

# The EcoFuture Food Dome Concept

Introducing a new project to the GCI

## **The Project Concept**

At the UCT REACT Social Responsiveness Conference 2015, a presentation by the Boston Consulting Group (BCG) was given on a Systems Approach to campaigns and projects. Various brainstorming sessions took place thereafter, guided by a BCG framework. One of the groups focused on environment and sustainability, and this included GCI representatives, Hugh and Kirtanya. A brilliant idea emerged in the context of social responsiveness, as we assessed who communities are, what they need, what we can provide, and how environmental issues can be prioritised on the agenda of social responsiveness. An important concept was raised and that is the issue of “Why should impoverished communities care about the environment, when they are more worried about when they will get their next plate of nutritious food?” We decided to merge the two concerns to find a solution that will address both issues of food security, as well as environmental sustainability. The idea that was agreed upon was a Food Garden. This is an unoccupied niche in UCT community engagement and besides providing a structural facility of a food garden, awareness and a strong culture of environmental care can be cultivated with this project. The communities involved will be the UCT student and research community, as well as rural communities comprising of kids and elders that we aim to educate and serve.

## **The Project Design**

We are fortunate to have been supplied with the EcoFuture Food Dome design by the Director of the company, EcoFuture Technologies. The food garden is designed as a greenhouse with a clear plastic dome and a multi-level pyramid-like structure, the size of which can be adapted. This closed structure saves land space, whilst allowing an irrigation system using a water basin on the ground connected to simple gutters in the domed roof to enable evaporation and condensation, where any extra water is collected as potable water. The structure also minimises the chance of plant diseases as it is a multilevel structure that can be separated in the case of a disease threat. A composting layer is also included, where food waste can be disposed of to decompose and be used to enrich the soil in the various layers. Quite simply, this design puts into practice the concepts of recycling, reusing and reducing food waste and water usage. The output of the system is of course the variety of vegetables that can feed a family.

## **Project Requirements & Stakeholders**

Kirtanya has networks with the EcoFuture Technologies and is currently involved in a pilot project in Cape Town along with EcoFuture Tech, Green Matter Fellowship (Associated with

SANBI) and the Green Shift Africa NPO whose roots lie with the founders here at UCT (Steve, a PhD student in EGS & Kirtanya an MSc student in Biological Science). The current pilot project (independent of GCI) will source materials, expertise and volunteers from these stakeholders. This provides the perfect platform to initially test the idea and then later roll it out on a larger scale to more communities, with help from GCI volunteers and GCI's outreach committee in the near future. We would like this to be an interdisciplinary project that is sustained for years to come. Should GCI adopt this project, Green Shift Africa and EcoFuture Tech would be happy to lend their support to the initiative. GCI would need to think about setting aside a budget for outreach, as well as sourcing sponsorships, supplying student volunteers and identifying communities in need.

### **In light of social responsiveness- a core value of a successful student**

The idea is that this engagement between the two communities (UCT & rural), will form a collective leadership. Secondly, before building the food gardens community engagement is necessary in terms of identifying cultural and political landscapes, so that we can drive the change that is needed and provide education as required by the community, rather than enforce what we feel is needed. Thirdly, the values that will emerge from this is an interconnected system where respect and sustainable living will lead to empowerment and independence of the communities we work with.

*The unique collaboration between impoverished communities, GCI volunteers, NPOs and Businesses should be envisioned as a powerful synergy that is bound to achieve success and happiness for many- In the name of sustainability.*