

THE 6<sup>TH</sup> SOLAR COOKER INTERNATIONAL

WORLD CONFERENCE

NICHOLAS NZOLA KITHEMBE

[www.tonembee.com](http://www.tonembee.com)

+ 254721971289

Kithembe111@yahoo.com

## **Introduction**

My name is Nicholas kithembe, I am a Kenyan in birth from kithuia village, kivaa location , masinga sub county, Machakos county,

Machakos County is a [county](#) of Kenya. Its capital is called [Machakos](#). And Its largest town is Machakos, the country's first administrative headquarters. The county has a population of 1,098,584.<sup>[1]</sup> The county borders [Nairobi](#) and [Kiambu](#) counties to the West, [Embu](#) to the North, [Kitui](#) to the East, [Makueni](#) to the South, [Kajiado](#) to the South West, and [Muranga](#) and [Kirinyaga](#) to the North West.

## **Demographics**

Local people are mostly of the [Akamba](#) ethnicity, although the presence of other communities is highly felt in this county mainly due to the welcoming and accommodating traits of the [Akamba](#) people<sup>[2]</sup>

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## **Climate**

The local climate is semi arid with hilly terrain with an altitude of 1000 to 2100 metres above sea level.. Tourist related activities such as camping, hiking safaris, ecotourism and cultural tourism, dance and music festivals among many more are more excitingly done due to the hilly terrain. The hospitality industry in the region is decent.<sup>[2]</sup>

## **Economy**

Subsistence agriculture is mostly practiced with maize and drought-resistant crops such as sorghum and millet being grown due to the areas semi-arid state. However, the County also plays host to the open air market concept with major market days where large amounts of produce are traded. Fruits, vegetables and other food stuffs like maize and beans are sold in these markets.

### **Kithuia village**

The village has 2500 of population and it has bouldering with 5 villages with total of 6000 population

Tonembee organization is a small organization founded at kithuia village and a registered charity in Canada. Its mandate is to educate needy and bright children and distribute solar cookers to the villagers.

### **Solar cooker in kithuia village**

Solar cookers and fireless basket was first introduced to kithuia village the year 2009 by Nikila Cole from Canada. Nikila had visited her sponsored child; she came with the idea of introducing solar cooking to the area. While in Kenya she visited Solar Cooker International at Nairobi with one villager and purchased few cookits to bring to kithuia villagers. She was trained together with one of the kithuia villagers (Nicholas). She brought the cookits with her to the village. Nikila and Nicholas demonstrated the use of cookits to the community and distributed the first bunch to the villagers. It was not that simple for the villagers to admit that such cookits can be useful. Later Nicholas appointed 5 persons to be trained and then later keep on training villagers frequently to see the importance of using sun to cook. Kithuia village is so blessed with adequate sun especially during summer time, so this cookits it can be used most of times in the year.

Since 2009 the solar cookers and fireless basket have been in use at kithuia village. Over 900 families have cookits and fireless basksets. When the community started using this kind of cooking the environment has dramatically changed for better, People from the area also changed their attitude of destroying many trees thinking that it is the only fuel they can use for cooking. Now people from the area are engaging in planting more trees. The area therefore has witnessed many advantages of using solar cookers and making it more different from the neighbours. Due to increase in population kithuia area still has families which have not yet received these cookits. Tonembee has been buying ready solar cookits and distributes to the community but now it purchases raw materials and a group from the village make the solar cookits. Tonembee Association is planning to introduce the villagers to solar cookits business so that they can promote the village economically and have more orphans and other needy and bright children been educated. The area has so many orphans and so the villagers need to find ways of supporting these venerable children.

### **Purpose**

Solar cooker project at kithuia village is to supply solar cookers to the entire village and neighboring regions. When the region is well supplied with these cookits then the Tonembee organization can engage in making solar cookers for business. This will therefore create jobs to the group making the solar cookers, hence raise economy.

When the villagers are trained on how to cook various types of food, they can also start baking and selling cakes and thus creation job. This project if made fully successful at the village it can therefore be of great beneficial to the region.

## **Methodology**

Organizing events in different instutions and gatherings to demonstrate and train people on how to use solar cookers and fireless baskets.

To plant more tree nursery beds to encourage people on how to conserve environment and see importance of use of this new technology of cooking which is safe and clean.

## **Results**

- 1 Since solar cooker was introduced to the village there is a great decline of water borne disease like cholera because water is always sanitized for drinking.
- 2 The environment is now conducive because many people from the village have learned to conserve environment instead of destroying it to get firewood/charcoal, so no more cutting of trees.
- 3 Many girls are safe because they don't go far fetching firewood.no more snake bites.
- 4 Girls can have more time to use in education because they are now relieved from duty of collecting firewood.
- 5 The community love using this cookits because it is safe to use,no risk of burning houses like before.This technology is quite friendly and no health hazards while cooking using sun.
- 6 The cost of buying fuel like charcoal is not incurred because sun is free of charge.
- 7 The food cooked is more nutritious thus making the community very health.
- 8 The area is currently receiving reasonable rainfall, making the area green

## **Challenges**

This is a new way of cooking; it is faced by some challenges. Solar cookers are very new to many people and so at first they were ignored by many.Tonembee appointed 5 villagers who could therefore monitor how they are used. These villagers therefore also organize frequent events of solar cooking to make more awareness of how they are used.

Another problem is that African people have large families and so most of them believe that this type of cookits cannot be in use at their family, so they end up ignoring to have them at their

homes. The 5 persons while keep on monitoring, training people, doing more demonstration, they also show the gathering the most importance of having this type of cookits

Other families could find it not good to cook their food outside because they have a feeling that maybe passerby can interfere with their food because it is outside and most of time unattended.

There is also fear of food will be overcooked because it is unattended, while people here cook and taste several times before it is served. This problem is still within some people so it should be well tackled to encourage many feel solar cookers to be the best.

Other people ignore this cookits because they see the area has large forest to collect firewood, which will cook faster for them compared to the new method of cooking,so the need to turn to solar cooking should be more emphasized to many also.

Raw material to make more solar cookers is not within the region, so there is a cost need for one to travel to Nairobi to purchase them, so to make more cookits it's also a challenge to villagers.

## **Conclusion**

Solar cookers and fireless baskets are quite beneficial to the kithuia villagers and now the technology is highly welcomed.

Tonembee teams goal is now to encourage the entire community to change to use of this cookits and pass the idea to the neighbors.

The motto at the village is every person to conserve the environment to make the area green and attractive

Solar cookers awareness is carried out in every gathering such as at schools to reach many people. Kithuia wants to make it well known then start solar business despite of some challenges in starting the business,

## **References**

Tonembee Association was founded at kithuia 2009 and its director at the village is Nicholas Nzola Kithembe.

Tonembee Association is a charitable association in Canada and has directors there, therefore the references are,

NIKILA COLE- Tonembee Association president, [nikila@primus.ca](mailto:nikila@primus.ca)

MELISSA WARRY SMITH director, [mwslocations@gmail.com](mailto:mwslocations@gmail.com)

*Tonembee team and Nicholas distributing solar cookers and fireless baskets to the villagers*





*Tonembee association team demonstrating how solar cooker function to gathering at the village*



A ready cooked food using solar cookers









