

A. NGO Background:

Nepal Rises is a registered non-profit organisation based in Chakupat, Patan Dhoka, Lalitpur. **Mission:** Nepal Rises improves the quality of education, health and environment for students and communities in Nepal by connecting people with organizations and using innovative solutions for sustainable change.

Vision: A more developed nation that values sustainable living enabled by informed and educated citizen together with a stable democracy.

History: On May 30th 2015, just after a month of the earthquake, Nepal Rises officially registered as a non-profit organization, with intentions of having better transparency and to work for a long term, because of the belief that a disaster not only brings immediate destruction, but has long term aftermaths like homelessness and famine if proper steps are not taken. Thus, Nepal Rises has been partnering with different volunteering groups and organizations to have permanent impacts. It was also one of the first groups to mobilize relief supplies after the earthquake.

Current Programs: Currently, Nepal Rises has been primarily involved in repairing schools and constructing the houses and schools damaged by earthquake.

Key Achievements: Nepal Rises focused on rebuilding phase of reconstruction under which Nepal Rises has been able to:

- Constructed 45 transitional shelter in Melamchi, Sindhupalchowk
- Provided technical assistant to GIZ in demolishing 15 health post in Dhading

B. Project Details

1. **Name of the Project:** Knowledge Lab
2. **Project Sites/locations:** Kathmandu: Naxal, Gyaneshwor, Sinamangal
3. **District:** Kathmandu
4. **Municipalities:** Kathmandu Municipality
5. **Project Duration:** 12 Months
 - Date of commencement: May, 2017
 - Date of completion: May, 2018
6. **Project Status:** New
7. **Project Sector:** Education
8. **Project Target:** Group Selection Criteria:

Students from underprivileged, poor and deprived families and communities.

i. Program Background

In 2005, about 1.4 million students enrolled in grade 1. After 10 years only about 400,000 appeared in the SLC in 2015. Less than 200,000 graduated. This means that over about a million children never made it to grade 10 and 1.2 million failed to graduate from secondary school system in Nepal.

Two-thirds of all children in Nepal attend public schools, and every year a significant majority of these students fail to graduate from secondary school. If 100 children enroll in grade one, only 30% of them stay in school. About 70% children drop out of the school system. Over 90% of students who fail the SLC fail in Maths, English, or Science. At grade four, 25% of students cannot count double digit numbers.

ii. **Feasibility Study/Baseline Survey**

Most public schools are under-resourced and struggle to both get and retain teachers. In schools where the government has not allocated enough teachers, or in remote areas where teachers do not want to live, primary school teachers have to teach secondary level students. As a result, teachers are overburdened and the education of students appearing for the SLC is being compromised by teachers who are not qualified to adequately prepare them to excel in the board examination.

Poor quality and wide disparity in education quality and access among school types, regions, and population groups are two of the major problems facing Nepal's education sector. A vast majority of students attending public schools do not have access to learning materials beyond the regular text books.

Nepal Rises' mission is to help address these problems through the integration of ICT in daily classroom teaching-learning process.

Through the assessment process, Nepal Rises identified three schools: Gyan Bikash School, Gyaneshwor, Adarsha Lower Secondary School, Naxal and Shree Sharada Higher Secondary School, Sinamangal, for setting up knowledge lab.

i. Gyan Bikash School: Gyan Bikash school was established to cater the educational need of children working as domestic worker, street children and children from poor community. The majority of the children studying in this school are domestic workers and street children. There is a computer course in school but school has only 3 working computer. Total number of students in the school is 150.

ii. Adarsha Lower Secondary School: Adarsha Lower Secondary School was established to provide education to children of "Bal Mandir" (oldest and biggest orphanage in Nepal). The majority of students studying in the school are domestic workers. The school used to have computer lab which now is damaged by April 25th, 2015 earthquake. There are currently 75 students enrolled in Adarsha School

iii. Sharada Higher Secondary School: In 2008 B.S two schools were merged to form Sharada Higher Secondary School. It is a government school and has been providing education to children from poor family. There were 8 computers but due to earthquake and flooding all computers were destroyed. Total No. Of students above 300.

iii. **Knowledge Lab Program**

The Knowledge lab will be consist of computer lab set by using Raspberry Pi system. The knowledge lab will use interactive educational software, e-Paath developed by OLE Nepal that are closely aligned with the national curricula. OLE Nepal created these multimedia learning modules that engage learners and provide a fun and meaningful learning experience for children. Another aspect of knowledge lab is to set up digital library, E-Pustakalaya, also developed by OLE Nepal which is a collection of thousands of books and educational resources, course content and reference materials. E-Pustakalaya has dual aim to develop reading habits among children by providing them free and open access to age-appropriate reading materials and to encourage them to learn through independent research and inquiry. Ultimate target is to teach children of higher grades (class 6 to 9) Scratch programming which is a free visual programming language. Scratch is used by students, scholars, teachers, and parents to easily create animations, games, etc. and provide a stepping stone to the more advanced world of computer programming. It can also be used for a range of educational and entertainment constructionist purposes from math and science projects, including simulations and visualizations of experiments, recording lectures with animated presentations, to social sciences animated stories, and interactive art and music

iv. Statement of the program goals and objectives

The major goals and objectives of the program are as follows:

The overarching goal of the program is to improve the quality of education with special focus on Maths, Science, English and Computer for the children of Adarsha Lower Secondary School, Gyan Bikash School and Sharada Higher Secondary School.

- To set up computer lab in the schools using Raspberry Pi system.
- Set up server from OLE to access e-path and e-pustakalaya and have teachers provide interactive lessons using these tools
- Give Teachers training on using these tools
- Provide intern for six months to support teachers in using these interactive tools and provide technical support in teaching scratch programming.

Key Activities and Timeline

Timeline of implementing knowledge lab in Adarsha Lower Secondary School, Gyan Bikash School and Sharada Higher Secondary School

Months	May-18	June-18	July-18	Aug 18-May 19		
Phase -1						
Procurement of required materials for implementing the lab						
Recruiting staff						
Install Computer lab						
Phase-2						
Training to teachers for using the interactive OLE tools						
Training to computer teacher about scratch programming						
Prepare schedule for practical class with teachers						
start e-paath teaching						
start scratch programming teaching						
Monitor the progress of students						

v. Project Implementation Process/Methodology:

Nepal Rises will be responsible for the whole implementation of the project including setting up computer lab and giving scratch training to teachers. Nepal Rises will collaborate with School

Management Committee, District Education Office while implementing the project in the field. Nepal Rises will collaborate with OLE Nepal for the teacher's training and OLE server implementation.

The program teams on the ground will coordinate with District Education Office (DEO) and School Management Committee where relevant for information sharing and better coordination. The program will include capacity building of teachers and school.

The funds will be received by Nepal Rises who will procure all the required equipment/furniture locally. Nepal Rises will also provide intern to the school to conduct the program smoothly.

vi. **Expected Project Outcome/Result**

Knowledge Lab: 3 Schools in Kathmandu	
# of computer lab to set up	3
# of system in each school	15
# of teachers to train	12
# of students benefitting from E-Paath and E-pustakalaya	243
# of students getting scratch programming training	114

vii. **Sustainability of the Project**

The computer lab will be handed over to the School after one year. The School will be the key body to lead the management and operations of the school who will work in coordination with relevant local government agencies.

viii. **Program monitoring:**

Program monitoring measurement, including measurable indicators for each objective will be done on a monthly basis through internal progress reports which track:

- Student's response to the new interactive learning system
- Upgrade in teaching method and skills of teachers
- Any change in skills in Math, Science and English subject of students
- Feedback from students, teachers and school
- Challenges encountered, if any, and how challenges were resolved.

Periodic reporting (based on the weekly internal reports) to donors, Department of Education and the Social Welfare Council will measure progress toward reaching program objectives. Final reporting will also include a section on formal beneficiary feedback gathered at the conclusion of the program. **Indicators of Success:** The program will be considered successful if at the close of the program period the following objectives are met:

- Upgrade in teaching methods of teachers.
- Students have more understanding of subjects like Math, Science and English.
- Students get friendlier with using computers and develop computational skills.
- Beneficiary feedback indicates satisfaction with the learning environment.
- Increase in attendance of student

C. Financial Details

- i) Total Program cost: \$34,000
- ii) Administrative/Overhead Cost with percentage: \$ 6000
- iii) Total Cost: \$40,000