A TRANSITION MANAGEMENT APPROACH TO GLOBAL CLIMATE GOVERNANCE

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Overview

Based upon the last assessment of the Intergovernmental Panel on Climate Change (IPCC, 2007), the concentrations of two most important GHGs in the atmosphere had increased from the mid-18th century to 2005 – during which the growing concentration of CO2 from 280 ppm to 379 ppm had been reported and the concentration of CH4 had increased from 715 ppm to 1774 ppm. Accordingly, the international efforts protecting the global climate could be understood far from achieving the UN goal of limiting the global average temperature increase to 2°C, relative to a pre-industrial (the mid-18th century) level (UN, 1992) – the achievement to which the need was reaffirmed in the 18th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC CoP18) held in Doha, Qatar in 2012 (UNFCCC, 2012).

The trend of global warming reflects the ineffectiveness of the global climate governance – the sum of organisations, instruments, mechanisms, principals, rules, procedures and norms that regulate the international efforts for protection of the global climate. This paper recognises that the global climate governance is influenced by social, economic, political, legal, behavioural and/or cultural factors involving a high number of actors who lack profound knowledge of climate change processes that lead to conflict of interests. With this regard, the global climate governance could be viewed as response to a '*persistent problem'* – as Dirven et al. (2002) define it as a "special type of complex, unstructured problem incorporating diverse stakeholders as well as surrounded by fundamental uncertainties that is deeply rooted in societal structures and institutions".

To resolve the persistent problems, structural transformations or '*transitions*' are necessary (Loorbach & Rotmans, 2006). Translating the abstract resolution of '*transitions*' into practical tool, Rotmans et al. (2001a) developed the concrete model of '*Transition Management*' (*TM*) – "built on the promise that full control of persistent problems is not possible, but these problems can be managed in terms of adjusting, adapting and influencing by organising a joint searching and learning process with special focus on long-term sustainable solutions" (Rotmans, 2005; Loorbach, 2007).

The 'TM' model employs a multifaceted – multi-actor (Loorbach, 2002), multi-phase (Rotmans, 2005), multi-level (Geels & Kemp, 2000), multi-domain (Martens & Rotmans, 2005), multi-change (Butter et al., 2002; Loorbach & Rotmans, 2006) and multi-pattern (De Haan 2010, de Haan & Rotmans 2011) – approach to a new governance – network and self-steering (Rotmans, 2005; Loorbach, 2007) – mode organised horizontally and vertically within a long-term horizon (Rotmans et al., 2000; 2001a; 2001b) through long-term stock monitoring (Loorbach, 2011) and cyclic knowledge development (Loorbach & Rotmans, 2010).

This paper assumes that the generic 'TM' model has a potential to offer a global governance architecture – an "overarching system of public and private institutions, principals, norms, regulations, decision-making procedures and organisations that are valid or active in a given issue area of world politics" (Biermann et al., 2007) – at meta-level – as Loorbach and Rotmans (2010) characterise the 'TM' model – within which the amalgam of international initiatives for climate governance – the situation that van Asselt and Zelli (2012) and Biermann et al. (2007) call it as "*the fragmentation of the existing global climate governance*" – could be managed leading to lower degree of fragmentation.

Methods

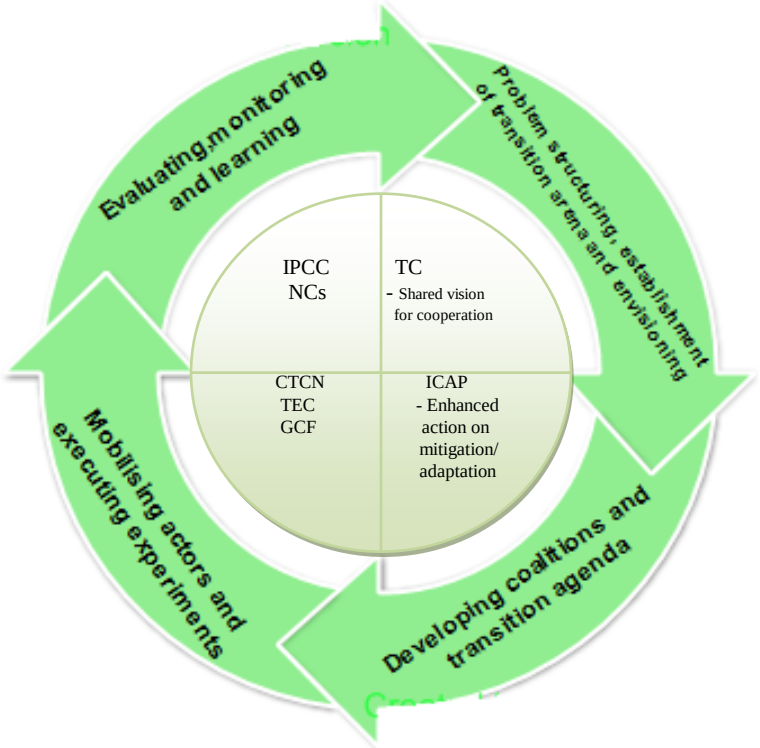
Both inductive and deductive thinking, this paper uses a '*Grounded Theory*' (*GT*) method (Glaser & Strauss, 1967) – employing which the cooperation activities decided within the Cancun Agreements (UNFCCC, 2011) are first reviewed and then coded using the concepts of '*transitions*' literature. In practical words, constantly asking "what is emerging through the evolution the global climate governance?", "what is the main concern with this evolution?" and "how could be dealt the main concern?", the cooperation activities are qualitatively analysed. In doing so, these activities are conceptualised and transposed into the generic 'TM' model in order to depict an architecture for global climate governance in cooperative manner at meta-level.

Results

Distinguishing three types of fragmentation – depending on the degree of institutional integration, norm conflicts and actor constellations – including synergistic, cooperative and conflictive fragmentations (Biermann et al. , 2009), this

paper reveals the potential of 'TM' model for architecting the cooperation activities decided within the Cancun Agreements (UNFCCC, 2011).

The net outcome is a TM-based meta-governance model (see Figure 1) that illustrates an architecture for the global climate governance with a potential to manage a move from the existing '*conflictive fragmentation*' towards '*cooperative fragmentation*' in the global climate governance through a transition from the current '*climate regime complex*' – depicted in the Cancun Agreements – to '*climate regime clusters*' – inter-linked within Figure 1.



TC=Transitional Committee; ICAP= International Carbon Action Partnership; CTCN=Climate Technology Centre and Network; TEC=Technology Executive Committee; GCF=Green Climate Fund; IPCC=Intergovernmental Panel on Climate Change; NCs= National Communications

Figure 1: An architecture for global climate governance in cooperative manner within the cyclic, modular model of 'TM'

Conclusions

The generic 'TM' model – employed for architecting the global climate governance – served as a single storyline around which the cooperation activities for moving towards a lower degree of fragmentation were draped. The TM-based meta-governance model for the global climate governance architecture (see Figure 1) is a GT-product – the product of intellect within which the subjective cooperation activities for the objectified problem of the conflictive fragmentation in the existing climate governance are inter-linked. In other words, this model is a reverse engineered hypothesis that is retrospectively formulated to fit the cooperation activities. As with any GT-product, this model is therefore never right or wrong; but it is just more or less fit, relevant, workable and modifiable (Glaser, 1998) that means the validity of the model – in its traditional sense of testing a hypothesis – is not an issue. However, this model should be judged in terms of (Glaser, 1998):

• *Fitness*: how the model closely fit the coordination activities decided within the Cancun Agreements;

• *Relevance*: how the model deals with the main concern of the fragmentation in the existing global climate governance;

• *Workability*: how the model works when it explains how to manage a move from '*conflictive fragmentation*' to '*cooperative fragmentation*' in the global climate governance; and

• *Modifiability*: how the model can be altered when new cooperation activities are compared to the ones decided within the Cancun Agreements.

It is worthy to note that the cooperation activities – one-to-one transposed to the generic 'TM' model – are based upon defactualised decisions made within the Cancun Agreements that present a set of utopian elements for cooperative global climate governance. Accordingly, the model illustrated in Figure 1 serves as a normative reference compared to which the architecture for more cooperative governance of global climate is proposed. As with any normative model, this TM-based model should be further extrapolative explored against empirical data on implementation of the cooperation activities in order to explicate its feasibility in the real world.