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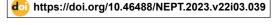
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Katowice Climate Package: Analysis, Assessment and Outlook

Aditi Nidhi

Gujarat National Law University, Gandhinagar, Gujarat, India †Corresponding author: Aditi Nidhi; aditinidhirmlnlu@gmail.com

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ABSTRACT

Climate change is a widely debated topic in the 21st century, with various perspectives and opinions on its causes and potential remedies. Climate change risks have perplexed authorities and made protecting human life and health difficult. The elements that cause climate change, such as the combustion of fossil fuels, air pollutants, short-lived climatic pollutants, etc., have affected both the climate and human health. The Paris Agreement established several commitment periods that each nation was obligated to follow in accordance with their own individual capacities. This will assist in achieving greater human health and environmental benefits. To develop a robust climate change framework, WHO and other UN organizations have moved up to resolve these challenges. From the first international conference in 1988 to the current Conference of Parties, it has been concluded that "humanity is conducting an unintended, uncontrolled, globally pervasive experiment, the ultimate consequences of which could be second only to a global nuclear war." The recent Katowice Agreement and the climate change package that was put in place demonstrate the seriousness required to resolve the issues of finance, loss and damage, and differentiation mechanisms, which were thoroughly discussed. The paper will focus on the existing legal solutions for providing climate justice to nations. The study will also look at the effectiveness of COP24 in executing adaptation and mitigation plans and adhering to the Paris Agreement in both text and spirit.

INTRODUCTION

Climate change is one of the biggest dangers to human health and puts our entire species at risk. It is also one of the greatest threats to the environment. The severity of climate change's effects on human health is becoming progressively obvious, and each alternative day that passes without action will make the risks even greater (McKeever 2021). Despite fifty years of concerted, targeted effort by policymakers and the health community, climate change threatens to undo those gains. This situation contradicts the government's promises to advance the realization of the human right to health for all individuals (OCHR 2008).

In recent years, the public health community has rapidly increased its involvement with climate change and health, advancing knowledge of the connections between the two, bringing attention to the serious health risks, proposing solutions to mitigate the worst effects, and evaluating the health benefits of climate action, including the extent to which these will outweigh the costs of mitigation (Klenert et al. 2020). To fulfill the commitments made by governments during the UNFCCC climate change negotiations and international negotiations at the World Health Assembly, a large community of organizations, including United

Nations agencies, academia, all levels of government, and nongovernmental organizations, are now working together (OHCHR 2019). The conclusions of high-level political gatherings and joint statements by health professional associations and broader civil society reflect how their work generally aligns with a common action agenda. Numerous agendas were discussed in the report, such as the climate change risks, Paris Agreement's central role in promoting good health, and opportunities for improving health provided by addressing climate change (MoHFW 2018). It further discusses how the health sector and civil society are involved, how to measure national climate change progress, and how to ensure financial support for health and climate change action. In addition to these subjects, the report discusses engagement by the health community and civil society, the evaluation of national climate change action progress, and the means of ensuring economic support for health and climate change action (Kruk 2018).

KATOWICE AGREEMENT

Goal and Vision

The agreement took place in December in Katowice, Poland (Glasgow Climate Change Conference 1995). The conference

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aims to facilitate the goals of the Paris Agreement in its entirety. The conference organized by the Intergovernmental Panel on Climate Change (IPCC) in Katowice, Poland, marked a small but meaningful progression in the global effort to combat climate change. Though it did not bring about a significant breakthrough, the conference made strides in addressing this important issue. Despite not being a breakthrough, the conference made some progress in the climate change battle. For the treaty to be implemented successfully, the participants were requested to create a set of guidelines that could be used to further the efforts made under the treaty. It is regarded as the greatest achievement in which all governments can take pride. It bolsters the Paris Agreement and paves the way for climate action to be taken on a global scale.

The "Paris Agreement Work Programme" was the focus of the two-week meeting, which was convened to implement a series of decisions to achieve this objective (COP24 2020). Parties voted to accept the Katowice Climate Package as the conference ended (COP24 2019a). This package addresses virtually all of the concerns raised in the PAWP. Even though parties emphasized the need for a comprehensive and balanced rulebook at the outset of the conference, there was still skepticism regarding delivery, given that a wide range of issues needed to be discussed and decided upon briefly (Low 2019).

The most significant achievement at COP24 was the countries' ability to reach a consensus on the regulations that would oversee the execution of the Paris Agreement starting in 2015. The Katowice Climate Change Package, to give the rule book its official title, outlines the procedures that nations should follow to monitor and report their greenhouse gas emissions (Murray 2022), as well as the actions they are taking to reduce those emissions. To put the rule into action in a more orderly fashion, there are a lot of questions that need to be considered. A skeptical person will argue that there is no enforcement mechanism in relation to such goals, what

happens if the countries breach their emissions target, and so on (Maizland 2022).

A cynic would argue that there is no enforcement mechanism. In contrast, in recent years, tremendous work has been achieved to increase energy efficiency and shift away from fossil fuels. Without any worldwide enforcement mechanisms, the energy required to create an additional percentage of the world's gross domestic product (GDP) has fallen by an average of 32% since 1990. It has dropped even more in emerging economies than in advanced economies. This serves as a reminder that change is possible and that the real challenge is not related to developing the appropriate technology or mechanisms but ensuring that all countries are treated fairly.

Analysis

COP 24 in Katowice, Poland, marked a small but meaningful advancement in the worldwide campaign to combat climate change. Though it was not a breakthrough, the conference did make some progress in addressing this important issue. The meeting failed to agree on key issues, including raising national contributions, integrating human rights into the Paris Agreement, and providing equal support for developing nations while adopting a climate package of Paris Rulebook documents. While steps were taken to improve areas like the rights of indigenous people, gender equality, finance, etc., the provisions for carbon trading were left out of the package. Thus, COP 24 failed to adequately address the most crucial matters that are necessary for effectively tackling the difficulties caused by global warming and its effects on communities that are at risk.

The "Intergovernmental Panel on Climate Change (IPCC)" is a respected UN group that aims to access the scientific aspects of climate change regularly (IPCC 2022). On the 8th of October, IPCC issued a report specifically examining the

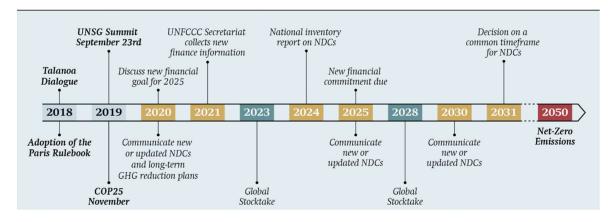


Fig. 1: Source-Stiftung Wissenschaft und Politik (SWP) (Dröge & Rattani 2019).

effects of global warming at 1.5 degrees Celsius. This report is a stark reminder of the imperative need for immediate action to preserve our planet (IPCC 2018). The report's key findings are straightforward: to limit the increase in temperature to 1.5 degrees Celsius by 2030 and reach a state of "net zero" by 2050 (Fig. 1). This is the sole means of achieving this objective. To achieve such a huge reduction in emissions, significant modifications will need to be made to the global energy and transportation networks, in addition to preserving and restoring natural ecosystems. The figure presented also depicts the significance of the "Global Stocktake" within the decentralized framework of the Paris Agreement. It functions as the principal hierarchical element of the accord. The Global Stocktake serves the objective of conducting a thorough worldwide evaluation of the climate policy commitments, referred to as Nationally Determined Contributions (NDCs), made by participating parties at five-year intervals.

What Occurred During Cop 24?

During the first week of the summit meeting, there was no indication of any progress being made on any aspect of the 2015 agreement (Kizzier 2019). Industrialized and emerging nations maintained long-held attitudes and interpreted the Paris Agreement differently (Paris Agreement 2015). These positions have been a source of contention for several years and have centered around scope, differentiation, and financing issues (Tanwar 2013). A discussion about the document's intended audience focused on whether the guidance for Nationally Determined Contributions (NDCs) (Pauw 2019) should only address mitigation or cover all potential NDC components, such as means of implementation and adaptation (Crumpler et al. 2020).

After that, the accord focused on discussing the guiding mechanism that will be followed by both developed and developing countries and how it may differ for each (UN 2015). Also, developing countries asked developed countries for promises to be open and honest about providing complete and accurate information on public finances (Our Common Future, From One Earth to One World 1985) both before and after the information was given. This was done to make things more predictable and accountable. This request was made within the context of the topic of finance (Stéphane & Kevin 2003).

Micha Kurtyka, the president of COP 24, and António Guterres (World Meteorological Organization 2018), the secretary-general of the UN, led closed-door meetings with groups of ministers from developed and emerging nations to agree on each Rulebook issue (Sethi 2018). People were afraid that the negotiations would fail, just like they did at COP 15 in Copenhagen in 2009 because they didn't have

enough information and there were rumors of chaos.

As the Conference continued, the problematic situation became more imminent. The issue centered on "Article 6 of the Paris Agreement" (Kizzier 2019), which outlined how nations can voluntarily cooperate in implementing their "nationally determined contributions" to carbon markets. In a global carbon trading system (Burniaux 2009), a nation, a company that produces fossil fuels, or an airline can "offset" excessive emissions by transferring them to a nation with lower emissions. Article 6 refers to "international transfers of mitigation results" rather than "markets," and a "Sustainable Development Mechanism" (United Nations 2007) will substitute the Kyoto Protocol's (UNCTD 2003) "Clean Development Mechanism," which has been heavily condemned for neglecting to offer extra reduction (Benites-Lazaro & Andrade 2019). There is also a plan for making non-market-based strategies for the future (Soutar 2021).

Brazil did not want to make any concessions on this issue, which is referred to as "double counting" (Schneider 2019), so it resisted rules that would apply "corresponding adjustments" (Climate Focus 2022) to transfer credits. Brazil, in particular, had been pushing for looser accounting rules for carbon credits for most of the year. This may allow governments to count other countries' carbon reductions toward their objectives, even if they had previously claimed them. Brazil refused compromises and resisted rules that would apply "corresponding adjustments." Both parties and observers generally regard double counting as cheating.

As a result of the discussions during the first and second weeks, it became abundantly clear that a consensus would not be reached regarding Article 6, and Brazil would not make any concessions (COP25 2019). Nonetheless, a one-page document was documented in which a request was made to the subsidiary body to continue debating the topic at the upcoming June meeting. At the end of the meeting, the President (Marcu & Duggal 2019) presented each participant with a compilation of the Paris Rulebook documents (Huang 2019). However, these documents did not include any rules for carbon trading (COP24b 2018) because the major impasse and potential breakdown in the negotiations had been resolved. One of the noteworthy outcomes of COP 24 was the adoption of the Rulebook known as the Katowice Climate Package.

KATOWICE CLIMATE CHANGE PACKAGE: HOPE FOR ALL (LOW ET AL. 2019)

Guidance on Nationally Determined Contributions (NDC)

NDC, often known as climate commitments, are mandated by "Article 4 of the Paris Agreement" (Paris Agreement 2019), specifying standards for their substance to make it easier to compare and aggregate pledges at the global level.

The decision mandates that all nations follow the IPCC's most recent emissions accounting guidance, which was last updated in 2006 and is scheduled to be amended again next year (IPCC 2008). According to Dr. Robbie Andrew, a senior researcher at the Norwegian research institute (CICERO), the primary change between the 2006 advice and prior versions is that methane's "global warming potential" has increased (Peters 2012). According to his colleague Dr. Glen Peters (Peters 2012), it would be "brilliant" for researchers if all nations adopted the same accounting standards. A climate change lecturer at the Grantham Institute of Imperial College London (Rogelj 2016) named Dr. Joeri Rogelj asserts that certain aspects of NDCs create questions regarding the environmental integrity of the commitments made by countries (climate pledges). He emphasizes the flexibility in the choice of accounting standards by stating, "The Paris Agreement calls for regular comparisons, summations, and evaluations of emissions and projected emissions reductions to determine their adequacy in limiting the temperature increase to well below 2C and 1.5C (Paris Agreement 2022). This calls for standardized regulations on the reporting of emissions. However, the final text agreed upon in Katowice now permits countries to adhere to "nationally appropriate methodologies" rather than requiring them to adhere to scientifically sound methods (Sharma 2020). Likely, this guidance will primarily be utilized for strategic reporting, potentially leading to the presentation of certain countries' emissions in a more favorable manner than they truly are. The land-use sector regularly faces this difficulty (Hill & Hill 2018).

In addition, the countries agreed that their commitments would be documented in a public registry modeled after the present interim website. Despite efforts to get it removed, this will still have a search bar. Pledges were also agreed upon to cover a "shared timeframe" beginning in 2031 (Mathiesen 2018), with the precise duration to be determined later. Some of the present pledges cover five years, while others cover ten years.

Global Stocktake

The Global Stocktake is a procedure established by the Paris Agreement (UNFCCC 2021) to examine the collective progress that Parties have made to accomplish the aim of the agreement and its long-term goals. It is also known as the "Five-Year Review." The next Stocktake, in 2023, will be held during COP 24, occurring every five years after that. The Global Stocktake will allow Parties to assess their advance toward the Paris Agreement's long-term goal and inform their additional nationally decided commitments (Climate Analytics 2018).

The Global Stocktake, a process that will evaluate the Parties' collective progress in achieving the goals of the Paris Agreement, will consider both the short-term and long-term objectives outlined in the agreement. In addition, it will adhere to the principles of transparency, equity, and fairness while considering the most up-to-date and accurate scientific information currently available. This will include the most recent findings of the IPCC (Rajamani et al. 2022).

The Global Stocktake is an evaluation process where the Parties will evaluate their success in reaching the ultimate objective of the Paris Agreement, which is to keep the global average temperature well below 2 degrees Celsius above pre-industrial levels and strive to decrease it to 1.5 degrees Celsius. The Parties will also deliberate on the multiple methods to minimize emissions and adapt to the impacts of climate change (Centre for Science and Environment 2021).

Transparency Framework

The Katowice negotiations sought to standardize reporting timelines and formats for national climate policies (Dal Maso & Antonio Canu 2022). The most susceptible nations will not be required to make quantifiable climate pledges or provide ongoing transparency reports due to the new rules, which provide for some degree of latitude for these nations (COP24 2019b). The conference focused on submitting a climate action report every two years (COP24 2018a) starting in 2024 by every nation.

Climate Finance

Establishing a new climate finance goal was becoming an increasingly sensitive issue for developing countries (ECOSOC Development Cooperation 2016). This should be established by the year 2025 in accordance with the Paris Agreement, and it should be higher than the "floor" sum of one hundred billion dollars per year pledged to developing nations by 2020. (Pauw 2022) The parties agreed to discuss this new target at the COP26 session in November 2021. At COP26, scheduled for November 2021, the parties said they would discuss this new objective.

In the meantime, the contributions from rich countries have not yet reached the target of \$100 billion for 2020 (Sirur 2021). However, a number of announcements made during the COP showed that there would be at least some increase in funding.

Germany has announced it will contribute €70 million to the Adaptation Fund. Other countries and organizations, such as Italy, Sweden, the EU, and France, have also made smaller contributions, bringing the total to \$129 million. This is the fund's highest-ever annual fundraising total.

Germany was the first nation to declare a specific amount it would donate to the Green Climate Fund's renewal cycle (GCF). The country pledged €1.5 billion, double the amount it had previously contributed in 2014. The Global Climate Fund (GCF) was given a contribution of 516 million dollars by Norway, and Japan stated that it would consider making a larger donation once the renewal process began in 2019. In February, Japan proposed the name of Ambassador Kenichi Suganuma for consideration to head the Global Climate Fund (Skene 2022).

Due to the United States' failure to fulfill a portion of its \$3 billion commitment and fluctuations in the exchange rate between the currencies of donor countries and US dollars, the Global Climate Fund (GCF) has only received \$7 billion of the \$10 billion that was pledged to it in 2014 (Waslander 2019).

Human Rights

Human rights protection can be considered one of the most significant achievements of the Paris Agreement. This is the one victory highlighted in the agreement's Preamble, barring no other articles discussing such a feature. Many civil society organizations and a few national champions argued at COP 24 that including the UDHR and the Preamble's reference to human rights would aid in the agreement's operationalization.

On the 70th anniversary of the UDHR, which coincided with UNFCCC (COP 24), civil society groups and a few countries pushed to integrate human rights references in the Paris Agreement's Rulebook's Preamble. These references, referred to as the "Great Eight," include ecosystem integrity, intergenerational justice, decent work, just transition for workers, food security, women's empowerment, gender equality, public participation, rights of Indigenous Peoples, and poverty alleviation. However, despite these efforts, the coalition ultimately failed to operationalize these references into the Paris Rulebook.

WHAT ELSE HAPPENED AT COP24?

Finance Pledges in Katowice

At COP 24, held in Katowice, Poland, in 2018, countries made no formal pledges for financial support specifically for harm and loss. However, industrialized nations did make some commitments to provide financial support for climate action more generally (Kachi & Day 2020). For example, The UNFCCC's Green Climate Fund (GCF) recently declared that it had secured extra funds from developed countries (Levaï 2021) to aid developing nations in adjusting to and reducing the influence of climate change.

To further aid developing nations in their fight against climate change (Garschagen & Doshi 2022), rich nations

renewed their pledge to raise \$100 billion annually by 2020. However, it should be noted that this commitment was first made in 2009, and it is still not being met. Developing countries, particularly small island states, argued that this funding was insufficient to address the issue of loss and damage and that more ambitious financial commitments were needed (COP24 2019a, 2019b) It's also important to mention that the Paris Agreement includes a "loss and damage" article. Still, it's not legally binding, doesn't provide a mechanism to compensate countries for loss and damage, and doesn't establish any clear financing mechanism to support countries facing loss and damage (Kuh & Rivkin 2021).

Talanoa Dialogue

To successfully implement the goal of the Talanoa Dialogue and the Paris Agreement, the outcome of COP24 must include a clear statement emphasizing the need for increased ambition (Stockholm Environment Institute 2019). Holding a conversation in a welcoming and accepting environment is referred to as "talanoa" in the Fijian language. It is a tried-and-true approach to conflict resolution in the Pacific region.

The goal of the Talanoa Dialogue (Lesniewska & Siegele 2018) is to find a way to break the impasse regarding climate change by bringing participants together by sharing their personal experiences with the phenomenon. It has been requested that governments, civil society, non-governmental organizations (NGOs), businesses, cities, and other entities share their experiences in response to the following three questions: Where do we stand right now? How do we want to go? What is the best way to get there? Hundreds of countries, organizations, and people have contributed to this cause.

To aid with and improve the enactment of the Paris Agreement, the UNFCCC established the Talanoa Dialogue as part of the UNFCCC. The process takes its name from the traditional Fijian idea of Talanoa, which refers to a method of discourse that is open to involvement from all members and is conducted transparently (Waskow 2018a, 2018b). The Talanoa Dialogue aims to foster cooperation and mutual understanding among Parties to the UNFCCC and enhance ambition in mitigation, adaptation, and support. It is designed to be inclusive and participatory, providing opportunities for all Parties to the UNFCCC to share their experiences, challenges, and best practices and to explore opportunities for cooperation. The Dialogue also serves as a forum for participation by non-Party stakeholders, such as municipalities, NGOs, and businesses. An ongoing effort, the Talanoa Dialogue seeks to aid UNFCCC Parties in raising their ambition in support, adaptation, mitigation, and carrying out the Paris Agreement (Recio & Hestad 2022).

Damage and Loss

The discussions on damage and loss during the COP 24 were focused on the "Warsaw International Mechanism for Loss and Damage Associated with Climate Change Impacts" (WIM), which was formed in 2013. Developing countries, particularly least developing nations, have urged strengthening the World Insurance Mechanism (WIM) and developed countries to give financial help for loss and damage. Since small islands are more susceptible to climate change's negative effects, including rising sea levels, eroding coastlines, and bleaching coral reefs, they have made it clear that resolving the issue of loss and damage is crucial to their very survival. COP 24 served as a platform for the Parties to the Paris Agreement and the subordinate organization for implementation to convene and hold high-level sessions and discussions on loss and damage. Despite the efforts made by developing countries and small island nations, the COP 24 did not result in any official promises to provide financial assistance for damage and loss

It is essential to note that loss and damage are complex issues encompassing various impacts and challenges, with different views on addressing them. Developed nations have argued that adaptation methods, not compensation or financial aid, are the best way to deal with loss and damage. Some poor nations have argued that loss and damage should be handled in a way distinct from adaptation under the UNFCCC framework. COP 24 failed to reach a consensus on how to address loss and damage, and the issue remains a contentious point of discussion in international climate negotiations.

Gender and Climate Change

An additional focal point of the conference was the intersection between gender and climate change. This emphasis recognized that climate change disproportionately affects women and other marginalized groups and that their participation and leadership are essential for effective climate action. The COP24 decisions included a call for climate policies and actions that take gender into account. In addition, they emphasized the need for a gender perspective to be incorporated into all facets of the enactment of the Paris Agreement. The resolutions also advocated advancing gender equality in the climate and energy sectors and including women in climate change decision-making processes (IMF 2021).

In general, including a gender and climate change focus at COP24 underscores the importance of understanding the unique implications of climate change on women and other marginalized groups and the necessity of their participation and leadership in solving this global crisis (UN 2021).

The Katowice Ministerial Declaration on Forests for the Climate

During the United Nations Climate Change Conference in 2018, this Declaration was adopted in Katowice to highlight forests' importance in climate change. The Declaration includes several commitments and actions that countries can take to protect and manage forests sustainably. The Declaration highlights the importance of "Reducing Emissions from Deforestation and Forest Degradation" (REDD+) as a key tool for mitigating climate change and encourages countries to enhance the implementation of REDD+ activities (PIB 2018). Additionally, the declaration acknowledges the significance of promoting sustainable forest management, afforestation, and reforestation as effective ways to increase carbon sequestration. It also advocates for advancing forest governance and protecting the rights of communities and indigenous peoples that depend on forests.

The Declaration also encourages countries to consider the application of market-based mechanisms and other incentives to support the protection and sustainable management of forests. The Declaration is a non-binding agreement, but it serves as a political statement and a call to action for countries to protect and manage forests sustainably and recognize the importance of forests in addressing climate change.

Furthermore, the Declaration highlights the need for data and information on forests and calls for strengthening forest monitoring, assessment, and reporting. This is important to track progress and to identify areas where additional action is needed. It also encourages Parties to include forest protection in their respective Nationally Determined Contributions (NDCs).

Henceforth, this Declaration calls for various actions and commitments, including using market-based mechanisms, strengthening forest governance, enhancement of afforestation and reforestation, reduction of emissions from forest degradation, deforestation, and other incentives to aid in the protection and sustainable management of forests.

COP 24 AND INDIA PRIORITIES

The conference aimed to negotiate the Paris Agreement's implementation plan, which was adopted at COP 21 in 2015 and went into effect in 2016. (IPCC 2018b) India, as a party to the UNFCCC, participated in COP 24. India's priorities at the conference included (Sinha 2018):

a) Making arrangements in such a way that the industrialized nations provide technological and financial support to the emerging nations and help them adjust to the changing pattern of climate change.

- Maintaining the idea of "common but differentiated responsibilities" which recognizes that industrialized countries have a higher historical responsibility for climate change and should shoulder a bigger burden in addressing it. (Sengupta 2019)
- c) Protecting the rights and livelihoods of local communities and vulnerable populations
- d) Encouraging the adoption of energy-efficient practices and the use of renewable energy sources.
- e) India proposes that the concentration of greenhouse gases in the atmosphere be stabilized below two degrees Celsius.
- f) Lowering the susceptibility of agricultural systems, water infrastructure, and coastal communities to the effects that are being caused by climate change.
- g) Promoting land management methods less destructive to the environment, such as agroforestry and agroecological farming.
- h) Promoting the participation of local communities, women, and other marginalized groups in decisionmaking and policy-making related to climate change.
- Encouraging cooperation among countries to share knowledge, technology, and best practices for addressing climate change.
- j) In addition, India emphasized the importance of developed nations living up to the financial promises they made about climate change in the Paris Agreement.

India's aims at COP 24 were consistent with its broader approach to climate change, emphasizing the need for developed countries to assume greater responsibility for solving the problem while assisting developing countries' attempts to adapt to and mitigate its consequences. (Nandi 2018).

Additional Secretary AK Mehta spoke on behalf of Environment Minister Harsh Vardhan to explain India's stance and efforts in the battle against climate change. (PTI 2018) It's a chance for nations to discuss what they're doing to combat climate change, from lowering their carbon footprint to preparing for its effects. (Gopalakrishnan 2014) The conference is also an opportunity for countries to engage in negotiations and obtain common answers to the challenges triggered by climate change.

CONCLUSION

The Katowice Agreement includes several important provisions that will help countries implement the Paris Agreement, such as guidelines for disclosing and monitoring greenhouse gas emissions and improvements in adapting to

the effects of climate change. These guidelines are intended to increase transparency and accountability and to ensure that countries are on track to meet their emissions reduction goals. To help vulnerable nations deal with climate change impacts that cannot be prevented through mitigation and adaptation measures, the accord also includes a resolution on executing the "loss and damage" mechanism established in 2015.

Thus, the importance of this conference can be seen from varied angles, i.e., to establish a "facilitative dialogue" process, which will be held in 2023 to assess progress in implementing the Paris Agreement and inform countries' emissions reduction efforts in the future. The agreement also includes a decision to establish the "Article 6" negotiations, which will establish a framework for cooperation on emissions reductions between countries. The negotiations will address carbon markets, carbon credits, and carbon offsetting.

Overall, the Katowice Agreement is an important step forward in implementing the Paris Agreement and addressing climate change. However, some criticized it for not going far enough in some areas, such as loss and damage, and for not funding climate change adaptation in developing nations.

REFERENCES

- Benites-Lazaro, L.L. and Andrade, C. 2019. Clean development mechanism: key lessons and challenges in mitigating climate change and achieving sustainable development. Reference Module in Earth Systems and Environmental Sciences. https://doi.org/10.1016/b978-0-12-409548-9.11863-9
- Burniaux, J. 2009. The economics of climate change mitigation. OECD Economics Department Working Papers. https://doi.org/10.1787/224074334782
- Centre for Science and Environment 2021. Addressing global stocktake under the Paris Agreement (an equity-based approach). https://unfccc.int/sites/default/files/890.pdf
- Climate Analytics 2018. Taking stock of the global stocktake. https://climateanalytics.org/blog/2018/taking-stock-of-the-global-stocktake/
- Climate Focus. 2022. Article 6 Corresponding Adjustments. Climate Focus. https://climatefocus.com/publications/article-6-correspondingadjustments/
- COP 24 2020. Baker McKenzie InsightPlus. https://insightplus.bakermckenzie.com/bm/environment-climate-change_1/international-cop-24
- COP24 2018a. Special report: health and climate change. https://apps.who.int/iris/handle/10665/276405
- COP24 2018b. Carbon market talks go downhill. https://www.downtoearth.org.in/news/climate-change/cop24-carbon-market-talks-go-downhill-62505
- COP24 2019. UN climate change conference, what's at stake and what you need to know. UN News. https://news.un.org/en/story/2018/11/1026851
- COP24 2019a. Great expectations, low execution: the Katowice climate change conference COP 24. https://eu.boell.org/en/2019/01/08/greatexpectations-low-execution-katowice-climate-change-conferencecop-24
- COP25 2019. The lack of consensus for international carbon market rules should not distract from domestic decarbonisation. https://newclimate. org/news/cop-25-the-lack-of-consensus-for-international-carbon-market-rules-should-not-distract-from

- Crumpler, K., Dasgupta, S., Federici, S., Meybeck, A., Bloise, M., Slivinska, V., Damen, B., Von Loeben, S., Wolf, J. and Bernoux, M. 2020. Regional analysis of the nationally determined contributions in Asia: gaps and opportunities in the agriculture and land use sectors. Environment and Natural Resources Management. Working Paper (FAO) Eng No. 78.
- Dal Maso, M. and Antonio Canu, F. 2022. Unfolding the reporting requirements for developing countries under the Paris Agreement's enhanced transparency framework, Vol. 1. https://climateactiontransparency.org/wp-content/uploads/2019/11/ICAT-MPGs-publication-final.pdf
- Dröge, S. and Rattani, V. 2019. After the Katowice climate summit: building blocks for the EU climate agenda. Earth Negotiations Bulletin (ENB), 12(747): 7. https://doi.org/10.18449/2019c09
- ECOSOC Development Cooperation. Making development cooperation on climate change sensitive to the needs of the most vulnerable countries. 2016. ECOSOC Development Cooperation Forum Policy Briefs, 14: 1-7. https://www.un.org/ecosoc/sites/www.un.org.ecosoc/files/ publication/dcf-policy-brief-14.pdf
- Garschagen, M. and Doshi, D. 2022. Does funds-based adaptation finance reach the most vulnerable countries? Glob. Environ. Change, 73: 102450. https://doi.org/10.1016/j.gloenvcha.2021.102450
- Glasgow Climate Change Conference 1995. IISD Earth Negotiations Bulletin. https://enb.iisd.org/glasgow-climate-change-conferencecon26
- Gopalakrishnan, T. 2014. COP24: A principled debate on adaptation communications. https://www.downtoearth.org.in/blog/climate-change/ cop24-a-principled-debate-on-adaptation-communications-62410
- Hill, C. and Hill, C. 2018. GeoPolicy: COP24 key outcomes and what it's like to attend. https://blogs.egu.eu/geolog/2018/12/28/geopolicycop24-key-outcomes-and-what-its-like-to-attend/
- Huang, J. 2019. A brief guide to the Paris agreement and 'rulebook. https://www.c2es.org/wp-content/uploads/2019/06/paris-agreement-and-rulebook-guide.pdf
- IMF 2021. Advancing gender equality through climate action. https://www.imf.org/en/Publications/fandd/issues/2021/09/advancing-gender-equality-through-climate-action-COP26-trevelyan
- IPCC 2008. Climate Change 2007 Impacts, adaptation, and vulnerability: working group II contribution to the fourth assessment report of the IPCC (1st ed.). Cambridge University Press, UK.
- IPCC 2018a. IPCC says limiting global warming to 1.5 °C will require drastic action. https://www.nature.com/articles/
- IPCC 2018b. Summary for policymakers of IPCC special report on global warming of 1.5°C approved by governments. https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/
- IPCC 2022. Climate change: mitigation of climate change. https://www.ipcc.ch/report/ar6/wg3/
- Kachi, A. and Day, T. 2020. Results-based finance in the Paris era considerations to maximise impact. NewClimate Institute, 1-20. https:// newclimate.org/sites/default/files/2020/12/NewClimate_Results_based_finance_in_the-Paris_era_Dec20.pdf
- Kizzier, K. 2019. What you need to know about Article 6 of the Paris Agreement. https://www.wri.org/insights/what-you-need-know-aboutarticle-6-paris-agreement
- Klenert, D. 2020. Five lessons from COVID-19 for advancing climate change mitigation. Environmental and Resource Economics, 76(4): 751-778. https://doi.org/10.1007/s10640-020-00453-w
- Kruk, M.E. 2018. High-quality health systems in the austainable development goals era: time for a revolution. Lancet Glob. Health, 6(11): e1196–e1252. https://doi.org/10.1016/s2214-109x(18)30386-3
- Kuh, K. and Rivkin, D. 2021. Legal aspects of climate change adaptation. https://www.ibanet.org/document?id=Climate-Change-Adaptation-Report-2021.

- Lesniewska, F. and Siegele, L. 2018. The Talanoa dialogue: A crucible to spur ambitious global climate action to stay within the 1.5°C limit. Carbon Clim. Law Rev., 2(1): 41-49. https://www.jstor.org/stable/26478085
- Levaï, D. 2021. Replenishment of the green climate fund: a missed opportunity. https://ideas4development.org/en/replenishment-of-thegreen-climate-fund-a-missed-opportunity/
- Low, M. 2019. Katowice climate package: operationalising the climate change regime in the Paris agreement. Energy Studies Institute (ESI) Policy Brief, 27: 1-4. https://esi.nus.edu.sg/docs/default-source/esipolicy-briefs/katowice-climate-package.pdf?sfvrsn=2
- Low, M., Bea, E. and Lu, S. 2019. Katowice climate package: operationalizing the climate change regime in the Paris agreement. Energy Studies Institute Policy Brief, 27: 1-4. https://esi.nus.edu. sg/docs/default-source/esi-policy-briefs/katowice-climate-package. pdf?sfvrsn=2
- Maizland, L. 2022. Global climate agreements: successes and failures. council on foreign relations. https://www.cfr.org/backgrounder/paris-global-climate-change-agreements
- Marcu, A. and Duggal, V.K., 2019. Negotiations on Article 6 of the Paris Agreement–Road to Madrid. https://think-asia.org/handle/11540/11644
- Mathiesen, K.M. 2018. Countries breathe life into the Paris climate agreement. https://www.climatechangenews.com/2018/12/15/countries-breathe-life-paris-climate-agreement/
- McKeever, A. 2021. Why climate change is still the greatest threat to human health. Science. https://www.nationalgeographic.com/science/article/why-climate-change-is-still-the-greatest-threat-to-human-health
- MoHFW 2018. National action plan for climate change & human health. https://ncdc.gov.in/WriteReadData/1892s/27505481411548674558.pdf
- Murray, L.S. 2022. Practical implications of the Katowice climate package for developing country parties and land sector reporting. The Nature Conservancy. https://www.nature.org/content/dam/tnc/nature/en/ documents/TNC_Transparency_LandUseReport.pdf
- Nandi, J. 2018. High stakes for India as 'make or break' climate meet begins in Poland. https://www.hindustantimes.com/india-news/highstakes-for-india-as-make-or-break-climate-meet-begins-in-poland/ story-vctMcG88CZ6fNSwNoKMx7H.html
- OCHR 2008. The right to health. https://www.ohchr.org/sites/default/files/ Documents/Publications/Factsheet31.pdf
- OHCHR 2019. Understanding human rights and climate change. https://www.ohchr.org/sites/default/files/Documents/Issues/ClimateChange/COP21.pdf
- Paris Agreement 2015. Paris Agreement. https://unfccc.int/files/meetings/ paris_nov_2015/application/pdf/paris_agreement_english_.pdf
- Paris Agreement 2019. Key aspects of the Paris Agreement. https://unfccc. int/most-requested/key-aspects-of-the-paris-agreement
- Paris Agreement 2022. Climate action. https://climate.ec.europa.eu/ eu-action/international-action-climate-change/climate-negotiations/ paris-agreement_en
- Pauw, W.P. 2019. Conditional nationally determined contributions in the Paris Agreement: foothold for equity or Achilles heel? Clim. Policy, 20(4): 468-484. https://doi.org/10.1080/14693062.2019.1635874
- Pauw, W.P. 2022. Post-2025 climate finance target: how much more and how much better? Clim. Policy, 22(9-10): 1241-1251. https://doi.org/ 10.1080/14693062.2022.2114985
- Peters, G.P. 2012. The challenge to keep global warming below 2 °C. Nature Clim. Change, 3(1): 4–6. https://doi.org/10.1038/nclimate1783
- PIB 2018. Cooperation of society in implementation of Redd+ strategy is crucial 2018. https://pib.gov.in/newsite/PrintRelease. aspx?relid=183155
- PTI 2018. The outcome of UN climate summit should be balanced, inclusive: Harsh Vardhan. https://www.businesstoday.in/pti-feed/story/ outcome-of-un-climate-summit-should-be-balanced-inclusive-harshvardhan-120405-2018-12-01

- Rajamani, L., Oberthür, S. and Guilanpour, K. 2022. Designing a meaningful global stocktake. center for climate and energy solutions. https://unfccc.int/sites/default/files/resource/202202281808_C2ES_Designing_A_Meaningful_Global_Stocktake_Under_the_Paris_Agreement.pdf
- Recio, E. and Hestad, D. 2022. Indigenous peoples: defending an environment for all. https://www.iisd.org/articles/deep-dive/ indigenous-peoples-defending-environment-all
- Rogelj, J. 2016. Paris Agreement climate proposals need a boost to keep warming well below 2°C. Nature, 534(7609): 631-639. https://doi. org/10.1038/nature18307
- Schneider, L. 2019. Double counting and the Paris Agreement rulebook. Science, 366(6462): 180–183. https://doi.org/10.1126/science.aay8750
- Sengupta, S. 2019. India's engagement in global climate negotiations from Rio to Paris. India in a warming world, 114-141. https://doi.org/10.1093/oso/9780199498734.003.0007
- Sethi, N. 2018. Climate change report is a "wake-up" call on 1.5°C global warming. Climate Change: World Meteorological Organisation. https://www.business-standard.com/article/current-affairs/countriesstate-their-true-positions-behind-closed-doors-115120701372_1.html
- Sharma, A. 2020. Guide to the Paris Agreement. Oxford Climate Policy. https://ecbi.org/sites/default/files/Guide%20to%20Paris%20 Agreement.pdf
- Sinha, A. 2018. COP24: Will achieve all our climate targets ahead of deadlines, India tells environment meet. The Indian Express. https:// indianexpress.com/article/india/climate-change-summit-cop24katowice-india-5477197/
- Sirur, S. 2021. What is COP26? Why it is important and India's role at the climate change conference. https://theprint.in/theprint-essential/ what-is-cop26-why-it-is-important-indias-role-at-the-climate-changeconference/757909/
- Skene, J. 2022. Forward progress at COP27 in Egypt and the path ahead. https://www.nrdc.org/experts/jake-schmidt/forward-progress-cop27-egypt-and-path-ahead
- Soutar, R. 2021. Carbon market grows in Brazil ahead of expected regulation in Glasgow. https://dialogochino.net/en/climate-energy/41641-carbon-market-grows-in-brazil-ahead-of-expected-regulation-in-glasgow/
- Stéphane, W. and Kevin, B. 2003. Institutional Capacity and Climate Actions. https://www.oecd.org/env/cc/21018790.pdf
- Stockholm Environment Institute 2019. The Talanoa Dialogue: An

- Explainer. https://www.sei.org/featured/talanoa-dialogue-an-explainer/ Tanwar, R. 2013. Porter's generic competitive strategies. IOSR J. Bus. Manag., 15(1): 11-17. https://doi.org/10.9790/487x-1511117
- UN 1985. Our common future, from one earth to one world: An overview by the world commission on environment and development. https:// sustainabledevelopment.un.org/content/documents/5987our-commonfuture.pdf
- UN 2015. Principles for responsible contracts: integrating the management of human rights risks into state-investor contract negotiations-guidance for negotiators. https://www.ohchr.org/sites/default/files/Documents/Publications/Principles_ResponsibleContracts_HR_PUB_15_1_EN.pdf
- UN 2021. Women Watch: Women, gender equality and climate change. United Nations. https://www.un.org/womenwatch/feature/climate_change/
- UNCTD 2003. An implementation guide to the clean development mechanism. (2003). In Geneva. https://unctad.org/system/files/officialdocument/ditcted20031_en.pdf
- UNFCCC 2021. Preparing for the first global stocktake revised non-paper by the chairs of the SBSTA and SBI. https://unfccc.int/sites/default/files/ resource/REV_Non-paper_on_Preparing_for_GST1_forSBs_15Sept. pdf
- United Nations. 2007. Sustainable development within the climate context. https://www.un.org/en/chronicle/article/sustainable-development-within-climate-contextsouthsouthnorth-and-clean-development-mechanism
- Waskow, D. 2018a. COP24 climate change package brings Paris Agreement to life. World Resources Institute. https://www.wri.org/insights/cop24climate-change-package-brings-paris-agreement-life
- Waskow, D. 2018b. Talanoa dialogue: jump-starting climate action in 2018. World Resources Institute. https://www.wri.org/insights/talanoadialogue-jump-starting-climate-action-2018
- Waslander, J. 2019. How much should countries contribute to the green climate fund's replenishment? World Resources Institute. https://www.wri.org/insights/how-much-should-countries-contribute-green-climate-funds-replenishment
- World Meteorological Organization. 2018 Climate change report is a "wake-up" call on 1.5°C global warming. https://public.wmo.int/en/media/press-release/climate-change-report