The UN Secretary-General's Advisory Board on Zero Waste

## Five-fold Income Expansion for Aged Women through Cassava Peel Recycling for Animal Feed (FINTRAFs)



#### Zero waste good practice

No Hunger Food Bank

Adeta, Indigenous Community, Kware State, Nigeria

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# About

#### Synopsis

Five-fold income expansion for aged women through Cassava peel Recycling for Animal Feed (FINTRAFs), aimed to equip the Adeta Indigenous women who work in the cassava value chain with the necessary machines and skills to increase their productivity and improve their standard of living. Before empowerment, indigenous women peeled cassava by hand, sustained varying degrees of hand injuries from the sharp knives they used to peel cassava. They are then sun-dried the peels and sold them within their community. The United States Ambassador's Special Self Programme (US ASSH) funded FINTRAFs provided to these Indigenous women represents a significant milestone in NHI's capacity to combat poverty and food insecurity in the Adeta community. The project, titled FINTRAFs is an initiative, benefited at least 500 direct beneficiaries and at least 2.000 indirect beneficiaries, including women, vulnerable children, and youth towards combating food insecurity, poverty, and food waste in disadvantaged communities.

#### Stakeholders and Partners

United States Ambassador's Special Self Programme (ASSH), the United States Embassy, Abuja-Nigeria, the Ministry of Agriculture, Kwara State, Minisitry of Communication, Adeta Garri Production Centre, Asejere Cassava Processing Centre, Adeta Cassava Community



#### **Connection to Zero Waste**

The FINTRAFs initiative exemplifies zero waste practices by repurposing cassava peels into livestock feed and employing solar-powered facilities for processing, contributing to waste reduction. Through community engagement, it transforms production wastage into income opportunities for Adeta's indigenous women, ensuring a five-fold increase in earnings. By empowering 100 beneficiaries within four weeks and promoting labor market efficiency, it enhances human resource circularity and economic sustainability. The project's theory of change aims to amplify the cassava value chain, potentially achieving a 97% optimization in peel utilization and a fivefold income boost for elderly women. With 500 empowered women serving as trainers, the initiative fosters a cascading effect, enriching the socio-economic landscape of the Adeta community.

#### **Contribution to Sustainable Development Goals**

The good practice integrates with several Sustainable Development Goals (SDGs), embodying a multifaceted approach to address poverty, hunger, gender inequality, and promote sustainable production. Aligned with SDG 1, it aims to uplift marginalized indigenous women in the Adeta Community by providing economic opportunities and training in sustainable agriculture. Through initiatives like the Announcement and sensitization of ASSH grant and the TREF Bundle Lab Renovation, the project seeks to alleviate poverty by empowering women with the means to generate income and improve their livelihoods.

Moreover, by focusing on local fabrication of cassava processing machines and installation, the project contributes to SDG 12 by promoting sustainable consumption and production patterns. These machines facilitate efficient cassava processing, reducing waste and enhancing productivity in a sustainable manner. Additionally, the training provided to beneficiaries on machine usage and cassava processing stages aligns with Goal 2, promoting food security and sustainable agriculture practices within the community.

The project's emphasis on gender-inclusive beneficiary selection and documentation underscores its commitment to SDG 5, striving to achieve gender equality and empower women and girls. By providing equal opportunities for women's economic participation and skill development, it works towards creating a more inclusive and equitable society. Through collaborative efforts with stakeholders and the organization of workshops to sensitize them on the role of Financial Transfer Facilities (FTF) and TREF Bundles, the project aims to scale its impact and foster partnerships to enhance community resilience and sustainable development. Overall, the project's holistic approach aims to address interconnected challenges while advancing progress towards the SDGs within the Adeta Community.

## Background, Challenges and Objectives

For the Adeta Indigenous women to produce substantial economic returns, reduce environmental pollution, and minimize post-harvest losses by recycling cassava peel into nutritious animal feed to save animals and the environment as climate change worsens in the Adeta community. FINTRAFs set out to contribute to the achievement of the project goals and visions.

No Hunger Initiatives (NHIs) heartily acknowledges its project stakeholders, notably the direct beneficiaries, community leaders, and the Kwara State agricultural sector authorities for their efforts towards the implementation of its planned activities during the project lifespan. "FINTRAFs transforms cassava waste into opportunity, empowering Adeta's Indigenous women while safeguarding our environment. Together, we're paving a sustainable path forward."



## Actions and Implementation

Discover how the Adeta Community of Indigenous Women is being empowered through a transformative project aimed at fostering sustainable development. From sensitization initiatives to the installation of innovative cassava processing machinery, each step contributes to economic empowerment and community resilience.

The endeavor unfolds with a purposeful sequence of activities designed to empower the Adeta Community of Indigenous Women while advancing sustainable development. It commences with the Announcement and sensitization of the ASSH grant, engaging the community to comprehend the project's goals and potential outcomes. Subsequently, the TREF Bundle Lab Renovation repurposes existing infrastructure to facilitate training sessions and accommodate machinery, with the active involvement of the local community.

Central to the initiative is the local fabrication and installation of cassava processing machines, encompassing peeling, pressing, dehydration, milling, and sealing equipment. Beyond promoting sustainable production practices, this endeavor enhances productivity within the community. Concurrently, beneficiaries undergo Training the Trainers sessions to proficiently operate the machinery and navigate the cassava processing stages, ensuring comprehensive skill development.

Beneficiary selection prioritizes inclusivity, considering factors like gender, age, and willingness to learn, aligning with the project's commitment to gender equality and empowerment. Through meticulous computer documentation, beneficiary details are systematically recorded, streamlining program management and evaluation.

The project unfolds in batches, empowering 100 beneficiaries every four weeks, gradually expanding economic opportunities and market access. Simultaneously, strategic collaborations and stakeholder engagement activities, such as workshops on FINTRAFs and TREF Bundles, further amplify the project's impact and sustainability.

Ultimately, the project aims to economically empower 500 women through the TREF bundle, fostering resilience and sustainable development within the Adeta Community. Through rigorous evaluation mechanisms, the project ensures that beneficiaries receive comprehensive training and support, laying the foundation for long-term success and empowerment.

## Outcomes and Impact

With support from US ASSH funding, the NHI implemented the FINTRAFs project, with the objective of empowering Adeta Indigenous women engaged in the cassava value chain. This initiative aimed to equip them with essential machinery and skills to enhance productivity and elevate their living standards. Previously, indigenous women manually peeled cassava, risking hand injuries, and sun-dried the peels for sale within their community, contributing to zero loss in the indigenous communities' cassava value chain operations. The US ASSH-funded FINTRAFs provided to these women mark a significant milestone in NHI's efforts to alleviate poverty and food insecurity in the Adeta community.



#### Income

The NHIs initiative, funded by US ASSH, aimed to empower Adeta Indigenous women in the cassava value chain through FINTRAFs, resulting in a five-fold income expansion.

#### Productivity

Prior to empowerment, indigenous women manually peeled cassava, leading to hand injuries, but with FINTRAFs, they received machines and skills to enhance productivity and living stan-

#### Empowerment

The US ASSH-funded FINTRAFs marked a crucial milestone in NHI's efforts to alleviate poverty and food insecurity in the Adeta community, accelerating economic empowerment.

## **Replicability and Scaleability**

No Hunger Food Bank is replicating FINTRAC among internally displaced farming communities in Northern Nigeria to contribute towards food availability and zero waste along the food value chain in response to the national agricultural transformation programme and climate adaptation

### **Inclusion and Innovation**

No Hunger Food Bank is spearheading the replication of FINTRAC across internally displaced farming communities in Northern Nigeria, aligning with national agricultural transformation and climate adaptation agendas to bolster food security and minimize waste throughout the food value chain. The initiative introduces the FINTRAFs, implemented via a comprehensive strategy known as the Train-Work-Reskill (TREF) Bundle.

The project encompasses several crucial activities, including the renovation of the FINTRAFs TREF Bundle Lab to accommodate training sessions and machinery installations. Concurrently, efforts are underway to finalize the setup of all machines and provide training to five lead beneficiaries selected from the elderly women demographic. A meticulous process of beneficiary selection, approval, and documentation is being undertaken, with profiles of 500 beneficiaries systematically recorded to ensure effective program management and evaluation.

The training component of the project is structured into 20 batches, each comprising 25 women, aiming to empower a total of 500 beneficiaries through skill development and capacity building. Upon completion of the training program, a network of 250 trained and reskilled individuals will emerge, equipped with the knowledge and expertise to drive sustainable practices within their communities. Additionally, the project includes the preparation and dissemination of a background paper summarizing key insights and recommendations, along with engagement activities targeting stakeholders, local government representatives, and policymakers.

Furthermore, the initiative prioritizes the establishment of partnerships to scale the FIN-TRAFs TREF strategy beyond its initial implementation, extending its reach to other wards, local governments, and state governments. Through these collaborative efforts, the project aims to maximize its impact and contribute significantly to poverty alleviation, food security enhancement, and waste reduction initiatives across Northern Nigeria.

## Accountability and Sustainability

The activities of the project unfold systematically, beginning with the announcement and sensitization of the ASSH grant to the Adeta Community of Indigenous Women, ensuring clarity on the project's objectives and outcomes. Following this, efforts focus on renovating the TREF Bundle Lab, providing a conducive space for training and processing sessions, and fabricating and installing cassava processing machines, including peeling, pressing, dehydration, milling, and sealing equipment.

Once the infrastructure is in place, training sessions commence, with a special focus on training lead beneficiaries to operate the machines effectively. The selection of 500 beneficiaries, based on various criteria, precedes meticulous computer documentation of their details for program management. Beneficiaries are then grouped into batches, with 100 beneficiaries empowered within four weeks, gradually increasing their daily income.

Additionally, the project includes the preparation of a background paper on aged women's contributions to the community's economic expansion, along with strategic partnerships. Stakeholder workshops sensitize participants to the role of FINTRAFs and TREF Bundles, fostering collaboration and knowledge-sharing. Lastly, the project aims to scale the impact by collaborating with more partners.

Throughout these activities, the beneficiaries cum trainees undergo evaluation to ensure comprehensive skill development and empowerment.

## **Further Data**

The project's implementation strategy unfolds with the launch of the FINTRAFs alongside the TREF Bundle. The initiative includes the renovation of the FINTRAFs TREF Bundle Lab and the finalization and installation of all necessary machines for cassava processing.

Following the infrastructure setup, training is provided to five lead beneficiaries among elderly women, who will subsequently train 500 selected beneficiaries. The project emphasizes thorough documentation of beneficiary profiles for effective program management. Beneficiaries are organized into 20 batches, each comprising 25 women, with a total of 500 individuals trained and graduated through the TREF program.

Additionally, the project entails the development of background and summary papers to disseminate key findings and recommendations to stakeholders and policymakers. Furthermore, efforts are directed towards establishing and strengthening partnerships to scale the impact of FINTRAFs and the TREF strategy to other regions and governmental levels.

Throughout these activities, the beneficiaries cum trainees undergo evaluation to ensure comprehensive skill development and empowerment.

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