

safi

means clean, fresh & pure in Swahili

Wash & Grow

by Lee Winfield

Curb the spread of diseases by improving hygiene in Kenyan schools through a hand washing system

Non-wasteful

Water is being recycled to grow more 'Soapy Plants' for hand washing

Accurate

Children will use a set amount of 80ml of water over 20 seconds that will ensure the effectivity of hand washing

Collaborative

Installed in conjunction with the setup of a nearby well.

Using low technology

Gravity and simple spring mechanisms are used to move water

Educational

Students are responsible to collect water and maintain the garden.

Adaptable

The school can add as many washing points as they like, depending on its size.

Self-reliant

'Soapy plants' is a name applied to various plants that contain Saponins in their roots, bulbs, leaves, stems, bark, or fruit. Saponins are water soluble and form a rich, soapy lather when shaken with water.

Realistic

Safi will use standardised joinery pieces to reduce costs



Student rep fills the water container with well water and inserts soapy plants



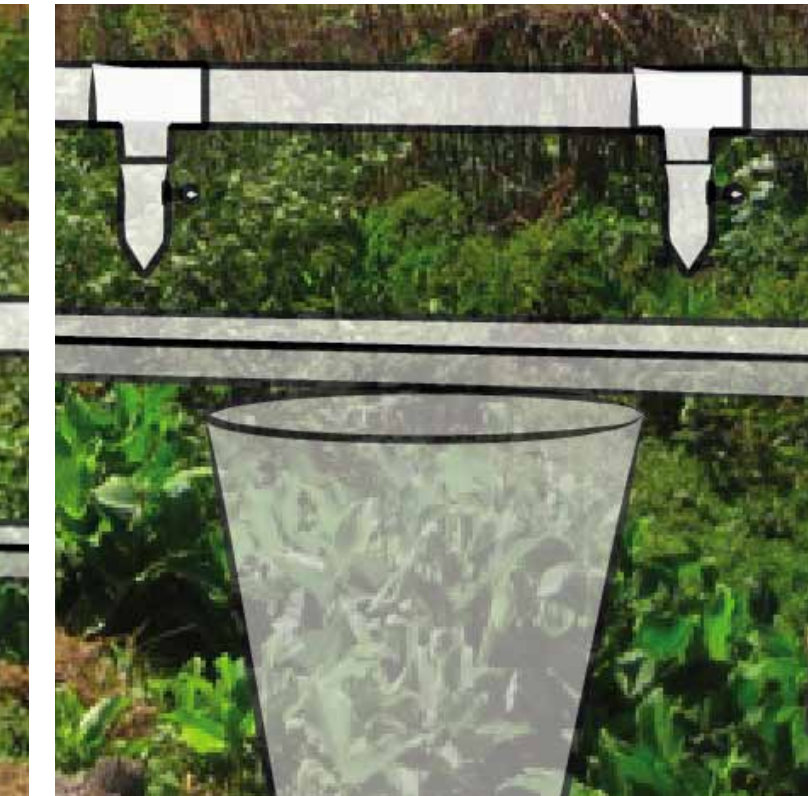
Students line up behind each **Floco** outlet



In turn, a student pulls the handle, filling **Floco** with water



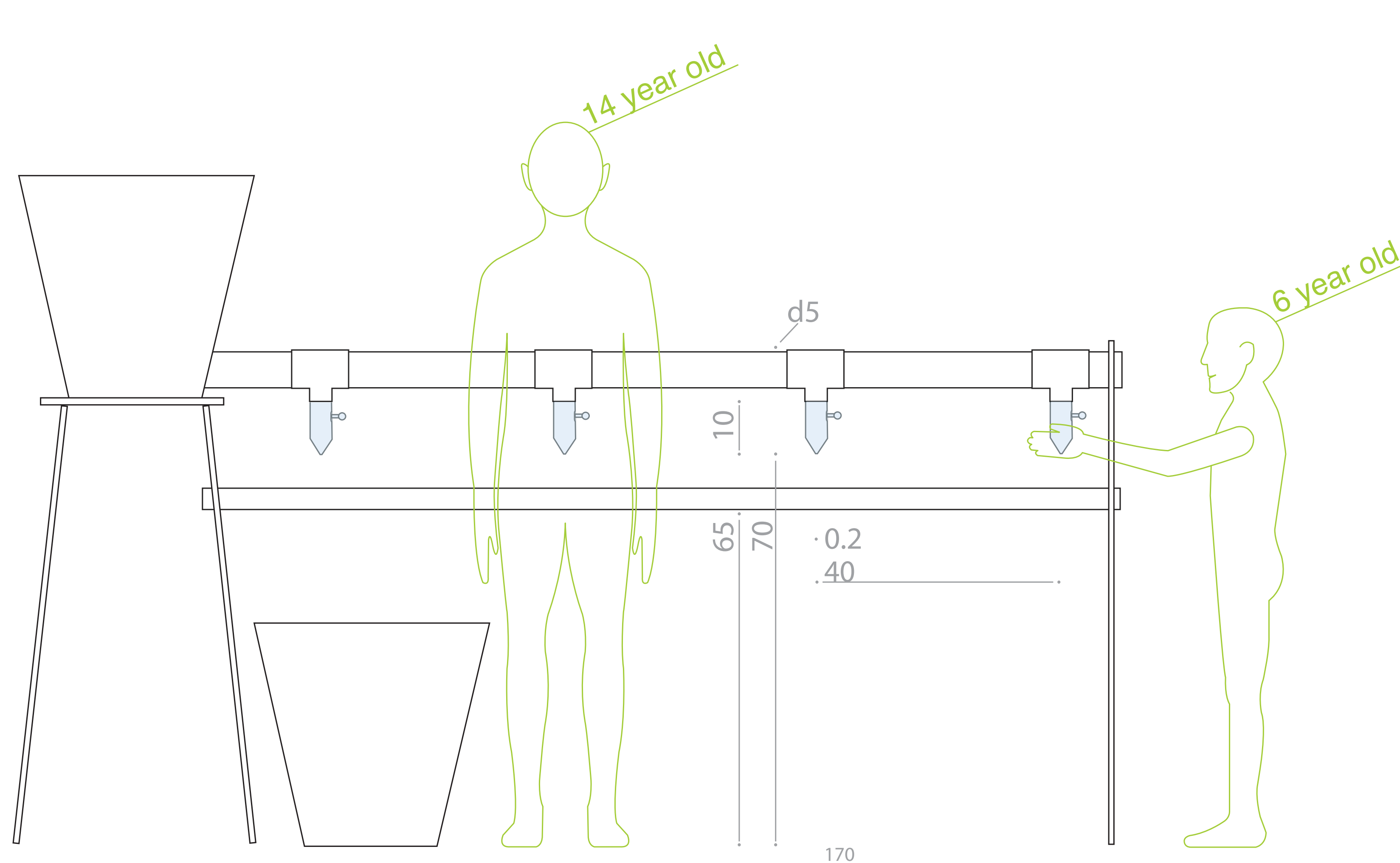
The student washes her hands until flow stops



All used water is being collected into a container



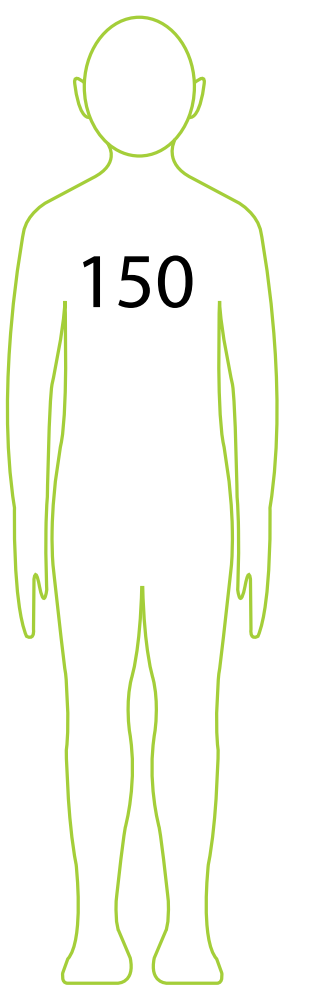
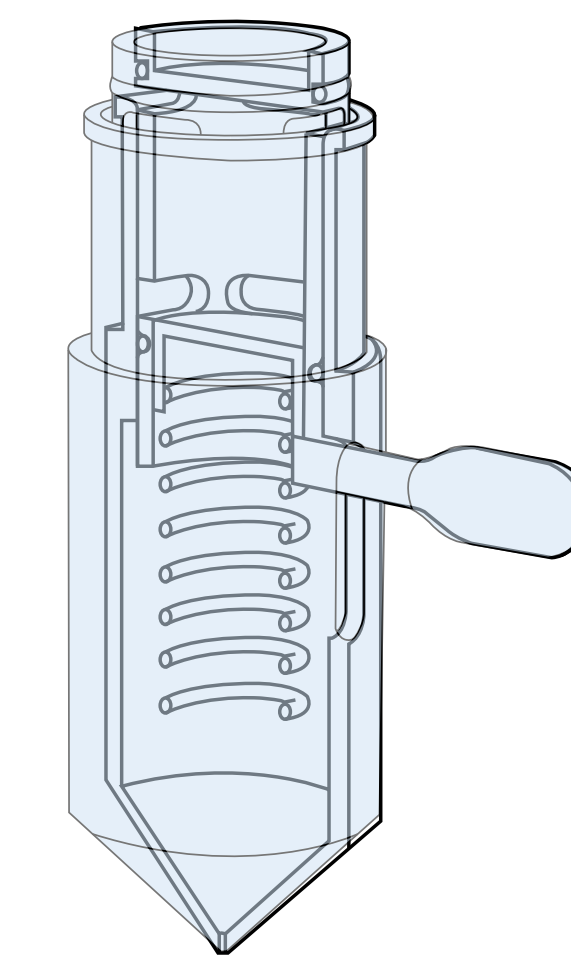
Water is then being distributed to water the garden of soapy plants



Drawing not to scale
All measurements in cm

Safi Floco

Safi's unique flow control mechanism that releases a set amount of water at a predetermined rate by the pull of a handle



150

80ml
20secs

12 mins