**Learning to address issues of climate change**

Draft summary of the RCE discussions

**Background**

The summary was developed to reflect on-line discussions ESD and low carbon, just and resilient societies among the members of RCE community. It will serve as a foundation for further elaborations at the Global RCE Conference that, in turn, would contribute to the formulation of the capacity development programme of the RCE community.

**Key areas of application - t**he work of many RCE practices fall into three broad categories – skills/competencies development, situated learning leading to innovations for low-carbon society and local/regional policy development.

**Situated learning – knowledge/innovation practices**

The situated learning that leads to evolving change practices includes those that could present open pathways towards emerging green economies and offer alternatives for the modern (unsustainable) ways of producing and consuming).

For example, Sustainability Commons Project of RCE Makana that, among other issues, focuses on the community water shortages resulting from climate change. “These challenges have led to civil responses like the Kowie Catchment Campaign and a student community engagement...( that lead to) water quality producing and water saving innovations. Recent challenges have also had people returning to some of the traditional water collection sites at local springs that still produce a steady trickle of pure drinking water... educational response in the RCE collaboration has been to support water quality testing and catchment action campaigns with learning resources primarily for use in schools and to produce Handprint for Change materials that tell the story of the local spring as well as open the way to local no-cost / low-cost innovations to enhance quality of life.”

Another example of working with sustainability commons using modern technologies is shared by RCE KwaZulu Natal where RCE partners” install, trial field-test and experiment with a range of technologies that progressively contribute to different ways of living / different lifestyle choices. In this way people learn through modelling inexpensive technologies that offer accessible choices to enhance livelihoods. Instead of teaching the problems RCE’s can teach what is known about the issues what is necessary to understand and engage with it. In this way at Umngeni Valley Nokuthula has invented a recycled satellite dish, covered with old reflective CD’s – it makes for a great solar cooker.”

**Important observations:**

* **RCEs as innovators in the practices for new low carbon economies** - Local could be a key characteristic of innovations that RCEs often facilitate. These local change stories, unfolding in harmony with the culture and reference to the history of the region, become a testing ground of practices that are offered as an alternative to modern development.
* **Role of traditional knowledge** - Traditional knowledge and practices frequently came in the conversation of climate-related issues pointing out at its important role in the situated learning for innovative practices that could inform different – more sustainable – development. The discussions highlighted a need to explore the methodologies that would enable systematic engagement of the learning processes with traditional knowledge and sciences.
* In contrast to many position where TK is seen as something that outlived its time or knowledge that needs to be “protected”, in the context of RCE practices TK comes as a valuable area of knowing and learning that contributes to sustainable practices particularly when works hand in hand with scientific knowledge. Examples of these were highlighted in the case of Bangladesh where traditional wisdom suggests choices of seasonal foods and in the case of planting indigenous trees in South Africa (RCE Makana).
* Use of tradition, however, might become a challenge when traditions are being linked to the unsustainable systems of consumption and production. The Diwali festival in India is an example at hand: “Traditionally earthen lamps made by potters (a poor and marginalised community) were used. Now earthen lamps are used just as token and the electricity lit lights (use and throw away type) are so much in use and rampant. The potters have lost their livelihood and are facing tremendous hardship. Modern lights are convenient, look good, but have too much environmental cost. Variety of flowers and leaves, like, lotus, lily, basil, are used for worship and this festival (others festivals as well) has helped conserve biodiversity of these species. Tradition of worship amongst younger generation both in villages and cities is losing out hence the biodiversity.” RCE Srinagar and RCE Himalaya run several “Safe Festival” Campaigns.
* Charting future directions through community work needs to be done with a clear understanding of the present often disastrous impact of the climate change on the lives of the communities. “Climate Proofing” is a strategy that helps to account potential climate impacts on the planned actions and projects. Generally, link of climate change and disaster prevention and management area is critical and RCEs demonstrate ways of doing so. . RCE Srinagar and CEE Himalaya has developed relevant IEC material in local languages – “We are linking CC with disasters and have been running DRR campaign in schools and villages helping schools to prepare their “School Disaster Management Plan” and villages their “Village Contingency Plan”. We conduct mock drills and impart required trainings to build capacity. There are ‘disaster response teams’ in schools and villages fairly equipped with necessary techniques and skills. Lot more needs to be done as the task is big and situation is dynamic therefore regular update and revision is needed”.
* **Importance of sharing RCE learning practices** - The RCEs demonstrate a variety of practices in the area of learning and climate change. It would be important to encourage sharing of these practices for the benefit of the whole RCE community and other stakeholders. While there is already an opportunity to use the reporting portal for these purposes, its potential is not yet fully utilised. We might need to understand what could create an incentive for the RCEs to share their stories.
* The story of local innovations exists in many places within and out side of the RCE community, e.g. ICLEI actions, Projects of GIZ , actions by Federation of Canadian Municipalities (wwww.fcm.ca) were mentioned in our discussion. The RCEs can supports these diverse small-scale stories that they become part of the story of transition towards low carbon economy.

**Development of competencies (and capabilities)**

Another area of RCE activities is related to learning and climate change related to the development of competencies predominantly within formal education and vocational education.

For example the “Capacity Building of Teachers of Fundamental and High School of the Sao Paulo City Education Programs (the main RCE’s stakeholders) to communicate the science related to climate change as well as to the Best Practices of projects for mitigation and adaptation in large cities aiming to improve quality of life and social inclusion within the urban environment. This approach appears to be capable to scaling up systematic ESD Program with the Sao Paulo Municipality Public Schools System with about 1 Million of Students...adding up their families the results could reach out more than 5 Million of people (half of the Sao Paulo City population). A publication we are preparing on those practices shall be ready by the 1st semester of 2012.”

A large scale competences development for teachers and learners in the area of climate change was initiated by RCEs in India. The project is concerned with production of learning materials, guidelines for teacher education as well as actions that secure policy and administrative support at the level of schools and administrative regions: “We are engaged in world’s largest school based CC education programme addressing to 20,000,000 students and through them equal number of their brothers/ sisters and again equal number of their parents plus many times more their friends and others. The details of this programme called “Paryavaran Mitra” (Friend of Environment) are available at www.paryavaranmitra.com <http://www.paryavaranmitra.com/> <http://www.paryavaranmitra.com> <http://www.paryavaranmitra.com/> “

RCEs also provide a vast array of examples related to the competencies development through education at the level of higher education.

**Policy towards climate change management –examples are provided through:**

1. Working with Dal Lake – RCE Srinarar
2. Example of Green Kalimantan (RCE Kalimantan)
3. Adaptation-related policies in Bangladesh
4. San Paolo Climate policies
5. Policy work of RCE Pacific

 **Up-scaling of knowledge-innovation practices** - There is an important concern on how to move from the small scale one-off projects to the programmes in a course of which the RCEs could systematically support emergence of the innovative experimental practices for low carbon society. Frame in a different manner the question could be how to challenge the status quo starting with small-scale projects. We came up with two ideas for the challenge – one is concerned with skills creation for various sustainability-related jobs (e.g. jobs for the widely spoken green economy); another is about strengthening the capacity of the RCEs to take up more ambitious long-term projects.

**Assessment of the learning results of the RCE projects** could be usefully done through the competencies framework (of e.g. GIZ or the Council of Europe) and the capability framework (Amartya Sen). The competencies framework appear to be more suitable for the training of skills and capability framework for the community projects. The stories of learning are recognised as important ways of documenting results of the community learning projects.

It is important to examine **relations of our practices to the concept of green economy** which, in many regions is treated with caution. We agreed that giving this concept our meaning, starting with the principle of low carbon climate resilient society, could be critical. We will continue this conversation. One of the definitions of “green” economy is suggested by RCE Makana: the “concept of ‘green economy’ (in the context of RCE work) should not be confused with global economic drives for green product market economy dominance but recognised as an emergent struggle amongst the global economic power houses of a fossil fuels era in transition. Our approach has been to simply give close attention to local issues of sustainability and quality of life in this time of global change.”

Access to information and materials developed by the international processes and translation of these materials into educational materials and learning processes might need to be strengthened, e.g. as pointed out by Bernard, interesting “when an international report is published (IPCC, IEA, UNEP, etc.) – it is not always accompanied with useful multimedia materials to be used in education”

RCEs can become important partners for implementing global policies addressing climate change. They can facilitate learning necessary for acquiring critical competencies and, most importantly to contribute to the locally appropriate translation of the global policies. Through participation in research, innovation and policy processes, the RCEs could secures a **critical link between local and global**.