



Miritini Building Products & Fredelund ApS

Miritini Building Products is located in Mombasa with a traditional production of clay tiles, cutting and shaping of sandstones from local quarries and production of cement mix for construction. Miritini has had a year long commercial relationship with Fredelund ApS in Denmark supplying the Danish company with natural sandstones for flooring, bathrooms and for outdoor use. Both companies entered the SUSBIZ programme with a mutual interest of raising productivity, quality and CSR standards in order to meet global market demands. Together with SUSBIZ both companies could dedicate more resources and include all production processes in the work with improved CSR standards, quality and productivity.

Miritini sources stones from quarries in local communities, where locals cut out stones to sell it on to factories like Miritini. Miritini then re-shapes the stones into exact tile sizes.

Miritini was fully aware of the challenges in the quarries where families often work together on mining and cutting the stones. Therefore, one of the first issues to work with in the programme was new standard management procedures and policies for how to work with the local communities. Thus, avoiding the worst forms of child labour and health & safety problems. This process was highly supported by Fredelund ApS emphasising on education and ethical purchasing codes.

SUSBIZ however, worked with Miritini across their business sections (including clay tiles and cement

mix), to integrate better and safer work environments and minimise environmental impact where possible.

Company facts

Miritini Building Products Ltd

- Est. 1974
- 70 employees
- Products: Brick tiles, quarry stone tiles, cement mix

Fredelund ApS

- Est. 2004
- 3 employees
- Interior, natural stones and building products

About SUSBIZ Kenya

SUSBIZ Kenya was a multi-stakeholder Corporate Social Responsibility (CSR) programme with partners from Federation of Kenya Employers, the Danish Business Authority and Danish Federation of Small and Medium Sized Enterprises.

The SUSBIZ Kenya Programme was implemented from 2011 – 2013 and facilitated integration of sustainable business development and strategic CSR in Kenyan companies, who had Danish business relations. The aim was to build capacity and show that socially and environmentally responsible business conduct create better companies.

The approach focused on:

- Participation of managers and workers
- Shift away from check lists of compliance, to implementing change management
- Develop local capacity to deliver workable solutions to integrate CSR into its business
- Business enhancement is realised through implementing CSR management

The SUSBIZ team worked with knowledge sharing through training workshops and in-house assistance with a focus on practical solutions. The activity flow through the Programme was: CSR assessment and initial audit reports -> action plan development -> training and in-house capacity building -> progress evaluation -> documentation and external communication.

LEAN production improves quality and CSR



Through increasing the understanding between supplier and customer, as to the quality required, and implementing a coded system and checklists in the production process, the quality of output has increased and number of broken tiles reduced.

The LEAN process

The understanding between Miritini and its Danish customer, as to the challenges from products received, was significantly strengthened at the joint workshop in Denmark for the SUSBIZ participants. The close customer-supplier interaction and sharing information increased mutual understanding of market demands and production requirements. It also had a strong positive impact on quality as well as CSR standards.

Especially clarifying and documenting procedures in the factory was needed, as lack of structures increased the likelihood of mistakes.

During the training in Denmark Fredelund and Miritini developed a coded system to improve on the delivery of products. Furthermore, through SUSBIZ workshops, a more LEAN approach to production was introduced. For example, a Kaizen process with written production



Quarry stones

boards was introduced on the production floor. This has improved the flow of information.

The production process was improved with quality checks. For example, after every 10 stones cut, a calliper is used to check the sizes to ensure they are within the code limit. Standard operating procedures were replicated for other customers.

The quality of quarry stones sent to Fredelund has improved, and improved customer satisfaction resulting in more orders to Miritini.

Quality and working environment in clay mixing

The clay mixing for creating brick tiles was also improved. Staff and supervisors were given guidance in the careful mixing of clay, to obtain the best ratio of clay to red soil, at the same time improving working environment. As a result the amount of breakages reduced from 60%-70% to approximately 15%-20%.



Beginning LEAN approach

Health & safety has become a top priority



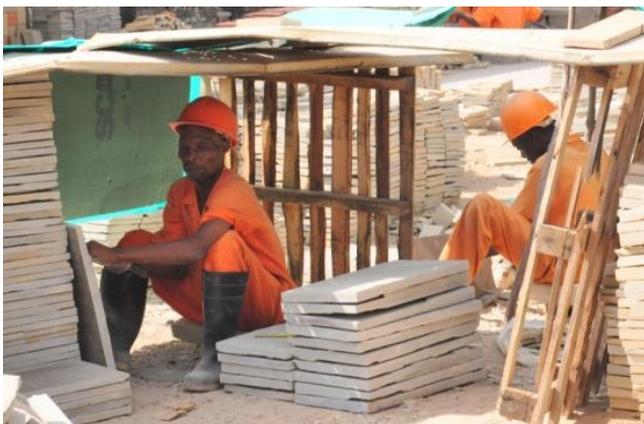
Lead by the Factory Manager, Miritini started systematic health & safety improvements creating better and safer work conditions.

To initiate this process, it was important to begin documenting procedures. This included checklists for supervisors on health and safety, to note, monitor, and control challenges and changes, and ensure continuous improvements.

Staff also received health and safety training at the SUSBIZ training workshops and at the Miritini factory. More awareness on health and safety issues and on how even small changes can improve working environment, fostered a break through in health and safety and smoothness of production.

The following actions were taken to reduce accidents and increase the wellbeing of staff:

- Workers were provided with ear muffs to help reduce the noise when stone cutting. However, these were uncomfortable, and therefore seldom worn. These were successfully replaced with earplugs.
- Workers were provided with work clothes, protective helmets, shoes, gloves and glasses.
- Staff cutting quarry stones were provided with shade, to improve the working conditions



Cutting quarry stones under shade

Anti child labour

The Miritini Factory Manager personally visits the quarries when sourcing stones from the local communities. Child labour had never been an issue at the quarries, but no structured guidelines were in place. Hence, during the SUSBIZ Programme the Factory Manager initiated education of the quarry owners about the challenge of child labour. He explained to the workers the importance of children attending school, rather than helping at the quarries. This is followed up with visits to the Chief, to explain the policies of Miritini Building Products on child labour. As a consequence, Miritini is now assured that no child labour issues occur in the quarries and able to document their anti-child labour efforts to international customers.

- The company, in collaboration with SUSBIZ, provided awareness to the quarry stone cutter suppliers in the villages, about safety issues and child labour.
- The workers mixing cement were exposed to dangerous dust and needed protection with correct dust masks.



Creating cement mix

Across all business sections accidents were reduced from 9 in 2011 to only 3 accidents in 2013.

Saving energy and improving health & safety



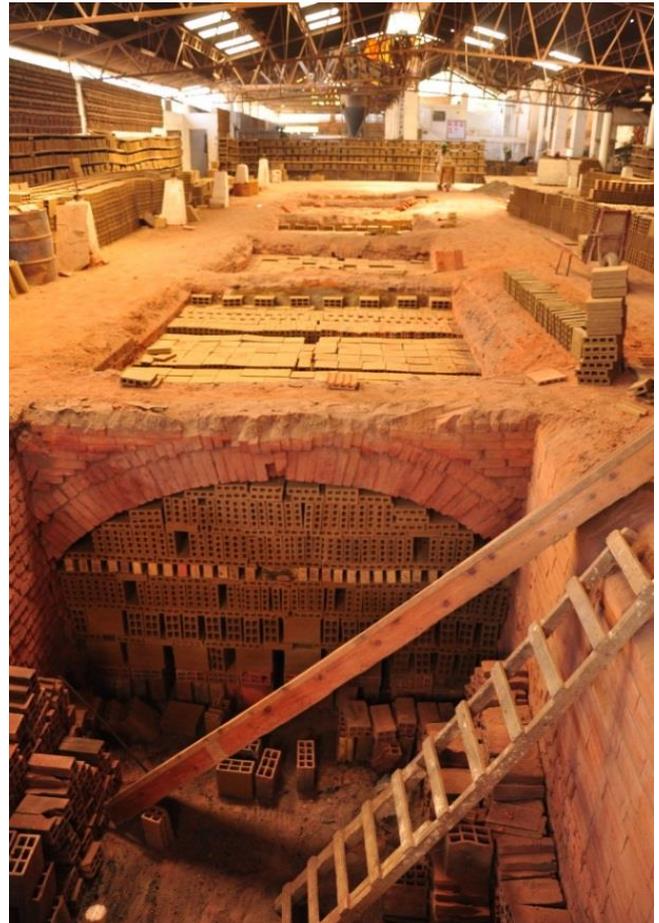
Reducing energy consumption

In the production of brick tiles, Miritini use an old tunnel kiln for burning the clay bricks. The combustion channels are divided into sections to manage the temperature of the continuous fire.

The fire is fuelled by waste from the local municipality, burning approximately 4 tons of waste per day to fire the kilns. This creates a number of challenges in relation to safety, but it also makes it difficult to control the temperature, and much heat is wasted.

SUSBIZ worked with the Factory Manager to develop a solution. Cone shaped funnels were introduced to feed the fire, and metal lids were placed on top of the holes. Experiments revealed that the metal quickly eroded. Clay lids are therefore in the process of being manufactured for this purpose.

The funnels enabled the workers to more easily control the opening and closing of the kilns and manage the heat. Less energy is wasted, and less smoke and ashes is released into the work space.



Production hall and tunnel kiln for burning bricks



Putting iron lids on top of the open fire

“Being part of SUSBIZ has had a change in our attitudes. The workers no longer feel they have a boss who they are scared of talking to, where they go to work and think they might get fired or maybe there will be an accident or something. Now even the junior staff and casual workers have the freedom to come to me and say what he thinks needs to be done, and I accommodate this, and I appreciate this anytime”.

Sultan Bakari
Factory Manager

Key learnings and continuous improvements



Miritini and Fredelund have worked closely together during the 2½ year programme facing a number of challenges together. In this case a very committed factory manager has been fighting with low company earning and lack of financial strength to invest in new technology and improved health, safety & environment.

One key learning is that new production and CSR standards are difficult to implement when top management is decentralised from the production process. But with few resources the company have managed to make great changes for employees, productivity, quality and savings.

It took just more than a year to get really started in Miritini – actually implementing new knowledge from training and factory visits. Today Miritini is planning to allocate specific safety duties to one person in each department and develop a list of procedures to be used as a baseline for CSR audits.

The health and safety committee will develop an activity plan on how to improve protective equipment.

The production manager will develop a list of “no-go wastes” (waste that is burned in the kilns as an energy source) that could potentially produce harmful fumes upon combustion. The company will now organise an annual workshop to discuss HIV/AIDS, malaria, cancer and other deceases for the workers and their families.

*Workers they understand “we are part of this”.
Then you get everything done perfectly well.*

We are all human beings, we are all doing the same job, and we need each other, without this there is no organisation. It is important that we stay together, and understand each other, then as an organisation we will win.

And we are winning right now”.

Sultan Bakari

Factory Manager