

# Water 4 Mercy School of Agriculture (WAMSA) with Don Bosco Technical Institute





# Introduction

- WAMSA is a revolutionary partnership between Water 4 Mercy, CultivAid, innovation:Africa, and Don Bosco Tech Africa designed to transfer knowledge.
- WAMSA utilizes the Water 4 Mercy Training, Demonstration and Research (WATDR) site at the Don Bosco Technical Institute in Dodoma, Tanzania.
- The WATDR site will support students to become skilled professionals and will train teachers and program managers for ongoing, sustainable education.



# WAMSA Objectives

WAMSA will provide students with the skills they need to support their communities. WAMSA's program is driven by youth employment, income generation, knowledge development, nutrition sensitive agriculture, high standards, and sustainable agricultural practices. These goals require students (and eventually, graduates) introduce and diffuse sustainable technologies.



Partner CultivAid project in Ethiopia

# Water 4 Mercy Training, Demonstration and Research (WATDR) Overview



## Components

- a. Horticulture
- b. Animal Husbandry

## Knowledge Development Program

- a. Courses
- b. Training

## Site Description

- a. Horticulture Acreage
- b. Animal Husbandry Acreage



# Component - Horticulture

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## Horticulture

- Open field vegetables
- Green house vegetables
- Nursery seedlings
- Fruit orchards

Promotion of “Eating the Rainbow” or dietary diversity and thus greater intake of nutrients and healthy foods that are required to combat malnutrition and childhood stunting.



# Nutrition and Health Impacts

## Malnutrition and Stunting

According to the Global Nutrition Report in 2018, globally 150.8 million children under five years of age are stunted – a marker for chronic malnutrition. Diversifying and increasing horticulture production can help overcome malnutrition and poverty by increasing household access and consumption of healthy diets rich in micronutrients.

WAMSA will promote “Eating a Rainbow” by giving communities the tools and knowledge they need to make healthy eating simple and economical.



# Component – Animal Husbandry

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## Animal Husbandry

- Eggs
- Poultry

The production method will be a "Free-Run Housing System" allowing the hens to roam freely within an enclosed barn. The Free-Run System provides a variety of enrichments for the hens along the barn floor, including nesting boxes and perches. These types of systems take into consideration animal welfare and provide more space per animal.



# Knowledge Development Program

Through engaging, hands-on curriculum, WAMSA cultivates future farmers, teachers, and crops!



## Courses

Short Course  
(8 months)

Long Course  
(3 years)

## Training

Regional Training

Open Days

Teacher Training

Agriculture  
Equipment and  
Mechanization

# Site Description

## Horticulture Acreage

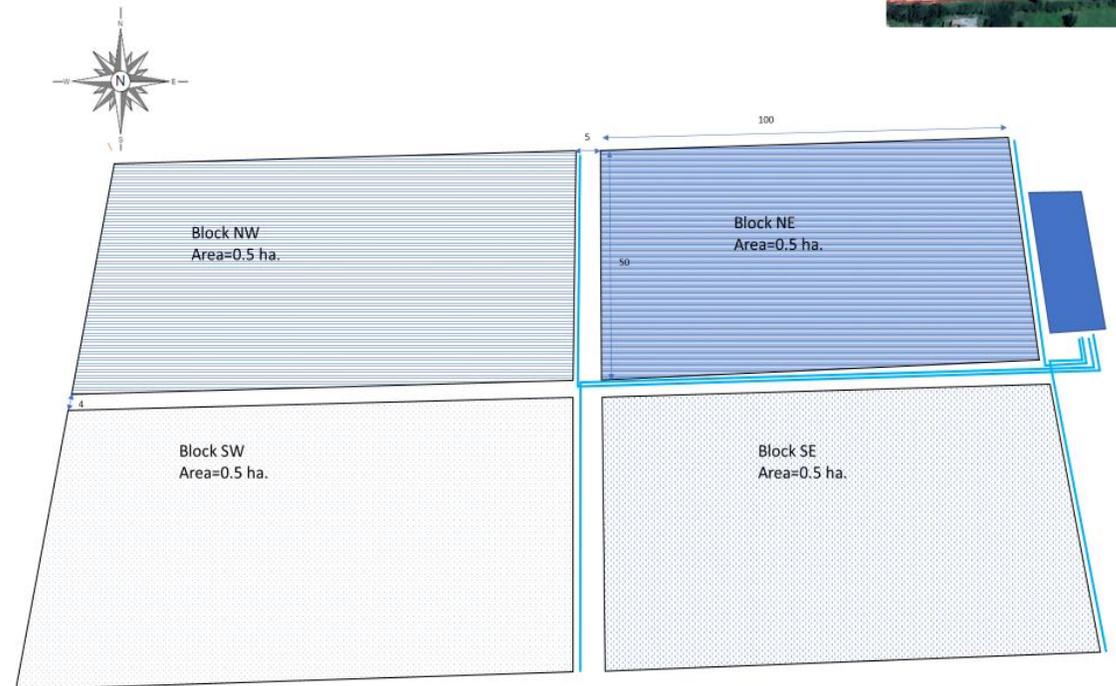
Component	Total Area (acre)
Open field drip irrigation	1.2
Open field sprinklers irrigation	1.2
Orchard, with drip irrigation	1.2
Protected agriculture structures	1.2
Roads and operational area	1.2
<b>Total</b>	<b>6</b>

## Animal Husbandry Acreage

Component	Total Area (acre)
Poultry house	0.15
Cooling room	0.01
Roads and operational area	0.06
<b>Total</b>	<b>0.81</b>



Tanzania, Dodoma	
Don Bosco	



# Budget and Estimated Costs



## Summary of WATDR Budget

Description	Cost (USD \$)
Horticulture project design	25,850
Horticulture capital cost	140,156
Field staff program	230,860
Animal husbandry project design	9,283
Animal husbandry capital cost	168,196
Overhead	86,152
<b>Total</b>	<b>\$660,497</b>

## Summary of WATDR Cost-Benefit Analysis

Description	Total inputs	Total revenue	Total profit (USD\$)
Year 1	147,225	247,048	99,823
Year 2	147,225	247,048	99,823
Year 3	147,225	247,048	99,823
Year 4	147,225	252,166	104,941
Year 5	147,225	256,645	109,420
<b>5-year total</b>			<b>\$513,830</b>



## Water 4 Mercy

*Visionary and Facilitator*

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## Don Bosco Tech Africa

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and Program Implementers*

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