members in particular.

