



## TGUP Project Details

Fruit/nut tree nursery; demonstration garden  
Loibor-Siret, Tanzania



**PROJECT NAME:** Fruit and nut tree nursery and demonstration garden

### **OVERVIEW:**

The Serengeti in western Tanzania (and southern Kenya) is the home to the Maasai, a native tribe which for millennia have been migrant herders, shepherding cows, goats, and sheep while moving in constant search of water and forage. The Maasai diet traditionally consists of meat and milk. It lacks any fruits or vegetables, which has negative consequences on bodily health. The elderly and children are frequently malnourished, leading to dwarfing and suppressed immune systems.

This project will build a 400 square meter fruit and nut tree nursery and a demonstration garden adjacent to a 350-person school. The school has a dormitory for 100 girls that produces grey water from bathing. The project will use the grey water for irrigation. Because of the abundance of such water, it is expected that the nursery will thrive. The project will both feed the students at the school and be used to teach other schools agricultural innovations to help the Maasai adapt to their new stationary life.

## PROJECT PARTNERS:

**The Global Uplift Project** (TGUP) helps American donors build small-scale educational infrastructure projects in developing countries from donations as small as one dollar. Since its founding in 2007, TGUP has completed more than 600 such projects in 26 countries in Asia, Central America, and Africa. TGUP is a registered 501c3 nonprofit.

**Humanity for Children** (HfC) is a U.S.-registered nonprofit that has worked in Tanzania for over 20 years. It provides fundamental infrastructure to rural Tanzanians in the areas of health, nutrition, education, vocation, and sanitation. HfC has completed 31 projects with TGUP including a vocational center, thousands of *Save a Girl*™ kits, school furniture, water systems, and more.



## PROJECT MANAGEMENT:

### **Humanity for Children**

#### **Sponsoring Executive:**

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### **The Global Uplift Project**

#### **Sponsoring Executive:**

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#### **Supervising Executive:**

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**PROJECT DATES:** Begin as soon as funds are available.  
Estimated time to completion: 2 months

## BACKGROUND AND PROJECT DETAILS:

TGUP has previously worked with HfC to create demonstration gardens, irrigation systems, water catchment systems, and other agricultural infrastructure to increase food security for Maasai tribespeople in southern Tanzania. These projects are universally successful, owing to their design by local agricultural experts and the participation of local people in their construction and maintenance.

The present project will build a nut tree and fruit nursery and a demonstration garden. The nursery will raise cashews, macadamia nuts, and kweme, a local indigenous nut high in fiber, fat, and protein. It will also raise mangoes, papayas, avocados, and various citrus fruits. The garden will raise herbs, green onions, varieties of lettuce, broccoli, kale, beans, tomatoes, zucchini, and cabbages.

The nursery and garden will be fenced and include an overhead screen to protect the crops from local animals which roam in surrounding areas. Monkeys are especially predatory of cultivated crops. The output from the garden will be used to supplement the diet of the school's 350 students, many of which do not come from the immediate locale and stay in the school's (removed 100-person) dormitory.



The nursery and garden will be used as “teaching centers” for transmission of knowledge to people at other sites in surrounding areas. This has been an effective method for rapid dissemination of know-how to other villages. The garden towers utilized by HfC specialists are specifically designed to conserve water and space. They require only 6 feet of space and use 30% less water than traditional gardening.

## BUDGET SUMMARY:

Category	Total (TZS)	Total (USD)
A. Structure & Materials	8,946,000	\$3,651
B. Planting Inputs	1,500,000	\$612
C. Tools & Equipment	1,490,000	\$608
D. Labor, Transport & Others	3,500,000	\$1,429
E. Project management & reporting	3,087,200	\$1,260
<b>Total Budget</b>	<b>18,523,200</b>	<b>\$7,560</b>

## GREY WATER GARDEN BUDGET: 400 SQUARE METERS

Category	Item Description	Quantity	Unit Cost (TZS)	Total (TZS)	Remarks
A. Structure & Materials	Steel Pillars (glavanized iron)	20	125,000	2,500,000	For garden structure support
	Roofing Fabric (Shade net/UV fabric) roller	2	1,250,000	2,500,000	To protect seedlings from excessive sunlight and monkeys
	Timber 2"x2"	50	15,000	750,000	For framing and support
	Chain Link Wire	8	217,000	1,736,000	For fencing the garden
	Cements	20	25,000	500,000	For pillars & foundation for chain link wire
	Kokoto/cocrete and sand	5	100,000	500,000	For construction
	Nails	10	10,000	100,000	For wood jointing
	Chicken Wire roller	2	180,000	360,000	For inner protection from small animals
	<b>Total</b>			<b>8,946,000</b>	
B. Planting Inputs	Vegetable Hybrid Seeds	Lump sum	-	500,000	Includes tomato, spinach, lettuce, cabbage, etc.
	Fruit Tree Seeds	Lump sum	-	700,000	Includes papaya, avocado, mango, citrus, etc.
	Black Sacks (tree growing)	Lump sum	-	300,000	For nursery preparation
	<b>Total</b>			<b>1,500,000</b>	
C. Tools & Equipment	Hand Hoe	4	20,000	80,000	
	Spade/Shovel	2	30,000	60,000	
	Rake	2	25,000	50,000	
	Wheelbarrow	1	180,000	180,000	
	Watering Can (20L)	4	25,000	100,000	
	Garden Fork	2	40,000	80,000	
	Machete/Panga	4	15,000	60,000	
	Tape Measure	1	20,000	20,000	
	Horse pipe	1	250,000	250,000	
	Sprayer Pump (16L)	2	50,000	100,000	
	Plastic Buckets	4	10,000	40,000	
	Rope & Stakes	Lump sum	-	50,000	
	Small Hand Tools (trowel, pruning shears, knife, etc.)	Lump sum	-	200,000	
	Garden gate	-	-	220,000	
	<b>Total</b>			<b>1,490,000</b>	
D. Labor, Transport & Others	Land Clearing	-	-	500,000	Bush clearing
	Labor Works	-	-	1,000,000	Construction, planting and leveling
	Bid construction	-	-	1,000,000	install of pillars and roofing
	Transport of Materials	-	-	500,000	Delivery of all materials
	Contingency	-	-	500,000	For unexpected expenses
	<b>Total</b>			<b>3,500,000</b>	
E. Project mgmt				<b>3,087,200</b>	
<b>Total requested</b>				<b>18,523,200</b>	