The REDD+ Programme: Affects on Governance Theory, Market Theory, and a Post-Kyo World

Tejas Kotak

ABSTRACT
The Reducing Emissions from Deforestation and Forest Degradation Programme (REDD+) is an international agreement that aims to address the issue of climate change due to deforestation and forest degradation while also encouraging the enhancement of forest stocks in developing countries with tropical forests. This paper aims to address the ways in which REDD+ would fundamentally affect governance and market theories if it is applied, and it discusses REDD+’s potential as a successor of the Kyoto Protocol.

INTRODUCTION
The majority of the scientific community agrees that anthropogenic climate change is being caused by the release of greenhouse gas (GHG) emissions into the atmosphere, the main one being carbon dioxide. As climate change is an international issue, international measures organized under the United Nations have been implemented. The Kyoto Protocol, which is considered the foremost international treaty to reduce anthropogenic climate change, entered into force in 2005 and is due to expire at the end of 2012. The future efforts to mitigate climate change in a post-Kyoto world have been discussed at the international level, and the Reducing Emissions from Deforestation and Forest Degradation Programme (REDD+) is an international agreement that aims to address the issue of climate change due to deforestation and forest degradation while also encouraging the enhancement of forest stocks in developing countries with tropical forests.

Along with GHG emissions from anthropogenic sources, such as automobiles and industrial processes, the deforestation and degradation of forest land adds to net GHG emissions by releasing the CO2 stored in trees and by removing a carbon sink. Land-use activities and deforestation are estimated to contribute between 20-25% of global GHG emissions (Madeira 2008), and current worldwide forest stocks are estimated to contribute to roughly one third of carbon abatement (Sohgen & Mendelsohn 2003). The governance system of the REDD+ Programme includes mechanisms which involve both governments and markets, and it potentially commodifies (forests) a resource based on its potential to sequester pollutants rather than pure commercial value. It therefore represents an interesting development in both governance theory and market theory.

THE REDD+ PROGRAMME
The REDD+ Programme, as described in the Bali Action Plan, is an international agreement on creating “Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries” (UNFCCC 2008a); the “+” indicating the phrase following the semicolon. In 2008, the UN-REDD Programme was launched to prepare developing nations for “REDD readiness” stages which will help them in creating the capacity and infrastructure for full-scale REDD+ initiatives (Johns, Johnson, & Greenglass 2009). REDD+ Programme was approved under the UNFCCC during the 2010 Conference of Parties (COP) in Cancun, and it aims to create a governance system which addresses the GHG emissions resulting from deforestation and forest degradation while supporting forest conservation, sustainable forestry, and the enhancement of forest carbon stocks in developing nations with large forest stocks. As it is set up under the UNFCCC, the primary players in implementing the Programme will...
be the participating governments. The official Programme sets up the framework, overall structure, and goals, but each individual nation can negotiate the terms under which it is implemented. The forest industry has traditionally been handled either by local, sub-national governments, or by private companies.

FINANCIAL AND MARKET STRUCTURE
The Carbon Fund is one market-mechanism the REDD+ Programme will implement. The structure of the Fund is detailed in the Forest Carbon Partnership Facility’s (FCPF’s) 2008 Information Memorandum. Developing countries which have recognized REDD+ Programmes and have gained certified emissions reductions (CERs) will be remunerated by the Fund based on the amount of reductions they have achieved. The monetary value of emission reductions for each nation will differ based on an assessment by the World Bank which will consider the nation’s individual REDD+ Programme and the method in which the reductions were gained. This function of the Fund effectively makes a commodity out of REDD-based CERs by placing a solid, monetary value on them. The Fund acts as a market mechanism known as a “payment for environmental services” (PES) to act as an incentive for developing nations to participate in REDD+ Programmes (Angelsen et al. 2008). It may also provide incentives to sub-national governments, indigenous peoples, and private sector entities based on the structure of the CER programme and the agreement between the national governments and the FCPF on who will receive the PES. The Carbon Fund faces many risks as PES system including the CERs staying constant after they have been purchased and the Carbon Fund being large enough. The Fund currently has a set target budget of $200 million, and is only planned to be active during the REDD readiness phases of national implementation. Once nations are considered “REDD ready,” different market mechanisms will have to be in place in order to secure long-term effectiveness of the REDD+ Programme.

One such mechanism is the creation of a carbon market for CERs created through REDD+ activities. Similar to the Carbon Fund’s structure, a REDD+ market calls for the creation of CER credits, but the credits are not purchased by a single buyer as in the Fund. Rather, they are bought and sold in a marketplace among participating players, which may include national and sub-national governments along with private sector entities. One main issue with making CERs is making appropriate measurements of emission reductions due to the complexity of measuring how much carbon has been sequestered. Current carbon markets create a set amount of CERs within the system before the trading begins. REDD+ credits, on the other hand, would be created after the emission reductions occur, which means that there is an uncertainty to how many could enter the market. There is a worry of flooding the current international CER market (which is conducted primarily in the European Union) with cheap REDD+ credits (Fry 2008; Hamilton 2008). The goal of carbon markets is to provide a cost-effective method for reducing GHG emissions, but if it becomes too cheap for participating nations and companies to stay within the cap then it becomes difficult to progressively lower the cap amount – which is part of the planned evolution of cap-and-trade systems. The market structure of REDD will eventually need to change from using the Carbon Fund to something else, but the viability of using a carbon market is of much concern.

OVERLAP OF GOVERNANCE STYLES
In the current structure of the REDD+ Programme, most of authority rests either in the national governments who are implementing their own programmes, or with the international institutions of the UN and the World Bank. Due to this current structure, there is no direct involvement of non-public or non-government governance within the hierarchy. Despite this fact, market governance plays a role in REDD+. The Carbon Fund and the possible carbon market future both provide market-based incentives for developing governments, local and indigenous peoples, and private sector player to participate in the Programme (Angelsen et al. 2008). These players are given the incentive of a PES to entice them to be involved with REDD+ activities whether they be setting up the infrastructure for a full Programme implementation or sustainable forestry techniques. Market governance is still relatively unused at this stage in REDD+ implementation. Current goals are to set up the infrastructure in developing nations so that REDD+ activities can be properly initiated in a few years time. The time at which the REDD+ Programme is set up both internationally and in developing nations is when market governance will become the driving force of the Programme’s goals. Market governance within the Programme is reliant on the creation of some form of carbon market to manage the carbon reduction resulting from REDD+ activities. If a carbon market is formed then market-based incentives will move the Programme forward by funding the participants in developing nations and providing the desired results. There is an extent to which the market incentives of acting in compliance with the goals of the Programme will outweigh those of the commodity markets of logging and forestry. Once this limit is reached, the market system may help keep a balance of afforestation versus deforestation rates through competition with the commodity market.

IMPLICATIONS OF REDD+
Political and economic evolution is stimulated not just by the debates and discourses of academia, but by actual implementa-
tions of these ideas. The REDD+ Programme is an application of theories that are debated in political, economic, and environmental circles, and it provides a case study that can be examined in the context of those theories and the additions it offers to them. In its current form, it can be looked at from the standpoint of its potential to add to the theories and discourses as it is too soon to see if it will succeed or not. When taking into account its goals and framework and potential future evolution, the REDD+ Programme has many implications for governance theory, market theory, and the future of climate change policy.

GOVERNANCE THEORY
Governance, while separate from government, does tend to draw its authority and power from a government. The REDD+ Programme draws its authority in part from two main sources. The international governing body of the United Nations and the UN-REDD Programme provide the primary authority as the source of the REDD+ Programme and the international overseer respectively. The national governments which enact their own programmes give the Programme authority as they are taking it off print and paper and making it a reality. Traditional hierarchies of both government and governance take the form of a central national government on top and subnational governments under it. The addition of an international system that is both above the national governments and overlaying the entire hierarchy brings a new dynamic into the implications of governance.

MARKET THEORY
Within the market there are costs, benefits, and externalities. The negative externalities of these activities include the effects on local populations, the effect on the biodiversity of the area, and the release the CO2 into the environment. The REDD+ Programme aims to address these externalities in forest-based industries by turning them into commodities. The potential of providing a PES to developing nations and local participants is a step towards increasing the importance of forests and the social equity of local and indigenous peoples as they are receiving payment for what they do. The PES method compensates for the externalities, but it does so outside of the market.

In order to see compensation within the market, a REDD+ carbon market would need to be created. If a carbon market does become the future of the REDD+ Programme the international carbon market will be expanded and be seen in greater significance than it is now. The carbon market turns the environmental externality of emissions into a commodity that has tangible value both in the cap-and-trade system of the carbon market as well as monetary value that can be used in the traditional market. The emission externalities are accounted for by commodifying them and placing them into a free trade market, which allows for both cost-effective reduction of emissions and the use of capitalistic mechanisms to do so. Carbon markets have existed since the early 1990s, so they are not new, but they do provide cases in which market mechanisms are employed by the public sector rather than staying with private sector players.

The REDD+ Programme, with both the current PES system and the possible carbon market future, is using market mechanisms to incite a change in activities, and the major difference here is that the Programme is based in the public sector. If the public sector takes on a more active role as a participant within the market then the future market will have a very different dynamic compared to todays where the private sector has the most influence.

SOCIAL EQUITY
The official structure of the Programme is built to include the needs and opinions of local and indigenous peoples as they will be the ones who are most effected by REDD+ activities. The inclusion of the local and indigenous peoples within the governing and decision-making processes expands the Programme’s influence on social equity. If REDD+ activities succeed in achieving their goals then the lifestyles and local economies of these peoples will be greatly enhanced as well as become far more sustainable than they currently are. The argument of social equity is one of great idealism rather than rationalism. It is a hope that individuals, nations, and corporations will work together for the common good of all of humanity. Environmental agreements and actions should focus more on increasing and stabilizing the social equity of groups which are affected by the actions and of humanity at large, but the argument is not one that is regarded highly due to its lack of tangible results. Market-based arguments have taken precedence in environmental debates because changes in the market are able to produce easily measurable economic results as well as the desired changes in action.

The REDD+ Programme makes use of the market argument as a means to achieve social equity for the local and indigenous peoples of developing countries. This use of market mechanisms may prove to be an effective method of gaining social equity, but it invalidates the core of social equity argument by placing the economy higher than the quality of life for human beings.

A POST-KYOTO WORLD
The Kyoto Protocol officially went into force in 2005, and is due to
expire at the end of 2012. The Protocol is largely considered to have been ineffective in achieving its goals of climate change abatement, but it still represents the largest step towards international climate governance. A new framework is needed to fill the gap that the Protocol is leaving, and the REDD+ Programme may be able to fill that gap. While the Programme has much narrower focus than the Protocol, it can potentially have a much greater long-term effect.

The goal of the Kyoto Protocol was to reduce the emissions of developed nations whereas the goal of the REDD+ Programme is centred on the carbon sequestration in developing nations. While reducing the emissions of developed nations is indeed important, allowing developing nations to grow within a framework that reduces their emissions while also creating sustainable economies is more important for significant progress to be made in the twenty-first century. If the developing nations that are participating in the Programme grow within a REDD+ framework, they will be able to become global players without the worry of reducing their effects on the environment down the line as the current developed nations are. The Protocol essentially kept the status quo and the global mentality of the twentieth century by wanting the developed nations to alter their behaviour while allowing the developing nations grow in an unsustainable fashion. As mentioned earlier, the CDM of the Protocol did allow for projects in developing nations, but infrequent projects are not the same as setting up a framework for sustainable development. The REDD+ Programme can act as the first step into a post-Kyoto world by providing a new climate change deal and by offering the potential for changing the status quo that the Protocol aimed to keep in place.

CONCLUSION
Creating significant reductions in the amounts of GHGs that are emitted due to human activities has been a difficult endeavour due to developed countries (the United States in particular) having economic-based objections to reduction programmes. The REDD+ Programme is an international agreement that aims to reduce the rates of deforestation and forest degradation in developing countries while also increasing and enhancing their total forest stocks. The economic objections of developed countries are made into moot points by focusing the Programme on reductions in developing countries. The Kyoto Protocol is due to expire at the end of 2012, and the REDD+ Programme can be considered a replacement for it as a major international climate change agreement. Unlike the Protocol, though, the Programme alters the focus of climate change programmes from developed nations to developing nations. The shifts of responsibility of GHG reductions from developed countries to the developing countries may be viewed as an unfair burden for them, but the Programme sets up a framework which allows developing nations to grow and develop in such a way that will result in economies that are both environmentally and economically sustainable. The REDD+ Programme represents a modern climate change deal that changes the status quo for international climate change programmes through the shift of responsibility while creating the potential to alter the status quo of international politics and the international market by promoting sustainable growth in developing nations.

REFERENCES