Starting Asset Based Community Development (ABCD) and Permaculture at WB Tshume and Emzomncane Primary Schools, KwaZakhele, Nelson Mandela Bay
Permaculture Schools Project Summary Since May 2012

The project, where Calabash Trust planned to facilitate an asset based community development process while implementing a permaculture designed system, was presented and accepted by all parties at initial stakeholder meetings at WB Tshume and Emzomncane Primary Schools, KwaZakhele.

A list of community members suggested by the school were contacted and informed of the process and invited to workshops. In addition, personal visits to the surrounding community were made to inform them of the process and invite to workshops. Below are some community members met along the way.

ABCĐ workshops were held with the aim to:

- Facilitate a paradigm shift (shifting poverty mindsets).
- Form a core group to drive the process.
- Compile asset inventories and an asset map of KwaZakhele, with a resource list linking to the permaculture design.
- Discuss ideas for action planning around starting/improving initiatives in and around the school.

Asset Based Community Development (ABCĐ) is an inclusive approach to community-led development that appreciates and mobilizes individual and community talents, skills and assets (rather than focusing on problems and needs). John L. McKnight and John P. Kretzmann (1993) came up with the term, Asset Based Community Development, after researching successful communities and identifying common success factors. Since then tools have been developed and refined internationally, and specifically adapted to the South African context.

As suggested by the name, this approach to developing communities places emphasis on the assets that already exist within communities rather than on needs. It therefore aims to shift poverty mindsets by encouraging people to start with what they have and build with what they know. As part of the process, ABCĐ focuses on mapping and creating inventories of five types of assets – 1) human, 2) social, 3) natural, 4) material/physical and 5) financial.
Below, parents and other community members are involved in discussions, mapping and planning.

Below is a map depicting community assets.
Permaculture systems were designed throughout the research and design phase:

Design of WB Tshume Primary School

Design of Emzomncane Primary School
Permaculture is the conscious design and maintenance of agriculturally productive ecosystems which have the diversity, stability, and resilience of natural ecosystems. It is the harmonious integration of landscape and people, providing their food, while potentially providing energy, shelter, and other material and non-material needs in a sustainable way. Its main principles are taking care of the earth, and taking care of the people. Permaculture as a systematic method was developed by Bill Mollison and David Holmgren during the 1970s. The word "permaculture" originally referred to "permanent agriculture", but was expanded to also stand for "permanent culture" as it was seen that social aspects were integral to a truly sustainable system.

A sustainable way of food gardening, it provides all the elements necessary for the garden to sustain itself in the long-term. The design of the food garden is holistic: the designer will look at the entire school area, considering all internal and external natural and social influences that could impact on the area. In demarcating different zones of the garden the natural cycles of seasons and time of day are considered as well as the physical aspects of the terrain including built structures: these influence planting decisions. For example a slope or trees may be used as sun and wind protection, water may be harvested from the roof and ground, and compost made from fallen leaves. Above all the permaculture system enables a conducive learning environment while restoring and conserving the eco-system.

The first Permaculture workshop was held after the ABCD workshop. A theoretical introduction to permaculture was presented to lay the foundational understanding required for subsequent practical implementation of the design, and covered the following:

- The importance of seasons, weather patterns, conservation and sustainability.
- Definition of permaculture.
- Visible and invisible aspects that affect the design of a system.
- Multifunctional elements.
- Elements in a system.
- Zoning—placing elements in a system.
- Ecosystems.
- Climate disruption.
- Permaculture ethics.
- Movies- Dirt the Movie and Urban Permaculture.

The Environmental Education Officer (pictured below, right) at the Nelson Mandela Bay Municipality (NMBM) spent a day sharing her expertise and experiences with the group.
Permaculture workshops were then held weekly by Calabash Trust’s consultant (pictured below, left), paralleled with implementation by the core group, who voluntarily worked at the school every week for over 3 months (over 4 800 hours volunteered) to implement the permaculture design.

Zone 1: Smaller production area closest to school kitchen for plants that require regular attention and produce frequent harvests.

Zone 2 and 3: Larger production area requiring less frequent attention and producing harvests that take longer to mature.
Wickersley School and Sports College visited Emzomncane (below) to help with the expansion of zone 2 and 3.

Swales (trenches on contour pictured below, left) captures ground water run-off. The top of all the swale mounds are planted with pioneer herbs and windbreaks. Trees are planted next to the swale mounds to catch the underground water captured by the swales.
Gutters, rainrunners (acting as a filter) and tank connections captures rainwater, which, if filled to capacity, overflows into the top swale, which again overflows into the subsequent bottom swales.

Nursery: Propagation and growing of seeds

Compost making: Demonstrating an 18-day method for making compost below.
**Replication of project:** Approximately 20 home gardens that we are aware of were developed by community members after attending permaculture workshops.

**Business training** received by Calabash Trust’s consultant (below), who is fluent in isiXhosa:

**At Emzomncane and WB Tshume combined:**
- The core group formed after the ABCD workshops named themselves Milani Group (meaning ‘to hold one another’).
- Based on the current sizes of the gardens (which will expand as the core group and school capacity grows), the average monthly income generated from the harvests alone (excluding seedlings, compost and medicinal plants) are approximately R1000.00.
- Making and selling products from waste (plastic carpets and hats) to visitors and community members earned them R2000.00 in 2 months up until the writing of this report.
• They made 20 netball bibs and 40 soccer bibs for another African Bank project, and besides making a bit of money, also increased their sewing skills tremendously.
• Milani Group is slowly establishing itself as an association and income generating entity, having the permaculture food gardening system as their main potential income, sewing as an extra, as well as making products from plastic.
• An average of 800 children are fed vegetables and salad from the gardens, supplementing the current feeding.
• Roof water harvesting infrastructure capable of harvesting approximately 800 000L of rain water per annum, based on a rainfall of 450mm/annum, and earthworks infrastructure catching additional run-off water of approximately 2 304 000L are in place.
• A biodiverse eco-system of approximately, consisting of approximately 200 indigenous windbreak/pioneer/nitrogen fixer trees and some fruit trees, as well as over 400 pioneer and herb plants are growing.
• The total number of people who attended ABCD and Permaculture workshops (including those who did not form part of the core group and the subsequent Milani Group) is 87
• The number of people who volunteered to implement the permaculture system (learning and implementation) varied between 20 and 25.
• The number of people part of the final Milani Group who will maintain the permaculture system varies between 10 and 15.
• A MOU was compiled and signed between Milani Group and the schools, stating the roles, rules and regulations of both parties.

Summary of lessons learnt:

**To maintain participation we learnt:**
- Long term commitment by all stakeholders is vital.
- Being clear about how you want people to participate helps ensure their participation.
- Ensure everybody agrees that the project will add value, and understand the value added.
- Be aware of how you mediate throughout the process.

**During the workshop process we learnt:**
- Relate to practical examples; try not to be too abstract.
- Don’t introduce too many concepts too soon or at once.
- Agree on how you define ‘ownership’.
- Manage expectations carefully.

**Generally we learnt:**
- Be aware of internal issues in order to manage conflict swiftly.
- Encourage regular and open communication between all stakeholders.