



Council of Governors



CHANGING THE FORTUNES FOR POTATO FARMERS IN NYANDARUA COUNTY

County	Nyandarua		
Sector	Agriculture	Sub-sector/ Theme	Crops
Key Words	Technology, Irish potatoes, agribusiness, Nyandarua		
Target Audience	Governors; county governments; departments of agriculture, trade and marketing;		
Resource Persons and Contacts	Daniel Muchiri, County Crops Production Officer and Anthony Kamau, County M&E Officer, Nyandarua County		

Context and Challenge

By 2018, Nyandarua County had a projected population of 712,596 persons, based on a 2% annual growth rate from 596,300 people recorded in the 2009 Kenya National Census (CIDP, 2017¹). It is estimated that the population will hit 771,336 persons by 2022, and that about 69% of the population will be below 30 years of age. Agriculture and trade are the backbone of Nyandarua's economy – because of fertile soils and favourable climate, Nyandarua is considered a food basket for Kenya due to high production of potatoes, cabbages, carrots, peas and milk. A vast majority of its population are farmers (approximately 100,000 farm families), who are engaged in the production of Irish potatoes. However, the potential of crop agriculture to uplift families and contribute to the county economy is undermined by a host of issues that include poor marketing of farm products, post-harvest losses, over reliance on rain-fed agriculture and lack of diversification of crop farming. Irish potato farming in particular has faced several challenges that undermine the farmers' ability to benefit from it. These challenges include the following:

- i. Low productivity, attributed to poor access to good quality seeds, seed recycling leading to a decrease in seed quality and low potato yields; inadequate usage of fertilizers, declining soil fertility and high prevalence of pests as well as crop diseases.
- ii. Dismally low farm-gate prices, especially during the peak harvesting season when there is glut occasioned by over-supply. This leads to farmer exploitation by traders and middlemen.
- iii. High cost of production due to high costs of labour and inputs, and inadequate use of mechanization.

¹ Nyandarua County Integrated Development Plan 2017-2022.

Response and Action

To address these challenges, the County Government has committed to revolutionizing Irish potato farming and marketing and developed strategies to address the plight of the farmers. Included in both the Governor's Manifesto and the 2017-2022 CIDP is a commitment to re-establish agriculture as the dominant component of the Nyandarua County Economy; to invest in value addition and agribusiness, and to build a strong distribution system with warehousing and cold chain facilities for Irish potatoes and other horticultural products. To promote Irish potato farming, the county government put in place the following:

- a) *Improving farmers' access to quality seeds and improved varieties of potato:* The County Government has put up a potato tissue culture laboratory, to ensure rapid production of quality seed materials. Through the laboratory, the county was able to introduce new varieties of potato seeds to suit different growing seasons, including short-season varieties that will be in the market within 90 days of planting, and varieties that have short dormancy periods. The new varieties are also high yielding and less susceptible to potato blight and other diseases that reduce yields.
- b) *Improved access for farmers to substantially subsidized fertilizers:* The county government began providing farmers with highly subsidised high quality fertilizers to promote yield per acreage. Farmers can access the fertiliser at several localities around the county.
- c) *Support to famers to form cooperatives,* to enable them access markets directly and counter the poor prices offered by middlemen. The county government has been providing support and education to farmers to join cooperatives and farmers' unions. The county government is helping to link the cooperatives and farmer groups to market outlets throughout the country.
- d) *Improved access to appropriate technology:* To reduce production costs and over-dependence on manual labour, the county government in collaboration with partners have introduced farm machinery for cultivation, planting, harvesting and grading operations. Although still in early stages, the mechanized system will enable farmers to harvest potatoes in record time, minimising the costs and losses associated with long, manual harvesting periods. Further, the county government is collaborating with partners to put up cold storage facilities to minimise post-harvest losses.

Outcomes and Results

These initiatives have produced remarkable results in Nyandarua County. Yield by acreage has improved by about 20%, a remarkable improvement on the 40 to 50 bags that they used to harvest prior to project intervention. There has also been a steady improvement in uptake of mechanization by farmers and reported gains in cost savings. Previously, it cost farmers KSh 7,000 to plant one acre of potatoes, but this has since come down to Ksh 4,500. The cost of harvesting has also come down from a high Ksh 9,000 per acre, spent on labour, to a low Ksh 5,000. Farmers are now getting more value for their produce in terms of returns on investment, and the reported

net effect is that these farmers now have more disposable income at family level, which translates into improved standards of living at the family level.

Lessons Learned

Some of the most critical lessons learned by the county government in this project include the following.

- Mechanization and use of good quality seeds have been critical in improving productivity.
- Access to and prudent use of fertilizers provides better yields per acre.
- Strategic marketing is equally important for the produce, and value addition can enable farmers to get competitive prices for their produce.

Recommendations for other counties

- 1) Invest in and facilitate the use of mechanization for farmers in order to improve and even diversify agricultural productivity and performance.
 - 2) Promote the production, access and use of certified seeds in order to guarantee productivity and yields for farmers' produce.
 - 3) Involve and work with all stakeholders within the agricultural sector to get better outcomes.
-