

Agroecology curriculum interventions from the NGO sector

Combined presentations from ACAT Lilima from eSwatini, Biowatch South Africa and Fambidzinai from Zimbabwe.

Africa Cooperative Action Trust (ACAT) Lilima, eSwatini

“Capacitate extension officers on agroecology to empower communities to sustain themselves.”

What we are trying to Achieve

- An effective extension services system that is ecologically sound: water efficient, harmonious with the environment
- Sustainable rural household food security
- Counter climate change and its effects.
- Building resilient communities, cognisant of issues around climate change

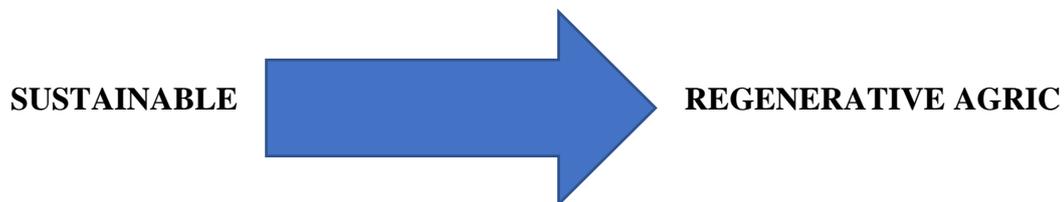
Why we would argue that this is a worthwhile endeavour

The eSwatini government through the Ministry of agriculture offers agricultural extension countrywide but has over the years not been effective in helping the Swazi people to be able to produce their own food. Government extension officers have very good conventional agriculture background as it is the only system offered in our tertiary institutions and has proven ineffective looking at the amount of food imported by the country and the number of people on food aid each year. Even worse with climate change taking its course, Swazi people have not been able to produce food. However, with agroecology (AE) the few farmers that have been reached have a different testimony and are able to sustain themselves in the midst of climate change effects. Land and environmental degradation have been a serious problem due to conventional farming systems which have been prevalent in the country, yet AE has proven itself to build the soil and the environment as a whole. Our farmers have been attesting to that they never see the need for soil tests because they ensure soil health in their husbandry practices.

Key lessons to share thus far

- Agroecology is wide hence a need for it to be incorporated/mainstreamed into formal education systems thereby improving the quality of extension services.

- There is vast agroecological knowledge from traditional farmers which needs to be documented and made available.
- Farmers are suddenly realising the benefits of AE hence growing demand for extension.
- “Actions speak louder than words” if we offer effective agricultural extension to farmers, government will eventually buy into taking AE seriously and taking the right actions.



Biowatch, South Africa
“Curriculum intervention at a state agricultural college to shift mindsets towards agroecology”

What we are trying to Achieve

Biowatch walks alongside smallholder farmers practicing agroecology based on traditional farming. These farmers and many other smallholders we have met over the years are aggrieved that the extension service fails them. They are often denied support because they don’t and won’t fit into the industrialised model of agriculture, and are pressured to conform and even derided – “throw away your Gogo [grandmother] seeds, they are no good”.

Our Agroecology manager, Lawrence Mkhalihi, trained at an agricultural college and became an extension officer. He shares his experience: He came to the job with his college education, thinking this modern way was better than what his mother knew. However, as he tried to work in communities in rural KZN he realised that commercial seeds need fertiliser and a lot of water to grow well – inputs which are unaffordable and inappropriate. This shifted his thinking towards learning from the wisdom of the elders; working with and improving their practice.

In 2018 Biowatch published a research paper by Dr Harald Witt looking into the support provided to smallholders in KZN. The research also highlighted that the extension service is not able to deliver appropriate support to smallholder farming communities. (See http://www.biowatch.org.za/docs/papers/2018/Biowatch_ResearchPaper_PolicyImpacts_032018_web.pdf)

Biowatch reflected on these experiences and how this situation could change. We knew that engaging with the formative years of extension workers – that is at agricultural colleges – could be a key contribution to change.

Around the same time, we had a serendipitous approach from two lecturers at Owen Sitole College of Agriculture (OSCA) in Empangeni, northern KwaZulu-Natal. In particular, the lecturer for food and nutrition security felt that what she taught her students was counteracted by the industrialised agriculture approach taught in college courses – an approach that will not deliver non-toxic, low carbon footprint, nutritious food. She suggested that Biowatch share knowledge of

agroecology at the college, and after several engagements the Principal and senior lecturers supported this idea. Biowatch delivered a short course and a practical at the end of the 2018 academic year. We hope to take this further in 2019.

Why we would argue that this is a worthwhile endeavour

This has been a small pilot intervention, and our approach has been to journey alongside interested lecturers. We worked together with interested College staff to design the process and a demonstration plot. We also held a participatory workshop for staff exploring the problems with the industrialised food system, which interested several more lecturers in the need for change.

Key lessons to share thus far

- At the moment OSCA sees agroecology as another option for production suited to household (subsistence) production for food security. It is not seen as “the way” for a necessary transformation of agriculture to ensure we can continue to live within planetary resources with fair social relations.
- We have an NGO way of delivering learning: participatory and experiential, which hasn’t fitted easily with the institutional way: a lecturing format, often within predetermined frameworks and time frames for how things must be done. There are also policy directives coming from national government that determine the curriculum, impacting what can be taught. For example, we found our agroecological intervention being re-framed as “Climate Smart Agriculture”, which Biowatch is strongly opposed to because it greenwashes the continued use of herbicides, genetically engineered crops and synthetic fertilisers.
- We worked with second year students who were already conditioned into thinking that industrialised agriculture is the only way “to feed the growing population”.
- Even this small intervention brought a process of change to the College that not everyone was comfortable with. Bringing in a new approach needs good communication and management to ensure that everyone is included.

Fambidzinai Permaculture Training Centre, Zimbabwe

“Building AE extension capacity through a university accredited formal training”

What we are trying to Achieve

- A significant improvement in food security and sovereignty through effective agriculture extension support to farming communities and implementation of agroecological practices.
- A shift in policy towards inclusion of Agroecology approaches in generic curriculum of agriculture extension officers training.
- The integration of agroecology curricula components into the ordinary training curriculum of agriculture in government colleges and institutions.

Why we would argue that this is a worthwhile endeavour

Zimbabwe as a country, despite having a robust agriculture extension services system; has not been able to facilitate production of safe and nutritious food and improving food security largely due to heavy dependence on often scarce and unavailable external inputs for production. It is factual all extension staff in the country and the region are equipped with skills to deal with conventional agriculture production from their tertiary education background, where external inputs and materials are key in supporting production. The extension support system has not been able to bring home-grown solutions tailor-made to address needs of a particular community but would rather bring prescriptions that do not solve farmer challenges, in the name of a blank recommendation, which is not economically viable and environmentally sensitive. In this view agriculture extension staff have not been relevant enough to advise the rural communities appropriately since they bring solutions based on materials and resources that are out of reach to the communities they are dealing with. This is mainly due to their limited capacity and knowledge to consider ecologically sensitive methods of production.

Key lessons to share thus far

- Agroecology learning and education can be effectively implemented at tertiary level to build requisite skills among grassroots extension support services.
- Communities have immense understanding of agroecology principles enshrined in their eroded cultural activities.
- Skills training on agroecology needs to be tackled at all levels starting from the lowest level in the tertiary education sector i.e. certificate.
- Support from both the government and the communities is key towards successful implementation of agroecology.
- Communities need to be empowered with capacity to speak for themselves on issues that affect them and by so doing they can effectively come up with solutions.