Genetically modified organisms have not yet been commercialised in Tanzania but they are being advocated as a cure of food insecurity in the country. The government has approved an application from the Tanzania Commission for Science and Technology (COSTECH) to conduct field trials of MON87460 at the Makutupora Viticulture Research and Training Centre (VRTX), Dodoma.

MON87460, or ‘Droughtgard’, was first commercialised in the US in 2011. The introduction of the seed into Tanzania, via these field trials, stems from a Monsanto/Gates Foundation project, Water Efficient Maize for Africa (WEMA). Implemented in South Africa, Kenya, Uganda, Tanzania and Mozambique, the project purports to offer the GM drought tolerant maize to smallholder farmers in Africa as a ‘Climate Smart’ solution to abiotic (or physical) stresses such as drought.

MON87460 contains the bacterial cold shock protein B (CspB), derived from the common soil bacterium Bacillus subtilis. According to Monsanto “the cspB gene helps to preserve cellular functions during certain stresses” and “reduces yield loss, primarily through increasing kernel numbers per ear”.

While this trial is set to begin, TOAM and its members are highly concerned for the following reasons:

**Possibility of genetic contamination:** In Tanzania, seed saving and exchange amongst farmers is widespread. The possibility of Genetically Modified seed spreading is therefore a major concern. We must ask what mechanisms will be put in place to ensure that beneficiaries of the WEMA project are aware of the special precautions and prohibitions related to genetically modified seeds and what safeguards are implemented to prevent the contamination of farmers’ varieties.

**Inappropriate technology:** GM drought tolerant maize is an inappropriate technological fix to a systemic problem. GM crops are embedded within the “Green Revolution” approach while this model of industrial agriculture has been identified as a major contributor to climate change. As we struggle through a prolonged drought and face climate change, we must assess whether the industrial farming system is appropriate. Decision makers in Tanzania must instead consider transforming agricultural production to adopt agroecological methods which ensure diversity and resilience to mitigate and adapt to climate change.

**More chemical use:** Previous trials for MON 87460 in other countries show the accompanied use of a variety of chemical pesticides. Putting farmers on a chemical treadmill will harm their livelihoods, as well as their health and that of the environment.
This October, Daily News reported on the growing trend of organic agriculture in Arusha and Kilimanjaro regions, particularly among coffee and flower farmers. The article quoted coffee grower Mr. Isreal Kome as saying: “It is high time now we all abandoned conventional farming and go for organic one. I for one have already started and wish others to do the same so that they get huge yield but also it is for the sake of the environment.”

According to the piece, farmers in the two regions are leaving conventional agriculture behind, as they wise up to its effects on climate change and deal with falling levels of productivity. “Decades of conventional agriculture has seen coffee production, the typical cash crop in Kilimanjaro and Arusha regions, drop in quality as well as quantity.”

The article painted a positive picture of organic, and comes at a time when Tanzanian media is talking more and more about the opportunity presented by organic farming. One striking omission from the article was the mention of the Kilimo Hai Mark and the East African Organic Products Standards (EAOPS). This highlights the fact that more needs to be done to sensitize the media and members of the public to organic agriculture in Tanzania.

**Agroecology contributes to the Sustainable Development Goals**

A meta-analysis of 50 case studies from 22 African countries shows the contribution of agroecology to the attainment of the UN Sustainable Development Goals (SDGs).

Measuring the benefit of industrial agriculture is simple; you just count the crop yield per unit area. This is the basic indicator of conventional farming technology. However, the real world is much more complicated. While industrial farming claims to have raised yields, it has done so at great cost, with extensive soil damage, huge biodiversity loss and negative impacts on nutrition, food sovereignty and natural resources. By contrast, agroecology offers sustainable improvements, not only to yield but also to many other aspects of life.

Simply measuring yield is not enough – we need to establish new ways of measuring the impact of our agricultural systems. Many are grappling with the task of developing more holistic tools, notably FAO and IPES Food. Meanwhile, there is a recently established benchmark against which we can gauge our progress: the SDGs.

Starting in 2013, the Alliance for Food Sovereignty in Africa (AFSA) and partners collected 50 case studies of agroecology from 22 African countries. The 50 case studies document the experience of a diverse range of agroecological approaches, collectively involving several million farmers.
To further strengthen the case for agroecology, TOAM (as a member of AFSA) developed a simple tool to establish how these case studies contribute to the SDGs.

Using the tool to record positive and negative impacts against the SDG goals and targets, TOAM officers analysed the 50 case studies, concluding that agroecology contributes positively in various ways to ten of the 17 SDGs. Notably, every case study showed a positive impact towards the goal, ‘End hunger, achieve food security and improved nutrition and promote sustainable agriculture.’

Highlighting the contribution of agroecology to an important policy framework such as the SDGs makes a clear case for cross-cutting policy that supports agroecology. It is now up to policy makers and the agricultural research community to recognise this potential to meet the world’s needs and challenges.

*Adapted from article in Farming Matters 32.3

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**TOAM GENERATES MEDIA STORM WITH THE LAUNCH OF ‘SEEDS OF FREEDOM’ DOCUMENTARY**

On 10th August this year, TOAM launched a documentary! ‘Seeds of Freedom’, in swahili: ‘Uhuru wa Mbegu za Wakulima’, captures the testimonies of farmers whose customary rights to save, share and exchange seeds, are threatened by seed laws designed to replace traditional varieties with commercial hybrids and handover control to the global seed companies. The 28-minute film follows a local seed producer, Mathias Mtwale, as he meets with farmers, researchers, seed suppliers, regulators, and legislators to understand the issues, and to make the case for a fair deal for the farmers.

The launch caused quite a stir in the media with stories from Habari Leo, Daily News, Majira and the Guardian Newspapers covering the event and the seed issues raised in the film: fake seeds, the lack of support for the farmer managed seed system, quality declared seed and how government can help to protect farmers’ indigenous seeds.
On NaneNane (the national Farmers’ Day - 8th Aug) the film was previewed on Azam TV’s ‘Morning Trumpet’ breakfast show, showing clips from the documentary alongside an interview with TOAM CEO Jordan Gama. Four TV stations (Channel 10, TBC, EATV and Azam TV) also reported the launch event and aired clips of the film in their news bulletins. Star Television went further showing a short version of the film on Mkulima Wetu (our farmer) a documentary program covering farmers and their activities aired on Friday evenings.

TOAM FARMERS BENEFIT FROM 2016 NANENANE PARTICIPATION IN LINDI

TOAM farmers from Masasi in Mtwara participated in this year’s Nanenane National Farmers’ Exhibition at Ngongo in Lindi region from 1st to 8th August. TOAM arranged an organic pavilion, providing informative, interactive displays and demonstrations. On display were a sample of organic products and promotional materials explaining organic agriculture and the East African Organic Products Standards (EAOPS). The event was also used to project video clips of successful organic practices, and visitors engaged in discussions to learn more about organic agriculture. TOAM managed to get 15 minutes of airtime on Mashujaa FM radio in Lindi and a 20-minute slot on TBC1 during the exhibition.

Farmers supported by TOAM to attend were able to meet with other farmers, processors and some value chain service providers from other pavilions and demonstrations. They shared knowledge and experiences on value addition and processing under the EAOPS and branding with the Kilimohai Mark. TOAM encouraged farmers and processors visiting Nanenane to follow EAOPS in their production and processing and benefit from access to organic certification for local and regional markets. Some of the pavilions TOAM staff visited include: JKT, AGHAKAN Foundation, TAHA, MALF, TBS, TFDA, TANTRADE and the district pavilions of Lindi, Tandahimba, Newala, Nachingwea and Mtwara. Farmers were encouraged to make the most of the learning opportunities

EDITOR’S CORNER

Over the past three months we have seen a growth in media coverage on organic agriculture in Tanzania. In some instances this has come as a direct result of TOAM advocacy and awareness campaigns. We also recognize the work of our partners and members who continuously feed into the narrative and who work closely with the farmers who embody the organic agriculture movement.

People are coming to see that the organic agriculture offers relevant solutions for the challenges of our times:

Climate change is no longer looming in the future but farmers battle it day-to-day. For this fight, organic agriculture offers resilience. Deteriorating soil fertility on a large scale threatens food security and leads to volatile livelihoods. Here, organic agriculture provides sustainability. The growing corporate seed sector promises high yields but delivers binding contracts, burdening debt and the prospect of ‘fake seeds’. Against this, organic agriculture represents freedom.

As we go into the last quarter of the year, we brace ourselves for new challenges to the development of organic agriculture in the nation. GMO trials threaten to contaminate the farmer managed seed system; government policy grows in favor of an industrialized economy and commercial agriculture and donor funding for the green revolution remains incessant.

We thank those of you who have supported TOAM over the past three months and invite you to continue following our work by reading our weekly news bulletins and dropping in to our office for a chat if possible!