



Short Communication

Increased Income of Farmers through Commercial Production of New Variety of Pineapple at Urukoki Village in Ngoma District, Rwanda

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Abstract

Production of low quality crops is among the major causes of inadequate income generation and poverty in most of rural communities in Rwanda. However, pineapples fruits producers have been facing the problem of their fruits to be rotten to unreliable market. Studies were therefore carried out in Urukoki village in Ngoma district where pineapples production was study for increased income poverty reduction by commercial production of new variety of pineapple production. In the village participatory community assessment methods were used and tools like, semi-structured Interviews, Quantitative analysis for SPSS (frequency), Qualitative analysis (interview) and Field visit survey. It was revealed from the present study that 31.5% of Urukoki community were engaged in agriculture activities, 22.2% in commercial production of pineapple, 18.5% in selling of second hand clothes, 13.0% in foods vendors, 9.3% selling of paddy rice, 3.7% sell of milk and lastly 1.9% market of pineapple. Commercial production of pineapple that is 22.2% is the major source of income as agriculture activities in Urukoki Village. It was also declared by respondent of alternative needs to improve income in the community, 44.4% of respondent declared that commercial production of pineapple was raise their income. The study was concluded that the community member organization and Urukoki community formed a committee to look for District support especially in improved pineapple steam, fertilizers, market and other extension services. Therefore the study recommends that deliberate efforts should be taken to involve all stakeholders in implementation of community economic development projects to ensure sustainability and reduced poverty that is threatening the nation.

Keywords: New variety of pineapple, Income, Urukoki, Rwanda.

Introduction

The pineapple plant is indigenous to South America and is said to originate from the area between southern Brazil and Paraguay; however, little is known about the origin of the domesticated pineapple¹. The large multinational growers dominate worldwide trade in pineapples with operations in Latin America and Asia. Most of the pineapples grown in the Caribbean and the Pacific Islands originate on small farms with less than optimal supply chains^{2,3}. Smallholders were generally engaged in a different value chain from more commercial farmers and also export pineapples as well as several of the African States^{4,5}. Pineapples production in Ngoma has been effectively sensitized since 2004, Urukoki Village community is among the villages adopted the knowledge early. Currently majority have started harvesting. Fruit production as one of the potential agriculture products for income earning has not yet well employed in Ngoma District despite the prevalence of abundant land suitable for fruits production. Fruits processing have been a new industry in Ngoma because it has been rarely practiced within the District. Urukoki Village only one person still practices the exercises and produces pineapples juice and wine. Majority have not been pineapple to engage in this industry due to lack of required processing tools and technology

of pineapple cultivation so as to add value of their products⁶. Rwandans are good users of juice so if fruits processing into juice could be exercised, much of the rotting fruits could have been rescued. Rwanda is one among the countries which engaged in fruits processing to value addition of the product for the concerned communities.

Although some efforts to improve community livelihood have been taken by organizations in the village, yet Urukoki communities face income poverty. Therefore the project improves community livelihoods through increased income of pineapple production. Pineapple is used as food crop it is also used as a cash crop for it help them to earn some money which in turn can contribute in household income poverty reduction⁷. Furthermore pineapples are rich in organic and inorganic compounds⁸. Apart from its dietary value, pineapple can also be used to enhance soil conservation particularly in the highlands⁹. With the increased endeavor in poverty alleviation, Ngoma District is emphasizing pineapple production throughout the District in all areas where pineapples can be grown so as to contribute in their income at household level, especially in rural areas whereby there is vast poverty prevalence. People living in Urukoki Village had been planting pineapple and other fruit for a long time but the productivity remained low because the

dwellers of Urukoki Village do not practice modern agriculture. The organization was improve pineapple production through providing capital for one season pineapple growing and support commercialization initiatives, market information and linkages among pineapple stakeholders¹⁰.

Through increase income of pineapple production as the major community problem was improved community income livelihood since the main economic activity in rural Rwanda is agriculture. Low price of pineapple production as the major community problem is caused by low pineapple production and lack of appropriate pineapple production and planting material; intervention should reflect on increase income of specifically in pineapple production as opportunity of human capital available in the village as well as fruits cultivated by majority and commercial production of pineapple. The great challenge which deprives fruits producers in poverty is lack of reliable market to enable every single fruit to be sold¹¹.

The problem has been exacerbated by lack or inadequate fruits local processing industries units to add value of the products. While the opportunity available in Urukoki village is land, achievement of project aimed to increase income productivity of pineapple at Urukoki village for community livelihoods to have excess pineapple production that will be sold to earn income.

Gap and abject was that community needs assessment for Urukoki village was conducted in order to examine the level of development in the community, to identify and assess needs and gaps in relation to available resources, opportunities that can be utilized by the community itself¹². The need for problems solving emerged and rooted from the community in question by coming up with practical solution can help the community to attain the desired development. Therefore the study was intended to come up with the increased farm income through commercial production of new variety of pineapple for pineapple farmers in Urukoki village Ngoma district particular.

Objectives: Overall Objective: Determining the intervention that can greatly contribute to the increased income from pineapples production by commercial production of new variety of pineapple for pineapple farmers in Ngoma district particularly in Urukoki village.

Specific Objectives: i. To describe the Demographic of the pineapple farmers of Urukoki village. ii. To examine economic activities production undertaken by pineapple farmers. iii. To identify alternative needs in addition to improving farmers' income in the community.

Methodology

The assessment was concentrated in three main sectors namely community, economic and environment. The study resulted to only one pineapple producer from Urukoki village to manage and utilize the knowledge acquired from the training.

Descriptive survey was applied in conducting the study which involved both qualitative and quantitative methods for data collection together with Participatory Rural Appraisal¹³. Qualitative approach was used because they give an opportunity of analyzing collected data such as open coding and content for different data analysis techniques¹⁴. In this case, quantitative research approach was used to collect quantified data. Research tools used are Questions and Discussion Guide¹⁵. Sampling Techniques since it was not possible to cover the whole population in the village, sampling was inevitable. Random sampling were applied where systematic interval sampling were applied. The questionnaires for each pineapple farmer were applied.

Data collection methods structured and semi-structured questionnaires were used to collect data for pineapple farmers of Urukoki village. The researcher used semi-structured questions to find broad information which do not have specific answers such as what are the problems do community faces specifically to know per piece price of pineapple in retail. Structured question were used to solicit information which need specific answers¹⁶. For qualitative, data were collected and transcribed because some was in Kinyarwanda language. Quantitative, data were analyzed using SPSS where results were displayed in table as well as frequency and percentage. Descriptive statistics used comprise percentages, frequencies.

Results and Discussion

Gathering of information using the questionnaire, the researcher issued 54 copies. Personal Demographics:

Table-1
Sex respondents

	Frequency	Percent
Male	31	57.4
Female	23	42.6
Total	54	100.0

Source: Researcher 2015

The respondents questioned where male constitute 57.4% and female 42.6%, the number of male is higher than female because most of the pineapple farmers are male. This reflects that more males of the respondents questioned, and this is gender imbalance. However it also expresses that views where obtained from difference sex to avoid biasness.

Economic activities undertaken by community: Table-2 shows different income economic activities for Urukoki village Mugesera sector.

Table-2
Income economic activities; agriculture and commercial production

	Frequency	Percent
Agricultural activities	17	31.5
Selling of paddy/rice	5	9.3
Market of pineapple	1	1.9
Sell of milk	2	3.7
Food vendors	7	13.0
Selling of second hand clothes	10	18.5
Commercial production of pineapple	12	22.2
Total	54	100.0

Source: Researcher 2015

The findings above revealed that 31.5% of respondents for economic activities were engaged in agriculture activities, which means agriculture is the major source of income. Those engaged in commercial production are 10% while 18.5% is for selling of second hand clothes; food vendors' activities take 13%; the rest activities are below of 10% which are selling of paddy/rice, Market of pineapple and Sell of milk. That means in order to raise majority income in Urukoki village, efforts should base on agriculture and commercial production of pineapple.

Discussion: Community needs assessment was conducted in seven days for pineapples production at Urukoki Village. The researcher collected baseline data from District officials and Village officers which helped during structures questionnaire. Information was gathered by through research tools which are Questions, Discussion Guide, and Interview guide.

Research tools were aiming to answer three research question, through research findings where pair wise ranking was reversed that income of commercial production of pineapple and agriculture activities production to address the income poverty was ranked as the first and second respectively; followed by selling of paddy/rice; Food vendors; market of pineapple; sell of milk; selling of second hand clothes and cattle keeping have scored followed from highest to lowest respectively.

Conclusion

Participatory approach at each level should be well applied from the identification to evaluation stage. Currently Opportunity and Obstacles to Development is the contemporary approach in any

planning in Rwanda. Therefore, for the economic growth to have impact in economic development, agricultural development should be the priority.

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