Full Length Research Paper

Contribution of the “Cassava: Adding Value for Africa” (C:AVA) project to income generation in Nigeria: The case of cassava farmers and processors in Ewekoro area of Ogun State

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This Research was about the effects of “Cassava: Adding Value for Africa” (C:AVA) project on cassava farmers and processors in the Ewekoro area of Ogun state, Nigeria. Respondent for this study were selected from five groups of processors targeted by the project in the area. They consisted of five pure cassava farmers and fifteen cassava processors because the ratio of men to women in the groups was about 1:3. Five respondents agreed that the new cassava variety had contributed to higher output. Cassava farmers did not report any change in asset as a result of their increased output. Six gari processors reported reduction in cost of cassava grating from one hundred and fifty naira to fifty naira. Five fufu processors reported reduction in cost of hiring drums from two hundred and fifty naira to a hundred naira. Eleven cassava processors reported that the processing equipment received from C:AVA had increased the volume of cassava processed and their capability to meet family expenditures due to reduction in cost. The cassava grits which is an intermediate product of High Quality Cassava flour (HQCF) was not processed in all the villages visited and groups interviewed. Based on these findings, this study concluded that the TME 491 cassava stems distributed to farmers had potential to increase farmers output but the quantity distributed to them was insufficient, the stem cuttings distributed to farmers did not result in acquisition of new assets, the processing equipment had increased the volume of cassava processed and reduced their cost.

Key word: Processors, Cassava: Adding Value for Africa” (C:AVA) project, gari.

INTRODUCTION

This study focused on the evaluation of Cassava: Adding Value for Africa (C:AVA) project in Nigeria supported by a grant from the Bill and Melinda Gates Foundation. The project was involved in development of value chains for High Quality Cassava Flour (HQCF) in Ghana, Tanzania, Uganda, Nigeria and Malawi to improve the livelihoods and incomes of at least 90,000 smallholders’ households as direct beneficiaries including women and disadvantaged groups NRI (2011). The project was led by the Natural Resources Institute of the University of Greenwich working closely with University of Agriculture, Abeokuta, Nigeria; Food Research Institute, Ghana; by the Natural Resources Institute of the University of Greenwich working closely with University of Agriculture, Tanzania Food and Nutrition, Tanzania; Africa Innovations Institute, Uganda; and Chancellor College, University of Malawi and a range of other partners. The purpose of C:AVA intervention at the rural level was to ensure that by the end of 2012, at least 90,000 smallholder farmers are earning additional $0.52 per day.

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from each producing 0.8 tons per farmer of consistent quality cassava grits per annum for the HQCF industry across the five countries (Adebayo, 2011). At the farmers’ level, the aim of the project was to ensure consistent supply of raw materials namely fresh cassava tubers and processed cassava grits.

The implementers of the project in Ogun state were the Agricultural and Media Resources Centre (AMREC) and Ogun State Agricultural Development (OGADEP) who jointly rendered extension services to farmers and were the links through which all the extension messages, TME 419 cassava variety stem cuttings and processing equipment got to the beneficiaries. These agencies were under the coordination of C:AVA country office at Federal University of Agriculture, Abeokuta (FUNAAB). AMREC is the extension arm of Federal University of Agriculture, Abeokuta and provided extension services to some villages in some parts of Ogun state. OGADEP was the state government extension agency in the state responsible for disseminating information on improved technologies and production recommendations to farmers in the state. At OGADEP, the activities of the project was under the coordination of the C:AVA desk officer supervised by Director of Agro processing unit of OGADEP. This office coordinates training, delivery of cassava stem and processing equipment as well as monitoring the installation of the equipment and implementation of C:AVA project in the villages under their jurisdiction.

Problem definition

The increasing popularity of cassava in production of high quality cassava flour had led to increased income of farmers involved. Diverse uses of cassava flour for food products such as its glucose for pharmaceuticals products as well as food supplements to make alcohol and other beverages, would make farmers smile all the way to the bank (Adebayo, 2010). The Federal government of Nigeria’s mandate to include 20% High Quality Cassava flour in all products of wheat flour for bread-making is the needed motivation for cassava farmers, and processing firms. Cassava farmers and processors were supposed to benefit from this policy by processing cassava tubers into cassava grits sold to cassava flour industries thereby earning additional income from value addition but the weak link between cassava farmers and processing groups on one hand and the industries using cassava as raw materials on the other, is depriving farmers and processors from earning the expected income.

Research problem

C:AVA was launched in Nigeria in June, 2008 to develop value chain for high quality cassava flour. Ogun state was one of the two states where the project was implemented in Nigeria. Implementation of C:AVA started in Ewekoro local government area in 2009. Seven cassava processing groups consisting of pure cassava farmers and cassava processors (present in the same group) were selected as beneficiaries of the project in this area. Although recent researches on the impact of C:AVA e.g. Abdulsalam-Saghir (2010) had discovered that incomes of smallholder households in some part of Ogun, Oyo and Ondo states had increased significantly by fifty Euro (ten thousand naira) per month, the effect of the project on the income at the levels of cassava farmers and processors in Ewekoro area was not known.

Purpose of the study

The thesis seeks to identify the effect of C:AVA project on income of cassava farmers and processors involved in the project in Ewekoro area of Ogun state, Nigeria. To achieve this objective the following research questions were formulated.

Research questions

1. What effect did TME 419 cassava variety distributed to cassava farmers have on income generated by farmers? Sub-questions: 
   a. To what extent had the cassava variety received by farmers affected their output?
   b. Was there any change in asset and expenditure of cassava farmers that received the TME cassava variety?

2. What effects did the processing equipment distributed to cassava processors have on their income generation? 
   Sub-questions
   a. What type of processing activities were cassava processors in the area involved in?
   b. What was the processing equipment given to processors in the area?
   c. Was there any change in volume of cassava processed by the processors’ groups that received the processing equipment?
   d. What changes had occurred in assets and family expenditure of cassava processors that received the processing equipment?

3. What effect did processing equipment donated to groups had on the processing cost?
   a. What were the costs incurred by cassava processors in the study area?
b. What were the changes in processing cost that occur as a result of processing equipment received by cassava processors?

The study area

Ewekoro Local Government first came into existence on 22nd of May, 1981, but it was later merged with Ifo local government in 1989 by the military government. However, on 16 December, 1996 Ewekoro Local Government was restored as an autonomous local government by the then Federal Military Government alongside five other in the state, thus increasing the number of Local Government in Ogun State from fifteen to twenty. The Local Government was bounded by Yewa South in the west, Ifo Local Government in the south, Abeokuta North and Obafemi Owode in the north and east respectively and it consisted of ten wards. It has a land area of 63.5 km² with an estimated population of about 55,000 people (2006 population census). The indigenous dwellers of Ewekoro Local Government area were mainly the Egbas. The people engaged primarily in farming and trading, the local government area consisted majorly of rural settlements. Cassava, yam, cocoyam and rice are the most cultivated food crops in this area. Processing of the product was done by women who also own personal farms although farm sizes are smaller compared to men’s farms in most cases.

Cassava processing groups in the area consisted of pure cassava farmer (men) and cassava processors who were women although they owned individual cassava farms. Ownership of land in this area was by inheritance; men and women had right to inherit land.

Cassava farmers

Cassava farmers in Ewekoro area consist of small scale (0.5 to 2 ha) and medium scale (2 to 4 ha). Cassava was grown as intercrop of maize, rice, melon and vegetables (Olasunkanmi et al., 2012). Cassava cultivation was done by men and women in the study area but male farmers cultivates larger farm than their female counterparts in most cases although there were some women with big farm sizes. Cassava was grown on rented or lease land as well as owned land. It was very easy to rent or lease a land in the area if the farmer was recommended by known indigene or if the farmer resides in the area.

Cassava processors

Processing of cassava in Ewekoro area was mainly women occupation although cassava graters are owned by men and are pushed on a truck around villages. Cassava was processed into gari, fufu and lafun but gari and fufu processing was more prevalent than lafun because lafun requires sun drying for its processing. Processed products were sold in the local market (Wasimi) where traders from Lagos were the major buyers.

Selection of the participants for the project

Selection of cassava farmers and processors that are benefitting from C:AVA project was done by OGADEP. Seven cassava processing groups consisting of cassava farmers and processors were benefiting from the project in the local government although more groups have shown interest in the project. Members of these processing groups are small scale farmers and processors. Selection criteria used for these farmers are based on the recommendation of OGADEP extension component of OGADEP selected these groups based on the possession of registration certificate, regular meetings with good attendance of members and their willingness to participate. Each processing groups consists of 30 members who are pure cassava farmers or cassava processors for easy management and coordination.

Challenges involved in evaluating income effect of projects

Evaluation of income effects of project can be quantitative or qualitative. In quantitative evaluation, data collection and analysis are carried out, while economical models are used for data analysis. Qualitative analysis of income effect is also possible but does not enjoy the level of acceptance and recognition as quantitative evaluation. Income evaluation also has other constraints such as under reporting (for a variety of reasons income is often under reported). Respondents perceive income-related questions as being invasive because of tax related problems. In developing countries, income and expenditure surveys yield estimates of saving that are absurdly low compared to estimates derived from national income. Reported expenditures often exceed reported income.

Conceptual framework

Evaluation of income effect of any project on farmers and processors was a very challenging task, especially when cost and revenues are not recorded down. This research had resolved this issue by looking on the effect of TME419 cassava variety on (a) change in output of cassava farmers in the study area (b) Change in assets and expenditure of cassava farmers that received the TME 419 cassava variety. The effects of the processing
equipment donated by C:AVA on (a) Volume of cassava processed (b) Change in processing cost as result of equipment received by processors (c) change in asset and expenditure of processors who received processing equipment from C:AVA were used as indirect indicators of income effect of C:AVA on the benefiting groups in the study area.

Information on change in expenditure (expenses on children education, expenses on food and other household need and expenses on social obligation) was another indicator used because it is easier to recall than income data and it seemed to be less prone to error because expenditures of household on food, children education and other household needs are continuous and recurrent, so it is easily remembered but income is earned at a point in time and the information may be easily forgotten.

Indicators for cassava farmers

Change in output of cassava farmers

Change in output was used to measure income of farmers. This indicator was used because cassava farmers may experience increased in output when they increase land size used for cassava cultivation or when they plant high yielding cassava variety or both. Cassava farmers in the processing groups interviewed were given 100 bundles of TME 419 cassava stems free; the change in income that occurred as a result sale of increased or otherwise of tubers harvested may serve as indicator of the effect of the intervention on the farmers that received the cassava stem cuttings.

Change in assets and expenditure

Increase output and favourable cassava tuber prices will result in increased income. Increased income may lead to acquisition of new assets (e.g. bicycles, motor cycles, houses and livestock) and higher expenditures on food, children education, and other social obligations. These indicators were used to probe the changes of income of cassava farmers that occur as a result of engaging in the project or as a complement of any other on-going project in the area.

Indicators for cassava processors

Change in volume of cassava processed

Cassava processors in the study area received processing equipment from C:AVA. These equipment were distributed to them through Ogun State Agricultural Development Program. Two Steel cassava graters (Figures 1 and 2) and two hydraulic presses (Figure 4) were given to gari processors at Eleyele and Awowo while fufu processors at Asipa-ilaho, Awowo and Gudugba received sixty processing drums (Figure 3) used for soaking fufu before sieving. The increase in volume of cassava processed by these fufu processors will lead to more income because limited numbers of drums were available for rent before the intervention and processors had to use it in rotation. Similarly gari processing groups will be able to increase the volume of cassava processed and may not have to wait for cassava grater owners in the village. This indicator provided a good measure of effect of this project on the activities of the cassava processors.

Change in processing cost

When the cost of processing increase or decrease, it will affect the income derive from processing activities. This indicator was used as a measure of change in income of processors. Cassava processors in the study area has benefitted from processing equipment like steel cassava grater, hydraulic press, processing drums and processing slab. These equipment were distributed by C:AVA through OGADEP to them free. The reduction in processing cost will lead to saving on expenses on processing which is unearned an income. This indicator was used in this research.

Change in asset and expenditure

Changes that occur in the expenditures and asset of cassava processors who received the processing equipment may indicate change in their income unless they are engaged in other income activities. Since the income of cassava processors is no easy to estimate because of poor recording keeping, change in their expenditure on food, children education, assets (pepper milling machine, livestock, houses etc.) and social obligation were used to make fair judgement on their income. This indicator was used in this research to explore the change in income of cassava processors who received the processing equipment in the study area. Assets in the study area include livestock like sheep and goat, motorcycle, bicycle, landed properties. Cassava grater, pepper milling machine were some of the asset that farmers and processor strive to acquire when their income increase. This indicator offered reliable measure of income of cassava farmers and processors in the study area although it may not be totally reliable.

RESEARCH METHODOLOGY

Research strategy

Case study was used as strategy for this research because in-depth information is needed to be able to unravel the effects of this
Figure 1. Gari processor at work at Asipa-ilaho.

Figure 2. Steel cassava grater donated by C:AVA to gari processing group.

project on the beneficiaries. This strategy was also chosen because the respondents are mostly illiterate and may not be able to fill structure questionnaire themselves. The research was conducted in five villages in Ewekoro Local government in Ogun state namely Eleye, Awowo, Asipa-ilaho Osupori and Gudugba. These villages were chosen because C:AVA project was implemented in all these villages and members of these processing groups were active farmers and processors and as such were be able to provide relevant information of the effect of the project. Qualitative data on the effects of cassava variety distributed to cassava groups and processing equipment distributed to processing groups were collected in order to make inference about changes in income that occur to participants of the project.

This strategy was chosen because most small scale farmers in Nigeria hardly keep records of their operations therefore great insight was obtained by involving them in discussion which can generate the needed information. In order to gain access to the study area, the agricultural extension officer was contacted before each interview was conducted. The extension officer assisted the researcher to make appointment based on the availability of the respondents and the appointment date was communicated to him.

Research population

The total population of this research were the beneficiaries of C:AVA in Ewekoro area. These were the two hundred and ten cassava farmers and processor belonging to seven groups in the local government. These groups were selected among existing cassava processing groups in the local government. It was
observed that all the groups have more women than men in the ratio of 3:1. Respondents of this research were pure cassava farmers and cassava processors who are beneficiaries of the project because they will be able to provide in-depth information on the subject matter.

Selection of processing groups interviewed for data collection was done using purposive sampling. Cassava processors that have participated in the C:AVA project for more than two years were selected because they were able to provide information of the effect of the project on their income. Five out of the seven cassava processing groups in the area were thus selected because they have participated in the project for more than two years; the remaining two groups started participating in 2012. Four respondents consisting of three women and one man were chosen per group making a total of twenty respondents for the five groups. Selection of respondents within groups was done by telling the members to pick tallies with “yes” or “no” and respondents with yes were chosen for the interview. This method was chosen to reduce bias and misconception among respondents who are mostly female. The initial plan in the thesis proposal was to choose equal numbers of men and women but the situation on the field revealed that there were more women in these groups than men in the ratio of 3:1 in all the groups interviewed. The researcher had no personal knowledge of respondents before the selection therefore issues of bias were minimal.

RESULTS

In this chapter, the findings of this research were
presented. Twenty respondents consisting of five male and fifteen female belonging to five groups in the study area provided the responses for these findings. In the proposal the respondents were to be chosen on equal basis of male and female for five of the selected groups but the situation in the study area revealed that there are more female than male. All female respondents were involved in cassava cultivation and processing while male respondents were only involved in cassava cultivation. In some of the groups visited, the project just commenced early this year and the impact of the project is yet to fully manifest, hence the reduction in the number of groups selected for the study.

**Effect of the cassava variety received by farmers on their output**

Six out of twenty respondents interviewed in the study area agreed that the implementation of CAVA project in the study area had contributed to higher output. These farmers consisted of five cassava farmers selected for the interview and one processor who also cultivates cassava farm because she was also given five bundles of the new cassava stems. Fifteen respondents (processors with farms) could not benefit because the cassava stems were not sufficient for all the members.

**Change in assets and expenditure of cassava farmers that received the TME 419 cassava variety**

The five Cassava farmers interviewed did not report any change in asset as a result of increased output but their capability to meet their family expenditure on children schooling, food and social obligation increased. One female farmer reported that output from her farm supported her through her time of trial when her husband died. She processed the tuber herself and earned additional income as a result of high starch content of the TME419 variety.

**Change in volume of cassava processed by the processors’ groups that received the processing equipment**

Six out of eight gari processors interviewed reported increase in volume of cassava processed. They said they processed two baskets (500 kg) of cassava tubers per week before but the amount processed has increased to three to four baskets (750 to 1000 kg) of the raw tuber weekly. When asked the reason for change increase in volume, they said they had easy access to the processing equipment donated by C:AVA through OGADEP and also enjoyed benefit to grate their cassava tubers on credit and made payment after the sales of their gari. This privilege was not available before they received the equipment. Two gari processors interviewed said the volume of cassava processed did not change because their houses were located further away from the group’s processing shed. Five fufu processors reported increase in volume of fufu processed because of the twenty drums donated by C:AVA which reduce the drudgery experienced before the intervention.

**Type of processing activities of cassava processors in the study area**

Participants of C:AVA in the study were engaged in processing of fufu and gari, the commonest food of the people of the state. Seven out of the fifteen processors interviewed were involved in fufu processing while eight respondents processed gari (Figure 2). At the Agbedara group in Asipa village, the respondent interviewed said they were formally gari processors but due to the training and encouragement they received from the extension agent working with them on C:AVA coupled with twenty drums donated to the group by C:AVA, they were motivated to engage in fufu processing which is required less labour and input than gari. At Fagbesoro fufu processing group in Osupori village, one of the respondent engaged in gari and fufu processing said she will continue to process gari although it is labour intensive because it had longer shelf life than fufu (which must be sold immediately it was processed) whether the prevailing price was profitable or not. She also said gari was very important for food security of household with children living in the city because it can be consumed in more ways and can be sold to earn income to support children in school as well. The fufu processors in the area offered their product for sale as wet fufu paste. The cassava grits which is an intermediate product of High Quality Cassava flour (HQCF), the topmost priority of C:AVA was not processed in all the villages visited and groups interviewed.

**Cost of labour for different operation of cassava processors**

Cassava processors in the study area incurred various cost on different operation carried in processing activities. Transportation cost of six thousand naira to eight thousand was paid for a pick-up van load (3 ton) of cassava tubers depending on the distance of the farm to the village. Cost of harvesting of tuber was two hundred naira for a basket two hundred and fifty kilograms and this cost is paid by the farmer. For cassava tuber weighing 250 kg (one basket), Gari processor paid two hundred and fifty naira for peeling, six hundred naira for grating, and four hundred naira for frying. Fufu processors paid the same peeling cost and sieving cost of five hundred naira for the same quantity of tuber. In
practice, respondents in the study area performed some or all of these operations to be able to obtain some margin on their activities. Additional transportation cost is also paid on the gari and fufu to market centres. One hundred naira is paid on a bag of gari or wet fufu for transportation to the market but lower cost can be paid if large numbers of bags are being transported by a processor through bargaining.

Change in processing equipment cost received by cassava processors

Some of the cassava processors in the study area reported reduction in processing cost in their processing activities as a result of processing equipment they received from C:AVA project. Six out of eight gari processors interviewed reported that the reduction in cost was as result of reduction in grating cost from one hundred naira which was paid previously to fifty naira which they paid into the group purse to provide the running and maintenance cost for the equipment (Table 1). However two respondents could not benefit from the reduction in grating cost because their houses were located further away from the processing shed. Five out of seven fufu processors also reported reduction in processing cost due reduction in cost of hiring drums used for soaking cassava tubers before sieving from two hundred naira paid previously to a hundred naira (Table 2). This reduction occur as a result of twenty processing drums they received from C:AVA project. The remaining two respondents have individual processing drums. The hydraulic press also donated by C:AVA to gari processors were not used in all the villages visited because it cannot contain the type of sac used in the area (Appendix 1) and the processors were not willing to change the sac because it is used as scale of the expected processed gari.

Change in asset and family expenditure as a result of processing equipment received by cassava processors

Eleven out of the fifteen cassava processors interviewed reported that the processing equipment received from C:AVA had increased their capability to meet family expenditures like payment of children school fees, training of their children on crafts, provision of their food needs and social obligation because of reduction in their processing cost. One of the fufu processors interviewed said she benefitted from marketing linkage with a firm producing High Quality Cassava Flour (HQCF) at the commencement of the project but the linkage stop later when the firm halted production because of poor electricity supply. She was able to buy a milling machine and start a small petty trade in addition to fufu processing. All the interviewed members of Fagbesoro processing group at Osupori village unanimously agreed that the implementation of the project in their village had impacted positively on their capability to meet their family expenditure and social obligations. Another respondent, an elderly woman at Osupori village said the project increased her income generation because of higher turn-over as a result of higher starch content of the TME 419 cassava variety and reduction in cost and hence was able to support the completion of her children higher education that was abandoned to her by her polygamous husband.

DISCUSSION

In this chapter, an attempt was made to analyse the findings to see the extent the research question were answered to fulfil the research objective.

Effects of the cassava variety received by farmers on their output

One hundred bundles of TME 491 cassava stems distributed to farmers among the processing groups interviewed had increased their output but the quantity distributed to them was not sufficient for all the farmers. Only five members out of twenty respondents selected for the interview were able to derive increased income as a result of increase in output by planting the high yielding, TME 419 cassava variety. The prevailing price in the study area encouraged the planting of the variety but it is not known whether the current price can be sustained because cassava tubers and product usually experience price fluctuation and if the variety was supplied and there was increase output, the marketing of the surplus must be guaranteed for farmers to continue to enjoy increase income by planting the variety.

Changes in assets and expenditure of cassava farmers that received the TME 419 cassava variety

The distribution of TME 419 cassava variety to farmers did not result in acquisition of new assets although the beneficiaries reported increase in their capability to meet expenditure on food, children education, and meeting social obligation like naming ceremonies. This was an indication that planting of the variety at the moment had not increase farmers income to the extent of having surpluses to acquire new asset because the quantity of cassava stem received was not sufficient.

Change in volume of cassava processed by the processors’ groups that received the processing equipment

The processing equipment donated by C:AVA to the
processors’ groups had led to increase in volume of cassava processed. Although some members of these groups were not able to use the facilities, eleven out of fifteen processors interviewed reported increase in volume of their processing activities as a result of the processing equipment they received. The processors reported that they do not have to compete with other villagers on the use of limited number of cassava grater and processing drums in the villages.

**Type of processing activities of cassava processors in the study area**

Processing of cassava grit used which an intermediate product for cassava flour processing was not observed in all the groups visited. Only one cassava processor reported that she was formally engaged in the processing when she was linked with a cassava flour firm but she stopped the processing when the firm no longer demanded the product from her. The remaining fourteen cassava processors did not process cassava grit at all although they reported that they had benefitted from training on processing of cassava grits, cassava flour and the utilization of this product for making chin-chin, pies and other recipes. None of these processors were involved in the processing of the chin-chin, pies and sausages because of lack of demand. The cassava grits innovation could be said to be inappropriate in this area at the moment because there was no cassava flour industries in the area to use the product as existing ones are out of operation because of unstable electricity supply. The cassava processors in the study area were mostly involved in gari and fufu processing although they also process lafun when they have sunny weather. Eggleston et al. (1992) as cited in Kehinde (2007), reported that of the main products obtained from processing cassava, gari, is the most common in West Africa agreed with this finding.

**Cost of labour for different operation of farmers and processors**

Cost of labour for farming operation and processing activities in the study area was expensive compared with the return farmers and processor earned. Although the project provided processing equipment for the processors, there was no provision for farmers on herbicide which can reduce weeding cost as well as enhanced timely weeding. Labour cost also change with prices of cassava tuber and cassava products in the study area. Farmers paid huge labour cost on clearing, heaping and weeding only for them to sell their harvest tuber at a give-away price during harvest when there was glut in the market. Labour saving processing equipment for cassava processing like hand peeler for tuber peeling was not used by cassava processors although this project did not provide such to processors. Donald et al. (2000) also reported similar finding by stating that
Cassava is labour intensive and costs of production can be quite high, compared to other carbohydrate sources. Adeniji et al., and Egyleston et al. (1992) cited in Taiwo (2006) reported similar finding stating “cassava processing by traditional methods is labour-intensive but the application of improved processing technology has reduced processing time and labour and encouraged further production”, although most of these cassava processing technologies like mechanised cassava harvester and cassava peeling machine or cassava hand peeler were not in use in the study area.

Change in processing cost that occurred as a result of processing equipment received by cassava processors

One thousand and six hundred naira (per ton of fresh tubers processed) reduction in processing cost was reported by gari processors that benefitted from the two steel cassava grater donated by C:AVA in the study area. Similarly fufu processors reported six hundred naira per ton reduction in cost of hiring processing drums due sixty drums donated by C:AVA to the fufu processing groups. This reduction in cost is calculated based on processing of one ton of cassava tubers using the processing equipment and the prevailing processing cost presented in findings above. The saving on processing cost can be considered as an income though it is not earned. However two out of eight gari processors interviewed could not benefit because their houses were located further away from the processing shed. The sustainability of the donation of processing equipment to cassava processors in the area was not guaranteed because C:AVA project may end in 2013 and that may signify the end of the gesture unless the project is extended in another phase.

Conclusion

This study has analysed the effects of Cassava Adding Value for Africa in Ewekoro area of Ogun state, Nigeria with the aim of investigating whether participation in C:AVA Project has contributed to better income generation among farmers involved in the project in order to make recommendations for similar intervention in the future. In order to achieve this objective, three research questions were formulated with sub-questions which were used to prepare an interview guide used on the field. The following conclusions can therefore be drawn from the findings presented in the previous chapter of this work.

Cassava farmers

The TME 491 cassava stems distributed to farmers among the five processing groups had potential to increase farmers output in the area but the fact that the quantity distributed to them was insufficient for all the members did not allow the increase output to reach some members.

The bundles of TME 419 cassava variety distributed to farmers in the five processing groups interviewed did not result in acquisition of new assets although the beneficiaries reported increase in their capability to meet expenditure on food, children education, and meeting social obligation like naming ceremonies.

Cassava processors

1. The processing equipment donated to 5 cassava processors’ groups in the study area has increased the volume of cassava processed by members.
2. Cassava processors in the study area were not involved in the processing of cassava grits used for High Quality Cassava flour which was the topmost priorities of CAVA project. This was as result of low demand by cassava flour firms caused by poor electricity supply but were rather engaged in gari and fufu processing.
3. The steel cassava grater and processing drums distributed to Eleyele, Asipa-ilaho, Osupori, Awowo and Gudugba cassava processing groups had led to reduction in processing cost.
4. The reduction in grating cost represents saving on processing cost which is an indication of increased income.
5. The hydraulic press and jack distributed to Eleyele and Awowo gari processors was not utilised because it cannot contain the sacs used for packaging grated cassava for dewatering and they are not willing to change the size of the sac used because the sac was used as scale of the expected gari processed.
6. Two out of eight gari processors interviewed could not benefit from reduction in grating cost because their houses were located further away from the processing shed.

RECOMMENDATION

Based on these findings and conclusion presented, the author proposes the following recommendations to the implementer of CAVA project in Nigeria, cassava farmers and processors.

Implementer of CAVA project in Nigeria

1. Multiplication of the TME419 cassava variety should be carried out by OGADEP this area either by selecting some of the farmers’ farms for multiplication or buying directly from IITA.
2. Linking farmers with multiplication centres for purchase of TME419 cassava stem should be facilitated by OGADEP.
3. Gari and fufu processors in the study area should be linked with credit sources so that they can increase the volume and quality of their product because there is ready market for these products in the local market as well as Lagos which is less than an hour journey to the area.

4. Processing of cassava grits should be encouraged in area where cassava processors have easy access to cassava flour industries and good demand for the product because there is no demand for the product in the area.

5. The hydraulic press should be withdrawn from processors by OGADEP and distributed to medium scale processors that show willingness to use it because the processors in the area did not show commitment and desire to change the sac used.

6. Gari processors that show interest in the hydraulic press should be encouraged to use sac sizes that are compatible with the press by given them enough information on the sizes of sac that can be used and the minimum quantity of grated cassava that it can contain before distribution.

7. C:AVA project should look into possibility of giving the processing equipment to processors on credit or at subsidized rate to make the project sustainable and allow more groups to benefit.

8. Hand drawn or push truck should also be provided for processing groups to facilitate easy movement of the peeled cassava to the processing shed.

Farmers and processors

1. Farmers must be willing to plant the cassava variety separately to facilitate easy identification during harvesting and to prevent confusion during distribution of the stem cutting to other farmers.

2. Cassava processors must take good care of cassava grater, hydraulic press and drum received from CAVA project. They should also make use of the fund generated from the use of these facilities to obtain other equipment needed in the processing sheds.

Abbreviations: OGADEP, Ogun State Agricultural Development Programme; C:AVA, cassava adding value for Africa; FAO, food and agriculture organisation; HQC, high quality cassava flour; IFAD, International Fund for Agricultural Development; IITA, International Institute of Tropical Agriculture; NEPAD, New Partnership for African Development; CGIAR, Consultative Group on International Agricultural Research; NGO, non-governmental organisation; RTEP, root and tuber expansion programme.

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APPENDIX

Appendix 1. Grated cassava in sacs used in the study area.