2024 IMPACT EVALUATION RESULTS

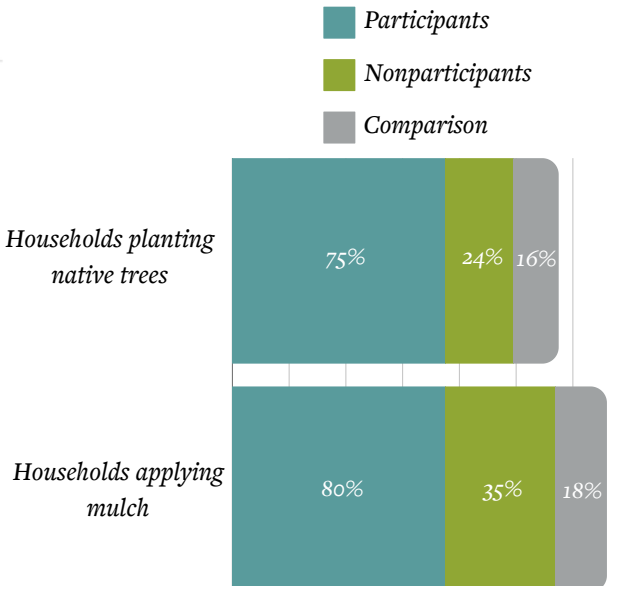
BURUNDI

PARTICIPANTS: 21,689
PURPOSE GROUPS: 914
TREES PLANTED: 9,773,641
Data as of June 30, 2024

The 2024 Impact Evaluation confirmed that many significant and positive changes are happening through our work in Burundi. Land is being restored, families are escaping poverty, and hope is renewed. In this report, we will provide a more in-depth look at the specific outcomes in our Burundi program.

Whole Watersheds Transformed

When Plant With Purpose works in a watershed, entire communities benefit–both participants and nonparticipants. Because participants share what they learn, other households start saving for the future, applying regenerative agriculture techniques, and are empowered to make positive changes in their community. While there is still greater impact in the lives of participants, the improvement among nonparticipants demonstrates how a watershed approach improves lives for all. One example is that neighbors to participants in the Rukuzira watershed are more likely to apply soil conservation techniques than households in areas where we do not work. Specifically nonparticipants are 23% more likely to be applying compost and 45% more likely to be applying cover crops than the comparison area.



POVERTY IN BURUNDI

Poverty is inherently complex and difficult to measure. Plant With Purpose uses a multidimensional poverty index (MPI) to apply a holistic approach to measuring poverty. This approach is adapted from the United Nations Development Program's MPI formula and customized for a rural farming context. Twelve indicators across six dimensions help us understand the material and environmental factors of rural poverty. In Burundi, participants experienced a 31% reduction in poverty.

Participants demonstrate a particularly dramatic difference from the comparison in the financial stability and farming dimensions. Participants applied 55% more regenerative farming techniques to their plots and harvested more than ten unique varieties of crops in the last year. The most common crops harvested by participants in Burundi were beans, potatoes and sweet potatoes, cassava, maize, banana, avocado, and eggplant. Participants are protecting 58% of their land with soil conservation or trees and only four percent are burning fields to prepare for planting. By protecting soil and planting trees, participants help reverse the adverse effects of drought and climate change in their communities and provide for their families.

VARIETIES OF CROPS HARVESTED

10.7 Participant | **9.2** Comparison

FINANCIAL STABILITY

Participants are **1.6X** more likely to be saving cash

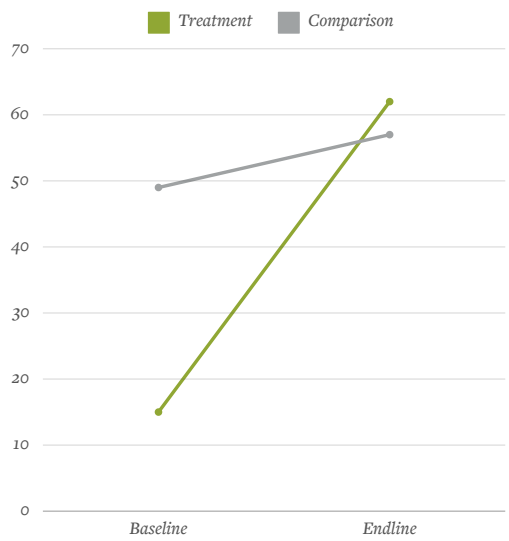
Regenerative Farming Techniques

5.1 Participant | **3.3** Comparison

Income Sources

3.6 Participant vs **2.9** Comparison

NUMBER OF TREES PLANTED IN THE LAST 12 MONTHS



More Meaningful Data Through Comparison

When Plant With Purpose began working in the Rukuzira watershed in 2020, our team conducted a baseline evaluation. In 2023, we returned to survey those same households from 2020 to understand how their lives changed in the last three years. This "difference in differences" analysis compares outcomes in treatment and comparison groups over time to understand the effect of our program. After three years, households in the comparison increased the number of trees planted by 16% while participants in Rukuzira quadrupled the number of trees planted. We also saw significant changes in the soil conservation techniques households applied. Rukuzira households began applying two additional techniques over the three-year study period. This increase in regenerative agriculture techniques is reflected in the health of the soil, which improved for participant households more than in the comparison households. Participant households reported 23% healthier soil in 2023 than 2020.

Two participatory workshops are conducted in each watershed during the impact evaluation--a watershed mapping workshop and a change matrix.

Hearing Directly From Our Participants

We host participatory workshops which usually involve 15-20 people representing a typical cross-section of participants–farmers, small business people, men, women, youth, elders, and leaders. When a workshop analysis comes directly from communities, it better helps us understand what factors drive the changes in these watersheds.

Watershed Mapping

Satellite mapping gives us one view of the land in a watershed, but the intimate knowledge of local farmers is often an equally valuable tool. We host mapping workshops, like one in the Rukuzira watershed where farmers identified increasing water sources and attributed the change to an increase in planting trees and grasses along contour canals. Workshop participants also shared how drought depleted water sources had negatively affected tree growth. Finally, we learned that increasing reforestation is in part due to government restrictions on tree cutting and the communities' adoption of improved stoves (image below shows a family's new stove). As of June 30, 2024, 2,101 families in Burundi are using improved stoves!

Why Are These Changes Happening?

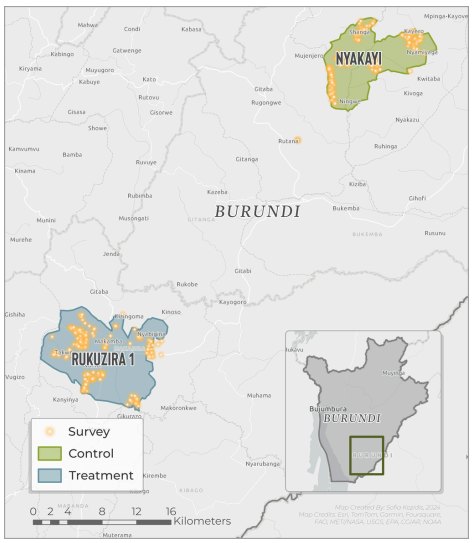
When asked about the most significant changes in their community, workshop participants said, "people are interested in environmental protection." This interest has led to improvements in soil health and prolonged water availability. A second change identified in the workshop was training, which helped people "cultivate well and increase production." The result is increased harvests and income, and a reduction in malnutrition.

Pictured: A family in Burundi with their improved stove

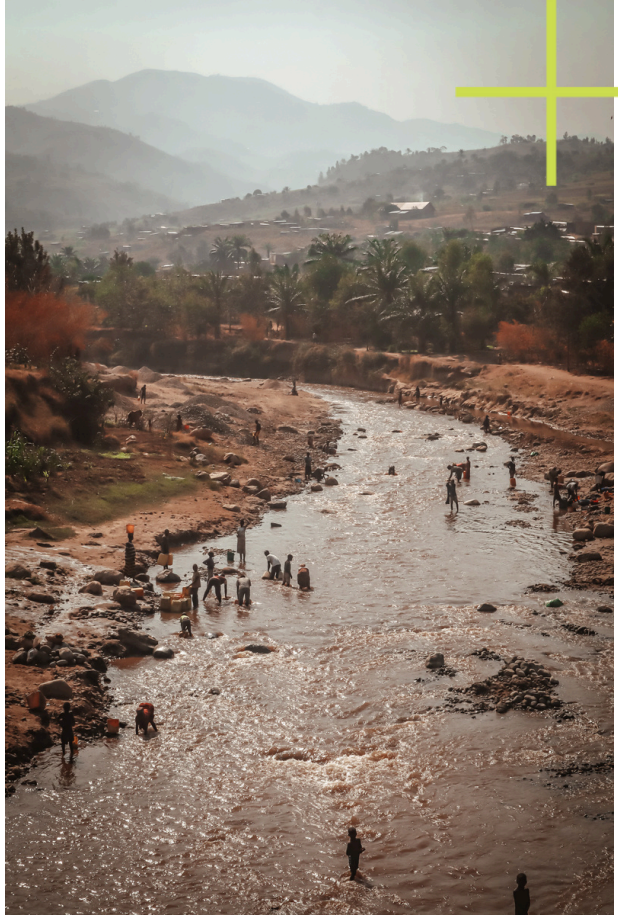
BURUNDI

DROUGHT IN EAST AFRICA

Plant With Purpose hears regularly about how drought impacts farmers in East Africa. Droughts increase farmers' vulnerability to crises by making it more difficult to recover from an environmental or economic shock. Plant With Purpose promotes strategies to conserve water and increase water sources. However, ongoing drought continues to be a challenge. Yet even during drought in Burundi, participant households travel shorter distances to access water than households in the comparison watershed, a testament to the positive impact of environmental stewardship in maintaining the health of the watershed ecosystem. This sustainable management ensures reliable water availability closer to communities, even under challenging conditions.. Participant households become more resistant to drought by applying mulch, amongst other regenerative agriculture techniques that conserve soil moisture. Improved financial stability also enables families to better respond to environmental hardships.



Using digital data collection methods, our team can monitor incoming survey data. The yellow dots represent household locations of survey respondents.



Pictured: Mugere River in Burundi

ENVIRONMENTAL RESTORATION

We celebrate that 100% of participants in Rukuzira own their land! Our team in Burundi shared that

"when participants begin the savings and loan activities the first thing they invest in is buying land because land ownership is a big issue for Burundian farmers."

The average respondent farming plot is 0.7 hectares (1.7 acres). As farmers take greater ownership over their environment, they start protecting the soil using regenerative agriculture techniques, including planting trees. In Rukuzira, participant households are most frequently applying compost, mulch, and mechanical barriers. They are also protecting 48% more land than households in the comparison.

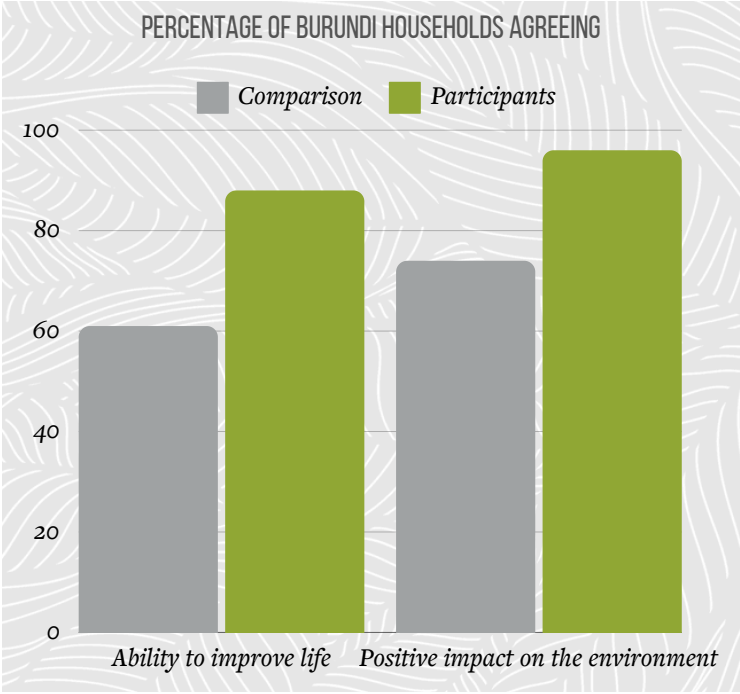
SPIRITUAL RENEWAL

Plant With Purpose works to reflect the love of God to all we serve. While we strive to offer the absolute best possible programs in poverty alleviation and environmental restoration, we are also aware that there are important spiritual dimensions to both poverty and environmental degradation. Therefore, church partnerships are created to encourage communities to grow in their love and care for neighbors, God, and creation.

Measuring spiritual growth is admittedly challenging, but where there is an internal transformation, we also expect to see external evidence. Changed attitudes lead to changed actions.

When we analyze the spiritual transformation of participants, we look at shifting attitudes and behaviors, increased personal agency, improved reconciliation, and higher levels of education for girls as a result of holistic flourishing. For example, 97% of participants in Burundi say their community works together to solve problems, and participants report helping a neighbor three times per month.

Healthier soil, increased financial resiliency, & hope for the future



As we expand to serve more families we are mindful of opportunities to refine our methodology to maximize our impact for farmers continually. For instance, in Burundi, participants are currently eating only two meals per day and have similar nutrition diversity to the comparison watershed. These food security indicators highlight areas for improvement, and may be influenced by regional drought conditions. After an impact evaluation, our team spends time discussing the results and making action plans to know how to improve program methodology and serve farmers better.

By applying 5 regenerative agriculture techniques, participants are protecting and revitalizing the soil on their land for themselves and future generations. With income from 3.6 sources and 1.5 months of savings in reserve, participants are better equipped to weather shocks and pursue their dreams. Participants develop agency to improve their economic and spiritual lives and their environment. They see the positive impact in their communities and are invested in leaving a legacy of transformation for the future.