# Climate Action DIGEST

ISSUE 7 / APRIL 2020


Technical committee at the Uganda National Bureau of Standards (UNBS) in a meeting discussing the standards and compliance strategy for cassava agro value chain

## TECHNICAL COMMITTEE MEETING WITH THE UGANDA NATIONAL BUREAU OF STANDARDS (UNBS) FOR ADOPTION OF THE CLIMATE ACTION MARKET INCENTIVES GUIDE FOR CASSAVA VALUE CHAIN AGRO INDUSTRIALIZATION

The urgency to climate proof Uganda's producers and economy is unquestionable. The urgent importance to ensure Uganda's gallant fight against climate change, simultaneously accelerates realisation of priority socioeconomic needs is as clear as day. The need to ensure there is food in every home, more money in more pockets, jobs for our youths, and a globally competitive economy is cardinal. These are priorities already eloquently captured in the vision 2040 and the Uganda National Development Plans 3 ,It is with these thoughts, that Uganda is developing theclimate action market incentives guide. A guide to ensure benchmarks offered by UNBS address the opportunities and threats presented by climate change.

# Accelerating adoption of the Market Incentives guide for Uganda cassava value chain through the Uganda National Bureau of Standards (UNBS)

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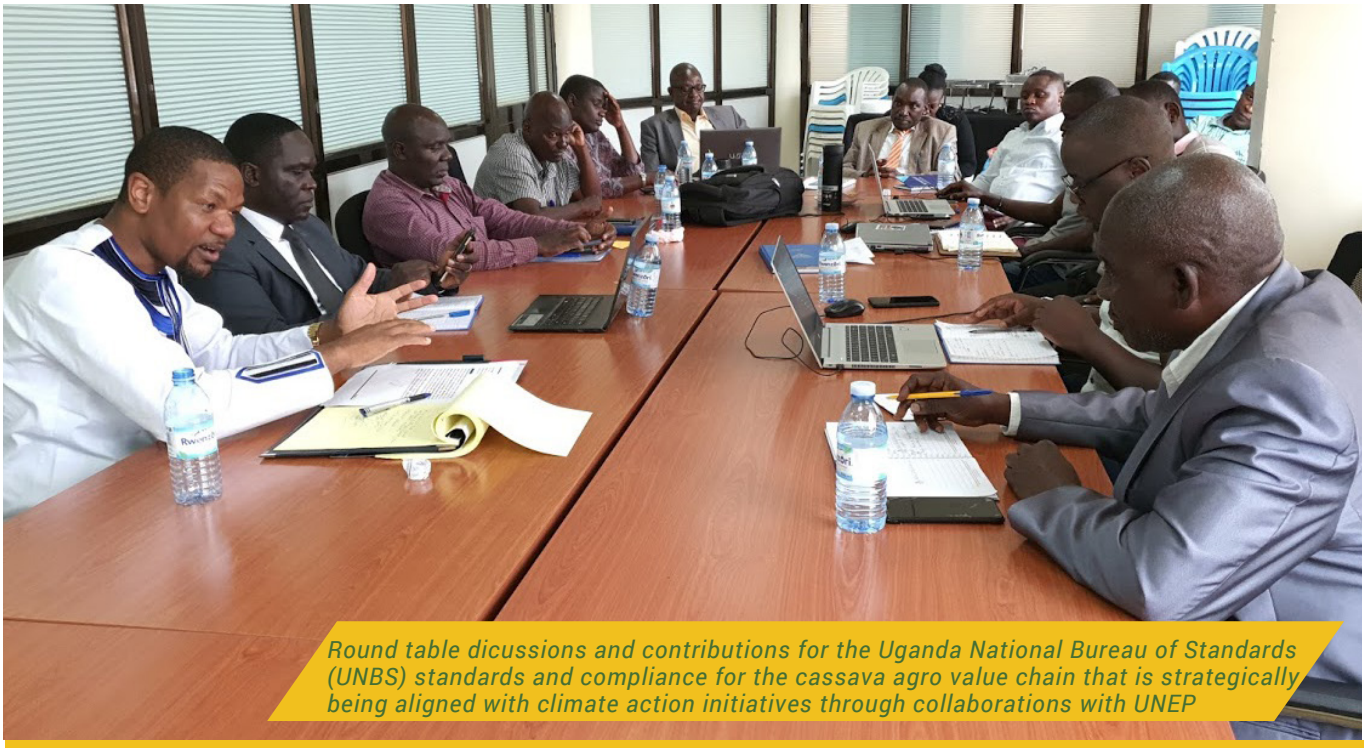

*Round table dicussions and contributions for the Uganda National Bureau of Standards (UNBS) standards and compliance for the cassava agro value chain that is strategically being aligned with climate action initiatives through collaborations with UNEP*

The seriousness of climate change to Uganda is clear for all. While Uganda contributes between 0.02 – 0.10% of global emissions, a negligible amount by all accounts, it stands out for its vulnerability. Uganda is rated as highly vulnerable, with a low readiness. The country is ranked the 15th most vulnerable and 49th least ready country. Nowhere are these impacts more profound than in the economic front. Between 2 – 4% of Uganda's GDP is depleted each year because of climate change. Without remedial actions, Uganda is set to lose up to $5 billion per year in the next 10 years. In the agriculture sector, which up to 70% of the population depends on, increasing extreme events are costing the sector over $40 million in crop damage alone. On average, 800,000 ha of crops are destroyed each year by climate change related effects.

This happens in a sector that creates livelihoods for 79% of households. Statistics show that for every three Ugandans lifted out of poverty, two fall back. In addition, youth account for 60% of the unemployed and 700,000 young people join the labour market every year. These sobering realities of the threat of climate change to Uganda's economy made clear, that unless Uganda climate proof productive systems, then the losses would only continue. And the role of standards benchmarks comes into focus.

Every sector and department of the economy engages to ultimately safeguard and enhance the economic bottom line of a country. With the clear threat of climate change on Uganda's economy, two fundamental questions are raised.. The first was, how can Uganda build climate resilience? The second was, given the climate emergency, what is the shortest route to significantly climate proof productivity of Uganda's economy? And the third was, what statutory mechanism, could be used, to ensure climate proofing solutions, can be infused into all sectors of the economy? To the first question, the answer was by accelerating socioeconomic growth. Uganda as the rest of the continent is a negligible emitter. The primary source of vulnerability is the inability of communities to afford alternative goods and services they need to buffer against the worse of the changing climate..

**Climate change stands out as a critical issue of our time, because it threatens to disrupt the entire economic systems. At the same time, addressing it strategically offers the timely rewards of accelerated socioeconomic growth. It is with these thoughts, that Uganda set forth on the noble task of developing the market incentives guide**

For example, East Africa is battling the worst locust attack in 70 years – as a result of climate change. Where extreme rainfall – as high as 400% more rains in October – December last year, created conducive environment for exponential breeding of these insects. The level of devastation these insects are capable of is unbelievable. Just imagine, in a region where nearly 20 million people already face high food insecurity, one large swarm of these insects can destroy cropland, the size of 250 football fields. Just one swarm. Without the ability of these communities to afford to harvest at the earliest warning of an attack, and preserve their harvest, they will simply starve. Without the ability of these communities to afford to buy food when their farms are attacked, they will starve. This lay bare, the need for thriving pockets to build real resilience in our communities.

To the second question, the answer is by targeting sectors that hold three distinctive qualities - economically inclusive; sectors in which Uganda holds a comparative advantage; and sectors which can ensure Uganda drives both socioeconomic priorities and climate aims simultaneously. Accordingly, triangulating Uganda's climate and socioeconomic priorities, as captured in the NDCs, the vision 2040, and its derivative – the 3rd, National Development Plan, leads to two key sectors – clean energy and sustainable agriculture.

To the third question, the UNBS is the best placed operational agency, that can infuse sector-wide climate proofing. This is because it holds the statutory mandate of guiding actors, on acceptable standards and approaches for productive, enterprise actions in every sector of the economy. It is such productive actions that are the fabric of the economy. Hence climate proofing them amounts to climate-proofing the economy.

A cassava farmer demonstrating the use of solar dryer in drying her cassava using a locally fabricated solar dryer by EBAFOSA Uganda innovative volunteerism volunteers actors

> **"A guide to ensure, that implementation of Uganda's national standards, contributes to climate proofing key catalytic sectors of Uganda's economy."**

An innovative volunteerism actor demonstrates how to chip cassava using a chipper for drying the cassava using solar dryers showcasing no pollution from the process




**Top Left ,an image of a solar dryer drying cassava in an open field. Top right innovative volunteerism actors from Uganda EBAFOSA demonstrating the process of fabricating the solar dryers. Bottom left is Dr Richard Munang UNEP's climate change coordinator for Africa examining the process of the solar dryers fabrication. Bottom right , the view of the inside of a solar dryer as it dries cassava peelings.**

Studies show that commercialisation of the cassava value chain, has potential to recoup up to $300million in import substitution with wheat. Cassava is the second most important staple crop in Uganda farmed by over 70% of the population – making it economically inclusive. Adding value to this – through leveraging accessible technologies like solar dryers - is recorded as capable of increasing incomes by 50 – 80% at the farm gate level. Beyond the farm-gate, solar-dryer powered value addition is an opportunity to increase production of quality value added products like cassava flour up to 200times.

Value addition is recorded capable of creating livelihoods for over 6 million of Uganda's youth under 25years, who can tap income opportunities through creating market, supply and production opportunities along the value chain. It is an opportunity to enhance profitability across various confectionary enterprises. For example, biscuit manufacturers in Uganda can save over $130,000 each year by substituting 35% of wheat flour with cassava flour. Rural bakeries, that consume about 2/3 of wheat in Uganda, can reduce raw material costs by 25%, by substituting wheat flour with high quality cassava flour. All these socioeconomic benefits are realised along climate resilient benefit. Where cassava being a resilient crop, has the lowest failure risk under harsh climate – just 8% - compared to the nearest challenges which is at 20%.

Investing to maximise the cassava value chain therefore offers an opportunity for the country to accelerate realisation of its socioeconomic aims while meeting its climate objectives. The Climate Action Market Incentive guide serves to leverage these exact opportunities. But to operationalise it, calls for a systems approach. Where operational level enterprise actions that drive this paradigm, are leveraged to provide much needed empirical data. Then this data is feedback as practical evidence to coherently recalibrate policies across key sectors – including planning & finance, agriculture, environment, among others. All towards ensuring these polices provide coherent incentives packages, that will catalyse more operational level investments in impactful enterprises that will drive Uganda's climate and socioeconomic priorities.

The decentralisation of solar dryers to power preservation and primary processing of cassava into varied products is the key ground action Uganda is banking on. Accordingly, youth are being structurally guided and mentored under the EBAFOSA Uganda incubation structure to develop and continuously improve solar dryer designs that are applicable to the current user base – the farmers. Through a series of iterations, they have developed solar dryers proving to be 48times faster at drying raw cassava.

The solar dryers dries the cassava to the recommended moisture content of 12% or less. A level which is critical to making high quality cassava flour. The dryers have also been made using locally available material to make them up to 200% cheaper than imported dryers. By this, enhance their affordability and usability. Unlike open sun-drying, use of the solar dryer does the job of drying faster, more efficiently and hygienically as produce is not soiled by dust, animal droppings and other debris that is a challenge with open sun drying. The result being a quality dried product that fetches more in the market. In addition, the target is health, climate, environment and quality conscious consumer niche markets. These are growing with increased linkage of what people eat and their health.

Fabricating the dryers using locally available material and leveraging locally available manpower is proving key to cutting costs. Second, the structure of financing these dryers is also being actively established leveraging on cooperatives, who's structure is well established to drive an Innovative Financing structure for cassava farmers and youth. The Buganda Kingdom PEWOSA cooperative has been leverage using a risk sharing de-risking instrument to support Cassava farmers and youth leverage and tap into the opportunities in the cassava Value chain using this Market Incentive Guide. With the dryers, earnings are improved by a projected 150%, Postharvest Losses (PHLs) cut by up to 30% and more income opportunities created for those who fabricate the dryers. This is the approach being established and already ongoing and will be generating empirical lessons and data that can be use to influence policy.

**Decentralising** solar dryers to the cassava farmers and augmenting this with affordability and structured financing. Such that they dehydrate their cassava to prevent spoilage and make alternative product lines that will earn them more. And by this, also create enterprise opportunities for youth who will engage in fabricating affordable solar dryers with locally available material. By this, there will be high level priorities if NDCs, NDP3 and the vision 2040, being actualised using what the country already has. This Climate Action Market Incentive Guide provide the system thinking approach to climate proof and accelerate realisation of development priorities – food for every household, a job for every youth, more money in more pockets. And do so building on what Uganda already has.

*A demonstration of how solar dryers drying cassava during the ground action exhibition which was facilitated by EBAFOSA Uganda.*

*Group photo of various actors in the cassava agro value chain posing behind a just fabricated solar dryer to be used for cassava drying and preservation together with PEWOSA for innovative financing*

This is a very clear potential for success for Uganda socioeconomic advances to drive practical action that will unlock the climate, social, economic and enterprise benefits of various social enterprises in Uganda through market incentives policies and how climate action policies can ensure there is better standards in social enterprises and thus also improves quality of life.

**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)**

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