## **PROJECT TITLE:**

#### DISSEMINATION OF IMPROVED BAMBARA PROCESSING TECHNOLOGIES THROUGH A NEW COALITION ARRANGEMENT TO ENHANCE RURAL LIVELIHOODS IN NORTHERN GHANA

# **END OF ACTIVITY REPORT**

## ACTIVITY 2.4

### TRAINING OF WOMEN PROCESSORS IN SELECTED COMMUNITIES IN PRODUCTION AND UTILIZATION OF HIGH QUALITY BAMBARA FLOUR

## ACTIVITY 2.6

### ON-SITE COMMUNITY-BASED DEMONSTRATION ON BAMBARA FOODS FROM HIGH QUALITY FLOUR

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#### **INTRODUCTION**

Bambara nut, a robust legume that serves as a food security crop, is cultivated and consumed by farm households in many districts of northern Ghana. The increasing urbanization and the accompanying changes in lifestyle experienced over the past five decades have resulted in a decreasing production of this high potential food security crop as a result of declining consumption of the legume.

Research studies conducted by the Food Research Institute (FRI) of Council for Scientific and Industrial Research (CSIR) identified a number of factors that account for the declining consumption and public interest in food prepared from Bambara nuts. Among others, the long cooking time and the presence of nutrition inhibitors, as well as the resulting production of unpleasant gastro-intestinal gases were identified. The Food Research Institute undertook a series of studies and analysis to solve the problems accompanying the declining public interest in the consumption of Bambara foods. The result of the research was an improvement of the traditional method of processing Bambara flour before its utilization in preparing various dishes. The improved method produces a high quality nutritionally beneficial flour that can be used to prepare traditional as well as new Bambara nut-based foods. It is called the High Quality Bambara Flour (HQBF).

The Report outlines two activities undertaken by CAPSARD and WIAD, as part of the DFID/CPHP funded project (Dissemination of Improved Bambara Processing Technologies Through a New Coalition Arrangement to Enhance Rural Livelihoods in Northern Ghana), in the training of women processor on small-scale/ household production of the HQBF, and on-site community demonstrations of the uses of the High Quality Bambara Flour to households on how to use the HQBF in local traditional dishes for home consumption.

#### 2.0 DESCRIPTION OF ACTIVITY 2.4

According to the Project PMF, a total of two hundred (200) women food processors/cooked food vendors will be trained by WIAD as the lead partner, and CAPSARD on the micro-scale production and use of HQBF for the preparation of various Bambara foods. These women, who belong to the Bambara Food Processors Association in northern Ghana, have been identified by CAPSARD as being involved in the preparation and sale of Bambara foods using tedious traditional methods, which result in low yield and poor quality. Some of them were also involved in the field testing of the HQBF during the technology development stages of the previous CPHP project. They are currently operating in four districts in northern Ghana.

The target trainees will be trained in the micro-level, household production of the HQBF in selected communities in the four districts, namely Tamale Metropolis, Savelugu-Nanton district, Tolon-Kumbungu district, and Gushiegu-Karaga district.

### 3.0 DETAILS OF TRAINING ACTIVITIES

The training activities were to be undertaken by WIAD and supported by CAPSARD. The details of the training activities are presented herein below.

#### 3.1 General Training Methodology

The methodology used in the training took the general form of a participative observational and hands-on training. The general format followed for all the training sessions was:

- 1. Arrival, Welcome and Opening Session
- 2. Introduction to High Quality Bambara Flour
- 3. Materials and Methods of Producing High Quality Bambara Flour
- 4. Questions, Answers, and Clarifications
- 5. Demonstration of Steps involved in producing HQBF
- 6. Demonstration of Uses of HQBF
- 7. Questions, Comments, Answers and Clarifications
- 8. Closing and Departure

The general average duration of a training session was three (3) hours, as most of the materials used in the training were already pre-produced for the purpose of shortening the time used during the training sessions.

Participation during the training session was very good and enthusiasm was high among the participants.

#### **3.2** District Level Training Sessions

Women food processors/cooked food vendors were trained in the following communities as presented in the table below:

DISTRICT	COMMUNITY	NO. OF TRAINEES
Tmale	Gumani Area	25
	Sabonjida	27
	Nyohini	15
	Kumbuyili	19
	Yong-duuni	15
	Vitting	11
Savelugu-Nanton	Savelugu township	24
	Tampion	16
Tolon-Kumbungu	Nyankpala township	19
	Kumbungu	13
Gushiegu-Karaga	Kpatinga	21
	Gaa	15
4 districts	12 communities	219 trainees

#### 4.0 DIFFICULTIES AND CHALLENGES

The main difficulty encountered during the training sessions was logistical, as the number of training participants almost always outnumbered the quantity of training materials budgeted for the training sessions. Most participants, however, were able to have a first hand experience in the methods of production and utilization of the HQBF.

Over difficulties and challenges were encountered during the training sessions, and invariably, all the training participants expressed the same concerns. These concerns related to their inability to purchase and produce the HQBF due to financial constraints, accompanied by the problem of contamination of their bambara flour with other grain flours at the grinding mills, as well as the poor quality of milling they encounter at their village grinding mills as compared to the smooth and white Bambara flour from mills in Tamale. Those in Tamale Metropolis expressed their concerns about their inability to purchase Bambara nuts when the prices are high, especially in the rainy season when competition from other cooked foods is high and schools have vacated.

Training participants therefore appealed to the two training organizations (WIAD and CAPSARD) to come to their aid with solutions to their problems so as to enhance their continued engagement in the Bambara cooked food trade for their livelihoods.

#### 5.0 CONCLUSION

The activity 2.4 was conducted successfully, in spite of the and challenges encountered. Monitoring of the post-training implementation revealed that about 76 trainees attempted replicating their training experience at home. About 65 of them were successful in producing HQBF while 8 women produced poor flour due to non-conformity to the Production Steps and lost their capital as a result. The trainers gave them reciprocal quantities of Bambara nuts to help them recover their lost capital.

As indicated, a total of 219 women engaged in cooked Bambara food vending were trained, thus exceeding the target of 200 women.

Report presented by WIAD and CAPSARD

September 6, 2004

#### 6.0 DESCRIPTION OF ACTIVITY 2.6

According to the Project PMF, at least eight on-site community demonstration on household use of HQBF will be undertaken in four project districts in northern Ghana. The demonstrations will be participatory in nature and will be led by WIAD, and assistance provided by CAPSARD and FRI. The number of participants during the Onsite community demonstrations were not specified in the Project PMF, so the WIAD, assisted by CAPSARD, could demonstrate the uses of HQBF to any number of community members attending the sessions.

The target communities will be selected from the four districts, namely Tamale Metropolis, Savelugu-Nanton district, Tolon-Kumbungu district, and Gushiegu-Karaga district.

#### 7.0 DETAILS OF ON-SITE COMMUNITY DEMONSTRATION SESSIONS

The on-site community demonstration activities were to be undertaken by WIAD and supported by CAPSARD. The details of the on-site community demonstration activities are presented herein below.

#### 7.1 General Approach to On-site Community Demonstrations

The on-site community demonstration sessions took the general form of an observation and hands-on demonstration. The general format followed for all the on-site community demonstration sessions was:

- 1. Arrival, Welcome and Opening Session
- 2. Introduction to High Quality Bambara Flour
- 3. Types of recipes that can be cooked using the High Quality Bambara Flour
- 4. Demonstration of the Various Recipes
- 5. Tasting and Eating of the Dishes Prepared
- 6. Questions, Comments, Answers, and Clarifications
- 7. Closing and Departure

On the average, each on-site community demonstration took about two (2) hours to complete and this did not take too much of the women's time and attention. During the on-site community demonstration session, participation was very good and enthusiasm was high among the participants. Many of the participants took the cooked food home to show to their household members and to try their hands on preparing same from the few packets of the flour that was given to them.

#### 7.2. District Level On-site community demonstration Sessions

The on-site community demonstration sessions conducted in the following communities as presented in the table below:

DISTRICT	COMMUNITY	PARTICIPANTS
Tamale	Kanville	37
	Gbambaya	34
	Nyohini	27
	Nyanshegu	37
Savelugu-Nanton	Zoggu	36
	Moglaa	31
Tolon-Kumbungu	Dalung	36
	Talli	30
	Zangbalung	32
Gushiegu-Karaga	Gaa	30
	Kpatinga	40
4 districts	11 communities	370 participants

#### 8.0 DIFFICULTIES AND CHALLENGES

The limited quantity of demonstration materials to suffice all community members present was the main difficulty encountered during the on-site community demonstration sessions. However, most participants were able to have a first hand experience in the use of HQBF and the preparation of traditional dishes (tuubaani, koosey, gabley, etc.) from HQBF.

The same concerns raised during the Training Sessions for Women Food Processors were also expressed during the on-site community demonstrations. The concerns included the following:

- Their inability to purchase and produce the HQBF since not every family or household cultivate Bambara nuts
- How to ensure there is no or little contamination of their Bambara flour with other grain flours at the grinding mills
- How to obtain high quality milled Bambara nut flour (smooth and white Bambara flour) because their village grinding mills produce poor quality milling (coarse and brownish flour) they encounter at their village grinding mills
- Households in Tamale Metropolis expressed their concerns about their inability to purchase Bambara nuts since they are in town and therefore do not cultivate Bambara nuts.

Community members participating in the on-site demonstration session therefore appealed to WIAD and CAPSARD to help members of the communities to produce and sell the HQBF to them, since every household cannot produce its own small quantity of HQBF.

#### 9.0 CONCLUSION

The activity 2.6 was conducted successfully, in spite of the difficulties and challenges encountered.

As indicated, a total of 11 community on-site demonstration sessions were conducted in the 4 project districts.