

## Securing Water Supply

### 1. Boys' Centre

The Boys' Centre is in the midst of a Nairobi slum; its infrastructure is under strain from 50 years of wear and tear, rising costs and increased local demand from a rapidly expanding city.

Nairobi water supply is erratic and is not adequate to serve the growing city's population. **With a school community of nearly 1,300 at Starehe Boys' Centre to support (1,000 boys, 100, teaching staff, non-teaching staff and their families), rationing is a frequent occurrence and often disrupts the schools' operations.**

The Centre wishes to secure its water supply by harvesting and storing rain water and replacing two old pumps which take the water from two on-site bore holes (these are old and need frequent and expensive repairs).

| Securing Water Supply   | Item Breakdown | Qty | Unit Cost KShs   | Total Cost KShs  | Total Cost £  |
|-------------------------|----------------|-----|------------------|------------------|---------------|
| Replace old water pumps |                | 2   | 1,234,960        | <b>2,469,920</b> | <b>21,394</b> |
|                         |                |     |                  |                  |               |
| Harvesting Rainwater    |                |     |                  | <b>2,268,266</b> | <b>19,647</b> |
|                         |                |     |                  |                  |               |
| <b>Sub-total</b>        |                |     | <b>1,755,959</b> | <b>4,738,186</b> | <b>41,041</b> |
| Contingency at 5%       |                |     | -                | 236,909          | 2,052         |
|                         |                |     |                  |                  |               |
| <b>Grand Total</b>      |                |     | <b>1,755,959</b> | <b>4,975,095</b> | <b>43,093</b> |

**Note:** Prices based on exchange rate as of January 14th 2009 (£1 = KShs 115.45)

## 2. Girls' Centre

The Girls' Centre is in a relatively isolated rural location on a site spread across a hill with a lake. The site was a gift to Starehe but its physical geography presents considerable challenges. Much work is needed to build up the infrastructure to an acceptable level to accommodate up to 400 girls.

Starehe Girls' Centres must invest in infrastructure to build their self-sufficiency and secure their future water and power supplies. Failure to invest will impact on Starehe's capacity to offer a life-changing opportunity to poor and gifted Kenyan girls.

Water presents a major challenge for Starehe Girls' Centre. The elevated site of the girls' centre means that water pressure from pipes is virtually non-existent. **Water has to be brought by tanker, which is expensive, insufficient and unsustainable.** In addition, a neighbour is gradually draining the lake on the Centre's site to irrigate his land. Legal advice is being sought but, in the interim, Starehe Girls' Centre cannot irrigate their on-site vegetable plots, an important source of food.

| <b>Securing Water Supply</b>                 | <b>Cost KShs</b>  | <b>Cost £</b>   |
|--|-------------------|-----------------|
| Drill bore hole                              | 2,500,000         | 21,654          |
| Installation cost                            | 500,000           | 4,331           |
| High level water storage                     | 3,000,000         | 25,985          |
| Effluence disposal and treatment works       | 2,250,000         | 19,489          |
| Site water reticulation (piping around site) | 1,500,000         | 12,993          |
| <b>Sub-total</b>                             | <b>9,750,000</b>  | <b>84,450</b>   |
| <i>Contingency at 5%</i>                     | <i>487,500</i>    | <i>4,222.50</i> |
| <b>Grand Total</b>                           | <b>10,237,500</b> | <b>88,675</b>   |

**Note:** Prices based on exchange rate as of January 14th 2009 (£1 = KShs 115.45)