

Policy brief on the Use of root and tuber crops for global downturn, poverty reduction and food security in African, Caribbean and Pacific countries

Executive summary

The recent global economic downturn has shown that consuming tropical root crops (TRCs) can have a critical role for feeding populations in ACP countries, preserving foreign exchange and supports the desire by all governments to have balanced budgets. The increased use of RTC's provides great opportunities for long-term poverty alleviation and food security much more than any other staple foods produced in the African, Caribbean and Pacific regions. This necessitates the development of the RT industry which would help to improve yields, quality, production systems, farm gate prices, transport, marketing, storage and processing systems. Recommendations for achieving the above include food reserve policy, funding for appropriate food support, organizational changes, greater investment in basic research and commercialization, strengthening of regional scientific networks, increased resource allocation to roots and tubers research

Context

Root and tuber crops (Cassava, Sweet potato, Yam, Aroids, and Potato etc.) are increasingly becoming important in the food systems of the ACP countries and overall are a component of the diet for 2 billion people in developing countries (Scot et al., 2000). The world production of cassava is 228mt, sweet potatoes 126mt, yams 52mt, taro and other aroids 12mt, and potatoes 322mt. The world production of tropical root crop (TRC) has steadily increased from 688mt in 2001 to 740mt in 2007 (FAOSTAT, 2008). The volume of production and large amount of contribution to kilojoules and nutrition per unit area that come from root and tuber crops make them a viable panacea to poverty alleviation and food security in ACP³. However, there is the need for more support and funding to TRC research.

Significant improvement has been achieved on production of root and tuber crops in ACP, but rather than focusing almost entirely on production issues, research should also explore better processing technologies and marketing techniques with a view to helping farmers increase their incomes, improve quality of life, nutrition and sustained food security.

Substantive amount of research has been done on increasing yields and producing disease resistant varieties. Outputs from these efforts are yet to be fully adopted by ACP farmers at food security and commercial level. Also, there has been little attention to the value addition of TRC.

There is thus, the need for pragmatic national and regional policy frameworks and implementation strategies, to really decipher what role root and tuber crops should play in the ACP agricultural sector with a view to maximizing their potential for poverty reduction and food security within the ACPs.

Better information channels for knowledge-sharing between researchers, farmers, processors, entrepreneurs and policy makers throughout ACP would help disseminate new ideas concerning a multitude of issues such as the costs and benefits of production, choices faced by farmers, what varieties to plant, when to harvest, how long to store, where and how to market, etc., so that all concerned can make better and informed decisions. This in turn would provide farmers, processors, primary and secondary investors with new

opportunities to increase their incomes and hence help alleviate poverty.

This policy brief therefore is a cursory overview of the potentials of root and tuber crops towards achieving food security and poverty alleviation in ACP. It is also intended to make policy recommendations to governmental agencies and all stakeholders in the root and tuber research, cultivation, utilization of root and tuber crops for poverty alleviation and food security in ACP.

A brief highlight of the food security and poverty situation in ACP

Food is the most basic of human needs and is central to the concept of human rights and social development. Food security refers to access by all people, at all times, to enough affordable and appropriate food to provide the energy and nutrients needed to maintain an active and healthy life.

Food insecurity therefore depicts uncertain access to enough and appropriate foods in the right quantity and quality. There are several definitions of poverty but minimum of 1 USD per day measure is now the most widely used index of poverty. Poverty leads to a miserable life, crime and other outcomes that work together to retard productivity and economic development. Food insecurity is basically a problem of poverty, affecting those social groups with the weakest or most fragile food entitlements, both in terms of access to social networks and safety nets or productive assets (capital, land, and other inputs).

ACP countries have a population of around 1 billion and account for 26 percent of undernourished population of the world, with 200 million people in sub-Saharan Africa and 8 million in the Caribbean (Jakob *et al.*, 2004, FAO). The 2002 report of least developed countries by

UNCTAD⁴ defines generalized poverty as “a situation in which a major part of the population lives at or below income levels sufficient to meet their basic needs and in which the available resources in the economy, even when equally distributed, are barely sufficient to cater for the basic needs of the population on a sustainable basis” (UNCTAD 2002, p. 39). The low-income per capita figures in ACP are suggestive of widespread or generalized poverty. Fast rate of population growth, depressed economy, natural disaster, political instability and world food conflicts are potential problems to achieving food security and poverty alleviation in the ACPs.

As population increases in these areas more and more TRC would need to be produced for both on-farm consumption and for sale in local markets for urban consumption. Cereal has been a competitor to TRC but now in some trouble creating more opportunity for RTCs. Rising real incomes in the western world are diverting cereal production into animal feed to convert to beef, poultry and pork thereby reducing availability of cereals for direct human consumption. Relative to cereals TRC are expected to take on a greater burden in supplying world’s basic foods (basically carbohydrates and bulk in the diet), especially in the tropical and sub-tropical regions of Africa, central and South America, Asia and the South Pacific Island Countries (Chandra, 2010).

Global economic downturn has shown that being dependent on local foods is critical for preserving foreign exchange and the desire by all governments to have balanced budgets, if possible. Many countries were impacted by the Global Financial Crisis and became heavily indebted by stimulus packages thereby eroding the ability of governments to meet recurrent expenditures and undertake long-term investments in critical human development sectors such as health, education, housing, infrastructure, etc. Many TRC producing/consuming countries would have been in a worst situation with the impact of the GFC if it wasn’t for the TRC.

Role of Root and Tuber Crops in achieving food security and poverty reduction in ACP

In ACP countries, root and tuber crops contribute to income and nutrition of a large majority of the population especially the resource poor rural farmers and village processors. Root and tuber crops act as insurance crops and provide safety shields for hunger and natural disaster within the region⁵. For instance, in Sierra-Leone, when it was safe to return to the villages during the devastating war, Sierra Leoneans did not find cereals, but found cassava waiting for them. Such stories are repeated everywhere in ACP especially by countries seeking economic drivers. When Ghana's President was looking for an economic driver, he chose cassava. When Nigeria's President was looking for a stimulus to agriculture, he launched a Presidential Initiative on Cassava (PIC). The Caribbean found best utilization of RTCs in the diversification programs as an option for food and nutrition security while in the Pacific (Chandra, 2010); RTCs have been used for self sufficiency policies by several governments. The initiatives are because of recent world food crisis.

The overall growth in the production of root and tuber crops in ACP, compared to cereals also depicts the strategic position and importance of root and tuber crops to poverty alleviation and food security in ACP. Hence, the potentials of root and tuber crops as commercial commodities and strong drivers of economic growth in ACP will remain a great challenge to researchers, investors and policy makers for some years to come. Experts are concerned on the inconsistency of policy makers in terms of uninterrupted economic growth using RTCs.

Roots and tubers will continue to play a significant role in ACP country food systems because they:

- i. contribute to the energy and nutrition requirements of more than 50% of the ACP people;
- ii. are produced and consumed by many of the ACP's poorest households;
- iii. are an important source of employment and income in rural, and often marginal areas, especially for women, and
- iv. adapt to a wide range of uses, from food-security crops to cash crops, raw material for industrial uses, and from fresh to high-end processed products.

Urbanization creates opportunities for greater production and consumption of TRC in many situations. Urbanization can help improve TRC yields, quality, production systems, farm gate prices, transport and marketing, storage and processing systems, etc. Negative influences can be increase in TRC prices for consumers, change in diet towards other foods such as cereals, loss of farm labour to urban and often higher paid jobs, etc.

The commercial value and contribution of root and tuber crops to household food security and poverty alleviation has long been recognized in parts of Latin America and Asia, but is not yet widely appreciated in ACPs. However, the extent of the contributions of root and tuber crops in achieving food security and alleviating problems of hunger, poverty and socio-economic development in ACP will greatly depend on research choices scientists make and resource allocation decisions by governments and donors on commodity priorities. To date, the disproportionate allocation by several governments and donors of resources for cereals research (compared to root and tuber crops), given its secondary importance in ACP, is difficult to justify.

Policy Recommendations

Roots and tubers provide great opportunities for long-term poverty alleviation and food security more than any other staple foods produced in the ACP. For us to fully explore the potentials of root and tuber crops in poverty alleviation and food security, the following policy recommendations are put forward as a challenge for all stakeholders:

1. Each of the ACP countries should develop a Food Reserve policy which is aimed at ensuring food security, guaranteeing food and industrial raw materials and providing employment opportunities for the rural labour force. This would stimulate roots and tubers production, processing and eventual commercialization.
2. Formation of a regional network of scientists involved in roots and tubers research will help boost access to scientific data and discoveries on the potentials of root and tuber crops in achieving food security and poverty alleviation within ACP region and beyond.
3. Investors/donors have and continue to allocate a disproportionate amount of resource to cereals research. For ACP to fully exploit the potentials of roots and tubers for poverty alleviation and food security, resource allocation to roots and tubers research and commercialization should be greatly increased.
4. In the absence of any major increases in external sources of support and limited resources, there is need to emphasize a greater reliance on internal strengths and squeeze more immediate solutions out of science. We can do the latter by fully appreciating that we do have choices even with the limited funding for science and that the choices we make have implications on how much or how little impact we have on poverty.
5. Markets cannot work without regulation. Root and tuber crops markets are marred by oligopolies and oligopsonies – both buyers and sellers are key points along the value chain and can manage prices to their advantage, at the expense of both producers and consumers. The past 20 years of trade and investment deregulation has allowed private companies to expand their control over global food and agriculture at the expense of public policy goals such as ensuring the universal human right to food. There is an important role for the public sector in oversight and regulation, and in some cases, in supplying services the private sector has declined or unable to provide.
6. Globalization notwithstanding, governments of ACP countries should promulgate laws to empower local products from roots and tubers as well as industries involved in local transformation of roots and tubers to value added products. Commercialization of roots and tubers production and processing will improve the incomes of more people.
7. Supplementing the risk-management efforts of the poor farmers and processors by government and investors is a vital strategy to economic growth since their ability to respond to risks is limited. Some of these risks associated with roots and tubers commercialization include biological, commercial, natural disasters, and political instability.
8. Infrastructure is very limiting as are market information systems in many ACP countries. Improved health and education services, better roads and rural transport infrastructure, improved housing, and better access to utilities will assist in the use of roots and tubers for poverty alleviation because of their potentials to increased employment opportunities.

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