By Samantha Hartery, Uganda

Twenty-five percent of primates in Uganda’s Kibale National Park have a severe physical deformity of some kind, and researchers believe pesticides are to blame.

Researchers working in the northern area of the park noticed that chimpanzees and baboons in the region had flattened noses, cleft lip, abnormal or absent nostrils, patchy fur, and concave faces. Some were missing fingers or entire limbs.

What’s worse, a number of the females were not producing offspring.

Researchers initially noticed that primates living near farm deformed from pesticides

By Constantine Akitanda, Dar es Salaam

Three organic agriculture knowledge centres are set to be established in eastern, western and southern Africa to spread and accelerate the adoption of organic agriculture practices in the continent.

“We had an interesting network meeting on boosting the role and potential of organic agriculture in Africa at the beginning of April and agreed on the next steps for the set-up of the three hubs,” said Mara Lindtner, an advisor at the Knowledge Centre for Organic Agriculture in Africa in an interview with AfrONet Newsletter recently.

The meeting at SEKEM in Egypt brought together African and German NGOs, research institutes, universities, and associations working with organic agriculture to discuss about ways of promoting the concept in Africa.

The future of our own food is in the hands of EOA actors

It is extensively agreed by many that today’s global agriculture system and structures is a social and environmental disaster. This is due to natural hazards or human-induced actions that result in significant changes in circumstances over a relatively short time period, with agriculture being one of the distracting actions.

The ’business as usual’ concept is no longer an option, biodiversity loss and nitrogen pollution are exceeding planetary limits, and catastrophic risks of climate change demand abrupt action.

It is widely conceded that a radical transformation of our agricultural systems is urgently needed in order to rescue our food systems rapidest. But the proposed innovations for more sustainable food systems remain drastically different.

Most of the suggested innovations can be broadly understood as either seeking to conform with – or to transform – the status quo. Some seek to keep the agriculture industry as close to existing practices as possible. This is true of the increasing number of corporate and financial actors who seek to solve the food crisis by developing new technologies. These technologies...
An organic farmer is inspecting her farm in Nigeria a country according to ECOWAS it leads in mainstreaming organic agriculture in school curriculum.

Nigeria leads in efforts to mainstream organic agriculture in school curriculum – ECOWAS

By Ebere Agozie, Abuja

ERNEST Aubee, the head of the Department of Agriculture at the ECOWAS Commission in Abuja, says Nigeria is one of the leading countries in West Africa that have taken the lead in efforts to mainstream organic agriculture in school curricula.

Aubee, who is also chairman of the Regional Steering Committee of the Ecological Organic Agriculture (EOA) initiative in Nigeria, was speaking at a workshop on ‘Understanding Organic Agriculture for Curriculum Development’ organized by EOA last April in Abuja.

He said the workshop was aimed at seeing how best to mainstream organic agriculture into school curricula to encourage and promote its sustainability in the country.

‘So I see this initiative of EOA in Nigeria as a very bold one in which we expect to see how best we can mainstream organic agriculture into the Nigerian curriculum. The outcome of this workshop will help other West African countries learn from Nigeria, the steps and approaches we have employed to get to where we are.’

He encouraged other ECOWAS member states to follow suit and start work immediately on ensuring that organic agriculture becomes part and parcel of their education agenda. ‘We must not just stop at one level... we should start from the base, from primary school to the highest level of education,” he asserted.

The Acting Executive Secretary of the Agricultural Research Council of Nigeria (ARCN), Mr Saidu Madagwa, represented by Dr. Kidda Danjuma of the council, said the importance of the workshop could not be over-emphasized.

‘This workshop is being held at a time when cases of indiscriminate use of chemicals in agriculture are becoming quite worrisome with the resultant adverse effects on people and animal health, which could have severe consequences for the environment,” Madagwa said. ‘An important way mitigate these adverse effects is to encourage organic agriculture practice rather than the use of inputs that could have adverse effects,’ he added.

Dr Adamu Kazaure, Executive Secretary of the National Board for Tertiary Education (NBTE), represented by Dr Jauro Kubura, said the board would continue to encourage the practice of organic agriculture.

“We are happy to partner with EOA in promoting organic agriculture and will introduce organic agriculture into the curricula of all polytechnics and colleges of education in Nigeria,” he said.

Prof. Victor Olowe, president of the Association of Organic Agriculture Practitioners in Nigeria, called for constructive contributions from participants.

“We want ideas that will move organic agriculture forward. Other countries are already running with the template that we developed and we, for our part, are trying to make in-roads through the NUC,” he said, adding:

“We want to see people obtain degrees and even PhDs in organic agriculture. Food security is beyond just filling your stomach but making sure it is with the healthy kind of food.’
The future of our own food is in the hands of EOA actors

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are envisaged as being part of what is being called the "fourth industrial revolution". The "answer" here is thought to lie in a fusion of technologies that blurs the lines between physical, digital and biological domains.

But there is an alternative to this future, and this is none other than Ecological Organic Agriculture involving the application of ecological principles for the design and management of sustainable agroecosystems.

Numerous researches on ecological organic agriculture have shown how it can contribute to food sovereignty, which emphasizes the democratization of food systems. But again and again it contributes to the Sustainable Development Goals.

In contrast to the technological vision, ecological organic agriculture innovations promote circular systems that involve recycling, reuse and combining resources to reduce dependency on external inputs, in particular fossil fuels. They copycat natural cycles and the functional diversity of natural ecosystems.

But given these highly contested views on innovations for food and agriculture, it is vital that everyone is able to exercise their right to have a say on the future of their food supply, because the future is within us.

Deliberative and inclusive processes such as citizens’ juries, peoples’ assemblies and community-led participatory processes are urgently needed to decide priorities for food and agricultural innovations. This is all the more important in today’s context of rapid global change and uncertainty.

So do you want to live in a world in which artificial food is produced by intelligent robots and corporations that put profits before people? The answer is likely to be no.

We still believe in ecological organic agriculture innovations – and only through it we can nourish ourselves and our communities in a fair, ecologically regenerative and culturally rich way.

Knowledge hub centres to enrich growth of Organic Agriculture in Africa

Continues from Pg 1 or August.

"For the Southern African knowledge hub, we are planning an appraisal mission by the end of June to the Sustainability Institute in South Africa and the Kasisi Agricultural Training Center (KATC) and PELUM in Zambia to decide on an institutional set-up for the hub and define the next steps to take," she explained.

She said a similar appraisal mission is being planned for the West African knowledge hub with the same objective, with FENAB and AgroecolAfrique in Senegal the places to be visited.

The possibility to build a fourth knowledge hub in North Africa was explored at the Egypt meeting and is being further investigated.

During the launch of the Knowledge Centre for Organic Agriculture in Africa at Biofach in Nurnberg, Germany on 15 February 2019, the Deputy Director General of the German Federal Ministry for Economic Cooperation and Development (BMZ), Mr Stefan Schmitz, noted that “agriculture is not just key to fighting poverty but is also critical to food security and an economic engine of growth”.

Mr Schmitz said with productive land shrinking, efforts are needed to ensure food production is in line with the environment, and with the current trend of depletion of resources and climate change, Africa is likely to feel more strongly the consequences.

He advised that entire food and agricultural systems need more improvement and modernization to follow ecologically sustainable practices.

“Business as usual is not an option and organic farming is the way to go”, he cautioned.

Mr Schmitz reported that only about 2% of land globally is managed organically, saying this has to change because organic agriculture is the key to sustainable intensification to strengthen the health of soils, ecosystems, water retention systems and eventually people as a whole.

A stronger focus on diversification and integrated crop-livestock systems will increase access to health and environmental benefits and sustainable soil management leading to enhanced adaptability to climate change. Such achievements are needed to tackle the three main challenges of food security, climate change and sustainable livelihoods in terms of jobs and incomes for growing populations.

Through BMZ’s One World Without Hunger initiative launched 4 years ago, focus has been on managing soil fertility through research and training. BMZ has also been promoting organic agriculture in more than 10 countries under bilateral, regional and global collaborations with over 20 organic agriculture projects.

Mr Schmitz thanked Prof. Gerold Rahmann and others for their support in developing the Green Innovation Centres which provide innovations for farmers to cultivate better products for markets and develop new value chains leading to increased productivity and incomes.

This is further achieved through processing and marketing in collaboration with over 35 public-private partnership projects involving the private sector.

The new project provides the opportunity to examine how to reach millions of farmers, identify obstacles and reasons for them, priorities and driving forces, and how to effect needed changes.

It also provides opportunities for synergies with governments, research organizations, private sector, networks such as AfrOnet, farmer organizations, consumer alliances, and development agencies. The project partners were encouraged to generate success stories to show the value of organic agriculture.
African countries have been extolled to stand united against an onslaught by multinational industrial agricultural companies to dump inappropriate technologies and agricultural applications in the continent. The president of the Alliance for Food Sovereignty in Africa (AFSA), Mariann Bassey-Oruvweje, told a conference on African Food System and Sustainable Development Goals (SDGs) held in Saly Portudal, Senegal that Africa's food systems and culture were under threat.

"It is vital that we work together soberly to examine the negative impact of imported technologies such as synthetic pesticides, fertilizers, proprietary seeds, Genetically Modified Organisms (GMOs) and gene drives that those companies and their hired helpers/local partners are seeking to dump on us and treat us as guinea pigs," she said.

She lamented that Africa was being portrayed as a continent teeming with hungry, malnourished and poverty-stricken people, a template being used by the multinationals and their collaborating partners to take over African land and food systems and introduce their propriety seeds and agro-chemicals in the continent.

"It is high time that people saw Africa in a more positive eye. The negative poster image should be erased because as a continent we have a lot of good things to showcase," Mariann said.

She added that industrial agricultural multinationals were pushing for copy-and-paste policies and laws from their countries that cannot work in Africa because of contextual divergences.

"We are still grappling with GMOs, and they have brought on yet another 'solution' – a deliberately invasive technology known as 'gene drive'. All these are done intentionally to suffocate our food systems and agriculture," the AFSA president pointed out.

The Alliance for Food Sovereignty in Africa is a Pan-African platform and a network of over 30 organizations operating in 52 out of the continent's 54 countries.

The seven-day conference in Senegal was meant to interrogate and conceptualize issues around soil, seeds, climate change and African cultural food systems.

Mariann said multinational agro-chemical corporations were now merging and forming big alliances, and wondered why small-scale farmers, pastoralists, fisher-folks, hunters & gatherers, consumers, climate defenders, CSOs and academia in Africa should not do the same against this threat. "Our work is connected, we should not be working in isolation. If we work together our efforts will be amplified and our voices strengthened," she pointed out.

She warned that Africa will face great challenges in the future if food sovereignty is lost and farmers are tied to the commercial noose of corporate agribusinesses.

Mariann called for the building of strategic alliances and networks between organisations and platforms across the diverse thematic areas of operation to press for needed change.

"We should not diminish our abilities to make a more lasting impact by isolating ourselves and groups. Global solidarity is needed to stop corporate take-over and control of food and family systems in Africa and the rest of the world," she said.
If all farmers would use organic seeds, we could easily finance organic plant breeding

THE 14th International Agricultural Show in Morocco, commonly as SIAM and held annually, this year also included representatives from the organic sector as guest participants. Our Staff Writer Constantine Akitanda interviewed STEFAN DOEBLIN, one of the founders of Sementes Vivas which is an organic and biodynamic seed company based in the Iberian Peninsula, on issues of seeds and seed sovereignty. Excerpts:

Q: Mr Stefan, you have been involved in the seed sector for a while now, could you briefly tell us about your Sementes Vivas company and how it is directly involved in addressing and advocating seeds and seed sovereignty?
A: Sorry Constantine, I've only become involved with organic and biodynamic seeds in the past five years. I did a two-year training in biodynamic plant breeding and then, jointly with Demeter International, we set about trying to convince the European Commission to promote organic seeds as a main future market. We have achieved that. My main work as an entrepreneur is to develop Sementes Vivas as a 100% organic and biodynamic seed company in the Iberian Peninsula. If you look at the trade balances of countries in the Mediterranean Sea area, most of them are importing more than 90% of their cultural seeds for agriculture from the big giant seed companies.

Our concept is different. We are focused on local production with over 30 certified organic and biodynamic farmers in the Iberian Peninsula. If you look at the trade balances of countries in the Mediterranean Sea area, most of them are importing more than 90% of their cultural seeds for agriculture from the big giant seed companies.

Our concept is different. We are focused on local production with over 30 certified organic and biodynamic farmers in the Iberian Peninsula. Most of the seeds we use are adapted and produced locally, which helps to improve country trade balances and increases food sovereignty for such countries.

We also produce seeds for countries like Egypt and hopefully soon also Morocco and Turkey - all countries with similar climates and soil conditions. The countries of the Mediterranean need to work closely together to increase the diversity of usable and high-quality seeds for their farmers because, due to outsourcing to the big companies, these countries lost most of their heritage in seeds.

It would be very dramatic if the big agrochemical companies decide to boycott any country - its people would face starvation within a year maximum. Organic agriculture is grounded locally and linked to global knowledge. That is the difference between the old days (over 100 years ago) and today. Organic farming and organic plant breeding are based on collaboration and knowledge exchange between farmers, producers, scientists and consultants.

Q: What is your understanding about Open- and Self-Pollinated Varieties and what is the best direction for Africa?
A: We believe in plant integrity because nature and spiritual forces are a complex system which we will never fully understand. Plants communication with other plants and insects and the soil and climate are part of the system of communications. Human beings are related to cultural plants and there is a dependency between each other. Open- and self-pollinated seeds are developed by humans and nature in their historical relationship. The advantage is that each farmer is able to replicate the seeds until the quality level goes down (after several years). Organic agriculture is based on biodiversity to always find the right varieties of soil, water and climate conditions are changing. We find that the best taste and aroma of vegetables comes from open- and self-pollinated seeds. That is another reason to focus on these seeds.

Unfortunately, most vegetables are transported around countries and there are tough logistical requirements involved. Therefore, hybrids are mainly used for professional farming. There are organic hybrids which we also sell, but we do not invest in their development. All our involvement in organic and biodynamic plant breeding is focused on open- and self-pollinated seeds.

Q. Seeds and the seed business have become a big debate all over the continent. Why is this happening now and where do you think we probably went wrong?
A: More people have become aware that pollution of the countryside and water is mainly done by agrochemical industry actors and their own health is related to food and seeds. Humanity has destroyed nearly the whole planet in only 100 years. Most water is full of chemicals, the sea is full of plastics, everybody recognises climate change. Even organic farms are polluted due to no barriers against neighbours, air and water pollution. But...
If all farmers would use organic seeds, we could easily finance organic plant breeding

Each organic farm supports a better situation by not polluting the soil, water and air. It is clear that the agrochemical approach destroys soil and pollutes water with chemicals, pesticides and anti-biotic. This is very bad for all of us - humans, animals and plants. We have to learn again to use knowledge and observation of nature and we have to learn to love our soil and our farming. This is the chance for small farmers to learn organic farming to get a better output from their work.

Q: What does the statement ‘whoever controls seeds control our lives’ mean in the context of food security and food sovereignty?
A: As I mentioned before, most countries and populations are still dependent on the ten top seed giants. If they stop delivering or their prices go through the roof, then we are left starving. Every country should have its own system of producing in a natural way to maintain their sovereignty in this matter.

Q: In most of your presentations, you have been using this phrase ‘organic food from organic seeds’. Why do you sing this song every now and then, and how do we access these organic seeds?
A: I have been going to organic shops for more than 30 years but it was only five years ago that I learnt that 95 per cent of organic food is produced from conventional seeds. This shocked me and it’s why I decided to act by creating an organic seed company since consumers also need to know this. If all farmers start to use organic seeds, we could easily finance organic plant breeding. But you cannot finance plant breeding if only five per cent of farmers are using organic seeds. Most organic farmers still finance the development of conventional seeds.

Q: What is your take on ‘seed freedom and open source seeds’?
A: It’s interesting how this idea is spread even in the world of seeds. You need to know I worked in the telecoms/IT industry for more than 20 years before I moved to renewable energy and now organic agriculture.

This is what I want to say in relation to this open source idea and seeds: Currently we have competition between conventional and organic seeds. We need high-quality seeds for professional farmers and this is only possible through professional development and plant breeding, all of which costs money.

The open source model is copied from the software industry and is too complicated for normal farmers. Farmers who signs are fixed forever not controlling the development. The real control, which is not possible via Internet like in the software case, could only be done by lawyers which would cause tremendous costs for lawyers. Its the open source models will hinder to spread seeds. The open source model from Germany lead the money flow to the consultants of open source. We should not forget that software is a virtual product. It is mainly a structure and logic. It is neither a physical product nor life. The open source idea in the software area is easy to control and manage because you can do checks worldwide if you need to.

It takes microseconds to check whether computers are using a certain software or not. With physical products it is very different. Is variety A the same as variety B? It takes a lot of effort to check and prove. It can’t be done in microseconds.

I do not believe that if you create many open source contracts you will be able to exert control, only that you will have plenty of labs and lawyers and you will have to pay them all. In addition, we are producing open pollinated seeds and maybe organic hybrids in the future. But we are interested in being transparent and spreading know-how to others. The open source contract is a difficult contract and makes life difficult for a lot of growers. My experience with Iberian farmers is that none of them would go along. It gives the illusion of being safe but the world of seeds is not safe and we need to create a political movement to avoid any patents on seeds and on life.

If we spread the open source contract, people will have the illusion that all is fine and no action is needed.

I have my doubts. The patent rights are very strong and we need a worldwide movement to fight that. Politicians will not accept patents on seeds and on life in principal. We need to get as many plant breeders as possible to create thousands of new seed varieties instead of fighting against Monsanto only.

I believe in positive actions instead of only actions against.

Q: From your experience in the seed industry what advice do you have for farmers who manage their own seeds through the Farmer Managed Seeds System in Africa?
A: Farmer Managed Seed System need to be connected to science and other regions to be prepared of seed development of the environmental changes. One region is not enough to keep the seeds healthy.
By Constantine Akitanda, recently in Meknes, Morocco

The historical background of Organic Agriculture (OA) in Morocco dates back 33 years ago when the Moroccan Association of Organic Production started offering technical assistance to farmers while working with their government to develop strategies for the OA development.

Morocco had a significant horticultural production history and the organic sector grew rapidly since its establishment in 1986. Association of Organic Growers was the first organization to run organic program for the development of the sector in Casablanca. Later it changed to MaghreBIO in Marrakesh and it was finally launched as a foundation mandated to coordinate organic sector in early 90’s. In 2010, Morocco Association of Organic Agriculture (AMABIO) came into being in order to answer the call for the Green Moroccan Plan which was conceived by the government since 2008 as a national strategy for agricultural and rural development.

In April 2011, the government and AMABIO signed a program contract up to 2020 for the development of the organic sector. A program of investment of up to 100 M€ (which is equivalent to USD 11 Million) was signed, to boost the implementation of operations in order to reach various objectives under program contract.

The program contract is based on the development of the research and extension actions, improvement of the conditions of valorization, marketing and promotion for organic products in the domestic market, development and promotion of the export sector and improvement of the professional condition framework.

Lately, the Moroccan Law 03-12 came to shape better the value chains by instructing them to be organized in a professional federation formed by the union of three associations namely production, processing, distribution and export. Then this order of the law gave rise to the formation of the Federation of Moroccan Organic Agriculture (FIMABIO) in June 2nd 2016.

Actually FIMABIO is now recognized by the government as the only representative of the organic sector in Morocco as a result of the favorable opinion issued by the National Commission for the Recognition of Agricultural Interprofessions at its meeting in November 28th 2016.

All these initiatives from the start to the present status have sustained a driving force towards the development of organic sector history along with the other value chains.

Some of the organic crops grown in Morocco.

Moroccan organic agriculture history turns 33 years

In 1986, the first export of organic produces was made successful when organic citrus was exported to Europe for the first time. Further exports of organic products were extended to vegetables, medicinal and aromatic plants and other exotic products.

It then took hardly four to eight years later when organic growers became active due to the immense intensification in the production of fruits and vegetables, which increased from a few hectares in 1990 to over 300 ha in 1999.

In 1998, another category of organic growers came in place, this is no other than Smallholders farmers within cooperatives in the rural and mountainous area. They were assisted by several Non-Governmental Organization (NGOs) to launch marketing operations of organic medicinal and aromatic plants collected in forests.

Argan forest was also subjected to regulatory certification, and the oil is currently marketed as endemic argan oil of Morocco. During the last decade, areas dedicated to organic farming increased significantly, from 8 300 ha in 2003 to 870 000 ha in year 2013 (including argan forest), a growth rate of 54% per annum.

Morocco has some strengths in agricultural production that promote the

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emergence of organic farming. The land and the climate are suitable for the production of off-season products for European markets, also easy access to labor is another strength in the Moroccan agricultural production.

The persistence of traditional agriculture has allowed the conservation of farmers’ expertise on ‘natural’ (low input) production. In all Moroccan regions, especially in the High Atlas, local varieties have been conserved in a dynamic way by farmers since centuries.

Farmers have been able to select varieties resistant to diseases and pests and adapted to local environmental conditions. Self-seeds reproduction on farms has remained predominant in these areas. While organic production in recent years has developed significantly in terms of acreages, production and export, particularly for crops, many constraints remain to stand as a stumbling blocks.

The conversion period from conventional agriculture to organic agriculture which takes two to three years, during which productivity declines and the product is not valued. Moreover, the increase in production costs caused by high costs of certification, currently performed by foreign regulators.

The scarcity of authorized inputs, including bio-pesticides and composts in the domestic market as well as new seeds varieties and plants used in organic farming, this goes along with lack of subsidies for professional entities (farmers, cooperatives…) which could ensure a smooth take-off for the sector.

From the database provided by the inspection and certification bodies operating in Morocco, the current area of organic crops is about 870 000 hectares. This certified organic area is managed by 260 entities (farmers, companies, cooperatives and individuals) throughout the country.

The Moroccan Ministry of Agriculture has developed an organic national regulation (N° 39-12 published in February 2013), in collaboration with AMABIO. Operators (farmers) have until now certified their products through private certification and control bodies (two are currently operating) since no national body was available, but this will now change since implementing decrees relative to the organic national regulation have been published.

The national authority for approving certification bodies is the Moroccan Accreditation Service (SEMAC).

In Morocco, organic cultivated land area comprises about 8046 hectares, while the wild collection certified area is 861 690 hectares with 1 840 hectares in conversion by 2015. The cultivated land comprises only 0.08% of the Moroccan utilized agricultural area (UAU), whereas for the areas of wild collection, organic lands exceeds 9 per cent of the national area. This is well above the world average of 0.9 per cent.

The main national organic products are the argan tree (72%) and AMP (22%), with 94% of the organic UAA. The cultivated area is shared between AMP (21%), carob (16%), olive (13%) and vegetable crops with (12%).

The export-oriented activities generate substantially all revenues of the national organic sector.

In 2013, the export volume reached 10,671 tons. Citrus dominates the exports, mainly ‘Maroc Late’ variety (49%), and zucchini dominates within the vegetables (37%). For processed products, orange juice dominates (38%).

Domestic exports experienced a remarkable growth from 2009 to 2011, with 13 512 tons. Since 2012, the volume has decreased, especially for fresh vegetables. The EU is the main destination market. France, Germany and Switzerland were the first European importers of organic produce from Morocco. France imports almost 90% of citrus and 79% of processed products. Germany is the leading importer of early vegetables with 61% of the volume of this category. At national level, a legal framework was established to regulate the organic sector through the adoption in February 2013 of the law N° 39-12 of organic production of agricultural and aquatic products. The law defines the following key points: The scope and definitions, rules of production, preparation and marketing of organic products, the National Commission for Organic Production (CNPBio), the accreditation of certification bodies of organic products and the labeling requirements.

A joint commission, CNPBio has been created to write, study and give its opinion on the implementing decrees specific to organic plant and animal products. The CNPBio is an advisory entity, composed of members representing government authorities, research sector such as INRA, INRH, ONSSA, EACCE, ADA, ANDZOA… along with FIMABIO, which is the relevant professional organizations such as FIMABIO.

CNPBio will give its opinion on the specifications for organic production, the granting or withdrawal of approvals of regulatory bodies and certification, complaints related to the suspension or revocation of certification and all questions of scientific, technical or legal aspects under the application of the rules on organic production.

The Moroccan government has developed objectives with FIMABIO that aims both to encourage producers to move towards organic production, convert to organic, and to raise awareness among producers and the public in general on the importance of organic farming.

The program contract has scheduled funds for research and development estimated up to 6.25 M € until 2020.
By Hamuud Saleh - Coalition Against GMO’s

In most tropical countries, a significant part of the people’s food and energy requirements is derived from a remarkable diversity of crop plants existing in the wild or under limited cultivation. The fruits, seeds, and leaves of many of these plant resources already form common ingredients in a variety of traditional native dishes for the rural population in developing tropical countries.

Such plant resources, abounding especially in the tropical forests and savanna, are in most cases wild relatives of crops, some with useful characters. Unfortunately, however, most of these indigenous species of food plants in the tropical regions, which have been utilized by native peoples since ancient times, were pushed aside during the colonial era when consumer demands in Europe largely determined the cultivation and research priorities of indigenous or traditional crop plants.

Indigenous food and useful plants in the tropics have suffered neglect, being considered ‘poor people’s food’ and therefore agriculturally unimportant. Nevertheless, local inhabitants still rely heavily on these neglected and lesser-known indigenous forest and wild gathered food crops, especially in times of periodic drought or crop failure and pre-harvest hungry season.

Wild gathered food resources are an important source of variation and complementation, especially with regard to vitamins and minerals, in the diet of rural dwellers in Africa. Tribal people in India have also observed that edible wild plants were prominent in the diets of local tribes during both drought and adequate rainfall in some countries of sub-Saharan Africa, and that their reliance on this wide range of local wild plants facilitated food diversity and drought-related survival strategies. It is also noted that wild edible plants comprised 21% of the estimated volume of the total diet in certain study areas.

Grivetti et al. (1987) reviewed the dietary role of wild plants among some sub-Saharan people and observed a wide diversity of foods and recommended that these underutilized and underexploited wild plants should be considered a research priority within agricultural development programs. Moreover, many of these food plants grow in a much broader spectrum of soil and weather conditions, some even in marginal conditions, and are often highly drought-tolerant. Quite a number of them are now under serious threat of genetic erosion and the danger of total extinction as long as they remain neglected and underutilized.

Local seeds producers

There’s no free lunch out there anymore

Farming started when local communities started collecting, planting and selecting seeds – modifying them to meet their needs in the process. Today’s seed also embodies centuries of knowledge about how to conserve, change, plant and guide it to fruitful expression. Seed is about culture, tradition, spirituality, cooperation and diversity. And finally, seed is about survival, about getting diverse and healthy food on the table every day. If Africa has such a tremendous richness of food crops and other plants, it is thanks to local farming communities collecting, conserving, developing and exchanging seeds for millennia.

Seed is life

But seed is also about control. Ever since the giant corporations started to gain control of the seed market globally, seeds have also been about making money, big time. Uniformity replaced diversity as the standard. Monopoly control based on property rights increasingly took over from sharing as the new system of seed distribution. And seeds have been turned into a global commodity in the service of industrial farming and huge corporations, with short shrift given to local adapting process to the specific methods, ecosystems, and needs of family farms.

Who is controlling our seeds?

The picture often painted for us is that we need corporate seeds to feed the world: they are alleged to be more efficient, productive and predictable. Locally developed farmer varieties are painted as backwards, less-productive and disease-ridden. But those of us with our feet on the ground know that this is not the reality in Africa. Just to start with a sobering fact: the vast bulk of food produced on the continent comes from homegrown farmers’ seeds (some studies put the figure at 80%). If these seeds are so “backward,” what moves farmers to keep preserving and planting them? What benefits do they derive from them? What challenges do they encounter in this effort? How must they be supported so that they can do their work more effectively?

An organization called Alliance for Food Sovereignty in Africa (AFSA) and another nonprofit organization called GRAIN decided to find out. They worked with numerous partner organizations across the continent, many of them involved in local seed diversity activities. AFSA along with many other civil society organizations (CSO) on the continent have adopted the term farmer-managed seed systems (FMSS) to acknowledge certain practices that have been dismissed as ‘informal’ by some.

They proposed a collaborative research project to these CSOs designed to answer these questions, involving interviews with the farmers they work with in order to document their responses. They also asked them to assess the

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policy situation in their country: what policies are being pushed and implemented, by whom, and to what end? What policies are actually needed? This on-the-ground work was complemented by a literature review and further reflections on the subject.

The outcome of these efforts is captured in this report and the six country case studies on which it is based. We think the results are encouraging. There are so many initiatives promoting the diversity of farmer-managed seed, and there is a widespread appreciation of that diversity and the need to nurture it. But we also note worrisome developments. The corporate lobby for industrial seeds, GMOs, and commodity plantations is relentless. Policymakers are often seduced by the grand narrative and propaganda purveyed by these interests. We hope that their report will serve to refocus our collective attention on the real food and seed producers of Africa, and make sure that their needs are met. It is also intended for this report to spur debate on the kind of food system that Africa really needs: one based on diversity, on our own resources and our knowledge? Or one based on uniformity, plantations and foreign corporate control? This report is intended to help us ensure that we proceed down the right road for Africa.

Modern technology and farming practices have no doubt contributed to more than doubling yields of cereals and even tripling the yield of some fruits and vegetables over the last half-century. Topping the list are strawberries with an eight-fold yield increase in productivity since the 1950s.

However, this has been at a huge sacrifice of taste, minerals, vitamins and the complexity of antioxidants. The work of crop breeders and companies manufacturing a wide range of inputs—from fertilizers to pesticides, has delivered yields but at the expense of nutrition density. There is plenty of research data showing that in corn, wheat and soybean, that are ubiquitous in processed foods, the higher the yield, the lower the protein and oil content. The higher the tomato yield, the lower the concentration of vitamin C and the antioxidant lycopene. Grow yellow tomatoes not just for diversity’s sake but for antioxidants such as lycopene. For example, you may read that restricted diet to a few major crops lacked the diversity, therefore the full range of vitamins and minerals. In our documentary Our Seeds film in eleven countries and produced by Seed Savers, there are interviews of isolated Pacific islanders making that very point.

The best diet comes from eating from the home garden grown from locally adapted seeds needing no pesticides to grow, in natural soils, and complementing that with harvests from the wild.

There is a decline in the nutrient-density of fruit and vegetables stems, in part, from the fact that high-yield crops devote energy to producing large fruit, grains or seeds, and put less emphasis on absorbing micronutrients. Faster growing plants that produce larger fruits and vegetables tend to dilute nutrient concentrations, a phenomenon labeled the ‘dilution effect’ by scientists in the early 1980s. Despite impressive increases in crop yields around the world, much of humanity remains malnourished, including the three billion people in poorer nations who suffer from caloric and micronutrient deficiencies, and those in wealthy nations who consume too many calories on a daily basis, yet inadequate levels of several essential nutrients.

As breeders have programmed plants to produce larger tomatoes, shorter-stature wheat with bigger grain heads, and corn that can tolerate closer spacing in the field, these plants have devoted less energy to other factors, like sinking deep roots and generating health-promoting compounds known as phytochemicals, many of which are antioxidants and vitamins.

For a wide range of fruits, vegetables and grains, reducing pesticide use has been shown to boost phytochemical content, sometimes dramatically.

The tradeoff between yield and nutrient level seems to be widespread across crops and regions, as plants partition their limited energy between different goals. Substantial data show that in corn, wheat and soybeans, the higher the yield, the lower the protein and oil content. The higher tomato yields (in terms of harvest weight), the lower the concentration of vitamin C, levels of lycopene (the key antioxidant that makes tomatoes red), and beta-carotene (a vitamin A precursor). High-production dairy cows produce milk that is less concentrated with fat, protein and other nutrition-enhancing components, and are also more vulnerable to a range of metabolic diseases, infections and reproductive problems.

Think of this relationship between yield and nutritional quality as farming’s equivalent of “no free lunch.” That is, higher yields, while desirable, may come with the hidden cost of lower nutritional quality, and in some cases, heightened risk of food safety and animal health problems. High levels of readily available nitrogen tend to reduce nutrient density and the intensity of flavors, and sometimes make crops more vulnerable to pests.

Nutrients in compost, manure, cover crops and other soil amendments tend to be released more slowly in step with crop needs, and often help to boost crop nutrient levels, the efficiency of nutrient uptake, and flavor profiles. Although agriculture has dramatically expanded both the human food supply, and in turn helped increase population, diseases and disorders rooted in nutritional imbalances and deficiencies have lingered.

The Green Revolution, the shift to higher-yielding grain varieties adapted to high-input farming systems in poorer nations that is often credited for averting mass hunger in the 1960s and 1970s, led to a large increase in caloric availability. But increased grain production often came at the expense of more nutritious legumes, root crops, other minor grains, and vegetables, reducing dietary diversity and contributing to widespread micronutrient deficiencies.

In South Asia, for instance, per capita grain consumption increased about 15 percent in the last 40 years, but per capita consumption of legumes has dropped more than 50 percent. A reanalysis of this British government data found “marked reductions” of seven minerals in twenty fruits and twenty vegetables from the 1930s to the 1980s, concluding that “in every sub group of foods investigated there has been a substantial loss in their mineral content.”
A strategic plan to fast-track the scalability of organic agriculture in Zanzibar is in the final stages of preparation and expected to be endorsed this August.

The team working on developing the strategy says a lot has been done so far and the final draft will be tabled in August to be agreed and be launched officially.

Stakeholders from the Zanzibar Ministry of Agriculture and Trade, Zanzibar Trade Cooperation (ZTC) and civil society organizations have for almost one year been involved in the project to make Zanzibar a fully-fledged organic agriculture Island. Commonly known as the Spice Islands, Zanzibar has for a long time been exporting quality exotic spices worldwide, from traditional cloves to cinnamon, cardamom, nutmeg, black pepper and chilies.

An organic agriculture strategy in Zanzibar will also open up opportunities for value addition and processing of by-products such as perfumes, perfumed soap, medication and food processing items, hence boosting trade and businesses within and without.

Zanzibar’s Minister for Trade, Industries and Marketing, Ambassador Amina Salum Ali, said last year that the Zanzibar Revolutionary Government planned to come up with policies, strategies and programs which would influence and enhance rapid growth of organic agriculture in the Isles with the aim of advancing trade and tourism in the archipelago.

“Zanzibar needed to act right away, without further delay. If we continue to dilly-dally it will take us too long and we shall have to toil a lot,” the minister told AfrONet Newsletter in an interview at the Julius Nyerere International Airport (JNIA) on her return from Biofach, a prominent world organic exhibition held in Nuremberg, Germany from February 14-18, 2018. The organic exhibition trip for Zanzibar policy makers was facilitated and financed by the Tanzania Organic Agriculture Movement (TOAM) through Ecological Organic Agriculture Initiatives (EOA-I) and OTEA.

Organic Agriculture
taking a new form in Zanzibar

Some organic spices grown in Zanzibar as was found in the marketplace

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estimated that 10 per cent of the population was afflicted, and unfortunately, things are getting progressively worse. A survey only two years later showed that numbers had risen to 25 per cent in chimpanzees and 17 per cent in baboons.

After ruling out common tropical diseases like yaws, scientists began to wonder if pesticides used in nearby farms may be the culprit. While they couldn’t test on the animals themselves due to the fact that they’re protected, researchers gathered data on the food that the primates typically eat: seeds and stems. Soil samples from surrounding fields, river sediments, and fish were also tested.

Almost every sample they tested had higher levels of a controversial insecticide than was legally authorized.

The insecticide, chlorpyrifos, has been in use since the 1960s. The chemical causes death by ‘overexciting’ the nervous system of insects. In high doses, it does the same to mammals.

The EPA has been fighting for a ban of the toxin for decades, citing developmental problems in babies and children. It was on track to be banned, however new EPA Administrator Scott Pruitt denied the proposed ban when he took office.

The L.A. Times reported, ‘Pruitt announced his decision to deny a petition to ban Dow’s chlorpyrifos pesticide from being sprayed on food even though a review by his agency’s scientists concluded that ingesting even minuscule amounts of the chemical can interfere with the brain development of fetuses and infants.”

Not only did the team discover chlorpyrifos in the samples; they also found DDT, a deadly insecticide that has been banned in the United States for decades.

Scientists concluded that the most likely cause of the deformities was the consumption of high levels of the insecticides in the region. One author of the study, Colin Chapman, expressed concern for both chimps and humans alike: “If the chimpanzees are getting this mostly from runoff and eating a little bit of the seeds and crops, what about all of the people?”

https://www.youtube.com/watch?v=5ungSzbs4_U
Organic agriculture takes centre stage in AU Agenda 2063

By Constantine Akitanda, recently in Saly Portudal, Senegal

Ecological Organic Agriculture (EOA) is a major component of the African Union’s Agenda 2063 with regard to enhancement of food security and sustainable development.

The first ten-year strategic plan, which was adopted by the African Union Summit in June 2015 as part of the 50-year horizon, embodies the Ecological Organic Agriculture Initiative (EOA-I) which is geared towards people-driven development relying on the potential of organic agricultural systems.

EOA-I is a response to the landmark decision by African leaders to renew interest and commitment to support agriculture generally and organic farming in particular. The pilot stage of implementation of the initiative started in 2012/2013 and covers Kenya, Ethiopia, Uganda and Tanzania in Eastern Africa and Mali, Nigeria, Benin and Senegal in West Africa under different funding arrangements.

The intention is to roll out EOA practices in more African countries during this five-year Action Plan. EOA practices are well grounded and have global recognition. For example, the Convention on Biological Diversity (CBD, 2001) recognizing the importance of traditional knowledge in the conservation and sustainable use of agricultural biodiversity.

The UN Environmental Program (UNEP) also recognizes the vital role of biocultural diversity in sustainable development. Ecological agriculture fosters biodiversity and is in itself resilient to impacts of climate change (Ensor, 2009). It depends on and sustains ecosystem services as well as the knowledge, practices and innovation of local communities, leading to more reliable and increased food security and incomes.

However, while it is true that the organic agriculture initiative has achieved tremendous growth over the past few years, there are challenges that need to be addressed in order to realize the full potential of EOA. The obvious absence of enabling national policies is the most pressing challenge that the initiative should address in its overall goal.

The lack of enabling policy is identified as the biggest obstacle hindering African governments to develop sustainable, resilient, and productive farming systems.

Other challenges include inadequate institutional capacity, insufficient coordination and networking among stakeholders, inadequate awareness and information on EOA practices, limited research that focuses on organic agriculture, poor linkages between industry and research institutions, and insufficient financial resources to execute EOA strategies.

Ecological Organic Agriculture is a holistic system that sustains the health of ecosystems and relies on functional cycles adapted to local conditions, rather than the use of synthetic inputs which have adverse effects on human, animal, plant and environmental health.

As Africa continues to face the challenge of feeding its rapidly growing population in a contaminated and quickly deteriorating biodiversity and worsening effects of climate change, agroecology brings in dimensions of agricultural practices that guarantee sustainability. This continental initiative, which holds a significant promise for increasing the productivity of Africa’s smallholder farmers, with consequent positive impact on food security, was discussed at the fourth African Organic Conference (AOC) held in Saly Portudal, Senegal, recently.

Jonathan Nyarko Ocran, policy officer with the African Union Commission, said the conference theme ‘Ecological and Organic Strategies for viable Continental and National Development in the Context of the African Union’s Agenda 2063’ was consistent with the AU’s aspirations.

“This framework is the blueprint for Africa’s development over the next 50 years. Currently, the first 10-year plan (2013–2023) of this development agenda is being implemented to create the Africa we want,” he said. He pointed out that Africa’s immense potential in organic agriculture needs to be effectively harnessed so that it can help curb poverty, improve food and nutrition security, enhance biodiversity and mitigate environmental degradation.

It is estimated that there are over 1.7 million hectares of certified organic agricultural land in Africa (Willer and Lernoud, 2017). This constitutes about three per cent of the world’s organic agricultural land.

Ocran said it was in recognition of the great potential for organic agriculture that African leaders called for the establishment of an African organic farming steering committee. African Organic Network (AfrONet) president Jordan Gama told the conference that the EOA initiative values are grounded in the reality of sustainable agricultural practices.

“We do not support at all agricultural practices that promote the use of genetically modified and engineered inputs,” he said.

AOC is an initiative of the African Organic Network (AfrONet).

It is convened every three years as a stakeholders’ platform for sharing knowledge, experience and views on various issues of concern in organic and ecological agriculture.
EOA goes upwards in EA

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agriculture latest international trends.

The EOA-I Eastern Africa Regional Secretariat organized a regional forum for indigenous certification bodies of Eastern Africa in August 2018 in Nairobi, Kenya. The forum deliberated on ways of strengthening the work of regional indigenous bodies in organic certification, strategies on awareness creation and key requirement for setting Certification Bodies Operations in the region.

In addition, participants shared their experiences in certification and local model certification (Participatory Guarantee System (PGS)). Participants were also brought up to speed on the progress of revising East Africa Organic Products Standards (EAOPS) and inputs collated for incorporation and consideration as well as understanding on key criteria for approval of organic inputs. Seven participants were supported to attend the 4th Africa Organic Conference in November 2018 in Saly Senegal. The participants comprised the three Eastern Africa Organic Champions who were declared during the last Africa Organic Conference in Nigeria in 2015, two farmers, the PELUM Kenya Country Coordinator and the Coordinator for the Eastern Africa Regional Secretariat.

The participants were exposed to the potential of organic agriculture in transformation of national and continental economy through income growth, climate change adaptation, food sovereignty and trade. The participants had an opportunity to share their knowledge, information, experiences and skills with other stakeholders in the organic sector.

Bi-annual RSC meetings are normally organized twice a year.

The committee consists of 18 members representing the National Organic Agriculture Movements (NOAMS), National Steering Committees (NSCs), Government representatives, Lead Coordinating Organizations and Gender Representatives.

The discussions focus is mainly on the progress updates of EOA in the region, strategies of bringing East Africa Community (EAC) on board, fundraising initiatives for the region and key challenges and recommendations for the region.

Agroecology success stories and directory for EOA actors in the region were published and shared among all partners in the region. The success stories describe how Agroecology has transformed lives of farmers in the region.

In addition to that, PELUM Kenya supported 12 youth and women farmers from six Eastern Africa countries - namely Kenya, Uganda, Tanzania, Rwanda, Burundi and Ethiopia – on a field visit to Rwanda.

The visit was hosted by the Rwanda Organic Agriculture Movement (ROAM). The main purpose of the visit was to sensitize and expose Youth and Women Entrepreneurs from East Africa on best practices in Ecological Organic Agriculture Innovations.

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Principle of Equity: Ecological organic agriculture should build relationships of equity in relation to the common environment and the opportunities of life.

Precautionary Principle: Ecological organic agriculture should be conducted in a prudent and responsible manner to protect the health and well-being of current and future generations and the environment.

Ecological organic agriculture is an innovative way of designing production systems that rely on the functionality offered by ecosystems. It amplifies them while aiming at reducing the pressures on the environment (e.g. reducing greenhouse gas emissions, limiting as much as possible the use of synthetic fertilizers and phytosanitary products) and preserving natural resources like water, energy, mineral elements. It is a question of making maximum use of nature as a factor of production by maintaining its renewal capacities.

Ecological organic agriculture is an agricultural system that focuses on the rational management of natural resources (use, conservation, renewal of soil, water, forests, biomass, fish and animal resources). It seeks to collaborate with nature, instead of trying to dominate it.

Organic ecological agriculture encourages a strong intensification of the biological processes of agricultural systems, combined with a good diversification of plant and animal productions. In organic ecological agriculture, the role of biodiversity as a factor of production is also strengthened or restored.

Ecological organic agriculture adopts a systemic approach in the plot, in the family farm and at the terroir level. Ecological organic agriculture relies on the traditional knowledge of populations, but is also enriched with modern technologies and technologies that limit external inputs including polluting and harmful chemical inputs.

Instead of fertilizers and synthetic chemical pesticides, organic ecological agriculture uses all renewable energies and biodegradable materials available in the environment, for soil fertilization and uses natural and integrated pest control. It develops the biodiversity and allows the farmers to put on the market, at any period of the year, vegetable and animal productions at profitable and fair prices.

Ecological organic farming is centered on the family farm which is a set of production system composed of various elements in permanent relationship: the family group, the natural resources on which the family acts, the agricultural equipment, the other factors of production, non-agricultural activities, the transmission of values (ethics, solidarity, work culture, etc.).

Ecological organic farming is therefore a sustainable family farming which is a powerful means of use and intensification of the labor force, hence of jobs in rural areas and the fight against poverty.

The limits of intensive production methods based on chemical inputs are real. Alternative agriculture is needed because unsustainable development does not benefit anyone or any country. Models of agricultural alternatives exist and aim at enhancing the productive potential of ecosystems. To promote them requires political will, commitment to research, and strong
A look at Ecological Organic Agriculture as an alternative to conventional agriculture

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photosynthetic activity.

Other advantages involve mineralization of organic matter which becomes slower and enhances maintenance of soil fertility and diversity which leads to a better use of water.

Soil fertility management is more effective with fallows, crop rotations, the combination of crops (like legumes and cereals), agriculture-livestock integration and the use of organic manure for soil fertility.

The natural and mechanical fight against pests preserves the environment and health, the natural conservation and the use of seed varieties adapted to the ecological conditions of the environment secures overall production.

In addition, farmers’ seeds contribute to the preservation of biodiversity and finally the production costs are lower and products are of a better quality, etc.

The peasant farming methods were based on the “possibilities and constraints of the environment”, but also on the possibilities and constraints of the farmers.

Traditional systems of agricultural production made responsible and sustainable use of natural resources (soils, vegetation, light, water, nutrients, biomass, etc.). Harvests were guaranteed and the risk of loss was reduced to a minimum. Traditional agricultural systems also had a strong cultural concept based on norms and customs, social hierarchies, solidarity economy (mutual aid and solidarity systems, fair prices, etc.).

But peasant agriculture was quickly affected by the wind of “modernity” and the market economy, which gradually made it lose its cultural foundations and good farming practices that are concerned with sustainability.

Conventional (modern) agriculture is characterized by its focus on only one aspect of the agricultural system, namely increasing the productivity and production of a given species through the massive use of chemical inputs.

Colonization introduced monocultures of commercial speculation (peanuts, cotton).

Post-independence agricultural policies have reinforced this logic and developed harnessed culture and chemical inputs.

The current agricultural policies are part of the same conventional agricultural logic underpinned by the liberalization of the world economy and trade policies that are not conducive to the preservation of our productive resources. All this has led to a massive destruction of our forest resources, land degradation, water pollution from chemical inputs.

Some foreign Journalists documenting successes of organic agriculture in Senegal

Man develops at the expense of nature and this is not sustainable. Paradoxically, man knows that he cannot live without nature, without its resources. Modern agriculture has shown its limits enough to feed people while preserving their health and productive resources for future generations.

A multisectoral, holistic approach is needed, and Ecological Organic Agriculture is an initiative that brings the dimensions of sustainability, biodiversity and undisturbed ecosystems to agriculture while producing food for people.

Ecological organic agriculture is the relevant alternative of sustainable development to face the current challenges of food and nutritional security, adaptation to climate change, fairness in trade relations and social cohesion. Sustainable development implies the right of use but also the duty to foresee future users. Its implication is the transition from the exploitation of natural resources to the management of natural resources. The peasant movement is aware of this and is committed to promoting this form of agriculture.

Ecological organic agriculture is an improved and affordable way to produce good quality agricultural products in harmony with nature. It combines traditional best production practices with modern sustainable farming methods. Ecological organic farming is defined as “a set of agricultural practices that respect the ecological equilibrium and the autonomy of farmers”.

The originality of organic farming is the use of cultural and livestock practices that care about natural balances. Across the world, only 12 per cent of agricultural land is currently being exploited environmentally.

Ecological organic agriculture is a new way of thinking about agriculture. Ecological organic agriculture focuses on the intensification of biological processes whereas current agriculture is based on the intensification of factors of production.

Ecological organic agriculture adopts the principles of organic agriculture which is based on the following principles:

Principle of Health: Ecological organic agriculture should support and improve the health of soils, plants, animals, humans and the planet as one and indivisible.

Principle of Ecology: Ecological organic agriculture should be based on living ecological cycles and systems, agreeing with them, imitating them and helping them to maintain...
EOA goes upwards in East Africa – PELUM Kenya

By Naanyu Manei, PELUM Kenya

The Ecological Organic Agriculture (EOA) Initiative was born out of a resolution by the African Union Heads of State and Governments during the 18th Ordinary Session held on 24-28 January 2011 to support organic agriculture in the African continent.

The regional secretariat was formed to operate and coordinate the EOAI function in the region. The Eastern Africa Regional Secretariat is based at PELUM Kenya which was an interim host from 2012-2017 after which the Regional Steering Committee endorsed it to be the host for five more years 2017-2021.

The Eastern Africa Regional Secretariat operates in Kenya, Uganda, Tanzania, Ethiopia and Rwanda with ongoing efforts to bring on board Burundi and South Sudan.

Some of the achievements of the EOA-I are seen through BIOFACH which serves as a trade fair that brings together various organic stakeholders to display and share ideas on organic produce and products thus exposing participants to enormous opportunities that exist in the organic sector especially in organic marketing and trade.

For a while now, BIOFACH has continued to serve as an avenue for organic traders to expand their market base through showcasing their various organic products and also serve to motivate participants to increase their efforts in pushing for Organic Agriculture recognition in the world.

The secretariat has been supporting various participants from 2017 to date to attend the annual BIOFACH International Trade Fair in Nuremberg, Germany with the main aim of exposing them to organic traders from the international organic market and be motivated by the organic

A look at Ecological Organic Agriculture as an alternative to conventional agriculture

By Ibrahima Seck, Senegal

The logic behind peasant farming is the best argument in favour of ecological organic agriculture. This argument is based on a farming system originally intended for a long-term equilibrium of multi-storied agriculture in which there was a strong synergy between plant and animal speculation. The cultural structure was associative using a diversity of species with different perennial or semi-perennial, seasonal or multi-seasonal characteristics.

A farmer could produce a variety of crops throughout the year without depleting the soil or destroying forest resources. Peasant agriculture has several ecological, economic and social advantages which include defence against the erosive impact of the first rains, permanent occupation of the soil which favors a decrease of high temperatures, reduced water evaporation and a more important active biomass resulting in a more effective