

“Nepal Science education is Nepal Future”

School Science Capacity Building Initiative

PROPOSAL

NEPAL SCIENCE FOUNDATION COMMITTEE
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Section A: Project Rationale and Approach

1.1 Context

Nepal Government has invested billions of dollars for improving nation’s education system in last decade. Donor agency and international organizations greatly helped to reshape education system, new curriculum are made with the slogan Education rights for all. Nepal has significantly improved school access and admission rate of child with the increased focus and budget to education sector. The results, however show that our performance and achievement in terms of productivity is on decline. Only 21% of school teach science in Nepal Skilled human resource is always scarce in market. More and more people are going to gulf nations for employment. Nepal needs to put high priority on science education in school in partnership with diaspora community to address this problem

School education is always vital to make citizen more reflective in future. Curriculum of school education in Nepal has provision of both theory and practical learning practices. But teaching practice in more than 95% school is based on theory rather than practical one. Science lab is far away from school but science text book has provision of science experiment. “School Science Capacity Building Initiative” is the core project of NSF and was initiated with the objective to develop science lab capacity in community based schools, provide orientation, training and practical experiment tools to school to effectively implement science education curriculum. This initiative aims to bring also school lab science to local community to raise community awareness on health, hygiene and nutrition etc. For example Cattle dung can and water sample from local water resources be screened in local level using resources available in school lab to teach about the importance of good and bad microorganisms. Science teacher will be provided training in well-equipped in regional schools and involve lab services to community using resources available in lab.

1.2 Organizational Background

Nepal Science Foundation Trust (NSFT) is a global initiative of diaspora Nepali established in 2013 to bring new momentum in Science and Technology (S&T) development of Nepal. It works with diaspora Nepali who wants to help S&T development in Nepal. It helps to develop bridge between international and national organizations. NSFT is working to develop diaspora friendly S&T policy of Nepal. This initiative has been purposed by NSFT to improve and unleash S&T potential of school children through science lab and science literacy.

1.3 Description of Project Activities

The project will be carried out with following activities:

1.3.1 Baseline study: A baseline study will be performed. Discussion with school administration, school management committee and local people will be organized. A coordination committee of teaching staff will be formed. The room available for lab will be monitored for further planning.

1.3.2 Basic structures development: Basic structure like furniture, painting and wiring will be developed.

1.3.3 Laboratory setup: Laboratory materials will be installed in room. Safety measures and waste management along with water supply will be fixed.

1.3.4 Orientation training to teachers: Orientation training of 3 days will be organized engaging teaching staffs. They will be trained with application of laboratory materials. The teacher will be provided with experimental catalogues to perform experiment. Schedule for laboratory experiment will be developed to include practical session in daily activity of class. Teachers and principle will be given information about materials that need to replaced and added regularly in lab.

1.3.5 Training to teacher: The training will be based on application of school lab for community. Basic local requirements that school lab can address, (like cattle dung and water sample screening) will be identified and training on those issues will be provided. The mechanism will be developed for using school lab in community issues.

1.3.6 Monitoring and Evaluation: The progress will be monitored and evaluated regularly. NSFT will contact and deploy follow-up plan. NSFT will contact with school regularly. The progress report will be submitted to donor regularly. NSFT will provide additional lab materials for first year of operation. Afterward, school need to manage it as District Education Office offers support to school annually.

1.4 Implementation plan and time frame:

1.4.1 Human Resource Management: Technical people for lab installment and orientation training will be appointed. Progress report and evaluation report will be developed by administration of NSFT. Basic structure will be developed by technically sound people. Local people will be given first priority under the condition of quality assurance.

1.4.2 Time frame: The project will be completed in period of 6 month.

The project will start immediately after agreement.

Month	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Baseline study						
Basic Structure Development						
Laboratory setup						
Orientation training to teacher						

Trial phase						
Monitoring, evaluation and progress report						

1.4 Communication of results and replication: The evaluation report of laboratory application and performance will be developed. The finding will be disseminated to district offices and other neighboring schools.

Section B: Project Risks, Monitoring and Evaluation

2.1 Risks to successful implementation

2.1.1 Room availability for lab: At least one room is needed for lab. The size may vary.

2.1.2 Supply of materials: road access to school is major aspect of supply of lab materials.

2.1.3 Confrontation on human resource management: Local people may confront about deploying outsider for developing basic structure and lab. If technically sound people are not available in community, NSFT will hire technical people from nearby market.

2.1.4 Support of school administration: teaching staff and principle should be aware and active. The project can be successful only after creative support from school administration.

2.1.5 Regular use of lab: Several schools have library but they just close it and never use it. So regular use and upgrade of lab is major risk. NSFT will regularly contact school and visit there if needed.

2.1.6 Maintenance: Lab needs regular addition and replacement of certain materials. School need to find resources for that purpose. School need to manage human resource to manage laboratory.

2.1.7 Sustainability of project is one of major risk. Lab materials need to be added and should be maintained regularly. Resource is needed to manage all those activities. As being one of project driven by diaspora but former students of hosting school, an endowment fund can be generated. District education office also provide support to school through its annual budget. School can generate some fund through providing some lab services to community too.

2.2 Monitoring, Evaluation Plan and Indicators

Project monitoring schedule:

General objective of project: “To improve science education of school through practical learning”	
Specific objectives:	<ol style="list-style-type: none"> 1. To develop laboratory in school 2. To provide laboratory application knowledge to teacher 3. To develop daily plan of lab practices for every class (Grade 6-10) and make _____ mechanism to implement it. 4. To develop mechanism for regular use of laboratory and regular maintenance of lab.

Target outcomes:								
<ol style="list-style-type: none"> 1. Technically sound and viable laboratory for school level education will be developed. 2. Teachers will be able to practice lab with theory. 3. Science knowledge of students will improve. 4. School will be able to manage lab for regular use. 5. Community will be benefited from school lab. 								
Responsible person/organization and indicator			Duration (month)					
Activity	Responsible Party	Indicator	1	2	3	4	5	6
Baseline study	NSFT and School Administration	Baseline report						
Basic structure development	NSFT	Room ready for lab development						
Laboratory Installation	NSFT	Lab development						
Orientation training to teacher	NSFT and coordination committee of teachers	Teacher performing class in lab						
Feedback and upgrade	School administration and NSFT	Regular use of lab						

Section C: Project Budget

3.1. Financial details: The project will cost NRS 671,400/- (six lakh and seventy one thousand four hundred rupees). 610,000/- will be contributed by donor and 61,400/- will be contributed by NSFT. The cost may vary with distance from district headquarter or nearby market.

3.2. Projected Expenditures:

S.No.	Title	Amount (NRS)	Remarks
1	Laboratory materials	316400	VAT included
2	Basic structures development (Furniture, Painting, Wiring)	260000	Vat included
3	Orientation trainer cost	20000	Tax included
4	Laboratory installation cost	15000	Tax included
5	Transportation cost	60000	Tax included
	Total	671,400/-	

The financial report will be published along with authentic audit report for this project.