Paper for Presentation #3

Bangladesh's Final Argument Summary for Climate Change Negotiations

- Architecture: The objective of this post-Kyoto framework is to engage all countries of the world in the battle against climate change, collectively working to reduce climate change effects, increase adaptation and mitigation abilities, diminish climate change contributors, enhance climate change education, and facilitate universal sustainable socio-economic growth for current and future generations through the adoption of "common but differentiated responsibility¹ (CDR)." The timeline for this agreement should begin in 2013 and end in 2053, with 10-year budgetary or "reassessment" periods throughout the agreement, effective immediately in 2013. Furthermore, Bangladesh proposes an Annex structure divided into 4 groups based on each country's Human Development Index² (0-1) and Greenhouse Gas Emissions Value (0-1), which includes a weighted calculation of historical and future greenhouse gas (GHG) emissions. Bangladesh argues that this mechanism of indexing is appropriate because it identifies a country's ability to contribute to climate change adaption and mitigation actions, capacity for adaptation, and historical contributions to provide for equitable accountability in bearing the burden of costs. The Annex Structure is outlined as follows:
 - Annex I (2 0.91) Developed Countries (US, EU, Japan)
 - Annex II (0.9 0.65) Advanced Developing Countries (Russia, China, Brazil, S. Africa, Egypt)
 - Annex III (0.64 0.5) Developing Countries (Bangladesh, some Small Islands, Nigeria, Kenya)
 - Annex IV (<0.5) Least Developed Countries (some African and Small Island Countries)
- II. **Targets:** Rather than negotiate a specific emissions stabilization target, Bangladesh proposes a **system of binding emissions reduction targets below designated baselines for each Annex, accompanied by sectoral targets with flexibility mechanisms outlined in national schedules³ submitted by each country for Annexes I through III.** By mandating binding emissions reductions targets and sectoral targets, but allowing domestic planning of desirable and cost-effective ways to achieve these said targets, Bangladesh aims to maintain CDR, as well as, achieve higher compliance levels and lower enforcements costs. The Annex Systems would be designed as follows:

Annex I:

- **80% reduction in 2000 GHG emissions levels by 2053** with 20% reductions in every 10 years (60%-2043, 40%-2033, 20%-2023)
- 50% increase in renewable energy use of total energy production by 2053 (40%- 2043, 30%- 2033, 30%- 2023)
- 50% reduction in transportation emissions by 2053 (40%- 2043, 30%- 2033, 30%- 2023)
- 10% increase in Carbon Capture and Storage (CCS) by 2053 to be determined by each country in their national schedules
- 10% use of Clean Development Mechanisms (CDMs) by 2053 as a soft target in ensure technology transfers to developing countries and secure another method of acquiring carbon credits

² UNDP Human Development Report (2008) HDI

¹ UNFCCC (1992) Article 3.1

³ Australia Schedules in Post-2012 Treaty (April 2009)

Annex II:

- 40% reduction in 2007 GHG emissions levels by 2053 with 10% reductions in every 10 years (30%-2043, 20%-2033, 10%-2023)
 - 2007 levels were selected as a fair baseline because 2007 was the year that China triumphed the United States in CO₂ emissions, thus giving Annex II countries a higher amount of emissions and less of a reduction target than Annex I 2000 level baseline
- **25%** increase in renewable energy use of total energy production by **2053** (20%- 2043, 15%- 2033, 10%- 2023)
- 25% reduction in transportation emissions by 2053 (20%- 2043, 15%- 2033, 10%- 2023)
- 25% increase in CCS by 2053 to be determined by each country in their national schedules, however, this Annex should focus on decreasing deforestation and using reforestation since they are still developing
- Voluntary use of CDMs, although it would be in their best interest to invest in a few projects for carbon credits

Annex III:

Binding emissions targets should be determined based on economic output (income per capita) indexing to ensure that GHG limits do not constrain economic growth for these countries.

Also, there should be non-binding sectoral targets equal those of Annex II, with the exception of a binding sectoral target of 25% increase in CCS by 2053, as well as, a mandatory submissions of national schedules or "plans of action." As an Annex III country, Bangladesh believes it is important to have a binding CCS target in order to facilitate a decrease in deforestation and unsustainable agricultural practices since they are the driving force of GHG emissions in these countries.

Annex IV:

Non-binding emissions targets should be determined based on economic output (income per capita) indexing to ensure that GHG limits do not constrain economic growth for these countries.

Also, these countries can voluntarily submit national schedules and adopt sectoral targets based on their vulnerability limitations

Annex Transitioning and Re-Indexing:

Re-indexing for Annexes should occur at each reassessment period. If a country qualifies to move up (or down) to a different Annex, that country must maintain a stable HDI above the Annex index limit for a minimum of 2 years, with 1 additional year to transition into the new Annex (3 years total).

When a country transitions to Annex I or Annex II, they should switch to a 2013 baseline, to allow for less harsh emissions reductions as they adjust to the financing and other binding sectoral targets of the new Annex. Also, the country should begin a path of 20% emissions reduction targets from the new baseline of 2013 every 10 years for Annex I or a path of 10% emissions reduction targets from the new baseline of 2013 every 10 years for Annex II.

III. **Trading**: Bangladesh is proposing a trading system based on carbon taxes levied against countries failing to meet emissions reduction targets at a reassessment period. If a country does not meet its emissions reduction target, the country can either pay the World Environmental Organization (WEO) a tax on each metric ton of CO₂ eq emitted over the reduction limit, or purchase emissions allowances at a slightly higher price from another country that reduced its emissions levels beyond the given target. Bangladesh argues that this approach would

encourage countries capable of higher emissions reductions to achieve these levels earlier through the use of better technology or other sectoral measures in order to market their emissions credits. Because this carbon tax is a non-compliance penalty with an alternative (if available and feasible), advanced developing countries would not have to feel limited by sectoral targets and binding emissions reduction levels because they could either pay the tax (making it harder to eventually comply however), or pay more than the tax, but less than the amount it would cost to domestically reduce emissions.

IV. **CDMs:** The objective a CDM is to allow developing countries to economically and socially progress in a cost-effective and sustainable manner, through the help of more developed nations. **CDMs can only occur in Annex III and IV countries, and should be prioritized based on a country's Vulnerability Indexing and geographic feasibility based on national vulnerability mapping to avoid implementing projects in unsuitable areas.

Countries can submit an Adaptation Needs Assessment (ANA)** (similar to a Technology Needs Assessment) to the WEO sub-organization overseeing CDMs, so Annex I and II countries can see if their projects line up with other country's needs. The timeframe for CDMs should **be 1-2 years for small projects and 2-4 years for large projects**⁴. Examples of current and future projects in Bangladesh and other similar nations include: biogas capture from landfills, waste water treatment, aforestation and reforestation, switches from coal to natural gas, compact fluorescent bulb distribution, solar home systems, retrofitting of power and chemical plants, manufacturing processes modification to remove fossil fuel uses, green building, carpooling, etc. When developed countries invest in CDMs, they should be taxed **2% levy on carbon credits generated, which will go to the WEO Special Climate Change Fund (SCCF) to fund climate change related mitigation and adaptation needs⁵.**

V. **Adaptation**: Bangladesh believes that adaptation should include not only a country's ability to adjust to the effects of climate change, but also a country's ability to adjust in a way that facilitates positive socioeconomic growth and development in a sustainable manner. **Adaptation funding for each country should occur based on its Vulnerability Index Ranking, which is calculated using the Environmental Vulnerability Index and the country's GDP**. Each country will then be placed in one of **4 categories** from highest vulnerability ranking to lowest: **Most Vulnerable, Extremely Vulnerable, Highly Vulnerable, Vulnerable.** Only Annex III and IV qualify for Vulnerability categorizing since they are the only countries eligible for adaption funding and CDMs.

Adaptation funding will occur in the following annual amounts for each Annex:

Annex I- 0.15% of GDP

Annex II- 0.08% of GDP

With public and private financing providing an additional 20% each year for both annexes, yielding a total contribution of USD \$90 billion per year with \$71 billion guaranteed

The WEO will control this funding and allocate it based on priority countries as defined by the Vulnerability Index and their ANAs and their feasibilities. If adaptation funding is not enough for some ANAs and the country's vulnerability to extremely high, then non-governmental organizations (NGOs) such as the Global Environment Facility can be used as an outside resource for funding if possible.

This funding should be used for projects that are exacerbated by climate change since it if often difficult to establish what explicitly is caused by climate change.

⁴ CDM Bangladesh http://cdmbangladesh.net/dns structure.htm>

⁵ Adaption and the Post-2012 Framework

http://www.tearfund.org/webdocs/Website/Campaigning/Policy%20and%20research/Post%202012%20web.pdf

Special Climate Change Funding from CDM carbon credit taxes can be used for mitigation and adaptation projects directly related to climate change such as displacement or temporary climate refugees.

Disaster Funding should occur in the form of a global insurance pool to cover premiums for disaster (meaning any natural, unanticipated catastrophe). To qualify for this funding, a country must first have national measures in place that "climate-proof" the country as much as possible prior to the disaster such as Bangladesh's early warning system for tsunamis and re-enforced seawalls and bulkheads⁶⁷. Claims for this fund can be prioritized by Vulnerability Index Rank in the event of multiple catastrophes or multiple countries in need at the same time.

Capacity Building should occur between all stakeholders such as NGOs, academics, private sectors, ministries, intergovernmental organizations, etc. It should focus on helping human resource development (HRD) by education individuals, providing training, skills and information relative to sustainable development and technological growth, as well as encourage partnerships⁸. Organizations such as the GEF, UNEP, World Bank, and UNDP should act as financial mechanisms to develop climate change educational programs, public awareness, national strategies and national communications. This can be accomplished similarly to measures taken in the past under Article 6 of the Kyoto Protocol through regional workshops⁹ to provide country representatives with information on how to achieve and implement these essential education components¹⁰.

VI. World Environmental Organization: The WEO will act as the governing body to this agreement. Each country that is Party to the post-Kyoto agreement will be a member of the WEO, in order to facilitate fair and equitable decision making processes. To oversee the activities and duties of the WEO, Bangladesh would like to see the creation of a WEO Executive Board, comprising an equal percentage of representation from each Annex (no more than 5 members being from Annex I). Also, a leverage to incorporate participation by the United States and European Union, Bangladesh would allow a Chairman (Annex I country) and a Vice-Chairman (Annex II country) to act as the speakers for the Board. These two leaders will have no veto power, and will have to be rotated out with the rest of the Board members after each reassessment period to allow for participation by as many countries as possible and to eliminate biases. The Board will conduct 10 year reassessments, allowing for review to occur during the ninth year (1 year before the reassessment changes). Any changes to emissions targets, indexing, funding, compliance, adaption, technology or emissions trading will be voted on by the entire organization with a two-thirds majority to pass. Once changes are made, a country has one year from the end of the re-evaluation period to object to any said changes.

The WEO will also have six sub-organizations to design and manage different parts of the post-Kyoto structure. The six sub-organization are as follows:

Emissions Targets- set reduction levels, review national schedules

Emissions Trading- set prices for emissions allowances and carbon tax, create market place for emissions transactions, monitor the market

Enforcement and Compliance- collect annual GHG inventories from all countries, monitor funding contributions, monitor CDMs and JIs

http://unfccc.int/cooperation and support/education and outreach/items/2529.php>

⁶ INSURANCE: A move to make the industry part of a post-Kyoto approach to climate risks (April 2009) http://www.eenews.net/public/climatewire/2009/04/30/1)>

Linking Climate Change Adaptation And Disaster Risk Reduction (2008)

http://www.tearfund.org/webdocs/Website/Campaigning/CCA and DRR web.pdf>

⁸ Defining Capacity Building http://www.gdrc.org/uem/capacity-define.html

⁹ UNFCCC Education and Outreach (Article 6 of the Convention)

¹⁰ UNFCCC Capacity Building http://unfccc.int/cooperation_and_support/capacity_building/items/1033.php

Re-Indexing- reassess HDIs for annexing every 10 years, reassess Vulnerability Indexing every 10 years, oversee Annex Transitions

Technology Transfers/CDMs and Jis- oversee all technology transfers, oversee CDM and JI applications, review all TNAs with technology transfers, review national vulnerability mapping, allocate funding for technology transfers from SCCF

Adaptation and Capacity Building- review ANAs, control and allocate Adaptation Fund based on ANAs and Vulnerability Indexing, manage capacity building measures and regional workshops between NGOs and countries, review claims for global disaster insurance pool and issue funds

Funding for WEO will come from dues and the UN to equal costs projected to be around USD\$ 45 million based on Kyoto Protocol costs for core program budgets from 2008-2009 (\$27 million) and resources required for supplemental activities (\$19 million) in 2009 as outlined in the Bali Action Plan¹¹

VII. **Energy and Universal Standards**: It is not in Bangladesh's top 5 priorities to have specific transportation, energy efficiency, population growth, or consumption standards. Also, Bangladesh does not feel the need to try and limit population growth or consumption standards are they are primarily domestic policies rooted in government styles and cultural practices and would be highly controversial. Bangladesh does however argue for strong renewable energy and deforestation standards as defined in the Annex Targets.

Transportation- Possible use of hybrid cars totaling 50% of auto fleet in Annex I countries by 2053 and 25% of fleet in Annex II countries by 2053 since the United States has already adopted 31.6 mpg standards for 2016 and most hybrid allow for 50+ mpgs (making a 50+ mpg fuel efficiency standard by 2053 for Annex I). These points are all negotiable.

Aviation- Bangladesh believes these standards should be determined domestically, especially because there has not been any consensus even in the United States on how to regulate aviation and aviation emissions.

Infrastructure- Because Bangladesh is already making concerted efforts to switch bus systems and other public forms of transportation (rickshaws) from fossil fuel use to natural gas use, Bangladesh proposes the use of natural gas or another non-fossil fuel use to power 50% of public transportation systems in Annex I by 2053 and 25% by 2053 for Annex II. These targets are also negotiable and subject to feasibility as more information becomes available.

Renewables- Renewable energy can be considered any energy generated from natural resources that can be readily replenished and have a low carbon impact on the environment.

Bangladesh avidly supports an increase in CCS to curb deforestation and promote reforestation for Annex I, II, and III with a focus on retrofitting fossil fuel plants to capture carbon and reforestation in Annex I, and limiting deforestation and improving agricultural practices in Annexes II and III.

Also, for specific sectors, each country will have to outline how they plan to improve their renewable sectors in their national schedules since most alternative energy possibilities are based on the climate and geography of a country. For developed countries, a focus on solar, wind, nuclear, and hydrogen fuel cell would appear most appropriate, accompanied by a focus on solar, wind, and biomass in most developing countries. Use of one major solar power project in Bangladesh alone has offset 48,380.75 tons of CO₂ per annum¹². Other projects of this sort in heavily rural countries with limited electricity capabilities would prove highly beneficial when trying to reduction GHG emissions. One area that is not feasible to

¹¹ UNFCCC Bali Action Plan http://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf#page=3

¹² Ecoworld: Bangladesh's Solar Energy (January 2008) < http://www.ecoworld.com/fuels/bangladeshs-solar-energy.html>

Bangladesh is biofuels. Bangladesh opposes any increases in biofuel use because it generates more methane, decreases the food supply, negatively affects food security, increases the price of crops and animal feed, and can't sustainably support a large industry except in places where the base resources are abundant (such as Brazil).

VIII. **Technology and Technology Transfer:** Each country from Annex III and IV should submit Technology Assessment Needs (TNAs) to the WEO for review. In return, the WEO Technology Transfers Sub-Organization should compile a literature review on Annex I and Annex II available technologies so that Annex III and IV countries have a basic knowledge of what is being currently used and what is available for transfer. Once TNAs are assessed and either Annex I or Annex II countries decide to commit to a technology transfer, the transferring country can decide what technology to provide to the developing country ¹³. The technology transferred does not necessarily have to the BAT, but it does have to feasible and cost-effective to implement for developing countries. For a leverage mechanism, developed countries should remember that the less state-of-the-art transfers they make, the more of an older technology they can implement and be credited.

Bangladesh believes this is a good mechanism because it will spur domestic R&D by Annex I and II countries, causing those countries to comply with emissions reductions and provide developing countries with easier and more cost-effective ways to progress sustainably in the future.

Mechanisms for technology transfer should be implemented by an "Expert Committee" as defined by the UNFCCC¹⁴. This committee should have 20 members, with the following representatives: 7 Annex I members, 4 Annex II members, 3 Annex III members, 2 Annex IV members, and 4 NGOs members such as the GEF, UNEP, WB, Renewable Energy Fund, EU Energy Initiative, FAO, or Climate Technology Initiative. This committee can be rotated every 2 years with the half of the initial committee remaining for 3 years, as to only rotate half of the committee each year. Bangladesh believes this group will be able to most effectively allocate technology transfers between developing and developed countries in a fair and equitable manner.

VIIII. **Enforcement and Compliance:** As mechanisms of enforcement, each country must submit an annual GHG inventory to the WEO Enforcement and Compliance sub-organization so that each country can be monitored annually for potential non-compliance and adequate non-compliance measures can be taken at the end of a budgetary period. Also, each country must contribute to the Adaption Fund annually as outlined above.

If a country misses its emissions target, it must either pay the carbon tax on the extra emissions above its reduction limit, or buy allowances from another complying country below reduction levels at a slightly elevated price as outlined above.

If a country misses its adaptation fund contribution, its carbon credits from technology transfers and CDMs will be taken away in an amount equal to the money missing from the adaption fund contribution. Once the contribution has been fulfilled, the carbon credits will be returned for the next reassessment period.

If a country fails to comply with emissions targets for two consecutive terms, it will not be allowed to serve on the WEO Executive Board for the following reassessment period.

By levying these non-compliance sanctions, Bangladesh strives to encourage voluntary compliance in the form of sectoral targets since Annex I and II will want to use CDMs and technology transfers to meet reduction levels and Annex III countries will want to sell their extra emissions to other countries.

¹³ UNFCCC Technology Needs Assessment < http://unfccc.int/ttclear/jsp/TNA.jsp>

¹⁴ UNFCCC Mechanisms for Technology Transfer < http://unfccc.int/ttclear/jsp/Mechanisms.jsp>

X. **Social Development:** Bangladesh heavily supports climate change education and public awareness. As stated in the capacity building measures, Bangladesh would like to propose regional workshops for HRD and training to help country leaders implement climate change oriented national strategies, communications, education plans, and outreach programs. **Bangladesh would also like to propose that social development and capacity building in this context become mandatory requirements in all national schedules.**

Health and Disease- Because funding is limited and negotiations for additional funding will only create extra strain in the agreement, aid for health and disease related issues in countries as a result of climate change should be addressed by outside aid relief organization such as the Red Cross rather than being funded within this agreement.

Development, Poverty Alleviation and Cultural Preservation- By implementing technology transfers, CDMs, JIs, and providing adaption and disaster funding, this agreement adamantly strives to improve quality of life, economic viability, poverty constraints, and cultural elimination.

XI. **Displacement and Climate Refugees:** Bangladesh is one of many countries facing current issues of displacement and climate refugees. The problem is being further exacerbated by climate change to the point where neighboring countries such as India are constructing fences to physically prevent refugees from crossing into their country. Bangladesh believes this is a serious problem and must be addressed by mechanisms in this agreement.

Environmentally Induced Migration as a form of adaption should be considered in this agreement, not necessarily for primary Adaption Fundings, but for at least a small portion of it for countries such as the Small Island Nations and Bangladesh which may have to relocate some, if not all, of its people in the future based on the success of emissions reductions. Additional funding from NGOs under the direction of an organization such as the International Organization for Migration, which recognizes environmental migrants in the international arena, could allow for highly vulnerable nations to look for signals to begin migration prior to being displaced. By incorporating migration as a form of adaption, we are taking a proactive approach to adaption rather than a reactive one of trying to negotiate climate refugees. In conclusion, Bangladesh would like to see a provision in the agreement for some Adaptation Funding for migration, in addition to outside funding for NGOs to provide resettlement programs for migrates before they become nomads and national security hazards.