EMPOWERING COFFEE FARMERS THROUGH MOBILE PHONE USAGE

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Let’s empower the farmers of Limu Kosa by introducing mobile phones
We aim to create a positive impact by creating a deep understanding of the lives and dreams of the farmers.
4 FOCUS GROUPS
30 FARMERS
60 INTERVIEWS

4 Weeks
2 Villages
11 Women
19 Men
We believe we can establish empowerment of the farmers by creating personalised advice.

App
Financial Workshop
HOW? By categorising the farmers into profiles
WHAT WE LEARNED
To create a deeper understanding on how to empower farmers through mobile phone usage, these three aspects have been determined.

These three aspects are both regarding mobile phones, and regarding the farmers day-to-day lives.

The ultimate goal is to empower the farmers by integrating their needs. However, first the physical circumstances and social circumstances needs to be harmonised.
MEET THE FARMERS
“We need from you one thing: to write down our questions and bring it to the boss. It is not only my question, but from the whole community.”

PHYSICAL CIRCUMSTANCES
- Bad road and bridge
- Majority has solar panels
- Bad phone network
- Buy phone credit at local shop
- Buy phone in Limu

SOCIAL-ECONOMICAL CIRCUMSTANCES
- Mostly dependent on coffee
- ‘Rich’ during harvest season, ‘poor’ rest of the year
- Distrust in local management
- Illiteracy rate is high
- Day-to-day planning mentality

NEEDS
- Being able to ask questions to FC/NL
- Education for children
- Stable income/ better understanding of financial stability
- Owning a mobile phone, preferably a smartphone

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ARCHETYPE PROFILING
MEET THE FARMERS
MEET THE YOUNG FEMALE FARMER
In addition, women are the caretakers for their family. This means that if she has a baby, she will take the baby on her back and carry her during her day. This also includes her time working in the field.
THE YOUNG FEMALE FARMER PROFILE

**PHYSICAL CIRCUMSTANCES**
- Use **electricity for lights**
- **Charges phone** at neighbours house or at home
- Bought phone at shop in Limu, or received as present (remittance)

**SOCIAL-ECONOMICAL CIRCUMSTANCES**
- Finished at least **elementary school** and are **literate** (to a certain degree)
- Considerable amount of daily activities and responsibilities
- **No current phone possession**
- Phone possession in the past (broke, or sold)
- **Share phone** with family/husband
- Phone usage: **calling, flash light, calculator,** and religious music
- **Spend < 10 Birr** per week on phone credit

**NEEDS**
- Expressed need for phone
- View phone possession as important and necessary due to the ability to **contact people,** and as a resource for **information**
- Family and education for the children is valued most in their lives
- **Ideal phone is a smartphone**
- Expressed that **more money** and **more coffee plants** could improve their daily life

Disclaimers: while young female farmers do not possess their own phone, this data is based on their perception and use of their husbands phone.
MEET THE YOUNG MALE FARMER
Young male farmers whom wife is not present, takes over the female tasks in the household, e.g. preparing food, and going to the market.
PHYSICAL CIRCUMSTANCES

Use electricity for lights and charging phones
Charges phone at home or at shop in Limu
Bought phone at shop in Limu, or received as present (remittance)
Smart-phone owners have better network

SOCIAL-ECONOMICAL CIRCUMSTANCES

Finished high school and are literate (to a certain degree)
Diverse amount of daily activities and responsibilities
75% possesses a phone (33% smartphone)
25% possessed a phone, but got stolen or broke
Majority is main-user, some share their phone
Phone usage: calling, flash light, social media, news-updates and tekst-messages
Smartphone owners spend > 30 Birr per week on phone credit
Not-smartphone owners spend ≤ 30 Birr per week on phone credit

NEEDS

View phone possession as important and necessary due to the ability to contact people, work related activities, and news updates
Family and education for the children is valued most in their lives
Ideal phone is a smartphone
Expressed that working hard, being a merchant, opening or extending their shop could improve their daily life
MEET THE OLD FEMALE FARMER
OLD FEMALE FARMER IN NUMBERS

> 40 years old

Can you read?

- Yes: 86%
- No: 14%
- Unknown: 0%

Daily activities

- Preparing food: 21%
- Fetching water: 26%
- Collecting wood: 5%
- Household chores: 5%
- Going to the market: 11%
- Going to the mill: 11%
- Going to the mosque: 11%
- Guarding house: 5%
- Working in the field: 5%

Do you possess a mobile phone?

- Yes: 100%
- No: 0%

Women with a husband and family do not regularly visit the mosque. Instead they guard the house and do their prayers at home.
**THE OLD FEMALE FARMER PROFILE**

**PHYSICAL CIRCUMSTANCES**
- Use electricity for lights and charging phones
- Charges phone at home or at neighbours house

**SOCIAL-ECONOMICAL CIRCUMSTANCES**
- Illiteracy rate is the highest
- Large amount of daily activities and responsibilities
- No current phone possession, due to lack of money
- Share phone with family
- Phone usage: calling and flash light
- Spend < 10 Birr per week on phone credit

**NEEDS**
- Expressed need for phone
- View phone possession as important and necessary due to the ability to contact family
- Family and education for the children is valued most in their lives
- Ideal phone is a smartphone
- Expressed that working hard, and owning more farm area could improve their daily life

Disclaimer: while old female farmers do not possess their own phone, this data is based on their perception and use of their husbands phone.
MEET THE OLD MALE FARMER
OLD MALE FARMER IN NUMBERS

> 40 years old

Can you read?
- Yes: 67%
- No: 16%
- Unknown: 17%

Daily activities
- Working at Washing Station: 46%
- Going to the mosque: 8%
- Guarding cettle: 23%
- Guarding field: 15%
- Working in the field: 8%

Do you possess a mobile phone?
- Yes: 50%
- No: 50%
THE OLD MALE FARMER PROFILE

PHYSICAL CIRCUMSTANCES

- Uses electricity for lights
- 50% has no electricity
- Bought phone at shop in Limu

SOCIAL-ECONOMICAL CIRCUMSTANCES

- High illiteracy rate
- Limited amount of daily activities and responsibilities
- 50% possesses mobile phone, no smart-phones
- 50% does not possess a phone due to lack of money
- Phone usage: calling
- Spend < 10 Birr per week on phone credit

NEEDS

- View phone possession as important and necessary due to the ability to contact family
- Family and education for the children is valued most in their lives
- Expressed that improved housing, and more money could improve their daily life
THE OPPORTUNITY
THE FAIRCHAIN SHOP

PERSONAL PROFILE

WEATHER UPDATE

BLOCKCHAIN (VALUE CHAIN)

FINANCES OVERVIEW

SOCIAL PLATFORM

REWARDING SYSTEM
The rewarding system motivates the farmers to use the app to its full potential. E.g. defining whether you are literate/illiterate, accepting or declining blockchain input, create input of financial overview, actively participating in the social platform.
THE FAIRCHAIN SHOP

Purchasing products
Overview amount of tokens
Insights in past purchases
Tokens evenly spread between men and women
Financial independence for women
PERSONAL PROFILE

Ownership of own data
Alterations can lead to rewards
Listen function

The use of icons helps illiterate people to understand the application
Ownership of own data
Insights in value chain
Alterations can lead to rewards
Listen function

Accepting or declining the new data, establishes insights, power, and ownership of their own data
FINANCES OVERVIEW

Ownership of own data
Insights in purchases
Monthly advices expenses amount
Creates financial awareness and stability
Alterations can lead to rewards
Listen function
SOCIAL PLATFORM

Ability to ask questions and learn about topics regarding phone usage, agricultural practice, and FC application
Direct contact between FC/NL and farmers
Insight in coffee market price
Listen and speak function
FINANCING
TWO APPROACHES

1. **Taxes principle**: use $x\%$ of the premium. Take the amount of costs and calculate the percentage of the premium each farmer has to pay for their phone. That way there will be no increase in the income-gap.

2. **Sale approach**: second phone for half the price $\rightarrow$ not feasible? The ability to switch from accounts in the application.
WORKSHOPS
STEP 1: VISION

STEP 2: CURRENT SITUATION

STEP 3: OPPORTUNITIES

STEP 4: CHALLENGES

STEP 5: TARGETS AND ACTIONS
THE VISION

1. Control over finances
   Awareness, stability, independency, thinking ahead, strategic planning

2. Education empowerment
   Awareness of new knowledge sources, sharing knowledge, direct communication with FC/NL

3. Ownership of own data
   Awareness of identity, insight of value chain and own position
1. No control over finances
   - Education limited
   - No existing data

Additional comments to current situation
1. There is no control over finances/no awareness of the (digital) possibilities as a woman
2. Education is limited to basic schooling, no experience in digital environment
3. No ownership/access of one’s data, or no existing data. No awareness of position in value chain
Additional comments to current situation
1. No awareness of the digital possibilities
2. Education is limited to basic schooling, is more experienced in digital environment
3. No ownership/access of one’s data. No awareness of position in value chain
Additional comments to current situation
1. There is little control over finances/no awareness of the (digital) possibilities as a woman (exceptions widow’s/unmarried)
2. No education, high illiteracy rate
3. No ownership/access of one’s data, or no existing data. No awareness of position in value chain
Additional comments to current situation
1. No awareness of the digital possibilities
2. Little/no education, high illiteracy rate
3. No ownership of one’s data and no access to owns data. No awareness of position in value chain
SIDENOTES
The current illustration of the application is in English, this should be adapted in Amharic.
The Ethiopian calendar is different, the Ethiopian calendar should be adapted.
All icons should be understandable for the farmers. Otherwise, they should be explained during the workshop.
Additional documents

• Profiles of male/ female/ old/ young farmers
• Profiles of young male/ young female/ old male/ old female farmers
• Workshop preperations and requirements
• Workshop template for the trainers
• Application with additional information
References

Literature


Reemer, T., & Makanza, M. (2014). *Gender Action Learning System: Practical guide for transforming gender and unequal power relations in value chains*. Oxfam Novib. (Section 2.3)

Icons references

**APP - GENERAL**
- Smartphone by cinnamon stick from the Noun Project
- weather by sandiindra from the Noun Project
- Purse by Rockicon from the Noun Project
- shopping by Alfa Design from the Noun Project
- profile by Nicolas Morand from the Noun Project
- forum by fae frey from the Noun Project
- Blockchain by Pablo Rozenberg from the Noun Project
- back by Тимур Минвалеев from the Noun Project
- listening by MRFA from the Noun Project

**APP - PROFILE**
- Woman by Dirk-Pieter van Walsum from the Noun Project
- read by beth bolton from the Noun Project
- contract by Robiul Alam from the Noun Project

**APP-SHOP**
- Coins by Rockicon from the Noun Project

**APP-BLOCKCHAIN**
- Coffee by I Wayan Wika from the Noun Project

**APP-FINANCE**
- part business by newstudiodesign10 from the Noun Project

**APP-FORUM**
- play by Eagle Eye from the Noun Project

**APP-WEATHER**
- sun by Srinivas Agra from the Noun Project
- Rain by Alice Design from the Noun Project