



ADAPTIVE FARMS



CANADA-UNDP
Climate Change Adaptation Facility



*Empowered lives.
Resilient nations.*

APPE-TEASER
VERSION!



RESILIENT TABLES

**Building secure food systems
and celebrating distinct culinary
traditions in a world of climate
uncertainty**



Expanding on this short teaser, the full publication will be available in early 2017, showcasing more delicious recipes



The Canada-UNDP Climate Change Adaptation Facility (CCAF) incorporates six national projects and one global project. Each of the six national projects focuses on strengthening resilient approaches to agriculture and water management, with an emphasis on gender-responsive strategies. These national projects are located in: Cambodia, Cape Verde, Haiti, Mali, Niger and Sudan. In addition, a complementary global component aims to promote South-South cooperation between the six countries and enhance understanding and analysis of these adaptation initiatives, especially the gender dimensions. This global component has three outcomes: i) establishing cooperation and communication among the six national projects, ii) enhancing effective knowledge management on the experiences and lessons emerging from this portfolio, and iii) ensuring that results related to gender are documented and shared to inform broader gender-responsive adaptation practices.

To meet these outcomes, the global component has worked on three areas of activities:

1. Community of Practice: Establish a community of practice amongst the six national project teams to share experiences and lessons learned that will inform and strengthen project activities
2. Substantive Analysis and Knowledge: Analyse and document substantive experiences and lessons learned from the CCAF portfolio and disseminate them to inform adaptation projects both within the CCAF and outside
3. Communication and Outreach: Showcase results and communicate successes of CCAF national projects to the global community

More information on the CCAF and specific products generated from the activities implemented in the six countries is available at the CCAF website here: <http://adaptation-undp.org/projects/ccaf>

UNDP partners with people at all levels of society to help build nations that can withstand crisis, and drive and sustain the kind of growth that improves the quality of life for everyone. On the ground in more than 170 countries and territories, we offer global perspective and local insight to help empower lives and build resilient nations.

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Photos:
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As the world gets hotter and rainfall more erratic, the type and availability of ingredients for daily meals are changing.

As the world gets hotter and rainfall more erratic, the type and availability of ingredients for daily meals are changing. For some countries these changes are more dramatic as climate change has already cut into the global food supply and many communities are struggling to get enough food on their plates. However, there is another story to tell: one of resilience and adaptation.

With support from the Government of Canada and the Global Environment Facility's Least Developed Countries Fund, the Canada-UNDP Climate Change Adaptation Facility (CCAF) has been supporting six least developed countries and small island developing states (Cabo Verde, Cambodia, Haiti, Mali, Niger and Sudan) to strengthen climate resilience and enhance food security. The CCAF is working with rural farmers to improve water access and management, introduce new varieties of crops, and strengthen alternative livelihoods that are not dependent on climate-sensitive natural resources.

Additionally, these efforts contribute directly to the United Nations' efforts to enhance food security and support communities in achieving *Sustainable Development Goal 2: Zero Hunger*.

CCAF activities are also working in all six countries to build gender-responsive resilience to climate change by supporting women to increase food production, diversify their livelihoods and transform gender-based social norms in food production.

To better understand and share the experiences from these six countries, and to celebrate some of the successes of the CCAF projects, this cookbook examines and raises awareness on the links between food security and climate change. The CCAF Cookbook showcases traditional recipes and compares culinary and agricultural traditions across the six countries. It also explores how climate change is impacting specific ingredients and recipes, and how each country's adaptation efforts are changing the ingredients and cooking methods traditionally used.

Our hope is that the recipes and information provided in this publication will highlight the dynamic and delicious world we live in, and inform and inspire future adaptation.



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FOOD SECURITY

& CLIMATE CHANGE

As climate change increasingly threatens crop yields, it also threatens food security.

Some of the most fundamental effects of climate change are the negative impacts on food. Changing temperatures, unpredictable rainfall patterns, shorter and more erratic growing seasons, and an increased frequency of extreme events like droughts and floods all directly affect productivity of traditional crops, livestock and fisheries. Many food producers around the world, particularly in developing countries, are rural smallholder farmers, often women. These farmers are dependent on agricultural production for both subsistence and income generation. As climate change increasingly threatens crop yields, it also threatens food security.



Nonetheless, food production is only one part of this food security equation. The UN Food and Agriculture Organization (FAO) has identified four pillars of food security: Availability, Access, Utilization, and Stability. Climate change will impact all four of these pillars. *Availability* is directly affected when production is impacted. As livelihoods and income generation are negatively disrupted by these same climatic changes, vulnerable communities are less able to *access* the food that is available, without sufficient incomes. Further, climate change impacts *utilization* of food by threatening other non-food inputs to food security, such as access to clean water, sanitation and health care. And finally, the unpredictable rainfall patterns, seasonal shifts and extreme events caused by climate change also make the *stability* of food a challenge.

This is why investing in climate change adaptation is imperative to ensure food security in these vulnerable communities. The global community has committed to this effort under *Sustainable Development Goal 2: Zero Hunger*. To reach this goal, we must consider climate-related impacts on food and continue to design and implement resilient solutions, at scale.





HOW THE CANADA-UNDP CLIMATE CHANGE ADAPTATION FACILITY IS ADDRESSING FOOD SECURITY

The Canada-UNDP Climate Change Adaptation Facility (CCAF) is implementing adaptation solutions to enhance food security in six least developed countries and small island developing states: Cabo Verde, Cambodia, Haiti, Mali, Niger and Sudan.

These projects contribute to enhancing resilience of staple crops, diversifying crop varieties, introducing alternative livelihoods that are less dependent on climate-sensitive resources (e.g. livestock rearing, fish farming and juice processing), and adopting resilient water management systems and approaches.

The Canada-UNDP Climate Change Adaptation Facility supports a portfolio of national climate change adaptation projects implemented in Cabo Verde, Cambodia, Haiti, Mali, Niger and Sudan. These projects were initially supported by the Global Environmental Facility's Least Developed Countries Fund (GEF/LDCF). In 2014, these ongoing LDCF-funded adaptation projects in each country received additional funding from the Government of Canada and UNDP to further enhance the adaptive capacity of vulnerable communities, particularly in the context of food security and water management. The CCAF also includes a global component, which acts as an umbrella initiative aiming to document, analyse and share experiences and lessons learned from across the six countries.

For more information, visit the project page at: <http://adaptation-undp.org/projects/ccaf>

These adaptation strategies are proving valuable in increasing *food availability* - through enhanced crop production, ensuring *food and market access* - to increase nutrition and health and strengthen livelihoods and income generation, improving *food utilization* - by introducing clean water and new cooking methods, and sustaining *food stability* - by adapting agricultural practices to the changing conditions and providing access to reliable sources of water.

While each country's experiences and adaptation approaches are unique to their local context, CCAF efforts all had a similar focus on not only enhancing food security, but also in generating additional income and diversifying livelihood options.

Positive results are already being seen across all six countries. In **Niger**, increased yields from crop production are reducing the number of food insecure days, and ameliorating the need to earn additional income to purchase food. This reduces the number of men who migrate for work, and in cases where they leave, it is for shorter periods. In **Cambodia** and **Mali**, women are enhancing their vegetable gardens to produce a wider variety of crops for families to eat, which helps strengthen nutrition. In **Cabo Verde** and **Sudan**, farmers are introducing new varieties of crops that are more resilient to increasingly drier conditions. In **Haiti**, farmers are developing and implementing individualized farming

plans based on the specific family needs, vulnerabilities and opportunities, to achieve both subsistence food production and income generation.

Through these efforts, CCAF-supported communities have seen significant changes in their food security status. The communities have also reinforced food production and provisioning which has increased income and improved health.

This cookbook represents the fruits of these efforts, restoring food to its position as a celebration of life, local culture and the environment.

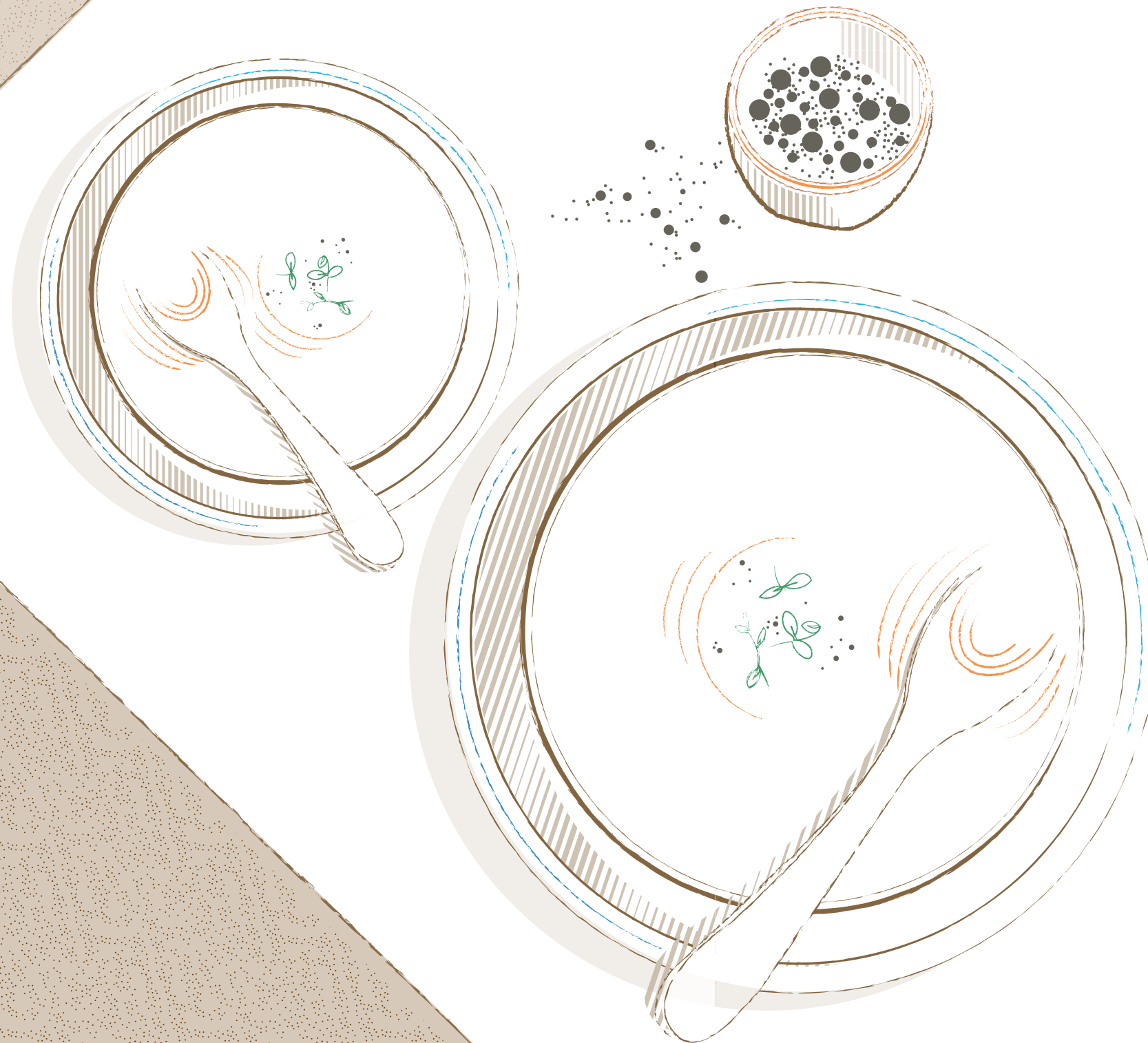


Bon appétit!



SOUPS

**RECIPES FROM
CABO VERDE AND
CAMBODIA**



Caldo Peixe

(Fish Soup) Cabo Verde

Ingredients

1 kg (2.2 lbs) grouper fish
500 g (1.1 lbs) cassava
2 (400 g, 14 oz) orange-fleshed sweet potatoes
2 (250 g, 9 oz) taro root
4 (350 g, 12 oz) green bananas
2 (200 g, 7 oz) onions
2 medium-sized tomatoes
1 green pepper
3 cloves of garlic
1 bay leaf
Salt – to taste
Parsley – to taste
Cilantro – to taste
50 ml (3 tbsp.) olive oil

Directions

1. Season the prepared, washed and sliced fish with thinly sliced garlic, salt, green pepper, tomato, onion, bay leaves and chilli peppers. Note that the green pepper, onion and tomato should be sliced in rings. Let it sit for 30 minutes to season.
2. Meanwhile, peel the green banana, the taro, the sweet-potatoes and the cassava. Slice the banana in half and cut the other ingredients into cubes. A useful tip for removing the peel of the green banana is to place it in a pot with water and boil for 3 minutes. After peeling the slightly boiled banana let it sit in cold water (prior to starting the soup preparation). The taro should also be peeled and placed in cold water prior to going in the pot.
3. Place the fish with the seasoning ingredients in a saucepan with olive oil and sauté for 3 minutes. Afterwards, remove only the fish from the pan and set aside. The fish should be removed with care in order not to break it. Add the peeled and cubed taro to the pan and simmer, stirring constantly with a wooden spoon. Next, add a litre of water (1 quart) and bring to a boil. When the water starts boiling add

the green banana, sweet potato and cassava. Add salt to taste and, if necessary, add a little more. Make sure that the liquid in the pan covers all of the ingredients. If not, add water to the same level of the ingredients.

4. When all the ingredients are cooked (you can check with a fork), add the fish that was previously removed and simmer for an additional 5 minutes or until the fish is cooked. Check for salt and turn off the heat. Add the cilantro and parsley and cover the pot for 5 minutes. The fish soup is ready and should be served with rice or xerém.

Caldo Peixe (fish soup) is a traditional Cabo Verdean recipe made with fish, vegetables and tubers. It is a nutritionally rich dish. The soup can be made with tuna or other fish, such as grouper or Atlantic bonito. The type of fish used depends on seasonality and personal preference. Caldo Peixe can be served with white rice or xerém (a traditional dish made with cornmeal).

This recipe uses orange-fleshed sweet potatoes, which are a high-nutrition crop. They are part of a package of high-nutrition crops that the CCAF project has researched and distributed to the farmers in the project's targeted communities.

Kako Soup

(Samla Kako) Cambodia

Ingredients

Green 'Kroeung'

- 30 g (1 oz) of lemon-grass (sliced finely); 3 parts leaves to 1 part stalk
- 1 tbsp. of greater galangal (cut small)
- 1 tsp. of turmeric (cut small)
- 4 garlic cloves
- 2 shallots
- 250 to 300 g (7-10 oz) chicken¹, frog or fish
- 1 tbsp. of prahok²

400 to 500 g (14-18 oz) of fruits³ and vegetables:

green papaya, green banana, green jackfruit, young palm fruit (sliced thinly), pumpkin (cut into cubes), purple eggplant (sliced into cubes), long bean or green beans (cut into 10-cm pieces), pea eggplant (small bunch). And 4 to 6 cups of water.

½ cup of rice (roasted and ground into powder) to make rice powder

Salt

2 tbsp palm sugar

2 tbsp of sauce or water

1 cup of Sesbania leaves and 1 cup of Moringa leaves /

Alternatively you can use spinach or other leafy greens

3 stems of curry leaves

2 cups of bitter gourd leaves

Directions

1. Prepare the Green "Kroeung" by pounding all kroeung ingredients either in a mortar or food processor until they have a smooth, paste-like consistency. Add shallots last.
2. Dice chicken into bite-sized pieces.
3. Remove leaves from Sesbania and Moringa stems and place in one bowl – or use spinach.
4. Remove bitter gourd leaves and keep them separately.
5. Fry the 'Kroeung' with prahok in vegetable oil in a large pot over medium-low heat.
6. When the sauce turns green and the aroma intensifies, add chicken, salt, palm sugar and ¼ cup of water.

7. Stir well.
8. Cook the chicken in the pot for about 15 minutes (10 minutes for frog and fish).
9. Add the vegetable/fruit combo. Stir constantly.
10. Add the rice powder (which is dry toasted rice, heated with no oil and ground finely). Stir and add the rest of the water.
11. Increase the heat to medium-high and bring soup to the boil. Once it bubbles, add the fish sauce, Sesbania and Moringa leaves and remove from the heat immediately.
12. Brush the curry leaves over the flame about four times so the leaves burn slightly, and then remove by sliding thumb and index fingers up the stem. Add to soup before serving.
13. The fresh bitter gourd leaves set aside in a bowl will be added individually.

'Kroeung' (herbal paste) is fundamental to Khmer cuisine. Most of the recipes rely heavily on the quality of this paste. 'Kroeung' could be classified into three categories: Green, Yellow and Red. Seven main vegetables/spices are used. For the Kako soup, one needs to prepare the Green 'Kroeung' beforehand.

Through the CCAF project, the introduction of vegetable gardens near the homes of beneficiary communities has led to better access and availability of the range of vegetables and species used for herbal pastes and other recipes like this. Farmers are more resilient and less dependent on one cash crop (e.g. rice) which could be vulnerable to climate change. The gardens have also led to increasing income through the sale of vegetables on the market, improving women's livelihoods, who are usually the primary managers of these gardens.

¹ Could be replaced by other meat, e.g. catfish, chicken, pork, beef, fish or frog.

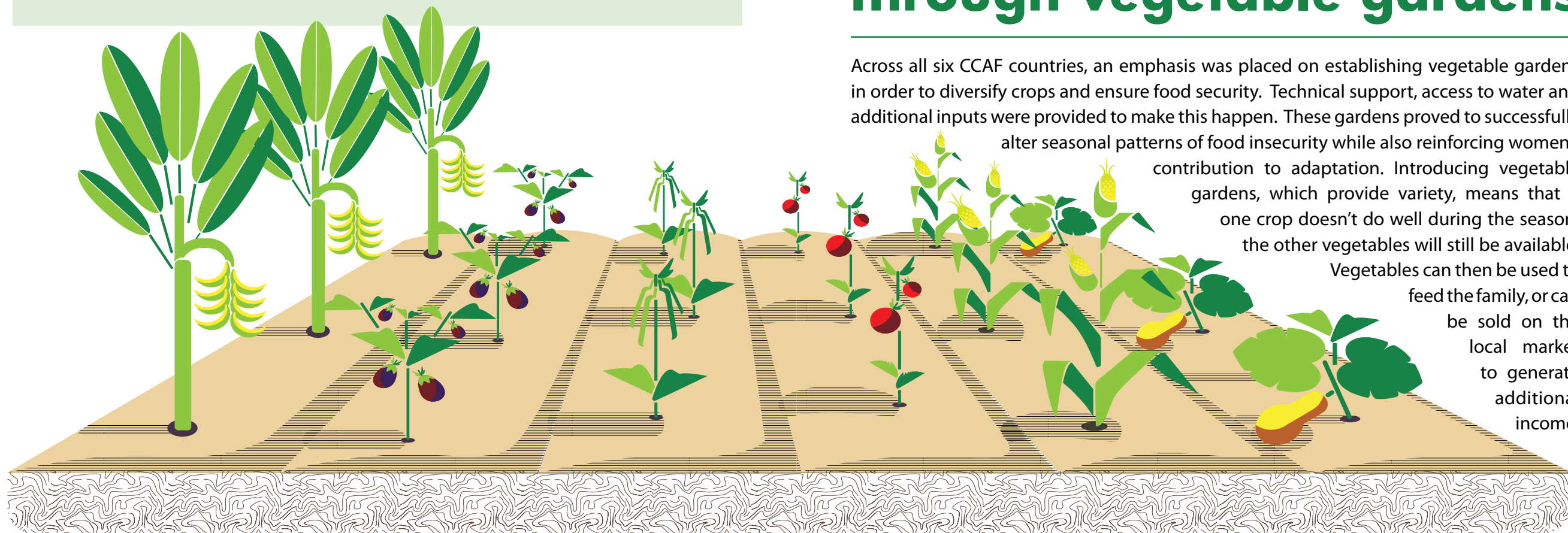
² Fermented fish paste.

³ Other vegetables/fruits could be also used e.g. Coccinia, yard long bean.

This type of intervention also addresses underlying issues of gender inequality. Given that tending home gardens is often a female practice (particularly in Cambodia, Sudan, Mali and Niger), supporting it can expand women's role in food production. The vegetables can help improve family nutrition and/or generate profit that women themselves can control.

DIVERSIFYING CROP PRODUCTION through vegetable gardens

Across all six CCAF countries, an emphasis was placed on establishing vegetable gardens in order to diversify crops and ensure food security. Technical support, access to water and additional inputs were provided to make this happen. These gardens proved to successfully alter seasonal patterns of food insecurity while also reinforcing women's contribution to adaptation. Introducing vegetable gardens, which provide variety, means that if one crop doesn't do well during the season, the other vegetables will still be available. Vegetables can then be used to feed the family, or can be sold on the local market to generate additional income.



Cabo Verde

**BANANA,
PAPAYA,
SWEET POTATO,
CASSAVA, SUGAR CANE**

In sites targeted by the project, drip-irrigation was introduced to increase fruit and vegetable production in terraced fields.

Cambodia

**EGGPLANT,
MORNING GLORY,
YARD LONG BEANS,
CHILLI, CABBAGE**

The CCAF project supported home gardens, a traditional practice, by providing access to water in the off-season, to provide food and generate revenues throughout the year.

Haiti

**BEANS,
PINEAPPLE,
PEPPER, MELON,
EGGPLANT**

Le Plan de Ferme supported farmers to develop individualized farming plans, in order to adapt their farming plots to grow more diverse and resilient crops.

Mali

**TOMATO,
GROUNDNUTS
(PEANUTS), BEANS,
LETTUCE, POTATO**

Women's collective action groups established cooperative vegetable gardens with access to water, tools and land by the project, to diversify their food and livelihoods.

Niger

**GREEN MAIZE,
CABBAGE,
LETTUCE,
TOMATO, CASSAVA**

The CCAF project helped groups of women secure collective plots of land to grow vegetables by facilitating leasing of land from private landowners.

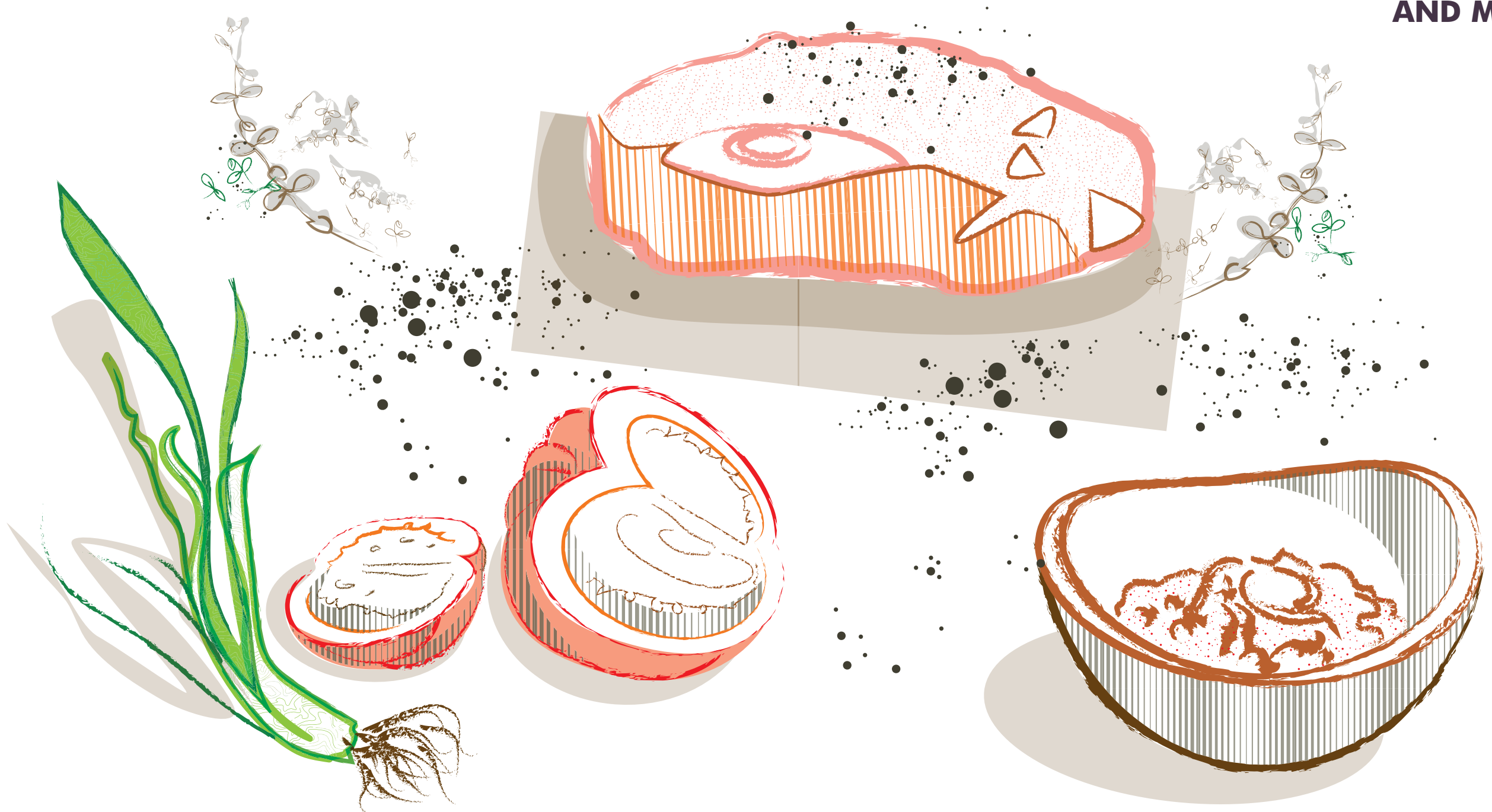
Sudan

**SQUASH/PUMPKIN,
TOMATO, POTATO,
OKRA, CUCUMBER**

Individual home gardens, or *Jubraka*, are supported under the project to diversify food crops, particularly in the dry season.

FISH, MEAT, VEGETABLES

RECIPES FROM HAITI
AND MALI





Banane Peze Kabrit Kreyòl

(Fried Plantains and Haitian Stew)
Haiti

BANANE PEZE - FRIED PLANTAINS

Ingredients

3 green plantains
500 ml (2 cups) corn or vegetable oil
250 ml (1 cup) water
1 tbsp. salt
2 tbsp. vinegar or sour orange

Equipments

1 tostonera (plantain press)

Directions

1. Peel the plantains and slice them diagonally into 1-inch pieces.
2. Place oil in a deep frying pan on medium heat.
3. Place cut plantains in hot oil. Cook plantains for 5 to 7 minutes on each side until golden brown. Then, remove plantains and lower heat.
4. Quickly use a wooden plantain press (tostonera) or 2 plantains' skins to flatten each slice to a thickness of about 1/3-inch.
5. Soak flattened plantains in salted water flavoured with 2 tbsp. of sour orange juice or vinegar and place back in oil on medium heat.
6. Turn plantains on each side until crispy and golden.
7. Remove fried plantains; place them on paper towels to get rid of excess oil.

KABRIT KREYÒL - HAITIAN STEW

Ingredients

500 g (1.1 lbs) cubed beef
2 tbsp. seasoned salt
2 limes cut in half
2 sweet potatoes
1 small plastic bag of spinach
2 potatoes
1 malanga
1 green pepper, sliced
3 carrots
2 onions-sliced
1 tsp. thyme
1 tsp. parsley
¼ cup scallions
3 tbsp. tomato paste
salt, black pepper and hot pepper to taste

Directions

1. Clean the meat with hot water and lemon.
2. Add seasoning salt and set aside for 2 hours in a bowl. Combine meat and spinach in a stock pot with 2 litres (quarts) of water until meat is tender.
3. Add remaining ingredients and cook for an additional 20 minutes or until potatoes are cooked.

Through the CCAF project, support was provided to farmers to establish individualized farming plans for their own plots of land, introducing resilient crops, such as sweet potatoes and manioc, as well as citrus grafting and new fruit varieties. This has become an alternative livelihood to cash crops, such as coffee, which is threatened by drought or heavy rain. These new farms, which use simple techniques and small spaces near farmers' homes, has led to diversified crops, which farmers use to make traditional dishes like this stew for their family.

Riz au Gras

(Rice in fat) Mali



Ingredients

3 tbsp. vegetable oil
1 small onion, chopped (or half a big one)
4 cloves garlic, crushed
450 g (1 lb) stew beef, cubed
1 eggplant
1 cup cabbage
½ cup potatoes
½ cup sweet potatoes
2 cups white rice
1 litre (4 cups) water
350 ml (1 ½ cups) tomato puree
1 tsp. oregano
½ tsp. chilli powder (for medium heat)
Salt & pepper

Directions

1. Heat the oil in a heavy-bottomed pot. When simmering, add onion and garlic. Cook at medium heat until translucent and fragrant.
2. Next, increase the heat to medium-high and add seasoned beef.
3. A generous sprinkle of salt and pepper goes a long way to seasoning the entire dish.
4. Once the meat is browned, let the white rice rain down like confetti.
5. Pour on the water.
6. Stir in the tomato puree. This will give the dish its characteristic rosy hue, as well as mild tomato-saucy flavour.
7. Sprinkle in a dash of chilli powder and a pinch of oregano.
8. Finally, throw in the vegetables.
9. Simmer, covered, for about 20 minutes.



This is a meal served when you receive important people or for significant events like a wedding.

The sheep, goat meat or beef is prepared in a sauce (made with meat, tomato and onions) and then the vegetables (i.e. eggplant, chilli pepper, cabbage, potatoes and sweet potatoes) are added in the order desired so that each vegetable is well-cooked. Then the meat and vegetables are taken off and the rice is cooked in the sauce. All the ingredients are then served together.

These ingredients are often a luxury for rural smallholder farmers, who have limited income. However, with the support of the CCAF project, water access has been provided for women's collectives to grow vegetables, and land has been secured through their earnings from the sale of food crops and the leasing of agricultural equipment provided by the project. Not only do these activities provide access to the ingredients to make nutritious and traditional dishes like this, but they also increase resilience by providing alternative livelihoods, increasing income and strengthening food security.

The livelihoods of many rural communities in CCAF countries is dependent on rain-fed agriculture. As crops fail, farmers and their families are faced with dwindling income, limited food sources and no safety net to cope. Introducing new types of crops and agricultural practices can help increase crop production and food security of these vulnerable households. Under the CCAF, yields of principal staple crops have been boosted across all six countries. Access has been provided to more resilient crop varieties, alongside training and technical support to introduce more resilient agricultural and water management practices.

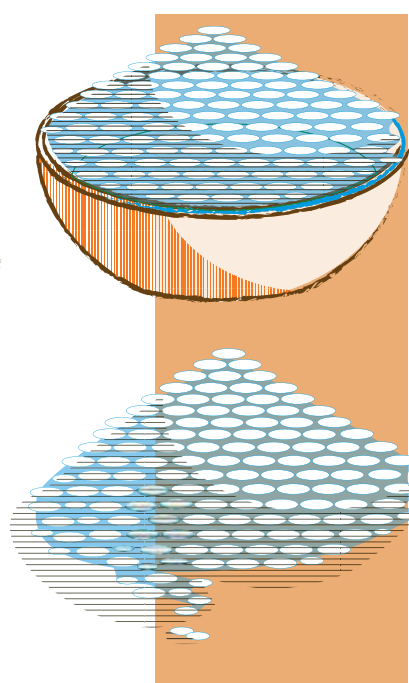
STRENGTHENING THE RESILIENCE of staple and cash crops

Each CCAF country targeted different staple and cash crops to enhance their resilience.



Cabo Verde
POTATO

The project supported the National Institute for Agricultural Research and Development (INIDA) to undertake research on the adaptive potential of different potato varieties, which they then tested with local farmers.



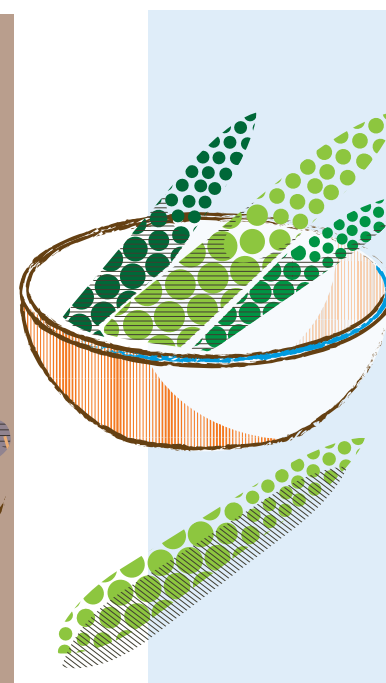
Cambodia
RICE

Studies have been undertaken on the suitability of several types of rice varieties for specific and changing conditions, as well as introducing new irrigation systems to produce two crop cycles per year instead of one.



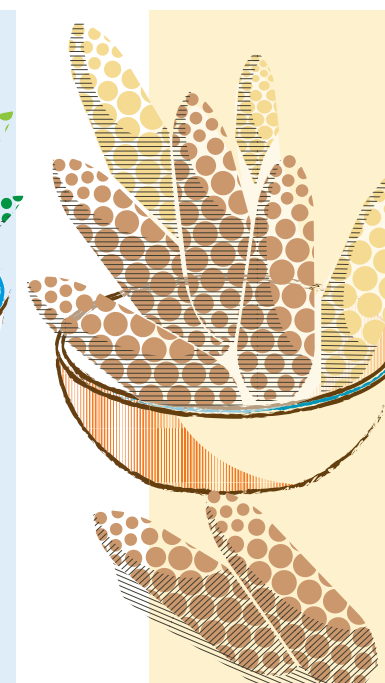
Haiti
MANIOC

Due to increased drought and heavy rain, many of the farmers introduced manioc as part of their 'farmer plans', which is more resilient to these changing conditions.



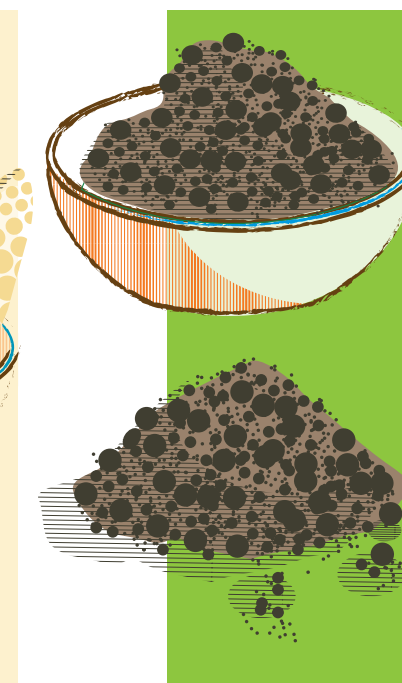
Mali
MILLET

New, drought-resilient varieties of millet are being tested by farmers, along with resilient growing techniques, which have proved to greatly increase productivity.



Niger
SORGHUM

New varieties of sorghum are introduced that help strengthen the crop under climate change conditions, while village seed banks are established to ensure these resilient varieties are distributed and shared to reach more farmers.

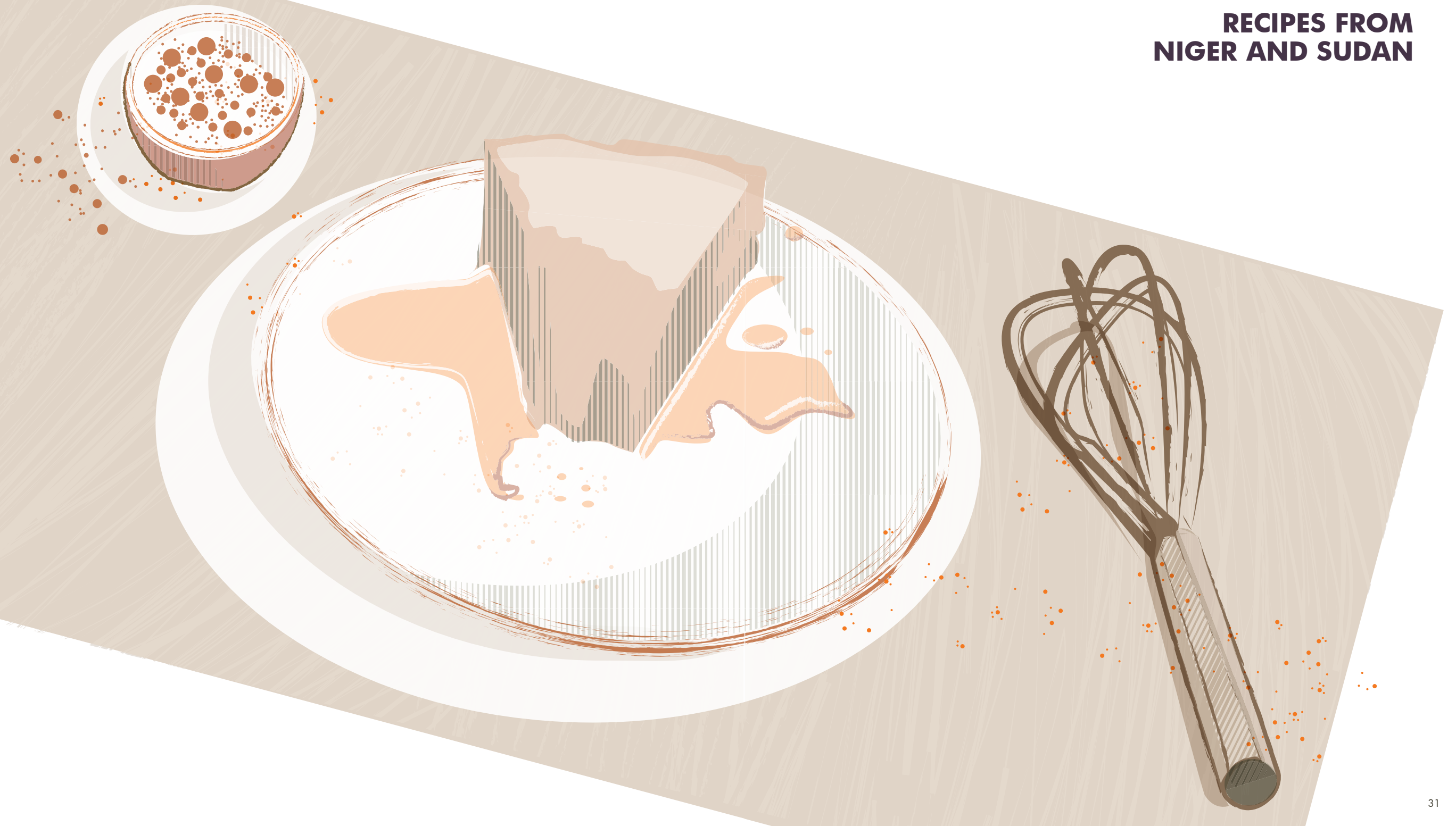


Sudan
LEGUMES

Demonstration farms for legumes were established, using a technical package of more resilient and productive varieties.

SWEET DISHES

RECIPES FROM
NIGER AND SUDAN



Hooray

(Millet Balls) Niger

To eat, break some millet balls into a bowl and mix with milk. When there is no milk, monkey bread can be used (fruit baobab) or tamarind juice. Add some milk to thin it out and sweeten it with sugar if you want.

Ingredients

400 g (14 oz) millet flour
½ to 1 tsp. ginger powder
¼ tsp. ground cloves
Pinch of salt
300 ml (1 ¼ cups) water
1 litre (4 cups) milk
Sugar (optional)

Directions

1. In a large bowl, mix the millet flour with all the spices.
2. Add the water to the flour mixture a little at a time until a thick paste is formed. You might not need all the water and you might need a little bit more.
3. Shape the millet paste into small millet balls, the size of golf balls.
4. Place the millet balls in a pot, add some water and boil them for 60 minutes. Make sure that the pot has enough water so that the balls are covered. You want the balls to be cooked all the way through. After 30 minutes, break a millet ball to see if it is properly cooked or if the inside still looks lighter in colour and raw. If it is still raw, keep cooking until it is done. The cooking duration will ultimately depend on the size of your millet balls.
5. After the millet balls are cooked, place them in a mortar and pound them into a paste. This is to make the millet balls even in texture and easy to break later. A stand mixer or a food processor can also be used.
6. Shape the cooked millet paste into millet balls again. Roll them in some additional millet flour to coat them and keep them from sticking to each other.



A recipe for a typical lunch for farmers and rural beneficiaries of the project. Traditionally, wholegrain millet is locally processed to flour using a mortar. The grains are pounded with a little bit of water to loosen the chaff. After blowing away the chaff, the hulled millet is then pounded and sifted to get millet flour.

The dough is made from millet flour which is sometimes spiced with ginger, cloves and perhaps pepper. It is a very healthy and satisfying dish.

Under the CCAAF project, new and improved varieties of millet and other staple crops (like sorghum) have been introduced. These varieties, which are more resilient to changing climatic conditions, particularly drought, have led to significant increases in yield and revenues.

Gurasa

Sudan



Ingredients

500 g (18 oz) of wheat flour
½ tsp. baking powder
500 ml (2 cups) water
Salt to taste

Sweet version: 50 g (2 oz) dates (stone-less)
125 g (4.5 oz) butter
4 tsp. sugar

Directions

1. In a bowl, mix the flour, the baking powder and the salt (if making sweet version, add dates at this stage).
2. Add and stir in water until it becomes thick and smooth batter (e.g. pancake texture).
3. Using a pancake fryer or a non-stick flat pan (at medium heat) spread ½ a cup of the batter evenly and flip to the other side when golden on one side. Repeat until finished.

Savoury version: Serve with tagalia

Sweet version: With the dates mixed in the batter and cooked, top with butter and sprinkle with sugar.

This is a typical lunchtime/daytime meal for the rural farmers in the Sudan CCAF project. It can also be a dessert when mixed with dates and garnished with butter and sugar.

Wheat, a staple crop in Sudan, is also vulnerable to changing climatic conditions. Diversifying crops and increasing access to water has helped to ensure the resilience of important ingredients such as these.





FOOD IS PERSONAL; FOOD IS CULTURAL.

Whether farming millet in the deserts of Mali, rearing cattle in the semi-arid regions of Sudan or growing mangoes on the coast of Haiti, the environments we inhabit and our cultural history, shape the meals we eat. With climate change increasingly affecting all these environments, cultural practices and types of food will need to adapt to keep pace.

The countries profiled here have made extensive strides in addressing the negative impacts of climate change. They have developed and implemented climate-resilient initiatives that simultaneously enhance food and nutritional security, and update agricultural practices to be more suited to current as well as forecasted conditions. Concrete results are being seen in terms of increased income generation, strengthened resilience of livelihoods, and enhanced developmental outcomes – like better health and increased enrollment of children in schools.

The cookbook highlights the various stages of food production and the related issue of global environmental change: from projects and programmes initiated by governments, all the way down to the food on our plates.

By switching the focus to a consideration of the end products of food production that we see on our dinner table, we can better understand the close interaction between climate change and food security.

Full Cookbook Publication:

Expanding on this short teaser, the full publication will be available in early 2017, showcasing more delicious recipes, specific country adaptation profiles, and additional comparative 'infographic' analyses of culinary traditions and experiences across the six CCAAF countries.



Many people contributed, directly or indirectly, to the creation of this cookbook. First, we wish to express our gratitude to those who directly contributed to the CCAF projects through their daily involvement, knowledge, creativity and generosity: the women and men who plant, water, weed, dig, bake, eat, sell, plan, devise, speak out and make changes in their own lives and in that of others. In each of the six CCAF countries, these are the people who are finding new ways to make these meals, feed their families, and celebrate their culinary world in a changing climate.

We want to thank the teams in Cabo Verde, Cambodia, Haiti, Mali, Niger, and Sudan, who made this cookbook possible by providing detailed recipes, instructive photos, and invaluable guidance. We are also very grateful to the restaurants and markets in Boston, U.S.A., that helped us procure ingredients and recreate the recipes and be able to highlight the complexity and nuance of these dishes. Most notably, we would like to acknowledge Elephant Walk in Cambridge for their generosity and support in the Cambodian section, Restaurante Cesaria in Dorchester for supporting our Cabo Verdean recipes, and Highland Creole Cuisine in Somerville for the Haitian recipes. We appreciate how supportive Pemberton Farms in Cambridge was in sourcing local, fresh and unique ingredients for us to create our dishes from Niger, Mali, and Sudan.

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"A well-fed household
is a household with
tranquillity,"
- woman from Santa
Cruz Municipality in
Cabo Verde.

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