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## Abagoré (Empowering Rural Women in Rwanda)

A StoryHouse Communications Production, 2017

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Below is a summary of Abagoré that is designed to stand alone or accompany the documentary. Please find the documentary linked <u>here</u>.

#### 1.0 Introduction

In Rwanda, women living in rural areas use indigenous knowledge and technology to improve their lives. By utilizing the rich knowledge passed down from generations, these women provide for their families by making and selling indigenous products. This documentary discusses the relationship between the empowerment of women living in rural areas and the production and sale of these valuable products.

Experts and the women themselves comment on this important relationship. As the documentary progresses, the production processes of banana wine, sorghum beer, indigenous vegetables, and sour milk are explored and demonstrated. This footage provides a visual experience for viewers to understand more about the women and their livelihoods, as well as the production of indigenous products.

Dr. Chika Ezeanya Esiobu, Senior Lecturer in the College of Business and Economics at The University of Rwanda, opens the documentary saying,

I think it's important to emphasize that the question of indigenous technology is not against whatever technology is going to come from the outside. They can both work together, but it's important that the foundational technological advance be founded not on important ideas, but on what the nation has and can build for itself, while



also borrowing ideas and existing technology from other nations.

Next, Nyirangaruye Dancilla, a woman living in rural Rwanda, explains,

It was someone that advised me to start making banana wine after I became a widow and there was nobody to even give me soap. He said, 'Instead of begging, let me teach you what you can do to afford school fees for your children.' So, banana wine was my source of income to buy things like schoolbooks and to cover other small bills. That's how I survived.

Dr. Marie-Christine Gasingriwa, Director General for Science, Technology, and Research with the Ministry of Education in Rwanda, states, "From the perspective of what we know, when we talk about tradition, we attach so much value to indigenous knowledge because we are what we are thanks to technology our parents used. Now, when we talk about modern technology, it is adding to what we have."

Paul Okwi, Program Officer of the Inclusive Economic Program for the International Development Research Center says,

Our position is to improve the jobs, employment, especially for women in developing countries. The program we're working on takes an innovative approach of looking at rural areas with the focus of indigenous knowledge, indigenous technology. We believe that local solutions work best for local problems. This project seeks to build the capacity of rural women in terms of enhancing their capabilities to grow their businesses, looking at the traditional businesses. It looks at enhancing their capacities to lead their rural folks in terms of production of indigenous products. We're also looking at possibilities of supporting the policy areas in terms of enhancing the growth of this business system.

### Dr. Chika Ezeanya Esiobu explains:

This project is focused on how women in Rwanda can be economically empowered using indigenous technology, their own local technology, not imported technology from outside; for being able to generate development, economic empowerment; using what is readily available within these local constituencies. In Rwanda, there are many indigenous ways of producing different items, products. For this particular project we're looking at about four products: banana wine, sorghum beer, indigenous vegetables, and sour milk. When you come to Rwanda you find that quite a few people consume cabbage, carrot, cucumber, tomatoes. Of course, these are good and nutritious; however, before these vegetables were introduced to Rwanda, there were certain traditional vegetables that Rwandans used to cultivate and eat that have proven to be even much more nutritious than the imported vegetables that are now being consumed.

But you find they are not so much consumed these days. We had to go to them and ask: 'why do you cultivate these vegetables? How much access do you have? How can your production be improved? How can consumers be encouraged to increase consumption of these vegetables?' Because it has proven to be more nutritious than cabbage, carrots, and cucumbers.

We're also looking at sour milk, *ikivuguto*, produced using traditional fermentation methods. In Rwanda, you find that it appears there is more emphasis put on encouraging the use of synthetic starter cultures, but then, for hundreds of years, Rwandans have been using traditional fermentation method with several advantages: it is cheaper, more accessible, even what is produced is much better, according to consumers, and has more nutritional content than the one that is produced using the synthetic imported cultures.

#### 2.0 Meet the Women

In this section, several women describe their lives in rural Rwanda.

Nyirangaruye Dancilla says, "I sell banana wine for a living, and I'm also a farmer. I have spent five years selling banana wine."

Nizeyimana Donatille says, "I make sorghum beer. I've been making it for five years."

Mary Kagabo says, "I'm a farmer. I've been making sour milk for 10 years."

Mukandekezi Francoise says, "I've been growing these vegetables for 10 years."

After the rural women speak, Dr. Chika Ezeanya Esiobu states,

The research on indigenous technology for creating employment for women is very important, especially in Sub-Saharan Africa. For several decades, development in Africa has taken an outside-in approach. A situation where conversations surrounding development usually emanate from international organizations, central government, while in these development conversations there are very few voices of those who will actually be the recipients of development efforts. So, this research is very important because we are going to focus on the women, the people who are actually at the center of development decisions. So, we are going to them to say, 'What do you need? What are you doing with what you have?' And from there, we'll be able to chart a development trajectory for these women. It's very difficult to generate development when technology is imported because it doesn't take root in local communities. But when technology grows from Point A to Point B, from what is known to what is unknown, it is easier for technology to take root and expand, and for that

community to become an extent of creativity and innovation based on available technology.

### 3.0 Empowered by Indigenous Technology

Nyirangaruye Dancilla first explains,

Because of poor living conditions I made enquiries from someone on how I would survive. We agreed that for me to live, he would loan me some money to buy bananas to make banana wine. I was loaned 5,000 RWF [Rwandan Francs]. That time I was selling a jerrican of 20 liters of banana wine for 1,000 Francs. The cost increased to RWF 2,000, and now, we currently sell a jerrican at RWF 4,000. The more costly the bananas get, the more we increase our prices. Therefore, I earn a living by making banana wine. Sometimes when the wine spoils, and I don't have money, I borrow money from the cooperative society. When I make profit, I pay them back. With the proceeds gained from making the banana wine, I bought that cow.

Nizeyimana Donatille also states: "I wasn't taught how to make sorghum beer. I did some research to find out how I can survive. I make like 10 jerricans. A jerrican sells for RWF 3,000. I use black sorghum flour. It costs RWF 500 per kilo."

Mary Kagabo says, "We grew up in a farming environment, and when we moved to Rwanda, we met people who were doing business, and milk was on high demand. So, I decided to do the business of selling sour milk. I buy the milk, prepare it for fermentation, and then resell the sour milk when it is ready."

Mukandekezi Francoise states,

I started growing these vegetables when I realized that these vegetables prevent diseases and because I realized that my family was feeding poorly, yet I had means to grow better food. I started growing these vegetables, and my family is now well. We are no longer sickly. When my neighbors lack vegetables, they come, and I give them for proper feeding in their homes, too. That way we reduce diseases in the village.

### 3.1 Indigenous Technology for Banana Wine (Urgwagwa)

Nyirangaruye Dancilla explains the process of making banana wine:

This is how I split the bananas. My kids help me prepare the banana leaves; I'm going to put the banana leaves in a hole, well covered so they can become ripe. I blow the smoke inside the hole because it hastens the ripening of the bananas. They stay about 5 days here. Then I remove them to make the wine. I remove

them and peel them. If we don't encounter any problems at this stage of processing the bananas, it will bring out very good wine. If I make it in the morning and put it on the fire, by evening the wine will be ready. I use a worker for processing the bananas because I'm not very strong. I have to press it until it begins to foam. When there is a lot of foam, it flows like there is water. We are going to put this juice from the banana into a jerrican. We will also add some water to dilute it. Now this is how we extract. After, I will put it in a saucepan, then I'll add more water. Then I'll put it on fire to make the wine. If I don't boil the wine on fire like this, it will be spoilt by tomorrow. The benefit I get from making the banana wine is that when I sell it, I get more money to buy soap, food, and other necessities. But if it gets bad before I boil it, it's really a big loss. After boiling the wine, I will sieve it to remove all the chaff and also maintain good hygiene. I have to wash the jerricans very well and keep them in a clean place. Then my customers pick them from here and take them to the market. Then I wait for them to sell and bring me the money.

## 3.2 Indigenous Technology for Sorghum Beer (Ikigage)

Nizeyimana Donatille explains the process of making sorghum beer:

When I want to prepare sorghum beer, I go to a sorghum seller and we bargain a price. After we agree on a price, I get the sorghum. Then I weigh the sorghum and get the exact quantity that I want to use. After weighing it, based on the money I have, I go to a special machine for milling it. After I get the flour, I take it home. When I get home, I put a pot of water on the stove to boil. I put some sorghum flour in a drum, and after the water in the stove has boiled, I pour it into the drum. After adding water, I put flour and then mix for a while. Then I stir and stir and stir until it is fine. After stirring properly, I add water to cool down the temperature. Then I cover it for 24 hours and open it the next morning. The sorghum beer is done and ready for consumption. As soon as the sorghum beer is ready, those who wish to sell it come to buy at a wholesale price and then resell it. There's alcohol we have that we normally add to the mixture; after adding it, we cover with some flour. It has become so sweet.

#### 3.3 Indigenous Technology for Sour Milk (Ikivugutu)

Mary Kagabo explains the process of making sour milk:

For sour milk, we get the fresh milk from the cows and boil it; then we store it in a nice clean place in different containers. We separate the milk into bits to enable it to cool. Hot milk is never used for making sour milk. We only use warm milk for the process. In the evening, around 7p.m., we get the milk ready and store it in a

clean place. Then we bring out the containers to be used for the fermentation. There's this milk called 'invuzu;' it is usually added to form or make yoghurt. This 'invuzu' or slightly soured milk is added to one of the clean containers and then mixed with very little water. You then get the cooled unfermented milk and you sieve it into the invuzu mixture. After sieving, you add a little milk (invuzu) on top of it. After that, you cover the milk and store it in a clean place. In the morning, you will find it in the form of yogurt.

## 3.4 Indigenous Technology for Vegetables (Mgoba)

Mukandekezi Francoise explains the process of growing vegetables:

The way we start is that these vegetables grow by themselves. For example, if this single one falls somewhere, it later grows. After it grows, I remove it and plant it properly. When planted properly, it then spreads so much that it can even fill a big garden, coming from this single leaf that fell. If you have the finances to get fertilizers and some chemicals to the vegetables, the farm will yield a better harvest. This old lady's vegetable farm looks that way because of the little fertilizer added to it. If she had added more fertilizer, the yield would have been much more. From my point of view, local or Rwandan vegetables are the most preferred because Rwandan vegetables have been found to be medicinal for everyone. When you add these vegetables to your meal, it gives you vitamins thereby providing a healthy diet. That's why people have an affinity for Rwandan vegetables—because it keeps them healthy when they eat them. All vegetables that are available are there for a reason, and they add value to your life. But the traditional vegetables are more important because they grow naturally on their own, and they have all the vitamins and minerals needed by a person's body. That's why people take their time to plant them, so everybody can have access to them.

### 4.0 Challenges the Women Have and the Role of the Government

Nyirangaruye Dancilla speaks about her main challenges in making banana wine:

I have never received financial support from the government or anybody. I could borrow RWF 5,000 from a friend and try my best to pay them back when I get the money. This is how I survive on a daily basis. The main challenge I face in my business is that sometimes my wine expires. When this happens, I lack business. I sit around doing nothing. When selling my juice, the problem I face is with washing the jerricans because I'm not strong enough. That's when I ask one of the girls to help me with washing. They also carry the heavy bananas for me.

Nizeyimana Donatille speaks about the challenges she faces in making sorghum beer:

The challenges I face include lack of water, since I have to pay money and go all the way to the tarmac road to buy water. Secondly, I use a lot of firewood. I buy a pile of firewood at RWF 3,000. Lastly, I will say that another challenge is being able to satisfy all my clients. So, my challenges are water, firewood and money to buy the sorghum seeds for RWF 500 a kilo.

Mary Kagabo explains the challenges in making sour milk:

We face challenges in buying and boiling the milk; we have problems with getting firewood because we can't cook plenty of milk on a charcoal stove, except on big charcoal stoves, and it's not easy to find charcoal to fit into it. The situation in our country is that firewood has become rare, and the government doesn't want us to cut trees from the environment. The government wants people to use other alternatives and that's why they help people use biogas, for example. But again a casserole, which can take 20, or 25, or even 45 liters of milk, can go on firewood, but not on a charcoal stove or biogas. Firewood is hard to find, and when you get it, it is very expensive. Two logs go for 400 RWF. The main challenge we face in selling the milk is prolonged power outage as this can cause the things in the fridge to get spoilt. Another challenge is that sometimes we don't get customers or very few, causing the milk to stay for some days and get spoilt. These challenges don't occur every day, though. They usually happen once in a while. It also depends on the season. When it is the rainy season, people who drink milk are very few. They prefer to drink tea. But in the summer people come for milk.

Mukandekezi Francoise speaks about the challenges in growing vegetables:

The main challenge we face is lack of fertilizer. If we had more fertilizer, we would increase the quantity of vegetables produced. In order to get a good harvest, we need to put in enough manure. With more manure, I could cultivate 3 to 4 meters of land and get more harvest. I would appreciate if I'm helped in getting more fertilizer, or even a cow that would provide manure for me. For example, this piece of land is 1 square meter and from it I can generate RWF 10,000 if I don't have fertilizer. But if I had fertilizer, I would generate RWF 20,000, and my family, as well as my neighbors and people around me, would have food to eat. But because there is no manure, I can't have a good harvest.

#### 5.0 Conclusion

### Dr. Chika Ezeanya Esiobu states,

Development partners, civil society, and private sector and non-governmental organizations can play a key role. We know that Africa is still an aid dependent continent for the most part, but one of the disadvantages of aid is that it is short-term. It does not really emphasize growth that springs from within. So, one way that development partners can encourage indigenous technology is by investing in capacity—building around existing indigenous technology.

### Paul Okwi says,

In this particular case, Africa has come a long way, we are losing some of the indigenous systems, and we need to enhance them because they have been the livelihoods of these communities for centuries. We can't lose these systems that can sustain families and employ many people. We want to enhance them and scale up the opportunities for the people. Policy makers have gone to indigenous knowledge and technical systems— it is not new to them. We feel that the young generation could be easily forgotten in this process. So, we have engaged the policy makers; we have talked to them at the time of design of the product and told them what exactly we want to achieve with this. The policy makers are keen to support the empowerment of women in these areas in Rwanda and Tanzania. The policy makers can be instrumental in implementing these ideas, scaling up. It is not easy, but most African countries are looking back at traditional systems and seeing how they can integrate these in the current planning process.

### Dr. Chika Ezeanya Esiobu says,

I think it's important for us to understand that most of the economies we consider developed had started by growing their own indigenous knowledge and technology. Across the world, in different sectors, you find traditional knowledge and technology forming the foundation for modern technology because it is easier to build from what is known. When technology is something that is taught locally, gotten from the immediate environment, it becomes a lot easier for innovation. So, it would be difficult for any country to advance technologically without emphasizing indigenous technology. It is very important for sub-Saharan African countries to focus on indigenous technology while also not neglecting more advanced technology. The question of indigenous technology is not against whatever technology is going to come from outside; they can both work together. But it's important that the foundation of technological advancement of a nation be

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founded not on imported technology, but on what the nation has and can build for itself while also borrowing ideas and technology from other nations.