





VALIDATION WORKSHOP REPORT OF RICE PARBOILING ECONOMICS STUDY

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Executive summary

A report presented by New Nigeria Foundation (NNF) on the study on the economics of parboiling techniques showed that certain practices were not fully adopted in all the locations for which CARI carried out training to improve the skills of parboilers.

Validation workshops was organized in four locations as a follow up to the study conducted where few selected parboiling women, trainers and MF partners were interrogated to strengthen the understanding of the results of study. The objective of this validation workshop was to find out why some of the recommended practices were poorly adopted.

A day interaction session was carried out in the four locations and the results showed a consensus among all the parboilers that, the CARI training has significantly improved the quality of the processed parboiled rice with higher output price than the conventional method. However, it was revealed that the adoption rate of carrying out sorting (general and visual) was low based on the general believe that the quantity of the final product available for sale will be reduced which negatively affect the profit. Sorting is time consuming with attendant physical exertion.

The practice of keeping records was also poorly adopted because parboiling women do not really see the importance of this exercise. They claimed that as far as they can always mentally recall these records, they do not see why it should be written down. Secondly and most importantly is that significant number of the interviewed parboilers were not literate enough to be able to keep records in written form.

Furthermore, Significant number of the participants maintain accounts with commercial banks, however, they have never approached any bank for loan because they believe that loans are meant for big time savers. The reason for their poor saving culture with the commercial banks is because they have other methods of saving their money which include the traditional "asusu and adashe" systems of daily savings. Most of the participants operate the business model 1, as they claimed that they are not familiar with business model 2 (refer to the report of the parboiling economics submitted by NNF).





1. Introduction

Over the years, the quality of locally milled rice especially at the small-scale level has remained an issue, in order to help solve this daunting challenge along the processing segment of the value chain, a lot of investment needed to be harnessed. Various literatures have quoted that significant percentage of the local rice consumed in the country is processed by small scale millers. These groups of processors who are mostly women possess very low skills in the business of rice parboiling thus the output most often than not is of low quality compared to the imported brands. Nigeria's quest for self-sufficiency in rice processing may not be actualized if the skills of these groups of women are not enhanced. It is in pursuit of this gap that CARI set out to train a number of women parboilers, the result of these trainings has impacted significantly on the quality of locally processed rice.

The Competitive African Rice Initiative (CARI) commissioned a study to assess the the economics of rice parboiling in Nigeria in the states of Jigawa, Kano, and Kebbi as well as the Federal Capital Territory (FCT). The goal of the survey was to determine the effectiveness of CARI parboiling training interventions following its Theory of Change (ToC). A total of 401 parboilers (398 female) were surveyed. The study focuses on 4 key pillars: (1) perception of training, (2) adoption of good parboiling practices, (3) profitability (gross margin), and (4) parboiling as a step towards women's empowerment. The result of the survey showed that as much as the parboilers adopted significant number of the techniques, but there were certain techniques that showed very poor adoption rate.

In order to fully understand the results of the study, validation workshops were organized in four locations as a follow up to the study with the goal of providing a comprehensive overview of the perception of participants (parboiling women) to the result of the survey and gaining clearer understanding of the result.

2. Tasks of the Consultants

The tasks of the consultants are as follows:

- i) Develop relevent set of questions from the report of the study that will steer the discussion during the workshop
- ii) Co-facilitate the validation workshop with the CARI parboiling master trainer in four locations
- iii) Develop a concise report (electronic documents in MS word) of the proceedings of the workshop by elucidating the perception of parboiling women about the result of the survey and providing clearer understanding of the result





3. Methodology, Results and Discussions

3.1 Methodology

CARI organized workshops in 3 states including the FCT where the consultants interacted with selected parboilers, in attendance were the CARI matching fund partners, parboiling women and parboiling trainers in all the four locations. The discussions were interactive in nature whereby questions were posed by the consultants and the women could freely express their opinions about the given questions and suggestions were also proffered by them, below are excerpts of the information harvested during the workshops.

3.2 Result and discussions

i) Choosing good quality paddy, general and visual sorting,

According to the women parboilers in all the four locations, the parboiling practices of choosing good quality paddy, general and visual sorting were not difficult to understand. However, the insincerity of the farmers do lead to poor paddy quality in the market. They generally do not adhere to the above sorting methods because according to them this tend to reduce the quantity of the final product and thus, they believed that this could impact negatively on the overall profit. They maintained that they were not used to sorting before the CARI training and that CARI intervention has taught them that visual sorting improves the quality of parboiled rice, increased in profit margin, brightens the colour of milled rice and improves swelling capacity when cooked. Furthermore, they explained that there are certain challenges/constraints that hinder them from adopting the good parboiling practices, though not exhaustive, they include:

ii) Choosing good quality paddy

- Lack of paddy testing equipment
- Lack of good quality tarpaulins for threshing
- Lack of knowledge by the farmers on good post-harvest handling techniques

iii) General & visual sorting

- Paddy rice do contain too many broken pieces therefore usually take much time to sort
- High physical exertion
- Even though there are enough local labourers, but cost of hiring is very high which ultimately reduce their gross margin

Participants in all the locations were unanimous in their claim as to why they do not actually sort as they were trained during the parboiling training is that apart from the fact that the sorting procedures are time consuming with higher labour cost and leads to physical exertion, it also tends to reduce the quantity of rice obtained at the end of the day and therefore could negatively impact on the expected profit per bag.





iv) Preferred parboiling method, challenges and constraints associated

All the parboilers in the four locations agreed that the CARI approach of rice parboiling as taught to them is better than their conventional method because it leads to better quality rice which tend to attract a better market price compared to the rice processed through the conventional method. However, they claimed that there are challenges and constraints, these include the followings: i) lack of proper threshing and winnowing from the farmers therefore leading to poor quality paddy in the market ii) lack of paddy quality checking tools especially when buying bigger volumes iii) lack of good quality tarpaulins for large scale sorting iv) high labour cost v) they believe that proper sorting will reduce the quantity and hence the profit vi) inadequate paddy purchase traceability systems, where women parboilers often buy from market but not from identified producer groups.

v) Availability of labour/associated challenges

According to the parboilers in the four locations labour is amply available to carry out all the activities, however the singular most important challenge is high cost, therefore they tend to shy away from hiring labour and only use family labour. They claimed that visual sorting is more time consuming than general sorting because of the attendant physical exertion which also leads to high cost as already mentioned.

vi) Recommendations to CARI on training approach and support needed to fully adopt the practices

The parboilers in the four locations were unanimous in recommending that the time for the training is usually not enough and therefore they need more time to fully comprehend some of the content. They also maintained that the farmers should be provided with good quality seeds to produce quality paddy. They requested that CARI should support them with good and durable tarpaulins, small rice mills in areas where mill do not exist, record keeping books, weighing scales and calculators.

vii) Most difficult parboiling equipment to procure and associated challenges

The most difficult parboiling equipment to acquire in most of the locations were aluminum pots, false bottoms, good quality tarpaulins and 100kg weighing scales. The general challenges ranges from non-availability within the locality and unaffordability due to high cost of obtaining the tools.

viii) Position on the use of 100kg weighing scale and what needs to be done for parboilers to adopt

The participants explained that most women parboilers are used to weighing using their traditional weighing tool called *mudu*. However, they welcomed the idea of the use of 100kg weighing scale in all the locations claiming that it will bring sanity to the business both at the paddy purchase point and sales of finished product. However, for full adoption, they proposed sensitization, training, and provision of scales as starter packs.





ix) Adoption of business practices as promoted by CARI

In all the locations it was discovered that the participants do not adhere to record keeping and the most important reasons were a) they do not realize any advantage in keeping record b) they are mostly illiterates. As for calculating money-in money-out, they claimed that they practice it but usually not recorded, this is same with calculating the cost of parboiling per bag. They all recommended that CARI should increase the training time and to carry out refresher training to update the knowledge of the parboilers.

x) Access to financial services and bank account penetration

According to participants, they have never request for loans/credit from any financial institution, this because, they are of the belief that the procedure for obtaining credit is cumbersome, coupled with high interest rates. Apart from 3 parboilers in Kebbi state, all others have bank accounts, however savings are not regular because they have the belief that you can only save large sum of money and most importantly, they claimed that they have other means of saving their money such as daily contributions (adashe, asusu) and buying products during time of scarcity and resell during off season.

xi) Complimentary income generating activities

All the parboilers have complimentary income generating activities which ranges from trading in household food stuff, tailoring, sales of shoes, clothing etc. According to them they engage in these extra activities to help the households in paying for medical bills, school fees and buying clothes during time of festivals. They all claimed they need training on business diversification in order to generate more profits.

xii) Location of rice mill

All the parboilers other than FCT have mills located in their communities where they mill their paddy and the price of milled rice tend to range from N600-N1000 per "mudu" depending on the quality of the rice.

xiii) Business models

According to the assessment report, there are two business models which could be promoted under the parboiling practices these include i) parboiling of paddy and subsequently milling, before then selling the parboiled (and milled) rice onward ii) parboiling of paddy and then selling it directly onward to a processor for further milling, even though business model 2 seems to be more profitable according to the report presented but the people mostly practice business model 1 claiming that they are not familiar with business model 2.

4. Conclusion

Interactions with the parboilers showed that they appreciated the training on parboiling as carried out by CARI, since this has significantly improved the quality of the produce and





increase in price compared to when they used the conventional method to process their paddy. However, adoption of the four practices under review would be significantly improved if conscious time is spent to making the participants understand why each of the processes is carried out. A training could also be organized for paddy dealers to improve on the quality of paddy they handle, while the smaller scale millers need to be trained on the proper setting of their machines to reduce the breakage of the rice.

5. Recommendations

From the interaction with the parboilers, the following recommendations are proposed:

- i) The period of the parboiling training should be increased to allow more time for the explanation of the importance of each of the practices and the pro and cons of negating the practices.
- ii) Retraining to follow up with parboilers after a certain period.
- iii) The millers need to be trained on proper machine setting to minimize breakage of rice during milling.







ANNEX 1: AGENDA

Thursday, 5th August 2021: Parboiling Study Validation Workshop				
Reiz Continental Hotel, Abuja, Nigeria				
Time	Topic	Responsible Person(s)		
08:00 - 09:00	Arrival and registration of participants	CARI		
09:00 - 09:20	Welcome address	Mr. Kazeem Adegoke/ Mr. Issah Nadjo		
09:20 - 09:30	Introduction of participants	All Participants		
09:30 - 09:40	Setting workshop rules	CARI and Consultants		
09:40 - 10:00	Setting the stage- Overview of the Study results	Martial Houessou		
10:00 - 10:15	Questions and answers	All Participants		
10:15- 10:30 Coffee break				
10:30- 11:45	Focal Group discussion – Adoption of good parboiling practices	Dr Mike and Engr. Isah		
11:45 – 12:30	Focal Group discussion – Adoption of business practices	Dr Mike and Engr. Isah		
12:30- 13:30	Lunch break			
13:30- 14:30	Focal Group discussion – Access to financial services and bank account penetration	Dr Mike and Engr. Isah		
14:00-15:30	Focal Group discussion – Complementary income generating	Dr Mike and Engr. Isah		
15:30- 15:45	Coffee break			
15:45 - 16:00	General discussion, Questions and answers	All participants		
16:00	Closing remarks	Hamzat Olawale		





ANNEX 2- PICTURE GALLERY



Pic 1: Group photograph with parboilers in Kano state



Pic 2: Workshop with women parboilers in Kebbi state









Pic 3: workshop in session with parboilers in kano state

Pic 4: Group photograph with parboilers in Jigawa state