P5.1-4 An Approach to Sufficiency Carbon Society: A Case Study of Thailand

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With the population of approximately 64 million and the emission of GHG per capita per year of Thai people that has already over the world average, profile of contribution to global warming of Thailand was in the upper range among developing countries. Regardless to the voluntary basis as the ratified party in UNFCCC of Non Annex I country, Thailand has launched several energy policies that support GHG mitigation. Some of which are energy efficiency labeling on home appliance, increasing share of renewable energy in power production industry, bioenergy including biodiesel and gasohol etc. These plans have not yet implemented fully and no current achievement evaluation of GHG reduction has been done. Taken into account the fast development and the crisis of energy and food in the country, entering into low-carbon society would require both infrastructural change as well as behavioural change.

More than 60 per cent of Thai population lives in rural area. Many communities have introduced 'sufficiency economy principle' in their way of living and to coexisting with nature. The philosophy of sufficiency economy and the concept of low-carbon society are in the same line. It is interesting to find out how sufficiency economy can support the approach of lowcarbon society in Thailand. Ban Pred Nai Village in Trad Province and Chumporn Carbana Resort and Spa in Chumporn Province which have been identified as the strong sufficiency economy implementation are our studied community. Examples of merging activities between sufficiency economy and low-carbon society of each community are presented and analysed the GHG mitigation potential as well as the adaptive capacity of the community. We propose the relation of sufficiency economy implementation as the foundation to the community entering into low-carbon society and to become 'sufficiency carbon economy'

The Sufficiency Economy Philosophy, bestowed by His Majesty the King, is based on the three main principles of self-immunity, moderation and reasonableness, with knowledge and morality as necessary and sufficient conditions, respectively. When applied to the area of natural resources and the environment, this philosophy, which stresses merit and self-actualisation, can enable humans to coexist with nature and the environment in a harmonious way

The activities of self sufficiency economy can drive the community toward the low-carbon society. We account CO2 mitigation from these two activities in term of CO2 sequestration from reforestation and in term of CO2avoidance from charcoal production. Taken into account the population in Ban Pred Nai Village, we can calculate CO2 avoidance which is equal to 2.09 tons CO2 per capita per year. From this avoidance accounting with comparative to average of national emission, it is evident that approach of sufficiency economy at Ban Pred Nai Village can help emitting lower CO2 per capita per year almost by one third. In case of Chumporn Carbana Resort, the activity of zero waste can help reducing GHG emission lower than the standard of hotel emission in term of kg CO2 per room night.

A case study of Ban Pred Nai Village and Chumporn Carbana Resort has shown the capacity of CO2 reduction which is the approach to the low-carbon society. This approach is strongly driven by the Practice of Sufficiency Economy and the activities are in line within this philosophy that community has aware of the resource depletion and set their own rule to be coexisted with it. The activities are accomplished by their own willingness and happiness which indicate the capable beyond the common low-carbon society approach. Therefore we proposed the terminology that combines between sufficiency economy philosophy and low-carbon society to become 'sufficiency carbon society'. This terminology can be defined as the community that are self-sufficient and harmoniously coexisting with nature in their living with fully aware and willing to initiate activities that can help mitigate CO2 emission as well as showing high coping capacity to adapt themselves to climate change.

It was found that community with sufficiency economy implementation, their mindset of consumption through eco-thinking and routine activities are different from other communities. Low-carbon society is not only driven by technologies but the consciousness of human for their living. Community with sufficiency economic concern is likely to drive towards lowcarbon society through their perception attitude and consciousness rather than those in other area where technology still play a role in mitigation. Merging this concept of mitigation with sufficiency concern with eco-technologies is the challenge for Thailand to drive forward low-carbon society in the near future.

Strategy for low-carbon society approach may need to remove technical, economical, social and information barriers. These will need strong co-operation between citizen and government as well as citizen to citizen. Relevant policies and regulations and incentive (business initiative) can be good tool to support. Moreover, dissemination of information, correctly and frequently as well as learning from each other and leadership role model can enable community towards low-carbon society.