## INTERNATIONAL PEACE AND ENVIRONMENTAL SECURITY PROJECTS COMMITTEE

Bernie Griffard, Past-President Homer-Kachemak Bay Rotary Club

Promoting Peace is one of Rotary's Causes. To be lasting, peace must be born from a population's sense its environmental security.

Environmental Security focuses on many of the areas that Rotary programs address such as fighting disease, providing access to potable water, ensuring proper medical treatment and preventive health programs, focusing on the welfare of women and children, supporting education, and assisting in growing local economies. It also encompasses sustainable food security programs, and the necessity for human physical security.

As we approach the challenges each of these issues present, we must understand that they are all interconnected. It is rare that a catastrophic environmental event is limited to just one area of human concern. Floods, wildfires, earthquakes and other natural or manmade crises that impact agricultural production, spread disease, destroy infrastructure, and force mass human migrations across national borders are more than a short-term, localized events.

District 5010 looks to encourage environmental security by encouraging Clubs to look for cooperative opportunities to apply Rotary Grants and expertise to complimentary projects that contribute to an overall plan supporting local and regional stability.

Building on the College Rotary Club of Fairbanks' efforts in East Africa, District 5010 is exploring a large multi-club District-wide Global Grant. This international project partners with the Rotary Club in Ololulunga, Southwest Kenya, an area that is currently undergoing severe food shortages due to drought, as well as a collapse of their cash income from wildlife tourism-related employment in the neighboring Serengeti-Mara area due to COVID-19.

Fundamentally a water project, we are proposing to the RI Foundation an integrated program that addresses the environmental security of the designated area. The focus is to address resource scarcity, threats to peace, and factors that force people to migrate.

The initiative is highly integrated across multiple Rotary areas of focus addressing issues of:

- o Water
- Peace and physical security
- Food security
- Adaptation to climate change
- Assist in bolstering the regional cash economy
- Improve the status of women in that society

The project involves building a local capability to increase food, water, security, and economic resilience. This project would "port over" to Rotary an integrated regional "environmental security" process that process lends itself well to Rotary's new scalable projects initiative.

The overall project is in the \$120K range. Identified funding sources include:

- TRF Grant
- o District Match
- o WASHRAG (\$2K)
- o District Club co-sponsor's cumulative donations (\$15K-\$20K)

Funds are not required until TRF approval of the District's Global Grant request. A funding decision is estimated for the latter part of the 2021-2022 Rotary Year.

## Southwest Kenai Integrated Peace, Climate Adaptation and Food, Water and Environmental Security Project General Description

District 5010 is exploring a large multi-club District-wide Global Grant international project that would partner with an active and solid Rotary Club in Ololulunga, Southwest Kenya, an area that is currently undergoing severe food shortages due to drought, as well as a collapse of their cash income from wildlife tourism-related employment in the neighboring Serengeti-Mara area due to COVID-19.

This project would involve building a local capability to increase food, water, security, and economic resilience. External factors considered include adaptation to the scientifically probable climate change in the region over the next 30-40 years, and the likelihood of resultant threats to peace, including armed conflict and political unrest arising over increasingly scarce resources and forced migration. This is becoming an increasingly severe problem world-wide, as can be seen from the attached recent New York Times article that reports upon a major, data-rich study of forced migration by the non-partisan Pro Publica think tank.

This project would "port over" to Rotary an integrated regional "environmental security" process that has been repeatedly proven in Africa and elsewhere over the past three decades, although not yet done by Rotary. This process lends itself well to Rotary's new scalable projects initiative.

An initial environmental change assessment for the proposed project area has been completed by a nationally recognized researcher. It reveals that probable climate change expected in this "Mara" area, a populated northern extension of the Serengeti, over the next 30-40 years, will result in both more frequent and severe drought, coupled with extreme rainfall and flooding events affecting the populated areas and the ability of people to feed and support their families.

The grant area is also impacted by the fact that the national parks to the west, famous for their masses of spectacular wildlife, are expected to experience even more severe and frequent drought. The resulting stressors on the wildlife, tourism and the game management industries, impact not only some of the most spectacular wildlife on the planet but also the grant area's major employment and cash economy engine, because wildlife tourism is currently the primary source of cash income upon which the people rely during drought periods when food must be purchased from elsewhere. This is documented by the second, attached article.

There is a great deal of research, including a recent study by the non-partisan Pro Publica think tank, indicating that the immigration pressure occurring in Europe and the US is driven in large part by climate changes in warmer areas that are reducing the ability of people to stay in their homelands because they cannot provide for their families or for a safe environment, with food and water stresses arising from climate change as a primary underlying cause.

Thus, not only do climate change and adaptation circumstances badly affect families living in these areas, but also underlie the seemingly intractable forced immigration issues confronting both North America and Europe. Few people want to move away from their extended families and friends, but many are forced to do so in order to feed and protect their families. In recognition of this, the RI Board decided in October 2020 to establish a forced migration Rotary Action Group to begin addressing this deeper issue. The proposed grant project would be a demonstration of one approach that combines RI's

existing water, health, and community development areas of focus with reducing the root cause of many regional conflictual situations.

What we will propose to RI Foundation is an integrated program that addresses the environmental security of a designated area. Its goals, approaches, and processes are based on successful U.S. government programs where teams of experts assist local populations in devising locally suitable adaptations to water and other issues arising from their changing climate. The focus is to address resource scarcity, threats to peace, and factors that force people to migrate.

To the best of our knowledge and an experienced Foundation water project coordinator consulting with us about this project, this more-integrated environmental security approach has not been done previously by Rotary. Our intent is to not only help the Narok County area of Southwest Kenya devise a sustainable water, food, and community safety approach but to also act as a demonstration project showcasing this proven approach to the Rotary world.

This would be a program that could scale up in the environmental area of focus that will be a major area of focus for Foundation in the coming years.

Even though the concept has only been under preliminary development for the past three months, we already have a roster of experienced experts ready to help, both in the US and on the ground in Kenya.

Bernie Griffard, Homer Kachemak Bay Rotary Club Past President, is the project coordinator. As both an active duty Army officer and then as a Professor at the Army War College, he participated in multiple environmental security planning events in Africa, Latin America, the Balkans and Central Asia. Rich McClear of the Sitka Rotary Club has worked with the US Agency for International Development in Kenya. A variety of other experts in needed disciplines are likewise working together with us here.

Working with the proposed host Rotary Club, the Ololulunga Rotary Club in Narok County, Kenya, our District's preliminary plan has several integrated aspects, most of which involve providing expert assistance:

- 1. Construction of a potable water source from natural springs to town areas via a water pipeline and water storage tank.
- Construction of large farm ponds to store rainy season water for later livestock and farming use, as well as reducing flooding events. There may be less expensive alternatives, such as solar-powered boreholes, which must be evaluated as part of the community assessment and justification for any Global Grant.
- 3. Stored water would be used for the cattle, sheep, and other livestock that are critical to the Masai people, culture, and survival, as well as farming as desired.
- 4. Improve the genetics of current livestock to provide greater productivity of animal products for consumption and sale, from the same resource input. This is a priority item.

- 5. Improve dry land and lightly irrigated farming to increase efficiency. One promising option is quinoa, which is 50% higher in protein than the best wheat, highly drought-resistant, and a potentially high-value cash crop.
- 6. Improve the current cash economy by identifying other practical climate adaptation strategies as well as identifying products and assets that can be used to diversity the current employment and cash economy situation.
- 7. Assist in providing a scientifically valid climate change adaptation plan that includes identifying necessary wildlife protections during ongoing land privatization, possibly including provision of suitable dry season water resources for wildlife.
- 8. Identify regional potential conflicts and other threats to personal physical safety arising from resource scarcity and help devise regional arrangements to address and reduce the root causes of those conflictual threats.
- 9. Help Ololulunga devise a general community resilience program similar to FEMA-supported resilience programs in the US.
- 10. Act as a demonstration project for Rotary that can be scaled up.