Focus for Today:

1. The Digital Opportunity in Agriculture
2. Vision of Digital Development
3. Digital Development for Feed the Future
4. A Redefined, Future “Internet of Things”
5. Call to Action
The Digital Opportunity
Increase in unique mobile phone subscribership in sub-Saharan Africa from 2010-2015: 51%

Growth in smartphone adoption globally, 2010-2015: 5.5X

New mobile money deployments globally since 2010 (as of 2015): 202
The Market - Growth in Unique Subscribers
Feed the Future Focus Countries - East & West Africa

Key

2010 2015

36% 55%
+52%

26% 33%
+52%

38% 55%
+44%

27% 66%
+121%

25% 51%
+105%

30% 51%
+72%

21% 43%
+106%

27% 43%
+55%

29% 45%
+58%

39% 56%
+43%

53% 31%
The Digital Economy - Ups and Downs

**Upside:** rapid mobile adoption

*2010-2015:*

- Growth in unique mobile subscribers
  +44% in Ghana
  +121% in Mali
  +109% in Nepal

- Growth in smartphone adoption
  +675% in Cambodia
  +758% in Uganda
  +1010% in Honduras

**Downside:** sustained mobile gender gaps

*Women are on average 14% less likely to own a mobile phone than men, which translates into 200 million fewer women than men owning mobile phones.*

Source: GSMA
The Digital Economy - Ups and Downs

**Upside**: mobile money deployments on the rise

202 new mobile money deployments since 2010, globally

**Downside**: high costs of mobile broadband

<table>
<thead>
<tr>
<th>Country</th>
<th>500 MB data plan cost</th>
<th>Hourly min. wage</th>
<th>Hours of work for 500 MB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana</td>
<td>$8.21</td>
<td>$0.21</td>
<td>38</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>$7.36</td>
<td>$0.39</td>
<td>19</td>
</tr>
<tr>
<td>Nepal</td>
<td>$4.82</td>
<td>$0.43</td>
<td>11</td>
</tr>
</tbody>
</table>

Sources: GSMA, ITU, ILO
$430-440 BILLION
The estimated shortfall in serving the global demand for smallholder finance.

1.5 BILLION
# of people living on smallholder farms globally

80% of the world’s population is fed by smallholder farmers
Digital technologies will...

A. Reshape farmer growth models
B. Revolutionize farmer organizations
C. Put African smallholder farmers squarely as part of the solution and not just as part of the problem
D. Lower barriers and distance to markets for isolate smallholders
E. Revamp tradition extension models
F. Foster better, two-way and real time feedback loops, and
G. Improve farmer decision-making and competitive advantage.
“Agricultural development is rightly recognized as a key pathway out of poverty for countries in which millions of people live off their labor on the land. But for agriculture to succeed in sowing prosperity across Africa, we need to look at the industry holistically. Without solving the most important components of the supply chain, powerful technology and communications tools and solutions will flounder.”

-Jamila Abass, CEO and founder of m-Farm
Vision of Digital Development
This includes supporting **enablers** that shift behaviors, close gaps, and create new pathways to prosperity.
Inclusive Digital Economy

And includes cultivating a healthy **enabling environment** which supports the critical policies, regulations, and infrastructure that underpin the digital economy.
Our vision is that **digital development** lays the foundation for an integrated set of tools and services that empowers people to live more productive and resilient lives.
Digital Development for Feed the Future
D2FTF Theory of Change

Through the application of a coordinated suite of digital tools and technologies, based on strong evidence, this collaboration will accelerate the top-line objectives of Feed the Future: inclusive agricultural sector growth and improved nutrition of women and children.
Development Hypotheses (*illustrative*)

If there is reliable and affordable **network connectivity**, and widespread **digital literacy**, then...

...people will be more able to employ **digital financial services** to meet their economics and livelihood needs...

...leading to greater **financial inclusion**, a component of **agricultural productivity** and **economic growth**.
If smallholder farmers can receive timely and individually-tailored agronomic information based on where they live; what they grow; and the time in the crop cycle... such as through mobile/digital agricultural extension delivery services... then the probability of adopting new agronomic technologies correctly will increase and lead to greater productivity.
Creating a Sustainable Ecosystem

- USAID project uses digital services to address specific value chain challenges.
- By addressing value chain challenges, smallholder farmers and value chain actors adopt productive use of digital services.
- Better infrastructure leads to a wider set of digital services that can be used to address specific value chain challenges.
- Adoption leads to stronger demand for digital services in rural and agricultural areas.
- Stronger demand leads to increased investment by the private sector into digital infrastructure in rural and agricultural areas.
Global Alliances and Mechanisms

- **17 Governments**, including Ghana, Senegal and Bangladesh
- Over **40 members**
- Advocacy and TA

- **5 Governments**, including Ghana and Nigeria; work in Liberia
- Over **80 members**
- Policy reform

- **Policy reform (African B'band Partnership)**
- **Last mile, low-cost technologies**
- Previous work in Nigeria and Ghana; spotlight on Indonesia

- **Digital Tech. Assistance**
- All digital streams

- **3 donors**
- Global approach
- Focused on strengthening M4D sector

- **11 grants** (Mali, CI, Nigeria)
- **15 million new women on device**
A Redefined, Future “Internet of Things”
Call to Action
Where is the Evidence?

- What do we know works in applying digital tools to the field of agricultural development?
- Why has the Ag. sector not kept speed with other sectors?
- Do any studies, reports, case studies, etc. point to evidence that demonstrates impact or potential for impact?
- What have you seen to support this transition?
Thank You!

Christopher Burns,  
Senior Coordinator,  
Digital Development for Feed the Future, USAID:  
chburns@usaid.gov  
@cmitchellburns