## **Discover Newsletter for colleagues in Africa**

May 2021 -

## **Planetary survival**



One million species are threatened with extinction.

Between 1992 and 2014, throughout the world there was a loss of 40% of "natural capital", that is of pure water, soil fertility and natural forests.

90% of biodiversity loss is caused by the way we live, what we do and what we consume.

What can we do to survive?

What do you suggest?

What do you think of these ideas?

- 1. Produce our food sustainably
  - a) 80% of cultivated land throughout the world is used to feed livestock. That means, we must drastically reduce our meat consumption. We must become expert at producing nutritious meals with fruits and vegetables. Maybe start with grain amaranth or moringa – both are rich in protein.

Discover

The picture shows grain amaranth growing near Iganga in Uganda under the

supervision of Samuel Waiswa. Samuel does a wonderful work by treating malnourished children with grain amaranth porridge.

- b) *We must increase and maintain soil fertility*, so that we can produce more food on less land. That means using *manure, compost, ground cover and cover crops and leguminous plants and trees*.
- 2. We must consume less and waste less.
  - a) 28% of the world's fields are used to produce food that is wasted! Can you believe it? Sometimes it is never even harvested, sometimes it is never used and sometimes it is cooked and not eaten.
  - b) Rich people buy many clothes and shoes; many are scarcely worn.

Have you heard about the "circular economy"?

In a "circular economy" there is no waste. In permaculture and "climate smart farming" there is no waste, because by using manure, compost and mulch there are no waste products on the farm. Could we apply this principle throughout our lives, for example by *finding new uses for old wood and building materials, clothing, plastics*, etc?

The picture shows plastic bottles filled with earth used to make a raised bed in the Eden Project, Arua, Uganda.

3. Prevent all pollution.

Air pollution gives rise the respiratory problems such as asthma, causing the early death of hundreds of thousands of people every year. Water pollution leads to problems of diarrhoea, and more serious problems if the contamination is from metals (e.g. from the effluent from mines) or pesticides or other agricultural chemicals. All forms of pollution lead to loss of species – in heavily polluted water there are no fish!



How could we stop pollution?

At the household level by using fuel efficient stoves and photo voltaic cells to produce electricity. National regulation is required to minimise pollution from motor vehicles and contamination from mining. But nothing is simple – if we have PV cells on our roofs, or phones or laptops, then we need batteries – all batteries must be disposed of safely, with a maximum degree of recycling!

4. Reduce the impact of climate change.

The main thing is to *plant trees*! Trees absorb carbon from the atmosphere, enhance the natural water cycle of rainfall and subsequent evaporation and protect and increase the degree of biodiversity. Natural forests and indigenous trees are the most important to preserve biodiversity.

Trees enable heavy rainfall to soak steadily into the ground. Trees planted on mountains and along the contours help to prevent soil erosion, landslips and floods.

5. Increase conservation and restore natural ecosystems.

Natural forests, natural grasslands, wetlands and lakes have the greatest biodiversity and perform a vital role in the storage of carbon and provision of oxygen. This natural capital is priceless – once destroyed it is extremely difficult to replace. Thus, protected forests and national parks provide an invaluable service. But they must be protected!

There is an international movement to ensure that 30% of the area of every country is protected and allowed to regenerate naturally. I hope this happens in your country!

I hope that your family and community become models of how to live sustainably!

With my best wishes

Keith Lindsey