



## ECO ETHICS KENYA

### Munje Greenhouse

**Location:** Munje village, Kwale District

**Timeline:** Began June 2009; ongoing

**Funding:** Eco-Ethics micro-loan, private funding

**Objectives:** Provide the community with an alternative income source; increase access to cheaper and more abundant vegetables; help to bridge the gender gap.

#### **About the project:**

Munje is a fishing village on the coast, south of Ukunda and southeast of Msambweni. Its men primarily fish for most of the year. During the off season around June-September, they turn to farming to make a living, following slash-and-burn techniques on individual plots. The villagers call this style of farming tiresome and lonely.

The Munje community and its fishing lifestyle are not on a sustainable path. The size and number of catches have dramatically decreased, as the older men attest. In past times, fish under 0.5 kg were never found in the market. Now, you can even find fingerlings (thin, finger-length fish). Meanwhile, the number of fishermen continues to increase. Most children do not want to stay in the community and fish, but unless a boy does very well in school, he will be a fisherman. In terms of alternative lifestyles some villagers farm, rear animals or have businesses. These are not permanent occupations.

In early 2009 Will Ruddick, who was then a US Peace Corps Volunteer, invited Eco-Ethics to a greenhouse building and design workshop in Ribe, Kaloleni District. Following which, Eco-Ethics began a project led by a young intern, Dan Abrahams, to construct a timber-frame greenhouse in the village for growing tomatoes. Training would be provided in greenhouse husbandry and small-business skills. The aim was to supplement people's income from fishing and build capacity for developing long-term alternative livelihoods. The greenhouse would also provide a source of vegetables in an area where the changing climate is jeopardising the reliability of traditional rain-fed agriculture.

On the weekend of 24-25 July, volunteers and community members came together to construct a 24 x 6 metre greenhouse, with a strong plastic roof and fine netting for walls. The community dealt with early teething trouble - the seedlings wilting from excess fertiliser - and went on to record a strong crop of tomatoes for sale at hotels and local stalls.

From the beginning, the project was deliberately run as a joint enterprise between Bidii Women's Group and the men-only Munje Fisherfolk Group. Munje is a Muslim Swahili village where women and men were traditionally not allowed to be seen together unless they were married. This system excluded women from financial decisions and presented a barrier to community-run businesses. The tomato project has encouraged men and women to collaborate in tending the plants and establishing a market. Members of the women's group told us that the greenhouse has been a uniting factor, allowing them to work together with men in a way that would not have been possible before.

Despite these positive steps, there has been a major challenge: water. Munje's sandy soil is exceedingly thirsty, and the amount of work required to water the tomatoes was underestimated by Eco-Ethics and by the community. The plants need watering twice a day, requiring 24 trips with a 20-litre bucket of water every morning and the same again every evening. Most of the work of drawing the water is done by women, who complained of neck problems from carrying the heavy water buckets and of time being taken away from other tasks. The problem was threatening the length of the tomato crops, which is crucial for establishing a stable business.

Following an evaluation in July 2010, Eco-Ethics began work on making technical changes to the greenhouse to relieve the pressure on the water supply. Drip irrigation was installed, a more efficient method of watering greenhouse plants, while guttering now collects rainwater at source. As the process of learning by doing continues, the project members are gaining valuable experience in greenhouse horticulture and marketing.