

# Haws Village\*

## Dukem, Ethiopia

### November 2008

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\*Haws Village is a working name for this project. The foundation which funds this development will have naming rights.

# Executive Summary

*“In the end, this community will raise enough money to fund our efforts in perpetuity. And when it does that, then we will prove that this model can be replicated in every city in Ethiopia, every country in Africa, and every continent in the world.”*

**--Wes Haws, DFTW Lead Superintendent**



**OUR BUILDING SITE NEAR DUKEM, ETHIOPIA**



**FACTORIES ACROSS THE WAY FROM OUR SITE**

The need for low-cost, high-quality housing in Ethiopia is great. Because of the price of regular construction, few foreign investors are interested in building low-cost housing. The government is building some apartment complexes, but not enough. In addition, many people moving to the urban areas are used to owning land and farms. Some families do not adapt easily to apartment life.

The proposed development is located on the outskirts of the city of Addis Ababa, 15 miles from the city of Dukem. Dukem is the main city center for the area and has had about 30 factories built in the last year alone.

The factories are planned to be completed and be in full operation within the next two years providing thousands of jobs to the local economy.

With no provisions for housing in this area those workers will have to commute a minimum of 10 miles everyday. In Ethiopia this travel expense represents about 20 percent of their income.

More importantly, the demand for housing will sharply increase in this area, and become a fertile ground for yet another unplanned settlement that is not sustainable both environmentally and economically.

This proposal addresses this need, a community for those rising up out of poverty and creating Ethiopia's new middle class. This village will be built of low-cost, but beautiful, safe, permanent and sanitary housing which will be used as a model for Ethiopia.

While addressing the immediate housing needs of this specific area the proposal also tackles the larger and



more pressing questions of best practices in creating contemporary developments in Ethiopia. Urban migration is happening at a rapid pace. Usually this is motivated by the need to look for work and meet basic survival needs.

The community is organized based on a settlement pattern more familiar to local neighborhoods which are generally compact with very small spaces between buildings.

Local settlement patterns have typically weaved buildings dedicated to residential use with those for work usually separate by interior shared spaces. The proposed development expands on this settlement pattern while introducing a sensitive balance between a growing desire for contemporary urban amenities and an environmental responsibility.

The planned development will build a self-supporting community from the ground up with 300 homes, a commercial hub, school, local clinic and a community center.

The residences will be constructed utilizing Monolithic EcoShell technologies. Each home is sited on an average 50 square meters of land.

Having homes located in close proximity to the residents' workplace and their children's school would make the new development economically sustainable. In addition, EcoShells require VERY little maintenance and are impervious to mold, bugs and rot-- this will aid in keeping the community stable.

The development will be complete within a year from mobilization and is expected to recover 50 percent of the initial investment money in the first year. In the best case scenario—which is also reasonable—it is expected that

most or all of the homes will be sold to the factory owners, investors, and other cash buyers and recover all the money immediately.

Monies recovered will be returned to the Donor at a pre-arranged rate and cap, the rest will be reinvested into more construction with similar intent of providing thousands of homes in a sustainable environment. Many homes could be built because of the initial capital investment.



**SITE PLAN**



**SITE LOCATION**

# Homes; Public and Commercial Centers

## Homes

Ethiopians typically have large families. We need to strike a good balance between conservative land use and our desire to provide enough land to families so they can be independent and even grow a garden, if they wanted.

The pride of owning a single family home cannot be underestimated. The Domes will be finished up with tile floors, indoor plumbing and nice windows. This will be a huge upgrade in lifestyle.

This will be an open market for the sale of the homes. We will give priority to buyers in the following order:

1. Cash buyers purchasing multiple houses (factory owners buying housing for their workers)
2. Individual cash buyers.
3. Investors who are cash buyers looking for rental property.
4. Individuals that have a good down payment.
5. Investors with a good down payment.
6. Individuals with a small or no down payment.
7. We will then use the rest as DFTW rental property until they sell.

This system is a model for free enterprise, and it will work. This may mean that we only get to step 4 before all the units are sold. This will allow us to recover all monies quickly and reinvest in more housing—enough housing that we will be able to serve all levels of buyers. In the long run, thousands of families will be given high quality homes for years to come.

Those who do not pay cash for the home will be given affordable payments with a 20 year term. We will request 10 percent down with payments of between 30 to 40 dollars a month.

We intend to have and enforce a few covenants. There would be a monthly maintenance fee to pay guards, provide garbage and sewer, and to hire teachers to educate the village.

There will be incentives in place which will reduce the maintenance payment. There will be reductions for maintaining a garden year round; taking monthly classes

from a master gardener; maintaining at least one fruit tree; attending a monthly nutrition meeting with the nutrition expert; taking a monthly class by a public health instructor to discuss health and hygiene related issues; taking monthly computer classes; volunteering in the canary once a month; and maintaining their home to certain standards.

## Commercial Center

We want to provide the community members a means of industry. The following structures are suggestions at this point. Input from all project leaders is welcome.

Grocery store

Hardware store with specific tools and supplies to maintain the Domes.

Computer electronic store/ internet café. Giving people access to the internet will make a huge difference in their lives. An I.T. professional will teach weekly computer and internet classes.

Clothing store

Pharmacy

Stationary shop/copy center

Our office: To run the village, sell units, rent units, build more units, enforce covenants and pay utility bills.

Restaurant: High quality food with a master chef who will teach a weekly nutrition class.

Juice Shop: Very popular in Ethiopia

Hotel: We know there will be a large number of tourists who will come to see the community. Some would love to stay the night in a Dome. Also the 30 factories in the area hire specialized employees for a short amount of time on a regular basis. This will include 10 Domes and 1 reception Dome.

Cannery: We will provide 3 square meters of garden space for each family. We will also hire a full time master gardener to teach the benefits of gardening and canning. The cannery will provide them with a means to keep their food in storage. This is unheard of in Ethiopia and could be revolutionary.

Souvenir shop

Green house for starting plants for gardens and a shop to sell garden supplies and seeds.

This commercial complex will be owned by DFTW and rented out. In the future we can sell them to shop owners; sell them to investors; start a community business and that business could purchase them; encourage micro-enterprises to move in; or we could keep them permanently.

### Public Complex

The public complex will be donated back to the Government in exchange for the land. It will include:

1. A Medical Clinic with a full-time doctor
2. A Government office building
3. A School: This will be a school big enough for 600 students. It will have 20 Dome classrooms, restroom Dome, library and teacher's lounge.
4. Cultural Center/Meeting House/Social Recreation Room used for meetings, cultural events, and storing recreational equipment. Teachers will provide adult education classes in the following areas: nutrition, hygiene, gardening and computers. This will also store equipment to service the soccer field, basketball and playground.

### Government Involvement

The government has agreed to provide the main power line and transformer to the village. They will provide the road up to the entrance of the village

They will provide legal protection and enforcement of all contracts, mortgages, and covenants made by DFTW. They will maintain all buildings donated to them in the Public Complex.

They will allow us to drill and install a well and provide us a small piece of land for a water tank on top of the hill. They will also allow us to control the water. We will be in charge of price setting and maintenance. There have been huge problems in the past with the government has taken control of water access and tripled the price.

The objective of this water system is to give people plenty of water at a low cost to upgrade their lifestyle. They also need enough cheap water to maintain a garden all year round. DFTW will stay in control to make sure these things are done.

The government will allow us to purchase cement, tile, sand and rebar direct from the factory and will ensure delivery in a timely manner. All of our equipment purchased and shipped for this project will be free of all import taxes and other taxes.



**SITE CONCEPT BY FASSIL ZEWDU, GOJO HOMES, ETHIOPIA. FASSIL AND HIS SISTER ARE GOING TO BE EXCELLENT COUNSEL. THEY HAVE HELPED US A GREAT DEAL TO PUT THIS PROJECT TOGETHER.**



**JIM KASLIK OF CLOUD HIDDEN DESIGNS PRESENTS THIS CONCEPT SKETCH FOR CONSIDERATION.**



# Design Concept by Leland A. Gray, NCARB

When asked about his prior architectural career, which has included some 13,000 projects, Gray said, “I had a dream job when I was the (LDS) church architect. It was a highly sought after position. I had it for 25 years. Every other church-member architect in the world wanted my job.”

When asked whether he had a “dream project” in mind, Gray said, “I’ve already built it: the LDS Conference Center in Salt Lake City -- amongst many, many others I couldn’t even list.” That Conference Center can seat more than 21,000 (making it the largest performing arts center in the world) and was designed to last 150 years.

Five years ago, Lee Gray took an early retirement to form his own firm to focus on design and development of Monolithic Domes. Having a history in thin-shell concrete construction as well as a close working friendship with David B. South, President of Monolithic, Inc., this career path was the next logical step.

During his presentation at the Ninth Annual Monolithic Dome Conference in 2005, Gray pointed out that despite the Dome Industry’s progress, the general public still perceives concrete thin-shell construction as an “alternate, less attractive building approach” rather than a “preferred method of construction.”

His firm, LPDJ Architects, LLC. is changing all that. In 2008, they designed and managed 100 Million USD in Dome business.

He is ready to help in any way to see DFTW projects get built in every corner of the globe. His international development experience is indispensable to us.

**The drawings on the right are a concept Gray developed for a school in Hawaii. The general idea would translate easily to a holistic community anywhere in the world.**



# Project Budget

## CONFIDENTIAL

Engineering	\$9,900.00
Supplies & Transportation	\$48,750.00
Rough Grade Rental	\$8,000.00
Airforms (5, 25 ft.) fans & shipping	\$28,750.00
Office equipment, phone, internet, utilities	\$25,000.00
Cement Mixers, Trowels, Shovels, etc.	\$20,000.00
Temporary tents, kitchens for 400 workers	\$9,250.00
Installation of Wells and Meters	\$144,250.00
Electrical hookup w/ meters, panels and transformers	\$78,250.00
Paths, sidewalks, retaining walls, landscaping, drainage	\$65,000.00
Plumbing, septic system	\$75,750.00
Fence	\$28,250.00
Road, Gravel	\$44,500.00
*Dome Homes @ \$5,450 x 300	\$1,635,000.00
Superintendent Salary	\$78,750.00
Assistant Salary	\$35,000.00
Living Expenses	\$28,750.00
Travel Expenses to and from US	\$24,500.00
School	\$59,750.00
Clinic	\$17,250.00
Playground, basketball court, football field, cultural center	\$28,000.00
Government building	\$11,500.00
Commercial complex	\$236,000.00
Contingency, 4%	\$109,606.00
DFTW Administration Fee 7%	\$191,810.50
<b>Total:</b>	<b>\$3,041,566.50</b>

## \*Dome HOME COSTS:

Shell	\$3,100.00
Windows, Doors	\$500.00
Coating	\$800.00
Paint inside	\$100.00
Tile	\$500.00
Kitchen	\$300.00
Electrical	\$150.00
<b>Total:</b>	<b>\$5,450.00</b>

## PROJECTED RETURN ON HOME SALES:

Dome Home Sales Cost	\$10,153.97 (or 99,000 Ethiopian Birr)
Homes Sales x 300	\$3,046,191.00

# Field Study Notes

## An interview with Wes Haws, Lead Superintendent, DFTW

### How did you feel before you left for Ethiopia?

This was my second Trip to Ethiopia. My goals were clear. I had spent a lot of time in emerging countries and I have done a lot of good things but when all was said and done I didn't feel like I did much. I had decided that the way I wanted to make a difference was to not only find a way to build housing, but introduce new industry and enterprise to a country. That is what made America great. So I went to Ethiopia partly to find something I could do to accomplish this goal.

### How did you feel once you landed? What were your first impressions?

As I looked and talked to people I realized that there are more barriers to cross than just encouraging free enterprise. Just as I found out in Indonesia, anything we do in Ethiopia would be a delicate balance between bringing western ideas and ways of doing business and combining them with their culture.

The people are friendly and always have a smile. Ethiopia has the lowest crime rate in Africa and I immediately could see that in their calm demeanor. I know I will have to be careful to tread lightly, being the type-A-get-it-done person that I am.

### Did you notice cultural similarities between the Ethiopian people and the US?

One big thing I noticed--and I know it seems obvious--but just like us, the people of Ethiopia have *dreams*. They have been suppressed under communism and poverty but it has not diminished their dreams. Everywhere I looked they were reading books like "The Secret" and "7 Habits of Highly Effective People".

As I talked with electrical contractors, plumbers, realtors and businessmen, I saw a group of people ready to use their talents in a big way. When I talked about 300 homes and an all-inclusive development, I saw their eyes light up and I knew they were up for the challenge.

There are people just **waiting** for an opportunity to shine and really do something big. In Idaho we don't wait for our chance We go and take it. We have been empowered to believe if we work hard enough we can achieve our dreams. In Ethiopia they seem to be less sure, but they are willing and excited to try.

### What was your initial purpose for the visit?

I had four purposes on this visit.

1. To visit the child I had fallen in love with on my first visit. Now my wife and I are working on adopting this boy. We know he is meant for our family.
2. For me to expand the orphanage at Village of Hope by building additional Domes.
3. To allow my new wife to experience Ethiopia and do some good together.
4. To find a project which would earn some income for both DFTW to re-invest into the country and that could help the people to not just subsist, but to thrive.

### Where did you stay?

We lived in the orphanage with the children. We cleaned out a closet and made it our room.

### What was it like to introduce Alyssa to the orphans?

We love the Kids there. Sometimes we cry because we want so much more for them. Most of the time we laugh because you can't help but be happy when you're around them. They are so full of love.

### What made you decide on this concept for a DFTW project there?

As I searched for a project I came across a town called Dukem. This town intrigued me because it lies just one hour from the capital city, Addis Ababa. As the country has developed, Dukem has become a place of Industry. They recently constructed over 30 Factories in the area but nothing else. As these factories begin to open the people will flock to them as they will be some of the highest paying jobs in Ethiopia.

I have a good understanding of housing. I have built a development in Indonesia and have my own properties in Idaho. I knew right away there was a great opportunity for housing in this area.

[My goal was] to find a project which would earn some income for both DFTW to re-invest into the country and that could help the people to not just subsist, but to thrive.



# Field Study Notes, cont.

## *An interview with Wes Haws, Lead Superintendent, DFTW*

### What kind of research did you do after visiting Dukem?

I decided the best way to see if a project was feasible was to visit other developments in the area and talk to the people.

I first found a realtor and had him take me around to some homes being built in Debrazet. What I found there amazed me. The “Developers” have no concept of the word “Development”. The houses were not laid out in any order. There were no roads. Power lines were scattered at random. No thought of drainage or septic.

These homes were some of the fanciest in the area! The quality of construction was terrible. They had upgraded from mud and sticks to mud and sticks with a layer of concrete on both sides. We went into a home under construction and one of the walls already had a huge crack in it. I looked up and there were sticks sticking out of the concrete! The windows and roofs were all made of metal. Concrete had been splattered all over the “windows”. It could never be cleaned off properly.

Crooked windows--doors that did not open right--everything in the “development” was a disaster. So, then I asked the price tag of this newly constructed mess. This is what blew me a way: they were for sale for \$23,000 American Dollars! I could not believe it. As I thought about this I knew I could build the same size home, of high-quality, and sell it for HALF the price and still make enough to reinvest in more construction.

I started showing people the pictures of New Ngelepen, Indonesia-- a community of 80 EcoShells where I had been the Superintendent of Construction. I casually surveyed and asked anyone who would answer how much would they pay for those 700 sq. ft. homes? I was getting answers like \$32,000 USD. My lowest answer was \$18,000.

They saw the quality of the EcoShells through the pictures. When I told them I could build them a house for about \$10,000 USD (or 99,000 Ethiopian Birr) and pay for all the infrastructure, they got very excited. I got several verbal commitments from investors there who would purchase them as rental property because they looked so good.

### How do the locals feel about Domes and our developing technologies?

They loved the Domes! They could see their quality. I do believe it will be important to make the Domes as modern, yet as conventional, as possible.

### What kind of dealings did you have with the government?

We scheduled a meeting with the governor of that region. He was the equivalent of the governor of a state here. I sat down and told him of my ideas. He was very excited. I asked him what it would take to get the land to build such a project and he said it would be “no problem”. He would expect something back and asked what I had to offer. I told him I could provide a government building and a school in exchange for the land. He agreed and asked if I could start construction immediately.

He told me of the troubles he is having with housing in the country. He said they could not find investors that were willing to build low-cost housing because the profits were not high enough. The foreign investors were only building high-end custom homes in Addis.

**He said the government could not keep up with the demand. They build government apartment complexes that are 400 sq. ft. per unit and cost 7,000 dollars. They recently finished one in Shashameni that was 200 units. They had over one million people apply for this housing.**

### How were the roads? What are the utilities available to Dukem that we could tie into?

The road to Dukem is a good, standard American road. They have electrical service to tie into and sewer in Ethiopia is all done by pump trucks.

### What is your vision, if it could be as big as your wildest dreams, what would it be in the short term as well as in the long term?

I see a village that is self-sufficient. Shopping center, paved roads, electricity by solar and wind, advanced septic systems, well-built homes with trees and gardens. A whole package--better than anything seen in the country. And the best part is in the end this community will raise enough money to fund our efforts in perpetuity. And when it does that, then we will prove that this model can be replicated in every city in Ethiopia, every country in Africa, and every continent in the world.

# Thoughts On Ethiopia

*by Alyssa Haws, Public Health Expert and Executive Assistant, DFTW*

Wes and I spent our honeymoon with an NGO called “Village of Hope” at their orphanage in Ethiopia. It is located in the small village of Kersa Illala about three hours southwest of Addis Ababa.

As soon as we arrived the kids showered us with love and unending attention. We quickly settled into our cozy 6x10 closet. There are 30 orphans who live there, ranging from newborn to 18 years old. Each has a unique story and personality.

We were continually touched by their ability to rise above their circumstance and move forward. We spent time flying kites, blowing bubbles, telling stories, laughing and loving them. We have stories about rats in our bedroom, eleven days without electricity and water, and the strange traditional foods we ate. All these priceless memories will be cherished forever. The children have captured our hearts and changed our lives for the better.

## A Dream Fulfilled

Since I was young, I’ve dreamed of going to Africa. I’ve schemed hundreds of ways to go and serve the people. Going with Wes was better than anything I had ever imagined. While living in the orphanage, I taught at a nearby school about HIV and AIDS. Teaching in their modest mud school rooms was humbling. It was rewarding to see their thirst for knowledge.

## In The Library

That same school had thousands of used books donated from America to start their first library. The books had been locked up in a dusty room for months because they didn’t have the know-how to organize and categorize them. My mom is a librarian, and I couldn’t let her down. It was a massive project to tackle but well worth the effort.

## Pearly Whites

Ethiopians brush their teeth with a stick. There is a tree which is specifically used for toothbrushes. Many items were donated for us to take on our trip. Among those items were toothbrushes and toothpaste. It was humorous to see them brush with toothpaste for the first time.

## Omo Valley

Visiting the Omo Valley was remarkable. Two long days of driving on treacherous roads was an amazing feat.

The valley is filled with a mix of several ethnic groups. We felt like we were walking through a “National Geographic”. Before taking a picture, a price had to be agreed upon to pay them. If they thought they were more beautiful than the other villagers, they expected more money for their picture. They are very proud of who they are and how they are living. It was incredible to witness their culture.

## Wes Building Domes

Wes has a great desire to serve people in large ways. His love for others has made a difference in many parts of the world. Ethiopia was no exception. With Wes working by their sides, several Domes were built by local workers. These Domes will be used to house more orphans and one larger Dome for a Women’s Educational Center. These buildings will be a huge benefit and blessing to those in the orphanage and surrounding village. Wes also has an amazing capacity to love people on an individual level, especially little children. Each child felt needed and special while near him. He made sure the money [we raised at our wedding reception (in lieu of gifts)] was spent on playground equipment, a basketball court, and a soccer field with goals. The kids looked up to him and were extremely sad when he had to leave.

## Lake Langan

One of my favorite memories of our trip was our outing to Lake Langan. The weather was beautiful. We took the children to the nearby lake to go swimming. We made peanut butter and jelly sandwiches for everyone... they all thought they were gross.



## Story One:

### Amaha Melkesadik Aragaw



Amaha Melkesadik Aragaw is a 30 year old iron worker who lives with his wife Aragash in a near by town within the city limits of Dukem, some 40 kilometers away from the city of Addis Ababa, the capital of Ethiopia. Amaha left his beloved countryside near the town of Assala as a fourteen year old boy to work as a laborer and was the youngest of five siblings. He met his wife, Aragash now twenty five, five years ago. Aragash is among a group of children who were raised as orphan, along with some chaperones, made the then difficult journey to the city of Akaki, on the outskirts of Addis Ababa to take her first work as laborer. There, Amaha met Aragash and supported themselves with temporary jobs while going to local public school. They got married two years ago. Currently the couple has no children and lives in one room 'hut', 4meter by 5meter. Learning more about the young couple, there is a sense that, in spite of the difficult circumstances under which they live, their life is guided by a depth of purpose shared by many, young and old, in the community. Their desires are met by being focused and being purposeful that started from their teen years.

Amaha and Aragash are optimistic as they seek a better future in the town of Dukem, where considerable industrial development is taking place. They are also hopeful to have some work in one of the manufacturing plants and secure a home to live nearby their employment place. They hope to better themselves and build a family and are willing to pay up to \$500 in rent, or if available, for mortgage payment with an initial down payment of \$7000 for a new home with two bed rooms, as long as the home is near their work place in Dukem.

## **Story Two:**

### **Kawa Gudeta Bedane**



Kawa Gudeta Bedane, age 48, is a father of six children. Kawa is married to Etenesh, and employed as a guard in a nearby factory. Three of his children still live at home and juggle school and work in alternate seasons to provide support for their family.

Kawa's and Etenesh's childhood experience is formed in a town that did not change that much—south of the Arisi region about 150 kilometers from Addis Ababa—the neighborhoods simply become mini villages where people come together in the evening drinking their homebrew and share their dreams, hopes, sad stories, dance and rejoice that they know others with whom they might share and are known.

The life of Kawa's family is guided by vigor of his wife, Etenesh who is now age 36 and is focused and determined to improving their family's well being. Like her mother before her, Etenesh wanted to go into the workforce and do something meaningful for her family, but due to the hardship of long commute to where employment is readily available she chose to stay at home as a homemaker. Etenesh is ready to work hard, to build her family and keep their childhood dream alive. Both Kawa and Etenesh look forward to provide their family an experience similar to their childhood growing up in an environment they can call home. Kawa envisions a home in the town of Dukem, closer to his work which would save him his hard earned money.

Currently, Kawa's family live in a substandard house in the city of Akaki, 10 kilometers away from their employment which is located in Dukem, and with no public transportation makes commuting difficult. At present, Kawa's family pays \$150 for rent. Kawa hopes to live nearby his employment place. He hopes to borrow from his relatives and invest \$1,000 in down payment for a new home with two bed rooms, if provided near his work place in Dukem.



## Story Three:

### Mulisa Beyene Ede



Mulisa Beyene Ede is a 48 year old factory guard who lives with his wife and four children on the outskirts of the city of Dukem. Mulisa was born and raised in this region where at age 30 met his wife eighteen years ago and since supported his family with a job as a security guard. His wife works at home preparing food for passerby. They live in a house that is typical in that community without electricity, no water, and other facilities we take for granted. Yet, in spite of it all, Mulisa's family sees a better future—surrounded by industrial developments, they hope to secure a house and a job in Dukem.

Mulisa hopes to be employed as a guard in one of the manufacturing plants and to live nearby his employment place. He also hopes that his young children may be able to secure a job in a nearby factory and improve the conditions of their life and build a family. Mulisa is willing to pay up to \$200 in rent. If home ownership is available he would be able to afford an initial down payment of \$5000 for a new home with two bed rooms, as long as the home is near their work place in Dukem.