

## Cassava: Food Crop to Commercial Cash Crop through Value Addition, Research and Development (R&D)



*Inset: Workers at a Good Practice Centre (GPC) prepare cassava tubers for processing<sup>i</sup>*

The importance of cassava in Ghana cannot be denied. Apart from being the main ingredient of daily staple food enjoyed in many Ghanaian households - fufu, akple, to some extent gari, Cassava has undoubtedly proven itself to be a resilient and food security crop, though regarded by many to be a reserve crop for the poor. It has commendable abilities to resist many diseases, can grow well in relatively infertile lands and can endure the harshest of weather conditions (droughts and flooding which are common characteristics in Ghana's geographical landscape) and still thrive.

In consideration of all the plethora of qualities and prospects the cassava plant presents, different establishments have come up with various programmes which particularly focus on improving the outputs, value addition, incomes and living standards of subsistence farmers in the country. One of such programmes, The Root and Tuber Improvement and Marketing Programme (RTIMP), was introduced in 2007 and wrapped up in 2014. The programme was funded by the International Fund for Agricultural Development (IFAD) and the Government of Ghana (GoG). RTIMP was an upgrade of the Root and Tuber Improvement Programme (RTIP) which was implemented over 1995 to 2005 and sought to develop crop production through research and extension. The programme aimed to build competitive and market-based root and tuber commodity chains (gari, yam, plywood cassava flour and high quality cassava flour) which are supported by relevant, effective and sustainable services that are easily accessible to the rural poor<sup>ii</sup>. Processing and marketing were main emphasis of RTIMP. The goal of the programme was to enhance income and food security through strengthening root and tuber based livelihoods of small scale farmers and processors with special attention to women and youth.

I was part of the Participatory Development Associates (PDA) Ltd core research team which recently conducted the national impact evaluation of the RTIMP. Travelling through several impoverished

communities across regions and interacting with various root and tuber stakeholders broadened my, hitherto, myopic perception of the enormous potential of cassava and its ability to create job opportunities for citizens in the country. For each value-added end product of cassava developed, and approved by authorities, came along a different supply chain activities, actors and beneficiaries –elderly and young, male and female, literate and illiterate. Conversely, for each value-added end product hindered, either through licensing constraints - costly and cumbersome procedures and requirements – by Ghana Standard Authority and Food and drugs Board, or limited marketing opportunities blocked potential job opportunities. All the same, value addition to the fresh produce had really made impressive impacts, albeit.

One striking observation from the impact evaluation experience was the need to thoroughly consider, as a nation, and invest in enhanced Research and Development (R&D) for alternate uses of cassava and possible market avenues. As with all industries in developed countries', R&D plays a pivotal role in economic growth and development. If we, as a nation, are determined to aggressively impact the lives of smallholder farmers in our rural communities, then the clarion call for a more enhanced and improved cassava end products should compel us to go beyond the conventional processing of fresh cassava into gari, chips, and 'agbelima' (cassava dough) -which are more common than the cost intensive beer brewing, High Quality Cassava Flour (HQCF) and Plywood Cassava Flour (PCF) - to more diverse and enhanced value-added end products.

Other developing countries such as China and Brazil have explored and extended uses of cassava as a source of ethanol for transport fuel, industrial alcohol, pellets for animal feed, cassava flour which is gluten-free, starch for cosmetic and pharmaceutical industries, and the list goes on and on. All these advancements are strongly attributed to R&D. It will be of interest to our government to know that some of these countries are currently importing cassava chips from Ghana on large scales to feed their industries!

Ghana should also take a cue from Malaysia, the largest producer and exporter of palm oil in the world. The country has established a research institute mainly for palm oil - Palm Oil Research Institute of Malaysia (PORIM). The establishment is mainly funded from a research tax levied on palm oil millers. Through this establishment's findings and other complementing policy structures, they have been able to increase production and processing efficiency, generate and disseminate information to relevant industries for commercialization, and expand uses of palm oil and oil palm plant in general<sup>iiii</sup>! The most remarkable thing about Malaysia's advancement in the oil palm sector is that Malaysia was the first country to initiate planting and processing of oil palm on large scale. This feat necessitated that they become creative and innovative with regards to their technology and policies to facilitate the development process. All this was achieved through rigorous R&D.

A promising angle of the story is that through RTIMP's intervention, farmers all over the country have been sensitised to a point where they appreciate the importance of growing cassava on commercial basis. This has reflected in an increase in production of cassava nationwide regardless of the limited market options available that has been a glitch in the programme. To complete the process however, it would be prudent to capitalise on farmers' willingness to grow the crop on a large scale and create more diversified avenues and markets to absorb the excess production hence creating more income and job opportunities for the majority. This can be achieved when emphasis is placed on R&D and complementing policies are tailored to match implementation processes to help small farmers commercialise.

Rome was not built in a day and so it is understandable to expect the transformational process to be a bit slow. However, we need to ensure that we are on course in grasping and internalizing the long term vision which will bear fruits in its season.

I dare to believe with a few, that this “reserve crop for the poor”, with enhanced R&D backing and effective marketing systems, can and will one day overtake cocoa as the major cash crop of our nation and be a major source of employment for many.

**By Kobby Optson**

**Project Officer at PDA,**

**Team Leader of the "Middle Belt Team" during the RTIMP PIALA Impact Evaluation**

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<sup>i</sup> [http://mofa.gov.gh/site/?page\\_id=1379](http://mofa.gov.gh/site/?page_id=1379)

<sup>ii</sup> [http://mofa.gov.gh/site/?page\\_id=715](http://mofa.gov.gh/site/?page_id=715)

<sup>iii</sup> <http://tcdc2.undp.org/GSSDAcademy/SIE/Docs/Vol5/Oil.pdf>



*Inset: The author interacting with some cassava farmers after an interview session.*