## 'Science for the People' /NRN Science Foundation Project- Confidential

## **Operational modalities**

(As per NRN Sydney meeting declaration and following discussion with Dr. Raju Adhikari on 17.9.2012)

- 1. Responsibility NRN-SKI Chair and team below will be responsible for overall policy directions, funding clearance and approval of programs and activities listed herein.
- 2. SKI Team is responsible for management of the Fund as earmarked by NRN-ICC decisions, conference resolutions, etc.
- 3. Structure of the management team responsible for program development and implementation of activities as defined by NRN-ICC/SKI.

Mr. Gokul Pokhrel - Coordinator
Dr. Pramod Dhakal - Member, Nepal
Dr. Ambika Adhikari - Member, USA
Dr. Drona Rasali - Member, Canada
Dr. Hemraj Sharma - Member, UK
Mr Rajesh Rana - Member, Nepal
Mr Mana Kc Member, Oceania

Dr. Raju Adhikari - Member, Oceania, Chair (SKI)

Plans, programs and activities: 2012 – 2013

#### 1. Objectives

### (a) General Objective:

Promote science awakening (awareness) at the grass-root level through media partnership and support to science education in Nepal.

## (b) Specific Objectives:

- Promote partnership with leading media organisations of Nepal for depth reporting on popular issues of science concern.
- Promote programs in support of science education in schools of disadvantaged areas.
- Organise policy level dialogues among policy makers and scholars for the advancement of science education in Nepal.
- Prepare groundwork for the structure and function of NRN Science Foundation ) in support of the above mentioned objectives on a long term basis.

### 2. Scope and limitations

The programs are complementary to national efforts undertaken by several organisations of Nepal and does not infer to compete or substitute any. The listing of activities under the four major program components may appear ambitious but start can be made with smaller activities at affordable costs.

The NRN/SKI- Forum will be responsible for coordination and streamlining the implementation of the programs. However, each of the activities will be implemented in collaboration with national/local institutions as may be feasible.

## Flexibility:

The proposal provides wide flexibility in picking up items from the list of activities and is intended to be implemented in phases. For instance, modest start can be made from part of the seed money of A\$ 28000/- raised from the NRN fraternity in 2012. Based on the results during the project year, other initiatives can be followed in successive stages. The seed money will be deposited into a separate NRN account and will be used as specified in the project document.

### 2. Description of programs and activities

## 2.1 Media-based Initiative (Commencement date 1-1-2013)

The project is a collaborative model that promotes partnership with leading media institutions of Nepal for science popularization. The program will offer in-depth science reporting fellowships to competent mid-career journalists/science writers, features production based on specific case studies and their dissemination over the popular media channels. The project is cost effective and aims to reach wider segments of people at grass-root level through the use of existing media outlets.

### 2.2 Justification

Ever since the restoration of parliamentary democracy in Nepal, there has been phenomenal growth of free and independent media.. Free media operate side by side with State sector media but maintain superiority in terms of circulation, audience and reach. There are over 2000 newspapers, 230 FM radio stations and about 20 television stations. Most of the 75 districts have more than one radio station. Peoples access to media messages has increased enormously but the message quality and contents suffer from a number of inadequacies. Information on health, agriculture, forestry and environment are fed over the State sector media to a limited extent but the wider media spectrum is outside its reach. Ignorance about the modern attributes of science on matters affecting the daily lives of the common masses is very high and the rural society is still ridden by superstitions, dogmas and unfounded beliefs. It was no less glaring that in year 2010, over 400 persons died in 24 hilly districts of Nepal from diarrhea which could have been prevented through simple awareness creation about access to safe drinking water and proper community sanitation. This is where knowledge dissemination about scientifically tested and adopted practices and their application to awareness creation on matters

affecting the daily lives of the rural people assumes high relevance. And, the availability of widely accessible media networks can be a very cost effective and affordable resource in the dissemination of facts about basic sciences affecting the lives of the people.

Promoting media partnership in the popularization of science is a new concept being promoted by NRN fraternity in Nepal. Starting with the fellowship program, more collaborative models with media will be explored and implemented in the coming years.

#### 2.3. Activities:

## Science Depth Reporting Fellowships to Journalists/science writers 3

Amount for each fellowship: Rs. 32,000 x 3 Rs.96,000

(US\$ 1200 approx.)

Grant to Fellowship recipient: Rs. 25,000

Editing and product standardization: Rs. 5,000

Miscellaneous expenses Rs. 2000

Total for each fellowship: Rs.32,000

#### 2.4 Qualifications for eligibility of award recipients:

- \* Candidate must be a science graduate from a recognised university; or,
- \* Should have about 10 years of experience of working as a journalist/columnist in a newspaper organisation or in an electronic media network, or,
- \* Should have work experience as a science teacher in a higher secondary school or a college in Nepal for ten years or above.
- \* Should have produced at least two feature stories about scientific subjects of popular interest in newspapers/journals or in electronic media.
- \* Should have proficiency of writing in Nepali or English language.

Note: Priority will be given to women and candidates from disadvantaged communities and ethnic groups.

## 2.5 Probable themes for the Fellowships

- \* Diversification of Renewable Energy Sources;
- \* Deforestation in *Chure* Hills area and its implications on ecology;
- \* The effects of pesticides on human health;
- \* The Prospects of Bio-diesel as alternative to fossil fuel;

- \* The disposal problem of lead batteries from electric vehicles;
- \* The effects of climate change on crop patterns;
- \* Unplanned Urbanization of Kathmandu valley and environmental hazards;
- \* State of Science Education in Higher Secondary Schools: A sample case study;
- \* Solid Waste Management Problem in Kathmandu: Pollution levels of Kathmandu rivers and threats to aquatic species;
- \* Arsenic and chemical poisoning of underground water from shallow tube wells in Terai areas.
- \* Air flight safety standards and public security issues.

(Note to Steering Committee members: there is ample scope of modifying or adding more topics of popular science interest over and above the suggested list. Contributions are welcome. Should the entries be open to single specified topic or the candidates are given option to choose one from among the list?)

## 2.1.6 Methodology

Being a new initiative, the program will provide fellowship grants for investigative reporting into the subject areas as prioritized by the sponsors in collaboration with leading media organizations of Nepal. The NRN-S&T Forum duly represented by the NRN secretariat office in Kathmandu will be responsible for procurement of necessary funds from the Science Foundation Fund and fixing the quota of Science Reporting Fellowships on yearly basis.

The NRN-S&T teamwill notify the NRN secretariat in Kathmandu about the availability of grants for the fellowships and the agency responsible for the grant management. The administering agency can be a newspaper organization, an electronic media channel, or a professional media NGO, depending on the nature of the medium prescribed and selection of subject area.

### 2.1.7 Responsibilities of the grant administering organization

- \* The grant implementing organization is expected to maintain a fair degree of impartiality to enable selection of competent science writers/journalists for the fellowship award.
- \* Information about the award should be widely circulated over the media or over other available outlets to enable wider participation of eligible candidates. (No separate cover expenses will be provided for advertisements about the fellowships).
- \* Sufficient time should be given (at least one month) for filing applications for the fellowship grant.

- \* A three-man selection panel will select the award recipient from among the applicants. The director of NRN secretariat in Kathmandu will be invited as one of the panel members.
- \* The award recipient is required to submit an outline of his area of study, methods to be employed, numbers of days to be spent on field study and the expected outcome.
- \* Following the submission of the outline, a contract paper should be drawn defining terms and conditions of the grant and obligations of the grantee.
- \* The fellowship recipient will be given 50% of the grant amount on signing the contract and the rest will be paid on submission of the project report.
- \* The report submitted by the award recipient will have to be properly edited and graded in a manner acceptable by the designated media for publication as a feature article or use over an electronic medium.
- \* About 20 percent of the grant amount will be available to the implementing agency to meet the cost of editing and other incidentals.
- \* The eligible candidate is required to select a field study site and spend about a week for study, investigation and interviews with potential stake-holders/beneficiaries.
- \* The implementing agency should submit a report to NRN Secretariat about the completion of the Fellowship program along with clippings of the articles published or other evidences attesting to the use of the Report.

## 3. Support to capacity building of schools in remote areas.

The program seeks to lobby for support to schools of remote rural areas in expanding the scope of science teaching by helping them have access to science books, learning tools and equipments.

NRN stakeholders will be encouraged to donate computers, scientific equipment and learning tools including books. A list can be developed providing ample choices on the equipment and materials, depending on donors preferences. Depending upon the availability of funds, support can also be extended to setting up science laboratory in a school (estimated cost for one lab varies from Rs.300,000 to 400,000 i.e, A\$4000 – 5000) can be initiated as an example of a model school in partnership with communities schools like Samta school or Hindu Vidhyapith.

Many schools of remote areas do not prescribe science education simply because the instruction is practical based requiring the support of equipments and learning materials. As a modest starter, NRN S&T hopes to launch a science education support program this year with a call for equipment and learning materials donation. Modest fund will be

aside for the purchase of some equipment and learning materials to be delivered to deserving schools of remote areas.

In the succeeding phases, the program proposes to address the training of science teachers in remote schools. Depending on the availability of funds, the program will offer stipends to science graduates who are willing to go to rural areas as teachers for a period of six months at a time under contract.

Equally important field of activity during the next phase will be support to improve the human resource potential of science schools. This will include a program to train science teachers in which the NRN scientific pool of professionals can be effectively used.

The collected equipment will be distributed to selected schools during NRN Global Conference 2013

## **Activity Support for 2012/13**

Amount: Rs. 100,000 (US\$ 1200 approx.)

#### 3.1. Awards to Science Students (Commencement date 1-1-2013)

This year NRN the project will offer young science talents awards to two students studying at higher secondary school level.

Category of awards

2

1

1

- (a) Science talents award
- (a) Science talents award(b) Award to students from marginalized communities

Amount: Rs. 15,000 x 2 = Rs. 30,000 (US\$ 400 approx.)

#### **Selection procedure**

Announcement about the In-school fellowships will be made through the existing network of Nepal government's Board of higher Secondary Education and High School Education Board.

A three-member panel of educationists will be constituted for the selection of the eligible students. One of the fellowships will be awarded to candidate from women, and marginalized communities.

#### 4. Policy level Seminar on Science Education (October 2013)

This will be achieved through a series of policy level dialogues and consultative meetings involving NRN educationists, S&T professionals and policy makers of the Government

at various levels. Several donor agencies can be approached to supports the proposed consultative forums. The outcome will be policy papers, situation analyses and issue profiles that can have important bearing on forward policy formulations and decision making.

Target for 2012: Consultative meeting on Science Education In Nepal Tentative date: Three days before the NRN Conference In Nepal (2013)

Estimated Cost: Rs. 170,000 (US\$ 2000 approx.)

(Detailed program will be developed later in consultation with stakeholders in Kathmandu and circulated among the members of the Project Steering Committee)

## 5. Science Foundation Initiative (Ongoing)

Science for the People Project is a participatory movement while Science Foundation is a long term goal providing for sustained development of S&T capacities in the country. The Foundation is conceived as a public endowment trust by mobilizing the resources and contributions from NRN global community.

During the project year, a conceptual framework of the Foundation will be prepared for submission to the NRN-ICC Governing body.

## 6. Budget

Total Cost of Activities as listed above: Rs. 400,000 (US\$ 5,000)

Management overhead

About 8% of the total Rs. 34,000 (US\$ 400)

**Grand total** Rs. 434,000 (USD 5,400)

#### Request for contributions/feed-back/suggestions

The NPI/NRNA Coordination Committee requests all NRNA organizations, development organizations and S&T professionals to support this new science fellowship as a knowledge dissemination initiative among the hard to reach people. This initiative is complementary to NRN Open University activities and support OUN S&T projects in the future

- Cash contributions above \$100 will be credited with commendation certificates to be issued in the annual function organized by NRN Governing Body.
- Contributors are also welcome to sponsor a fellowship by offering a cash grant of \$400. The fellowship will be named after the contributor and letters of commendation issued accordingly.
- Suggestions are welcome towards the improvement of the draft outline or inclusion of any thematic areas not listed in this announcement.

# 7. **Summary**

The above activities progress reports will be presented to the ICC meeting during the global conference 2013 for review. It is anticipated that the proposed permanent S&T committee will overtake overall responsibilities from SKI Task Force following its approval from the ICC meeting and team structure revised as necessary to meet its future objectives.