

The
GEE

Messiah for **Massai**

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Messiah for Maasai is a housing company that aims to provide eco-friendly, affordable and inexpensive housing to the Maasai population in the Ngorongoro Conservation Area in Tanzania. The houses will be built using plastic and glass bottles with additional binding materials to hold them in place. The company will simultaneously train around 5% of the Maasai population in the area to build these houses. The trained members will then continue to develop the business and reap the profits in the coming years.



TEAM 60

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Business Overview

Housing in Tanzania: The Maasai tribe lives in an economically polarised situation, with a handful of wealthy leaders and landowners, and a poorer population. They lived in Kraals arranged in a circular fashion, holding an entire extended family. In the 1960's and 1980's, the introduction of the 'Group Ranch' project, led to division of their land into group and individual ranches, which now holds more than one extended family. Responding to this need, the Kenyan Government in 2004 was set to build approximately 150,000 houses every year. Seven years later, this has remained as a failed promise with only 35,000-45,000 houses built each year. This leads to a shortfall of approximately 115,000 houses being built annually. The Messiah for Maasai (MFM) project aims to cover a fraction of this gap by providing affordable houses to the population.

The Maasai Culture and Entrepreneurship: The Maasai people are one of the indigenous tribes in Tanzania and Kenya, whose culture and way of life was hinged on self sustenance. With globalization and development, they now face a challenge in obtaining income because the lands they depended on are a depleting resource today. This has led them to turn to petty trade and agriculture as a means of obtaining their living. Thus MFM looks at empowering the Maasai people by providing them the training and skills to build eco friendly houses in Tanzania. Entrepreneurship among the tribe has been encouraged by the Government of Kenya as well and mentions in its 'Economic Recovery Strategy Paper', that microenterprises act as a vehicle for creating employment opportunities and eradicating poverty.

About Messiah for the Maasai: Arising from the housing need in the Tanzanian and Kenyan market among the Maasai tribes in the Ngorongoro Conservation Area emerges the MFM project. The company aims to capitalize on this opportunity by setting itself up as a social enterprise, ensuring that the Maasai tribe reaps all the benefits from the project. All profits will in turn be reinvested into the project to carry on its work and to expand its scale of operation.

Goals and Objectives

The Ngorongoro Conservation Area in Tanzania has a Maasai population amounting to 25,000. The MFM project strives to train 5% of them (1250 people), to build eco-friendly bottle houses within two years. The trained men will then continue to use their skills to build houses in their own and other regions (especially in Kenya) with assistance from the MFM workers which will ensure support by providing them with business contacts and guidance. In the long run, the trained members will foster a revolution to provide the entire area with housing facilities in an eco friendly manner.

Value Creation (Triple Bottom Line)

MFM has strived to formulate a strong triple bottom line to ensure that all the stakeholders benefit from the project.



Social Value: The MFM is setup to provide affordable social housing which is built in an eco-friendly manner. This enables the Maasai population to live more comfortably. The social value created will be measured by the number of houses built every year. Another dimension measuring social value is the reduction in the number of households with more than one extended family living in a single house.

Environmental Value: Recycling bottles costs money as well. The use of used glass and plastic bottles in housing instead of bricks reduces the number of bottles to be recycled. Thus the environmental value that we create will be measured by the number of bottles used which need not be recycled. Another environmental value measuring tool is the reduction in the number of bricks that would have had to be produced to be used in building the houses.

Financial Value: The project will create a means for the Maasai to gain a source of income through the use of their skills. Once they are empowered with the skill set, they are entrepreneurs who are responsible for how much money they bring in for themselves.

The Product

MFM aims to build eco-friendly houses for communities where there may be a demand for an increase in housing. The construction of houses with bottles is based on the use of so-called eco-bricks; this is made with the use of recyclable materials as a brick. These eco-materials can be disposable plastic PET bottles. Hence, the PET (Polyethylene terephthalate) is the best alternative to recycle given its high quality and low weight; which means that throughout this material we would be collaborating at the same time with the global warming effect. Further, the PET made bottles are easier to reach because their main use is for bottling and packaging water, oils, soft drinks and many more liquid products. There are also other alternatives if there are preference luminosities. For example, a house will look much better if in terms of design with glass bottles of various colors which provides a stained glass effect.

Furthermore, constructions with recycled materials have its advantages. Firstly, it can be a creative use for trash and therefore provide greater environmental care. Secondly, recyclable materials are very low in cost which also can improve insulation and are very light in weight. In addition, it allows people with little or no economic resources to access housing or a place for common use.



Market Analysis of Tanzania

Tanzania consists of more than 120 ethnic groups, out of which the Sukuma tribe is one of the largest and dominant. Most of the tribes belong to the big Bantu Family.

Target Market:

The initial target market for the education and construction of the MFM project will be the Maasai tribe in the Ngorongoro Conservation Area in Tanzania. The target market is woman and men aged between 18-40 who are willing to learn and give their labour to a very good initiative. According to the population in the Ngorongoro Conservation Area, the target market is around 25,000 Maasai people and we aim to train at least 5% of them.

Building houses out of bottles is a very cheap and sustainable way of creating shelter for villages. By providing these new initiatives not only are we providing shelter, but we are also using them in a 'Green' way. Traditionally, the women of the Maasai group are the ones that cook, milk and do much of the chores, including building and maintaining shelter. Whereas the men are the warriors who go hunting and look after the herds of the animals the tribe owns. We are looking to train both men and woman because they have complimentary skill sets. The men exhibit physical strength and the women are hard working and have attention to detail.

The Maasai lack a sense of entrepreneurship, wherein the only forms of it are exhibited in the trade of their livestock, so as to earn a living for the household. By training this indigenous group, we aim not only to provide them with shelter, but also to empower them with the skills to make a livelihood for themselves. Thus MFM strives to give them a business which they can grow and nurture themselves and the opportunity where they can call something their own creation.

To train the Maasai is a challenging task for the MFM team as the local Maasai people lack entrepreneurial knowledge, money and the tools necessary to build these sustainable houses. Thus we have a timeline of two years to break through the barriers. However one thing they do have which is very valuable to this venture is time. As the majority of work done by the tribe is not in real money paying jobs, they have a lot of time on their hands which is usually spent at home with friends and family. By targeting this group we will be able to give the strengths we have by providing the right



Picture 1: The Hadzabe Tribe is hunters and gatherers living in the remote shores of Lake Eyasi.



Picture 2: The Datoq tribe is a nomadic tribe of cattle herdsman covering territories bordering Maasai Land.



Picture 3: The Maasai tribe is considered to be one of the most interesting tribes in East Africa. The people in the tribe are nomadic herdsman and warriors who refuse to give up their own traditions and customs.



skills, tools and supervision in building the houses where they can give us something which this task demands; Time and Effort.

Competitors for building low cost houses for the Maasai tribe in Tanzania

With the effects of constant change and commercialization around the globe, the Maasai tribe needs help in adjusting and diversifying their survival skills. Housing has been a significant infrastructural issue among the tribe for many years. Being a nomadic/semi nomadic tribe, the Maasai have often relied upon impermanent housing built from readily available materials like mud, sticks, grass, cow dung, human urine and ash.

The proposed solution of helping the tribe with low cost housing through recycled bottles has a fair degree of competition from existing Non Government Organizations, Volunteering Organizations, and other forms of low cost housing initiatives in Tanzania. Key contributors to the shelter developments in Tanzania are the National Housing Corporation, private real estate developers, Central Government and Local Government Municipals.

Competitive Advantage

The competitive advantage for MFM using recycled bottles for construction of houses in Tanzania is the fact that the solution is highly low cost, reliable and easy to implement across a large area. It is also an eco-friendly option that replaces the use of bricks. This innovative solution is perfectly in line with the affordability and the requirements for the Maasai who depend on temporary/impermanent materials to construct their houses. In addition, the construction know how will provide them with means to train and equip others in neighboring areas and hence enable a self sustainable model. The recycled bottles are filled with sand to give a proper thermal insulation in the walls and hence make it more stable and reliable. The success of this innovative construction model can be scaled to other regions with substantial poverty and shelter inadequacies.

Risks & Barriers

Maasai society is not only organised according to age, but they are also organised into groups based upon levels of skill and labour. For example, the roles of men and women are different in the Maasai society. In the early times of the Maasai people, the warriors (Men) were often involved in war, whereas now they keep their cattle safe from wild animals and help in any hard labour or dangerous situations. However the women are the ones in charge of creating and building their houses. The risk we take is that in the past the men would not have been involved with the construction of houses. By providing them with this opportunity, the Maasai can emerge out of their vicious cycle of poverty, a chance to change their past and current ways of living and learn new skills with the men and women constructing eco-friendly houses together.

Also, since 1960 most of the land of the Maasai people has been stolen and invaded by individuals to build farms and private ranches and by the Government for their projects and national parks. Lately, all of Loliondo Maasai, located in northern Tanzania, have been directly confronted and threatened by local authorities, who were miserably responsible for starting fires that destroyed villages to make way for companies that want to establish themselves in this area. Otterlo Business Corporation (OBC) is one business trying to sabotage the land of the Maasai people. OBC claims that the territory that the Loliondo



Maasai people occupy in northern Tanzania is in fact there's according to the lease that was granted in 1995 by national officials. However little is shown to the Maasai people in terms of lease forms or communication from national councils; instead the local Maasai people lose their villages and land just because of a breakdown in communication (or a lack of care). This shows that there is no real relationship and little communication between the Maasai people of Tanzania and the national government. Therefore all the legal terms or issues involved in our idea must be managed by an intermediary and not by themselves.

Business Strategy

MFM's overall business strategy is to recruit and train 5% of the women and men of the Maasai Tribe in the Ngorongoro Conservation Area in Tanzania. A selection process to choose the members who will undergo the training process will be in place. This will be based on their existing skills, their motivation and eagerness to join the project.

Marketing and Sales

MFM project will be using recycled plastic bottles, this will give us the opportunity to approach recycling companies and build relationships with them so both parties can gain benefits in the future. We will look to use the same recyclers in hope for cheaper prices on resources and in return we will mention them in advertisements and in our marketing campaigns. This will also work in parallel with an eco-friendly 'Green' image which will be great for the business in terms of who supports the project as well as being recognised as doing good for the community.

The World Bank Housing Project, currently targeting Tanzania, provides housing finance to mortgage lenders, to increase their liquidity. This initiative is a move to make housing affordable for the Tanzanians. MFM will partner with this project to make sure that Tanzanian customers can afford eco - friendly houses. The partnering aims to achieve a foolproof system of providing the Tanzanians with housing that they can afford. This in turn will be beneficial to both parties. The financing project from World Bank will gain in terms of volumes, whereas MFM will be able to reach out to more and more people who need homes.

Education and development

The training will take place in a holistic manner. Some lectures which will include some management skills will be imparted indoors, while the rest of the training is outdoors on the job. The first part of the training will involve educating the chosen Maasai people in the innovative eco-friendly bottle houses. Their previous skills and knowledge in building houses made with bushes, mud and dry animal skin would be enhanced and cultivated in this stage of the training. As they are really good with this kind of construction the only thing that we need to teach them is how to get the resources (bottles), how to negotiate terms and how to buy them.

After this stage, we have to give the tribe some insight into business as they will be taking over this business in the future. This will be outlining the stage that the business must go through in order to become profitable.

At the end of the two year training program, they will be equipped to construct the houses themselves, and be able to partially handle a project themselves, wherein they build these



houses for other customers, thus ensuring the smooth transition of the ownership of the business from MFM to the trained members. For example, a trained group may build houses for another tribe, or teach other tribes how to build houses; both of these will gain money and make the business sustainable and profitable – one through labour, the other through a physical end product. What is important for the Maasai people to know is that in the initial stages this project will be more about learning about the business, but in later stages the tribes will reap the rewards of profitability.

Exit Strategy

As the vision that MFM has for the tribe is empowering and instilling an entrepreneurial spirit in them, the company will exit its position while slowly handing over the operations of the business to the trained members.

The exit for MFM will take place in two stages. The first stage is after two years, when the training is complete, wherein the trainers and other staff included in assisting training will exit their position in the business. The second stage will involve the MFM business being passed from our hands over to the Maasai people who have been working on the housing project. This will be done over a 3 month period.

Owing to the lack of business skills that the Maasai possess, the MFM Company will continue to assist them in certain areas of business. It will act as a support and mentor to help them with any queries or issues they might have in terms of procuring new contracts or fulfilling the existing ones. MFM will remain as a communication channel so that the language barrier is not a problem when dealing with big organizations such as recycling companies or national governments or clients and customers. However the construction and the business decisions they make is entirely at their discretion and MFM will not intervene in these matters. This system of operation is designed to sustain the business and to reduce the risk of failure.



Finances

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|---|------------------|
| Cost of Plastic Bottles (500,000 bottles x \$0.17 per bottle) | \$85000 |
| First year: Cost of wages (8 workers x \$10,000 per worker) | \$80000 |
| Second year: Cost of wages (4 workers x \$10,000 per worker) | \$40000 |
| Third year: Cost of wages (4 workers x \$10,000 per worker) | \$40000 |
| Cost of transportation of goods & personnel | \$20,000 |
| Other Costs (includes building tools etc.) | \$5000 |
| Cost for Translator (includes food, accommodation etc.) | \$4000 |
| Total | \$274,000 |

Table 1: Estimated costs for the first two years and initial capital.

| Year | Set up costs (total remaining) | Revenue for Messiah for Maasai |
|-------------|--------------------------------|--------------------------------|
| 2011 (July) | \$274,000 | \$0 |
| 2012 | \$194,000 | \$80000 |
| 2013 (July) | \$64,000 | \$130000 |

Table 2: Summary of the financials for first 3 years

Messiah *Massai*

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