A Brief Review of COP21

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Abstract: COP21 received widespread praise and vast attention for its proclaimed successes. Yet, the agreement only provided a broad template with lofty ideals, but no direct path towards achieving them. More accurately than characterizing it as a binding document to ensure protection of the climate, the agreement signaled a statement of intention – one whose objectives appear unrealistic relative to the pledges produced by parties involved in the treaty.

On Saturday, December 12, 2015, after two weeks of negotiations, 195 nations adopted the world's first legally binding climate agreement¹. The culmination of the UN's 21st annual meeting Conference of Parties (COP21), which took place in Paris, resulted in the creation of a document hoped for six years earlier in Copenhagen. While the Copenhagen Summit (COP15), characterized by disarray and blatant marginalization of less powerful countries, yielded few results and failed to produce an internationally binding treaty, COP21 received widespread praise and vast attention for its proclaimed successes². Yet despite its apparent progress towards addressing climate change, the agreement was recognized as far from perfect. Although representing a significant step towards comprehensive alteration, intended to reduce and ultimately stop the production of emissions contributing to global warming, the agreement only provided a broad template with lofty ideals, yet no direct path towards achieving them. More accurately than characterizing it as a binding document to ensure protection of the climate, the agreement signaled a statement of intention—one whose objectives appear unrealistic relative to the pledges produced by parties involved in the treaty.

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Background and Legacy of COP15

Catalyzed by the submission of proposed commitments, called Intended Nationally Determined Contributions, or INDCs, by 160 nations before the summit, environmental activists expressed hope for the adoption of an agreement that addressed climate change³. Global advocates for renewable energy and representatives from an array of indigenous communities pushed for the creation of a universal agreement incorporating the demands of the most vulnerable individuals and nations⁴. In an attempt to avoid the failures of COP15, leaders of the Paris Summit sought to prepare more adequately. While the Copenhagen meetings were characterized by a lack of organization from most parties, exacerbating the marginalization of less powerful nations, media attention prior to the start of COP21 highlighted the need to provide these countries a significant role in negotiations⁵.

With immense fires ravaging Indonesia ⁶, the persistent destruction of biodiversity ⁷ in the Amazon for business profits, and rising sea levels disproportionately affecting poorer countries ⁸, the preservation of the rights of the vulnerable constituted one of the primary concerns prior to COP21. In Copenhagen, a small contingent of powerful nations rushed a last-minute agreement after structuring the summit to ignore the demands of less influential countries. In reaction to Copenhagen, the Paris Summit incorporated global opinion prior to the summit. While industrialized nations and global manufacturers contribute most to the production of carbon emissions, smaller countries suffer disproportionately from climate change ⁹. Accordingly, adopting provisions to protect these nations represents a primary concern of climate justice activist as well as a reality, which leaders of industrial giants seek to avoid.

Key Points of Agreement

Two significant aspects of the treaty agreement are:

- 1. Signatories will attempt to keep the rise in global temperatures below 1.5 degrees Celsius from pre-industrial levels¹⁰.
- 2. Parties will seek to contribute \$100 billion annually in order help subsidize the costs for smaller countries to switch to cleaner energy sources.

1.5 Degrees Celsius

The Paris Agreement declares the intention of the much lower standard of 1.5 degrees Celsius, significantly lowering the previous objective of limiting climate change to 2 degrees Celsius, established in Copenhagen at COP15. Indeed, considering that "the aim of the COP21...[was] to facilitate access to a low-carbon pathway and resilient sustainable development for all while keeping the global temperature from rising more that 2 degrees Celsius, ¹¹" the intent to limit the increase in measureable warming certainly seems a significant result. While a valiant objective, its validity, sufficiency and achievability have been called into question.

The 2 degree Celsius objective arose somewhat arbitrarily at the Copenhagen Summit. Finding difficulty in previous conferences to establish clear, concrete aims that could be implemented, the declaration of a confined target in 2009 appeared to present substantial progress in discussions. Admittedly, as demonstrated not just at COP15, but at other climate talks, given the number of countries involved in negotiations, the creation of widely-supported targets often proves difficult. Although there was general agreement at the Kyoto Protocol in 1992, that treaty neglected the establishment of clear standards to which countries could be held. While different ecosystems respond differently, and with varying severity, to changes in climate conditions, scientists started conducting research to determine the maximum capability of more delicate systems to tolerate alterations in conditions but research remained limited. However, studies seemed to repeatedly indicate the more fragile ecosystems could withstand maximum changes of about 2 degrees Celsius¹². Despite its consideration as an upper limit of the change that many environments can withstand, the 2 degrees has been championed as a worthy objective. Accordingly, following declarations first by the European Union, then a number of other countries including the US to limit change to this level, the 2 degree Celsius goal was formalized at the Copenhagen Summit, not necessarily for its complete desirability, but because it presented some standard. As described by Scott Barrett, a professor at Columbia University, "the two degree target was chosen more for political reasons than for true scientific reasons. The idea was... if countries could agree on a collective target, that that would mobilize the action needed to get the whole world to act together. 13, Highlighting the symbolic value of the decision to pursue the 2 degree target, Barrett's statements hint at the problem with placing this objective on a pedestal.

Although seemingly a small difference in number between 1.5 and 2 degrees, the environmental impact of restricting change to the lower number results in vastly improved outcomes, according to studies. Raising the issue of increased vulnerability of developing countries, the Sudanese diplomat who led negotiations for a UN group comprising 77 developing nations (G77) powerfully declared "two degrees is a certain death for Africa.14," Indeed, studies predict a stark disparity in the impact of a 1.5 degree rise versus a 2 degree increase from preindustrial levels. Depicted as a decisive difference in the survivability of certain environments, "the additional 0.5 C increase in global-mean temperature marks the difference between events at the upper limit of present-day natural variability and a new climate regime, particularly in tropical regions. 15, With scientists realizing the rapid pace of ice sheets melting and other warming incidents visibly seen in recent years, the danger of singularly referencing the 2 degree objective is becoming more apparent. However, this number still dominates discourse, constituting the primary concrete target established to guide emission reduction efforts.

Accordingly, the declaration of a lower objective signaled significant progress. Although not announcing a binding objective of pursuing and enforcing regulations to ensure that climate change reaches, at a maximum, 1.5 degrees Celsius, the Paris Agreement indicates a strong commitment to striving towards that number. The exact language states parties will seek to hold "the increase in the global average temperature to well below [2 degrees Celsius] above preindustrial levels and to pursue efforts to limit the temperature increase to [1.5 degrees C] above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change. While ostensibly signaling an indication that global leaders now regard global warming with the severity it demands, a closer look at current infrastructure and efforts to curb emissions reveals this stated objective remains a distant hope, not a realistic policy.

The disconnect between the intentions declared in the Paris Agreement and the actual ability for countries to achieve these rather lofty objectives is apparent when looking at the INDCs submitted prior to COP21. While studies estimating the probable rise of temperatures according to the action plans delineated in the INDCs vary in their projected increases, they concur the rise will be far above the 2 degree cap. Expert analyses of the INDC pledges show the proposed changes can result in global temperature increases of up to 3 degrees¹⁷. With the difference in 0.5 degrees signaling disparities in the amount of environmental destruction, an additional rise from the maximum level signals even more drastic results from climate change acceleration. Simply put, the current proposals of governments cannot restrict climate change to 2 degrees Celsius, let alone 1.5, despite the

declarations made in Paris. And a rise above 2 degrees will likely have drastically destructive results.

Close scrutiny of the current rate of warming, compared to that in past years, hints at the challenges facing nations seeking to curb emissions enough to hold them to these levels. Based on the current rise of CO2 in the atmosphere, stemming the rapid rate of warming will prove difficult, even if countries both successfully implement the plans put forth in the INDCs and the agree to further measures to move to cleaner energy sources. As noted in one study, "the annual increase in CO2 concentration in the period 1959 to 2006 was at 1.4ppm, while this value has increased to 2.1 ppm in the period from 2006 to 2014. With this rapid and dangerous rise in emissions entering the atmosphere, the rate of warming becomes a more urgent issue in need of faster action. But the new agreement does not go into effect until 2020. While allowing signatories to prepare for the switch to less destructive energy sources, it means that the realization of limiting climate change to 1.5 degrees becomes less realistic, if not completely impossible. Indeed, data already show increases of nearly 1 degree Celsius, casting perspective on the likelihood of not breaching 1.5 degrees.

Funding

A key inhibitor to implementing structural changes in energy production so as to limit warming rates, is the lack of available funds, particularly among developing nations. In 2009, rich countries agreed to provide \$100 billion per year to assist countries with less wealth make the transition to cleaner energy 19. While seemingly a hefty sum, considerations of the scope of necessary alterations and vast restructuring required to stem the acceleration of warming reveal the scope of the project. The \$100 billion falls short of the \$400 billion, which some projections show is needed to actually implement the needed changes²⁰. Despite this declaration of intent to provide these funds to facilitate the implementation of less polluting energy sources, little of the money pledged has been provided. As of December 2015 the \$3 billion pledged by the US remained simply a promise²¹. Viewed as a catalyst for donations, the decision to withhold the money seemed an ominous indication of the likelihood of wealthy nations donating promised money. In March 2016, the Obama administration paid \$500 million to the fund, but the majority of the amount pledged still remains unpaid²². The agreement enables a loophole for wealthier nations, as it relies on intention to commit the promised funds, rather than a binding promise. Given the \$100 billion is considerably less than the amount needed, the failure to even raise this sum prevents the effective implementation of changes in energy production.

Economic Effects of Warming

In addition to the increased vulnerability of less wealthy nations because of both geographic location and a lack of infrastructure to help mitigate the impacts of natural disasters, developing countries also are at most risk in terms of the eroding effects of warming on their economies. These countries have less manufacturing and diversified income sources. Alterations in the ability to generate income in established ways means that climate change affects poorer nations more. In many African countries, for example, continuation of global warming is estimated to have a more negative impact on the economy. As noted, "with the continent's estimated annual GDP loss as a result of global rise in temperatures ranging from 1.5% to 3% by 2030, Africa's economic future may rest on the successful implementation of the COP21 text. Of course, Africa spans a vast geographic area. Such statistics provide a broad overview of the impact of rising temperatures, with certain countries subjected to much more severe changes than others. Yet, the figures drive home the extent of the detrimental results of failing to address accelerating atmospheric changes.

Reparations

Despite the fact that developing countries suffer the most from the continued global warming, the Paris Agreement clearly establishes no reparations will be given to these countries as a result of the damage borne by climate change. Arguably, representing one of the greatest shortcomings of the agreement, the document unequivocally rebuffs attempts from less wealthy nations to receive compensation for the adverse effects resulting from the reckless production habits of wealthier countries. Indeed, one of the most contentious points surrounding climate discussions is that countries less equipped to protect their citizens because of lower economic stability and affluence are those who suffer the most damage caused by industrial giants, that now attempt to avoid providing adequate assistance. Acknowledging the disproportionate economic and health damages developing nations experience, global powers state in no unclear terms they will not accept liability²⁴. This refusal to provide additional funding to offset some of the damage wrought upon developing countries unable to adequately confront climate change without aid is another hindrance to effective mitigation efforts.

Consequentialist Analysis

Consequentialism posits the ultimate evaluation of one's actions depends on the results of those actions. Looking through a consequentialist lens to determine the ethics of the behavior of rich nations in regard to climate change helps in understanding the significance of the results of COP21.

While the pledges created in the Paris Accords seemingly indicate genuine desire to combat climate change, the actual plans put forth by wealthy nations fail to line up with declared intentions. As demonstrated in past agreements and by previous statements of intent, lofty aims often fail to translate into necessary action. At the Copenhagen Summit in 2009, wealthy nations marginalized those who typically have less ability to voice their concerns, thereby subverting the supposed democratic nature of the conferences. While the agreement established during the Paris meetings certainly incorporates the concerns of less wealthy nations to a much greater extent than the resolutions arising from COP15, the refusal to provide reparations seems to cast doubt on the intentions of powerful countries. After treating climate change as an unimportant issue for decades, despite recognizing its potential harm to security and health worldwide, Western nations finally pledged to achieve ambitions aims. However, as already mentioned, the concrete plans established to pursue the declared objectives fail to come close to enabling the realization of these aims.

Hiding under the guise of an impressive agreement, wealthy nations still seem guided by reluctance to adequately contribute to the massive mobilization needed. Undeniably, progress has been made, as large countries have begun to donate funds. Yet the sluggish pace seems to indicate the low priority assigned to the ambitions and ideals outlined in the Paris Accords.

Such a massive project, for its success, requires genuine intention to achieve the plans put forth. Yet even with the full implementation of these plans, because of their inability to keep the global temperature rise below 2 degrees Celsius, the Paris Accords only serve as a small step to action significant enough to address climate change. Countries like the Marshall Islands and Bangladesh, Kiribati and Tuvalu, so absent from the discourse, and among the most susceptible to climate change, need assistance. Relatively unaffected—for now—by global warming, developed countries seem content to move slowly towards the objectives outlined in the Paris Agreement.

While much of the validity of the Paris declarations rests on the fast creation of binding agreements between countries to hold one another to concrete plans, the stated promises for now seem to fall short of moral action needed. Indeed, with such a broad conference, and the document produced understandably failing to

establish concrete legal standards that bind all signatories to specific contributions, the value of the agreement relies on the creation of effective strategies to ensure its implementation. Understandably, creating such guarantees takes time. However, the perpetually sluggish response pace of Western countries casts doubt on their intention of mitigating climate change. Some may observe that the denial of reparations to countries harmed by industrial activity makes any seemingly altruistic declaration of intent suspect. The Paris Agreement represents a hopeful promise. Until its actual implementation and the creation of more stringent objectives, the actions of the world's most powerful countries on helping less developed nations mitigate and adapt to climate change remains unfulfilled.

Conclusion

Despite the praise for COP21, its true impact remains unknown. While certainly signaling progress in efforts to curb the rise of global temperatures and hinder the advance of climate change, the agreement produced a platform from which to proceed, rather than a set of concrete solutions. The document certainly retains the possibility of failure if global powers elect to ignore its provisions. Indeed, even with relatively greater attention given to the most vulnerable countries during Paris negotiations and consequently reflected in the final agreement, rich nations still maintain the ability to dominate the implementation of the treaty, thus potentially allowing them to shirk their responsibilities. As indicated by the projections of temperature increase if current (emission) output persists, delaying the global transition to cleaner energy sources represents an deficient response to effectively addressing climate change. The document produced at COP21 offers an indication of global solidarity. More than sentiment, the adoption of concrete solutions and the provision of vast amounts of money, are needed to prevent irreversible damage to the environment.

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