

Agricultural Story Script

Slide 1: Rural Extension with Africa's Poor

A Christian approach to development through teaching

Script:

Slide 2: REAP's Agricultural Story

Script: Agriculture is one of the ways that REAP improves the lives of the rural poor in Africa.

Slide 3: REAP is a Christian charity set up to improve the lives of Africa's poor through teaching

Script: REAP seeks to improve the lives of Africa's rural poor through teaching.

REAP's approach is biblically based; it is concerned for the wellbeing and dignity of the individual as well as the whole of creation, and believes that good stewardship of God-given resources will enable the poor to improve their standard of living.

REAP instructs the poor directly; seeking to overcome a culture of dependency and the call for large external resources, and to reverse the effects of materialism and environmental neglect.

Slide 4: REAP's teaching

- ▶ Research of helpful ideas
- ▶ Development of teaching with aids
- ▶ Trained team demonstrates teaching
- ▶ Follow up

Script:

- 1) REAP researches the practicalities of helpful ideas.
- 2) It then develops teaching appropriate to the specific locality and people group.
- 3) REAP's trained team draws alongside the poor to demonstrate how the ideas work.
- 4) Finally REAP will follow up how it's teaching is being absorbed into the local cultural practices.

Slide 5: Soil conservation

Script: Soil conservation has become vital for the future of Africa and is one of the most pressing agricultural issues at the moment.

Slide 6: Soil erosion (picture of erosion)

Script: Soil erosion is a huge problem facing farming by the African poor.

Stemming from this is the need for incorporating trees into the agricultural system, reclamation of the land already lost and making the most efficient use of the land that can still be farmed effectively.

Slide 7: (picture of soil erosion)

Script: Every rainy season the loss of soil is exacerbated.

Slide 8: (picture of muddy river)

Script: Rivers that only a few years ago were clear are now filled with silt.

Slide 9: (picture of water sweeping downhill)

Script: Heavy rains rush through the cultivated plots of land and sweep away the soil, often along with the fledgling plants that the farmer is trying to grow.

Slide 10: 'A' Frame teaching (picture of an 'A' frame)

Script: Terracing helps combat the problem.

Dr Roger Sharland, director of REAP, first learnt about the 'A' frame from World Neighbors. Used to plot the contours of a hill it will enable effective terracing of the land and is a low cost accessible solution to the common agricultural problem of soil erosion.

It is as accurate as a spirit-level and yet is constructed from materials that are freely available – three sticks, some string and a stone.

It is simple to construct and calibrate.

Slide 11: (picture of old terracing)

Script: Unfortunately some terracing is labour intensive and difficult to maintain.

Where terraces have been built they are not always well maintained and often fail to stand up to the onslaught of the rains.

It is difficult to replace the soil once it is lost.

Slide 12: Vetiver Grass teaching (picture of Vetiver grass hedge)

Script: Vetiver grass has roots that extend downwards so when used as a hedge Vetiver will have the twin advantages of stopping the soil being washed away and helping to retain moisture.

Dr Roger Sharland, founder of REAP, learnt about Vetiver from Roland Lubett who was working with Tearfund in Tanzania and had included it in his newsletters.

When Roger was doing work for Tearfund in Ethiopia he found that they had it in a government nursery and began using it himself.

Slide 13: (picture of Vetiver grass)

Script: On his return to Kenya he showed Vetiver to Sam, one of REAP's fieldworkers, who found some growing locally.

REAP developed its teaching from there.

Slide 14: (picture of Vetiver holding back water)

Script: When Vetiver grass is established it will hold back the soil, resulting in its build up behind the hedge rather than being washed down the hillside.

Slide 15: (picture of Vetiver hedge in rain)

Script: By restricting the run off the retained water has the opportunity to penetrate much deeper into the ground and allows the soil to hold.

Slide 16: (picture of woman by Vetiver hedge)

Script: By using Vetiver as a terracing medium many inches of soil can be retained, which would otherwise have been lost.

Soil brought down the hillside from higher up is stopped from going any further and adds to the fertile ground.

These advantages are significant and REAP's teaching is becoming highly valued as farmers realize how much Vetiver can improve their plots.

Slide 17: Five F Hedges

Script: REAP teaches that hedges can be multipurpose.

The advantages of multi-tasking hedges are easily remembered by being the five F s.

Slide 18: Fence (picture of garden)

Script: When using a hedge as a fence it not only marks out a boundary, but can also be a very productive part of any farm.

This can be a tree like moringa, where the trunk forms the fence.

Quick growing species such as Sesbania or Moringa will help establish the line of the fence whilst other plants are growing between them.

Slide 19: (picture of Calliandra hedge)

Script: These are Calliandra trees that can be used as a boarder (fence), and in this case are supplying some shade.

Calliandra is particularly recommended as it can also be used as fuel, fertiliser and fodder.

Slide 20: Fuel (picture of woman carrying fuel)

Script: Hedges need managing and can easily be pruned for firewood.

Fast growing trees that coppice are particularly suitable for a constant supply of fuel.

Slide 21: Fertiliser (picture of Tithonia hedge)

Script: Most leaves form a good basis for fertiliser and help improve animal manure.

Certain species, especially leguminous trees such as Leucaena, Sesbania, and Calliandra, are particularly good for adding fertility to the soil.

This is a Tithonia hedge, which can provide liquid fertiliser that is easy to use.

Slide 22: (picture of Tithonia)

Script: Tithonia was originally introduced from South America to be used ornamentally; it now grows wild in many areas of Africa.

When encouraged, it will easily grow within hedges and round crops.

Tithonia is extremely useful as a fertiliser as it rots quickly and contains large amounts of nitrogen and phosphorous.

Slide 23: Fodder (picture of fodder being given)

Script: Young leaves are particularly palatable to animals.

Leucaena, Sesbania and Calliandra are especially recommended.

These leaves can be added to cut grass, such as Napier, to make a nutritious fodder for animals.

Slide 24: (picture of Calliandra flower)

Script: This shows Calliandra in more detail, (beneficial as a fence, fuel, fertilizer and fodder).

It provides a very high amount of protein, so is excellent for producing milk from dairy goats and cattle.

Slide 25: Food (picture of guava)

Script: These are some guava.

Moringa, guava, mulberry and passion fruit are very nutritious and can be grown easily within a hedge.

Slide 26: (picture of passion fruit)

Script: Passion fruit is a climber so can be grown within a hedge of another species.

Slide 27: (picture of Moringa)

Script: Moringa has exceptionally good nutritional value.

Its leaves can be used as a vegetable during the dry season when others are not available. When dried the leaves can be ground and are easy to add to any starch based meal.

They contain the equivalent of 7 times the Vitamin C of oranges, 4 times the Calcium of milk, 4 times the Vitamin A of carrots, 3 times the Potassium of bananas and twice the protein of milk.

(for further information contact echo@echonet.org)

Slide 28: Zero grazing high yield goats

Script: Following on from this teaching, REAP encourages breeds of high yielding dairy goats that utilise the hedge fodder trees and provide valuable manure to enhance the fertility of the land.

Slide 29: Stall fed goat (picture of goat)

Script: These breeds of high yielding dairy goats must be stall fed, so are kept away from crops. The pens can be made entirely out of available materials and are raised allowing the manure to fall through the raised floors and be easily collected.

Slide 30: (picture of goats)

Script: Goats have been found to be much more suited to the needs of the rural poor than cows. This is because they are smaller units; less fodder is required, there is a shorter gestation period for breeding, any loss incurred is less and the raised stabling to collect manure effectively can be made without expenditure.

Women rather than men are traditionally involved with rearing goats so they involve the whole family.

Slide 31: (picture of goat in car)

Script: This goat was bred by REAP and is amongst the first to be given away to people who cannot afford new livestock, on condition that their firstborn and third kids are given to one of their neighbours, on the same terms.

Slide 32: (picture of President with Pamela the goat)

Script: Here is Pamela, one of REAP's goats, who won the champion rosette at the Kisumu Agricultural Show, being awarded by Kenya's President.

Slide 33: (picture of REAP team at Kisumu with cups)

Script: Exhibiting at agricultural shows has proved to be a very effective means of promoting REAP's teaching.

Slide 34: (picture of awards outside Reap Kisumu office)

Script: In 2009 REAP came first in all three categories that it entered at the Kisumu Show; Best Small Trade Stand, Best Non Government Organization and Best stand in Environmental Management.

Slide 35: Tree Planting

Script: Encouraging tree planting helps with soil conservation and provides many other benefits. REAP uses many channels to encourage this along with its other teaching, particularly through agricultural shows, community workshops, by example through individual contacts and working with African churches.

Slide 36: Easter tree planting (picture of church and trees)

Script: The idea of Christians planting trees every Easter, as a symbol of new life, was brought to REAP by Wangari Mathai, the Nobel peace prize winner.
Wangari's representative was involved in the God and Creation conference that REAP organised with Care of Creation, Arocha, Green Belt movement and others.
She proposed it as a church based idea, building on what had been common in schools in her school days.

Slide 37: (picture of planting a tree)

Script: There are an enormous number of Christians in Africa.
If each one plants trees each year this could have a huge affect on the climate... and much more beneficial than the custom of buying chocolate eggs!
The advantages of Calliandra and Moringa make them ideal trees of choice and REAP is particularly emphasising their benefits, though the longer term benefits come from encouraging more indigenous trees.

Slide 38: Agricultural advice

Script: Incorporated in REAP's teaching is a lot of general advice on all kinds of agricultural problems from viruses and pests to reproducing plants, from the planting out of cassava to the budding of citrus trees, and which are the most nutritious plants suitable for any particular area.

Slide 39: Natural medicines (picture of medicinal garden)

Script: REAP's teaching on how to grow and use natural medicines has stimulated a considerable amount of interest over the past few years.

Slide 40: Artemisia (picture of Artemisia)

Script: One of the most used of the medicinal plants that REAP promotes is Artemisia; which is most successfully grown from cuttings.
Artemisinin, from the Artemisia plant, is now the drug of choice for malaria.
REAP's teaching makes this home cure available to everyone.

Slide 41: (picture of Artemisia nursery)

Script: When the leaves are dried they can be made into a tea.
The plant contains many additional ingredients (not used by the pharmaceutical companies) that also aid recovery from malaria.
This method also has the advantage of decreasing resistance to the drug.
Dosage is straightforward and so it is easy to use responsibly.
In hotter regions it is difficult to grow without good husbandry techniques, for example the plants benefit from a microclimate created when surrounded by banana trees.
REAP adapts its teaching to suit each appropriate area.

Slide 42: (Details of REAP UK)

Script: REAP UK shares in the work in Africa by promoting its awareness over here.

Slide 43: Ways you can help REAP

- ▶ Financial – please fill in form if you are a taxpayer for claiming Gift Aid
- ▶ Prayer – please provide e-mail/ mailing address to receive our Newsletter
- ▶ Advertise REAP – let us know if you could show presentations or DVDs

Script: There are many ways in which you can help share in the work that REAP is doing.

Slide 44: For more information:

- ▶ View our website: <http://www.reap-eastafrica.org>
- ▶ Contact us on: REAP@ukonline.co.uk

Script:

Slide 45: Rural Extension with Africa's Poor

A Christian approach to development through teaching.

Script: