



Key Research Findings

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Research Title: The concept of NDC
(Nationally Determined Contribution) in Paris
Agreement: Why do Brazil, China, India and
Bangladesh understand it differently?

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1. Background

Climate change has many grim security consequences¹ that pose severe existential threat to life on earth. The phenomena of acute food scarcity, inability to exploit natural resources by States, territory loss due to rising sea level, development instability, fierce competition to take control of shared international resources etc will be the key impacts of climate change in future. Eventually it will lead us to international conflict of unthinkable magnitude.² To tackle the climate change Parties to the UNFCCC adopted Paris Agreement in 2015. It is a legally binding agreement, its scope is global, it puts all Parties under same core obligations, the goal it pursues is long-term and the architecture upon which it is built on is durable.

The blood circulator of the Paris Agreement is ‘Nationally Determined Contribution’ or NDC by which the high contracting Parties are supposed to express the quantified amount of their respective contribution in the fight against climate change through mitigation actions and adaptation strategies. But big countries and big emitters like Brazil, China and India and a climate vulnerable densely populated country Bangladesh submitted their 1st NDCs, the content of which are not easily comparable. In some cases, information provided in NDCs lacks clarity and transparency which make the achievement of the objective of UNFCCC and goal of the Paris Agreement more challenging.

2. Problem Statement/ Research Question

The submitted 1st NDCs by Brazil, China, India and Bangladesh under Paris Agreement show that they have conceptualized it differently. It means and indicates that Paris Agreement suffers from legal clarity and the term ‘Nationally Determined Contribution’ or NDC needs to be demystified and made specific.

3. Research Objectives

The aim of this research is to critically analyse the NDCs of Brazil, China, India and Bangladesh and examine whether relevant COP decisions and the Paris Agreement under UNFCCC regime have been able to clarify the term ‘Nationally Determined Contribution’ to warrant harmonized action in the spirit of mutual trust and confidence from the Parties to combat climate change where international cooperation is critical for achieving below 2⁰C

¹ UNGA ‘Climate change and its possible security implications: Report of the Secretary-General’ (2009) UN Doc A/64/350.

² *ibid* 1.

temperature goal. In other words, whether the Paris Agreement suffers from any legal clarity in relation to defining the length and breadth, content and scope of NDCs in consequence of which Parties might understand it differently resulting in incompatible NDCs sounding discords and triggering failures in individual as well as collective actions against climate change.

The objectives of this research are (a) to identify the goals and mechanisms of the Paris Agreement and their relationship with NDCs and to show how realization of those goals and success of mechanisms are impacted by well-defined NDCs; (b) to identify and explain the true parameter of Nationally Determined Contribution analysing UNFCCC, Paris Agreement and different decisions of the Conference of the Parties (COP) and Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) and assumes what actually Paris Agreement wants to include in NDCs; (c) to assess 1st NDCs of Brazil, China, India and Bangladesh focusing on the similarities and dissimilarities of the first NDCs submitted by those countries. The comparative study of these NDCs will determine what are lacking in them and what are still required to be done to make them compatible with each other; (d) to illustrate NDCs in the context of sustainable development by shading light on what should be an ideal model of NDC in the context of not only climate change but also sustainable development; (e) to expound NDCs in the context of energy security by focusing on measures relating to building renewable energy infrastructure which can buttress energy security when fossil fuels and other traditional fuels are abandoned in compliance with climate goals; (f) to show the lack of legal clarity in Paris Agreement that has led Parties to different understanding of their NDCs which might result in incomparable NDCs again focusing on and analysing different Articles of the Paris Agreement and particularly Article 4.

4. Research Methodology

In conducting this research mainly literature review has been resorted to. Analysing UNFCCC, Kyoto Protocol, Paris Agreement and different decisions of the Conference of the Parties (COP) and Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) along with various assessment reports of the IPCC that provided guidance over what is required to be done to reduce anthropogenic greenhouse gas emissions, findings have been reached at.

The submitted 1st NDCs of Brazil, China, India and Bangladesh have been examined to shed light on what should be an ideal model of NDC in the context of not only climate change but also sustainable development and energy security.

Finally focusing on and analysing different Articles of the Paris Agreement particularly Article 4, 6 and 13 the term Nationally Determined Contribution (NDC) has been explained and showing that there is a lack of legal clarity as to what should it contain a set of recommendations has been made. In this regard Katowice Climate decision at COP 24 has been analysed.

5. Findings and Discussions

5.1 Goals and mechanisms of the Paris Agreement and their relationship with NDCs

Paris Agreement was crafted in a way so that there remains no room for unfettered emissions by some countries whereas some other countries' emissions were restricted. Unlike Kyoto Protocol, goal of the Paris Agreement is set in terms of holding global mean surface temperature (GMST)³ increase to well below 2°C above pre-industrial levels, though the Parties are encouraged to strive for limiting the increase, employing all their respective means, to 1.5°C above pre-industrial levels.⁴ The temperature goal is to be realized under Paris Agreement in the context of 'sustainable development' and 'eradication of poverty'.⁵ Increasing adaptation ability, making parties climate resilient and developing capabilities to emit low GHGs while keeping food production secured are the further goals enumerated in Paris Agreement.⁶

Paris Agreement recognizes under Article 6 voluntary cooperation among the Parties to implement their NDCs. Integrated, holistic and balanced non-market approaches are required to be made available to the Parties in implementing their NDCs through, inter alia, mitigation, adaptation, finance, technology transfer and capacity building.⁷

³ Ross J. Salawitch, Timothy P. Canty, Austin P. Hope, Walter R. Tribett, Brian F. Bennett, *Paris Climate Agreement: Beacon of Hope* (Springer 2017) 118.

⁴ Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016) FCCC/CP/2015/10/Add.1, Annex (Paris Agreement) art 2.

⁵ *ibid.*

⁶ *ibid* art 2(b).

⁷ *ibid* art 6.8.

A well-defined NDC should contain information about the intention of the Party concerned whether it wants to avail mechanism described in Article 6 of the Paris Agreement for mitigation actions. NDCs of EU, Brazil and Bangladesh clearly provide information in this regard, but that of China and India have not clarified it. An NDC reflecting a clear roadmap for mitigation actions and adaptation strategies identifying priorities of the country Party in accordance with its national circumstances for achieving the ultimate objective of Paris Agreement can trigger international cooperation among the Parties in a non-market approach. In this regard Annex I of decision 4/CMA.1 (hereinafter CMA1D4AI)⁸ is required to be followed by the Parties.

5.2 Nationally Determined Contribution: what needs to be included in it

It will not be an exaggeration if NDC is termed to be the basic pillar of the Paris Agreement upon which the whole edifice of the instrument has been built. It is the NDC that will steer, guide and stimulate the future course the UNFCCC regime.

‘Lima Call for Climate Action’⁹ at para 14 enumerates few of the elements required to be included in ‘Intended Nationally Determined Contribution’ or INDCs even before adoption of Paris Agreement (an INDC becomes an NDC upon ratification of Paris Agreement by the relevant state Party)¹⁰. They are:

‘[Q]uantifiable information on the reference point (including, as appropriate, a base year), time frames and/or periods for implementation, scope and coverage, planning processes, assumptions and methodological approaches including those for estimating and accounting for anthropogenic greenhouse gas emissions and, as appropriate, removals, and how the Party considers that its intended nationally determined contribution is fair and ambitious, in light of its national circumstances, and how it contributes towards achieving the objective of the Convention as set out in its Article 2’

The call for INDC submission can be traced back in Decision 1/CP.19 para 1(b) but Lima Call for Climate Action for the first time provided the guideline for preparing INDCs.

⁸ CMA1D4AI para 5(g).

⁹ UNFCCC, ‘Report of the Conference of the Parties on its twentieth session, held in Lima from 1 to 14 December 2014’ (2 February 2015) FCCC/CP/2014/10/Add.1 Decision 1/CP.20.

¹⁰ UNFCCC, ‘Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015’ (29 January 2016) FCCC/CP/2015/10/Add.1 Decision 1/CP.21 para 22.

In the Paris Agreement first mention of NDC is found in Article 3 which describes it as an ‘ambitious efforts’ by the Parties to achieve the target stated in Article 2. Article 4 contemplates Parties will take steps to peak their GHG emissions without delay and thereafter rapid reductions will follow creating a balance between human induced emissions of GHGs by sources and removals by sinks in the last fifty years of this century.¹¹ It inevitably follows that NDCs should contain list of all emission sources and sinks that remove GHGs within the territorial jurisdiction of a country Party. It should also contain domestic mitigation measures,¹² an explanation as to why such mitigation measures should be considered as the highest possible ambition¹³ of the concerned Party and description of national circumstances¹⁴ under which such measures have been taken. Further, it should comprise of statement as to whether these mitigation measures are economy-wide or not¹⁵. Information in NDCs should be provided in a manner that ensures ‘clarity, transparency and understanding’ of it.¹⁶ Future CMAs have been given power to take decision on the further content of an NDC.¹⁷

Now, if we look back to the hint given by Article 3 of the Paris Agreement, we will see information relating to adaptation, climate finance, technology development and transfer, capacity building and transparency arrangement of a Party provided respectively in Articles 7, 9, 10, 11 and 13 of the Paris Agreement, should also be the elements of an NDC.

5.3 An assessment of 1st NDCs of Brazil, China, India and Bangladesh:

Brazil, China and India are the three big emitters of GHGs. On the other hand, Bangladesh is one of the climate vulnerable densely populated countries. These four countries submitted their respective INDCs pursuant to the invitation made by Lima Call for Climate Action. This section will shade light on the information provided in these NDCs, compare them and identify whether they lack any material required for facilitating clarity, transparency and understanding.

¹¹ Paris Agreement art 4.1.

¹² *ibid* art 4.2.

¹³ *ibid* art 4.3.

¹⁴ *ibid* art 4.3.

¹⁵ *ibid* art 4.4.

¹⁶ *ibid* art 4.8.

¹⁷ *ibid* art 4.8.

The following Table1 shows how far these countries have followed the guideline of Lima Call for Climate Action in their respective INDCs turned NDCs.

Required Information in INDC	Brazil	China	India	Bangladesh
Quantifiable information on the reference point (including, as appropriate, a base year)	37% emission reduction below 2005 level in 2025 and 43% in 2030	reduction of emissions per unit of GDP by 60% to 65% from the 2005 level	reduction of emissions intensity of its GDP by 33% to 35% from 2005 level	5% (12 MtCO ² e) unconditional and 15% (36 MtCO ² e) conditional emission reduction from BAU levels
Time frames and/or periods for implementation	Single year target for 2025; indicative value for 2030	by 2030	by 2030	by 2030
Scope and coverage	Whole of Brazil, economy wide, including CO ₂ , CH ₄ , N ₂ O, PFCs, HFCs and SF ₆	CO ₂	No sector specific mitigation. Goal is to reduce overall emission intensity	100% territory of Bangladesh. Power, transport and industry sectors. CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs and SF ₆
Planning processes	Brazil's INDC is carried out under different National Policy and Law on Climate Change and planning processes	Not specifically mentioned. Intends to strengthen laws and regulation on climate change	Under the heading "India's Progression in Combating Climate Change" explained elaborately.	Mitigation objectives carried out under BCCSAP
Assumptions and methodological approaches including those for estimating and accounting for anthropogenic greenhouse gas emissions and, as appropriate, removals	Metric-GWP-100, inventory based approach in accordance with applicable IPCC guidelines	Not mentioned.	Not mentioned.	GWP-100, following revised IPCC 1996 guidelines

Required Information in INDC	Brazil	China	India	Bangladesh
How the Party considers that its INDC is fair and ambitious in light of its national circumstances	Explained in additional information	Not explained	Explained under the heading “Consideration on Fairness and Ambition”. Also explained national circumstances.	Explained under the heading ‘Fair and ambitious goal’
How it contributes towards achieving the objective of the Convention as set out in its Article 2	Not specifically mentioned.	Not specifically mentioned except peaking emissions in 2030 or earlier.	Not specifically mentioned	Not specifically mentioned

Table1. Comparison of four NDCs submitted by Brazil, China, India and Bangladesh.

Table1 clearly indicates that information relating to emissions reduction target provided by the four countries, though has been quantified, not expressed in common measurement unit. Brazil and Bangladesh provided required information relating to scope and coverage whereas China and India lack clarity in this section. Though none of the countries has described their ‘planning process’ under indicative heading, China has not mentioned their planning process specifically. China and India again did not mention what metric they had followed for estimating GHGs in their NDCs and China did not explain how it considered its NDC to be ‘fair and ambitious’. Finally, none of the countries has specifically identified how their NDCs contributed to achieving the objective of UNFCCC except a promise from China that it will peak its emissions in 2030 or earlier.

5.4 NDCs in the context of sustainable development

All activities under UNFCCC and subsequent legal instruments adopted within the framework of it are to be conducted in the context of sustainable development with special emphasis on eradication of poverty and ensuring food security.¹⁸ In 2015 UN set seventeen goals with 169 targets to achieve sustainable development in economic, social and

¹⁸ UNFCCC arts 2, 3; Kyoto Protocol arts 2, 10, 12; Paris Agreement preamble art 2, 4, 6 and 7.

environmental dimensions¹⁹ by the world community by 2030 with a focus on people, planet, prosperity, peace and partnership in a declaration of plan of action commonly known as UN 2030 Agenda.²⁰ UN 2030 Agenda acknowledges that for reducing GHGs through mitigation and increasing resilience against the catastrophic effect of climate change through adaptation ‘widest possible international cooperation’ is required.²¹ NDC of individual country can play a central role in triggering international cooperation in achieving SDGs as well as climate goals. But failure to integrate SDGs in NDC information requirement by COP 24/CMA.1 is very unfortunate. It is the UNFCCC regime who is required to take lead in making Paris climate goal achievable while integrating SDGs in Parties NDCs. A model NDC should include precise information about all 17 SDGs implementation while pursuing mitigation and adaptation actions.

5.5 NDC in the context of energy security

In 2010 fossil fuel combustion alone constituted 69% of total global GHG emissions.²² A low carbon pathway induced by deep emission reduction essentially calls for abandonment of fossil fuel energies in all their forms. The void place, obviously, cannot be kept empty. Renewables should be proper replacement of fossil fuel energy. Parties to Paris Agreement need to state firm commitment for renewables in their NDCs. Paris Agreement has failed to address this aspect by not making any reference to renewables in its body let alone making it a component of NDC.

5.6 Lack of legal clarity in Paris Agreement leading to difference in understanding NDC

Article 4(2) of the Paris Agreement binds the Parties to an ‘obligation of conduct’ of preparing, communicating and maintaining successive mitigation NDCs which they aim to achieve, but not to an ‘obligation of result’.²³ During Paris negotiation the idea of making ‘obligation of result’ mandatory for the Parties for NDC implementation was advocated by many Parties including EU, SIDS and members of the CDPA but it was vehemently opposed

¹⁹ UNGA ‘Transforming Our World: The 2030 Agenda for Sustainable Development’ (2015) UN Doc A/RES/70/1 (UN 2030 Agenda) para 2.

²⁰ UNGA ‘Transforming Our World: The 2030 Agenda for Sustainable Development’ (2015) UN Doc A/RES/70/1 (UN 2030 Agenda) preamble.

²¹ *ibid*) para 31.

²² Harro van Asselt, Kati Kulovesi, ‘Seizing the opportunity: tackling fossil fuel subsidies under the UNFCCC’ (2017) 17 *Int Environ Agreements* 357, 358.

²³ Lavanya Rajamani and Jutta Brunnée, ‘The Legality of Downgrading Nationally Determined Contributions under the Paris Agreement: Lessons from the US Disengagement’ (2017) 29 (3) *Oxford Journal of Environmental Law* 537, 541-542.

by big emitters like USA, China and India.²⁴ Consequently, Paris adopted a path where NDC implementation is not binding, but Parties are expected to implement it in good faith.²⁵ However, failure to achieve target in NDC would trigger accountability provisions under Paris Agreement's transparency framework.²⁶

Within the 'hard law-soft law' approach of Paris Agreement Article 4.8 uses an auxiliary verb 'shall' in it meaning it is mandatory legal obligation of the Parties that they submit their NDCs providing information necessary for clarity, transparency and understanding. This Article also mandates CMA to take decisions as to what information is necessary in NDCs without prejudicing the effect of the auxiliary verb 'shall' occurring in it. The consequential equation is decision taken by CMA in this regard is also legally binding for the Parties. Therefore, CMA1D4AI is required to be followed by the Parties in preparing their NDCs. But decision 4/CMA.1 in its para 7 'decided' that Parties are to follow Annex I in their second and subsequent NDCs and 'strongly encouraged' Parties to follow it if they decide to update their first one. This is frustrating because information in 1st NDC of most of the Parties is so vague that pursuing climate goal and reviewing progress has become more challenging only for this.

It is noticeable that except further elaborating the components of an NDC enumerated in paragraph 14 of Lima Call for Climate Action, CMA.1 has largely failed to adopt and codify other elements of a 'fair and ambitious' NDC taking examples from different country Parties.

For example, Canada in its revised and updated 1st NDC²⁷ submitted in 2017 mentioned about special action that was being taken against a short-lived pollutant 'black carbon' which is not included in the gases covered by UNFCCC regime but significantly detrimental to Arctic.²⁸ This is a region specific special measure which Canada has voluntarily included in its NDC but it should have been made a specific requirement of an NDC by CMA1D4AI. Certainly, paragraph 3 of CMA1D4AI where requirements relating to 'Scope and Coverage' unfolded, did not mean to include it in NDCs.

²⁴ *ibid* 542.

²⁵ *ibid*.

²⁶ *ibid*.

²⁷ Canada, 'Canada's 2017 Nationally Determined Contribution Submission to the United Nations Framework Convention on Climate Change' (2017).

²⁸ *ibid* 1.

Another example is South African ‘peak-plateau-decline’ (PPD) trajectory. South Africa has indicated in its NDC when its emissions are going to peak, for how long they are going to be in plateau state and when they are going to decline.²⁹ China also in its NDC has indicated intention to peak around 2030 or earlier. CMA1D4AI in its para 7(b) has required this information but not in PPD style which is clearer and more transparent.

Developed country Parties are required to contribute to the Green Climate Fund (GCF) established by the decision 3/CP.17 prior to adoption of Paris Agreement. This fund is to serve as one of the financial mechanisms of Paris Agreement.³⁰ Developed Parties are required to communicate biennially information relating to mobilization of climate finance and financial resources they intend to provide to the developing country Parties to support their mitigation and adaptation efforts.³¹ But surprisingly, CMA.1 has not incorporated any information requirement about financial contribution of developed Parties while designing contents of an NDC.

All IPCC scenarios point that in addition to the measures taken for emission reduction, carbon capture and storage (CCS) can play a very strong role to achieve the 2°C target.³² Definitely, developed country Parties are in better position to implement CCS. They can also help developing country Parties by providing necessary financial assistance and transferring technology to implement CCS. Therefore, NDCs should reflect whether a country Party intends to adopt CCS as a mean to fight against climate change. But unfortunately, CMA1D4AI has not asked any information regarding this from the Parties in their NDCs.

Researchers have found that mitigation actions in countries have become challenging due to fossil fuel subsidies.³³ In 2015 fossil fuel consumption subsidies were more than two times higher than that of renewable energy.³⁴ This consumption subsidy accounted for 13% of global CO² emissions in 2014 whereas only 11% of global GHG emissions was covered

²⁹ South Africa, ‘South Africa’s Intended Nationally Determined Contribution (INDC)’ (2016) 6.

³⁰ Paris Agreement art 9.8.

³¹ *ibid* art 9.5.

³² Carlo Carraro, ‘A Bottom-Up, Non-Cooperative Approach to Climate Change Control: Assessment and Comparison of Nationally Determined Contributions (NDCs)’ (2016) 9 (5) *Journal of Sustainable Development* 175, 181.

³³ Harro van Asselt, Kati Kulovesi, ‘Seizing the opportunity: tackling fossil fuel subsidies under the UNFCCC’ (2017) 17 *Int Environ Agreements* 357, 359.

³⁴ *ibid*.

through all available emission trading systems on the planet at that time.³⁵ This figure is enough to provoke conviction that for a net zero world subsidy to fossil fuel energy is needed to be abolished. In NDCs the information as to how far the Parties are ready to reduce fossil fuel subsidy should be incorporated. This aspect has totally been ignored by CMA.1.

For clarity, transparency and understanding of an NDC as well as for easy comparison between and among NDCs for the purposes including global stocktake, extending support and reviewing progress a tabular format of NDC where all vital pieces of information are to be provided in a consistent manner, was required to be developed and adopted by the CMA.1, which they have utterly failed to do.

It was the demand of many developing countries in Katowice that NDC should include information relating to adaptation, technology, capacity building and finance.³⁶ This is actually what is hinted by Article 3 of Paris Agreement as discussed above. But developed countries insisted focusing on mitigation only.³⁷ This piecemeal approach might not be a suitable choice for many developing countries who lack capacity and finance for focusing on mitigation only. However, there is no bar to include these pieces of information in NDCs as per para 8 decision 4/CMA.1.

It seems that some of the Parties do not want to remove clouds of confusion covering NDC. The more the targets remain vague in NDCs, the less accountabilities of the Parties are ensured. Enhancing transparency framework of Paris Agreement may be a solution to this.

6. Contribution to the body of knowledge

International legal order is a complex devolved system lacking, in strict sense, legislature, judiciary and executive, the three must have branches of a functioning democracy.³⁸ Within the realm of international law sovereign States perform key roles and they cannot be forced to do anything if they do not commit themselves to do it.³⁹ In the wake of concerns of many giant countries in the world contents of NDC in legally binding Paris Agreement have been

³⁵ *ibid.*

³⁶ Wolfgang Obergassel and others, 'Paris Agreement: Ship Moves out of the Drydock' [2019] CCLR 3, 6.

³⁷ *ibid.*

³⁸ James R. May and J. Patrick Kelly, 'The Environment and International Society: Issues, Concepts and Context' in Shawkat Alam and others (eds), *Routledge Handbook of International Environmental Law* (Routledge 2015) 15.

³⁹ *ibid.*

made non-binding. Had the contents been made legally binding by embedding them in a treaty, possibility of higher ambition in it would have been increased.⁴⁰ Though in such case, the risk of expressing easy targets by the Parties in NDCs to avoid non-compliance with binding international legal obligations is very high.⁴¹

However, under Article 4.8 of Paris Agreement Parties are legally bound to provide necessary information for clarity, transparency and understanding their contributions. But non-alignment of Article 3 and 4 requirements of Paris Agreement with CMA1D4AI and consequential confusion might trigger preparing and submission of non-comparable vague NDCs in second round of NDC cycle too. Future CMAs need to address this issue so that Brazil, China, India and Bangladesh and all other Parties submit quantifiable information in their subsequent NDCs in the context of all 17 SDGs and energy security with a clear roadmap outlining how they address mitigation, adaptation, finance, technology development and transfer, capacity building and ensures transparency by accounting for their NDC progression.

7. Policy Implementations (be specific in implementing SDGs)

All 17 SDGs are interlinked. Achievement in one SDG has profound impact upon others. But the knowledge acquired through this research is directly connected with implementing SDG goal 7 i.e. “Affordable and Clean Energy” and SDG goal 13 i.e. “Climate Action”. An estimation by UNDP found energy responsible for 73% human caused GHGs. On the contrary as of 2017 worldwide 17.5% energy was generated through renewable sources.⁴² Therefore, reducing fossil fuel combustion and increasing renewable sources for energy by making commitment in NDC and implementing it would lead us to achieve SDG goal 7.

Every country in the world is experiencing the drastic effects of climate change. Global warming is changing our climate system so irreversibly that our very existence is at bay now. Disasters originated from change in climate system account for economic losses of hundreds of billions of dollars in every year. Between 1998 and 2017 disasters in different forms linked with climate change killed nearly 1.3 million people, and left 4.4 billion injured.⁴³ The

⁴⁰ Jonathan Pickering, Jeffrey S McGee, Sylvia I Karlsson-Vinkhuyzen and Joseph Wenta, ‘Global Climate Governance Between Hard and Soft Law: Can the Paris Agreement’s ‘Cre`me Bru`le`e’ Approach Enhance Ecological Reflexivity?’ (2019) 31 Oxford Journal of Environmental Law 1, 26.

⁴¹ *ibid.*

⁴² see < <https://www.undp.org/sustainable-development-goals>>

⁴³ *ibid.*

SDG goal 13 aims to mobilize US\$100 billion annually to address the needs of developing countries for adapting to climate change and invest in low-carbon development.⁴⁴

The knowledge acquired through the research would help me to contribute in climate action on behalf of my country Bangladesh while working in the different government departments, institutions, organizations, offices and courts as a government servant/judge.

8. Practical Implication of the knowledge acquired

With the research so conducted, I have gained detailed knowledge about Paris Agreement and how to prepare an NDC under it. I have also learnt how quantifiable information, time frames or periods for implementation, scope and coverage, planning processes, assumptions and methodological approaches including greenhouse gas emissions and removals can be provided in an NDC. I have acquired knowledge that an NDC should be fair and ambitious in light of the respective country Parties' national circumstances for achieving the objective of UNFCCC as set out in its Article 2 and Paris Agreement.

As a Judge in the subordinate judiciary of Bangladesh the knowledge so learnt will help me boost up my performance while working in the Environment Courts of the country.

9. How I am planning to utilize the acquire knowledge in service as well as in the development of the country

I am a Joint District and Sessions Judge working on deputation in the Supreme Court of Bangladesh. The acquired knowledge will assist me to help implement the policy of the government relating to clean energy and climate action by adjudicating disputes relating to this. Furthermore, I want to work on deputation in various government offices who work on SDG and renewable energy including the Office of the Honorable Prime Minister and the Sustainable and Renewable Energy Development Authority to contribute in the development of the country.

⁴⁴ *ibid.*