

CULTURAL IMPORTANCE



The use of clay-sealed bottle gourd containers to store seeds for planting has proved to be an effective local practice for cheap and safe chemical-free storage of seeds. Occasionally, ash is mixed to enhance storage.



Wide mouthed bottle gourds are used for brewing traditional beer which is taken during leisure time and also when taking dowry to in-laws.



The use of the bottle gourd as a container straddles across many African cultures. It is used as a container for milk, local beer, food, water, cloth, medicine, tobacco, animal fat, honey, poison, blood, salt, charcoal, perfume, chicks etc.



It is a common practice for traditional doctors to use bottle gourds to store their spells and to communicate with the spirits.



Bottle gourds are used as musical instruments. Many communities in Africa make xylophones, fiddles, rattles, percussions, lyres, drums, pipes, wind instruments, maraca, hand piano, bugle etc.



Bottle gourds are used as handicrafts and decorations, toys, necklace, earrings and other items. The Akamba of Kenya use small spherical types of gourds to make the wheels of toy cars for children.



The half bottle gourd is used as bowls for food, grain and fluids and also winnowing grain. It is also used for scooping water from sand beds and a measure for grains, medicines, food, sugar, salt, porridge etc. for selling or barter trade.



Young tender fruits of the edible types are eaten as fruit - vegetable in some communities. These vegetable types are harvested when still young and soft.



The fruits are usually cut open into 2 to 6 pieces depending on fruit size then boiled for 10 to 15 minutes until soft. They are eaten with little salt or may be mashed and fried or used as stew.



Young shoots, new leaves and flower buds of edible types are occasionally eaten as a green vegetable in some communities.



Seeds of edible types of gourds are eaten and are rich in protein and oil. They are frequently roasted and consumed as snack or pounded and mixed with maize or millet flour. In West Africa, such seeds are known as Egusi.



The bottle gourds, like pumpkins demonstrates a very good ability to suppress weed. In the traditional farming communities, seeds are mixed and planted with many different types of crops.

DIVERSITY



The "bottle gourd" is a utilitarian domesticated cucurbit and used as a container, it straddles across many African cultures. Believe it or not, the bottle gourd is a traditional item of all people in the world. A myriad of shapes are maintained by the various cultures of the world - long elongated, club, spherical, cylindrical, necked, etc. All these belong to one species known in botanical terms as *Lagenaria siceraria*! The vast variation in morphology is considered to be as a result of human intervention over countless years of symbiotic relationship between this remarkable plant and people.



KAWG is based near Kitui town, some 160km east of Nairobi, Kenya. The group made up of 26 members, including 3 men, was formed in 1989 as a self-help community based group.

CONSTRAINTS



The use and value of the bottle gourd have lately been undermined by plastic and other related manufactured containers. This has caused extinction of local varieties of *Kitete* therefore threatening local knowledge as well.



Loss of *Kitete* will encourage use of plastic, tin and glass containers, which litter the environment as they are not biodegradable.



The transfer of IK to the young generation is much less than before. Any efforts to conserve the local varieties would therefore need to go hand in hand with transfer of knowledge from the old to the young.

WHY IS IT IMPORTANT TO MAINTAIN BIOLOGICAL DIVERSITY?

Emerging opportunities over the last few years for "minor" crops, particularly those Underutilized or Neglected Species (NUS), signal a new attention of the public opinion on biodiversity and its sustainable use along with an increasing interest of the public and private sector towards "new" crops, "new" uses and "new" markets.

There exists great association between diversity and indigenous knowledge of the crops as seen in traditional agricultural systems and cultural systems. It is this association, which has enabled the cultivated species to evolve and be maintained from generation to generation. Recent changes in culture and marketing of plastic containers have caused an erosion of knowledge threatening the loss of bottle gourd diversity.

This inherited diversity and associated indigenous knowledge of use need to be maintained within local communities especially among the young generation, for enhanced conservation of the traditional values and multiple uses.

"KITETE" (BOTTLE GOURD) PROJECT

The bottle gourd in Kitui District, Kenya is known locally as "*Kitete*". Kitui District of Kenya, which is inhabited by the Kamba people, is a region that combines ideal growing conditions for *Kitete* with rich cultural knowledge of the varied uses and types. Since May 2001, Kyanika Adult Women Group (KAWG) has embarked on an ambitious two-year project aimed at "conserving the diversity of bottle gourd and its associated Indigenous Knowledge (IK) through awareness creation, increased cultivation, documentation and dissemination of IK".

This project's emphasis is that IK needs to be maintained in the community especially among the young generation and benefit through selling and household use. National Museums of Kenya (NMK) and International Plant Genetic Resource Institute (IPGRI) have been collaborating with KAWG in this project.

PROJECT ACTIVITIES, METHODOLOGY AND PRODUCT



The Project started by identifying persons to carry out documentation.



A planning seminar was organized to prepare a work plan, identify target communities and allocate duties.



Training the group to use documentation tools such as cameras and tape recorders.



Identifying resource people to train group members various skills.



Collecting fruits and seeds of all known varieties of *Kitete* from relatives, friends and other groups in Kitui and neighbouring districts.



While visiting neighbouring districts, members also exchanged seeds and knowledge.



Documenting indigenous knowledge from skilled people.



Two methods of recording IK were used i.e. notebooks and cassette tapes. Many local people cannot express their IK in writing hence the importance of cassette tapes.



The knowledge was also captured in form of photographs. Writing was first done in Kamba then translated.



The group members assembled and organized all different types of seeds and fruits, brought by members from different areas.



The collected material as well as tapes and photographs were labeled, catalogued and stored in an exhibition centre.



KAWG organized seminars with other groups in different communities and shared their *Kitete* collections, knowledge and experience.



The groups shared information such as planting, cultivation, management of *Kitete* and tools used to prepare *Kitete* for domestic use.



Practical demonstration of stitching a broken container.



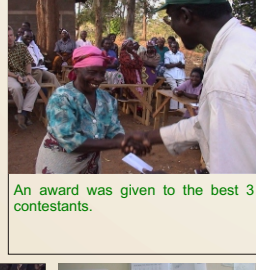
KAWG organized seed/fruit fairs with neighbouring communities and exchanged seeds and knowledge.



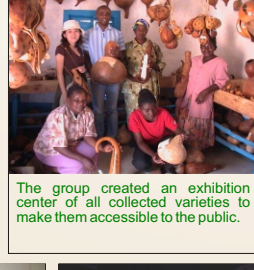
KAWG organized IK competitions and award-giving ceremonies. Farmers with most rare varieties, highest diversity, and best workmanship were awarded.



Competition such as this one of tying up *Kitete* with a sisal rope to draw water was a way of identifying experts and also sharing traditional techniques.



An award was given to the best 3 contestants.



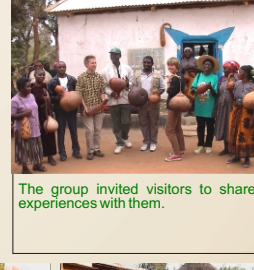
The group created an exhibition center of all collected varieties to make them accessible to the public.



The center will not only be a cultural exhibit but also seeds distribution center for the community and an eco-tourism site.



Members made follow-up visits to the farmers they had trained and shared more experiences and seeds.



The group invited visitors to share experiences with them.



Group members presented their project in several national and international workshops.



The group is developing training material for use by school children.



Elders told folklores, sang songs, and narrated poems related to specific *Kitete* varieties.



Project partners helped the group to transcribe, translate, edit, print and assemble all collected information such as tapes and photos. All information was put in digital media such as CD.



The group is getting more support from other partners who are introducing new methods of decorating *Kitete* for commercial use.



Marketing *Kitete* products for cash. This is seen as an incentive to maintain and keep the crop and its diversity.



Visitors buying *Kitete* items from KAWG members.



Incorporating *Kitete* activities in cultural events such as community festivals will help maintain the crop diversity and knowledge.

Project contacts:
Yasuyuki Morimoto and Patrick Maundu
International Plant Genetic Resources Institute
Sub-Saharan Africa Group
P.O. Box 30677,
Nairobi, Kenya
Tel: (254-2) 524500/524509
Fax: (254-2) 524501/524001
Http://www.ipgri.cgiar.org