



CultivAid

Knowledge based Development

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# North Shewa Program Proposal

August 2019

**North Shewa proposal:** The following document provides a program for community development, agriculture and artisan crafts in North Shewa Zone of Amahra, centered in the city of Debre Brehan. The documents in an internal document for development of the program and its activities.

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## Executive Summary

The following document is a program proposal for establishing a development program in North Shewa. The proposal is based on research and site visits which have been summarized into an assessment report. The proposal has been developed by CultivAid together with members of the Kechene Beta Israel community, Abas from Gedams, community members in Debre Brehan and a team of experts from Israel.

The Zone of North Shewa in the Amhara region of Ethiopia has been proposed for establishing a community-based development program focusing on agricultural and artisan craft. The communities of the area have ancestral roots related to Beta Israel communities of Gondar and are related to the community of Kechene in Addis. The proposed activities aim to develop a knowledge-based program based on CultivAid's methodology that has been developed in Ethiopia. This document provides a proposal for establishment of an integrated development program to improve the social and economic conditions of the Beta Israel Community of North Shewa as well as region-wide development.

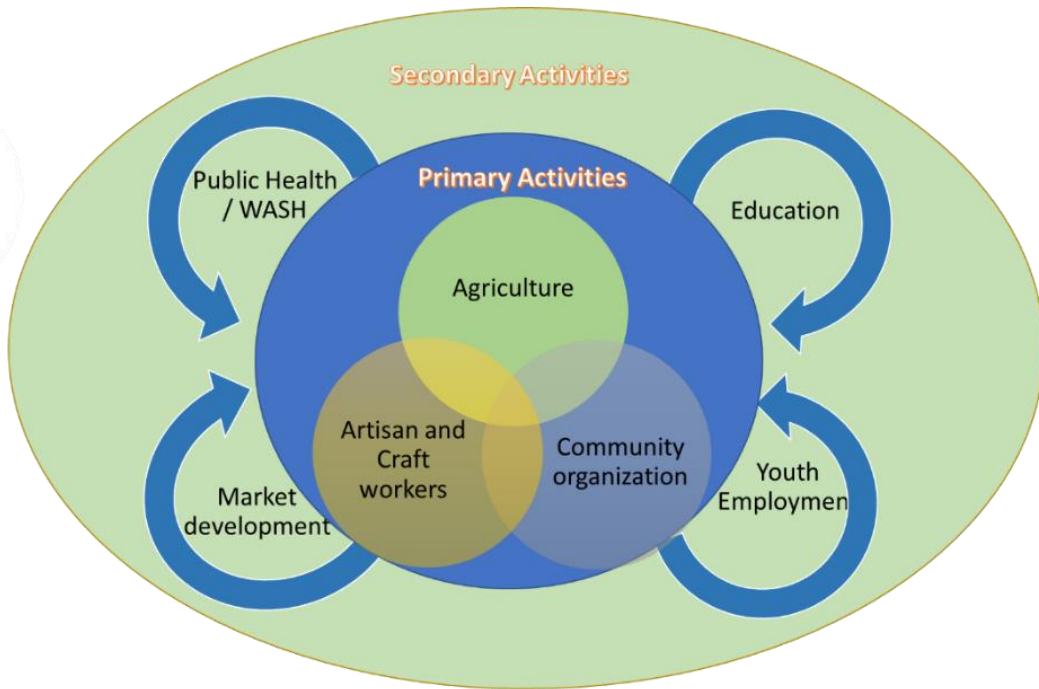
The program proposes to establish several projects in the realms of agriculture, water, artisanship crafts, education and community organization that will develop regional partnerships with multiple stakeholders. The program's primary stakeholders are the Beta Israel communities in North Shewa and the Gedams (religious centers), Debre Brehan and Kechene. The program will seek to develop multiple stakeholders' partnerships in the region.

The main activities of the proposal are divided into the three primary areas of implementation community, agriculture and crafts. In terms of community development, the program offers support the establishing of a community center which will support the organization of the community in North Shewa. The center will provide a base for interacting with the community and for developing various programs related to the Gedams, development of the communities, knowledge and skills development, training and education. The center will enable communication between the community and Jewish communities around the world. The center will be a central mechanism for implementing the various activities proposed in the document.

The agricultural component includes establishing an agricultural site that would be owned by the community act as a central mechanism for knowledge development, training and for addressing agricultural related issues in the region. The site will be operated by CultivAid and transferred to the community after stable operations. CultivAid will provide technical support and extension services to multiple stakeholders in the region, building the capacity of the region and integrating the development activities of the community with the region.



The crafts component aims to introduce new technologies, work methods and materials. The activities will aim to increase the profitability of craft workers with a specific focus in ceramics and metalworking. The programs will include Bezalel Academy of Design and Art who will be a main partner. The crafts component will aim to build an organization of workers to enable greater market power and to address various challenges and opportunities.



## Introduction

North Shewa is one of 10 Zones in the Ethiopian Amhara Region. The zone takes its name from the former kingdom or province of Shewa. The region's history stretches back to the kingdom of Aksum and to becoming the center for regional kings from the mid-10th century to the end of the 14th century. The area was conquered by Muslim forces from the state of Adal to the east and in the 1800's the kingdom of Shewa regained prominence under the leadership of Melenik II who established the borders of modern-day Ethiopia.

The proposals in this document are based on the rich experience and knowledge of CultivAid, an Israeli nonprofit organization, specializing in capacity building and knowledge and technology transfer initiatives with a focus on the agricultural and water sectors. CultivAid has been on the ground in Ethiopia since 2014. The organization focuses on the construction of local knowledge infrastructures that constitute a mechanism for the self-development of the local population..

### Fields of development

#### Primary Activities:

**Community Development** is a process where community members come together to develop solutions to common problems. Community development seeks to improve quality of life based on mutual benefit and shared responsibility among community members. Through the process community capacity is built. Community can be thought of in geographic terms (city, woreda, zone, region, country) or in terms of cultural heritage, language, and beliefs or shared interests (community of interest). The program will establish a community center in Debre Brehan which will operate as a central mechanism for all aspects of development as well as a center for religious education.

**Gedams** – 15 Gedams are spread out throughout the North Shewa region in Amhara and Oromia. 13 Gedams are in Amhara and 2 in Oromia. The Gedams are a social and religious institute that house elderly and orphans. The program will aim to support the Gedams by empowering the Gedams and providing technologies that could improve living conditions at the sites. The Gedams are the back bone of the community. Their survival promises strengthening of the community and local identity.

**Agriculture** - The Agricultural Sector is the backbone and foundation of Ethiopian society and the national economy. Agriculture accounts for almost 50% of the nation's Gross Domestic Product and over 80 percent of exports. Furthermore, over 80% of the labor force is employed in agriculture. Agriculture's central role in the economy, combined with its importance for food



security and nutrition makes the sector a prominent focus of development initiatives. The agriculture program will focus on the fruit tree sector, vegetable production and poultry for egg production. The program will emphasize knowledge development, technology transfer and market development.

**Artisan Crafts** - Bal Ej literally means Craftsmen in Amharic. In Kechene, Debre Brehan and in Fiche a variety of Artisan crafts are produced by the Bal-Ej Community. The program will work to introduce new technologies, develop new productions, improve production methods and address market related challenges. The program will work to organize the sector and support cooperative or business development of the workshops.

The program aims to establish strong connections between the Beta Israeli community of North Shewa Israel and Jewish communities around the world. The relationship will aim to strengthen the Jewish identity of the communities in Debre Brehan and to establish social and economic linkages.

### Pathway of Development

Development has many forms and definitions and likewise the proposed program will establish various forms, mechanisms and operate in different professionals' fields with the ultimate goal of improving the livelihoods and economic conditions of the people living in the area. The program proposes to develop initiatives in the realms of agriculture, WASH, crafts and artisanship, health, education, community development, cooperative establishment and more. The program will work together with the communities of the Gedams, Debre Brehan and Kechene. Furthermore, the program will collaborate with multiple stakeholders in the region, such as Debre Brehan University, government agencies, local NGOs and different organizations who have like-minded goals.

The program will seek to develop an integrated approach for sustainable development. The focus will be Community, Agriculture and Artisan Crafts. Through the activities discussed the overall aim of the activities are to promote economic and social development for the Beta Israeli community, for the North Shewa region, for Amhara and Ethiopia in general.

### Development Approach

The program will seek to find a balance between two types of approaches, an integrated development approach and a knowledge-based development approach.

**The concept of an integrated approach** refers not only to its multi-sectoral nature but also to the broad range of actors involved. International non-governmental organizations, International agencies, multilateral financial institutions, regional associations, private sector donors and



investors, local governments, communities, families, and individuals ‘ all have a role to play in integrated development efforts. The challenge is to coordinate the different efforts so that they complement rather than contradict each other.

Integrated development emphasized that those who are affected by the development, must be included in directing, implementing, and evaluating the projects. Local ownership is the goal toward which all the other players must be working. Development aims to include the social, cultural, economic, environmental, and geographic realities that shape people's lives.

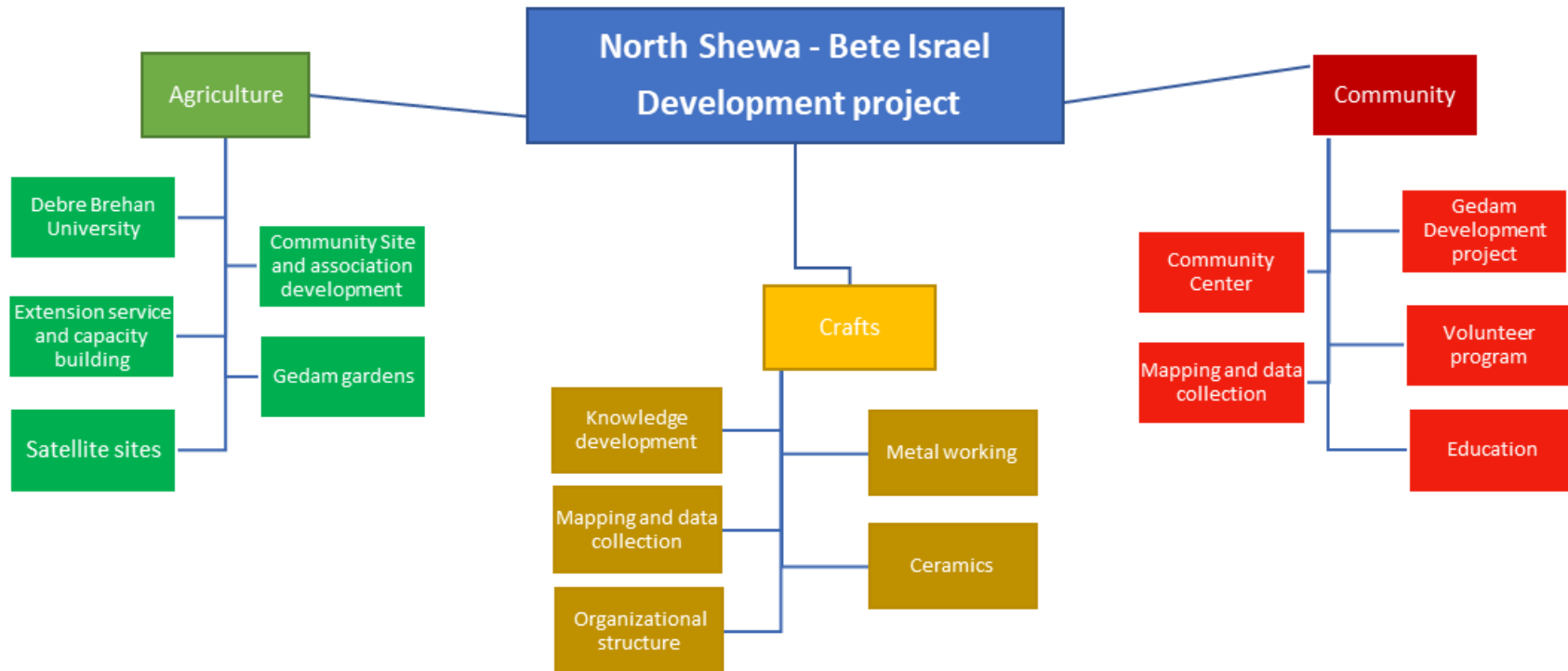
**The concept of a Knowledge based development** approach refers to a systems approach to development. The systems approach takes into account different actors from the public and private sectors, and people at all levels of local, regional and federal hierarchy. This approach looks at relationships, how systems works and how they affect their surroundings.

Knowledge based development emphasizes the need for building local capacity and for decision making by skilled experts and professionals. The approach aims to develop local experts for professional, scientific based directing, implementing, and evaluating of projects. This type of development promotes evidence-based decision-making at all levels and to establish communities of practice.





North Shewa Development Program Proposal



## Stakeholders and Partners

The development of the current program is a grass-roots initiative initiated by the Jewish community in Kechene seeking to support the development of the Beta Israel communities of North Shewa and in particular the Gedams of their communities.

**Love of Zion Association (LOZA)** is an organization established in Kechene associated with the Beta Israel community. In Debre Brehan a branch will be established as part of the community center. The organization will be the main implementation partner, providing on the ground logistics support and coordination with the communities.

**Community of Debre Brehan** will establish an organization as an initial part of the program.

**Gedams of North Shewa** have a network between them with Abba Minas serving a leadership role. There is no formal organization.

**CultivAid** is an Israeli not-for-profit organization, specializing in capacity building and knowledge and technology transfer initiatives with a focus on the agricultural and water sectors. The organization focuses on the construction of local knowledge infrastructures that constitute a mechanism for the self-development of the population, in order to create food security and economic stability. CultivAid's holistic systems approach combines market-based solutions together with social interventions, combining agro-business and rural development initiatives.



## Part I: Community Development Program

The proposed intervention for the community component aims to improve the quality of life for members of the Beta Israel community living in North Shewa and surrounding communities. The program will establish a community-oriented development project that will strengthen the community through establishment of local organization and enable it to address issues faced by members, ranging from economic production to discrimination and poverty.

The community program can be divided into 5 components which will all support the local organization, the Gedams and build a bridge with Israel's and the Jewish world's civil society.

First, the program will aim to support the organization of the community through a center which will establish a physical space vital for strong community participation in all development projects. Second, the program will implement a mapping of the Gedams and the needs assessment of the communities in North Shewa. Third, the program will develop a technological relief package that will be made available for implementation at the different Gedams based on the need's assessment. Forth, through the community center an Israeli/Jewish volunteer program in a variety of fields will be established. Finally, the program will initiate an educational program through the center.

The objective of the community center is to establish a strong community. Community centers are widely accepted as effective solutions to social and economic problems and can serve as a backbone of service delivery in the community. From the physical infrastructure to the programs/activities for the community the center will play a central role in supporting economic and social development. The community center will serve as a base of interaction between the community and all development activities. The center will provide religious education and a center of practice. All organizations and projects operating in North Shewa will be organized and coordinated through the center. Both the Agricultural and crafts activities will work in coordination with the community through this center.

During the establishment of the center, a Zonal data collection and mapping initiative will be undertaken to evaluate the extent of the Beta Israel community, its demographics, geographic placement, specific needs of the communities throughout North Shewa and to develop a long-term outreach program. The initiative will introduce new methods and technologies for data collection to the region.

To support the Gedam system an Israeli technological package will be developed based on the mapping of the Gedams and their needs. Based on the initial visits the technological package will include a water technologies related to water source development, water storage, irrigation and



water treatment; Energy technologies that will introduce solar energy to off grid communities; Agricultural programs at the Gedams to address issues of nutrition and generation of income; the package will also seek to introduce revenue generating technologies that can increase the financial budget of the Gedams. In addition to the technologies, a professional development program will be implemented in Debre Brehan that will train community members in the specific technologies, how to install, operate and maintain them. The program will seek to develop forward and backward market linkages as well as jobs and business opportunities.

The fourth part of the program aims to develop a vibrant and dynamic volunteer/internship program. The volunteers will work within the different development projects and provide support to local implementation. Short term volunteer programs will be developed through the community center and enable support for education, religious studies, language and develop deep connections to Israel and the wider Jewish community. The internship program will focus on experts in various field who will undertake a more intensive program to support development initiatives. The two programs will aim to develop strong institutional partnerships between Israeli and Ethiopia institutions and organizations.

The final program will aim to improve the educational capacity of the region while providing improved opportunity for community members and orphans at the Gedams. The program will support teacher trainings through the local institutions and introduce various teaching methods and technologies to the region.

The community proposal is divided into 3 phase of implementation that are built one on the other. The first phase includes the community center and mapping of the region. The second phase will develop and implement the technological packages for the Gedams and initiate the volunteer program. The third phase will establish education programs with the community center.



## Overview of components and activities

The activities of the community development program are based on 5 major components.

Component	Activities	Responsible party
<b>1. Community Center</b>	<ul style="list-style-type: none"> <li>Support the proposal for the establishment of the community center.</li> <li>Develop operational protocols.</li> <li>Establish funding mechanisms for the center.</li> <li>Provide a specialist to support the development of center.</li> </ul>	<p>The community center will be the responsibility of the community.</p> <p>A person or partner organization will be selected to support the development of the center and affiliated programs.</p>
<b>2. Mapping and Data Collection</b>	<ul style="list-style-type: none"> <li>Needs assessment and mapping of Debre Brehan Community.</li> <li>Needs assessment and mapping of all Gedams.</li> <li>Needs Assessment of communities in North Shewa.</li> </ul>	CultivAid will be responsible for this component and will develop an implementation plan together with the community center.
<b>3. Gedam Development project</b>	<ul style="list-style-type: none"> <li>Development of a Bank of Gedam Technologies Package based on needs assessment.</li> <li>Implementation of selected technologies</li> <li>Training program for young professionals</li> <li>Outreach and extension services</li> </ul>	CultivAid will be responsible for this component and will develop an implementation plan together with the community center.
<b>4. Volunteer program</b>	<ul style="list-style-type: none"> <li>Establish volunteer program and operation</li> <li>Establishment of volunteering workplans, guidelines, timetables and recruitment.</li> <li>Volunteer logistical protocols</li> <li>Development of hostel / housing</li> </ul>	A person or partner organization will be selected to support the development of the center and affiliated programs.
<b>5. Education</b>	<ul style="list-style-type: none"> <li>Assessing the current status of school aged children at Gedams and possible educational opportunities</li> <li>Assessing the educational system of the zone and understanding bottlenecks and challenges</li> <li>Assessing the educational status in Debre Brehan.</li> <li>Developing cooperation and support program with the Debre Brehan Teacher's college.</li> </ul>	A person or partner organization will be selected to support the development of the center and affiliated programs.

The community program will need an additional organization to support the implementation of the proposed activities. Specially an organization will need to be established or to be invited to be responsible for aspects of community development related to education, religion, Judaism and to lead



the volunteer program. This organization could be through American institutions or through an Israeli NGO. CultivAid will not be able to take part in activities that could be seen as political or religious. Furthermore, CultivAid is a professional technical organization and is not suited for coordination of volunteers.

## Timeline of Implementation

Establishing 5-year program

### Initiation stage, Months 1-6

The initial activities will be dedicated towards

1. Community Center program development.
2. Selection of organization or coordinator for community program
3. Developing Gedam Development project and bank of Gedam Technologies
4. Developing a 5 years Community development program work plan

Description	Sub total cost
Gedam Development pilot	15,000
Management, administration and technical support	1,176
Community center Building	-
Community center services and operation	-
Community program coordination	-
Senior Advisor to program	3,600
Quarterly management visit to Ethiopia	3,356
MISCELLANEOUS	1,157
OVERHEAD	3,643
<b>Total Costs</b>	<b>27,932</b>

### Program implementation, Months 6 -12

1. Mapping and Data Collection of Gedams and Beta Israel communities
2. Implementation of community center programs and establishing operational protocols
3. Implementation and operation of Gedam Development project at selected sites.
4. Development of guidelines and implementation plan for Volunteer / Internship program

### Program operations, Months 12 - 60

1. Developing and operation of programs of the community center
2. Scale up of Gedam Development project



3. Implementation and operation of a Volunteer / Internship program

**Cost**

**TBD**

**Education program, Months 18 -60**

1. Education development

**Cost**

**TBD**

**Program review and future proposal,**

At the end of year a full program review will be conducted, monitoring and evaluation. The review will examine all aspects of implementation, management, operation and develop the next stage of guidelines for the program. The following year of implementation may change according the conclusions in the M&E.



## Component description

### **Component 1: Community Center**

The role and function of the community center is to serve the community itself and to support social and economic development. The center aims to provide a range of activities that fit the needs of the local community, are inclusive and encourage active participation and involvement of the community. The community center will establish a physical space to strengthen the organization of the Beta Israel community in North Shewa.

The center will include: a synagogue, learning facilities, rooms for Gedam members to stay, rooms for volunteers. The full proposal of the community center needs to be developed with the community and will be defined accordingly. The local organization will need to define the mandate of the center and its services and operational structure.

The establishment of the center will be the responsibilities of the local community of Debre Brehan with consultation from the Abas of the Gedams and in support by community members from Kechene and love of Zion Organization (LOZA).

The project will recruit a specialist in community building and organization development will be recruited to support the organization of the center, grant writing, management and program development. The position will be for 1 year during which an evaluation will be done to understand what requirements are needed and to develop the volunteer program.

### **Component 2: Data Collection and Mapping**

For the different components there is a need for continual data collection in order to develop a full understanding of the communities in North Shewa and what type of implementation could best support their development. The different data collection, monitoring and analysis will be done together with the Community Center.

In order to understand the needs of the community in Debre Brehan, the community center and Israeli professionals will develop a needs assessment study. The study will introduce different technologies that will enable ongoing monitoring and assessment of the community to address issues and challenges. The program will aim to develop an understanding of the community needs in order to provide the most appropriate services through the community center. In addition, the program will train in skills related to community development, baseline studies and data acquisition.





The component will undertake a zone wide mapping of the Gedams and the development of individual programs per Gedam. The study will map out the exact location and characteristics of each Gedam and the challenges faced by each. The study will determine such challenges as road accessibility, water access, energy, agriculture etc. The study will enable the establishment of a Gedam Development Program.

CultivAid will be responsible for this component.

### **Component 3: Gedam Development Project**

The Gedam Technological project will develop a package of Israeli technologies that could be implemented at each Gedam. The technologies will provide solutions that can improve the living conditions at the Gedams and serve as platform for scaling up various technologies to the entire zone. The selected technologies will be combined into a Bank of Gedam Technologies that comprise a package. These will include water technologies that will ensure proper access to clean drinking water, Energy technologies that will provide access to clean energy solutions for electrical power and cooking needs. Agricultural technologies that will enable vegetable production to address issues related to food and nutritional security. The bank will also include technologies related to health and safety such as improved cooking stoves/oven.

The establishment of technology centers are the Gedams will aim to centralize their presence in the local community. The identity of the Gedam will be associated with modernity and development. There will be a need to establish proper extension services to conduct maintenance, training and ensure long term functionality.

Hence, the component will establish a professional training program that will train and specialize young community members from Debre Brehan to be able to install, operate and maintain the different technologies. Through hands on work Israeli experts will train and guide the locally trained experts. The program will also look towards utilizing the new set of skills to seek out business opportunities in the different sectors and to advance scaling up the technologies to the entire zone. A model site for the different technologies will be established in Debre Brehan and be used as a training and demonstration center for the Gedams and the entire region.

Furthermore, the Gedam Development Programs will set to support the regional outreach and extension program. Young experienced and skilled professionals will be developed through the program who will provide technical support to various NGOs, government agencies, private investors and farmers.

CultivAid will be responsible for this component.



**Component 4: Volunteer program**

The program will emphasize the development of bridges between the Beta Israel communities of North Shewa to Israel and Jewish communities around the world. The program will be focused on bring Israeli and Jewish volunteers to North Shewa for short periods of time. The volunteer program will be managed by a coordinator or secondary organization. Volunteers will arrive in the area for specific programs related to Jewish education, Hebrew and specific programs as required at different times of the year.

The logistical requirements of these programs will require proper management that could support all activities, professional and logistically as required for high standards of implementation. The management of volunteers will need to establish an independent structure and an organization to implement volunteers.

**Component 5: Educational program**

The program’s educational component will be further developed during the second year of the project. The component will focus on the education system in Debre Brehan and deepen the knowledge of how the school systems operates, the educational system itself and aim to provide solutions for bottle necks and challenges faced by the schools. A specific focus will be placed on the Teacher’s college to ensure professional development and provide educational tools to teachers for better quality education throughout the zone.

As a first step into the educational system of the regional, emphasis will be placed on children living at the Gedam. These school aged children need to be educated and should have the opportunity to go to school. As part of the mapping exercise there will be a full review of the educational status of children at schools and an assessment will be conducted to find solutions for the students





## Part II: Agricultural Development program

The Agricultural Sector is the backbone and foundation of Ethiopian society and the national economy. Agriculture accounts for almost 50% of the nation's Gross Domestic Product and over 80% percent of exports. Agriculture accounts for over 80% of employment hence it is the most critical sector for inclusive economic growth and fundamental for addressing issues related to food security, health and income generation. The vast majority of the population of North Shewa are farmers who are cultivating crops or raising animals. Although there is high potential for highland agricultural, the zone is characterized with low production of fruits and vegetables, reliance on grains and rainfed crops and in general food insecure.

In order to improve productivity, there is a dire need to modernize the agricultural sector. Technologies are required to help solve the various problems faced in the region. Solutions related to irrigation technology, protected agriculture, seedling development, postharvest solutions and mechanization need to be implemented and enhanced. New technologies must be accompanied by proper extension services and knowledge-building efforts in order to increase the capacity of the agricultural infrastructure and to develop local experts and professionals. Skilled professionals are required to install, operate and maintain these technologies, who need to be developed through practical hands-on trainings and provide the human capacity to ensure long-term functionality. Specialization in specific crops and technologies is recommended for distinct agroecological zones enabling areas with a comparative advantage to focus on harness their advantage.

The proposed interventions for the Agriculture component aim to foremost develop knowledge, introduce new technologies, empower the extension services and support social and economic growth through agricultural development. The interventions aim to develop the fruit tree and vegetable sector through a knowledge-based development methodology. The agricultural interventions will aim to incorporate the Beta Israel Community into the programs, providing a mechanism for sustainable community based regional growth. The activities will establish a community owned farm and introduce concept of grower associations to influence and direct market activities and functions.

The agricultural component will focus and introduce deciduous tree production such as apples, nectarine, pear, plum, peach, as well as vegetable production. The program will provide emphasis on training and capacity building to enable large scale implementation of modernized agricultural technology, knowledge and techniques. The establishment of the program will include various activities related to establishment of new sites, partnership development, extension services, training and capacity building and the development of a strong knowledge



based agricultural sector. The program will emphasize that Improvement in agricultural productivity need to be driven by two factor, income generation and nutritional security and stress the need for strong organization of stakeholders. The beneficiaries of the program will be both Beta Israel communities, education and research institutions, government agencies, NGOs and the millions of farmers throughout North Shewa zone.

A livestock component will also be incorporated in the program. According to the Ethiopian government livestock sector analysis there is a government priority to increase productivity or production per animal by addressing feed deficits, animal health and genetics. The report places importance on promotion of poultry production and consumption which is also in line with environmental policy of low greenhouse emission by livestock. There are recommendations that the poultry industry should be modernized and with it a need for poultry feed production. Furthermore, Eggs have a great potential to improve nutrition among vulnerable populations living in regions with limited resources. They provide a nearly complete source of protein and are also an important source of essential fatty acids, choline, vitamins A and B12, selenium, and other critical nutrients. At the same time, compared to other animal-source foods, they cost less and are more readily available. The agricultural development program will seek to improve poultry production through the introduction of new technologies, knowledge development and establishment of a demonstration and training site.

CultivAid along with local partners will develop a knowledge based agricultural program that supports a marginalized population and leverage the program to scale up knowledge and technology. The empowerment of the marginalized population aims to redefine and enable improved relationships with neighboring communities. The program will strengthen the community through the establishment of a community owned farm and a growers association to support the value chain development of the sector.

The agricultural program will be initially focused on components, 5 of which are collaborative implementation with regional stakeholders. The components include 1) the development of a community based farm and training program; 2) Establishment of a Gedam based community garden 3) Collaboration with Debre Brehan university and to support the development of a highland fruit center of excellence; 4) Provide extension service and capacity building with regional research institutes, government agencies and local NGOs (Africa Rising and Adeno) 6) Establishment of agricultural sites for demonstration and training purposes.



## Overview of components and activities

The activities of the community development program are based on 5 major components. All aspects of this program will be under the management and supervision of CultivAid.

Component	Activities	Responsible party
<b>1. Development of a community-based farm and training program</b>	<ul style="list-style-type: none"> <li>• Purchasing of land, materials, equipment</li> <li>• Establish operational and management guidelines and protocols</li> <li>• Establishment of site and training program</li> <li>• Site management and operation</li> <li>• Establish grower association development program focused on supply chain distribution and market-oriented sales.</li> </ul>	CultivAid will be responsible for this component and will develop an implementation plan together with the community center.
<b>2. Gedam Based community garden</b>	<ul style="list-style-type: none"> <li>• Selection of site and development of implementation plan</li> <li>• Dietary assessment of Gedam</li> <li>• Training of young agronomist to support the sites</li> <li>• Site establishment and operation</li> <li>• Monitoring and evaluation of site for proper functionality.</li> </ul>	CultivAid will be responsible for this component and will develop an implementation plan together with the community center.
<b>3. Partnership with Debre Brehan University, establish demonstration site and development of center of excellence</b>	<ul style="list-style-type: none"> <li>• Establish a demonstration and training site with the university.</li> <li>• Support establishment of center of excellence in highland fruit production</li> <li>• Joint activity with the STEM center</li> <li>• Establish a meteorological station for data collection</li> <li>• Establish a student training program.</li> <li>• Provide extension services for agricultural research and community outreach programs.</li> </ul>	CultivAid will be responsible for this component and will develop an implementation plan together with Debre Brehan University
<b>4. Provide extension service and capacity building with regional institutions. Debre Brehan</b>	<ul style="list-style-type: none"> <li>• Support established sites and provide extension services to the organizations and individual farmers.</li> <li>• Establish new sites focused on research of different varieties (root</li> </ul>	CultivAid will be responsible for this component and will develop an implementation plan together with specified partner organizations.



<p><b>Agricultural research institute</b></p>	<p>stock and scion) for various crops – apples, nectarine, pear, plum, peach</p> <ul style="list-style-type: none"> <li>• Establish a meteorological station for data collection</li> <li>• Develop mechanism for marketing and distribution of produce.</li> </ul>	
<p><b>5. Establish satellite sites</b></p>	<ul style="list-style-type: none"> <li>• Establishment of agricultural program focused on specific site.</li> <li>• Establishment of a farm to fork program to education on agriculture to nutrition</li> <li>• Establish community outreach program to provide training in agriculture and nutrition.</li> </ul>	<p>CultivAid will be responsible for this component and will develop an implementation plan together with the polytechnic college and the community project.</p>



## Timeline of Implementation and costs

**Stage 1, Months 1-6** - The initial activities will be dedicated towards partnership development, implementation plans and project designs for the selected sites.

1. Component 1: Developing implementation plan, securing resources, finding and securing purchasing of land.
2. Component 1: Capacity building of future staff
3. Component 2: Selecting pilot Gedams and developing design.
4. Component 3: Establishing partnership with Debre Brehan University, establish proposal, resource allocation
5. Component 4: Establish partnership agreement with Agricultural Research Institute, Adeno and Africa Rising
6. Component 5: Establish partnership agreement with Polytechnic college and with the community project

## Cost

Description	Cost
Management, administration and technical programming, 6 months	24,498
Local coordinator, 6 months	3,366
Quarterly management visit to Ethiopia, 2 visits of 2 people, 7 days each	13,424
Transportation (4X4 vehicle with driver)	2,356
Capacity building, 3 interns for 6-month training program in Mekelle	18,213
MISCELLANEOUS	3,093
OVERHEAD	9,742
<b>Total Costs</b>	<b>\$ 74,692</b>



**Stage 2, Months 7-13** - This stage will aim to initiating operations and sites.

1. Component 1: ~~Establishing business plan for site~~
2. Component 2: Establishing agricultural sites at Gedams and supportive extension service
3. Component 3: Establishing agricultural site at Debre Brehan University
4. Component 4: Operation of extension services at selected site and establishment of research site.
5. Component 5: Training program for future site operators.

### Cost

**Manpower and coordination – 7 months, 1 agricultural season.**

Description	Sub total cost
Program coordinator	46,741
Program coordinator monthly visit to Ethiopia (7)	12,467
Transportation (4X4 vehicle with driver)	22,212
Management, administration and technical support	16,463
local coordinator	3,769
Israeli field staff housing	9,392
Israeli field staff monthly (3 field staff, 7 month)	37,901
Israeli field staff quarterly expenses	11,047
Beta Israel community interns	8,640
Quarterly management visit to Ethiopia (3)	6,712
MISCELLANEOUS	8,767
OVERHEAD	27,617
<b>Total Costs</b>	<b>211,729</b>

### Equipment

Description	Sub total cost
1 HA FRUIT AND VEGETABLE DEMO SITE - CAPITAL COST	35,899
1 HA FRUIT AND VEGETABLE DEMO SITE - Seasonal COST	6,731
Gedam relief technology package – 2 pilot gedams	22,000
MISCELLANEOUS	6,463
OVERHEAD	10,664
<b>Total Costs</b>	<b>81,757</b>

**Total cost: \$293,486 USD**





**Stage 3, Months 13 – 25-** This stage will aim to formulize operations, develop knowledge and scale up

1. Component 1: Operation of farm and initiation of training program
2. Component 1: Establishment of a grower’s association
3. Component 2: Scale up of agricultural program to all Gedams
4. Component 3: Operation of site and initiation of training program. Initiate livestock sub-component
5. Component 4: Establishment and operation of training program with farmers in selected woredas and develop plans for scale up to selected areas.
6. Component 5: Establishment and operation of satellite site at Polytechnic college and with the community project

**Cost**

**Manpower and coordination**

Description	Sub total cost
Program coordinator	93,482
Monthly visit to Ethiopia	25,647
Transportation (4X4 vehicle with driver)	44,425
management, administration and technical support	32,926
local coordinator	7,539
field staff leader	45,462
Israeli field staff housing	16,100
Israeli field staff monthly	75,801
Israeli field staff quarter costs	29,458
Bet Israel community interns	2,880
Community training program development	26,849
MISCELLANEOUS	20,028
OVERHEAD	63,090
<b>Total</b>	<b>483,687</b>



## Equipment

Description	Cost per unit	# of units	Total Cost
<b>procurement of land for farm 5-10 Ha</b>	<b>74,789</b>	<b>6</b>	<b>373,947</b>
Israeli drip irrigation for site 10 Ha	12,000	6	120,000
<b>1000 chicken coop pullet + layers</b>	<b>181,626</b>	<b>22</b>	<b>181,626</b>
1000 chicken coop Seasonal cost	168,802	6	168,802
<b>Community capacity building</b>	<b>2,629</b>	<b>6</b>	<b>31,549</b>
Training site seasonal cost	6,731	6	33,655
<b>Project Design</b>	<b>909,580</b>	<b>8.5%</b>	<b>77,314</b>
<b>MISCELLANEOUS</b>	<b>986,894</b>	<b>10%</b>	<b>98,689</b>
<b>OVERHEAD</b>	<b>241,208</b>	<b>15%</b>	<b>36,181</b>
<b>Total cost</b>			<b>1,121,765</b>

**Total cost ~ 1,605,452 USD**

**Stage 4, Months 26 – 60** - This stage will aim to formulize operations, develop knowledge and scale up

7. Component 1: Operation of farm and initiation of training program
8. Component 1: Establishment of a grower’s association
9. Component 2: Scale up of agricultural program to all Gedams
10. Component 3: Operation of site and initiation of training program. Initiate livestock sub-component
11. Component 4: Establishment and operation of training program with farmers in selected woredas and develop plans for scale up to selected areas.
12. Component 5: Establishment and operation of satellite site at Polytechnic college and with the community project



**Cost**

**Yearly costs**

**Manpower and coordination**

<b>Program coordinator</b>	<b>83,466</b>
<b>Monthly visit to Ethiopia</b>	<b>42,746</b>
<b>Transportation (2 4X4 vehicle with driver)</b>	<b>109,500</b>
<b>management, administration and technical support</b>	<b>97,993</b>
<b>local coordinator</b>	<b>6,731</b>
<b>2 field staff leaders</b>	<b>94,712</b>
<b>8 Israeli field staff housing</b>	<b>32,200</b>
<b>8 Israeli field staff monthly cost</b>	<b>210,559</b>
<b>8 Israeli field staff - quarterly cost</b>	<b>58,917</b>
<b>Bet Israel community interns</b>	<b>12,000</b>
<b>Management visit to Ethiopia</b>	<b>20,136</b>
<b>MISCELLANEOUS</b>	<b>76,896</b>
<b>OVERHEAD</b>	<b>126,878</b>
<b>Total cost</b>	<b>972,735</b>

**Equipment**

Description	Total Cost
<b>Israeli irrigation system for 160-320 farmers</b>	<b>1,869,736</b>
<b>Packing house for marketing products</b>	<b>720,000</b>
<b>Seasonal inputs for farmers</b>	<b>490,756</b>
<b>1000 chicken coop layers - seasonal</b>	<b>1,688,024</b>
<b>Community capacity building</b>	<b>315,490</b>
<b>PROJECT DESIGN</b>	<b>170,299</b>
<b>MISCELLANEOUS</b>	<b>525,430</b>
<b>OVERHEAD</b>	<b>151,683</b>
<b>Total cost</b>	<b>5,931,418</b>

**Total Yearly cost ~ 6,904,152 USD**

**Total 3-years cost ~ 20,712,456 USD**

- The assumption is expending with the equipment every year.



Stage	Time frame	Total costs
<b>Stage 1: initial activities, partnership development, implementation plans and technical designs for the selected sites.</b>	0-6 months	\$74,692
<b>Stage 2: initiating operations and sites</b>	7- 13 months	\$ 293,486
<b>Stage 3: This stage will aim to formulize operations, develop knowledge and scale up</b>	14-25 months	\$1,605,452
<b>Stage 4: This stage will aim to formulize operations, develop knowledge and scale up</b>	Yearly costs	\$6,904,152
	3 year costs	\$20,712,456
<b>Full program costs for 5 years</b>		<b>\$22,661,191</b>

**Program review and future proposal,**

At the end of each year a full program review will be conducted, monitoring and evaluation. The review will examine all aspects of implementation, management, operation and develop the next stage of guidelines for the program. The following year of implementation may change according the conclusions in the M&E.



## Component description

### Component 1: Community based agricultural site

The Establishment of a community-based farm is seen as a cornerstone that connects the Debre Brehan Community with agricultural activities of the zone. The farm will be around 5 hectares and aim to be a profitable site that will conduct demonstration, training and research. The farm will focus on four specific revenue generating agricultural programs, fruit tree development, vegetable production with nursery site, egg production and a training program. In addition, the farm will act as a value chain-oriented site that will distribute agricultural inputs and serve as a center for a marketing cooperative. The farm will provide extension services and provide a mechanism for scaling up.

**The fruit tree sub-component** will establish a 1-2-hectare site that could demonstrate and research various fruit tree varieties such as apples, nectarine, pear, plum and peach. The site will demonstrate proper growing methods in orchard of various apple varieties and establish an outreach programs to popularize cultivation. The trees will eventually be used as a mother site and enable production of fruit tree seedlings and scaling up to commercialization of fruit trees.

**The vegetable sub-component** is composed of two units, a vegetable site and nursery site for seedling production. The vegetable site will be a 1-2-hectare site which will strive for economic efficiency while producing high yielding crops for the local market and simultaneously demonstrate nutritious crops, test seed varieties, fertilizers, technologies and agro-technical methods. The vegetable nursery will operate as its own standalone economic unit and will demonstrate the seedling nursery business model. The farm nursery will have a potential to produce 5.5 million vegetable seedlings per year and enable access to improved seed varieties for farmers. The vegetable seedling nursery will introduce advanced seedling production using trays, growth medium and irrigation. Seeds are the foundation of agriculture. Regardless of the technology implemented, high yield and crop quality are dependent on high-quality seeds. The tree seedling nursery will be a 0.2 Hectares shade net and provide tree seedlings for fruit tree development as well as for forestry and soil conservation efforts. The site will promote fruit production in the region by introducing and supplying improved seedlings, facilities, equipment and materials.

**The Egg-production sub-component** will establish a model Chicken layer houses of around 250 m<sup>2</sup> with around 1,700 chickens and a production of approximately 1,500 eggs daily throughout the year. The production method will be Free-run housing system that allows 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. At an estimated market value of 4 birr per egg the unit will be able to have a yearly revenue of over 2,000,000 birr (~70,000 USD).

**The training program** will comprise the fourth sub-component and aim to build capacity of the region. The site will be used for teaching, demonstration, and training of agriculture service providers, extension service agents, stakeholders, zonal agriculture professionals, students and farmers. Moreover, the project will promote cooperation between the Beta Israel Community, local farmers and the various partners enlisted in the program.

The initial five years of the site will be managed and operated by CultivAid and will be transitioned to community management over this period of time. During this time operational and managerial protocols will be developed together with the future management of the site. The site will be a source of income, the main training center for the community and aim to produce skilled young professionals in the fields of agriculture and water. The site will provide jobs for community members who will be employed at the site as well as part of a service and extension services that can provide the technical support to Gedams, farmers, government or private organizations.

The experts and the extension service developed will be the future base of establishment a **grower's association** that will be owned by the community. The association will be responsible for 1) providing agrotechnical support to deciduous fruit production; 2) Purchasing all the fruit from farmers and selling to the market / buyers and 3) Ensuring quality and Good Agricultural Practices (GAP). The association will increase the revenue of the community owned association and at the same type improve the sector's professional standards raising income throughout the zone.

## **Component 2: Gedam Community Garden**

At selected Gedams and hopefully in all of them a community vegetable garden will be established. The site has three main objectives, 1) to provide healthy and nutritious crops to the members of the Gedam throughout the year and 2) to operate as a demonstration and training site for surrounding farmers. 3) The site will be an additional source of income where surplus production could be sold to the region. The operation of the site will be by the community members of the Gedam with technical and agronomical support from trained agronomists who will visit the site regularly.



The garden will implement a family drip system with options of scaling up to more advanced systems following successful implementation. The site will focus on a variety of crops based on a dietary assessment that will be conducted.

Selected Gedams will also include a fruit tree site. The selection of trees will be based on the climatic conditions and topography of the site. Like the vegetable garden the site will provide a source of nutritious crops, a training and demonstration site and additional income to the Gedam.

**Component 3: Partnership with Debre Brehan university: Establishing a demonstration site and development of center of excellence**

Debre Brehan university has an agricultural site that includes dairy and poultry, an agricultural research site, a non-functional greenhouse and an apple site that is 4 years old with health trees of Anna and Dorset variety. The current apple site is around 0.2 hectares and requires support for proper cultivation and pest management. The component will aim to provide the university with on-going extension services and training to improve the current site and to build future capacity. The extension service will provide support in additional areas related to production, research and hands on practical training programs.

**The first sub-component at the university site will serve to establish a demonstration and training site for fruit trees, vegetable production and a vegetable seedling nursery site.** The fruit tree site will be 0.5 hectares, the vegetable site will be 0.5 hectares and demonstrate nutritious crops, test seed varieties, fertilizers, technologies and agro-technical methods. The vegetable nursery will be 0.1 hectares and produce vegetable seedlings. The site will also include a meteorological station for data collection. This is an important measure for understanding the temperatures throughout the year and that enough chilling units are accumulated from the selected apple variety.

**The second sub-component will be to support the establishment of a 10 hectare center of excellence of highland fruit.** The land has been designated and is located adjacent to the university's demonstration site. Through the program, CultivAid will provide planning and implementation support for establishment of a center that can promote highland fruit trees.

**The Third sub-component will establish a livestock program** to support the dairy and poultry systems at the university. The current livestock programs at the university will be evaluated and upgraded to demonstrate modern growing methods and proper management.



**The fourth sub component is to develop a training program for students at the university.** The training program will merge with the current course curriculum and support the practical teaching at the university. The training program will aims to ensure that students who graduate from the university have experience and knowledge in advanced agricultural methods.

**The fifth sub-component is to operate at the university's STEM center.** The field staff will work together with the STEM center to develop different experiments and modules that connect STEM students to agricultural activities implemented.

**Component 4: Extension service and capacity building with regional institutions.**

The extension services and capacity building will focus on both governmental agencies and regional NGOs.

**The first sub-component is to establish collaboration with the Debre Brehan Agricultural Research Institute** which will focus on establishing testing sites, research and hence recommendations. CultivAid will initially work to support the current site operated at the research institute. The second phase of operation will be to establish a new site focused on research of different varieties (root stock and scion) for various crops such as apples, nectarine, pear, plum and peach.

Currently, apple and other highland fruits are under experimentation at the site. CultivAid will work with researchers to establish new research sites, support research activities and promote recommendations and cultivation protocols for the zone. Specifically, the collaboration will focus on establishing a testing site for plums and pears which have only started to be examined. The site will also establish a meteorological station for data collection. The collaboration will also aim to build the capacity of young researchers at the site.

**The second sub-component aims to establish collaboration with Africa Rising and Adeno.** CultivAid and the Beta Israel community developed staff will operate to better understand the gaps in cultivation. Improved knowledge to farmers will be developed through an extension service providing system as well as development of written material and cultivation protocols. The collaboration will identify the main bottlenecks and seek market-based solutions to ensure access to agricultural inputs and knowledge.

**Component 5: Establish satellite demonstration and training sites**

There is a dire need for modernization of the agricultural sector in order to improve productivity. The introduction of new technologies must be accompanied by proper guidance and knowledge building efforts in order to provide the agricultural sector the capacity to install, operate and





maintain these technologies. Technologies require practical training, experience and demonstration in order to ensure functionality of the technologies and to ensure the set objectives are met. The desired hardware must be accompanied by the required software.

The establishment of satellite sites will extend the impact of the activities to additional sites, introducing advanced Israeli technology and agricultural practices to the. The site aims to provide direct daily contact with development agents, farmers and the local community and thus to act as the central mechanism for knowledge and technology transfer. The satellite sites aim to strengthen the extension services and FTCs by operating within the context and objectives of the National Strategy for Ethiopia's Agricultural Extension System.

**The first sub-component is with Debre Brehan Polytechnical college**, a well-known Technical and Vocational Training center that has received recent awards in excellence. The college has an agricultural training program that trains the future extension workers of the region. The satellite site at the college would establish a small plot at the college campus and in the future could expand to additional land near Debre Brehan.

The collaboration with the college will attempt to take the leap from traditional farming practices and work with the different departments at the college to seek innovation and modernization for new agricultural tools and machinery. The program will evaluate the full capacity of the school and work in collaboration with the crafts program to develop new concepts.

**The second sub-component is with the Community project**, a school in Debre Brehan that is supported by a American funders and works in collaboration with Engineers Without Borders. Educational agricultural activities will be established at the school alongside an agricultural plot. The satellite site will be a 0.25-1-hectare garden equipped with modern technologies. The garden will be managed by an agronomist who will be responsible for planning and operation. The students of the school will be responsible for working at the garden through which they will gain practical hands on experience. The students, as agents of change will take this knowledge back home and diffuse the new techniques to their parents, relatives and neighbors. The educational program will develop linkages between agriculture and health in order to promote lifestyle choices that nurture their bodies, their communities, and the planet.

## Scaling up process



The implementation of the first 2-3 years will provide demonstration, training and market based linkages to enable scaling up to additional locations in Simien Shewa. Additional sites and scaling up will be based on the relationships developed. Strategic sites will be selected together with the community and local partners.

In addition, the scaling up will include an introduction to new technologies such as:

- a. **Packing house** - The packing plant will be used as a logistical center for surrounding farmers and will provide services of sorting, cleaning, storing and cooling and marketing solutions for the domestic and international markets. The three main objectives of applying postharvest technology to harvested fruits and vegetables are to maintain quality (appearance, texture, flavor and nutritive value), to protect food safety, and to reduce losses between harvest and consumption, post-harvest loss. These objectives would increase the value of crops and thus the profit margin.
- b. **Community based irrigation systems** aims to establish pressurized irrigation systems to support agricultural development. Pressurized irrigation systems, as opposed to the surface irrigation systems, are more effective in application of irrigation water to crops. They provide improved farm distribution, improved control over timing, reduced wastage of land in laying field distribution network, reduced demand for labor and improved use of limited water resources. Establishing community irrigation systems that are based on pressurized irrigation and utilize drip and sprinkler irrigation enabling higher yields, lower labor requirements and water conservation; this in turn will enable more land to be irrigated and significant improvements in production.
- c. **Poultry houses** – The aim is to introduce layer houses, about 500 m<sup>2</sup> each. The houses will raise about 3,000 chickens producing on average 2500 eggs per day or an expected production of 900,000 eggs per year. The production method will be Free-run housing system that allows 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.





### Part III: Artisan Craft Development Program

The proposed intervention for the craft workers aims to improve the quality, working conditions, safety and capacity of craft workers in Debre Brehan and Kechene. The proposed technologies, products and changes in work environment will aim to improve the profitability of the products being produced and thereby improve the socio-economic condition of the community. Furthermore, the interventions aim to improve both the reputation and identity of the community.

The Crafts program can be divided into 5 components which will aim to support the development of the craft industries of the Beta Israel community. The first component aims to introduce new technologies while developing strong institutional partnerships. The second component will conduct a regional assessment of crafts to get a full understanding of the extent and scope of craft workers in the zone. The third component will focus on metalworking, with a focus on new products and improving production processes. The fourth component will focus on potter with a focus on work processes and raw material related to production. The fifth component will seek to improve the structure of the industry, aiming to improve the organization of workers as well as developing marketing mechanisms for improvements in both marketing as well as access to raw materials.

To ensure the sustainability of the program the interventions will develop partnerships between the implementation with the community and relevant stakeholders, such as the polytechnic college, Debre Brehan university and Addis Ababa University. These partnerships will enable the programs to build the capacity of the various partners in terms of training, practical hands on work and supporting current projects. The partnership will aim to include Israeli Institutions such as Bezalel Academy of Arts and Design and the Technion. Together with partners the programs will work towards developing a mutual understanding of the community, production, processes and design.

The Metal works will focus on creating new products that can be made by the craft workers. This process will be initiated through Bezalel Academy of Arts and Design’s metal courses. Through the course, new technologies for production will be examined and introduced. The program will work towards improving the profitability of the products being produced and to develop new concepts of design based on local knowledge and local design. The program will also analyze the current methods of production in order to improve safety and working conditions.

For the pottery programs the objectives will focus on Improving the work processes and raw material related to production. Specifically, the program will introduce new technologies for production with a focus on the oven as well as the process of producing the ceramic products.



The program will aim to improve the working conditions of the women involved in pottery production at the communal workshops and at individual production methods. The intervention will examine how to improve the profitability of the products being produced and to develop new products that can be introduced. The partnerships will enable the program to develop new concepts of design based on local knowledge and local design.

The program will develop structural improvements to the organization of the workshops through which workers can achieve higher returns. The organization of the workshops will provide a mechanism for decision making and work in together with the community center being developed.



## Overview of components and activities

The activities of the Artisan Crafts Development Program are based on 5 major components. All aspects of this program will be under the management and supervision of CultivAid. After the first year evaluations of the program will suggest if the management of activities should be transferred to a secondary organization or remain under CultivAid’s management.

Component	Activities	Responsible party
<b>1. Knowledge development and partnerships</b>	<ul style="list-style-type: none"> <li>To develop new concepts of design based on local knowledge and local design.</li> <li>To develop partnerships between Israeli institutions, the community and relevant stakeholders, such as the polytechnic and Addis University</li> <li>To improve the capacity of the Polytechnic school through partnership with Addis University’s department of design, Bezalal academy regarding training, practical hands on work, supporting current projects.</li> </ul>	CultivAid will be responsible for this component and will develop an implementation plan together with Bezalel Academy.
<b>2. data collection/mapping</b>	<ul style="list-style-type: none"> <li>Mapping and market assessment of the artisan craft communities, production and processes.</li> <li>Mapping of all market processes for production and marketing</li> <li>Evaluation and recommendations of related technologies currently being used in Ethiopia and abroad for pottery and metal working</li> </ul>	CultivAid will be responsible for this component and will develop an implementation plan together with the community center
<b>3. Metal Working</b>	<ul style="list-style-type: none"> <li>Improvements in the quality, working conditions, safety and capacity of metal workers in Debre Brehan and Kechene.</li> <li>Creating new products that can be made by the craft workers</li> <li>Improving the work processes and raw material related to production.</li> <li>Developing new technologies and work processes together with Bezalel academy of art and design</li> </ul>	CultivAid will be responsible for this component and will develop an implementation plan together with Bezalel Academy.



<p><b>4. Pottery and ceramics</b></p>	<ul style="list-style-type: none"> <li>• Improvements in the quality, working conditions, safety and capacity of ceramic workers in Debre Brehan and Kechene.</li> <li>• Introducing new technologies and work processes into the production process.</li> <li>• Creating new products to be produced at the workshops</li> <li>• Improving the access to raw material related to production.</li> </ul>	<p>CultivAid will be responsible for this component and will develop an implementation plan together with Bezalel Academy.</p>
<p><b>5. Organization of craft workers</b></p>	<ul style="list-style-type: none"> <li>• Establishment of joint work space</li> <li>• Establishing an organization of craft workers</li> <li>• Improving the profitability of the products being produced.</li> <li>• Developing marketing mechanisms for higher returns</li> </ul>	<p>CultivAid will be responsible for this component and will develop an implementation plan together with the community center and Bezalel Academy.</p>

## Timeline of Implementation

### Initiation stage, Months 1-6

The initial activities will be dedicated towards

1. Component 1: Course implementation at Bezalel, testing innovative new products on a small scale. Establish sustainable relations with Ethiopian institutions
2. Component 2: Undertake data collection and in-depth research of crafts in North Shewa
3. Component 3: Developing program for metal working innovation.
4. Component 4: Testing possible oven design and work methods improvement in ceramics.
5. Component 5: Design a communal workshop for the crafts, establish organization of craft workers for the ceramics and for metalworkers.



**Costs**

**Manpower and coordination**

Description	Total Cost
Course implementation at Bezalel	1,800
Bezalel 4 students visit to Ethiopia for 2 weeks	9,262
Bezalel 2 lectures visit to Ethiopia for 2 weeks	8,726
Transportation (4X4 vehicle with driver)	1,683
Testing possible oven design	7,000
MISCELLANEOUS	1,424
OVERHEAD	4,484
<b>Total cost</b>	<b>34,378</b>

**Program implementation, Months 6 -12**

1. Component 1: Field workshop in Ethiopia using selected students from Bezalel and AAU, to try their design on small scale workshop. Building knowledge center and craft and technology resource library.
2. Component 3: Metal working - implement, learn and redesign.
3. Component 4: Ceramics - implement, learn and redesign.
4. Component 5: Establishment of communal workshop for the crafts

**Manpower and coordination**

Description	Sub total cost
management, administration and technical support	11,759
field staff leader	22,731
Israeli field staff - monthly	25,267
Israeli field staff -quarterly	11,047
Bet Israel community staff	4,320
Quarterly management visit to Ethiopia	6,712
PROJECT DESIGN	-
MISCELLANEOUS	4,092
OVERHEAD	12,889
<b>Total Costs</b>	<b>\$ 98,817</b>



**Equipment**

<b>Decription</b>	<b>Sub total cost</b>
<b>Metal working technology package</b>	11,000
<b>Ceramics technology package</b>	11,000
<b>MISCELLANEOUS</b>	2,200
<b>OVERHEAD</b>	1,980
<b>Total Costs</b>	<b>\$ 26,180</b>

**Total costs for stage 2: \$124,997 USD**

**Program operations, Months 12 - 60**

5. Component 1: Establish yearly program for conducting field workshop, trainings and exchange in Ethiopia using students from Bezalel and AAU.
6. Component 2: Implementation of outreach program to selected areas of craft production.
7. Component 3: Metal working - implement, learn and redesign.
8. Component 4: Ceramics - implement, learn and redesign.
9. Component 5: Training program, on-going courses and development though communal workshop. Development of marketing program for addressing profitability.

**Cost**

**Cost to be determined based on implementation of first and second stage and evaluation of program.**

**Program review and future proposal**

At the end of each year a full program review will be conducted, monitoring and evaluation. The review will examine all aspects of implementation, management, operation and develop the next stage of guidelines for the program. The following year of implementation may change according the conclusions in the M&E.





## Component description

### Component 1: Training and Knowledge development program

In order to develop a long-term sustainable program, there is a need for local and international partners. The focus of the partnerships is to two-fold, to conduct trainings and capacity building and to develop innovative solutions that can transform the industry and develop new opportunities.

The program will recruit Bezalel Academy of Arts and Design (department of ceramics and the department of Industrial Design) to support and partner with CultivAid for the purpose of improving production and quality. At Bezalel, Ethiopian Craft production will be integrated into student projects by which products and process methods will be piloted. A program will be developed to conduct visits by lectures and students to the region and to jointly implement the selected pilot projects. The visits will incorporate trainings and introduction of new technologies. The program will introduced new skills for example welding, drilling and metal cutting.

In Debre Brehan, the Polytechnic college and Debre Brehan University have great interest in developing a strong partnership. The Polytechnic college is a trades college that has professional staff and equipment. The college is located near the community, has a few community members who have studied at the school and it has a good educational infrastructure. The college could develop the ability to support scaling up, introduce new technologies and provide a physical space for various pilot scale projects. The partnership will enable capacity building at the college and trainings that could have a wide impact on the entire region.

Debre Brehan University has community development programs in the zone that focus on supporting poor communities. There is understanding that the Beta Israel community is marginalized and requires support. In Kebele 05 there are university programs. A proposal related to ceramics and artisan crafts has been developed by the university that focuses on Kebelle 05. The proposal aims to conduct a baseline assessment followed by organizing all ceramics workers into cooperatives and introducing various molds for production. The partnership with the university could support community development programs throughout the region with the Beta Israel Community.

The third partner in Ethiopia is the department of Industrial Design at Addis Ababa University. The department could be instrumental in developing new thoughts on design and enabling the development of new products and methods. The department will serve as a linkage to Addis and could establish a program with the community in Kechene that would enable product development and process enhancement.



## **Component 2: Data Collection and Mapping**

For the crafts program a data collection program needs to be implemented in Debre Brehan to further understand the current magnitude of craft production and to what extent job production could be developed through the industry. A baseline assessment needs to be conducted to identify the number of workers in each craft in Debre Brehan and throughout the North Shewa region. The mapping of the zone will document all market linkages regarding raw materials, supplies, marketing and distribution. Based on data it will enable to understand what type of interventions could most easily improve the lives of these communities throughout the zone. The mapping needs to identify the different markets in the zone and how they operate along with data on costs and prices. Specific areas of production will be identified for future activity. The mapping will also collect data on different types of technologies being implemented in the zone and their current status. A proper workplan for the data collection and mapping program will need to be developed and implemented during the first year.

## **Component 3: Metalworking**

For the Metal works it is recommended to focus on creating new products that can be made by the craft workers. This process could be initiated through Bezalel Academy of Arts and Design's metal courses which are instructed by team member Yaniv Gluzman. Through the course, new technologies for production will be examined and introduced. The program will work towards improving the profitability of the products being produced and to develop new concepts of design based on local knowledge and local design. The program will analyze the current methods of production in order to improve safety and working conditions.

As part of metalworking course at Bezalel academy, a practicum for traditional blacksmith will be developed. The course will provide students with knowledge of traditional craft work in Ethiopia who will develop new ideas for products that could be created. There will also be assessment by students on tools that could be implemented into the workshops. There will be a special focus on agricultural related products that could be developed.

Following the product design at Bezalel the course will have selected students undertake a joint workshop on building new products with the community in Debre Brehan. The workshop will be in full collaboration with Addis University and the Polytechnic college. The program will initiate joint courses with Bezalel and Addis university.

The program will evaluate various technologies and skills that could be transferred to the community. Through a communal workshop (component 5), these skills will be transferred to



the community. The workshop will provide access to various technologies and enable upgrading of crafts workers to modern methods of metalworking.

#### **Component 4 Ceramics**

For the pottery programs it is recommended to focus on Improving the work processes and raw material related to production. The program will introduce new technologies for production with a focus on the oven as well as the process of producing the ceramic products. The program will aim to improve the working conditions of the women involved in pottery production at the communal workshops and at individual production methods.

The component will establish a program with the Ceramics department at Bezalel. The department will support the implementation of the selected activities, development of products with traditional technologies and knowledge. Together with the department, a team will be established to conduct a study of ovens for ceramics that would develop a new oven for implementation. The team will also introduce electric or manual powered ceramics wheel, improvements in raw materials and new concepts for the processes of production and products that could be developed. The activities in ceramics will proceed from Oven + raw material → glazing → ceramics wheel → new products. The implementations will be supported by students who will arrive for pilot implementation of product/process. Following the initial stage new products will be developed that could include plates, cups and other household products.

At the ceramics department there are Israel - Ethiopian students who could be approached to take part on the program and support implementation at various levels. The program will look to promote Israeli-Ethiopian students to study at Bezalel Academy and seek to provide unique scholarships.

#### **Component 5: Organization of Craft workers**

The improvement in production will require to establish a communal workshop that will act as a mechanism for knowledge and technology transfer. This communal workshop will be owned and operated through the community center which will also be responsible for the training programs, partnerships and related marketing of products. The communal workshop will provide modernized equipment in metal working, wood working and ceramics. These technologies will be introduced to the craft workers who will be trained in proper operation. The component will enable local decision making towards the development of new products along with marketing strategies.



The component will examine the production process and marketing of the various crafts. Mechanisms will be established that combine improved organization of the workers with a centralized marketing program that will aim to ensure higher profits are returned to the community. The community center will take a lead role in marketing of products, in return this will create a funding mechanism for operation of the center.

The program will establish cooperative/business enterprise for scaling up the trainings into various modes of production. The development of the cooperative or business unit will be in collaboration with the community center, the polytechnic college and Debre Brehan university.



## Program implementation

### **First 12 months, September 2019 – August 2020 .**

The establishment of the program will be managed through CultivAid. The initial 3- 6 months will be dedicated towards establishing the required infrastructure, partnerships and Gantt/timetables for the program. During this period a program coordinator will be hired to oversee all aspects of implementation and provide program planning for 5 years.

The coordinator will conduct frequent visits to Ethiopia and engage with the community, building strong relationships with the community and other stakeholders. The coordinator will be responsible for communication and coordination of the various activities, partners, implementors and stakeholders.

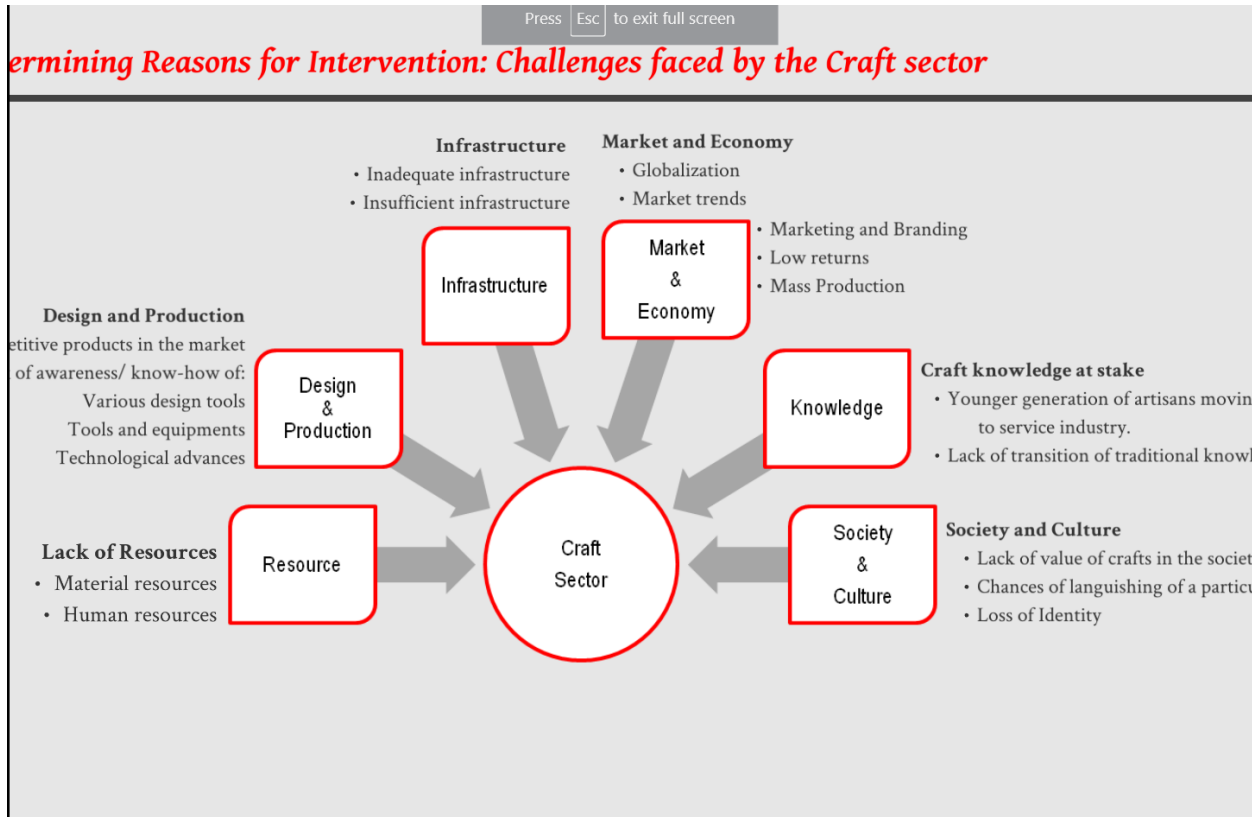
The coordinator will be responsible for supporting the establishment of the community center through on-going support to the community specialist who will be on the ground. The coordinator will also be responsible for implementing a mapping and data collection of the Gedams and Beta Israel communities.

The coordinator will oversee the development of a full proposal for establishment of an agricultural site around Debre Brehan and for establishing agricultural sites at the Gedams. There will be development of partnerships, agreements and proposals with Debre Brehan university, the Agricultural Research Institute, Adeno and Africa Rising, the Polytechnic college and with the community project.

The coordinator will support be in direct communication with the staff and administration at Bezalel to support the establishment of courses and interventions. The coordinator will provide logistical support to the metal working and ceramics intervention and will be responsible for the development o a communal workshop proposal with various experts.

Within the first 12 months, an initial site will be established with one of the local partners exemplifying the type of activity and establishing the initial training program. The agricultural program will include 0.5 hectare of fruit trees, 0.5 hectare of vegetables and initial the Gedam development program. A field staff will be developed of Israeli and Beta Israel experts. The program will establish the foundation for scaling up and implementation of the full program.





**Possible Interventions**

- Social Interventions
- Technological Interventions
- Design Interventions
- Infrastructural Intervention
- Marketing Interventions
- Financial Interventions

