General Grant Information

This application has been developed as a tool to help Volunteers and their communities plan successful grant projects. The information that you record here will also be transmitted to Peace Corps Headquarters for internal reporting and reporting to donors. Please work with your community to fill out this application and return it to the appropriate staff member at post for review. Before completing any section, make sure to read the entire application.

Project Title: Namajani Day Borehole Hand Pump

Grant Type: Water & Sanitation

Status:

Volunteer: Ross Fischer

Kevlin Mkulia

Responsible Program Manager/APCD:

Country: Tanzania

Program Element:

Project Start Date: 02/04/19

Project End Date:

Community Information

City/Town/Village	Community Group Name	Group Contact Information (phone, address, etc.)	Group Contact Person
Namajani Village	Namajani Day Secondary School	0623-756-451	Augustino Kihula

Classification

Choose from the following categories to give your project a primary classification: Agriculture, Education, Environment, Health, Municipal Development, Community and Economic Development, Youth Development, Water and Sanitation, HIV/AIDS, ICT, NGO Development, Volunteerism, Food Security, or Gender and Development.
From the same list above, choose one or more secondary classification to describe your project, if applicable

Primary Classification?	Classification(s)
Water and Sanitation	Hygiene, Food Security, Education, Agriculture

Volunteer Information

Primary PCV	Ross Fischer	**Peace Corps Sector**	Education	**COS Date**	21/9/20
PCV 2		**Peace Corps Sector**		**COS Date**	
PCV 3		**Peace Corps Sector**		**COS Date**	
Other PCVs:					

Project Narrative

Please fill in each box explaining the planning for your project.

Summary

Please provide a brief summary of the project (up to 250 words). Include project activities, objectives, the community's contribution and the potential impact the project may have. For PCPP applications, this is the text that will appear on the PCPP webpage, please omit specific location information.

Every day Namajani Day Secondary School uses approximately 1000 liters of water sourced from unclean dug wells. The school body of 502 students carries 100 buckets from villages up to 5 kilometers away to supply water for the whole day. The supplied water is sometimes contaminated which leads to diarrhea and other waterborne diseases, causing student absences. Usually, the supply is depleted before school day ends. This, combined with a lack of hand wash stations, means that bacteria and sickness is spread at a high rate. Additionally, female students lack the water to care for their menstrual cycles sanitarily. The school's proposed solution is a hand pump to be installed on the school grounds. Estimated completion date is mid-August. Primary outcomes include clean water to be provided to teachers, students, and cooks during school and a decrease in waterborne sickness at school which will improve student attendance and time in class. After school, the guard will be responsible for attending the pump and distributing water to villagers. The guard will keep records of the water sales to villagers in a ledger to monitor usage and for reporting to the district. If the pump breaks, the district government will perform repairs for this model pump, free of charge. A project committee of four teachers and project club of 24 students has been established. Staff and parent meetings have been conducted to generate interest in the project. Community contributions will reach at least 25% of the total project cost of 13,000,000 TSh. Contributions take the form of materials, labor, and cash contributions.

Commented [c1]: I think here you can just mention the primary outcome (the first things you mentioned) and save the rest of the secondary outcomes for that section; may include one quick blurb about less sickness/truancy directly after

Background

Describe the background of the community and what priority this project addresses.

Namajani Village is in southern Tanzania in the region of Mtwara. Approximately 4,200 people live in the village and 95% practice subsistence farming according to the ward office. The village hosts Namajani Day Secondary School which serves the surrounding nine villages. Namajani Day Secondary School is a relatively new school, founded in 2006. The school is expanding its classroom and teaching capacity yet lacks many facilities that would improve the school's wellbeing - most notably a reliable supply of clean water. Students bear the responsibility of carrying 100 buckets of water to school each day to provide for drinking, cooking, and cleaning. Many students travel from villages up to 4 miles away, often by balancing buckets on their bicycles or heads. During the dry season (a majority 8.5 months of the year) the school resumes its reliance on water purchased from dug wells. These wells often provide brackish and contaminated water caused by agricultural runoff and livestock feces. This leads to students contracting diarrhea, giardia, cholera, and other serious waterborne diseases. The wells are further dangerous since people must balance themselves on the edge of a 20 foot-or-more deep hole while heaving jugs of water. The lack of water inhibits the opportunity for proper hygiene education like hand washing and menstrual cycle care. The community surrounding Namajani Day S.S. has proposed for a hand pump to be installed on school grounds to address the need for improved water security at school and for the surrounding villagers. Last year, one effort was proposed the parent-teacher meeting. The community planned to dig a surface well, but made no progress.

Commented [c2]: Very good transition here

Community Involvement

How is the community the driving force behind the project? Provide examples that demonstrate the community's involvement in the design and planning of this project.

The community shows interest and is eager to improve the school's water situation by installing this hand pump. The head of the school's parent committee has contacted two different drilling contractors. Many other parents are interested and have asked when and how they can contribute - they are prepared to contribute 25% of the total cost services. A project committee has been created and includes the Headmistress, Deputy Headmaster, Academic Master, and the school accountant. The school accountant will keep track of contributions using a ledger. One meeting was held in January among all teachers to gather ideas and distribute responsibilities. Two meetings were held in February of 2019; one was to host the engineer while he gave advice, and another was a general meeting to discuss responsibilities and the progress of the concept memo. The last meeting was held with the parent committee, parents, and teachers in March. The Academic Master invited the local district water engineer to visit the school and advise on project feasibility. The engineer is supportive of the project and, in his experience and knowledge, Namajani is a successful area for boreholes. Two teachers have already helped lead the student project club, which students have attended and eagerly contributed ideas and writing samples to the project. Additionally, the teachers are ready to conduct student trainings on good hygiene practices.

[Type here]

Outcome

Briefly describe the desired outcome of the project.

The main project goal is a completed hand pump to be installed on the school campus that will provide water for students year-round. Additionally, hand-washing stations will be installed near the student bathrooms and the staff bathrooms. Immediate outcomes of the project are decreased non-academic workloads for all students, access to non-contaminated water for cooking, drinking, and cleaning, and increased water security for the nearby villagers. This will prevent the school day ending with a lack of water and thirsty students who must bicycle back to their home villages. Hygiene trainings will educate students on proper washing techniques and lower the transmission of harmful bacteria and pathogens. Waterborne diseases will decrease, leading to both more time in school and improved attention/learning ability. Other short-term outcomes include project planning and management education for both students and teachers, and emphasis on the importance of math and science education as they watch engineers and other technical work be performed at their school. By observing and partaking in the project associations between work and reward will be strengthened. Longer term outcomes include an opportunity for a year-round school garden to be implemented by the project club, an improvement of student attendance due to a reduction in waterborne diseases and an improved sense of agency and pride in their school.

Implementation

Describe the implementation plan that will be used to achieve the goals and objectives of this project. Do you foresee any challenges to project implementation?

The project committee has separated the project into five main phases. Phase one is to collect community contributions as soon as the grant is accepted. Augustino Kihula and Azaria Mjema will oversee responsible contribution collections. Phase two consists of a surveyor to visit the school the last week in June. The school will propose three locations on the grounds for the surveyor to estimate water depth and pressure. The location with the most reliable measures will be chosen as the site for the borehole and hand pump. Phase three will start the first week of July, whereby drill-rigs will be mobilized to the school from the town of Lindi to drill an 50-meter-deep borehole. The project committee and district water engineer will oversee the drilling. The drilling must start in July or later to give time for recent rainfall and groundwater to settle, allowing for more reliable drilling. Phase four will consist of the construction of a pump basin and security hut, and installation of the hand pump. The project committee and heads of the parent committee will oversee phase four. The community contributions will help construct these structures and purchase the pump. Phase five will include pump testing and usage education from the engineer and drillers, and hygiene training periods for students, teachers, and cooks. A special session will be held for women on proper menstrual cycle care. Education includes basic pump maintenance the school may perform, how to avoid aggressive pumping techniques to lengthen its lifespan, and how to properly lock the pump when not in use.

Commented [c3]: "The location with the most reliable measures (water pressure, amount of water, etc) will be chosen as the site for the well and hand pump"
Make sure you say when each phase will start and end; be sure to say who will oversee each phase- you can use ablanket blurb here (the project committee will oversee phases one through three. Or local contractors with experience digging wells will oversee phase four

Capacity Building

How will the project contribute to building skills and capacity within the community?

This project will increase students' capacity by improving their ability to learn. By supplying clean drinking water throughout the entire day their ability to focus will increase. This project will reduce the occurrences of diarrhea and waterborne illnesses, transmission of bacteria and pathogens, and reduce nonacademic workload, leading to more time spent in class and better academic performance. The burden of purchasing and supplying water will be taken off the students' families. Teachers' capacity will improve as they participate in grant writing and project implementation. The project committee teachers will gain experience planning, creating a budget, and negotiating with contractors. This will increase the school's capacity when teachers start new projects. Also, school cooks will have access to clean water, and in turn, teachers and students will be able to eat healthier meals. An opportunity for a school garden will open, and participation in sports will improve as students will have enough water after school to play.

Commented [c4]: Gain experience

Sustainability

How will the community be able to sustain the activities and/or benefits of this project? What is the community's plan to sustain the benefits of the project after the initial project funding has been exhausted?

A hand pump was selected over other types of available pumps (solar, electric, gas) because it is much simpler and likely to last longer. Another important factor in this decision is that the district water office advises that wells around this area reach water, and provide maintenance to the well. So, if the hand pump breaks, the district office will provide parts and labor free of charge. The pump will be supported by the district through routine maintenance and repairs, and the school watchman will allow villagers to access the water after school hours. The deputy headmaster and academic master will continue to supervise the operation of the pump and collect funds from the watchman. To withdraw funds, the headmistress, deputy headmaster, and academic master must all agree on the use of the funds. This model is already followed by another village's pump and will be adapted for the school. Also, the installation of this pump (the same model of other hand pumps in the region) supports development of the broader water infrastructure in the region. As more hand pumps are installed, it contributes to institutional knowledge and it becomes easier for local governments to expand support for improved water access.

Goals & Objectives

What are the project's goals and objectives and how will you know if your project is reaching them to produce the desired benefits or change? Please list corresponding goal and objective for each line when entering multiple indicators under a single goal/objective. Add rows if needed.

Fill out for Initial Grant/Application				
Goal	**Objective**	**Indicator(s)**	**Who**	**When**
1. Increase the capacity of the school, students, cooks, and families of Namajani Day Secondary School by improving hygiene by ensuring water security and cleanliness.	1.1 Train students, teachers, and cooks on good hygiene practice	# of students, teachers, and cooks attended hygiene trainings. # of liters of clean water per day provided to # of students, cooks, and teachers.	Drillers & Builders, Project Committee	By the end of August, after pump installation
	1.2 Decrease occurrence of waterborne diseases and diarrhea in students and villagers by 40%	Reduction in # of student diarrhea cases.	Project Committee	By the end of August
2. Improve student's capacity to learn by improving nutrition and access to clean water.	2.1 Provide education (e.g. project management, gardening practices) to project club to increase the agency of the student body.	# of club sessions held relating to water project, project management, or gardening practices. # of students participating in club.	Project Club	Throughout entire project
	2.2 Increase student's academic performance by reducing nonacademic workload.	Reduction in liters of water per day brought to school by students as a percentage	Project Committee, Project Club	By the end of August
	2.3 Improve food security for students and villagers	# of functional hand pumps installed. # of square meters dedicated to gardens which are watered from hand pump.	Project Committee, Project Club	Pump installed by mid-August. Garden project started by the end of August.

Timeline

Person Responsible	Activity	Implementation Time
Project committee	Start of project committee and project club. Parent meeting.	January 7, 2019
Project committee & headmaster	Conduct Parent meeting and contact engineer.	February 7, 2019
Azaria Mjema & Augustino Kihula	Collect community contributions.	Until July 29, 2019
Project committee	Drilling of borehole by drilling company. Installation and testing of hand pump by District Water Office.	Within 3 weeks of receiving grant money.
Project committee & Community	Construction of concrete basin and hut.	Week after hand pump installation
Project committee	Training of teachers, students, and villagers on proper usage and water conservation practice.	Week after basin completion
Project Club	Hold weekly project club meetings presenting various topics.	Weekly throughout the project

PCV	Completion of project and closing of grant.	Submitted 1 month after completion of construction

Do No Harm

General

Please report on the results of your "do no harm" discussions with community members. Did you find that there were consequences you hadn't thought about?

One potential risk of this project is that it may reinforce gender roles and the work that one gender may be expected to perform (e.g. teachers may select boys to fill buckets).
Similarly, the hand pump runs the risk of breaking, especially when used by many students.

Environmental

If the proposed project is not solely a training project, please discuss possible negative environmental impacts with your community. What are potential negative Environmental impacts of the project activities?

As with any construction site, there will be leftover materials and localized waste/pollution.
To drill the borehole, large machines will run for multiple hours and produce greenhouse gasses. Also, the hand pump will access and withdraw groundwater, a semi-renewable resource. As with all groundwater wells, there is potential that water is used faster than rain can replenish the aquifer. Lastly, to drill the borehole a few trees may need to be removed.

Mitigation

For each of the potential negative impacts described in your prior responses please describe the measures the community will adopt in order to monitor and mitigate against potentially harmful effects.

Well usage education has been reviewed by the project committee and students will be shown proper pump usage. Teacher training will include non-discriminatory practices to ensure pump-work will be delegated equally to females and males.
Any leftover materials will be stored or repurposed for future school projects. Localized waste will be cleaned as a part of the school's daily cleaning regimen.
The additional trees and crops grown from the well's water will offset the greenhouse gasses produced from drilling.

Budget Summary

No need to complete this section when working offline. This section will automatically calculate when the detailed budget has been entered in the PCGO portal.

Category	Grant Amount (USD)	Community Contribution Cash (USD)	Community Contribution In-Kind (USD)	Third-Party Contribution Cash (USD)	Third-Party Contribution In-Kind (USD)
Equipment	$2000	$0	$0		
Labor	$2000	$0	$86		
Land/Venue Rental	$0	$0	$0		
Materials Transport	$435	$0	$0		
Materials/Supplies	$0	$1086	$112		
Other	$135	$0	$0		
Travel/Per Diem/Food/Lodging	$0	$0	$0		
Total	$4565	$1086	$198		

Environmental Review

For grant projects involving 1) water/sanitation; 2) agriculture such as agroforestry and community gardens, and 3) environment such as natural resource management, Volunteers must complete and submit an environmental screening form to the grant review committee. The grant review committee must ensure that information on the form is taken into consideration and given significant weight. The Volunteer and committee will determine what, if any, measures must be taken to mitigate and monitor the environmental impact of the project.

The purpose of this Environmental Review and Assessment Checklist (ER Checklist) is to determine whether the proposed action (scope of work) encompasses the potential for environmental pollution or concern and, if so, to determine the scope and extent of additional environmental evaluation, mitigation, and monitoring necessary to fulfill federal U.S. environmental requirements. The ER Checklist is intended to be used by both the Peace Corps personnel who submit project proposals and the grant selection committee to ensure that environmental consequences are taken into account before making an award for a proposed activity. The environmental consequences checklist will assist in determining the potential environmental impact of the proposal.

Include cost information on any environmental mitigation and monitoring in the overall budget proposal. Appropriate environmental mitigation and monitoring is considered an integral aspect of the overall project activity.

Please provide the following information. This information will assist the grant award committee in making an environmental impact determination on the proposed activity.

Project/Activity Description	A borehole will be drilled on a secondary school campus using heavy machinery for about two hours. A handpump will be installed as opposed to a gas or electric pump, and then a concrete basin and small brick-walled hut will surround the pump. The pump will withdraw groundwater and provide for the school and village.
Type of Project/Activity	Water
Baseline Environmental Conditions	Baseline environmental conditions are a clean school campus with an abundance of trees and agricultural land used for growing maize. There is currently no concern for major pollutions.

A. CHECKLIST FOR ENVIRONMENTAL CONSEQUENCES: Check appropriate column as Yes (Y), Maybe (M), No (N) or Beneficial (B). Briefly explain Y, M and B checks in next Section, "Explanations". A "Y" response does not necessarily indicate a significant effect, but rather an issue that requires focused consideration.

1. Earth Resources	
a. grading trenching, or excavation in cubic meters or hectares	M
b. geologic hazards (faults, landslides, liquefaction, un-engineered fill, etc.)	N
c. contaminated soils or ground water on the site	N
d. offsite overburden/waste disposal or borrow pits required in cubic meters or tons	N
e. loss of high-quality farmlands in hectares	N
2. Agricultural and Agrochemical	
a. impacts of inputs such as seeds and fertilizers	N
b. impact of production process on human health and environment	B
c. other adverse impacts	N
3. Industries	
a. impacts of run-off and run-on water	N
b. impact of farming such as intensification or extensification	N

c. impact of other factors	N

4. Air Quality

a. substantial increase in onsite air pollutant emissions (construction/operation)	M
b. violation of applicable air pollutant emissions or ambient concentration standards	N
c. substantial increase in vehicle traffic during construction or operation	N
d. demolition or blasting for construction	N
e. substantial increase in odor during construction or operation	N
f. substantial alteration of microclimate	N

5. Water Resources and Quality

a. river, stream or lake onsite or within 30 meters of construction	N
b. withdrawals from or discharges to surface or ground water	Y
c. excavation or placing of fill, removing gravel from, a river, stream or lake	N
d. onsite storage of liquid fuels or hazardous materials in bulk quantities	N

6. Cultural Resources

a. prehistoric, historic, or paleontological resources within 30 meters of construction	N
b. site/facility with unique cultural or ethnic values	N

7. Biological Resources

a. vegetation removal or construction in wetlands or riparian areas in hectare	M
b. use of pesticides/rodenticides, insecticides, or herbicides in hectare	N
c. Construction in or adjacent to a designated wildlife refuge	N

8. Planning and Land Use

a. potential conflict with adjacent land uses	N
b. non-compliance with existing codes, plans, permits or design factors	N
c. construction in national park or designated recreational area	N
d. create substantially annoying source of light or glare	N
e. relocation of >10 individuals for +6 months	N
f. interrupt necessary utility or municipal service > 10 individuals for +6 months	N
g. substantial loss of inefficient use of mineral or non-renewable resources	N
h. increase existing noise levels >5 decibels for +3 months	N

9. Traffic, Transportation and Circulation

a. increase vehicle trips >20% or cause substantial congestion	N
b. design features cause or contribute to safety hazards	N

c. inadequate access or emergency access for anticipated volume of people or traffic	N

10. Hazards

a. substantially increase risk of fire, explosion, or hazardous chemical release	N
b. bulk quantities of hazardous materials or fuels stored on site +3 months	N
c. create or substantially contribute to human health hazard	N

11. Other Issues

a. substantial adverse impact	N
b. adverse impact	N
c. minimal impact	N

B. EXPLANATION OF ENVIRONMENTAL CONSEQUENCES: explain Y, M and B responses

1.a. – There will be excavation in the form of drilling. A 7in. borehole will be drilled to a depth of 50m.
2.b. – There will be a positive impact on the agricultural potential on campus because the well will provide an opportunity to start a garden.
4.a. – While not substantial, heavy drilling machinery will be used for about two hours, all while releasing greenhouse gases.
5.b. – The borehole will reach an aquifer and withdraw groundwater for the school and village.
7.b. – Depending on the location on campus, light vegetation and 2 or 3 trees may need to be removed in order to drill and install the pump.

C. IDENTIFIED SIGNIFICANT ENVIRONMENTAL IMPACTS (including physical, biological and social), if any: (Use ER to identify significant environmental impacts)

n/a

D. PROPOSED MITIGATION MEASURES (if any):

During construction the construction site will be kept clean and organized as a part of the school's daily cleaning routine. Any air pollutants will be offset with the increased agricultural activity the well will provide. The school and villagers will provide seeds for the garden, and labor will be performed by the project club.
Additionally, the project club will plant 5 new trees for every tree removed during construction. This will be free, as cutting will be used to start the new trees.

E. PROPOSED MONITORING MEASURES (if any):

The project committee will supervise the construction if an unforeseen environmental hazard arises.

Grant Performance Indicators

When you are applying for a grant and filling in your grant application, you will only fill in the first column titled, "Initial Indicators". At this time, you will estimate the number of organizations or community members that you anticipate will participate in, benefit from, or be affected by your project. You must enter a non-zero number for at least one initial grant-specific indicator for the project to be approved.

When your project is complete and you are filling out your grant completion report, you will only fill in the second column titled, "Final Indicators". In this column, you will report the actual number of organizations or community members that participated in, benefited from or were affected by your project. You must enter a non-zero number for at least one final grant-specific indicator to confirm that the project met agreed-upon funding requirements

Region / Country	Type	Program Element	Metric	Categories	Initial Indicators	Final Indicators
Tanzania	All	# of Beneficiaries (indirect)	Community members who receive an indirect benefit from the project, not including those counted above	Male(s), 25 and above	600	
				Male(s), 15-24	600	
				Male(s), 14 and below	300	
				Female(s), 25 and above	700	
				Female(s), 15-24	700	
				Female(s), 14 and below	300	
		# of Participants (direct)	Community members directly involved in the design and implementation of the project, including those who attend trainings or workshops	Male(s), 25 and above	5	
				Male(s), 15-24	12	
				Male(s), 14 and below	0	
				Female(s), 25 and above	1	
				Female(s), 15-24	12	
				Female(s), 14 and below	0	
		Capacity Development	# of community organizations and/or associations that will have increased capacity due to this grant	Organizations	1	
			# of individuals who will have increased capacity due to this grant	Male(s) 25 and above	600	
				Female(s) 25 and above	700	
				Male(s) 15-24	600	
				Female(s) 15-24	700	
				Male(s) 14 and below	300	
				Female(s) 14 and below	300	
			# service providers who will have increased capacity due to this grant	Male(s) 25 and above	12	0
				Female(s) 25 and above	2	0
				Male(s) 15-24	0	0
				Female(s) 15-24	0	0

				Male(s) 14 and below	0	0
				Female(s) 14 and below	0	0
		New Technology & Practices	# of individuals who have applied new technologies and/or practices as a result of this grant	Male(s) 25 and above	12	
				Female(s) 25 and above	2	
				Male(s) 15-24	0	
				Female(s) 15-24	0	
				Male(s) 14 and below	0	
				Female(s) 14 and below	0	
			# of new technologies and/or practices that will have been adopted as a result of this grant	Technologies	1	
				Practices	1	
	SPA	4.5.2, Agricultural Sector Capacity	# of farmers and others who have applied new technologies or management practices as a result of US government assistance	Female(s) 14 and below	0	
				Female(s) 15-24	12	
				Female(s) 25 and above	3	
				Male(s) 14 and below	0	
				Male(s) 15-24	12	
				Male(s) 25 and above	1	
			# of firms (excluding farms) or Civil Society Organizations (CSOs) engaged in agricultural and food security-related manufacturing and services now operating more profitably (at or above cost) because of USG assistance	Civil society organizations	0	
				Firms	0	
			# of food security private enterprises (for profit), producers organizations, water users associations, women's groups, trade and business associations, and community-based organizations (CBOs) receiving USG assistance	Community Based Organizations (CBOs)	0	
				Private Enterprises	0	
				Producers organizations	0	
				Trade and business associations	0	
				Water Users Associations	0	
				Women's Groups	0	
			# of hectares under improved technologies or management	Hectares	0	

			practices as a result of USG assistance			
			# of individuals trained in child health and nutrition through US government-supported health area programs	Female(s) 14 and below	0	
				Female(s) 15-24	0	
				Female(s) 25 and above	0	
				Male(s) 14 and below	0	
				Male(s) 15-24	0	
				Male(s) 25 and above	0	
			# of individuals who have received USG supported short term agricultural sector productivity or food security training	Female(s) 14 and below	0	
				Female(s) 15-24	0	
				Female(s) 25 and above	0	
				Male(s) 14 and below	0	
				Male(s) 15-24	0	
				Male(s) 25 and above	0	
			# of members of producer organizations and community based organizations receiving USG assistance	Community Based Organizations (CBOs)	0	
				Members: Female	0	
				Members: Male	0	
				Other organizations	0	
				Producer Organizations	0	
			# of MSMEs, including farmers, receiving business development services from USG assisted sources	Agricultural Producer	0	
				Input Supplier	0	
				Majority Owner(s): Female	0	
				Majority Owner(s): Male	0	
				Medium Enterprises	0	
				Micro Enterprises	0	
				Non-Agriculture	0	
				Other	0	
				Output Processors	0	
				Small Enterprises	0	
				Trader	0	