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# Punjab State Council for Science & Technology

A Scientific & Industrial Research Organization approved by DSIR & Central Govt. under Clause (ii) of Sub-Section (I) of Section 35 of Income Tax Act, 1961

(A State Govt. Undertaking)

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Ref No. : PSCST/ 8091

Dated 24/08/2012

#### The Global RCE Service Centre

United Nations University - Institute of Advanced Studies, 6F, International Organizations Centre Pacifico – Yokohama 1-1-1 Minato Mirai Nishi-ku, Yokohama 220-8502 Japan.

Re: 2012 pilot RCE Award to celebrate 'good practices' in education for sustainable development (ESD).

Sir/Madam,

This is with reference to your emails on the above subject.

On behalf of RCE-Chandigarh and Executive Director, Punjab State Council for Science & Technology (PSCST), I am sending herewith duly completed application as per format alongwith the following books for consideration for the 2012 pilot RCE Award to celebrate 'good practices' in education for sustainable development (ESD):

1. Copy of book 'My Carbon: Footprint Vs Handprint' published by PSCST, lead partner of RCE-Chandigarh.

2. Draft copy of the book 'My Carbon Footprint Vs Handprint - A Teachers' Guide'.

Application for the 2012 pilot RCE Award is also being sent through email.

Thanking you,

Yours sincerely,

Dr. Satnam Singh Ladhar
Joint Director (Environment)

#### Application under Category-1 for the First RCE Award on ESD Initiatives

### By RCE-Chandigarh, India

### 1. Short description of the action/programme:

RCE-Chandigarh was established in January, 2012 with the initiative of Punjab State Council for Science & Technology (PSCST). The Council has been taking up environment education programmes in formal and non-formal sectors in the region since the past twenty years through identified government schemes, as well as, through *suo moto* initiatives. The present project was taken up in association with partner agencies of RCE-Chandigarh to promote ESD through participatory learning-through-doing.

The objective of the project was to identify and initiate actions in areas where considerable impact of ESD activities would be discernable in the context of climate change issues. Since ESD involves bringing about attitudinal changes in students and teachers, the RCE network decided to develop a student friendly activity module and a teacher's guide book with locale specific information to facilitate ESD discussion in classrooms. The key issues identified were water, electricity, travel, food and waste. The activity handbook for students provided guidelines for audit of daily actions in the above key areas so as to provide children an opportunity to assess the impact of their actions on the environment, change their attitudes and learn about broader climate change issues. The module was titled 'My Carbon: Footprint Vs Handprint'.

A participatory approach was adopted while developing the module. All stakeholders and RCE partners conducted a need assessment exercise in four workshops/meetings. Once the draft modules were ready, these were tested in a stakeholder meeting comprising 100 participants (Master Trainers, District Science Supervisors, Eco-club Incharge Teachers and Experts). The participants were divided into five groups to test the five elements of the activity book through

the lens of students in the age group of 12-17 years and give feedback for improvement. Feedback on the teacher's guide-book was also obtained. The draft was accordingly modified and the final publications were brought out to be used in 5000 schools in the region (copies attached). These books are proposed to be translated in vernacular language also for increased outreach.

### 2. Description of the context in which projects/programmes were undertaken:

RCE Chandigarh partners realized that though environment education is being imparted to students in 5000 schools (reaching out to 0.2 million eco-club members and about 2 million other students within the school system), however, it was a one way dissemination process and there were hardly any opportunities for participatory learning. Hence, in order to bring about attitudinal changes and inculcate a sense of responsibility amongst students towards their environment it was proposed to initiate participatory activities. This project was identified as a link between non-formal education embedded in the formal education system. During this period Punjab State Council for Science & Technology, the lead partner in RCE-Chandigarh, got an opportunity to participate in the SIDA sponsored 'Advanced International Training on ESD in Formal Education'. This was an year long programme and it provided ample opportunity to deliberate, discuss and develop a specific programme which could be adopted by RCE.

#### 3. Major partners and their roles:

Lead agency: Punjab State Council for Science & Technology

Partners: Deptt. of Education-Govt. of Punjab through State Institute of Science Education, Punjab School Education Board, District Science Supervisors and Eco-Club Incharge Teachers in schools, Ministry of Environment & Forests-Govt. of India through the NGC Programme and Master Trainers trained by Punjab State Council for Science & Technology under the

NGC Programme.

Facilitators: Centre for Environment Education-India, SIDA, Ramboll Natura-Sweden, WWF-India and other independent experts.

### 4. Contribution of your project:

## What according to you is the most innovative aspect of your case study?

The present project provides an opportunity to understand the contribution which an individual can make in protecting ones environment through a small change in routine activities everyday. This is possible through a constant audit which an individual is motivated to conduct while performing his/her routine activities and change ones habits/responses accordingly.

The project also provides teachers a chance to discuss locale specific issues with students (which is normally not possible in a defined curriculum) so that they have a better understanding of their immediate locality and can relate local issues to global concerns.

This project has a great multiplier effect. Through a single set of books in a school the outreach is increased to 50 students in an eco-club, about 200 students within the school environment and about 1000 people in the community as part of the families of these 200 students. Since, through this project, RCE-Chandigarh and its partners propose to reach out to 5000 schools in the region, it is assumed that the total outreach would be 0.25 million eco-club members, 5 million students and 10 million community members (as families of students).

### In which area has your project contributed the most?

The National Environment Policy (NEP) in Education System lays emphasis on making communities aware of the environmental issues through formal and non-formal education. However, a lot still needs to be done to enhance their consciousness on issues pertaining to Sustainable Development. Providing information pertaining to their local environment can help them take informed decisions and adopt a responsible behaviour to promote a sustainable society. Teachers and students are the most important conduit to take the

message of sustainable development. Our project ensures possibility of better value education to the coming generation.

## What are the unique long-term sustainability element(s) of the project:

The project is being implemented through an identified programme of the Govt. of India which is operational in all states of the country. This is an onging scheme supported financially by the Central Government thus ensuring long term sustainability. Further, the scheme is ingrained in the formal education system.

## What, according to you, are the critical factors that made your project successful?

The commitment of all stakeholders, proper field testing and the fact that the project was taken up within an identified programme of the government have been the major critical factors which have made our project successful.

## What according to you, is a critical governance element that made your project successful?

PSCST, which is the lead partner in RCE-Chandigarh is also the nodal agency for executing the National Green Corps Programme operational in 5000 schools in the state. Other partners of RCE i.e. Deptt. of Education through State Institute of Science Education and District Science Supervisors are already working in collaboration with PSCST to implement the NGC Programme. Hence, a governance mechanism was in place before the project was taken up. This was a key factor while selecting this project.

# Are their any ethical, socio-cultural, political or economic dilemmas? If yes, how have they been addressed?

Nil. The project is already sensitive to the local practices and socio-cultural aspects and addresses a wide range of economic strata through a series of activities so that children from different strata can chose the activities most relevant to them. To further address this issue RCE Chandigarh intends to take

the publications to students and teachers in vernacular language for which action has already been initiated.

#### 5. Upscaling of project result:

What are the major actions that would enable similar activities to grow in scope, scale or impact? Please elaborate:

Presently the activities are limited to 5000 schools in a phased manner. RCE-Chandigarh intends to extend its outreach to all the schools (about 12000) in the region.

The project is highly replicable in other states/regions of the country as well, and can be adapted/adopted as per local needs of other regions. Presently the NGC programme of Govt. of India is operational in about 0.1 million schools across the country where opportunities for participatory pedagogy exist.

Key elements of the project can also be uploaded on existing environment information dissemination websites for voluntary participation by schools and communities. Though the project is focused on secondary school children it is highly relevant for other age groups also. PSCST is already operating one such website (www.punenvis.nic.in) which can host the outreach material. This website is further linked to 68 similar ENVIS websites which are operational under the aegis of Ministry of Environment & Forests, Govt. of India.

Hence, the project has a very high element of replicability, scalability and impact.

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