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Review Article

Article Review on Global Negotiations and Bargaining Strategies: Kyoto, Paris Agreement in Ethiopia Bule Hora University

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Abstract: Even though the climate change have a major impact on environment, human life and infrastructure over the world, for a long period little attention was given by world countries to mitigate this climate change and its impacts for a century. But in recent time due to highly increase of world temperature and frequent drought in several parts of the world including developing countries different world countries developed policy and signed different agreement on greenhouse reduction and to minimize the impact of climate change. The main goal of the Kyoto Protocol is to control emissions of the main anthropogenic (human-emitted) greenhouse gases (GHGs) in ways that reflect underlying national differences in GHG emissions, wealth, and capacity to make the reductions. There are different international negotiations and bargaining strategies on Kyoto, Paris agreement in order to reduce impact of climate change. Even though, different convention and agreement have has been signed on negotiations and bargaining strategies on Kyoto protocol agreement. None of these negotiation and agreement did not concrete solution on climate change impacts at global level. Due to this fact, in view of the above statements the review is interested to focus the international negotiations and bargaining strategies on Kyoto, Paris agreement and futures steps. Therefore, the specific objectives of this review paper are: To review the importance of the international negotiations on climate change To highlight policy implication to focus on negotiation and bargaining strategies on Kyoto, Paris agreement and futures step. Now a day's one of the most challenges of the world is climate change. This challenge highly affect both developing and developed region of the world. Even though largest emitter of the greenhouse gases were developed countries for a long period they did not give attention for climate change. Recently since the issues of climate change is issues of the world, all international organizational and governments responding on climate in many different ways. One of the international responses on climate change is through Paris agreement. There are negotiations among different countries on adaptation and mitigation strategies of climate change.

Keywords: Global Negotiations, Bargaining Strategies, Kyoto, Paris Agreement and Future Steps, Ethiopia

1. Introduction

Also according to [26] reports, effect of climate variability and change is more sever in the developing countries than the developed ones due to high vulnerability and least capacity to cope up to these changes which is particularly true in the continent of Africa. Also [40] Africa's High vulnerability to the impacts of climate change and variability is exacerbated by widespread poverty, recurrent droughts and floods, dependence on natural resources and biodiversity are some

adverse effect of climate change.

Even though the climate change have a major impact on environment, human life and infrastructure over the world, for a long period little attention was given by world countries to mitigate this climate change and its impacts for a century. Due to this every world countries specially developing countries those have low adaptability to this climate change suffered different problems likes' food insecurity, health problem, loss of biodiversity and damage of infrastructure [40].

But in recent time due to highly increase of world

temperature and frequent drought in several parts of the world including developing countries including Ethiopia different world countries developed policy and signed different agreement on greenhouse reduction and to minimize the impact of climate change. Among this agreement to reduce impact of climate change and green house emission was Kyoto protocol. The Kyoto Protocol is an international treaty which extends the 1992 United Nations Framework Convention on Climate Change (UNFCCC) that commits state parties to reduce greenhouse gas emissions, based on the scientific consensus that global warming is occurring and it is extremely likely that human-made CO₂ emissions have predominantly caused it.

The Kyoto Protocol implemented the objective of the UNFCCC to reduce the onset of global warming by reducing greenhouse gas concentrations in the atmosphere to a level that would prevent dangerous anthropogenic interference with the climate system [5] The main goal of the Kyoto Protocol is to control emissions of the main anthropogenic (human-emitted) greenhouse gases (GHGs) in ways that reflect underlying national differences in GHG emissions, wealth, and capacity to make the reductions. According to the treaty, in 2012, Parties who have ratified the treaty must have fulfilled their obligations of greenhouse gas emissions limitations established for the Kyoto Protocol's first commitment period (2008–2012).

The ultimate objective of the UNFCCC is the stabilization of greenhouse gas concentrations in the atmosphere at a level that would stop dangerous anthropogenic interference with the climate system [41] Parties succeed in meeting their first-round commitments, much greater emission reductions will be required in future to stabilize atmospheric GHG concentrations. For each of the different anthropogenic GHGs, different levels of emissions reductions would be required to meet the objective of stabilizing atmospheric concentrations. In order to meet the objectives of the Protocol, Parties are required to prepare policies and measures for the reduction of greenhouse gases in their respective countries. In addition, they are required to increase the absorption of these gases and utilize all mechanisms available, such as joint implementation, the clean development mechanism and emissions trading, in order to be rewarded with credits that would allow more greenhouse gas emissions at home.

Generally, there are different international negotiations and bargaining strategies on Kyoto, Paris agreement in order to reduce impact of climate change. Even though, different convention and agreement have has been signed on negotiations and bargaining strategies on Kyoto protocol agreement. None of these negotiation and agreement did not concrete solution on climate change impacts at global level. Due to this fact, in view of the above statements the review is interested to focus the international negotiations and bargaining strategies on Kyoto, Paris agreement and futures steps. Therefore, the specific objectives of this review paper are:

To review the importance of the international negotiations on climate change.

To highlight policy implication to focus on negotiation and bargaining strategies on Kyoto, Paris agreement.

2. Literature Review

2.1. International Reponses on Climate Change

According [44] suggestion recently the concerns of climate change is become warmed agenda among developed and developing countries. According ideas of this author, Promoting awareness by international organizations and nation-states of changes in the ecosystems and the destruction of natural resources initiated the attempts to address environmental concerns on a global scale. According [40] suggestion, different global organization such as United Nations Conference on Human Environment is global organization which is responding by establishing of the United Nations Environment Program (UNEP) which formed to minimize impact of climate change. [29] Also suggested, other international organization responding to climate change was UNEP, it is environmental assessment and research and monitoring, which is also played a role in placing the link between environment and development on the international agenda.

[21] Reported that a number of international conferences and agreements have been made on climate change including the Second World Climate Conference 1990, were held in the late 1980s and early 1990s. According to the ideas of this author, the conferences helped to raise international concern about the issue of climate change and its impact. Another international response on climate change is through Intergovernmental Panel on Climate Change (IPCC) which was established in 1988 by the UNEP and the WMO with the mandate to assess the state of existing knowledge about the climate system and climate change; the environmental, economic, and social impacts of climate change; and the possible response strategies [41].

According to [40] first assessment report, approving that human-induced climate change was indeed a threat and calling for a global treaty to address the problem. The United Nation conference is responded to these calls in 1990, officially launching negotiations on a framework agreement on climate change by its resolution [17] these negotiations were conducted by an Intergovernmental Negotiating Committee. Negotiators from 150 countries finalized the convention in 15 months and adopted by consensus the United Nations Framework Convention on Climate Change (UNFCCC) in New York on 1992. The Earth Summit became the largest ever gathering of Heads of States. Other agreements adopted at Rio were the Rio Declaration, the Convention on Biological Diversity and Forest Principles. The First World Climate Conference recognized climate change as a serious problem. This scientific conference explored how climate change might affect human activities and issued a declaration calling on the world's governments to foresee and prevent potential man-made changes in climate that might be adverse to the well-being of humanity. It also endorsed the establishment of the World Climate Program (WCP) under the joint responsibility of the World Meteorological Organization (WMO), the UNEP, and the International Council of Scientific Unions (ICSU).

According to [38] report, concentrations of greenhouse gases in the atmosphere have increased significantly due to human activities such as the combustion of fossil fuels. In the 1980s, the scientific evidence that such an increase would affect the global climate system grew and the call for concerted action at international level emerged. According to [23] report the aim of United Nations Framework Convention on Climate Change is to achieve stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. According the ideas of above authors the Convention emphasizes the common but differentiated responsibilities of the Parties, the principle of taking precautionary measures, and the importance of enabling economic development to precede in a sustainable manner.

This also defines the sectors and greenhouse gas source/sink categories for which emissions have to be estimated. The developed country Parties to which a commitment applies are listed in to the Protocol. Besides individual country Parties, it also includes the European Union as a separate Party with a reduction commitment of minus8%. A to the Protocol defines the greenhouse gases covered, i.e. carbon dioxide, methane (CH4), nitrous oxide (NO), sulphur hexafluoride (SF) and two groups of gases, hydro fluorocarbons (HFCs) and per fluorocarbons (PFCs). This also defines the sectors and greenhouse gas source/sink categories for which emissions have to be estimated.

As stated by [34], objective to stabilize the concentrations of greenhouse gases in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. [8] Suggested that Kyoto Protocol, which needs a limited number of developed country groups to bound or diminish their greenhouse gas emissions up to 2020, was adopted under the Convention In 1997. According [14] ideas, to address climate change more broadly, the Paris Agreement was negotiated and adopted in 2015. According to the ideas of above author, the agreement, which entered into force in 2016, requires climate change mitigation and adaptation actions from all Parties in the time period after 2020. Also [19] suggested that, goals of the Paris Agreement are to hold the increase in the global average temperature to well below 2°C above pre-industrial levels, to pursue efforts to limit this increase to 1.5°C, to increase the ability to adapt to the adverse impacts of climate change and to make finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development. [13] suggested the Paris Agreement, groups frequently communicate their Nationally Determined Contributions (NDCs) as part of the global response to climate change; the ambition of these contributions has to increase over time. The Paris Agreement also provides for a global stock take which assesses the collective progress of all Parties towards achieving the goals of the agreement.

In addition to Kyoto Protocol and its Paris Agreement, the other convection was the Montreal Protocol addresses emissions of certain greenhouse gases. The Kigali Amendment to the Montreal Protocol schedules the phase-down of hydro fluorocarbons, a group of gases which gained in importance as substitutes for ozone-depleting substances. According to [23] report transportation emissions of carbon dioxide from international aviation and shipping are also addressed by two specialized United Nations Agencies the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO). According [1] reports, other United Nations initiatives address the response to climate change, including the 2030 Agenda for Sustainable development. According to ideas of above authors, the developed country group to which a commitment applies to the Protocol. Besides individual country Parties, it also includes the European Union as a separate Party with a reduction commitment of minus 8%. Of the 39 Parties the United States did not ratify the Protocol and Canada withdrew from it in 2011 [4].

2.2. International Convection and Agreement on Climate Change

Kyoto protocol and Paris Agreement

The Kyoto Protocol targets to diminish emissions of countries slightly modified in a new by at least 5% below 1990 levels and in some cases 1995 levels in the period 2008-2012. Individually, these countries have separate commitments [19]. The European Union countries are collectively expected to reduce their emissions by 8%, the USA by 7% and Japan by 6%. Australia, Iceland and Norway are allowed to increase their emissions. The remaining countries are allowed varying levels of reduction. Also [38] suggested an important step; it falls short of what is needed to stabilize global concentrations of GHGs. The Protocol identifies policies and measures that can be taken by countries and quantified commitments for countries on six GHGs and reiterates other commitments.

There are also articles on meanings, procedures, nonconformity, argument resolve, modifications, extensions, voting, depository, signature and ratification, entry into force, reservations and withdrawals [32] According to ideas of different scholars 1997 Kyoto Protocol permits combined implementation with crediting among the developed country group [11] Different countries establishes a Clean Development Mechanism which aims at enabling projects in developing countries to achieve sustainable development, contribute to the ultimate objective of the Convention and assist developed countries in complying with their quantified emission reduction and limitation commitments.

Under the Protocol, countries with commitments are also allowed to participate in emission trading among them. Such schemes call for the division of a budget of permissible emissions among countries. Those countries that do not use their complete share may sell the unused portion to those who need them. In the KP, the assigned amounts (or quotas) have been allocated to the developed countries and the quotas are equivalent to their emission reduction commitments. The

underlying rationale of these co-operative mechanisms is to ensure that global emissions of greenhouse gases are reduced in a cost-effective manner in line with the principles in Article 3 of the FCCC. In order to support the achievement of its objectives, the UNFCCC provides for the adoption of protocols. Following the entry onto force of the Convention, the Kyoto Protocol was accepted by the Conference of the Parties in Kyoto in 1997 (UNFCCC 1998). The Kyoto Protocol necessary to industrialized nation Parties to limit or diminish their greenhouse gas emissions. The declines or restrictions agreed for the leading obligation period (2008-2012) were slightly below the emissions levels of 1990 in most cases, and for some countries they constituted an increase Compared to 1990.

The remaining Parties to the Kyoto Protocol achieved their requirements in the Protocol's leading obligation period. The Kyoto Protocol permits states to attain their release declines or restrictions by three carbon market mechanisms: Under the Clean Development Mechanism (CDM), industrialized states were permitted to use licensed emission diminutions from mitigation projects in emerging states to attain their obligations. Under Joint Implementation (JI), industrialized nations were permitted to get emission reduction units causing from developments in other industrialized Additionally, industrialized nations could transfer parts of their assigned emission budgets to other developed countries. As the first commitment period of the Kyoto Protocol ended in 2012, countries agreed on a second commitment period at the climate change conference in Doha in 2012. The so-called Doha Amendment to the Kyoto Protocol [41, 42] commits a restricted number of developed country Parties to limiting or reducing their emissions in a second commitment period from 2013 to 2020.

[24] Suggested that, even though, large emitters of greenhouse gases are industrialized nation like the Russian Federation or Japan but they did not assume a commitment for this period, emissions reductions under the Doha amendment are mainly achieved through the commitment of the European Union to decrease its greenhouse gas emissions by 20% compared to 1990, in line with the climate and energy package [3] The Kyoto Protocol stipulates that modifications to the Protocol enter into force only after acceptance by at least three fourths of the groups to the Kyoto Protocol. Overall, only a restricted share of the world's emissions were covered by commitments under the first commitment period of the Kyoto Protocol, and an even lesser ratio is covered in the next obligation period. In contrast, the groups to the Paris Agreement which cover the vast majority of global emissions [6].

2.3. International Negotiation on Climate Change

There are a number of international organizations and countries responding on climate change, the Conference of the Parties (COP) became the convention's ultimate authority which is in indicator of international response on climate change [14]. According to ideas of different studies the agreement's made by group have responsibility to meet on

conference annually, in the conference of the parties to monitor its implementation and continue discussing how to tackle best climate change. According to study done by [34], COP's decisions also make up for the effective implementation of the convention. According to this study, the Conference of parties held its first session in Berlin since 1995. The other study done by Bodle, Donat & Duwe is suggested that the conference was agreed that the commitments contained in the convention for developed countries were inadequate and the conference launched the Berlin mandate talks on extra obligations [6].

[42] Suggested that, one of the international treaties responding on climate change is the Kyoto Protocol which was adopted at the Paris conference in 1997, as a result of the decision of leading conference of groups/parties intention to reinforce the agreement. Following to Paris conference, the quarter conference of the Parties held in Buenos Aires, Argentina, since 1998, this conference agreed a two-year Plan of Action, for finalizing the Kyoto rulebook. The other conference concerning Kyoto protocol was Bonn conference which the agenda of this fifth conference of the Parties which took place in 1999 was based plan of action [10].

Damro and Méndez [11] Reported that, adoption of the Kyoto Protocol greenhouse gas emissions from developing countries, most notably from China, have increased rapidly. [17] Also have reported, worldwide obligations on the Kyoto Protocol comprise a inadequate number of developed countries only, the global community organized a replacement to the Kyoto Protocol, which would comprise mitigation obligations by a superior collection of countries. According to the Damro And Méndez [11], report the leading main effort completed in a disappointment at COP15 in Copenhagen in 2009, where nation state only took note' of a document that placed out principles for intentional donations in the period up to 2020. The following conferences focused on an agreement that would permit Parties to determine their contributions in a bottom-up approach, but would have legal force and would require all Parties to contribute to its mitigation goals [13].

Climate change negotiations on Paris agreement came to a closure in 2015, the same year the and the Sendai framework for disaster risk reduction were adopted [7] According to this idea, the significant conference, Conference of parties in Paris was preceded by announcements by many countries to contribute to climate change mitigation the so called planned countrywide determined contributions. [33] Suggested that, more than 150 leaders of the countries and government attended a high-level event on the first day of the Paris conference. Despite the positive momentum that had been built ahead of the conference, negotiators still had to resolve a number of key issues such as how to find a balance between ambitious action and the needs of developing countries, and how to enshrine increased ambition over time in the agreement [6].

Paris Agreement

The first main effort completed in a disappointment at COP15 in Copenhagen in 2009, where countries only took note of a article that laid out principles for intentional

contributions in the period up to 2020 [14]. The subsequent negotiations focused on an agreement that would allow Parties to determine their contributions in a bottom-up approach, but would have legal force and would require all Parties to contribute to its mitigation goals. The negotiations on this agreement came to a closure in 2015, the same year the SDGs and the Sendai framework for disaster risk Reduction were adopted. The decisive conference, COP21 in Paris was preceded by announcements by many countries to contribute to climate change mitigation the so called intended nationally determined contributions.

More than 150 heads of state and government attended a high-level event on the first day of the Paris conference. Despite the positive momentum that had been built ahead of the conference, negotiators still had to resolve a number of key issues such as how to find a balance between ambitious action and the needs of developing countries, and how to enshrine increased ambition over time in the agreement. Events reached an agreement on 12 December 2015 adopting the Paris Agreement and the first international agreement requiring climate change mitigation and adaptation action from all Parties (UNFCCC 2015). While Each Party decides the Degree of its action (the bottom-up approach of the nationally determined contributions), the Paris Agreement also includes overall lawful duties that apply to all Parties, Thus establishing a shared rules-based system (top-down approach).

Negotiation and bargaining power of Ethiopia on climate change

According to [43] sugestion emerging nations including Ethiopia implement global negotiations establish of two essential mechanisms to improve their success through negotiations: capitals and conduct. Also [35] reported that the developing they can progress their negotiation capitals by formulating and recruitment their assignments with skilled representatives, by containing external experts from academia or the non-governmental sector in the hope to increase their power. On the other hand they can choose a certain negotiation behavior with which they try to realize their negotiation goals and find a solution for the negotiations.

According to [22] study, bargaining approaches comparatively slight systematic knowledge on the use of bargaining resources and choice of strategies in global and in particular climate change negotiations. Different studies have investigated certain aspect of negotiation behavior such as the choice of strategies or they have discussed why states organize side events or include in their delegations [23] According to the ideas of above authors the negotiation resources and negotiation activities in particular strategies which were used by the governments participating the UNFCCC negotiations in Copenhagen 2009.

The study can show that negotiation activities such as involvements are used to reimburse for a lack of resources which is a new insight in the sphere of global negotiation resources. Besides, the study examines the choice of negotiation strategies which structural, domestic and delegation-specific variables determine the choice of a

negotiation strategy [19] The Copenhagen UNFCCC negotiations were characterized by the high expectations policymakers, the public and the media held before the summit and the disappointing lowest common-denominator outcome at the end of two intense negotiation sessions [4].

The major environmental negotiation gathering ever involved a lot of attention since it was suggested that the future of the global climate was to be decided at this event [37]. The Importance of this climate summit was illustrated by the 40000 participants and by the unusual length the heads of states were actually debating. Generally in such events the two or three last days are reserved for the government leaders to negotiate, in Copenhagen it was a whole week. Too many extreme positions, a too ambitious negotiation goal and lack of transparency during the negotiations were cited a reason for the negotiation failure. This underlines that the actual course of negotiations, the bargaining strategies and diplomatic resources are thought to have an effect on the outcome of negotiations [19].

Bargaining strategies

According to [37] reports, group recognized the adaptation strategies Fund allocation started in 2001 under the Kyoto Protocol. The Adaptation capitals concrete adaptation schemes and programs in emerging nation groups that is principally exposed to the contrary effects of climate change. The capital is partly funded by a 2% portion of proceeds from emission reductions (CERs) certified from Development Mechanism (CDM) projects. However, given the current low value of CERs, the Adaptation Fund has had insufficient resources and has resorted to fundraising through voluntary contributions from developed country Parties [22] Germany, currently the biggest contributor to the Adaptation Fund, donated EUR 50 million in 2014. With this contribution, the Fund has approximately USD 147 million available to fund projects.

The Adaptation Fund permits Parties to access capitals directly through national implementing entities [7] This direct access is intended to better target local priorities and to increase the speed of delivery of the funds. According to this idea, the adaptation fund is now the only basis of funding for adaptation under the UNFCCC and Kyoto Protocol that does not entirely depend on voluntary donations from industrialized nations. Once operationalized, the Green Climate Fund (GCF) will be an additional source for adaptation financing.

There are two types of bargaining strategies [43] According to above authors, this bargaining approach is said to be distributive bargaining and the other as integrative bargaining. The above study is stated that the simplest form of negotiation is distributive bargaining. Here one party wants one item from the other which is called win-lose situation. Also those authors suggested that in this situation it is likely that one wins at the cost of the other and in such negotiations, each party has an ambition situation and a reserve position. Agreement normally falls between the two reserve positions of the two Parties.

Consensus on article was only likely because Parties were able to sufficiently balance the interests of developed

countries who wanted to expand the donor base) and developing countries who require support for mitigation and adaptation [18] key element of this balance is the recognition that the mobilization of climate finance deploying various sources of climate finance beyond public funding from developed country Parties that are mobilized by public climate finance, will be crucial for achieving the goals of the Paris Agreement [33].

According to [3], Ethiopia is putting in place the building blocks essential to implement the Climate-Resilient Green Economy strategy. The government's action plan contains setting up a perpetual financial mechanism, continuing the participant assignation procedure, and prioritizing and sequencing segment specific initiatives in detail. According to this author, the government is using significant resources to develop and implement the green economy strategy and welcomes partnerships with development partners engaged in combating climate change as well as contributions by the private sector. Institutions are in place to enable the successful implementation of the strategy [30].

Ethiopia is dedicated to construct a climate-resilient green economy. Its design to do so encompasses activities to reduce greenhouse gas emissions while protecting economic growth green economy as well as adaptation initiatives to reduce exposure to the effects of climate change climate resilience [36] According to [3] reports, all the emission reduction initiatives that have been identified were fully implemented, Ethiopia would Limit emissions to current levels in absolute terms and reduce per capita emission ns from 1.8 to 1.1 t CO2 while achieving middle-income status before 2025. In parallel, those sectors of the economy most vulnerable to the hazards of climate change have been identified for prioritized regional adaptation plans: agriculture, health, water and energy, buildings, and transport [25] Ethiopia is already pursuing large-scale afforestation and reforestation and is developing further adaptation initiatives to increase climate resilience through support for natural ecosystems and a green cities approach to urbanization.

Implementation strategies

Study done by [29] on impoortance of REDD+ is a type of global compensation for developing nation which support to ecosystem services. According above author industrialized nations, finance global funds, or private companies offer financial or other benefits to emerging states, societies to take action to reduce carbon emissions from deforestation and forest degradation. According [16] reports, countries that still have much of their forests intact, benefits may come from keeping these forests standing and continuing to store carbon. Also according to above report, countries with high rates of deforestation cutting many trees each year benefits could be paid for stopping deforestation practices and renovating degraded forests. [12] Suggested by reducing the amount of CO2 released into the atmosphere and conserving the forest, REDDS+ will help to mitigate climate change. Under UNFCCC, countries are negotiating REDD (reducing emissions from deforestation and forest degradation in developing countries) as an instrument that would provide motivations to emerging nations to carry out forest-based climate change mitigation actions.

Several states proved an instrument that offer motivations for fundamentally all land based forest mitigation measures, stated to as REDD+; this comprises decreasing emissions through decreasing deforestation and forest degradation, forest conservation, sustainable management of forests and improvement of forest carbon stocks. Thus far, REDD+ negotiations and national preparations have primarily focused on defining transparent monitoring, reporting and verification systems, and on forest governance and national policies and strategies for REDD+[28] While these are fundamental pillars for REDD+ construction, improving forest management practices will also be of major significance to reach the wanted objective of limitation emissions from deforestation and forest degradation and to conserve and enhance forest carbon stocks on the ground. Forest management will be fundamental to the successful implementation of national REDD+ strategies [16].

Increase carbon sequestration by forests and trees

Forests and trees are significant carbon sinks. They absorb carbon dioxide from the atmosphere and store it as carbon. Carbon sequestration by forests has attracted considerable interest as a mitigation approach, as it has been considered a comparatively cheap means of addressing climate change immediately. Around 13 million hectares of forest were converted to other uses or lost through natural reasons each year between 2000 and 2010. The world has an expected 850 million hectares of degraded forests, which could potentially be restored and rehabilitated to bring back lost biodiversity and ecosystem services, and, at the same time, contribute to climate change mitigation and adaptation (source).

Research done by [30] indicates the important interaction between carbon storage and sequestration by forests and changing temperatures and precipitation. On the one hand, the more carbon is stored in forests; fewer will be in the atmosphere. Increasing this stock will thus donate to decreasing the rate at which the global temperature is increasing. This relation has become tremendously significant in the climate change discussions and various tropical nations are preparing themselves to reduce emissions and increase forest carbon stock in order to capture part of the funding promised for GHG emissions reductions [15].

3. Conclusion

Now a day's one of the most challenges of the world is climate change. This challenge highly affect both developing and developed region of the world. Even though largest emitter of the greenhouse gases were developed countries for a long period they did not give attention for climate change. Recently since the issues of climate change is issues of the world, all international organizational and governments responding on climate in many different ways. One of the international responses on climate change is through Paris agreement. There are negotiations among different countries on adaptation and mitigation strategies of climate change. Ethiopia also one of the developing country signed

international agreement on climate change. From this agreements and Paris agreement on Kyoto protocol which aimed to reduce greenhouse gas emission. Developing nation like Ethiopia has bargaining power to confirm the mitigation and adaptation strategies to minimize the impact of climate change. These strategies require high capital implementation these adaptation and mitigation strategies. The Adaptation capitals concrete adaptation schemes and programs in emerging nation groups that is principally exposed to the contrary effects of climate change. Ethiopia also accepts international negotiation on Kyoto protocol agreement and implementing this agreement. One of the strategies is construction of a climate-resilient green economy. Its design to do so encompasses activities to reduce greenhouse gas emissions while protecting economic growth green economy as well as adaptation initiatives to reduce exposure to the effects of climate change climate resilience.

Ethiopia is also putting in place the building blocks essential to implement the Climate-Resilient Green Economy strategy. The government's action plan contains setting up a perpetual financial mechanism, continuing the participant assignation procedure, and prioritizing and sequencing segment specific initiatives in detail. This strategies implemented by its own sequential step and supported by different national International organization like REDD+ and.

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References

- [1] Adane Tuffa, Alemu Mekonnen, Zenebe Gebreegziabher, and Assefa Seyoum (2012) Climate Conventions and Africa/Ethiopia.
- [2] Afeworki H. Mesfin and Adam Bekele (2018) Farmers Perception on Climate Change and Determinants of Adaptation Strategies in Benishangul-Gumuz Regional State of Ethiopia.
- [3] Authority, Environmental Protection (2011) Ethiopia's Climate Resilient Green Economy Strategy: The path to sustainable development.
- [4] Bailer (2012) Strategy in the climate change negotiations: Do democracies negotiate differently?
- [5] Bellassen & Valentin (2016) Compliance of the Parties to the Kyoto Protocol in the first commitment period". Climate Policy.
- [6] Bodle, Donat & Duwe (2016) The Paris Agreement: Analysis, Assessment and Outlook.
- [7] Cameron, et al (2016) The Paris Agreement What It Means For Business.

- [8] Chazournes (2008) Kyoto Protocol To The United Nations Framework Convection On climate changeC.
- [9] COM (1999)"Preparing for Implementation of the Kyoto Protocol".
- [10] Cutajar, M. Z (2004) Reflections on the Kyoto Protocol Looking Back to See Ahead International: Review for Environmental Strategies r Environmental Strategies, Vol. 5, No. 1, pp. 61–70, 2004.
- [11] Damro And Méndez (2016) The Kyoto Protocol's Emissions Trading System: An Eu-Us Environmental Flip-Flop.
- [12] Deborah, et. al (2007) sustainable forest management as a strategy to combat climate change: lessons from mexican communities 3rd ed. mexico city: CCMSS. pp. 57: 454.
- [13] Duwe, M (2016) The Paris Agreement: Analysis, Assessment and Outlook.
- [14] Falkner (2016) The Paris Agreement and the new logic of international climate politics.
- [15] FAO (2012) Forests and Climate Change Working Paper 10 ROME.
- [16] FAO (2010b) working with countries to tackle climate change through sustainable forest management, Brussels.
- [17] Ferdinand, B (2000) 'The Kyoto Negotiations on Climate Change: An EconomicPerspective,' Energy Sources 22: 481-496.
- [18] Fernández, C. G. (2015) Climate change adaptation strategies and mitigation policies.
- [19] Flannery, B. P. (2015) The state of climate negotiations.
- [20] Gedefaw, Girma, Denghua and Agitew (2018) Farmer's Perceptions and Adaptation Strategies to Climate Change, Its Determinants and Impacts in Ethiopia: Evidence from Qwara District. Gonder.
- [21] Gupta, J (2000) A Survival Guide for Developing Country Climate Negotiators.
- [22] HARSTAD (2019) Pledge-and-Review Bargaining.
- [23] Henrik & Judith (2018) International Climate Negotiations.
- [24] Hirono & Schröder (2004) The Road to and from the Kyoto Protocol: The Perspectives of Germany and Japan.
- [25] INDC (2016) Intended Nationally Determined Contribution of the FDRE.
- [26] IPCC. (2001). Climate change impacts, adaptation and vulnerability. IPCC.
- [27] Laurence (2007) Forests and Climate Change: adaptation and mitigation. Wageningen, The Netherlands: Tropenbos International, Maria, B. and Daniel, M. 2010. Harnessing Forests for Climate Change Mitigation through REDD+.
- [28] Locatelli, et. al (2008) Facing an Uncertain Future: How Forests and People can Adapt to Climate Change. Forest Perspectives, 5. CIFOR, Bogor, Indonesia.
- [29] Lorenz MOOSMANN, Cristina URRUTIA, Anne SIEMONS, Martin CAMES, Lambert SCHNEIDER. (2019). International Climate Negotiations.

- [30] MoEF. (2015). Second National Communication to the United Nations Framework Convention on Climate Change (UNFCCC).
- [31] National Research Council (2011) Climate Stabilization Targets: Emissions, Concentrations.
- [32] NEIER, NEYER& RADUNSKY (2018) International Climate Negotiations.
- [33] Seo, N (2016) Beyond the Paris Agreement: Climate change policy negotiations and future directions.
- [34] Stavins & Stowe (2016) The Paris Agreement and Beyond: International Climate Change Policy Post-2020.
- [35] UNDP (2015) Capacity Building for SIDS Climate Change Negotiators Guidance Manual. United.
- [36] UNECA (2015) Inclusive Green Growth in Ethiopia: Selected case studies.
- [37] UNEP (2006) UNEP Manual on Compliance with and Enforcement of MEAs.
- [38] UNFCCC. (1997). Kyoto Protocol. Retrieved August 3, 2005, from.
- [39] UNFCCC (2002) A Guide To The climate change convection process.

- [40] UNFCCC (2007) United nation Frame work convection climate change Impact.
- [41] UNFCCC (2011) Kyoto Protocol to the United Nations Framework Convention on Climate ChangNations Framework Convention on Climate Change.
- [42] United Nation (2008) Kyoto Protocol To The United Nations Framework Convection On climate change.
- [43] Valeria, Giorgia & Mariangela (2015) Interpreting bargaining strategies of developing countries in climate negotiations A quantitative approach.
- [44] Wakjira (2018) Climate change mitigation and adaptation through biotechnology approaches: a review.

Biography



Haile Tamiru Urgessa was graduate by Masters of Science in Agricultural Economics from wollega University in 2016. And employed in Bule Hora University as a lecturer and still serving as instructor and head department of Agricultural Economics.