Climate Action CESTIVE COLUMN 2020



Chief of staff of Nigeria SON, Mr. Richard Agu opening up the round table discussions on technical committee meeting on draft Nigerian Industrial Standards on Tomato and Tomato products

resilient, globally competitive Nigeria, creating enterprise opportunities for all, ensuring there is food in every home and more money in more pockets. All across the continent share in this vision of a globally competitive country and Africa, and Nigeria's actions will drive this vision, as it is of much interest to them. **Economic growth is fundamental to Nigeria as any hitch** in the economy is felt by every sector of the economy, ministry and departments in the country. There is therefore a need for urgency to safeguard and enhance economic growth through maximizing on the tomato value chain using climate resilient actions.

Standards Organization of Nigeria+ (SON) operationalising climate + action Market Incentives for accelerating SDG's - Sustainable + Production +



Richard Munang Regional Climate Change Coordinator UNEP, Africa Office



One does not need to search hard to realise that Africa is the region that risks failing to achieve the SDGs – with minimal progress and stagnation in the worst cases. The continent is blessed with 65% of the worlds arable land. Yet over 257 million of the people sleep hungry every day. Children, who would otherwise grow to exercise their talents & gifts to build the continent die before their fifth birthday – all because of lack of food. The economies of the continent are 20times less productive than other competitors in the global space.

Each year, over 12 million of the youth enter the labour market to compete for just 3 million jobs. In Nigeria, nearly 25% of the general population is unemployed, 20% is underemployed and over 50% of youth aged 15 – 35 years are without work. While the situation is dire, climate change – threatens to compound it further, by shrinking incomes in Africa by a massive 75%. Nigeria, Africa's largest economy is the 55th most vulnerable country to climate change and 22nd least ready. Overarchingly, climate change is projected to cost 6 – 30% of Nigeria's GDP by 2050, translating to

\$100 billion – \$460 billion in losses. This is an existential threat to the realisation of the SDGs. And if no action is done with speed to rectify these gaping anomalies, this decade of action will be futile and the SDGs will forever remain a lost opportunity.

Across Africa, Nigeria, and Nasarawa, must leverage what they have internally, to accelerate realisation of the SDGs. And climate action, which is SDG 13, this offers an excellent platform to do this. This is the premise of the work that is already underway in Nasarawa – through the patronage of his royal highness – the Emir of Nasarawa. It is this progress that brings hope to further buttress and build on, as they work join with the office of his excellency the governor, whose passion and commitment to see the SDGs achieved in Nasarawa is as clear as day. The approach is that strategically applying climate action solutions of clean energy and Ecosystems Based Adaptation approaches (EBA), to climate proof and maximise productivity of the food systems offers the shortest route to actualising multiple SDGs simultaneously.

Strategy is to apply climate action of clean energy using decentralization of clean energy solutions, to add value to agriculture - the most inclusive sector in Africa, Nigeria and Nasarawa - where up to 90% of Nasawarans draw a livelihood from, including the women who produce most of the food

Leveraging local manpower, skills, talents, knowhow and ongoing work to develop enterprises ecosystem based agriculture (EBA) using clean energy is the shortest route to realising multiple SDGs. Studies show, that using EBA approaches like agro-forestry, mulching, organic fertiliser etc., to grow food, not only enhanced the food resource base – the critical ecosystem services like pollinators – which are needed for growth of up to 75% of human food, healthy soils, water etc., but it increases yields by up to 128% under the changing climate. This contributes directly to SDG 2 on food security, and SDG 15 on protecting ecosystems.

The World Bank also reports that in Africa, a 10% increase in crop yields translates to approximately a 7% reduction in poverty and agriculture growth is two to four times more effective in reducing poverty than growth any other sector. So, these yield increases directly contribute to combat poverty among or farmers – SDG 1. And considering women produce up to 80% of the food, it will enhance earnings for women, towards enhancing gender equality & women empowerment – SDG 5.

Decentralising clean energy solutions to reverse postharvest losses that cost the continent up to \$48billion annually, can create up to 17million jobs along the entire value chain while catalysing an agro-sector worth \$1trillion by close of this decade in 2030. This incentivises investment in

clean energy – SDG 7, creates higher order jobs – SDG 8, reverses losses to enhances resource efficiency – SDG 12 and achieves all this without piling emissions or destroying ecosystems – SDG 13.

With such vibrant economic growth, enough income is generated for healthcare and education towards meeting SDGs 3 & 4, as well as infrastructure development – SDG 9. Furthermore, domestic clean energy options like fuel briquettes, will go a long way to reducing indoor pollution currently costing over \$200billion per year in medical liabilities across the country.



Display of tomato dryers to demonstrate their effectiveness and sharing of best farming practises by Nigeria innovative volunteerism actors

The global organic food market is growing at a compounded rate of 14% each year. Nigeria can strengthen its comparative advantage in the growing futuristic market.





A group photo of dignitaries at the Nasarawa state house, UNEP climate change coordinator for Africa, Dr. Richard Munang (centre in blue) standing next to Emir of Nasarawa Ibrahim Usman Djibril with next to him on the right being the Deputy governor of Nasarawa Dr. Emmanuel Akabe









Top Left ,discussion on operationalizing Nigeria agro value chain at SON offices, top right demonstration of cassava solar dryers having been fabricated by innovative volunteerism volunteers in Nigeria, bottom left is Dr Richard Munang UNEP's climate change coordinator for Africa giving a press interview, finally bottom right is the display of various cassava products inside a solar dryer by innovative volunteerism actor showcasing tot he Emir of Nasarawa

solar dryers have revolutionised the way tomato, pepper, vegetable and cassava farmers view market days. While previously, end of market days meant counting losses, where a large basket of tomato could be sold for as little as 20Naira, because the seller fears what is left over will rot, with solar driers, farmers have nothing to fear. Tomato or vegetable that is unsold at the end of the market day is simply solar dried and converted to dried tomato or dried vegetables, as an alternative product line. With this solution, papaya, cassava, tomato farmers are charging up to 30 times more for their dried produce in the off season which could not sell during peak seasons as a result of glut.

And unlike open sun-drying, use of the solar dryer does the job of drying faster – up to 48times faster, and more efficiently and hygienically as produce is not soiled by dust, animal droppings and other debris. The result being a quality dried product that fetches more in the market. The dryers are capable of dehydrating cassava and other food stuff to below 10% moisture content. A much lower threshold than the 12% needed to prevent aflatoxin attacks on cassava. The right threshold needed to preserve tomato in tropical climates like Nigeria.

At the moment, the firm focus is on adding value to cassava – which is Nasarawa's gold. It is the only crop, that can be

processed into over 300 products, including delicious ready to eat snacks that can be sold to markets and individual consumers across the country. In addition, even during harsh weather and with less water as climate change already causes, cassava is the only crop where losses are lowest – just 8%, compared to 20% and more for other traditional staples in the continent.

Projections show that the solar drier applied to cassava, will preserve cassava to prevent losses in times of glut. These dryers as part of a system of cassava value addition in driving the cassava bread policy implementation will create hundreds of thousands of employment opportunities – about 260,000 in cassava farming, over 40,000 in processing of high-quality cassava flour, and about 3000 in manufacturing equipment like the solar driers. These are reserved estimates – for flour only. If we consider the 300 diverse products that cassava can be processed into, and factoring in a multiplier effect of just 2, translates to over 600,000 jobs excluding in transportation and bread improvers value chains.

Through the above actions, comprehensive empirical, real time data and information on key bottle necks that policy should address will be made available. And by this, refine the relevance of policy processes towards accelerating realisation of the SDGs



This is a very clear potential for success for Nigeria agro value chain to drive the fabrication and product development that will unlock the climate, social, economic and enterprise benefits of cassava and tomato value chain in Nigeria, this will make the country a shining example in Africa, of how climate action policies can ensure there is better standards in the agro value chain through standardization and thus also improves revenues for government.

Register to become an Innovative volunteerism actor at : Registration link (Click) Join our continental platform of agro-industry actors and fill your GAP at : Registration link to join MeBAFOSA (Click)

