

THE ROLE OF AGRICULTURAL INNOVATION IN CREATING FOOD SECURITY FOR AFRICA

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ARTICLE

Poverty and hunger are on the rise in Africa despite its abundant land mass and quite a large farming population. Africa still has a high population of poor and hungry citizens, who suffer from food insecurity, malnutrition and chronic hunger. Agriculture being the backbone of most developing economies in Africa holds pregnant solutions to food insecurity and a spectrum of deficiency diseases affecting Africa. The sustenance, growth, development and productivity of man depends on what he eats. In order to meet the ever increasing population of Africa. However this potential has not been tapped enough to make it rise to the occasion of commercialized agriculture that can provide employment, continuously and adequately feed Africans and nurture economic growth in the individual countries. To see this in print we need combined efforts between large and small scale farmers, government and educational institutions to provide thinking minds and dedicated personnel's to act as movers of change. The farmers must convert the farming activities into enterprises worth investments of money, time and energy. This is unlike the garden-to-mouth philosophy that is not only a disgrace to a growing economy but also an injection of poverty to the society. The government needs to make policies that will not only support agriculture but also gets directly involved in it through parastatals. Subsidized, fertilizers, pesticides and buying produce from farmers can offer

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direct support while policies supporting climate change and environmental consciousness, rural development and artificial irrigation can support indirectly. Educational institutions should promote research projects related to agriculture from students for capacity building in rural areas and take their students for academic trips to food processing companies to set them on fire of innovation. According to statistics released by FAO, a child dies every second from hunger. 14% of green house gases come from agriculture and 74% of this is brought by developing countries, where most of our African economies lie. This necessitates the need to be conscious of our environment and fast conversion of words to deeds, from the boardroom to the field.

Food security in Africa is a point of concern for the world at large. In Africa the case is no different, with most of her population living in adverse poverty; access to safe and healthy food is just but a dream. Compared to other continents, Africa is lacking behind in terms of reaching its full potential in agricultural output which is in dire need to nurture its ever growing population. It is this state that has pushed stakeholders in the agriculture value chain to come out and find lasting solutions. Market information has been identified as critical point in spearheading the campaign for a food secure Africa. For



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a while now, research has focused solely on production and therefore farmers produce good quality, up to standard produce but lack avenues to trade. It is with this mind that innovations on market information were developed. These innovations not only seek to provide farmers and stakeholders with essential information but also empower the farmer to trade and compete both regional and global market as we cannot ignore the fact that agriculture is the engine for economical development in Africa. The use of ICT's has enabled farmers to access information on the market prices ,market patterns as well as weather patterns to enable them make informed decisions. E-agriculture has given farmers the opportunity to trade in the foreign market and make an income therefore

act as an incentive. The major challenges faced are the fact that innovation needs a certain level of educational background and technological expertise yet most of the rural farmers are illiterates. This makes it difficult for these innovations to be adopted and beneficial. This dilemma calls on the government to support the private sector and NGO's through offering public education programmers, to help educate and train farmers on the use of modern machines.

Sixty (60) percent of the farming populations in Africa are small scale farmers, with very few agricultural graduates ready to explore the sector. Such, agricultural innovations play major role in the sector, they will also

provide jobs for the rising population of the continent. We can transform our Arid and Semi-Arid Lands (ASALs) into our main production zones by not depending on rain fed agriculture but irrigating our farms. This will provide adequate food for us and feeds for our animals that will give us manure for organic farming

thereby reciprocal benefits. Africa is endowed with lakes, dams and rivers to support this but people in immediate environment die of hunger. Reclaiming our land by the government is another step of along the journey. Production alone is not enough. We need food processing companies near these farms to bring the youth to rural areas and closer to the farms that will rejuvenate the spirit of agriculture from old and rigid people to young

innovative and aggressive minds that can elevate the food security on the continent and reduce antisocial crimes and solve problems related to rural-urban migration. Food scientist and technologists in these companies will complete the chain of production by processing the produce to finished products to avoid post-harvest wastage and ensure continuous supply throughout the country .The excess will be exported to earn our countries substantial foreign currencies to increase our net factor incomes and lead to positive balance of payments. With the new technological advancement, education and incentive systems in our individual countries. Farmers should be empowered to form groups or co-operatives as this will be the easiest

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way to find financial support and to have good produce. Post harvesting technology should be reinforced so that the production will be conserved for a long time. The government policy should encourage banks to feel free to give loans to farming groups or co-operatives so that the investment would be high, hence production. Insurance companies should start to insure agricultural activities as disasters and climatic conditions might affect crops and even damage some.

Agricultural approaches like ICT's could provide new opportunities for making agriculture more interesting and attractive for young people resulting in the boost

of agricultural productivity. Through media, youth can be excited about some of agricultural technologies; hence the automatic recruitment of more young people into the sector. Post harvest losses, land and animal resource mismanagement, high food prices and low technology are all barriers to food security in Africa. With technological innovations, African can put an end to hunger if they work closely with policy makers.



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