DIGITAL AGRIFOOD COLLECTIVE

How can we collectively narrow the digital divide for digital agrifood solutions?

Sprint 1 Learning session: June 16th 2021

NFP

bop inc

Participants before/during the session:

A. Digital service providers

kuza

mDAIRY

icra building trust

B. 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

C. Digital service customers

Digital inclusion defined

Digital inclusion is about making digital services accessible, understandable and affordable for as many low-income producers and consumers as possible.

That way everyone can benefit from the digital transformation of the agrifood sector, regardless of their age, gender, location, disability, education, and prior experience with digital services.

Our definition for this collective, based on literature and expert input

How to realise digital inclusion?

Marked in green: the barriers that were prioritized by our members during the session.

Removing barriers	
1. Digital literacy and tech awareness	*"I don't know how to use a (smart)phone and what solutions are out there"*
2. Affordable devices and mobile ownership	*"I can't afford a (smart)phone or in my community, women don't own phones"*
3. Relevant content and user-friendly design	*"I can't find many agri solutions that meet my needs and I find them hard to use"*
4. Costs of inclusive business cases	*"I know my family closer to the city use digital agri services, but they're not here"*
5. Good infrastructure	*"I don't have access to good connectivity or mobile money agents"*
6. Cyber security and trust	*"I'm afraid to share my data and use the internet as I heard about scams"*
7. Extra: standardising inclusivity / impact metrics	

Step 1: Why do we prioritise these barriers as a collective?

Removing barriers	
1. Digital literacy and tech awareness	This is what many members are strong in. Last mile delivery of digital solutions is also most difficult and requires high investment into time and costs. Because we need to compare experiences about how to approach this in the best way. Because we cannot tackle all issues alone, need more manpower/capacity and resources. If we focus on small-holder farmers, we need to teach them, how they can use device, apps, and these are often missing. There are so many apps available. It's is difficult to keep track and that ability to make all those information useful is quite difficult. We need to support that transition.
3. Relevant content and user-friendly design	We need to make user-centered design mainstream. To make content so specific that content of the app makes it more comfortable for people to use, this is a whole area to still be developed we can work together on this. Working together means we can leverage our expertise coming in from across the world to build into field activities we have. This is internal and actionable for members.
4. Costs of inclusive business cases	We should proof that this can be a viable business case with acceptable RoI. We should look more into incentives for digital service providers and facilitate inclusion.

Step 2: What are our specific goals for removing these barriers?

Removing barriers	
1. **We improve digital literacy and tech awareness**	- We need to design for lower literacy by choosing devices and channels that people are comfortable using. - We need to deliver digital skills building training at scale, especially for women and other marginalised groups. - We need to exchange our targets on women inclusion and keep each other accountable for this.
2. **We develop more relevant use cases and content**	- We need to make sure mobile services are solving an actual need, are easy to use, and offered in local languages. - We need to bundle services to cater for all user challenges such as combining remote agri input training with a finance solution for purchasing those inputs. - We need to provide tailored onboarding and after-sales support to (marginalised) groups that have difficulties using a service.
3. **We (help) share the costs of inclusive business models**	- We need to explore new (economic) incentives to help entrepreneurs include marginalised groups that are more costly to onboard as users. - We need to explore and test more innovative strategies for revenue generation and cost-sharing (eg. public/private or startup/MNC). - We need to create favorable conditions for digital services and enterprises to grow into underrepresented countries.
4. **We use standardised metrics to measure and compare inclusivity**	- We need to establish and use the same impact metrics (and similar M&E approaches) to measure the inclusivity of our work. - We need to use standard metrics to be able to compare our work so we can learn which digital inclusion interventions are more effective than others.

Step 3: How do we bring our pledge into action?

Removing barriers	Actions for your business/programs in your geographies:
1. Digital literacy and tech awareness	iCRA: could collaborate with other education institutions on more soft skills training, and organizations in target areas to make sure that training is relevant. Targeting digital literacy in agriculture. Mercy Corps: creates open access digital literacy resources that other organizations can use to implement digital literacy programmes or trainings. Mercy Corps: is building an open source platform and asks members to add content. We need to consolidate all content there already is for digital literacy training SNV: will invest more rigorously in integrating digital literacy interventions into existing and new development interventions, such as Garbal in West Africa. RVO: As a large intermediary organization RVO will disseminate the information, lessons, best practices in this trajectory. RVO is prioritizing digitalization as topic, but at starting point of own inventory and searching way on how to prioritize and address it. RVO will communicate on this via newsletter, website, via strong outreach network (programmes, embassies, etc)

See for more recent actions, our Action inventory.

Step 3: How do we bring our pledge into action?

Removing barriers	Actions for your business/programs in your geographies:
3. Relevant content and user-friendly design	iCRA: can focus more on content they use during (online) courses, to make sure it is relevant to people. Use their consultants to deliver that. SNV: can document best practices for developing a more demand-driven, user-friendly approach for pastoralist communities. Certainly content, probably apps. (Relevant approach to more marginalized communities, low coverage, hard to reach etc.) Vandana (SNV): Garbal project, SNV works for business case, diff companies in Agri value chain for SME; their digital needs, to see whether they are digital ready, if they can adopt to digi-tech. Way forward: asses SME for digi tech readiness. Mercy Corps: Focus on multiple channels of access to beneficiaries. Most smallholders use feature phones. Make sure content can be delivered through apps but also ussd access? How can we deliver this, in addition to apps? Most content delivered will have this applied. Including pictorial documentation. This is internal and actionable for members (eg. Agrifin open source database with great content). Harm (PUM): already working on barrier three. Supporting SME. use the right kind of UI/UX, marketing of apps. Not specific target groups yet, small holders in general we support. We work for agri companies or software developers for small scale farmers, we can collaborate to enhance tech/apps. Or maybe for community development (agri) how to change behaviour. Got 1700 experts, half from Agri. Valentijn (TU Twente): Developing a marketplace for reducing the barriers. We could share back to this community the development of software frameworks. Further expand in BOP markets and explore small scale farmers. 300 Jamacan coffee farmers in one project, already have. Looking forward that Govt will come forward for a better Marketplace. Sellers from BOP will be recognized as a seller, would like to collab and commit for this cause.

See for more recent actions, our Action inventory.

Step 3: How do we bring our pledge into action?

Removing barriers	Actions for your business/programs in your geographies:
4. Costs of inclusive business cases	SNV: We'd like to grow on inclusive business cases, that business models become more sustainable. NSO: will release an insight report on revenue models). PUM: Not only telco they are facing problems, the apps developers IT providers, they are also struggling to get a better business case. eProd is a good example of where it works. - how to make money, most depends on Govt money or NGO money. MercyCorps: works with agtech and fintech providers, proving business case for them. Help to increase level of scale. In collaboration, we would like to re to reach tech assistance to tech companies, we would like to collab for digital inclusion. **More actions to be added during the next DAC session in September 2021**

See for more recent actions, our Action inventory.

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What's next?

Sprint 1 → Learning → Pledge → Action

- Bopinc and NFP to finalise the pledge document and share with all members.
- Members to ask their **leadership to sign the pledge before mid July** and post on social media
- Members to update us on actions taken (we will ask you in 1-2 months from now) and exchange through our **Action inventory & marketplace**
- NFP to publish pledges and actions taken by members on social media and website
- In September, we start our next sprint on **commercial viability** for digital services.

Annex:
All slides of the session

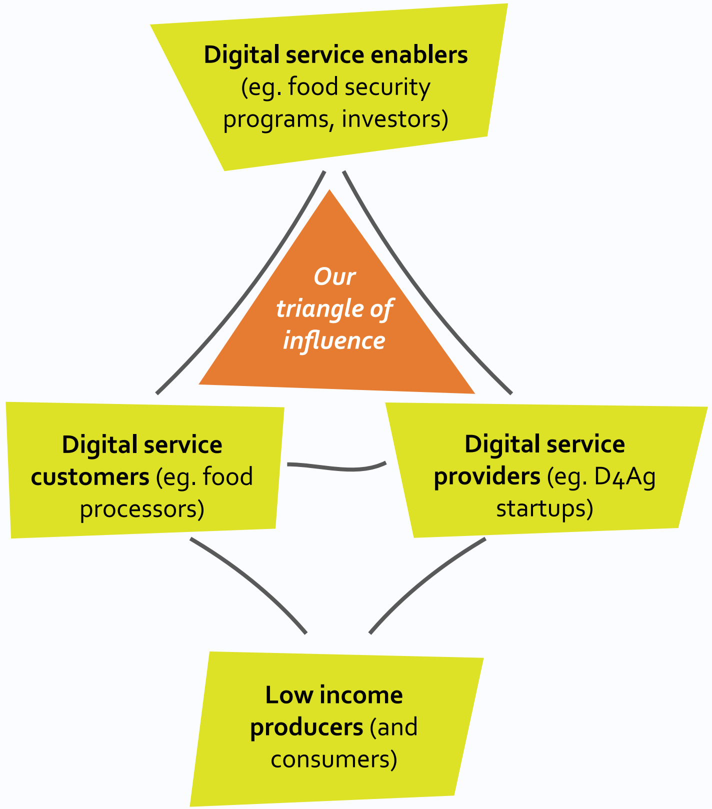
1.

Intro to the Digital Agrifood Collective

What is the collective about?

We are a collective of organisations that **exchange learnings and align strategies to remove barriers** that stand between newly developed digital services and the thousands of agribusinesses and millions of low-income producers (and consumers) that could benefit from these.

By removing barriers together, we aim to **accelerate the digital transformation of agrifood value chains** across Sub Saharan Africa and Southern Asia and make this transformation inclusive for all.



Who are our members?

Any organisation can join that is actively working on the development, dissemination and scaling of digital solutions that benefit agrifood value chains and the low-income producers working in these value chains. We differentiate between 3 member profiles.

A. Digital service providers

Organisations that sell software, apps or web/SMS/IVR services to paying customers in the agrifood sector such as food processors, individual farmers and food security programs.

Example: Kuza, Safaricom Digifarms

How many? Thousands

B. Digital service enablers

Organisations that directly support digital service providers (A) and their customers (B) to help low-income producers or consumers adopt digital solutions at scale.

Example: 2SCALE, IDH, RVO/NSO, Rabobank Foundation

How many? Hundreds

C. Digital service customers

Organisations that purchase digital services they use themselves or disseminate among large groups of low-income producers or consumers they work with.

Example: Mhogo Foods, Farmer Coop

How many? Millions

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How do we work?

Members join our ‘pledge-to-action sprints’ to collectively remove barriers. Each sprint has three steps, which will be facilitated by NFP and Bopinc. Our first sprint is on removing the digital divide.

Sprint 1 →	Learning →	Pledge →	Action
Digital inclusion:	Members exchange on:	Members agree on:	Members present:
The D4Ag sector is growing, but unevenly across and within countries, creating a digital divide.	**What have we learned about narrowing the digital divide and what works/what not?**	**What principles and strategies do we commit to for narrowing the digital divide in our work?**	**How do we put our pledge into action, both within our own organisations as well as through member collaborations?**

How do we work?

Example of what a pledge could look like.

Goals and principles	Actions we will take
1. We will use standardised metrics to measure inclusivity for low-income producers in our work	*Member X and Y will use the same metrics to evaluate their existing portfolio and compare results to understand which inclusivity strategies worked best.*
2. We will consolidate gender mainstreaming strategies	*Member Z will share their proven strategies as input for other members.*
3. We will reduce inequalities between countries	*Member X will set up a new Innovation Challenge for startups to replicate their ideas in underserved countries.*

Signed by the leadership of our members

How do we work?

Other barriers that we might want to tackle collectively are the following.

- **Commercial viability (Q3 2021)** Digital service models are not always easy to monetise and entrepreneurs therefore struggle to unlock investments for scale.
- **User-centered design (not scheduled)** There is a lack of digital services and use cases, including bundled services, that are truly desirable for smallholders.
- **Overhyped technologies (not scheduled)** The real added value of hyped technologies such as drones and blockchain still needs to be demystified and proven in the field.
- **Local talent (not scheduled)** Organisations struggle to tap into tech-savvy human capital.
- **Unfavorable policies (not scheduled)** There is a need for more coherence and coordination of government's policies.

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.

INSERT NAME HERE

What name fits our initiative best?

POLL

1. **Digital Agrifood Collective** – *Towards inclusive digitalisation of the agrifood sector*
2. **Digital Farmers Collective** – *From phone to farm to fork*
3. **Digital Smallholders** - *A collective for accelerating the use of digital to support food security*
4. **Connected Farmers** - *Because everyone in the agrifood sector should benefit from digital solutions*
5. **Your suggestion (Write in chat)** - *Tagline*

2.

Learnings about digital inclusion

What have we learned?

Interviews/surveys with:

- Digital service providers: MDairy Agritech, Safaricom
- Digital service enablers: 60Decibels, GSMA, MercyCorps (Agrifin), WUR, NSO, NAB, SNV, Cordaid, IDH, NL MoFA
- Digital service customers: n/a

Literature consulted:

- What's Cooking: Digital Transformation of the Agrifood System (World Bank Group, 2021)
- Scaling Up Disruptive Agricultural Technologies in Africa (World Bank Group, 2019)
- Bridging the digital gender divide (OECD, 2018)
- Agrifin annual learning event (Mercycorps, 2021)
- Connected Society: Delivering digital inclusion for all (GSMA, 2020)
- Inclusive Digital Agriculture: Making value chains work for farmers with disabilities (GSMA, 2021)
- Digital Equity Policy Brief (GSMA, 2019)
- Agrifin impact reports for D4Ag Companies (60 Decibels and MercyCorps, 2020)
- Digitalisation of Agriculture report (CTA, 2019)
- Mobile Gender Gap Report (GSMA, 2019)
- Space for Food Security: Stimulating smallholders' access to emerging AgTech and FinTech markets (NSO/G4AW program, 2021)

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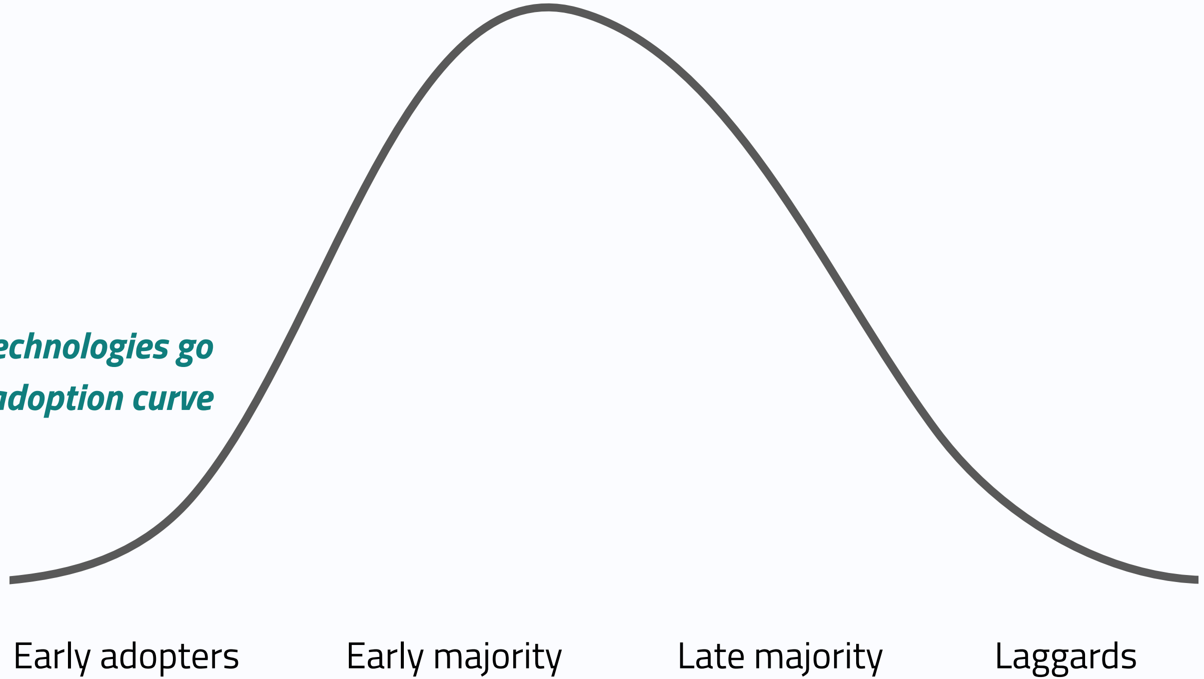
Digital Divide: What is the problem?

Fact: All technologies go through an adoption curve



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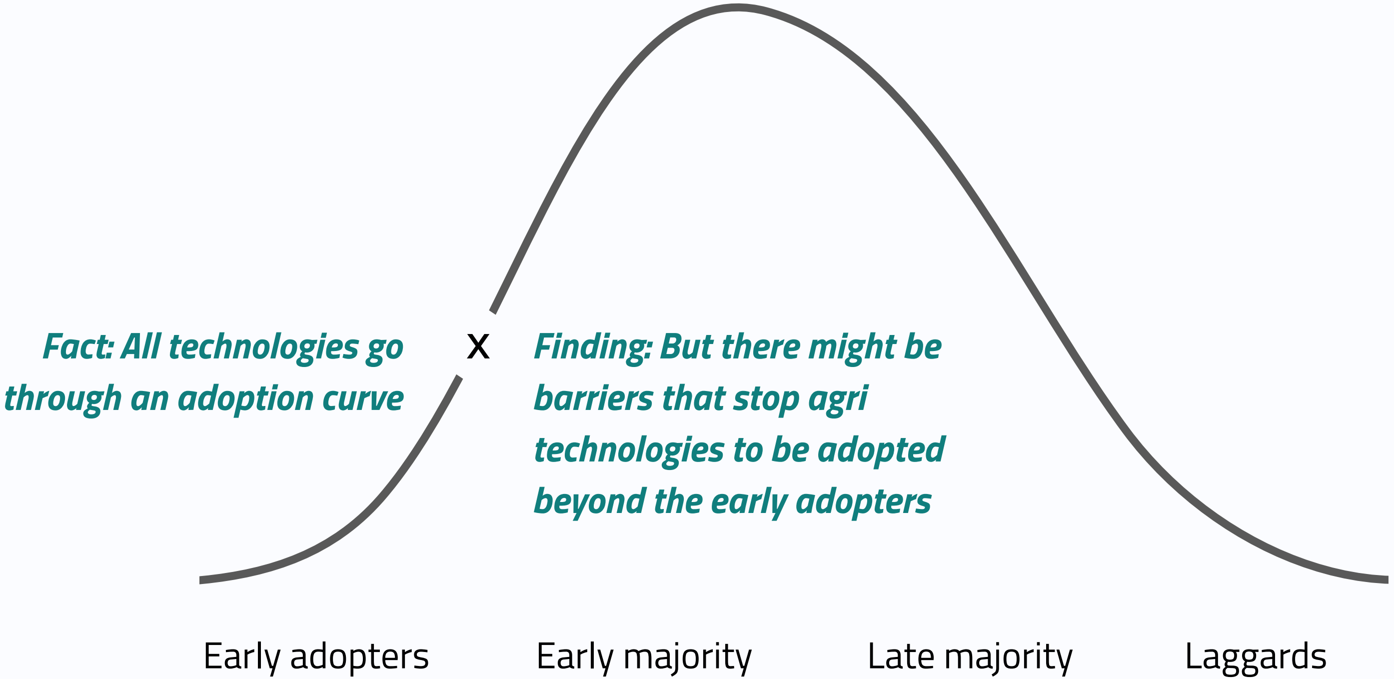
Digital Divide: What is the problem?

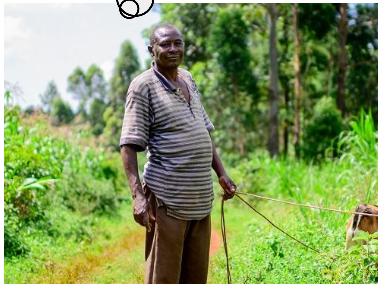


Digital Divide: Each farmer is unique

"I have a very basic phone and only use it for phone calls. I believe I have all the knowledge to run my farm, no need for mobile phone based support"

"My husband has a smartphone but I don't really use it. I heard from others that it's unsafe and there are a lot of scams"

"I'm using my smartphone every day to find agri info and exchange with other farmers on Facebook. I've heard of many new agri apps as these companies approach me often."



George (58)

Beryl (42)

Digital Divide

Peter (28)

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Digital inclusion defined

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That way everyone can benefit from the digital transformation of the agrifood sector, regardless of their age, gender, location, disability, education, and prior experience with digital services.

Our definition for this collective

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Why is this so important?

Based on our literature research and expert consultation:

- **Low-income producers (and consumers)** being the backbone of the agrifood sector, should not be left out. More so, because more evidence is becoming available on how digital solutions positively impact this group through better access to finance, information and markets. (World Bank, 2019)

- This requires **efforts from all stakeholders**, including the digital service providers but also digital transformation enablers such as GOs, NGOs and donors.

How big is the problem?

Inequality within countries

Infrastructure:

- **7%** of the world's population is not connected in 2019, mostly in rural areas (GSMA, 2019)

Usage barriers:

- While the coverage gap continues to narrow, the usage gap remains 6 times bigger, meaning **44%** of the people that can be connected face usage barriers as they cannot afford handsets, lack digital skills, or cannot enjoy relevant content (GSMA, 2020)
- Globally, software and IT service companies are lagging behind with an average digital inclusion score of only **0.53** out of 2 (27%) as compared to 0.82 (41%) for hardware companies and 0.85 (43%) for Telcos. (World Benchmarking Alliance, 2021)
- Better educated (large scale) farmers are more likely to engage in digital agriculture (World Bank, 2019)

Cultural norms incl. gender :

- Women are up to **28%** less likely than men to own a mobile and up to **57%** less likely to use mobile internet (GSMA, 2019)
- The gender gap is biggest in South Asia (51%) and Sub Saharan Africa (37%), as compared to the global average (20%) (GSMA, 2019)
- Persons with disabilities who live in rural areas and relying on subsistence farming for their livelihoods are less likely to own a mobile phone and use mobile internet than persons without disabilities. (GSMA, 2021)

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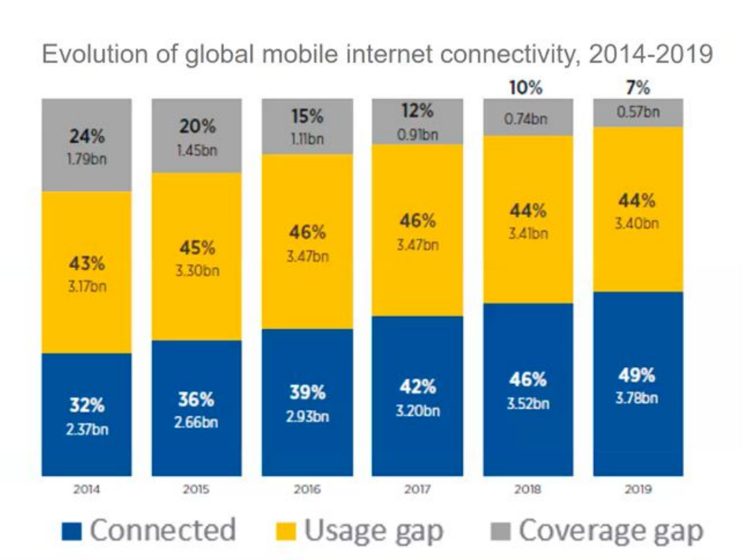
How big is the problem?

Inequality within countries



GSMA, 2020

How big is the problem?

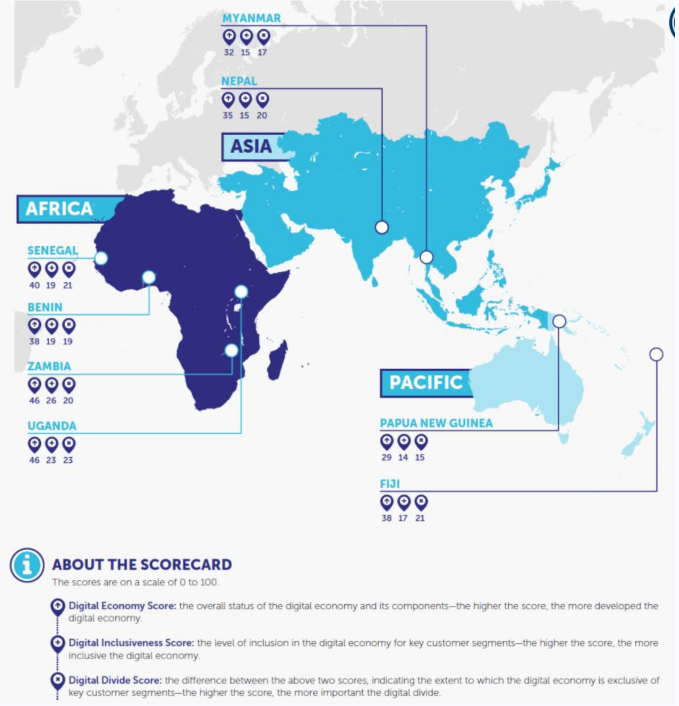
Inequality between countries

Investment inequality:

- Many countries, eg. Francophone West Africa, have not benefited from the same investments in infrastructure and D4Ag industry as other countries, eg. Kenya, Nigeria and India (CTA, 2019)

Digital innovation ecosystem:

- Not the same ecosystem of incubators and early-stage investors to help D4Ag companies get off the ground in all countries. (CTA, 2019)



UNCDF scorecards 2020

3.
Creating our pledge

How to realise digital inclusion?

Removing barriers	
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7. Extra: standardising inclusivity / impact metrics	

The barriers are ranked by order of importance (proxy used: number of mentions in literature and by experts and members)

How to realise digital inclusion?

Removing barriers	Goals
1. Digital literacy and tech awareness	We need to design for lower literacy by eg. choosing channels (eg. IVR) that people are comfortable using. We need to deliver basic digital skills building trainings to upskill people at scale, especially for women and marginalised groups. We need to develop behavior change campaigns on the benefits of digital, with effective last mile delivery channels (eg. extension workers) for boosting digital adoption.
2. Affordable devices and mobile ownership	We need to reduce the affordability gap for internet-enabled phones. We need to better understand women's needs and (social) barriers to own and use mobile phones, create targeted interventions to address those, and involve women in design and implementation of digital services and policies.
3. Relevant content and user-friendly design	We need to create use cases that are relevant, all-encompassing and that fit with people's behaviour. We need to ensure mobile apps are easy to use and offered in local languages with inspiring examples. We need to include farmers with disabilities and provide them with tailored support.

How to realise digital inclusion?

The barriers are ranked by order of importance (proxy used: number of mentions in literature and by experts and members)

Removing barriers	Goals
4. Costs of inclusive business cases	We need to incentivise digital service providers to include marginalised groups that are more costly and challenging to onboard as end-users. We need digital service providers to explore cost-savings and new revenue models such as PPPs. We need to support enterprise to grow into underrepresented countries with less favorable markets.
5. Good infrastructure	We need to not only connect people but make sure their connection is reliable and has good bandwidth. We need to drive mobile money adoption through training, ensuring sufficient cash in/out points and creating affordable transaction fees.
6. Cyber security and trust	We need to increase awareness of potential threats when people are new to the internet. We need to take away fears of digital information and being exposed to harmful content.
7. Extra: standardising inclusivity / impact metrics	We need to use standardised metrics and M&E approaches to measure the inclusivity of our business/programs/portfolio. We need to use these standard metrics to compare our interventions for digital inclusion.

How to realise digital inclusion?

Removing barriers	Examples of best practices by our members
1. Digital literacy and tech awareness	**GSMA:** Leverage existing toolkits (eg. GSMA) for consistent training on digital literacy skills. **Kuza:** Last mile delivery "Rural Youth Agent model" which is focused on increasing agricultural productivity and incomes for smallholder farmers and building more resilient communities.
2. Affordable devices and mobile ownership	*KaiOs: Develop operating system for feature phones to run apps on cheaper phones*
3. Relevant content and user-friendly design	**SNV**: Share learnings on developing pastoralists specific solutions
4. Costs of inclusive business cases	**IDH**: Farmfit tool for demonstrating successful inclusive business cases. **NAB Impact investing:** Due diligence criteria for selecting entrepreneurs that are digitally inclusive **WUR:** Create dashboard that shows inclusivity scores for different countries
5. Good infrastructure	**GSMA:** Work with MNOs to find innovative ways of expanding rural coverage
6. Cyber security and trust	*BuffaloGrid: Share educational videos at their internet-hubs to educate people on fake news and Whatsapp scams*
7. Extra: standardising inclusivity / impact metrics	**MercyCorps**: Make use of Evidence Gap Map for choosing digital inclusion focus areas **NSO and Cordaid:** Standardised metrics on measuring digital inclusion **WUR:** Create metrics for wider sector to adopt

DIGITAL AGRIFOOD COLLECTIVE

visit our new website