





THE CASTRAP NEWSLETTER

A biannual newsletter of the Liberia national component of the West Africa Competitiveness Programme Second Edition - Issue No.02 (November 2022 - April 2023)



Implementing Partners

Welcome to the Second edition (issue No. 02) of the biannual newsletter of the Liberia national component of the West Africa Competitiveness Programme - The Cassava Transformation Project. This newsletter presents updates on the activities and the progress of the project. For further information about CASTRAP, visit: https://cerathdev.org/cassava-transformation-project

OVERVIEW OF WACOMP

The West Africa Competitiveness Programme (WACOMP) is a partnership initiative between the Economic Community of West African States (ECOWAS) and the European Union (EU). It is aligned to support the implementation of ECOWAS regional policies and programmes including the West Africa Quality System Programme (WAQSP). WACOMP seeks to support several selected value chains at the national and regional level, so as to promote structural transformation and better access to regional and international markets while taking into account social and environmental concerns.

WACOMP was adopted under the 11th European Union Development Fund (EDF) Regional Indicative Programme for a total amount of €120m, and highlight a commitment to the Economic Partnership Agreement between the EU and West Africa.

Some Selected Value Chains

The principal objectives of WACOMP are to strengthen the competitiveness of West African countries, and to enhance their integration into the regional and international trading system. The programme will work to:

- improve performance, growth and contribution to the industry,

- improve regional trade and exports of selected value chains,

- and improve the business climate at national and regional levels.

The Programme has 16 National components and 1 regional component. While each country is individually responsible for the implementation of its component, the ECOWAS Commission, with the support of the West Africa Economic and Monetary Union (WAEMU/ UEMOA) Commission, is responsible for the implementation of the regional components and for the coordination of WACOMP.

WACOMP IN LIBERIA

WACOMP in Liberia seeks to improve the competitiveness and regional integration of Liberia's cassava sector through a value chain approach. Cassava is the second most consumed crop in Liberia, and estimated to be cultivated by 65% of Liberia's farmers. This notwithstanding, a myriad of along its value-chain impedes the factors competitiveness of Liberia's cassava sector. These factors include access to quality inputs, low technical skills of essential value chain actors, limited access to finance, low entrepreneurial skills, absence and weak organization of essential value chain actors and their linkages, limited infrastructure, unstructured markets, and weak public sector support.

In Liberia, WACOMP targets the South Eastern counties of Sinoe, Grand Gedeh, Grand Kru, River Gee and Maryland. The South East Region of the country is estimated to be the poorest and with also a comparatively smaller population.

Enhancing the cassava value chain in the South Eastern Region can lead to a significant revival of the food processing industry, among others, and provide socio-economic opportunities including job creation, food and nutrition security, and poverty reduction. It can also contribute to the empowerment of women and youth, who constitute the majority of small producers, carrying out 80% of activities in rural areas.

ABOUT CASTRAP

The Cassava Transformation Project (CASTRAP) is the Liberia component of WACOMP. The goal of CASTRAP is to enhance the competitiveness and the regional integration of Liberia's cassava sector through a value chain approach focused on sustained production, value addition, entrepreneurship, and sustainable markets.

CERATH Development Organization in partnership with Rural Integrated Center for Community Empowerment, Conservation Alliance Liberia, and Center for Enterprise Learning are implementing the project in Liberia's South Eastern counties of Sinoe, Maryland, Grand Gedeh, River Gee, and Grand Kru.

CASTRAP Objectives and Expected Outcomes

Objective 3

Cassava value chain enhanced to be financially sustainable. and commercially viable

Expected Outcomes

- Increased cassava value chain connectivity in the project landscape. - Increased inclusive employment and entrepreneurship within the cassava sector of Liberia's South Eastern Region.
- Increased access to financing for cassava enterprises.

Objective 4

Policies, programs, and incentives to stimulate the commercialization of the cassava sector advocated for and implemented

- Increased collaboration between sector partners particularly bakeries and upstream value chain actors resulting from advocacy activities.

Expected Outcomes

- Improved legal framework and capacity of the national standards laboratory (NSL) to offer conformity services (testing, inspection, certification, quality award, and metrology).

CASTRAP IN FOCUS

Innovative Cassava Harvesters Introduced by CASTRAP Generates **Positive Feedback**

using the harvesting tool

The project baseline study revealed that harvesting was considered one of the most difficult activities in cassava cultivation, especially for women who dominate the production of the crop in the South East of Liberia. It was observed that most farmers plant using the flat bed method which causes compaction around the roots. This exacerbates an already difficult activity, and does not help the situation. Hence, the project, in collaboration with the Crop Research Institute of Ghana, introduced an innovative cassava harvesting tool for farmers in April 2022.

In March 2023, the Project Agronomist embarked on monitoring activities in Grand Gedeh and Sinoe counties to assess progress and receive feedback on the effectiveness and efficiency of the new innovative cassava harvesting tool. Farmers were ecstatic about the harvesters. Mr. Nelson, a farmer in the Kpanyan district, applauded the project for the introduction of the new harvesting tool. He noted that he could now harvest the same quantity of cassava that he had previously harvested in two hours in 30 minutes.

A farmer from the Panama Women for Future group (left) and farmer in Kapayan district (right) harvesting cassava using the harvesting tool

CASTRAP Distributes Over 313,375 Improved Cassava Cuttings to Project Beneficiaries

CASTRAP has distributed over 313,375 improved cassava cuttings to 445 beneficiaries across the project landscape. This comes at the back of the CASTRAP baseline survey that identified access to improved and healthy cassava materials as a major challenge to effective cassava production in the South East of Liberia. Farmers' livelihoods were negatively impacted by the consequences of low yields and low-quality crops.

In an effort to address this constraint, the project team identified five key beneficiary communities where cassava nurseries could be established. Additionally, the project partnered with a private nursery to increase farmers' access to improved planting materials.

The nursery development started in March 2022 with two varieties being introduced by the Central Agriculture Research Institute (CARI). Variety CARICAS-01/0040 was nursed in Sinoe, Grand Kru, and Maryland counties, while variety CARICA-95/0289 was nursed in Grand Gedeh, River Gee and Sinoe.

Farmer George T. Geelpay who planted a sample of variety CARICA-95/0289 in his backyard in Grand Gedeh County during the establishment of the nursery was astonished to harvest 100 kg of cassava tuber from a six-meter square area. Mr. Geelpay said he was so impressed with the new variety and will encourage other farmers to plant the new variety.

Distribution of improved cassava cuttings in Sanquoin (top), Nialiakpo (middle), and other communities within the project landscape

CASTRAP Trains 36 Processors on Cassava Value-added Products

CASTRAP has trained 36 members of different private cassava processing enterprises. This forms part of CASTRAP's efforts toward enhancing the processing and commercialization of the cassava value chain. Processors who participated in the training were the Panama Women for Future, Badio's Farmer Cooperative, and the Lydia's field project. The training focused on the processing of cassava into gari, super gari, fufu, food-grade cassava flour, high-quality cassava flour (HQCF), starch, and other cassava recipes including bread and chips. In all, 22 females and 13 youth participated in the training.

A group of trainees from the Panama Women for Future, Badio's Farmer Cooperative, and the Lydia's field project.

The training also included the best food safety measures and quality assurance practices for members and staff of the processing enterprises. The training was conducted using competencybased approach to ensure that processors gained hands-on experience in processing starch, deepah quality gari, super gari, and using HQCF to make bread, as well as using the cassava peel to produce animal feed. The training, which started in Grand Gedeh on March 23 was completed in Sinoe County on April 4, 2023.

Training on cassava weight and measurement

One of the most exciting components was using the cassava food products (cassava chips, super gari, and fufu) the trainees prepared to serve as breakfast and lunch during the training. This training is expected to continue in the project year three to cover additional 21 processors.

Preparation of cassava foods/products during the training.

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Inauguration of the Panama Women for the Future Association Processing Center

Inauguration of the mini processing center in Panama community, Sinoe County

CASTRAP has commissioned the Panama Women for Future Association's newly constructed miniprocessing center in Sinoe County. This activity is part of the project's objective to strengthen the efficiency of the main actors in the cassava value chain to improve inputs and increase cassava production, processing, and commercialization.

The project baseline study conducted in the South East of Liberia revealed that traditional micro-scale cassava processing predominates in the project landscape. In light of this, the project additionally conducted a technology needs assessment; to evaluate the processing scale, existing technologies, processing constraints, and market prospects for processed cassava products. Based on the findings, the Panama Women for Future Farmers Association is one of five businesses selected to receive funding for the construction of a mini-processing center.

Inside view of the processing center

Madam Victoria Cooper, the Sinoe county agricultural coordinator (CAC), and Ms Geetrui Louwagie (PhD), the EU representative on the project, formally commissioned the Panama Women for Future mini cassava processing center on March 29, 2023. The local officials who attended the ceremony included Panama Town Chief-Anthony Targeh and Kapanyan District Paramount Chief- Gibson Seyei.

The center includes a processing area, a food and recipe formulation unit, a raw material storage room, and an office, as well as four parching plates, a tricycle, a 5HP grating machine, two heavy-duty dough presses, and processing enhancements such as aprons, head covers, scales, knives, barrels, and so on. The recipients were encouraged to make commercial use of the center in order to earn money and, hopefully, expand its business.

Madam Alisha Keitou thanked CASTRAP for supporting the construction of the center, ensuring it remains productive for cassava processing groups and individual farms.

Outer view of the processing center

CASTRAP Conducts Action Audit for Six VSLAs

CASTRAP conducted an action audit for six (6) of the twenty-seven (27) village savings and loans Associations (VSLAs) that had completed their cycles in the project landscape. As per the accepted VSLA principle, a full-cycle action audit is performed between six to twelve months following savings, depending on the program's design.

During the action audit, the cumulative savings and service charges are discussed and shared among members, allowing the organization to begin a new cycle. At the end of eight months of intensive savings and loan activities among members of six groups, a total amount of US\$18,963 was raised. This amount was shared amongst 180 persons, including 130 females, 69 youth, and 7 persons with disabilities during the action audit.

The secretary of God will provide VSLA in Shampy Community, receiving her savings at the action-audit

Representatives from the National Authorizing Office Visit the CASTRAP Sites

As part of the National Authorizing Office's (NAO) oversight responsibilities for overseeing projects funded by European Development Funds, a team from the NAO of the Ministry of Finance Development Planning visited the project sites in Sinoe and Grand Gedeh counties. The NAO team was led by Ms. Clementine Rennie, the project focus person within the NAO. The NAO team's two-day monitoring visit was intended to assess the project's progress over the period of implementation. The NAO team and the project team visited selected project sites in Grand Gedeh and Sinoe from February 22 to 24, 2023.

The project manager presenting the project achievements over period to the NAO team during their visit

Ms. Clementine Rennie, the project focus person from the NAO explained the purpose of the visit to members of the Panama Women

The NAO team visited the National Union of Disabled Organizations in Sinoe county, Panama Women for Future Association in Kpanyan district, Lydia's Field Project in Grand Gedeh, and Badio's Farmer's Association in Badio to assess the project's impact on their farms, training, and climate-smart practices.

Year 2 in Numbers

farmer groups have completed their registration process with the Cooperative Development Agency (CDA) 445

farmers have access to approximately 331,000 improved cassava cuttings

acres of land under improved cassava cultivation

members of 5 groups trained to operate motorized weeding machine, as part of a

pilot to determine the business viability of providing weeding services to farmers

members are registered to various VSLAs.

These include 632 women, 300 youths and 23 people with disabilities

members of 4 processing groups have been trained in establishing quality management system (QMS)

fully equipped cassava mini processing centers constructed across 3 counties

27

village savings and loans associations established across 5 counties

5,400

USD injected to 27 VSLAs in the project landscape

members of 3 processing groups and 1 private processing enterprise trained in the

processing of gari, super gari, starch, HQCF, cassava bread and chips

European Union Cooperation Officer Visits the Cassava Transformation Project Sites

The Cassava Transformation Project (CASTRAP) is making significant progress toward its goals and objectives in Southeast of Liberia. The Cooperation Officer for Rural development, Food security and Environment at the European Union (EU) Delegation in Liberia, Ms. Geetrui Louwagie (PhD), visited project sites between March 27 and March 30, 2023. Ms. Louwagie's visit was intended to interact with the project's beneficiaries and to evaluate the level of progress in the implementation of activities. In Grand Gedeh, Ms. Louwagie interacted with beneficiaries of Badio's Farmers Association, a cooperative initiated and supported by CASTRAP, as well as Lydia's Field Project, a privately operated cassava production and processing enterprise.

Ms. Louwagie observed an ongoing processing training involving beneficiaries from Faith Temple Cooperative, Badio and Lydia's Field Project who were being introduced and trained in the production of starch, super gari, high quality and food grade cassava flour as well as fried cassava chips. She also inspected an ongoing construction of a mini processing center for Badio to ascertain progress of work.

The project team and the EU Cooperation meeting with the manager of the Natemujee Agro Resource Nursery Farm

Meeting with Badio's Farmers Association during the monitoring visit

The team visited the Sinoe chapter of the Liberian Association for the Disabled in Sinoe county and spoke with its members. The project recently enlisted the association, and is supporting them to expand their farm with better cassava cuttings and training in climate-smart and good agricultural practices. Since collaborating with CASTRAP, the association has been involved in a number of activities, including establishing its first village savings and loans association (VSLA).

The team then traveled to Grand Kru to speak with the members of the Iloh district's Naikplaikpo Multipurpose Farmers Association. Here, Ms. Louwagie and the project team held extensive discussions with the group's members to understand how it intended to finance its cost-related activities, such as the purchase of ledgers, passbooks, and stationery, in order to better understand how it plans to maintain the gains made in the conduct of its VSLAs. It was also an opportunity to check on the progress at the site where its mini processing center was being built. On the 29th, the team traveled back to Sinoe and met with Nartimujee Agro-Resource (NAR) LLC, a private cassava nursery owner serving the county's Kpanyan, Greenville, Sanquin, and Juarzon districts.

European Union Cooperation Officer Engages with the Lydia's Field Enterprise

The Cooperation Officer of the EU to Liberia, Ms. Geetrui Louwagie (PhD), engaged in an interesting interaction with Lydia's Field Enterprise during a recent project site visit in Zwedru, Grand Gedeh County. Lydia's Field Enterprise is a privately owned integrated cassava production and processing facility.

The business, which has 35 employees, has been in operation since 2021 and processes cassava into gari, super gari, and good grade cassava flour. At the time of the visit, Lydia's Field Enterprise together with two other enterprises in the county were undergoing training in the processing of various cassava products including high quality cassava flour, cassava chips and foods, and industrial grade starch production.

Processors washing cassava at Lydia's Field Enterprise

Mr. Daniel Sackie, the CEO of Lydia's Field Enterprise, in his interaction with the EU representative, expressed his delight in the support his outfit has thus far received from CASTRAP. He indicated that assistance such as training on development and good agricultural business practices, the provision of improved cassava-cutting tools for the farm, and efforts to help the enterprise access external funding to expand its operations had all significantly aided in the expansion of his business. He also said that the project had made it easier for the National Standards Laboratory (NSL) to test its products, and he expressed the hope that soon the enterprise's products would be certified to further increase their marketability.

EU Cooperation Officer and the CASTRAP team engaging Mr. Daniel Sackie, CEO of Lydia's Field Enterprise

During the visit, Ms. Louwagie learned about Lydia's Field Enterprise business model, its history, how it funds its operations, as well as its long-term goals. Interestingly, the enterprise which had prior to the visit had just been introduced to fried cassava chips as a marketable product served the team with samples of the products made with its home-grown recipe. The chips had caught on so well with the enterprise and had immediately decided to commercialize it.

CASTRAP Year Two Wrap-up

Written by: Isaac Donkor Project Manager, The Cassava Transformation Project (CASTRAP)

Introduction

Year Two of CASTRAP officially ended on the 15th of April 2023. Following a number of assessments carried out in Year One to ascertain priority areas that the project needed to focus on. CASTRAP proceeded to concentrate on improving efficiency and productivity at the upstream of the value chain. In order to achieve this, the project with support from the Cooperative Development Agency (CDA) began processes, to organize and strengthen existing farmer groups to become more functional towards the upgrade of the cassava value chain. Secondly, having determined that yields were low compared to the national or regional average, the project, together with the Central Agriculture Research Institute (CARI) introduced to farmers,

improved cassava varieties and accompanied this with training in climate-smart good agricultural practices using the Farmer Field School (FFS) Model. One was amply envisioned to lay the ground to improve cassava yield across the project intervention areas.

Strengthening of Farmer groups into becoming functional cooperatives

Year Two therefore, was planned as a natural step to support activities to add value to cassava in order to increase its commercial value and ultimately to increase the income of actors operating along the chain. Again, year two continued to focus on further strengthening the groups into becoming functional cooperatives. However, drawing lessons from Year One where the project had led most of the processes leading to registering the groups as cooperative, the project decided this time round, to make the groups more responsible at taking the steps towards becoming licensed cooperatives. Therefore, the project provided motivated groups with the needed financial backing to cushion part of their cost of becoming CDA-registered cooperatives.

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This led to the signing of several local subsidy contracts (LSC) with 10 of the groups across the five counties. The LSC has proven to be effective, as the groups have, enthusiastically, taken up the mandate to undertake the steps to become licensed with CDA. As of the time of reporting, the project was only one group short of the 5 groups that it had targeted to obtain license with CDA. The remaining 6 groups are at different stages of completing their registration with CDA.

Access to improved planting materials and agronomic practices

In order to make improved cassava planting materials available to farmers across the project landscape, CASTRAP supported the establishment of several nurseries across the five counties.

> Five group-managed nurseries were established in Year One and have been maintained going into year Additionally, project two. the supported two private enterprises to establish nurseries to sell to farmers within their respective catchment areas. This was a pilot to determine the viability of private seed provision as a viable business.

As farmers had also been introduced to these new varieties coupled with climate smart good agricultural practices (CS-GAPs) training, year two was to assist the project to determine the level of interest, first in the accessing the improved varieties, and second in the adopting the climate-smart good agricultural practices learned through the farmer field school. Demand for improved cuttings exceeded the project expectations with supplies exceeding about 330,000 cuttings to 445 farmers across the 5 counties. As of April 2023, 78 acres of farm was under improved cassava cultivation. One of the private nurseries, Nartimujee Agro Resource (NAR) based in the Kpanyan District of Sinoe county continues to receive demand, serving farmers within and in the surrounding the district of Juarzon.

Construction of mini processing center

In keeping with the project's focus on value addition in Year two, the project embarked on the supporting 5 groups to construct and equip a turn-key mini processing centers to produce gari, super gari, starch and flour. The beneficiary groups are Panama Women and Greenlife in the Kpanyan and Sanguin district of Sinoe, Seetor Women and Nakplaikpo groups in the Barclayville and Jloh districts of Grand Kru as well as Badio Group in Tchien district of Grand Gedeh. Unlike in Maryland and River Gee which could boast of the 3 processing centers between them and 1 in Grand Gedeh, the counties of Sinoe and Grand Kru had no center processing cassava into any value-added product, except for some women processing gari using rudimentary and often unhygienic methods.

As of the time of reporting, the constructions of 3 of the centers were at advanced stages of completion while 2 had been completed and turned over to their respective groups in Panama and Badio. In addition to the center, each of the group receives a tricycle to aid in the transportation of raw materials to the center and finished products to the market. Additionally, graters, cassava dough presses, sieves, production materials and parching plates have been supplied to each center.

Training in processing and QMS

As part of the continuation of CASTRAP technical support to enhance the processing and commercialization of the cassava value chain, the project trained 36 processing group members and workers of a private cassava processing enterprise, including 22 females and 13 youth, in how to process cassava into gari, super gari, fufu, food grade cassava flour, high-quality cassava flour (HQCF), starch, and other cassava recipes including bread and chips.

Prior to this training the project trained 80 processing group members including 45 females and 37 youth in Quality Management System (QMS); established quality management systems for four processing centers in Grand Gedeh, river Gee and Maryland; and supported the set up the quality management team at each of the centers in fulfillment of this objective.

The training covered the description of quality gari and its production processes, how to identify hazard and quality defects for each operation area, as well as, corrective measures in implementing the hazard analysis critical control point (HACCP)/Quality management System.

Financing the value chain at the community level - VSLAs

In the year under review, the project supported the establishment of additional 17 village savings and loans (VSLAs) bringing the total to 27. This was achieved in part because of the very high interest amongst beneficiaries to be part of the savings and loan club. As of April 2023, over 850 project beneficiaries had signed up to become a member of a VSLA including approximately 630 women. The VSLA has been designed to become the fulcrum on integrated which the project's production, processing and commercialization system (IPPCS) is built. The production and processing centers save their incomes with the VSLA as a member. Savings from the production or processing center accrues profit which the center then uses to maintain its operations. Also, the center as a member of the VSLA is eligible to access loans to operate or expand its operations.

Crosscutting issues

Year two also saw the project's tenet of consolidating gender equality and social inclusion (GESI) in its approach. The project has since November 2022 been supporting the Sinoe Chapter of the National Union of People living with Disabilities providing support to establish cassava farm using improved varieties coupled with good agronomic practices. The group is also operating a savings and loans with a membership of 40.

Challenges and Lessons from Year Two 🕺

Year two did not go without some challenges however, and it must be said that the project draws lessons from these challenges in order to continuously improve its engagement and ultimately to manage its expectations and that of its partners including beneficiaries. Of key mention is the challenge with CDA.

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In Year one, the project understood that CDA was to act as a partner to support the transition of farmer groups into becoming functional cooperatives. However, over time, it was realized that CDA rather acted as a service provider with not financial obligations towards the groups it was supporting. This significantly slowed the processes to support the groups to strengthen into cooperatives. The LSC contract has partly resolved this quagmire the project was confronted with. However, there is still the need for CDA to reconsider its approach considering that cooperatives are subject to annual renewal which comes at cost. In the event the project exits, groups may find it difficult to renew their licenses if they do not receive the needed support to not only become functional but most importantly profitable.

Article

Written by: Jerome G. Karnwea Sr. Agronomist, The Cassava Transformation Project (CASTRAP)

Enhancing the Competitiveness of Liberia's Cassava - A Focus on Sustainable Production of Cassava through Good Agronomic Practices

Cassava as a major staple food in Liberia cut across six Sustainable Development Goals

Cassava is a key food commodity in tropical and subtropical regions of the world. According to Luis Augusto Becerra Lopez-Lavalle et al 2021, cassava is an agricultural commodity that has the potential to have a significant global impact on nearly all the Sustainable Development Goals with an emphasis on the following goals: Goal-1 (no poverty), Goal-2 (zero hunger), Goal-3 (good health and well-being), Goal-12 (responsible production and consumption), Goal-13 (climate action), and Goal-15 (life on land).

A farmer enroute to sell cassava tuber in the local market in Greenville, Sinoe County

In Liberia, cassava is the second most important staple food crop for the majority of rural poor households. This could be attributed to the fact that cassava is a resilient and versatile crop that can be grown in a wide range of ecological conditions. It also has a rich nutritional value, plays a crucial role in ensuring food security for many households, offers income-generating opportunities for farmers in Liberia as it can be processed into various valueadded products such as cassava flour, starch, chips, and other derivatives.

Despite the crop's importance in achieving the above-mentioned SDGs, production is unable to meet the current local and regional demands. According to the CASTRAP baseline survey, the factors driving low productivity are poor agronomic practices, lack of access to appropriate planting materials, lack of access to markets, and high levels of post-harvest losses, among others. This article seeks to outline how CASTRAP is supporting smallholder cassava farmers to sustain production through good agronomic practices that promote climate-smart approaches.

Sustainable cassava production through climate smart site selection and land clearing

The term "sustainability," as it applies to agriculture, describes a holistic, long-term approach to business on-farm, which means maximizing economic and environmental stability, equity, and health of the farm, business, and family. <u>Betts 2015</u>. Climate-smart on the other hand is an approach that helps guide actions to transform agri-food systems towards green and climate-resilient practices, Choice of land for cassava production is very essential for sustainable production and climate-resilient practice.

The CASTRAP baseline survey revealed that 87% of the respondent interviewed in south eastern Liberia carried out the slash-and-burn method of farming as opposed to 13% who do not burn their farm. While it is important to use fertile soil for cassava cultivation, it is also important to emphasize the need to avoid cultivating high forested land which might require felling trees and burning bushes to reduce the impact of cassava production on greenhouse gas emissions and climate change. According to Global Forest Watch, Liberia lost 284kha of humid primary forest between 2002 to 2021 representing 6.4% in this time period.

According to Norway's International Climate and Forest Initiative, most deforestation in Liberia is caused by people trying to cover basic needs through shifting agriculture and cassava production is no exception. Across CASTRAP landscape, the Agronomy team is encouraging farmers to adopt permaculture and zero burning.

Choice of good cassava variety as related to climate-resilient practice

The choice of a good cassava variety largely depends on the purpose for which the cassava is being cultivated. Climate-resilient cassava varieties have been recommended to help farmers adapt to climate change. To achieve the optimum yield of a given variety, good agronomic practices must be observed irrespective of yielding potential. The best and preferred varieties are those that have the growth and yield attributes required by the end user. In the south eastern part of Liberia for instance, most rural farmers cultivate the traditional varieties due to the unavailability of improved ones (CASTRAP 2021). Even though these respondents cited a lack of improved varieties, their second and third consideration was based on the crop utilization as leafy vegetables or consumption as root. The traditional cassava varieties are very palatable and are sold on the local market for daily household consumption in a different form.

Some qualities of good cassava variety are as followed:

- Early maturity (6-9 months after planting)
- Good yield (20-30 tons per hectare),
- Long tuber storage in the soil,
- Tolerance to major pests and diseases (Cassava Mosaic Virus CMV, Cassava Brown Streak Disease CBSD, cassava mealybug), etc.

Liberia

Liberia has improved varieties that meet some of the above mention qualities of a good cassava variety. However, most of the said varieties have not been documented and cataloged for easy traceability. According to CASTRAP baseline, 95.6% of farmers sourced their planting materials from their own farms, 3.8% from the market, and 0.6% from non-governmental organizations (NGOs).

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In keeping with Liberia's Nationals Cassava Sector Strategy to select 5 improved varieties for maximum output, CASTRAP is partnering with the Central Agriculture Research Institute (CARI) to introduce two of its improved varieties across the project landscape in the south east. The project has distributed approximately 313,000 cassava cuttings enough to plant 78 acres to more than 440 farmers across the project landscape. Before the close of the project, the agronomy team will come up with complete documentation of the two varieties as research and data collection on growth and yield are currently taking place across 15 demonstration sites.

Choice of Land Preparation for Planting (Methods of Planting)

The way land is prepared for cassava cultivation is commonly referred to as the method of planting in Liberia and this method has a significant influence on the growth, yield, and return on investment. In the south east where the average farming size is 1.4 acres and 87 % of the farming population carrying out slash and burn, it was also reported that 99.8% of them used manual labor and hand tools such as cutlass, and hoe for land preparation through harvest either due to unavailability of machinery or cost associated with the use. Flatbed (planting on flat land) is the most common planting method used in Liberia. However, another form of flatbed which required zero tillage called the god-bless-you method is predominantly used in the south eastern part of Liberia.

) Female farmer planting cassava using the flatbed method, (I Use of God-Bless-You method without overing cassava cuttings with soil, (C) A female farmer plantin using the mound and ridge method of planting

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Flatbed (planting on flat land) - no heap form, minimum tillage usually where the farmers insert or buried the cassava cutting. This method is the most common practice all over Liberia since it required less labor, less time, and is less costly.

God Bless You - this method of planting is most commonly practiced in the south eastern part of Liberia. This method required zero tillage after the land is clear of weeds and debris. In this method, the farmer cut the stem cuttings about 30 -40 cm long and places the cutting on the surface of the soil without covering it. This exposes the planting material to extreme environments such as excessive sunshine, and pest attack. As the name denotes, if god-bless the cassava cuttings will grow, otherwise, it might be feasted upon by this extreme environmental factor. This method results in poor root penetration, poor root development, and poor yield.

Mound - is the piling of soil into heaps of 30 to 60 cm height for cassava cultivation using hand tools or machinery. This practice is common but rarely adopted by most farmers because it is time-consuming, labor-intensive, and costly.

Ridge - unlike mound is a horizontal line of heaps formed by piling up soil using hand tools or machinery. This practice is also common but rarely adopted because it is time-consuming, labor-intensive, and costly as well.

Under the CASTRAP, 99 % of our farmers have transmissioned from this traditional (God-Bless-You) method of planting to a flatbed method. Farmers are also being encouraged to adopt the mound and ridge land preparation even though it comes with extra labor but promises a higher yield and more income as compared to the The project also established flatbed. 15 demonstration sites across the project landscape where these three improved land preparations are closely being compared for growth and yield attribute through the farmer field school (FFS) approach to convince farmers.

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At a Glance

WACOMP'S Country Intervention

Amount: 65m Lead Ministry: Ministry of Finance Implementing Partner: GIZ Selected Value Chains: Soya, ICT

Amount: €4m

Lead Ministry: Ministry of Trade, Industry and Employment (MOTIE) Implementing Partner: UNIDO; United Purpose Selected Value Chain: Onion

Amount: 65m Lead Ministry: Ministry of Finance ent Planning and Developm Implementing Partner: CERATH Development Organization Selected Value Chains: Cassava

Amount: €10m

Lead Ministry: Federal Ministry of Industry, Trade & Investment Implementing Partner: GIZ Selected Value Chains: Ginger; Tomato/Pepper; Textiles & Garments; Skin, Hide & Leather

Burkina Faso

Amount: €7.5m Lead Ministry: Ministry of Trade, Industry and Handcraft Implementing Partner: Chamber of Commerce Selected Value Chains: Honey, Cotton, Renewable energy

Amount: 69m

Lead Ministry: Ministry of Finance, Ministry of Trade Implementing Partner: UNIDO

Selected Value Chains: Tropical Fruits: Cassava & Derivatives, tics and Personal Care products

Amount: 64m Lead Implementing Ministry:

Ministère de l'Économie et de l'Industrie (MEI) Selected Value Chains: Poultry; Skin, Hide & Leather; Gum Arabic

Amount: 69m

ICT

Lead Ministry: Ministère de l'Economie, des Finances et du Plan, Ministère du Commerce, Ministère de l'économie et des Finance lementing Partner: ITC Selected Value Chains: Mango; Onior;

Amount: 65m

Lead Ministry: Competitiveness Unit (Office of Prime Minister) Implementing Partner: UNDP Selected Value Chains: ICT; Renewable energy, Culture, Tourism & Leisure

Amount: €5m

Lead Ministry: Ministere De L'industrie Et Des Prne Implementing Partner: UNIDO Selected Value Chain: Pineapple

Amount: 65.5m

Lead Ministry: NAO, Ministry of Industrial Development and Investments Promotion, Ministère du Développement Industrie Selected Value Chain: Tropical Fruits: Cereals

Amount: 65m

Lead Ministry: National Authorising Office, Ministry of Trade Implementing Partner: UNIDO Selected Value Chains: Cassava & Derivatives, Cocoa, Palm Oil

Amount: 69m

Lead Ministry: Ministry of Regional Integration

Implementing Partner: Chamber of Commerce

Selected Value Chains: Tropical fruits; cassava, cashew, textile & garment, rubber & plastics, ICT

Amount: 64m

Lead Ministry: Ministère de l'Industrie et des PME, Cellule de Gestion du Fonds européen de Développement (CGFED) Implementing Partner: UNIDO Selected Value Chain: Mango

Amount: 65m

Lead Ministry: Ministère des Finances, Ministère du Commerce extérieur et de La Promotion du Secteur privé

Implementing Partner: Ministère du Commerce et de la Promotion du secteur privé (MCPSP)

Selected Value Chains: Skin. Hide & Leather

Amount: 65m

Lead Ministry: l'industrie Ministère du commerce de l'industrie du développement du secteur privé et de la promotion de la consommation locale

Implementing Partner: GIZ Selected Value Chain: Pineapple

CASTRAP'S Contributions to SDGs

Funding Organization & Implementing Partners

European Union	CASTRAP is financed by the 11th European Union Development Fund under the West African Competitiveness Programme.
CERATH	CERATH Development Organization is a non-profit entity focused on catalyzing development within rural and urban poor communities in Africa.
	RICCE is a not for profit right based organization working to empower rural communities in Liberia. RICCE emphasize participation in decision making and the sustainable use of natural resources.
CONSERVATION	CAL is an organization that serves as a catalyst for biodiversity conservation and improved socio-economic conditions of fringe communities. Its vison is to empower communities in Africa to lead in biodiversity conservation and create opportunities for economic growth and improved human well-being.
Center for Enterprise Learning	Ghana is focused on transforming ideas into impactful businesses, and supporting businesses to launch, scale and accelerate. CEL is focused on providing a cocktail of context-based solutions to businesses in Africa particularly within the agricultural and green space.

THE CASTRAP NEWSLETTER

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WACOMP

The West Africa Competitiveness Programme (WACOMP) aims to support a number of selected value chains at national and regional level to promote structural transformation and better access to regional and international markets, while taking into account social and environmental concerns. The WACOMP consists of one regional and sixteen national components (15 ECOWAS Member States and Mauritania). The West Africa Competitiveness Programme (WACOMP) is financed under the 11th European Development Fund (EDF).

www.wacomp.ecowas.int

WACOMP Liberia targets the cassava value chain In the South Eastern Region. The Cassava Transformation Project (CASTRAP) is the Liberia National component of the WACOMP. The CASTRAP seeks to enhance the competitiveness and regional integration of Liberia's cassava sector through a value chain approach focused on sustain production, value addition, entrepreneurship, and sustainable markets. The project is being implemented in the South Eastern counties of Grand Gedeh, River Gee, Grand Kru, Maryland, and Sinoe.

DISCLAIMER

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