DIGITAL AGRIFOOD COLLECTIVE

How can we collectively improve the commercial viability of digital agrifood solutions?

Sprint 2: learnings > pledge > action

NFP

bop inc

Rules for this workshop

- Please **mute yourself,** and if possible turn your **camera on**
- Add your **organisation** to your name
- Leave your **questions in the chat** during the presentation.

  We will try and answer them during the webinar.

1. Recap of the Collective

DAC

Backdrop of the collective

Digital agrifood services are on the rise!

400+ service providers in Africa alone

33m smallholder farmers have used at least one digital service

Access to markets

Access to information & training

Access to inputs and finance

Organising smallholders and supply

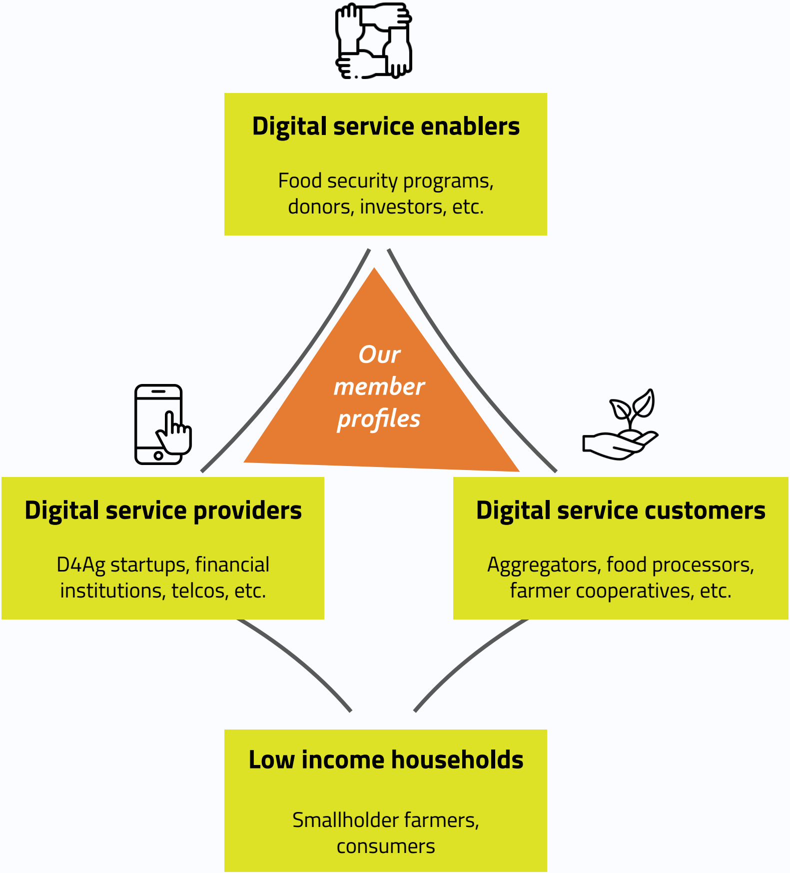
Transforming food systems

Digital marketing

DIGITAL AGRIFOOD COLLECTIVE

Our mission

We are a collective of organisations that **exchange learnings and align strategies** with the purpose to collectively **accelerate an inclusive digital transformation** of the agrifood systems in Sub Saharan Africa and Southern Asia.



Since 2020, the DAC activities are coordinated by NFP bop inc

DIGITAL AGRIFOOD COLLECTIVE

Our members / endorsers

Digital service providers

- kuza
- mDAIRY
- icra building trust
- ignitia TROPICAL WEATHER FORECASTING
- Cropin
- QILIMO SOLUTIONS
- YIELDER grow smart
- eprod

Actively recruiting

Digital service enablers

- bop inc
- NFP Netherlands Food Partnership
- 2SCALE
- NAB Driving real impact
- WAGENINGEN UNIVERSITY & RESEARCH
- idh the sustainable trade initiative
- Solidaridad
- Cordaid
- Netherlands Enterprise Agency
- MERCY CORPS AGRIFIN
- Netherlands Space Office
- Ministry of Foreign Affairs of the Netherlands
- UNIVERSITY OF TWENTE.
- SNV
- VC4A VENTURE CAPITAL FOR AFRICA
- PUM Netherlands senior experts
- Pears Program for Global Innovation

Digital service customers

Out of scope for now

Why join us?

Members can expect to:

- Access to state-of-the-art **tools and resources** that we will share and create together
- **Meet** with fellow specialists, funders and the private sector
- Collaborate on **joint activities and business development**
- Help craft our **collective model** for the long-term

In return, we expect all members to commit to the joint mission of our collective and present action plans in order to advance on inclusive digitalisation in your own organization. Specifically, you will be asked to attend work sessions, make available learnings and materials from your own programs or operations, and get buy-in from your leadership to put our joint strategies into action.

Our activities to date

Topics that we take action on collectively:

- **Digital inclusion** (June 14th 2021)
- **Commercial viability** (October 6th 2021)

- **User-centered design** (not scheduled)
- **Demystifying overhyped technologies** (not scheduled)
- **Local talent recruitment** (not scheduled)
- **Ethical business models and data usage** (not scheduled)

Recap of last sprint in June ‘21

Pledge for **removing the digital divide in agrifood systems**

Goals
1. We improve digital literacy and tech awareness
2. We develop more relevant use cases and content
3. We (help) share the costs of inclusive business models
4. We use standardised metrics to measure and compare inclusivity

Examples of action taken by members

- **WUR** will host a workshop on impact measurement criteria (scheduled for Nov 2021).
- **PUM** Senior experts offers its support to DAC members on human centered design and UX.
- **MercyCorps** is creating an Open Content for Agriculture Platform and invites DAC members to add content.

Signed by the leadership of our members

WAGENINGEN UNIVERSITY & RESEARCH · bop inc · MERCY CORPS AGRIFIN · SNV · PUM Netherlands senior experts · eprod

2. Agenda for today

Our approach

Sprint 2

How can we collectively improve the commercial viability of digital agrifood solutions?

Learning

Members exchange on:

What have we learned about what works and what not?

What needs to change?

Member survey (17 responses)
Literature study (10 resources)

Pledge

Members agree on:

What principles and strategies can different member profiles commit to?

Action

Members present:

How do we put our pledge into action, both within our own organisations as well as through member collaborations?

Agenda for today

- Learnings about commercial viability
- Recommendations and input for the pledge
- **Breakout session: Develop pledge & exchange on (collective) actions**
- Practical tool for assessing commercial viability
- Summary and next steps for DAC

3. Learnings about commercial viability

DAC

What have we learned?

Member survey filled out by:

- Digital service providers: Yielder, Ignitia, Tech4Ag, Cropin, Arinifu, iCRA, Qilimo
- Digital service enablers: Solidaridad, RVO, Rabobank Partnerships, WUR, SNV, PUM, Commonwealth, VC4A, 2SCALE

Literature consulted:

- Scaling Up Disruptive Agricultural Technologies in Africa (World Bank Group, 2019)
- Agricultural platforms in a digital era: Defining the landscape (IDH, 2021)
- What's Cooking: Digital Transformation of the Agrifood System (World Bank Group, 2021)
- Overview of the D4Ag Sector in Africa (SNV, 2020)
- Agrifin annual learning event (Mercycorps, 2021)
- The Digitalisation of African Agriculture report (CTA, 2019)
- Agriculture in Africa 2021 (Oxford Business Group & OCP, 2021)
- Mapping Agriculture Investing in Africa (Village Capital, 2020)
- Space for Food Security, Part 1: Users and Services (NSO/G4AW program, 2021)
- Space for Food Security, Part 2: Sustainable business models and scaling (NSO/G4AW program, 2021)

Commercial viability defined

Digital agrifood services are 'commercially viable' when they are offered by (for-profit) enterprises that generate revenues from the services.

This provides the service providers with a steady income that is needed to sustain and scale-up their activities. It also helps them attract (private) investment.

Services that remain largely dependent on donor funds or prize money are not considered commercially viable because their income and sustainability is uncertain.

Most of the 16 survey respondents agreed that commercial viability is a necessity but often difficult to realise when focusing on low-income producers.

Why is this important?

Having a commercial mindset: know who you serve!

Read more: Everyone Deserves Great Design

Why is this important?

Having a commercial mindset: know who you serve!

When focusing too much on your donor

Learning: *"The most important reason for a sustainable business case is to ensure the financing of long-term service provision (after the project)"*

NSO G4AW, 2021

When putting your end-user at the center

Learning: *"By being perceived as a customer, smallholders will have a stronger voice in the key focus areas of the service applications."*

NSO G4AW, 2021

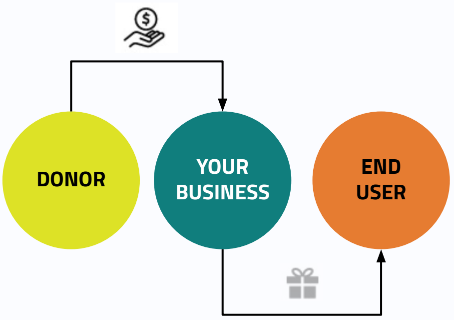
When you realise your end-user is not your paying customer

Learning: *"Smallholders have limited capacity and willingness to pay for services."*

NSO G4AW, 2021

Why is this important?

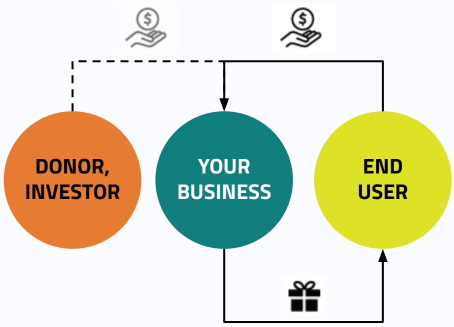
Having a commercial mindset: know who you serve!



When focusing too much on your donor

Leads to:

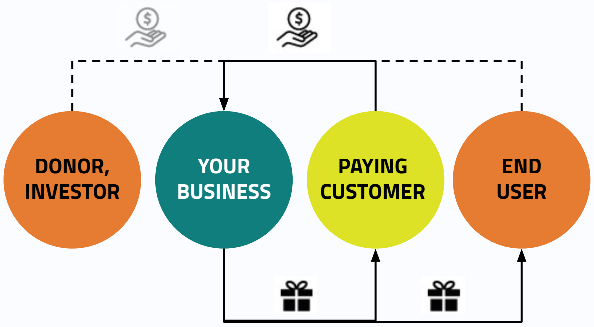
- X Rejected propositions
- X Insecure business finance
- X No lasting impact



When putting your end-user at the center

Leads to:

- ✓ Desirable propositions
- ✓ Stable income through revenues
- ✓ Impact coupled with business growth
- X SHF specific challenges: digital literacy, affordability, free services, etc.

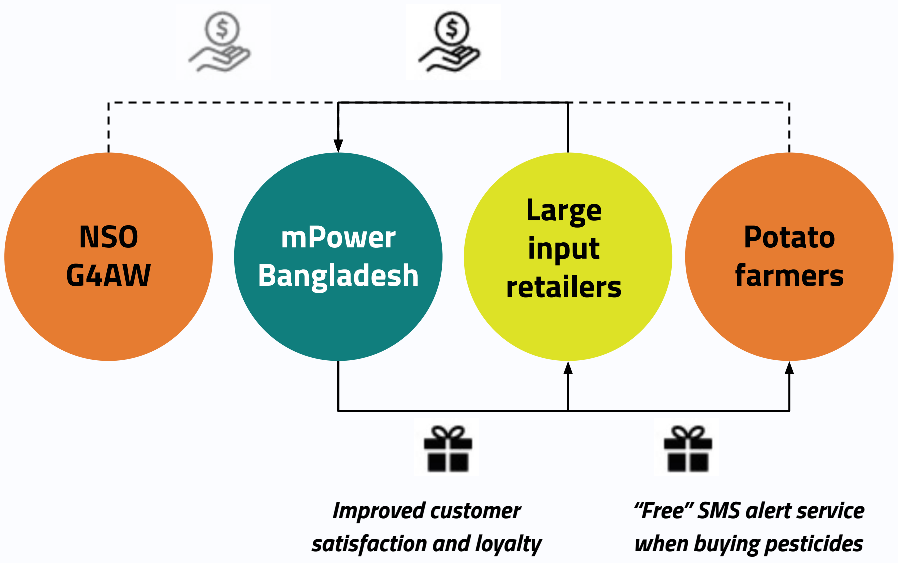


When you realise your end-user is not your paying customer

Leads to:

- ✓ *Same as on the left*
- ✓ Lower marketing costs, easier onboarding
- X Bigger pipeline challenges

Example: Geopotato Bangladesh



2 ways of realising commercial viability with annual opex of $50k:

1. Get 50,000 farmers to pay a $1 subscription fee, or
2. Find 1 or 2 B2B customers to pay $50,000

State of the sector

Generating revenues

400+ digital agrifood service providers in Africa alone. [SNV, 2020]

70% of service providers are estimated to generate revenue. [CTA, 2019]

But only **26%** managed to break-even with their financial model. [CTA, 2019]

Many are very early stage enterprises that are yet to report revenues. [SNV, 2020]

About **60%** of solutions available in Africa in 2019 are launched after 2016, and 20% since 2018. [Oxford, 2021]

80% of service providers rely on diversified revenue streams, not being able to generate sufficient revenue from their core services or customers. [CTA, 2019]

Only **25%** of the 25 G4AW projects is financing their operations (partly) through sales of the newly developed service. More than **50%** expects to always rely on grants as their sales revenues would not suffice. [NSO, 2021]

State of the sector

More inspiration from our survey

Companies that managed to establish a commercially viable business model for their digital services:

CropIn

Twiga Foods

SourceTrace

KwikBasket

DigiCow

Strider

DigiFarm

EProd

DeHaat

Apollo Agriculture

Ignitia

Farmlogics

And more...

Manobi

Greenfingers

See also: Mapping Agriculture Investing in Africa (Village Capital, 2020)

State of the sector

Financing available

Many digital service providers are largely donor or government funded. [SNV, 2020]

14/16 Most DAC survey respondents argue that digital service providers keep chasing grants and prize money because this is an easier way for them to finance their operations than through commercial revenue streams.

Approximately **€175m** in annual donor funding flows to Africa-focused digital agri service companies, as compared to private sectors investments of approx. **€47m**. [CTA, 2019]

8/16 DAC survey respondents believe many digital service providers cannot access private capital because there are not enough investors active in this sector or because their ticket sizes or conditions are out of scope.

The market for agritech is estimated at **€2.3bn and €5.3bn**, with only **€127m** currently captured. [Oxford, 2021]

More investors are stepping in (consult *Agtech investor repositories such as: NSO G4AW, GIZ Investment Guide, VC4A*)

44 agtech companies in Africa secured A/B/C series private investments [VilCap, 2020]

DAC

State of the sector

Financing available

Rwanda raised **$11.6 million** in VC money.

Levels, a Californian startup that sells a biometric patch that tells you that oatmeal spikes your blood sugar, raised **$12 million** for its seed A round.

DAC

State of the sector

The ‘unicorns’

$1.3 million seed round

Founded in 2019
South Africa

Khula provides tools and platforms to support the growth of businesses in the agriculture supply chain, announced to scale its operations across the country.

$20 Million series C

Founded in 2010
India

Cropin provides a data-driven farm management platform with real time insight on crop growth along with predictive analytics solutions.

$85 Million series B

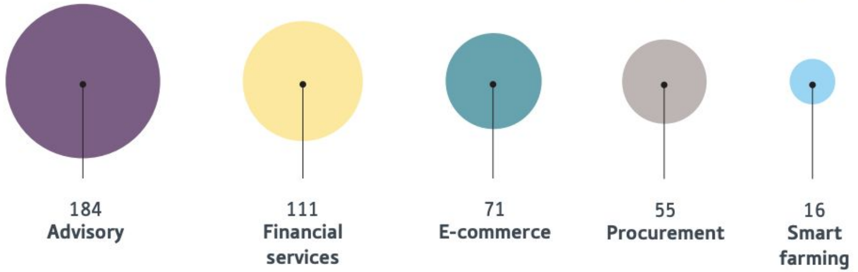
Founded in 2014
Kenya, USA

Using AI to predict food production for governments but also companies like Unilever.

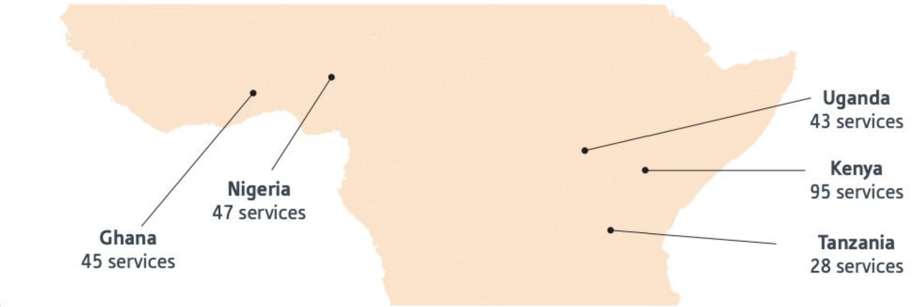
State of the sector

The most common service in the market is the hardest one to monetise

Active digital agriculture services in sub-Saharan Africa by type, January 2020



Top-five countries by number of digital agriculture services, January 2020



[Oxford, 2021], [CTA, 2019]

Services ranked by commercialisation difficulty (from our DAC survey)

1. Farmer advisory **(15/17)**
2. Agribusiness software **(4/17)**
3. Farmer market access **(4/17)**
4. Farmer financial services **(0/17)**

"Farmers might not be willing to pay for advisory services, when not bundled with additional benefits like input services, access finance and markets" - Survey respondent

Barriers to overcome

Inhibitors for revenue generation and commercialisation

Internal:

- **Value creation:** The focus of agritech projects and startups is often on developing the tool and not the cost-benefit analysis for paying customers and end-users. [Solidaridad]
- **Customer identification:** G4AW projects faced challenges of finding and retaining customers, with sometimes unclear business commitment of B2B partners. [NSO, 2021]
- **Lack of entrepreneurial leadership:** G4AW projects often lacked sales competences in their team and many were not clear about who owns and leads the business. [NSO, 2021]

External:

- **Increased competition:** Free services from NGOs or the government becoming available. [NSO, 2021]
- **Market immaturity:** The digital agrifood market is immature in certain countries such as in Francophone Western Africa. Therefore it is not likely that standalone business models will readily emerge. [NSO, 2021].
- **Knowledge gap:** Service providers experiment with a wide range of service delivery models, with no winning revenue models emerging just yet. [SNV, 2020]

4. Recommendations for improved commercial viability

Barriers to overcome

Recommended improvement areas to realise commercial viability

Ranked by number of mentions by survey respondents:

1. **Value enhancements** Service providers need to enhance the value and desirability of their service offering. **(10/17)**
2. **B2B revenue models** Service providers need to move away from smallholder farmers paying for their services, and identify large value chain actors as their paying customers. **(10/17)**
3. **Service bundling & platforms** Service providers need to integrate multiple services and offer holistic solutions. **(8/17)**
4. **Mergers** Services providers (startups) will be acquired by large companies such as telcos or banks that are better equipped to make the services commercially viable and scalable. **(7/17)**
5. **Costs optimisation** Service providers need to reduce the costs of their business by, for example, using cheaper technology, open data, or reducing costs of staff. **(2/17)**
6. **Alternative revenue models** Service providers need to explore alternative revenue models by selling the data and insights they collect from farmers. **(2/17)**
7. **Entrepreneurship** Service providers need to boost their entrepreneurial excellence and recruit talented people with sales competences. **(1/17)**

Barriers to overcome

Recommended roles and support areas for “digital service enablers”

Those with public funds, such as Innovation challenge organisers and NGOs with food security programs, can support the commercialization of digital services by:

1. **Piloting** Help demonstrate benefits and potential for scale
2. **Learning capture** Commission research on what works and what does not work
3. **Coaching** Build the business capabilities of entrepreneurs
4. **Access to capital** Mobilise (angel/impact) investors
5. **Establish long-term PPPs** For product-market combinations that cannot be commercially sustainable

6. **Risk capital** Provide seed money to finance startups or new innovative projects at SMEs
7. **Results based finance** Introduce commercialisation incentives
8. **Project deliverables** Ask for proof of a viable business model a a key deliverable of a project
9. **Donor alignment** Make sure there is no oversupply of grants and cannibalize the market with free or subsidised services

10. **Customer identification** Introduce services to large pools of farmers and other value chain actors
11. **Market development** Digital training and orientation of smallholder farmers
12. **New market entry** Help scale services into geographies not reached and served easily
13. **Systems change** Go beyond support of individual digital services and take a holistic approach to food systems
14. **Enabling environment** Liaise with other stakeholders to establish industry standards, fair data use, good connectivity, etc.

Input for our pledge

Commercial viability, that is attractive to investors, comes from:

Relevant proposition Do you have a service that is desirable for your end-users and paying customers?

Entrepreneurial excellence Does your team have sales intentions and capabilities?

Rock solid business models Do you maximise your revenues and minimise your costs?

Proven potential to scale Do you know the realistic market size that you can obtain?

5.
Next steps

What's next?

Sprint 2 → Learning → Pledge → Action

- Bopinc and NFP to finalise the pledge document and share with all members.
- Members to **sign the pledge by mid November**.
- NFP to publish pledges and actions taken by members on social media and website
- **Workshop on Impact measurement** of D4Ag services with WUR: **November**
- **Evaluation survey** and interviews about the value of DAC, actions taken by members to date and suggestions for way forward

DIGITAL AGRIFOOD COLLECTIVE

Visit our website