Youth Entrepreneurship and Women’s Empowerment in Northern Nigeria–Nigeria Way

MEDA Youth Entrepreneurship and Women’s empowerment in Northern Nigeria (WAY) Project in Bauchi state is a five year project that assists economically active poor women and youth to increase their income, specifically those who are involved in agro-processing in the Rice, soybeans and Groundnut value chains. MEDA supports the business development of women led SSBs and ENs. Strengthening women’s business capacity for agro-processing in the rice, groundnut and soy value chain with group development at the center.

In partnership with

BAUCHI STATE PRIMARY HEALTH CARE AGENCY

and

MINISTRY OF HEALTH, BAUCHI STATE
This training manual is a step-by-step guide on incorporating soybeans in the Nigerian cuisine to promote consumption and subsequently contribute to improving nutritional status among children under 5. This manual was adapted from the Training of Trainers’ module for Orange-fleshed sweet potato (OFSP) by the International Potato Centre and the Nigerian Community Infant and Young Child Feeding Counselling Package: Facilitator Guide. Website

The recipes were tested by women of Dass and Bauchi Local Government Areas (LGAs) after a training of 100 women entrepreneurs in the soy value chain on soy utilisation skills. The State Ministry of Health, especially Mr Dogara Mamman, the Deputy Director of Nutrition and Food Safety have been instrumental in providing information and in reviewing this manual.

Dr Rose Idi Head of Women in Agriculture Extension department BSADP (Bauchi State Agricultural Development Program) has been instrumental in the dissemination of the soy utilisation message along with the Women in Agric (WiA) extension agents under her department.

This book and its contents are intended for training, educational and domestic purposes. The training guide has been validated by Sa’adatu Abdul-Rahaman and Stephanie Wealth-Ekanem with 10 trainings in 10 locations in 5 LGAs in Bauchi state for over 800 women.
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Goal
To further develop the soy value chain in Bauchi State by promoting the consumption of diversified soy products among the people of the state.

Objectives
• To increase the awareness among women farmers, health workers and school caterers of the nutrient content and health benefits of soybeans.
• To promote the proper preparation, storage and use of soybean in local dishes by doing cooking demonstrations among women farmers and school caterers.
• To improve the nutritional practices of smallholder farming families and school caterers through nutrition education and cooking demonstrations.
• To provide income-generating opportunities to women entrepreneurs and smallholder farmers by educating them about the soy value chain.

Target group
The training in this manual is intended for health workers, schoolteachers, school caterers, women farmers, commercial food processors, and pregnant and lactating mothers in the selected local government areas (LGAs) for the MEDA-Nigeria Youth Entrepreneurship and Women’s Empowerment Project in Bauchi State. Other stakeholders in the soy value chain may be included. If the participants have more advanced training knowledge (e.g. project staff), the approach in this manual may be adjusted as needed.

Problem statement
For decades, agricultural development programs and, indeed the agricultural sector, have told farmers, “Engage in production or value addition of X or Y agricultural products to have ‘more money’, ‘increased yields and or income’ or ‘end poverty’ “. These messages are not wrong in themselves, but have resulted in major nutritional challenges, which currently are being improperly addressed, and have left many households disillusioned.

At least 2/3 of Nigeria’s population and 75–80% of the citizens of Bauchi State depend on agriculture for employment and their livelihood (FMARD 2011 Bauchi State Agricultural Policy Document 2019). At the same time, the nutritional indices are dismal in, for example, Bauchi State. According to the National Nutrition Household Survey Report of 2018 (NUHS 2018), overall 45.5% of children in Bauchi are stunted (short for age) and 28.2% of all children in the state are underweight (low weight for age). These figures are higher than the national average of 32.0% and 19.9%, respectively, for stunting and being underweight, meaning that children in Bauchi State are more malnourished than those in other areas of Nigeria.
Malnourishment has occurred because, in the absence of nutrition education, an increase in yields or income doesn’t necessarily translate into improved nutritional status or healthy living. Nutrition-sensitive agricultural education (e.g. food-based dietary guidelines) is conspicuously missing from the information provided to farming families. Instead, information on the nutritional needs of different household members is made available to health facilities rather than farming families. If the families had the information, they would be able to eat healthier rather than having to become malnourished before receiving appropriate advice from a health centre.

**Proposed solution**

One of the proposed solutions to the lack of nutrition information among farming families is to provide them with behaviour change communication materials and training that focuses on farming families. Helping the families to make more nutritional food choices may fast track a reduction in malnutrition and support healthy farming families to increase their income by using agricultural processes that can first improve their health, and then take them out of poverty.
For safety reasons, the practical training sessions should be done outdoors. Depending on the caliber of the participants, all the sessions (both interactive lectures and the practical training) can be held outdoors. In choosing a training venue, consider the closeness to a source of water and the availability of a grinding mill in the community.

Visual aids is a great asset especially in training illiterate participants, but training can still be successful and have the same impact if the interactive sessions are made highly participatory.

Facilitators should always prepare a list of the ingredients needed for a training and budget for them based on the number of participants so enough food prepared for all participants to taste and form an opinion about it. It is always better to have ingredients left over than not have enough. Budgeting correctly is important— inadequate funds can limit meeting the objectives of a training.

Pre-arrange for the utensils and cooking fuel for the training to be in place; if that is not possible, include them in the budget. When training community women, choose a training venue in a community where more of the training participants live so you can pre-arrange with them for utensils.

**Guide for budgeting for training materials**

1. Identify all the meals to be prepared for the duration of the training.
2. List all the ingredients for each meal. List the ingredients again if they are needed for other meals.
3. List all ingredients identified in step 2 again, but this time, list each ingredient only once.
4. Using the list from step 2, count the number of times each ingredient was listed and calculate the quantities needed, using the list in step 3.
5. Quantify the list once again but this time use local measures (as used in the market) to identify the quantities needed for the training. Example: If in step 4, rice is quantified as 2, how much would be needed in mudu?
6. Allocate prices for the amounts of each ingredient and multiply by the total amount identified in step 5.
7. Add all the costs together to get the total cost of training materials (refer to template).
8. If buying cooking utensils and cooking fuel, add them to the list of materials and costs. If they are to be paid for, include the cost of water for cooking and cost of grinding.
Template for the budgeting of training materials

<table>
<thead>
<tr>
<th>List of Ingredients</th>
<th>Total Measures (M)</th>
<th>Unit Price per Measure (P)</th>
<th>Total Amount (M * P)</th>
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The training will be conducted in six sessions in which the participants will be working in groups. The groups should be small and manageable with each participant involved actively. Lectures and discussions with visual aids and practical demonstrations of soybean preparation and utilization will be conducted through 15 activities. These training sessions should be carried out in a minimum of three days minimum so the participants to grasp the skills in soy utilisation in a relaxed environment. While trainings should not be rushed, the number of activities in the practical sessions can be reduced if resources (time and logistics) are constrained.

**DAY ONE**

<table>
<thead>
<tr>
<th>Session One: Benefits of good nutrition</th>
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<tbody>
<tr>
<td><strong>Learning Objective 1</strong></td>
</tr>
<tr>
<td><strong>Methodology</strong></td>
</tr>
<tr>
<td><strong>Suggested time</strong></td>
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</table>

**Instructions for Activity**

1. Display the food items from the three food groups (energy giving, body building and protective) separately. Arrange them on a mat or table so everyone can see them. If the food items are not available, use pictures.

2. Ask the participants if they have the various food groupings at the community level or in their homes. If they don’t have those you have displayed or shown in the pictures, find out if they have other foods that belong to the three food groupings.

3. Take participants through the food groups and their benefits.

4. Ask volunteers to use the available foods to “**prepare a meal**” (to demonstrate a balanced meal).

5. Discuss and further explain what constitutes a balanced diet and the importance of a balanced diet.
Learning Objective 2 | Discuss the nutritional and health benefits of soybeans.
Methodology | Brainstorming, interactive presentation
Suggested time | 20 minutes

Instructions for Activity
1. Ask participants:
   a. What do you know about soybeans?
   b. What do you know about the nutritional benefits of soybeans?
   c. What are some health benefits of soybeans?
2. Recognize all the input and fill in any gaps in knowledge.
3. Discuss.

Key Information: Nutritional benefits of soybeans

Protein
Soy is a source of high quality plant-based protein; it is regarded as complete protein. This means it contains all the essential amino acids that the body needs but can’t make for itself. As compared to other legumes, soybeans contain about 35–40% protein.

Fats
Soybeans contains about 20% fat. They also contain essential fatty acids: soy contains omega-3 and omega-6 fatty acids, which are essential nutrients for a healthy life, especially for infants.

Vitamins and minerals
Soybeans are a good source of several vitamins and minerals, including vitamin K1, copper, manganese, phosphorus, calcium, and B-vitamins including thiamine and folate.

Carbohydrates
Soybean is very low in carbohydrates. Another great benefit is its high fiber content, which is good for gut health and diabetes (soy has a low glycemic index – a measure of how food affects the rise in blood sugar level after a meal).
Key Information: Value of soybeans in the diet

Soybeans are a rich source of various bioactive plant compounds, including isoflavones, saponins and phytic acid. Isoflavones mimic estrogen and are responsible for many of soybeans’ health effects. Research is ongoing into the extent of the health benefits of soybean. Some of these health benefits include:

**Keeps bones stronger**
Isoflavones content of soybean helps to maintain bone tissues, prevents bone loss and reduces risk of osteoporosis.

**Contributes to heart health**
Soybean contains isoflavones and saponins, which help to lower bad cholesterol, reduce total cholesterol, prevent plaque buildup and protect against strokes and heart disease.

**Lowers risk of cancer**
Soybeans have anticancer properties that help to prevent breast cancer, colon cancer and prostate cancer.

**Reduces menopausal symptoms**
During menopause, estrogen levels starts decreasing and causing menopausal symptoms. Isoflavones in soy mimics estrogen and helps reduce menopausal symptoms, especially hot flushes.

**Helps with weight reduction**
Increased protein intake has been associated with the suppression of appetite. Research has shown that plant foods like soy, which provide concentrated amounts of protein, have an ability to help suppress appetite.

**Prevents diabetes**
Their high fiber content makes soybean and other foods containing soya valuable in cases of constipation, high cholesterol and type 2 diabetes.
### Session 2: Practical
Processing soybean flour, roasted maize flour, beans flour and roasted soybean flour

| Learning Objectives | • Participants will gain knowledge and skills in how to process soybean to flour to reduce its off-flavour.  
|                     | • Participants will learn how to process maize, beans and groundnuts hygienically for use on Day 2. |
| Preparation         | • Read the session material and familiarize yourself with the process for each activity.  
|                     | • Prepare the budget and purchase the ingredients for the activities. Refer to Logistics for more information.  
|                     | • Make copies of the recipes for the participants (if literate). |
| Materials           | • Soybeans  
|                     | • Preferred type of fuel, cook stoves, basins, buckets, cooking pots, stirring rods and sieves  
|                     | • Beans and rice |
| Precautions         | • Check the availability of water/how close the training venue is to a source of water.  
|                     | • Use an outdoor venue for training, if possible.  
|                     | • If conducting training indoors, make sure it is well ventilated.  
|                     | • Have a first aid kit on hand. |
Activity 1: Processing Soybeans Flour

- Divide the participants into small manageable groups.
- Distribute the ingredients for the activity.
- Explain the activity process to the participants and give them recipes (if participants are literate).
- Check on participants at short intervals during activity.

Ingredients

- 4 cups of soybeans
- 20 cups of water (soy expands when cooked)

Method 1

1. Remove stones and unwanted particles from soybeans.
2. Wash beans in clean water to remove dirt.
3. Add beans to boiling water and boil for 20–25 minutes. It will begin to foam. Do not cover with a lid.
4. Drain the beans and add cold water. Wash (rub between both palms) to dehull.
5. Sun dry dehulled beans until completely dry.
6. Grind beans into flour and store in a dry airtight container.
7. Use within a month.

Refer to Recipes for alternative method
Activity 2: Roasting Maize Flour

- Divide the participants into small manageable groups.
- Distribute the ingredients for activity.
- Explain the activity process to the participants and hand out recipes (if participants are literate).
- Check on participants at short intervals during activity.

**Ingredients**

- 2 cups of maize
- Water

**Method**

1. Remove stones and unwanted particles from the maize.
2. Wash maize in clean water to remove dirt. Do not leave in water for more than 5 minutes.
3. Drain and sun dry until maize feels dry to the touch.
4. Roast maize on medium heat until golden brown.
5. Grind roasted maize into flour and store in an airtight container.
6. Use within a month.

Activity 3: Processing Beans for Kosei

- Divide participants into small manageable groups.
- Distribute the ingredients for activity.
- Explain the activity process to the participants and hand out recipes (if participants are literate).
- Check on the participants at short intervals during the activity.

Participants are to only dehull beans and grind them in the morning for use on Day 2.
Activity 4: Preparing Roasted Soybean Flour

- Divide participants into small manageable groups.
- Distribute ingredients for activity.
- Explain the activity process to participants and hand out the recipes (if participants are literate).
- Check on participants at short intervals during activity.

Ingredients

- 1 cup soybeans
- 6 cups water

Method

1. Remove stones and unwanted particles from the soybeans.
2. Wash beans in clean water to remove dirt.
3. Add beans to boiling water and boil for 20–25 minutes. It will begin to foam. Do not cover with a lid.
4. Drain the beans and add cold water. Wash (rub between both palms) to dehull.
5. Sun dry dehulled beans until they feel dry to the touch.
6. Roast dry dehulled beans on medium heat until golden brown.
7. Winnow roasted beans to remove any excess hulls.
8. Grind and store in an airtight container.
9. Use within a month.
Total participants for training should preferably not exceed 35. This would ensure they are manageable, and everyone is actively involved when they are divided into groups. If exceeding this number, then the facilitator should have a co-facilitator.

- Each group is to perform all 4 activities.
- For ease of this session and subsequent others, each group should select a leader.

If the training is conducted for a larger group of people or for community members, pregnant and lactating mothers, or if there are resource and time constraints, the facilitator can divide the participants into four groups and delegate each of the activates to a group. However, the facilitator should ensure that all participants know how to process soybean flour (Activity 1) and roasted soybeans flour (Activity 4).

### Preparation for Day 2

- Ensure that all processed flours from activities 1 to 4 are stored in a well-ventilated place for use on Day 2.
- Give the rice for maasa to one of the participants to process on the morning of Day 2.
- You may let the participants take their group items home to grind and bring back for Day 2.
- Ensure all the utensils are cleaned.

Ensure all fires are extinguished!
Session 3: Incorporating soybeans in household meals

<table>
<thead>
<tr>
<th>Learning Objective 1</th>
<th>Demonstrate proper food safety, hand washing and critical times for hand washing.</th>
</tr>
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<tbody>
<tr>
<td>Methodology</td>
<td>Brainstorming</td>
</tr>
<tr>
<td>Suggested time</td>
<td>30 minutes</td>
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</tbody>
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Instructions for Activity 1: 10 minutes

Food safety and handling

1. Ask the participants: **What are the keys to safer food?**
2. After hearing the comments, mention the keys to safer food.
3. Discuss.

Key Information: Hand washing cannot be over emphasised when working with food

The following are some basic requirements for food safety and a checklist for the personal hygiene practices of food handlers:

- Use a clean and washable apron to prevent the cross contamination of bacteria from clothing to food stuffs and vice versa.
- Cover your hair with a scarf or hairnet during food preparation.
- Keep your fingernails short and clean.
- Avoid touching your nose, mouth, hair and skin during food preparation.
- Check the expiry dates of products before using.
- Do not share cutlery with others unless the cutlery has been washed first.
- Never taste from a utensil that is going to be placed back into the food source before the food is served.
- Do not cough or sneeze directly onto food. Wash your hands after coughing or sneezing.
- After blowing your nose, wash your hands.
- If you have diarrhea or the flu, avoid food preparation completely.
- Avoid wearing jewellery while handling and preparing food.
- Clean and tidy as you cook to prevent contamination of food items.
- If a surface or utensils were used for raw meat, poultry or eggs, thoroughly wash and clean them before using them for any other items.
Instructions for Activity 2: 10 minutes

Critical times of hand washing

1. Ask the participants to list the five main critical times when hand washing is necessary. Write the responses on a flip chart (where applicable).

2. Probe until all the 5 critical times have been mentioned.

3. Discuss and summarize.

Key Information: There are five critical times when washing one’s hands with soap is important to reduce fecal-oral transmission of disease.

1. Before and after preparing food or handling raw meat, fish or poultry.
2. After using the toilet.
3. After cleaning a child’s bottom.
4. Before feeding a child.
5. Before eating.

In addition, people should wash their hands following these actions before and during food preparations:

- Before and after using kitchen utensils
- After sneezing, coughing or blowing one’s nose
- After smoking
- Touching the hair or face
- After using or emptying bins
Instructions for Activity 3: 10 minutes

Practical demonstration of hand washing with soap under running water

1. Ask the participants to demonstrate how proper hand washing is done.
2. Take the participants through the steps in proper hand washing as below:
   - Wet hands with water.
   - Apply enough soap to cover all hand surfaces.
   - Rub hands, palm to palm.
   - Right palm over the back of the left hand with interlaced fingers and vice versa.
   - Palm to palm with fingers interlaced.
   - Backs of fingers to opposing palms with fingers interlocked.
   - Rotational rubbing of left thumb clasped in right palm and vice versa.
   - Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa.
   - Rinse hand with water.
   - Dry thoroughly with a single tissue or napkin.

Learning Objective 2

Demonstrate how to incorporate soybeans in household meals.

Methodology

Interactive presentation

Suggested time

15 minutes

Instructions for Activity

Incorporating soybeans in family meals

1. Ask the participants about their experience in using soybeans; probe to learn if they incorporate them in meals.
2. Demonstrate how soybeans are incorporated in meals, using the roasted maize and soybeans.
3. Discuss.

Key Information: Soybeans can be used to fortify any food in terms of protein quality and quantity. It can be added to tuwon masara, jollof, kunu and other local meals.

1. The basic principle in adding soybeans to any food is using the ratio 4 parts of the main food (rice, maize, yam, etc.) to 1 part of soy flour or grain.
2. For soups, stews and sauces, as much as needed may be used to obtain the desired taste.
## Session 4: Practical

Preparing tuwo, tuwon shinkafa, masa, kose, kunu, pounded yam, egusi soup, soya soup, and soya jollof

<table>
<thead>
<tr>
<th>Learning Objectives</th>
<th>Participants will gain knowledge and skills in how to incorporate soybeans in household meals.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation</td>
<td>• Read the session material and familiarize yourself with the process for each activity.</td>
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<td></td>
<td>• Prepare the budget and purchase the ingredients for the activities.</td>
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<td></td>
<td>• Refer to Logistics for more information.</td>
</tr>
<tr>
<td></td>
<td>• Make copies of the recipes for participants (if literate).</td>
</tr>
<tr>
<td>Materials</td>
<td>• Soybeans flour</td>
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<tr>
<td></td>
<td>• Preferred type of fuel, cook stoves, basins, buckets, cooking pots, stirring rods, and sieves</td>
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<td>• Ingredients</td>
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<tr>
<td>Precautions</td>
<td>• Check availability of water/ how close the training venue is to a source of water.</td>
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<td>• Training should preferably be an outdoor activity.</td>
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<td>• If conducting training indoors, make sure the space is well ventilated.</td>
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<td>• Have a first aid kit on hand.</td>
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</tbody>
</table>
Activity 1: Preparing Tuwo

- Divide the participants into small manageable groups.
- Distribute the ingredients for the activity.
- Explain the activity process to the participants and hand out recipes (if participants are literate).
- Check on the participants at short intervals during the activity.

Refer to Recipe #4 in Recipes

Activity 2: Preparing Tuwon Shinkafa

- Divide participants into small manageable groups.
- Distribute the ingredients for the activity.
- Explain the activity process to participants and hand out recipes (if participants are literate).
- Check on the participants at short intervals during the activity.

Refer to Recipe #5 in Recipes

Activity 3: Preparing Masa

- Divide participants into small manageable groups.
- Distribute the ingredients for the activity.
- Explain the activity process to participants and hand out recipes (if participants are literate).
- Check on the participants at short intervals during the activity.

Refer to Recipe #6 in Recipes
Activity 4: Preparing Kose

- Divide participants into small manageable groups.
- Distribute the ingredients for the activity.
- Explain the activity process to participants and hand out recipes (if participants are literate).
- Check on the participants at short intervals during the activity.

Refer to Recipe #7 in Recipes

Activity 5: Preparing Kun

- Divide participants into small manageable groups.
- Distribute the ingredients for the activity.
- Explain the activity process to participants and hand out recipes (if participants are literate).
- Check on the participants at short intervals during the activity.

Refer to Recipe #8 in Recipes

Activity 6: Preparing Egusi Soup

- Divide the participants into small manageable groups.
- Distribute the ingredients for the activity.
- Explain the activity process to participants and hand out recipes (if participants are literate).
- Check on the participants at short intervals during the activity.

Refer to Recipe #9 in Recipes
Activity 7: Preparing Soya Soup

- Divide the participants into small manageable groups.
- Distribute ingredients for activity.
- Explain the activity process to participants and hand out recipes (if participants are literate).
- Check on the participants at short intervals during the activity.

Refer to Recipe #10 in Recipes

Activity 8: Preparing Pounded Yam

- Divide the participants into small manageable groups.
- Distribute the ingredients for the activity.
- Explain the activity process to the participants and hand out recipes (if participants are literate).
- Check on the participants at short intervals during the activity.

Refer to Recipe #11 in Recipes

Activity 9: Preparing Soya Jollof

- Divide the participants into small manageable groups.
- Distribute the ingredients for the activity.
- Explain the activity process to participants and hand out recipes (if participants are literate).
- Check on participants at short intervals during activity.

Refer to Recipe #12 in Recipes
• Be active and have control of this session – otherwise, participants will not incorporate soy flour at the right time.
• Each group is to perform all 9 activities, or the facilitator can select less activities that will equip participants with the needed skills for further innovation.
• This session can also be done in two days to enable each group to complete all activities.
• Note all questions asked during the session at the end of the session, have a Q&A and feedback session.
• Display meals prepared and each group should make a verbal presentation of their meal.
• For ease of this session, group leaders will be very useful.

If the training is conducted for a larger group of people or for community members, pregnant and lactating mothers, or if there are resource and time constraints, the facilitator can divide the participants into seven groups. Activities 1 & 5 should be delegated to one group, Activities 3 & 4 to another and the rest of the activities delegated per group. The key is for each participant to understand the principle of soy utilisation so as to promote the use of soy and innovation with it in households.

**Preparation for Day 3**

- Soak soybeans for milk and tofu.

*Ensure all fires are extinguished!*
## Session 5: Practical
### Preparing tofu and soy milk

| Learning Objectives | • Participants will gain skills in how to process soybeans into tofu and soy milk.  
| | • Participants will be better informed about the cost-benefit of using soybeans. |
| Preparation | • Read the session material and familiarize yourself with the process for each activity.  
| | • Prepare the budget and purchase the ingredients for activities.  
| | • **Refer to Logistics for more information.**  
| | • Make copies of the recipes for the participants (if literate). |
| Materials | • Soybeans  
| | • Preferred type of fuel, cook stoves, basins, buckets, cooking pots, stirring rods, and sieves  
| | • Ingredients |
| Precautions | • Check availability of water/how close the training venue is to a source of water.  
| | • Training should preferably be an outdoor activity.  
| | • If conducting the training indoors, make sure the space is well ventilated.  
| | • Have a first aid kit on hand. |
Activity 1: Preparing Tofu

- Divide the participants into small manageable groups.
- Distribute the ingredients for the activity.
- Explain the activity process to the participants and hand out recipes (if participants are literate).
- Check on the participants at short intervals during the activity.

Refer to Recipe #13 in Recipes

Activity 2: Preparing Soy milk

- Divide the participants into small manageable groups.
- Distribute the ingredients for the activity.
- Explain the activity process to the participants and hand out recipes (if participants are literate).
- Check on the participants at short intervals during the activity.

Refer to Recipe #14 in Recipes

TIP

- This session should be performed with strict supervision.
- Participants can be divided into 2 groups to complete the activities.
- Start session 6 as soymilk is left to cool for bottling and Tofu is left to drain off excessive liquid.

Ensure all fires are extinguished!
## Session 6: Interactive Session

<table>
<thead>
<tr>
<th>Learning Objective 1</th>
<th>Recap of Day 1–3 activities.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methodology</td>
<td>Question and answer</td>
</tr>
<tr>
<td>Suggested time</td>
<td>40 minutes</td>
</tr>
</tbody>
</table>

### Instructions for Activity

1. Recap the training with the participants.
2. Allow the participants to ask questions and probe the participants for answers.
### Soy Paste

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 1 cup soybeans</td>
<td>1. Remove stones and unwanted particles from soybeans.</td>
</tr>
<tr>
<td>• 6 cups water</td>
<td>2. Wash beans in clean water to remove dirt.</td>
</tr>
<tr>
<td></td>
<td>3. Add beans to boiling water and boil for 20–25 minutes. It will begin to foam. Do not cover with a lid.</td>
</tr>
<tr>
<td></td>
<td>4. Drain the beans and add cold water. Wash (rub between both palms) to dehull.</td>
</tr>
<tr>
<td></td>
<td>5. Grind beans into a smooth paste.</td>
</tr>
<tr>
<td></td>
<td>6. Use to make soy milk and tofu and to add to stews and food (tuwon, kose, etc.).</td>
</tr>
</tbody>
</table>

### Soybean Flour

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>METHOD 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 1 cup soybeans</td>
<td>1. Remove stones and unwanted particles from soybeans.</td>
</tr>
<tr>
<td>• Water</td>
<td>2. Wash beans in clean water to remove dirt.</td>
</tr>
<tr>
<td></td>
<td>3. Drain and sun dry until they feel dry to the touch.</td>
</tr>
<tr>
<td></td>
<td>4. Roast the soybeans in a heated pan until the hulls are dry and golden brown and come off easily (when rubbed between two fingers).</td>
</tr>
<tr>
<td></td>
<td>5. Dehull (using a mill or another alternative) and winnow.</td>
</tr>
<tr>
<td></td>
<td>6. Mill into flour and store in a dry airtight container.</td>
</tr>
</tbody>
</table>
### Roasted Soybean Flour

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 cup soybeans</td>
<td>1. Remove stones and unwanted particles from soybeans.</td>
</tr>
<tr>
<td>Water</td>
<td>2. Wash beans in clean water to remove dirt.</td>
</tr>
<tr>
<td></td>
<td>3. Drain and sun dry until it feels dry to the touch.</td>
</tr>
<tr>
<td></td>
<td>4. Roast the soybeans in a heated pan until golden brown.</td>
</tr>
<tr>
<td></td>
<td>5. Dehull (using a grinder or another alternative) and winnow.</td>
</tr>
<tr>
<td></td>
<td>6. Mill into flour and store in a dry airtight container.</td>
</tr>
</tbody>
</table>

### Tuwon Masara

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 cups corn flour</td>
<td>1. Mix the corn and soy flour and set aside.</td>
</tr>
<tr>
<td>1 cup soybean flour</td>
<td>2. Bring water to a boil.</td>
</tr>
<tr>
<td>Water</td>
<td>3. Mix a portion of the corn-soy flour in a little cold water to form a slurry.</td>
</tr>
<tr>
<td></td>
<td>4. Add slurry to boiling water while stirring to prevent lumps.</td>
</tr>
<tr>
<td></td>
<td>5. Leave to cook/boil for 2–3 minutes.</td>
</tr>
<tr>
<td></td>
<td>7. Cover and leave to simmer under low heat for 2–5 minutes.</td>
</tr>
<tr>
<td></td>
<td>8. Stir continuously for 2 minutes.</td>
</tr>
</tbody>
</table>
## Tuwon Shinkafa

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 4 cups white rice (tuwo rice)</td>
<td>1. Remove stones and unwanted particles from rice.</td>
</tr>
<tr>
<td>• Salt (optional)</td>
<td>2. Wash with clean water to remove dirt.</td>
</tr>
<tr>
<td>• 1 cup soy flour</td>
<td>3. Soak rice in clean water for about 5 minutes.</td>
</tr>
<tr>
<td>• Water</td>
<td>4. Put enough water on fire and bring to a boil.</td>
</tr>
<tr>
<td></td>
<td>5. Drain water from rice and add to boiling water. Add salt and stir.</td>
</tr>
<tr>
<td></td>
<td>6. Do not cover completely.</td>
</tr>
<tr>
<td></td>
<td>7. Leave to cook. Add water if rice is not soft as desired.</td>
</tr>
<tr>
<td></td>
<td>8. When the rice is soft enough, add soy flour and stir.</td>
</tr>
<tr>
<td></td>
<td>9. Leave on low heat for 5–10 minutes, stirring intermittently.</td>
</tr>
<tr>
<td></td>
<td>10. Stir to a thick consistency and mold to desired portions.</td>
</tr>
<tr>
<td></td>
<td>11. Serve with preferred soup.</td>
</tr>
</tbody>
</table>
# Masa

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ½ cups of “tuwo rice”</td>
<td>1. Soak the rice for at least 8 hours or better still leave overnight.</td>
</tr>
<tr>
<td>4 tablespoons of pre-cooked rice</td>
<td>2. Rinse the rice and blend it together with the pre-cooked rice and water until creamy.</td>
</tr>
<tr>
<td>1 ½ cups of soy flour / 1 cup of soy paste</td>
<td>3. Add soy flour or soy paste to the mixture and stir to mix evenly.</td>
</tr>
<tr>
<td>2 ½ teaspoons of active dry yeast</td>
<td>4. Proof the yeast by mixing it with a pinch of sugar and water and set aside until it proofs.</td>
</tr>
<tr>
<td>1 ½ teaspoons of baking soda</td>
<td>5. Add the salt, sugar and proofed yeast to the rice batter and mix together.</td>
</tr>
<tr>
<td>4 tablespoons of sugar (optional)</td>
<td>6. Cover up the mixture for about 6–8 hours (or overnight) and leave it in a warm place until the mixture rises and collapses.</td>
</tr>
<tr>
<td>1 ½ cups of water a little more or less + 1/4 cup for proofing the yeast</td>
<td>7. Add a tiny bit of oil to your pan or skillet and fry the masa on both sides.</td>
</tr>
<tr>
<td>Vegetable oil</td>
<td>8. Serve with soup or with honey or any other accompaniment.</td>
</tr>
<tr>
<td>2 tablespoons of salt</td>
<td></td>
</tr>
<tr>
<td>1 large onion</td>
<td></td>
</tr>
</tbody>
</table>

1. Soak the rice for at least 8 hours or better still leave overnight.
2. Rinse the rice and blend it together with the pre-cooked rice and water until creamy.
3. Add soy flour or soy paste to the mixture and stir to mix evenly.
4. Proof the yeast by mixing it with a pinch of sugar and water and set aside until it proofs.
5. Add the salt, sugar and proofed yeast to the rice batter and mix together.
6. Cover up the mixture for about 6–8 hours (or overnight) and leave it in a warm place until the mixture rises and collapses.
7. Add a tiny bit of oil to your pan or skillet and fry the masa on both sides.
8. Serve with soup or with honey or any other accompaniment.
## Bean Cakes (Akara)

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 3 cups beans</td>
<td>1. Remove stones and unwanted particles from beans.</td>
</tr>
<tr>
<td>• 1 cup soy flour/paste</td>
<td>2. Wash in clean water to remove the dirt. Soak in water for about 10 minutes.</td>
</tr>
<tr>
<td>• Cooking oil</td>
<td>3. Drain the beans and put them in a mortar and pound until all the hulls come off.</td>
</tr>
<tr>
<td>• 7 hot pepper</td>
<td>4. Wash in clean water to remove the hulls.</td>
</tr>
<tr>
<td>• 1 large onions</td>
<td>5. Add onions and pepper to dehulled beans and mill.</td>
</tr>
<tr>
<td>• Salt to taste</td>
<td>6. Add soy paste/flour bean paste and salt to taste.</td>
</tr>
<tr>
<td>• Water</td>
<td>7. Beat thoroughly until the paste becomes fluffy.</td>
</tr>
<tr>
<td></td>
<td>8. Drop scoops of the paste in the medium heated oil and deep fry.</td>
</tr>
</tbody>
</table>
#8 Tombrown Kunu

**INGREDIENTS**
- 4 cups roasted maize flour
- 1 cup roasted soybean flour
- 1 tablespoon salt
- ½ cup sugar
- Water

**METHOD**
1. Mix maize and soybean flour and set aside.
2. Heat enough water in a saucepan.
3. When the water is hot, mix the maize-soy flour with cold water to form a slurry.
4. Add the slurry to hot water and stir continuously to prevent lumps.
5. Continue stirring and add water to get desired consistency.
7. Add a pinch of salt and sugar to taste.
8. Serve hot with or without milk.

#9 Egusi Soup

**INGREDIENTS**
- 2 large onions
- 7 medium tomatoes
- 5 hot peppers
- 1 cup palm oil
- smoked/dry fish
- 1 cup soy flour/paste (refer to recipe #1) or use desired quantity
- ½ cup egusi
- 3 garlic cloves
- 2-3-inch ginger
- 2 cups green leafy vegetables
- Seasonings

**METHOD**
1. Grind/chop onions, garlic, ginger, tomatoes and hot pepper. Wash fish, debone and break into pieces.
2. Fry onions in oil until translucent and add ground onions, tomatoes and hot pepper.
3. Cook for 5 minutes. Add 2 cups of water, fish and seasonings. Cook for 10 minutes.
4. Mix soy flour/paste with egusi, water and salt to form a thick paste. Add to soup and leave for about 5 minutes – do not stir.
5. Chop vegetables and add to soup. Stir and allow to simmer until done. Taste for salt.
6. Serve with any food of your choice.
### Soya Soup

**INGREDIENTS**
- 2 large onions
- 7 medium tomatoes
- 5 hot peppers
- 1 ½ cup palm oil
- Smoked/dry fish
- 2 cups soy flour/paste (refer to recipe #1) or use desired quantity
- 3 garlic cloves
- 2-3-inch ginger
- 2 cups green leafy vegetables
- Seasonings

**METHOD**
1. Grind/chop onions, garlic, ginger, tomatoes and hot pepper.
2. Wash fish, debone and break into pieces.
3. Fry onions in oil until translucent and add ground onion, ginger, garlic, tomatoes and hot pepper.
5. Add soy flour to soup while stirring to prevent lumps.
6. Cook this on medium heat for 10 minutes.
7. Chop vegetables and add to soup. Stir and allow to simmer until done. Taste for salt.
8. Serve with any food of your choice.

### Pounded Yam

**INGREDIENTS**
- 4 parts yam
- 1 part soy paste (refer to Recipe #1)

**METHOD**
1. Put peeled yam in a saucepan. Wrap the soy paste in aluminum foil or tie in cellophane add to yam.
2. Add water and cook until the yam is done. Drain the water.
3. Pound yam piece by piece while adding cooked soy paste in bits.
4. Pound until the yam mixes evenly with soy paste and the texture is as desired.
5. Serve with preferred soup.
# Soya Jollof

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 1 cup rice</td>
<td>1. Grind/blend onions, hot pepper, pimento and tomatoes roughly.</td>
</tr>
<tr>
<td>• ½ cup cooking oil</td>
<td>2. Heat oil in a saucepan and add onions to fry until translucent.</td>
</tr>
<tr>
<td>• Red hot pepper</td>
<td>3. Add blended vegetables to onions to fry. Stir until the water content reduces.</td>
</tr>
<tr>
<td>• Onions</td>
<td>4. Add tomato puree and soaked soybeans (washed) and stir for 2–3 minutes.</td>
</tr>
<tr>
<td>• Pimento</td>
<td>5. Wash and debone dry fish. Add to stew and stir for 2 minutes.</td>
</tr>
<tr>
<td>• Fresh tomatoes</td>
<td>6. Add your desired quantity of water and seasonings.</td>
</tr>
<tr>
<td>• Tomato puree</td>
<td>7. Allow to boil. Add washed rice and stir.</td>
</tr>
<tr>
<td>• Salt</td>
<td>8. Leave to cook on medium heat. Stir intermittently to prevent burning. Cook for about 25–30 minutes.</td>
</tr>
<tr>
<td>• Dry fish</td>
<td>9. Serve when rice is cooked and soft.</td>
</tr>
<tr>
<td>• Seasonings</td>
<td></td>
</tr>
<tr>
<td>• Soybeans (1 palmful, full soaked until the hulls come off easily)</td>
<td></td>
</tr>
</tbody>
</table>
# Soy Kebab

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>METHOD</th>
</tr>
</thead>
</table>
| - 3 litres unsweetened soy milk  
- Tomato stew/sauce  
- 1 litre oil  
- 1 cup hot tamarind juice/  
- 6 tablespoonful vinegar or lemon juice  
- Salt and seasonings  
- 2 green bell peppers  
- 3 large onions | 1. Boil soy milk for about 5 minutes and reduce heat.  
2. Add tamarind, vinegar or lemon juice and stir gently. Leave to coagulate.  
3. Strain the curd once it separates from the whey (clear yellow liquid).  
4. Add salt and seasonings to the curd and mix gently to avoid breaking it up completely.  
5. Put the seasoned curd into a piece of cheesecloth and tie tightly. Put a weight on it to drain any excess the water for 1–2 hours.  
6. Slice the tofu into cubes and fry until brown.  
7. Add fried tofu to the tomato stew and simmer on medium heat to soften and spice the tofu.  
8. Arrange fried tofu on skewers with vegetables. |
# Soy Milk

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 5 cups of soybeans</td>
<td>1. Remove stones and other unwanted particles from the beans.</td>
</tr>
<tr>
<td>• 1 cup of sugar (adjust as desired)</td>
<td>2. Wash beans thoroughly and soak in completely in 10 cups of water for at least 8 hours.</td>
</tr>
<tr>
<td>• 1 tablespoon of salt</td>
<td>3. Strain beans and add clean water.</td>
</tr>
<tr>
<td>• 2 teaspoon of vanilla essence</td>
<td>4. Wash beans to remove most of the hulls and sieve.</td>
</tr>
<tr>
<td></td>
<td>5. Mill beans with little water as possible.</td>
</tr>
<tr>
<td></td>
<td>6. Add about 5–10 cups more water to soy paste to form a slurry that pours.</td>
</tr>
<tr>
<td></td>
<td>7. Strain slurry through a cheesecloth and pour into a stainless steel saucepan.</td>
</tr>
<tr>
<td></td>
<td>8. Boil the strained liquid for 15–20 minutes, stirring continuously to prevent it from sticking to the saucepan.</td>
</tr>
<tr>
<td></td>
<td>9. Skim off all foam and fat from the surface of the milk while cooking.</td>
</tr>
<tr>
<td></td>
<td>10. After 15–20 minutes, take milk of the heat and add sugar, salt and flavor.</td>
</tr>
<tr>
<td></td>
<td>11. Serve chilled.</td>
</tr>
</tbody>
</table>
REFERENCES


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Onimawo I O. F A O: *ENACT Piloting Nigerian Experience with a Focus on Tutorials 2013*. 