Objective

Enhance the nutrition behaviors of women, caregivers, family and community members, and those who influence them by:

- Providing women with an understanding of how the foods they provide for their families affect their overall health
- Expanding the list of common meals people make to include more food diversity in daily diets
- Extending local people’s voice regarding nutrition habits, recipes, and stories to towns outside their own

Background and Rationale

In Tanzania, malnutrition is a significant issue affecting children, their families, and the Tanzanian economy as a whole. Around 42% of children under 5 are stunted, 32.9% of pregnant women have iron deficiency, and 37% women of reproductive age have Vitamin A deficiency. With a large portion of the population unable to meet their full health potential, and susceptible to infections and diseases, the Tanzanian economy is at risk. Despite the many positive health outcomes from UNICEF programming to-date, these statistics demonstrate that there is a compelling opportunity to explore how innovative methods such as behavior change communications might be leveraged to increase healthy nutrition behaviors.

The poor nutrition, especially among pregnant mothers and young children can be attributed to various factors. The availability of crops can often depend on weather, physical access can be limited based on a person’s mobility or strength, financial access can limit what people can afford to buy, and a lack of education or access to education can prohibit people from understanding the consequences of a limited diet. The problem was approached by the Rainbow Project via health and nutrition education of women, caregivers, family and community members.

Current methods of educating women about nutritional needs for themselves and their families is often limited to health visits in hospitals or with local health workers. It is rare for a woman in Tanzania to attend more than one antenatal visit to a doctor. This indicates a need for this information to reach these women elsewhere. Local markets are a logical point of entry to the community as this is where women purchase food for themselves and their families. It is also a place to socialize in the community. As illiteracy is one of many underlying factors that contribute to malnutrition, a color-coded educational system is used in order to reach the 20% of women in Tanzania who are illiterate.
Developing an accessible, educational solution targeting illiterate pregnant women will, by default, benefit a whole community. This project creates a match to the system and the real world, communicating ideas in a familiar environment in a concise and non-restrictive way. Engaging in this project, users will find they retain control and freedom within their experience and can choose how to interact with the system. The aesthetic and minimalist design invites members of different literacy levels and languages to engage. The greatest value this approach adds is the ability to scale for different communities, villages, towns, and countries.

Project Description

The proposed three-pronged communication system integrates critical nutrition information into women’s daily routines. The three components that are developed are a booth for local markets, a database for radio service, and recipe cards that can be distributed and shared in different locations.

The project is a color-coded nutrition system that fits into a compact toolkit and targets pregnant women specifically and the illiterate population generally. It is a tool that is centered in local markets within Tanzania. With use of various media, users can learn about and make healthier food choices by choosing ingredients and foods/meals which can be broken down to fit into the five-color system.

- **Market/Booth** - Taps into the power of local markets with a visual nutrition system which is categorized by five main food groups. The booth provides information that can be explained by interns/health workers and cooperates with market vendors by distributing market signs that help customers distinguish foods/food groups. Market customers will be able to identify foods at the marketplace by their colored signs and refer to nearby posters to ensure their purchases can be categorized into each of the five groups (therefore having a diverse range of foods).

- **Radio Database** - Utilizes a non-textual communication method to incorporate nutrition dialogue in communities. This facility enhances the nutrition system by encouraging people to share their stories and increasing awareness locally as well as nationally about the Rainbow Project and nutrition in general. This database of stories is publicly available for anyone to access, including radio producers looking for content.

- **Recipe cards** - Embraces the traditional food culture of Tanzania while encouraging food diversity. These recipe cards utilize examples of traditional Tanzanian meals and breaks them down into their ingredients by category within the nutrition system. They also include a number of suggested ingredients that can be added to the meal from food
categories that are not represented in the original recipes. These cards bring awareness of nutrition and the nutrition system while also encouraging users to add a little variety to their daily meals in order to enhance their nutritional intake. These are to be distributed to customers in local markets which complement the color coded signage found in the market places. The cards have been designed to include the color-coded sign on the back of the cards so they can function independently from the market and be distributed elsewhere such as health facilities, shops, school, etc.

Running the Rainbow Project necessitates involvement from local health workers, college students that work as interns, market vendors/farmers, and the government.

**Health Workers** encourage a more diverse and nutritional meal as well as the nutrition program to pregnant women and mothers to ensure a healthier outcome for families in the long term. They provide information and guidance on matters of nutrition as well as the nutrition system so that pregnant women and mothers can take action themselves. They can help at the markets and booths that are part of the nutrition system.

**Local College Students (Interns)** working with health workers, the interns will provide information about nutrition and the nutrition system to encourage pregnant women and mothers to add variety to their daily meals. They work at the booths and markets and distribute market signage among vendors/farmers as well as recipe cards to users. They supervise and maintain the radio database where nutrition stories are called in by users in order to provide useful recordings that becomes part of the radio service of the nutrition system.

**Vendors/Farmers** in local markets are encouraged to participate in the nutrition system by using the provided signage that categorizes their products within the five food groups of the nutrition system as well as suggesting to pregnant women and mothers a variety of ingredients that add to the nutritional value of one’s meal. By participating in the nutrition system, vendors and farmers will also learn about the positive effects of a nutritional meal, one filled with a variety of ingredients and therefore be able to pass on the knowledge to others.

**The Tanzanian Government** provides funding for nutrition projects and therefore will play a major role in the nutrition system.

**Customers (Pregnant women/ moms)** are the main audience of the nutrition system who can use the color-coded nutrition system to add more variety to the daily meals of themselves and their family and ultimately increase the nutritional value and intake of their food. By using the market and booth they learn about nutrition and its positive effects, the radio system encourages their participation in bringing awareness about the importance of nutrition and allowing them to
take a more active role, and the recipe cards provide suggestions or a place to start increasing the nutritional variety of their meals.

**Way Forward**

There is potential for this project to be scaled nationally in Tanzania, as well as globally to contexts facing similar challenges, such as low pre-natal nutrition, illiteracy, etc.). This means tailoring the materials of the toolkit to the targeted locations, and ensuring adequate support from the communities.

As this project moves forward, it will be critical to check with and survey local leaders for their support with the program. A couple of local markets will be selected to test the system, possibly focusing on markets in Morogoro (Population 315,866. 169km from Dar es Salaam) in order to test the effectiveness of the proposed plan. Running the program in the market 2-3 times can allow locals to become familiar with the system. The interns’ primary focus will be on introducing the system and collecting feedback. This feedback will be in the form of verbal conversations, first-hand observations of interaction with the system, and a voice recording device integrated with the booth. After the initial launch, content and design iterations will follow as needed based on the feedback.

What will be primarily observed are how and if attitudes toward food, meals, and nutrition are changing, and how people interact with the program.

The minimum materials required by the Rainbow Project will be manufactured and produced in the United States and shipped to Tanzania. These include the large banners and waterproof vendor signs. The collapsible tent is also manufactured in the US but is optional, as the budget allows. The remainder of the paper-based printable materials should be produced locally in Tanzania. These include recipe cards and toolkit instructions. If the villages where the markets are happening do not have printing facilities, they can be produced in bigger cities and shipped. These are optional, the system can still run with the minimum setting of the banner and vendor signs.

The Rainbow Project will work with UNICEF to seek local colleges’ school of public health or school of nutrition students to apply for the internship. The system can rely on interns’ knowledge on nutrition and health, but they will be trained through UNICEF’s local office about the Rainbow Project and how it works. Their duties when they are stationed in the booth are to explain the Rainbow Project and it’s color system, encourage people to leave recordings of personal stories, help them record, save gathered data and transfer to the online recording
database. Local UNICEF contact points will be trained about the Rainbow Project using video communication with the original team from New York.

Local UNICEF officials are in charge of operating the system. After the soft launch, the Rainbow Project will set up booths in markets every second week. UNICEF officers are in charge of checking with interns and handing them out booth materials and providing them with transportation, but are not required to be present in the market. UNICEF office will be used as a storage point for Rainbow Project materials.

Support Needed
This project could be financially supported by engaging in corporate partnerships & requesting government support to cover the starting and operational cost. (Option B)

Option A: Budget support from UNICEF (Cost estimation is based on running 12 booths/ working with US based vendors) (Estimate excludes Recording Database and Radio)

<table>
<thead>
<tr>
<th>Market/Booth:</th>
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<tbody>
<tr>
<td>Booth</td>
<td>$120</td>
</tr>
<tr>
<td>Posters(Banners/durable)</td>
<td>$400</td>
</tr>
<tr>
<td></td>
<td>24 + Standee $38x24=$912 (2.5’x4’)</td>
</tr>
<tr>
<td>Recipe Cards</td>
<td>$500</td>
</tr>
<tr>
<td></td>
<td>10,000 (color, double sided)</td>
</tr>
<tr>
<td>Toolkit Guide</td>
<td>$470</td>
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<tr>
<td></td>
<td>2,500 (color, double sided)</td>
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<tr>
<td>Vendor Signs</td>
<td>$1,160</td>
</tr>
<tr>
<td></td>
<td>waterproof 17x11 Tri fold stand alone</td>
</tr>
<tr>
<td></td>
<td>100/ each color (oil/fatty acid: 50)</td>
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<table>
<thead>
<tr>
<th>Radio:</th>
<th></th>
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<tbody>
<tr>
<td>Recording Stations</td>
<td>$78</td>
</tr>
<tr>
<td></td>
<td>Desk sign + holders $6.50/each x 12</td>
</tr>
<tr>
<td>Intern Salary</td>
<td>$65</td>
</tr>
<tr>
<td></td>
<td>phone + $29 (1000min/month) = $94 x 12 = $1128</td>
</tr>
</tbody>
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| Misc:                  |       |
| Storage/Transportation/Misc | $150 per booth |

It could cost approximately $5700 to start with a minimum of an additional $29/month after the first month.

Option B: With corporate/non-corporate partnership

With a corporate sponsorship, the booth, banners, recipe cards and all the other printed supporting materials could be paid for by a local food company, and in return Rainbow will be co-branded with the company’s logo. Potential partners include Nakumatt, Uchumi, TNS Supermarket.

For the recording stations and devices, support can be sought for phones, carrier service and
intern compensation from a corporate partner and in return the company promotes their product (promotional content limited to fit into on A4 sized printed medium standing next to the recording instruction) in the Rainbow booth and interns will be trained to expose the brand name at least once to the customers. Also get support for additional materials e.g. desk sign for the recording instruction + its holders and battery support. Potential partners include Samsung, LG, Vodacom, Airtel and Tigo.

Recording Database

Joint operation with computer science department of a local college.

Radio

Stories air in public announcement format from Ministry of Health and Social Welfare in conjunction with the system sponsor to cover the media budget. It is unclear whether the government currently offers national programming. The Rainbow Project also seeks help from a Tanzanian ad agency to carry project as a pro-bono to get continuous support on creating/editing radio spots and communicating with radio stations and media providers (if they are not capable of buying it themselves).

Desired media plan would be;
- Weekdays between 7am - 12pm (morning prime time)
- Airs twice during that time block
- Each spot will air for 2 weeks and get switched with new spot.
- For the national holidays, Rainbow will create holiday specific spots with stories involve meals with holiday tradition.

Once the project has successfully launched on a small local scale, there is a possibility to approach the Ministry of Health and Social Welfare for extra funding. Explaining how the Rainbow Project can support the existing government health program and make improvements using the highly versatile system design to be sustainable and self-operable, could gain interest and provide incentive for funding opportunities.