3rd Annual Meeting of LoCARNet, 24-26 November, Bogor, Indonesia

* PROSPECTS OF ADOPTING THE LOW CARBON SOCIETY CONCEPT AT THE LOCAL GOVERNMENT LEVEL

Ranjith Perera

Adjunct Faculty, Asian Institute of Technology, Thailand

Associate Professor, Sultan Qaboos University, Oman

* What is the importance of local governments for Climate Change mitigation?

- *The role of local government is important for implementing national policies at the local level.
- *Local governments work closely to local people and have authority to encourage Civil Society Organization (CSO) to respond to the GHG emissions reduction targets (NMT, 2008; Demeritt and Langdon, 2004).
- *We need to understand the challenges faced by local governments to engage in GHG mitigation activities, particularly in developing countries (Dhakal, 2010).
- *Whether local government bodies can implement the National Climate Change policy at local level is highly questionable. 2



*Good Practices Towards a LCS

Minimizing GHG emissions: It can be implemented by applying energy efficient devices, utilizing alternative energy such as hydropower (APEC, 2010; Skea and Nishioka, 2008; Takahashi, 2008).

Maintaining and expanding green areas: Planting trees as a carbon sink is a significant method that can absorb the amount of CO₂ in the atmosphere (Takahashi, 2008)..

Changing people's lifestyle: This method can be implemented by creating awareness of people through education and training to realize the danger of climate change and emit less GHG (Skea and Nishioka, 2008; MOEJ, 2008).

Promoting co-benefit of existing policies: Applying existing policies such as air quality control regulation can lead to reduce the amount of GHG emission (Asia-Pacific Economic Cooperation and generate more than one benefit (APEC), 2010; Skea and Nishioka, 2008).

* Research question

- *Some Metropolitan Administrations (e.g., Toronto, Bangkok) have implemented climate change mitigation plans and try to reduce carbon emissions in different frontiers.
- *Local government bodies at the lower tiers of hierarchy find it difficult to emulate BMA.

"Why do the Local Government bodies of even regional capital cities find it difficult to pursue the LCS approach?"



* Scope of Research

- *This presentation is based on a project involving some sub-national level cities of Sri Lanka, Thailand and Vietnam.
- *They are the centers of socioeconomic development of regions.
- *They are significant sources of GHG emission, after the national capital cities of respective countries.
- *They have demonstrated some good practices of GHG mitigation
- *Their achievements can influence the local government bodies at lower levels.



Matale, Sri Lanka



Rayong, Thailand



Hue, Vietnam

Key Informants	Respondents	Attributes	
Local government Agencies (LGAs)	 The officials in municipality The provincial offices of energy, and environment The provincial office of local administration 	 The officials who directly engage in climate change mitigation activities. 	
Civil society Organizations (CSOs)	Community based organizations (CBOs)NGOsInterest groups	 The leaders of community and civil society organization are the representatives of people. 	

^{*} Explore the barriers faced by the state and civil society to implement carbon mitigation activities in their municipalities.

^{*} Do the LGAs and CSOs face the same barriers or not?

^{*}Perceptions recorded using Likert scale (0-5). Weighted Average Index (0-1) computed for statistical comparison.

^{*}Sample frame: LGAs = 45, CSOs = 63, Total = 108

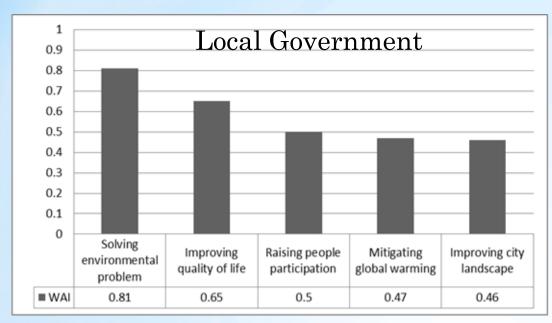
Findings of the study

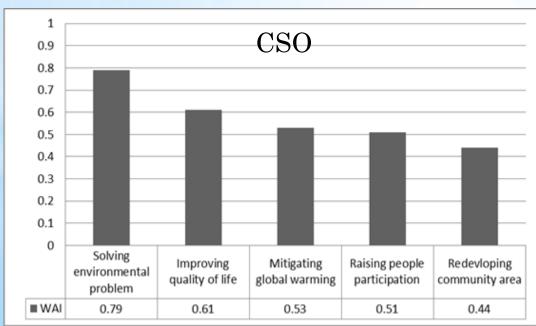


* Comparison of Privers Faced by LGAs and CSOs

	Local Government Agencies		Civil Society Organization	
	External Drivers	Internal Drivers		External Drivers
Highly Influencing			CSO leadership	Projects of other organizations
			Participation of people /stakeholders	Support of the mayor
Moderately Influencing	Technology transfer	Political leadership of the mayor	Competitive mindset	
	Financial incentive	Stakeholder collaboration		
	Knowledge transfer	CSO leadership		
	Policy directive	Trained officials		
		New by-laws		

Purposes of implementing env. management activities

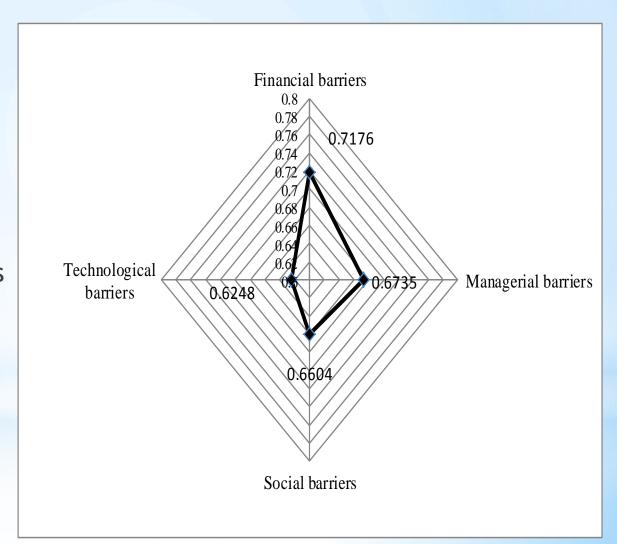




- *LGAs and CSOs give more priority to solve local environmental problems.
- *Improving the quality of life in general is the other important issue for them.
- *LGAs and CSOs implement environmental management activities for locally important reasons and not necessarily for mitigating climate change.
- *WAI value ≈ 0.5 indicates that carbon emission reduction for climate change mitigation is averagely important

* What prevents LGUs from implementing selfdriven GHG mitigation activities?

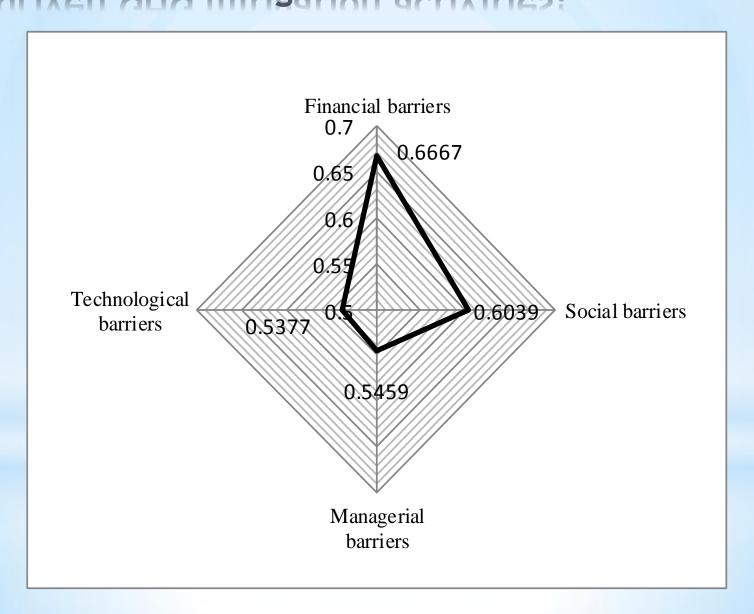
- *Financial Barriers
- *Managerial Barriers
- *Social Barriers
- *Technological Barriers



* Inferences of the Findings Regarding Barriers faced by LGAs

- *Finance is the most significant barrier while the technology is the least significant barrier
- *All three municipalities studied have received some technological support from state agencies and international development partners. Perhaps this is the reason for the perception on technological barrier as least affecting.
- *On the other hand stakeholders seem to perceive that once the financial barrier is overcome, technology is not a very big barrier
- *Although suitable technologies are necessary for GHG mitigation, overcoming management barriers (information and human resources) are more critical for a paradigm shift from routine environmental management activities to climate change mitigation.
- *Rayong Municipality also demonstrate that, if local political leaders are really serious about climate change mitigation, they will find innovative ways to overcome financial and managerial barriers.

* What prevents CSOs from implementing selfdriven GHG mitigation activities?

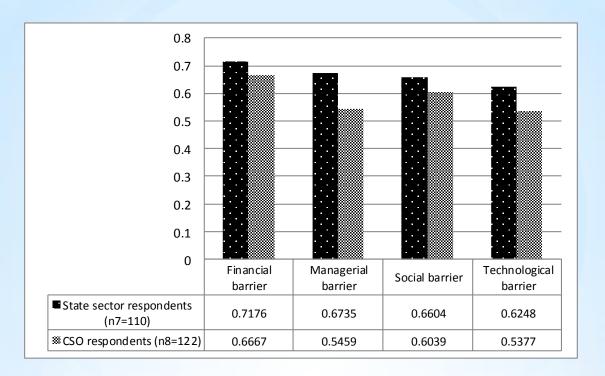


* Inferences of the Findings Regarding Barriers faced by CSOs

- *As expected, finance was found to be the most affecting barrier for CSOs. They expect financial grants and subsides for switching to cleaner technologies.
- *Giving grants and subsidies across a city is not a viable financial strategy. That means alternative funding mechanisms have to be find to support community level LCS actions.
- *Dissemination of information among CSOs and people is a critical need to kick start LCS activities in an organized manner.

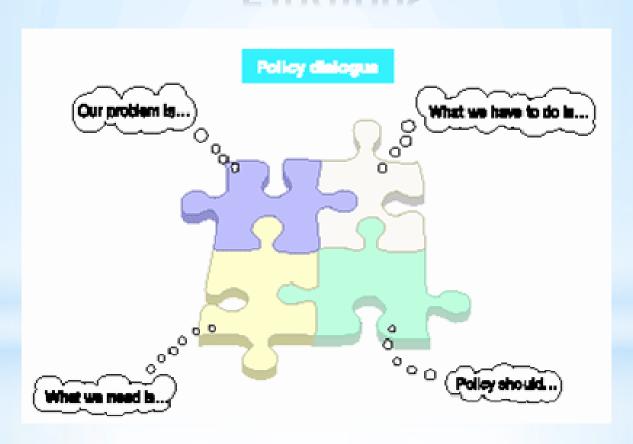
 Information on climate change and mitigation actions should be comprehensible by leaders and ordinary people alike.
- *Low-carbon life style has to be inculcated among the wider spectrum of the society in order to realize the LCS goal. Without that unthoughtful actions can negate the achievements of scattered activities.
- *Cleaner and energy efficient devices have to be norms instead of unaffordable alternatives

Comparison of barriers faced by LGAs and CSOs



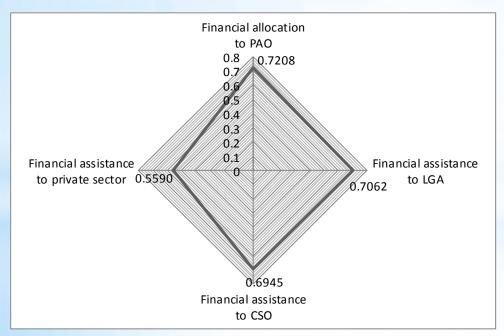
- *Finance is seen as the most influencing by both groups.
- *Management is the third for CSOs but it is the second for the LGAs. That is understandable because municipalities are more complex organizations with responsibilities divided among sections.
- *Attitude of people is a more serious matter for CSOs.
- *Technological barriers seem to be easier to overcome if other types of barriers are extinguished.

*Policy Implications of the Findings



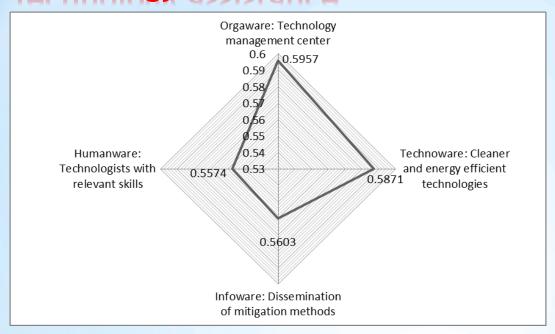
Financial Assistance

- *The study reveals that It is important to provide financial assistance like budget allocations, grants and incentives to the four main stakeholder groups (i.e., PAO, local government agencies, CSOs and private sector).
- * The respondent groups collectively perceive that providing financial allocations to PAOs and LGAs as very important (WAI ≥ 0.70).
- * Providing financial assistance to CSOs is as important as to PAOs and LGUs (WAI \approx 0.70).





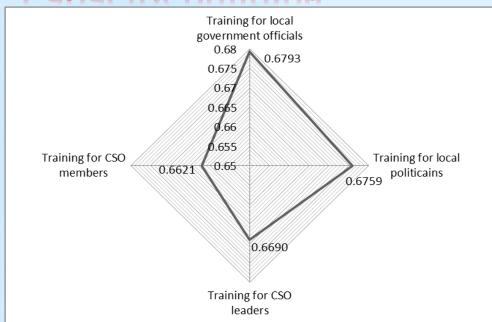
Technology assistance





- *Establishing a technology management center to assist the four main stakeholder groups is viewed as the most desired policy intervention by the respondents.
- *Infoware and humanware needs are less significant than technoware needs, and perceived to be moderate.
- *Despite the fact that technoware, infoware and humanware are very essential for carbon emission reduction, the findings imply that efficient orgaware are more crucial.

* Capacity building





- *Training for local government officials and local politicians are is the most significant capacity building need according to the respondents.
- *That means the political and technical leadership at the LGAs is important to drive the LCS idea among the society stakeholders.
- *If they inculcate an interest on low-carbon living they can influence the civil society to follow suit.

Thank you very much for your attention

