

Blue Atlas Project



Spirulina Initiative – Uganda

Through its partnership with the Spirulina Development Institute (SDI) in Western Uganda, the Blue Atlas Project is expanding access to nutrient-dense spirulina to schoolchildren, vulnerable households, refugee communities, and—beginning September 2025—families and orphaned children in Byumba Village.

This integrated nutrition program strengthens food security, supports child and community health, and provides consistent, locally grown supplementation to populations facing chronic nutritional gaps.

Production & Farm Status

Daily Production

SDI currently produces 5.5–7 kg of dried spirulina per day, depending on weather.

Annual Production Capacity

At peak output, the farm produces approximately 2,184 kg per year.

School Nutrition Program

Blue Atlas supports spirulina distribution across seven schools, reaching 2,416 students. Schools receive spirulina bi-monthly to ensure continuity across the 3-term academic year.

Schools Receiving Spirulina

- Trinity Primary School – 358 students
- Muhanji Primary School – 518 students
- St. Francis School – 183 students
- Kyanika School – 277 students
- St. Xavier Model School – 439 students
- Kigoyera School – 509 students

- Busiriba School – 132 students

Annual Allocations

Across all seven schools, SDI provides 1,297 kg of spirulina per year.

School	Student Population	Annual Allocation	Per-Term Allocation
Trinity Primary	358	183 kg	60.8 kg
Muhanji Primary	518	280 kg	93.3 kg
St. Francis	183	99 kg	33 kg
Kyanika	277	150 kg	50 kg
St. Xavier Model	439	237 kg	79 kg
Kigoyera	509	276 kg	92 kg
Busiriba	132	72 kg	24 kg
TOTAL	2,416	1,297 kg	432.1 kg per term

Distribution Schedule:

Bi-monthly distribution throughout the nine-month school year.

Refugee & Community Outreach

Blue Atlas and SDI allocate spirulina to refugee settlements and neighboring communities experiencing chronic food insecurity and malnutrition.

Communities Reached

- Rwamwanja Refugee Settlement – 170 households
- Nakivale Refugee Settlement – 93 households
- SDI Neighboring Communities – 60 households

Total Households: 323

Estimated Individuals: $323 \times 4 = 1,292$ people

Monthly Allocations

- Rwamwanja Refugee Settlement – 25 kg monthly
- Nakivale Refugee Settlement – 13 kg monthly
- SDI Neighboring Communities – 9 kg monthly

Distribution Schedule:

All groups receive spirulina three times per week, with monthly distribution conducted through local coordinators.



Byumba Village Program – Spirulina Supply & Allocation

In September 2025, the Blue Atlas Project expanded spirulina support to Byumba Raising Orphans and the Needy in Byumba Village. This new program directly targets individuals affected by chronic illness, malnutrition, disabilities, and extreme vulnerability—including 178 beneficiaries, among them pygmy community members.

Health Conditions Targeted

Spirulina is being used to support individuals impacted by:

- Diabetes
- Asthma

- Hypertension
- HIV/AIDS
- Malnutrition
- Mobility limitations
- Vision challenges
- General immune deficiency

Dosage & Allocation

Beneficiaries were supported with spirulina using two dosage models:

1. Standard Dose (1 Month)
 - 30 teaspoons
 - 1 teaspoon per day
 - Taken once daily
 - Provided to the majority of participants
2. Therapeutic Dose (1 Month)
 - 60 teaspoons
 - 2 teaspoons per day
 - Morning and evening
 - *Given to individuals with more serious health concerns*

Duration & Coverage

- 4 people received spirulina for two months
- 174 people received spirulina for one month
- Total beneficiaries: 178



Early Outcomes & Community Impact

Within weeks of distribution, the Byumba program reported significant improvements:

- Individuals who previously reported pain while walking are now beginning to regain mobility
- Several beneficiaries who had stopped working due to illness have expressed increase energy are slowly returning to daily activities
- Reports of improved vision, energy, appetite, and strength
- Multiple testimonies shared by families expressing restored hope and improved wellbeing

Spirulina is rapidly becoming a transformative health intervention for the Byumba community.

Challenges Encountered

1. Difficulty Dissolving Spirulina

Because the spirulina provided was unmilled, many beneficiaries struggled to dissolve it fully in water. This milling process required electricity that was unreliable, with the expanded solar installation this should be resolved

2. High Demand for Longer-Term Supply

Due to the noticeable health improvements, many recipients requested more supplies.
Response: Additional spirulina was provided only to the most critical cases. Beneficiaries were encouraged to follow dosage guidance and await future program cycles. We will be revisiting allocations by the end of 2025

Program-Wide Impact Summary

Children Reached Through Schools:

2,416 students

Refugees & Community Members Reached:

1,292 individuals

Byumba Beneficiaries:

178 individuals, including orphans, elderly, chronically ill, and pygmy households

Total Spirulina Allocated

- Schools: 1,297 kg annually
- Refugee & Community Programs: 47 kg monthly
- Byumba Program: Monthly allocations per dosage: 20 kg

Blue Atlas' total impact continues to expand as outreach capacity grows.

Looking Ahead

The Blue Atlas Project is committed to expanding the Spirulina Development Initiative by:

- Increasing production capacity with SDI to meet rising demand through expanded, reliable solar installations
- Scaling the school nutrition program to additional underserved regions
- Strengthening distribution to refugee communities
- Continuing support to organizational partners
- Improving monitoring and evaluation to track health outcomes

Your support enables life-changing nutritional access for children, families, and marginalized communities across Uganda. Together, we are building sustainable systems that improve health, resilience, and long-term food security.