COMMUNITY NEEDS ASSESSMENT RESULTS FOR A GLOBAL GRANT

Use this form to inform The Rotary Foundation of the results of your community needs assessment when applying for a global grant.

Assessing the strengths, weaknesses, needs, and assets of the community you plan to help is a critical first step in designing an effective and sustainable block grant-funded project. See Community Needs Assessment Resources for complete instructions and helpful tips.

This form will help you report the results of your community needs assessment, which is a requirement for grant applications for humanitarian projects or vocational training equipment. Complete a separate form for each beneficiary community (for example: school , health system or population), using current and specific information for each of them. Remember that you will not be able to use block grant funds to cover the cost of this evaluation, but you may be able to use district grant funds.

OVERVIEW OF THE COMMUNITY

Describe the characteristics (such as geographic information, main sources of income, population size, and access to education/health services) of the specific community where this project will be carried out.

The specific community where the RotVolutionSTEM Peace & Prosperity project will be carried out is the North of Valle del Cauca, a region of Colombia characterized by facing socioeconomic challenges and high poverty rates. This community is mainly made up of boys and girls from strata 0, 1 and 2, who belong to vulnerable groups, such as peasants, Afro-descendants, indigenous people, migrants and displaced people.

The region has a population of approximately 1.2 million inhabitants. The region's main source of income is agriculture, followed by livestock and tourism. The unemployment rate is 15%, and the poverty rate is 50%.

Access to education and health services in the region is limited. The literacy rate is 80%, and the infant mortality rate is 10%.

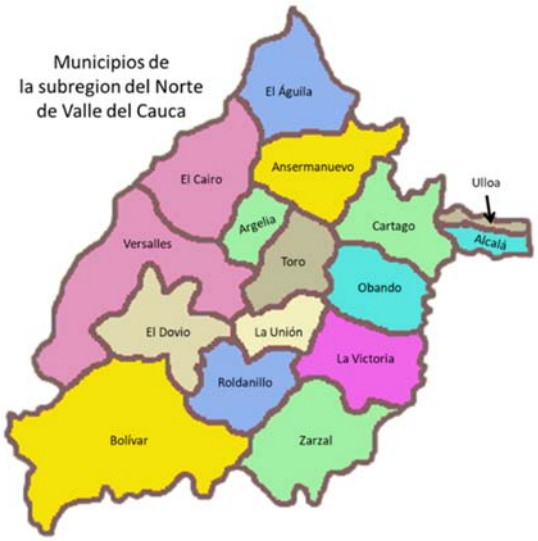

Figura 1. Mapa del Norte del Valle del Cauca

COMMUNITY NEEDS ASSESSMENT DATA COLLECTION

When you did the assessment, who did you talk to in the community? At least two different community representatives and beneficiaries who are not involved in Rotary (such as teachers, doctors, or community leaders) should be included in the discussions.

Cartago Municipal Education Secretary: The municipal education secretary is responsible for public education in the city of Cartago. The secretary provided information on the needs of education where active peace, social justice, equality and prosperity are promoted in educational environments through methodologies focused on STEM areas in the city, as well as on educational policies and programs. current.

Director of the Digital Ecosystems project for the Municipal Education Secretariat of Cartago: The director of the Digital Ecosystems project is responsible for the implementation of educational innovation projects in the city. The director provided information about ongoing educational innovation projects, as well as opportunities for collaboration with the project.

Zone managers: The zone managers are responsible for the public educational institutions in the city. The directors provided information about the specific needs of the educational institutions in which the project will be implemented.

Teacher leaders in research projects: Teacher leaders in research projects are teachers who have developed research projects through STEM with students. Where its results directly impacted the way of acting and thinking of young people, promoting vocations and university careers.

A parent of a student at a public educational institution: The parent

provided information about their child's needs in terms of managing frustration and relationships with peers through STEM education, as well as their expectations. for the project.

A community leader: The community leader provided information about the challenges and opportunities that young people in his neighbourhood have through STEM education in the community and how through their projects they can collaborate with different productive activities in their neighbourhood.

When last year were the talks held?

Throughout the year the communication process was carried out given that for two years we have been accompanying these communities as a club and from this interaction the project presented has been maturing. They took advantage of the months of:

February: When educational institutions begin their activities and teachers, education secretaries and other entities begin their work and all students arrive, both old and new.

June and December: When the holiday season begins, we spoke with community leaders and parents about the problems of young people in their free time, and how to take advantage of it to continue their projects

What methods did you use to gather information from community members (such as community meetings, interviews, or focus groups)?

Community meetings: Community meetings were organized at the public educational institutions where the RotVolutionSTEM Peace & Prosperity project will be implemented. The meetings were held with the participation of students, teachers, directors and parents. At the meetings, the project objectives, community needs for positive peace, and expectations for the project were discussed.

Interviews: Individual interviews were carried out with representatives of the community, directors of institutions, teachers who benefited from deliveries and accompaniment by the club and other institutions not yet impacted. The interviews were conducted to delve deeper into the opinions and experiences of the participants.

Opinion groups: Opinion groups were organized with students, teachers and managers of the public educational institutions in which the RotVolutionSTEM Peace & Prosperity project will be implemented. The opinion groups were held to generate ideas and proposals for the project.

TARGET POPULATION

Who will directly benefit from the project? Indicate the groups that will benefit (such as schools, hospitals, vocational training centers, cooperatives or towns).

The beneficiaries are public education institutions in vulnerable areas of the region with

talented young people in grades 8,9,10 and 100, with great potential in STEM areas, empowering them with capacities for conflict resolution and positive peace through tools modern didactics

Around 200 students are part of at least ten STEM research hotbeds, where projects are developed, which solve community problems and participate in various national and international events. Some of the public institutions with which we have worked are:

to. Alfonso López Pumarejo of the Municipality of Cartago

b. National Academic College of the Municipality of Cartago

c. José María Córdoba from the Municipality of El Águila.

d. Industrial Institute of the Municipality of Cartago

and. Educational institution Ciudad Cartago

F. Sister María Juliana of the Municipality of Cartago.

In addition, the project also has an indirect impact on more than 5,000 students at the institutions, since they will be able to use these teaching equipment in their regular training, thus expanding the scope of STEM education in the region.

The beneficiary community encompasses a diversity of realities and experiences, which further enriches the educational proposal. By involving young people from different backgrounds and contexts, the project becomes a unique opportunity to build a more inclusive and equitable future, where STEM skills and creative thinking become drivers of positive peace, social transformation and economic development. .

In addition, with this project it is expected to articulate four other public institutions in the region, and from these seedbeds, at least one Interact Club and a Rotaract club will be created, with emphasis on robotics, electronics, and software development, which will show our new CR Cartago Pedro Morales Pino, as a dynamic club of people of action and with young volunteers willing to continue the legacy of Rotaryism in society.

Describes the process used to identify beneficiaries.

Through community meetings, interviews and opinion groups, STEM research hotbeds were identified, where teachers donate their time and young people attend after-school hours, to strengthen their capacities in resolving conflicts and problems, and are participants. of positive peace for your community. In addition to the information shared by the region's secretary of education.

These seedbeds are an important social asset in our region because:

• Contribution to knowledge: Research incubators often generate research results that can have a positive impact on society by addressing specific problems and challenges.

• Skill development: Students who participate in research incubators acquire research, critical thinking, and problem-solving skills, which can benefit them individually and contribute to the formation of a more educated population.

• Promotion of higher education: The existence of research hotbeds can motivate students to seek higher and advanced education, which in turn contributes to the educational development of a society.

• Collaboration and networking: Research hotbeds encourage collaboration and networking among students and with other researchers, which can promote the exchange of ideas and innovation.

• Knowledge transfer: The results of research carried out in seedbeds are often shared with the academic community and, in some cases, with society in general, which can have an impact on decision making and problem solving.

In summary, a student research hotbed can be considered a valuable social asset due to its contribution to knowledge, skills development, promotion of higher education and its ability to foster collaboration and knowledge transfer in society.

STRENGTHS, NEEDS, COMMUNITY PRIORITIES AND PROJECT DESIGN

Describe what community members said they cared about during the evaluation.

Training towards true positive peace through STEM education:

Hotbeds of student research in STEM (Science, Technology, Engineering and Mathematics) can also contribute to positive peace. Although at first glance STEM fields may not seem directly related to peace, they play an important role in building a sustainable and positive peace in several aspects:

1. **Technology for peace**: Technological advances, especially in fields such as cybersecurity, can help prevent conflicts and ensure online safety. STEM students can research and develop technologies that promote security and stability.

2. **Solutions to global challenges**: Global challenges such as climate change, resource scarcity and food security have a direct impact on peace. STEM students can contribute to the research and development of sustainable solutions to address these problems.

3. **Science for Peace**: Scientific research can provide a deeper understanding of conflicts and underlying causes. STEM students can research peace-related topics such as conflict resolution, disaster mitigation, and disease prevention.

4. **Education and Opportunities**: STEM research hotbeds provide students with the opportunity to acquire advanced technical and scientific skills. STEM education can improve employment prospects and economic well-being, which can contribute to peace and social stability.

5. **Encouraging international cooperation**: Collaboration on STEM research projects often involves students and professionals from different countries. This can foster

international cooperation and promote cross-cultural understanding, which is essential for global peace.

6. **Information and communication technologies (ICT) for education**: ICT can be used to improve access to STEM education and training around the world. This can empower communities and increase employment opportunities, which in turn can contribute to peace.

In summary, student research hotbeds in STEM can play a significant role in building positive peace by developing peace technologies, addressing global challenges, promoting international cooperation, improving education, and offering scientific solutions to peace-related problems. peace. These efforts contribute to a safer and more prosperous environment.

But this requires access to the right tools for this type of training, especially true in rural and very low-income communities.

Development of the necessary capacities to access professional university careers in the STEM area: Community members expressed concern that their young people can enter university education as a tool to break the chains of poverty in their community and consolidate positive peace .

Developing STEM skills for employability and prosperity for your community: Community members expressed concern that STEM skills are increasingly in demand in the job market. However, many students do not have the STEM skills necessary to be competitive in the job market.

In particular, community members said they cared about:

“That the project is accessible to all students, regardless of their socioeconomic situation.”

“That the project provides students with the STEM skills necessary for success in the world of work.”

“That the project promotes positive peace between students and their family and social environments.”

Describe the community's strengths and resources.

The Cartago community has a number of strengths and resources that can support the RotVolutionSTEM Peace & Prosperity project. These strengths and resources include:

A young and growing population: Cartago's population is young and growing. This means that there is great potential to involve young people in the RotVolutionSTEM Peace & Prosperity project, who will set an example for the rest of the academic community and their social and family environments.

A tradition of innovation: Cartago has a tradition of innovation. The city

is home to several technology-based companies and an innovation center. This can help promote entrepreneurship among students and teachers.

Groups of regular teaching volunteers in educational institutions: Group of teachers with experience in Peace, conflict resolution and STEM training, who donate their time and knowledge to accompany and train young people in their training process.

A commitment to education: The Cartago community is committed to education. This is reflected in the high literacy rate and investment in public education.

These strengths and resources can help ensure the success of the RotVolutionSTEM Peace & Prosperity project. The project can take advantage of these resources to a large number of young people and promote innovation, entrepreneurship, and contribute to the development of education in the region that guarantees positive peace.

Describes challenges and gaps in community behaviors, skills, and knowledge.

Distrust towards true positive peace through STEM education: The community normally remains skeptical due to so many unfulfilled promises no matter how promising the initiatives are, therefore having early victories will be key to showing the community that the skills achieved by Your young people will be a key factor in the peace and prosperity of your community.

STEM skills for employability: STEM skills are increasingly in demand in the labor market. However, many students in the city of Cartago do not have the STEM skills necessary to be competitive in the job market. The RotVolutionSTEM Peace & Prosperity project will address this issue by providing students with the STEM skills necessary for success in the working world.

What problems will the project address and how is the community currently addressing those problems?

Academic inequality, lack of support networks and appropriate teaching tools for a modern education in students from lower socioeconomic strata are generally the main problems addressed in this project.

Currently, the Cartago community addresses these problems through the following mechanisms:

Public educational institutions: The public educational institutions of the city of Cartago have volunteer teachers who convene STEM seedbeds, but these with few didactic tools.

Informal education programs: There are several informal education programs in the city of Cartago that provide STEM learning opportunities to young people. However, these programs are often expensive and available to a limited number of students and do not focus on positive peace.

Technology-based companies: Technology-based companies in the city of Cartago offer job and internship opportunities to STEM students. However, these opportunities are typically available to students who already have a strong foundation in STEM.

Provide specific details about the project design and how it will solve these problems.

In particular, the RotVolutionSTEM Peace & Prosperity project will focus on the following activities:

1. Training in conflict resolution and "Positive Peace" according to Johan Galtung:

2. Soft skills training

3. Design thinking training

4. Psychological support for vulnerable young people

5. Training on communal and family peace

6. STEM training with advanced teaching tools

Describes the long-term plan for the project (such as oversight, financial responsibilities, and expected behavior change) after Rotary's involvement ends.

Supervision: The project will be overseen by a steering committee composed of representatives from the following organizations:

Rotary Club Cartago Pedro Morales Pino

Secretariat of Education of Valle del Cauca

Valley University

Technology-based companies of Cartago

The steering committee will be responsible for ensuring that the project meets its objectives and goals, in addition to the proper use of the tools, and the maintenance of the equipment once its guarantees end.

In addition, the improvement in academic performance, participation in events where students and teachers show their results, such as:

- Ambiente educativo más inclusivo y de buen rendimiento académico

- Results of new methods to solve problems through creativity and skills to manage conflicts more constructively.

- Reduction of the expulsion of young people for being victims of the armed conflict (Consumption, drug sales, social incorporation, family problems)

- An annual technological capabilities fair in the city, where the city's EIs participate with the seedbeds that were sponsored in the project.

- Participation of teachers and their student groups in national or international technological events, such as the Ondas program or excursions to NASA

In addition to the Articulation of the project to the training of each institution through article 14 of the law of law 115 of 1994, as a transversal project and labor competencies in the institution.

ENVIRONMENTAL ASSESSMENT (FOR ALL PROJECTS IN THE FIELD OF WATER, SANITATION AND HYGIENE)

What are currently the biggest environmental threats to local soil, air, water resources and ecosystem?

STEM skills can help students find jobs in the field of sustainability, where they can apply their knowledge and skills to help protect the environment.

Behavioral change can help create a community that is more environmentally conscious and more committed to environmental protection, as well as helping to solve environmental problems in the region through the use of technology. It also has the potential to prepare students for careers in the field of sustainability, to develop innovative solutions to address environmental problems, and to create a more environmentally conscious community.

Indicates cultural practices relevant to the project (such as agricultural techniques or traditions).

This project can take advantage of these cultural practices to help solve environmental problems in the region, through:

- The incorporation of sustainable agricultural techniques in STEM education programs.

- Promote the ecological traditions of the community through events and activities.

- Educate the community about environmental values and their impact on positive peace

What positive and negative environmental changes do you expect to result from the project?

-Students could work with local farmers to learn about sustainable agricultural techniques.

-Students could participate in environmental conservation activities, such as cleaning rivers and forests.

-Students could create campaigns to educate the community about environmental values.