New four varieties of 'high oleic' sunflower Hybrid seeds in the offing

THE Great African Food Company (GAFCo) Chief Executive Officer Sherrie Woodring recognises Salome Mpongoliana as an outstanding farmer for her highest integrity. With her, is the Simanjiro District Commissioner, Zephania Chaula who graced the Farmer's Field Day held recently in Langai village, Manyara region.

By DAILY NEWS Reporter

SUNFLOWER sub sector represents one of the key sectors of agriculture industry in Tanzania and is the most important vegetable oil with high value and on international markets.

However, Current oil seed productivity is below the internationally reported yields and below the achievable potential for the crops. Tanzania imports 60 per cent of edible oil requirements despite having vast and promising production potential in the sunflower sub sector, according to Bank of Tanzania report, 2017.The production potential is missed as the national average yield is 0.6 tonnes compared to potential yield of 2.0 to 3.0 tonnes per acre.

Thanks to the Agricultural Markets Development Trust (AMDT), the programme that is keen to improvingsunflower seed varieties and production practices that could result in significant increase in production, productivity, offer employment opportunities and return to labour and capital to smallholder farmers in the country.

To achieve this, established by the Governments of Denmark, Ireland and Sweden, (AMDT) facilitates the private sector to invest in supplying improved seed varieties, while also encouraging the public sector through responsible research institutes to invest in developing the breeding capacity for new Hybrid seed varieties in the longer term.

Through AMDT grant, the Quality Food Products (QFP) is working with Ilonga Agricultural Research Institute to conduct two year-field trials that upon completion will see the release and multiplication of new four High Oleic Sunflower hybrid varietiesin the country.

This will give farmers option of hybrid seeds and more access since the new seeds will add to other two sunflower company's hybrid seeds, Bytrade(Hyssun) and Sunflower Development Company's seeds that have recently entered the market and already showing good results.

"Then we will go through a national performance test in the third year with TOSCI, and our objective is to take four varieties across four locations in Tanzania that represents various altitude, climate differences and conditions in growing, so that after these seeds get released we can offer the seeds to our sunflower farmers so that they can have high quality seeds," said Sherrie Woodring, the QFP's Chief Executive Officer.

Currently most famers use local or open -pollinated varieties that do not have high oil content about 15-20 per cent oil percentage only, but the new seeds will have up to 35-42 per cent oil content that is important because now farmers will get more income.

"If you look at the current market price, sunflower farmers get about 500Tsh/kg, but with the new varieties we will be able to offer up to 850sh/kg because we know our seeds will have high oil content upon processing and because of that we will be able to sell in the market.

The other aspect is that the processors will get more oil and more heathier cake for the animal feeds than that obtained using local seeds," she added.

The support from the government for this programme with AMDT has been very good, the Ministry of Agriculture has been very patient with us, as we release these four varieties in the market they are allowing us to produce these varieties as well so that we are able to build the export market now, we don't have to wait for years from now," she told this paper.

Also, the government is supporting the company with storage facilities around areas where commercial hubs are established to avoid any post-harvest losses of sunflower as the company does collection. Other areas that the companywas working with the government is mechanization services, where by tax makes company' services very expensive to farmers that inhibit farmers' ability to grow and take advantage of the services.

"We are also working on irrigation so that sunflower farmers can do rotational farming with other high value crops under irrigation. It is our hope we will continue to get all level government support So as we can be able to build a sustainable programme that the community can embrace, and other players can later adapt and crowd-in," said Woodring.

Speaking on the progress of the evaluation of the high oleic sunflower hybrid seeds trials, Researcher and Head of Department (oil seed crops), Frank Reuben from Ilonga Agricultural ResearchInstitute said the trials were progressing well, where by almost 100 per cent of germination successful in Milundikwa (Rukwa) with plant vigor very promising caused by right planting timing, while other sites experienced some germination challenges due to heavy rainfall and that they had to repeat planting.

"Data collection is in progress for testing crop maturity and other scientific factors during the Month of May and early June. But we have observed better performance than our (opv) varieties in terms of early maturity, yield, diseases, pests' resistance and drought tolerance. We are yet to conclude other data analysis such as oil content," he said.

ARI Ilonga hosted QFP to conduct trial inspection in Hombolo and Makupupora in Dodoma, Ukiriguru in Mwanza, Tumbi in Tabora and Milundikwa in Rukwa. The research institution Ilonga facilitates the planting of the new high oleic four hybrids namely; Michel, Archeo, Ancilla and Soleado at all trial locations.

The field trials test how all four varieties respond to different land preparation techniques, different inputs (chemicals/fertilizers, etc.) and new protocols.

High oleic sunflower varieties give oil that has a very neutral taste and are more stable at high heat, so they are less likely to produce harmful compounds during cooking and they fetch premium prices in global market for pharmaceuticalindustry.

The Great African Food Company (GAFCo) and Quality Food Products (QFP) in collaboration with their 3 in 1 partners, World Vison Tanzania and VisionFund Tanzania under the support of Agricultural Markets Development Trust (AMDT) are implanting a project that seeks to increasing farming income through use of technology (sunflower hybrid seeds), financial services, good agricultural practices, business ethics and quality inputs.

In the first quarter, this year, about 2,173 farmers were targeted for loans and insurance to smallholder farmers growing sunflower value chain in Kigoma (Kakonko), Kagera (Missenyi), Simiyu (Maswa), Rukwa (Kalambo&Sumbawanga), Manyara (Babati&Simanjiro), Arusha (Karatu&Longido).

Through 3 in 1 partnership Vision Fund provides seasonal loans for purchasing seeds, inputs, and mechanized services, as well savings products that encourage financial stewardship. World vison mobilizes farmers and trains them in business and household financial literacy and is adapting its acclaimed mind-set change approach to instill the values of personal initiative and business ethics in farmers and community leaders.

On the other hand, QFP, owned by the GAFCo, a for profit, social impact business whose purpose is to uplift children out of poverty by improving the capacity of smallholder and mid-scale farmers to high value crops for global markets. The company exports high quality pulse seeds, and vegetable oils, while empowering and enabling smallholder farmers to move from subsistence farming to farming as a business.

"Contract farming with QFP has made me regain my respect in the community because I have a reliable market for my produce. I can now afford education for my children. Through it, am also able to improve my other income generating activities," said Salome Mpongoliana, a farmer at Narakauwo village, Simanjiro district at Farmer's Field Day that was held recently.

It employs over 150 full-time employees and creates 1-2 on/off farm jobs for every acre of cultivation. In the current season, GAFCo's contracted farmers will produce on 38,000 acres over 130 varieties of beans, sunflower and safflower oilseeds, as well as other specialty crops. GAFCo enables farmers to grow their businesses by facilitating access to financial services for inputs, providing extension and logistical services to 12 commercial hubs, offering land preparation, precision planting, spraying and harvesting services.

The crops such as sunflower is used as both human food and animal feed. The major problem for animal feed industry is the shortage of oil seedcake and the poor quality of some available seedcake.

It is envisaged that the improved performance of the edible oil industry, as the result of implementation of the developing hybrid seed projects, will increase availability of the seeds, edible oil, and seed cake to a level that will satisfy the demand of the vegetable oil industry. A serious problem for many private oil millers is a shortage of raw materials that makes the production viable.

Some schools have very strange problems

By SOSTHENES MWITA

ONE of the worst omens in primary and secondary education include lack of school feeding. Some schools of thought believe that hunger often affects the concentration of children in the classroom. Hungry children often doze off or simply get disillusioned.

The Magufuli administration is aware of this anomaly and is already working on it. The common suggestion, however, among stakeholders in education is that parents should give their young school goers small amounts of money for buying food or sweets.

When hunger strikes in any communal setting, it is often the children who suffer most. It is imperative to mention here that school feeding should be restored especially in rural primary and secondary schools especially where students cover huge distances on foot going to school and back home.

Certainly, hungry students hardly listen to their teachers. A survey made in yesteryears showed that apart from whetting the appetite for learning, school feeding improves school attendance and cuts back on the drop-out rate. Students hardly grasp the gist of their lessons with the pangs of hunger and thirst raging.

So, stinging hunger and thirst affect the concentration of children in the classroom. As mentioned before, hungry children often doze off or simply get badly disillusioned and disoriented.

Yet the nation expects excellent academic performance from them! Schooling children must be accorded the best all-round attention.

It is during these early school stages that future professional brains are groomed. These must be accorded the best care, grooming and academic supervision. This initiative also entails excellent school feeding. The nation cannot expect to have excellent future doctors, architects, soldiers, teachers, journalists, politicians and others who have full potential if their educational start is this erratic.

Psychologists believe that an intelligent brain lost during childhood is an intellectual firebrand lost forever. So, we cannot expect to see brilliant brains emanating from primary schools where pupils study in mud huts. Some of the children who fail to make it at school normally return to their families and try to help out in household chores or other work. Unfortunately, however, join the ranks of hoodlums who sow mayhem in the streets or in villages.

So, some destitute children go out of their way to become budding criminals. Historically, adult outlaws are known to have committed crimes for many centuries. Unfortunately, modern society sees an increase in criminal acts committed by children.

One school of thought, however, asserts that children are not criminals by nature. But the plight of disadvantaged children who live on the mean streets without legal means to earn a living drives them into the criminal underworld.

Some of these unfortunate children are neglected orphans who miss parental supervision. A number of street boys in cities and municipalities, who eat from garbage cans and sleep in the dank alleys, find descent living near-impossible.

Some get so disillusioned that they lose hope. They say that life is not worth living. Many of these souls are, actually, former school pupils who failed to make the grade to a more prestigious level. Reasons for their predicament may include school or State poverty.

Some of these delinquent children may have been brought up by parents who have no respect for the rule of law or who are criminals themselves. It is natural that children who grow up in a family of outlaws, without any adult role model, are likely to consider criminal activity as an acceptable way of living.

PUPILS seated in the heat of the sun in the absence of a classroom.

Recent history, unfortunately, has seen various communal settings caring less for their children. In Tanzania, today, wealthy families are rarely concerned about the children of other people.

Clearly, this is a departure from the traditional African culture that requires that care for all children be a responsibility of every member of the society. In towns and cities the once closely-knit extended family is now fragmented. In some places it has ceased to exist.

What we now see is a proliferation of fragile families that live acrimoniously and single parent households, many of which are headed by women or older children. This situation cannot be allowed to escalate. Children need better grooming, protection and education.

Last year it came to light that the parents of kindergarten pupils in a remote village in Longido District have agreed to hire a young Maasai morani to teach their young kids at a monthly "salary" of a "mbalelo" (a young male goat).

The teacher, a young man who has graduated from the youth group to the more respectable morani, lives in Kitumbeine division of Longido District in Arusha Region. The teacher with a difference conducts his kindergarten lessons in Gilaibomba village.

The children take their lessons in the shade of a tree every day. This sounds like fiction in a short story book but it is, indeed, true. Mwalimu Tipiliti Kileli Mollel, as the young Maasai morani is known to his pupils and their parents, is a rare gem indeed.

In rural Tanzania, however, scenes like this one are not uncommon. They are not incredible or laughable. The introduction of free education from Standard One to Form four a few years ago has received a lot of accolades nationwide.

It is a brilliant initiative that has been unveiled by the Fifth Phase Government under President John Magufuli. But there is a kink in this initiative. The nation does not have enough schools. There are too few teachers.

Some schools do not have desks, learning and teaching materials; and as if this is not bad enough most rural schools do not have running water and toilets. The abolition of school fees, consequently, has prompted parents to take their school age children for enrollment, a situation that has overstretched the intake capacity of most primary schools. The same predicament has also overstretched school resources.

Majimatitu Primary School in Temeke District, for example, is a case in point. Here, the number of registered newcomers virtually overwhelmed the school. Some of the pupils sat under the canopies of trees due to a critical shortage of classrooms.

There is absolutely nothing wrong in registering all school age children for primary school education. But the going is a bit rugged and rough. The Fifth Phase Government should step in and see how this nasty kink in a highly brilliant initiative will be eliminated.

There are so many critically needy schools in this country. A few years ago, the National Assembly was told that pupils at Kamukola and Ruzila primary schools in Kagera region learned in despicably filthy conditions.

They sat on stones in grass-thatched mud huts which got smelly and dank during the rainy season. The huts were also infested with insects, some of which were notorious in biting the children and their teacher. Certainly, this was, and still is, not an ideal learning environment even for a primary school child.