

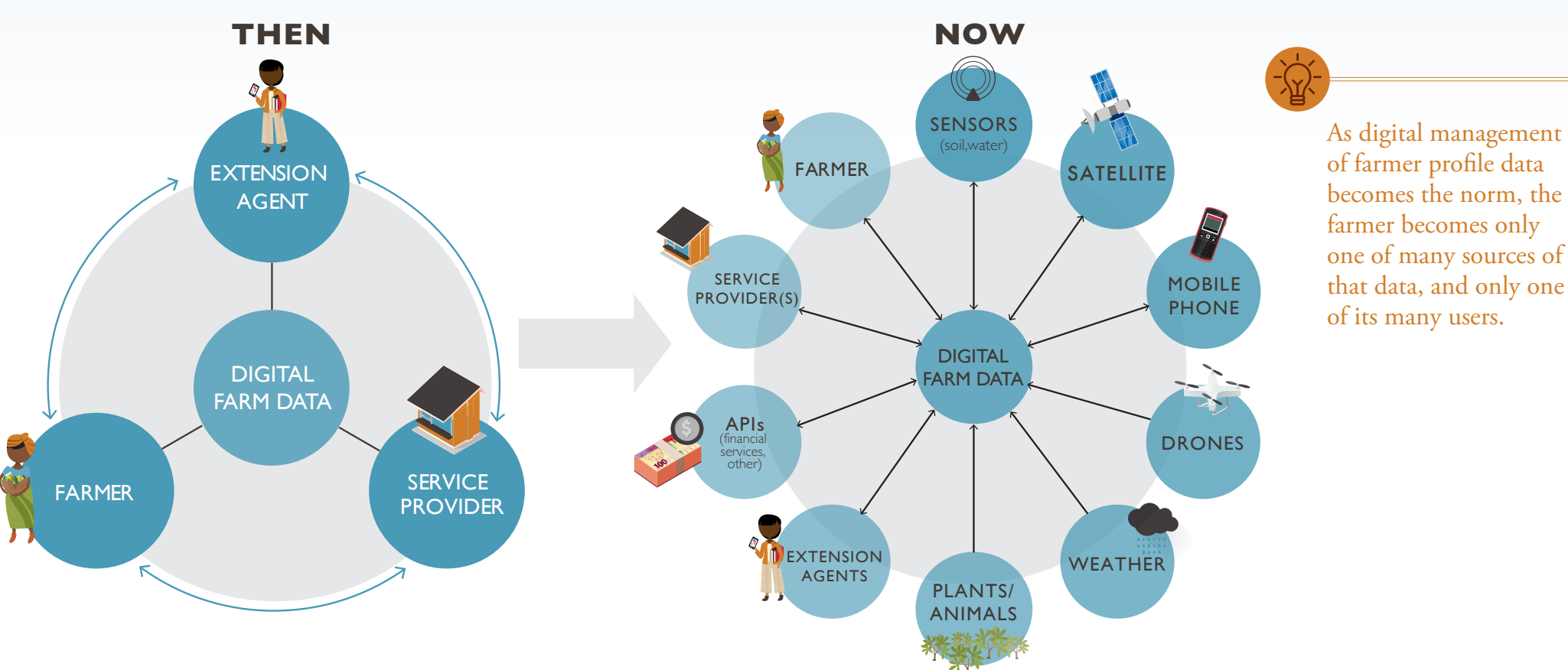
# DATA-DRIVEN AGRICULTURE

## The Future of Smallholder Farmer Data Management and Use

More than **500 million** smallholder farms worldwide play a significant role in food production and genetic diversity of food supply. Mobile technology, remote-sensing data and distributed computing and storage capabilities are changing how smallholder farmers are identified, understood and supported.

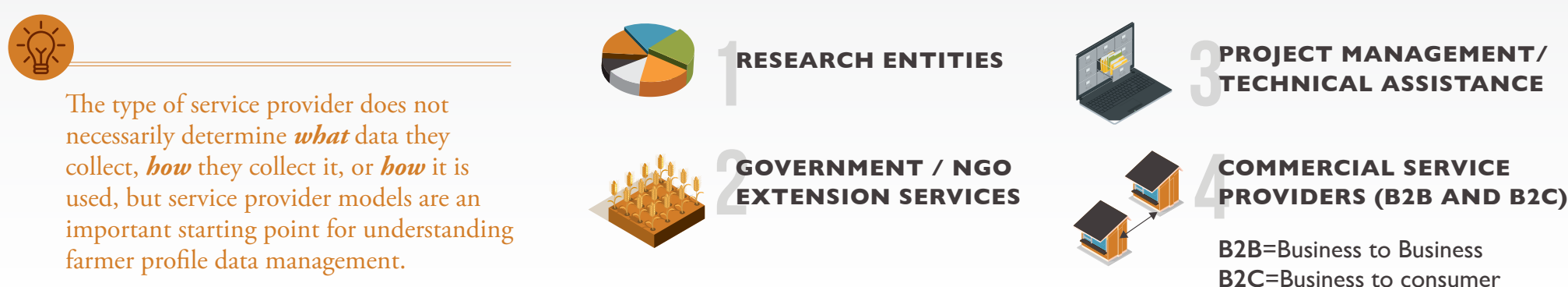
### DIGITAL FARMER PROFILES: THEN AND NOW

A digital farmer profile is a profile that can capture comprehensive data on a farmer and their farm. It can be developed over time, provide real-time data flows between farmers and stakeholders, and it can be accessed simultaneously by multiple service providers such as financial service providers, input suppliers, agro-processors and farmer cooperatives.



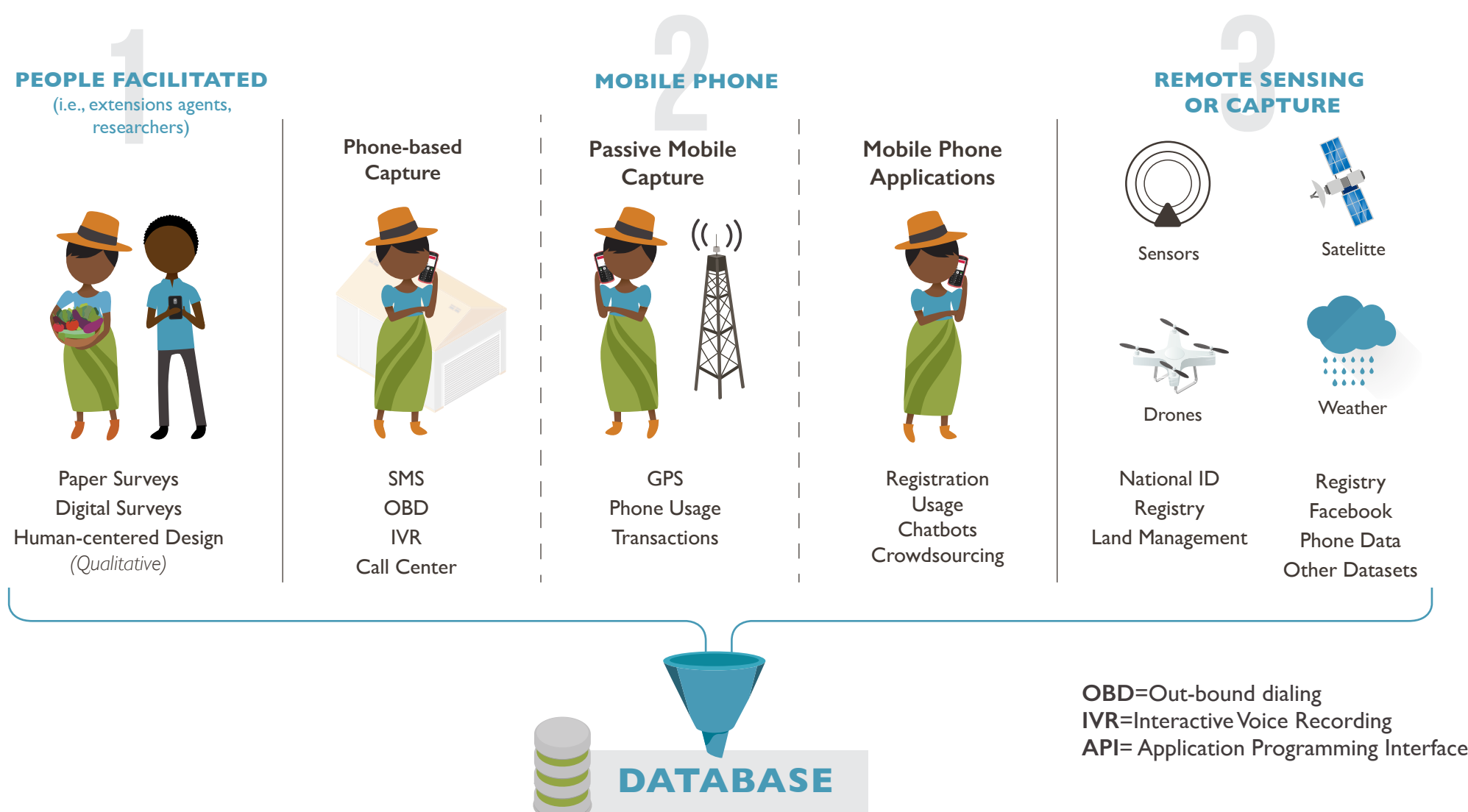
### DATA GENERATORS: SERVICE PROVIDERS

Service providers who collect data on and from smallholder farmers fall into four main models.



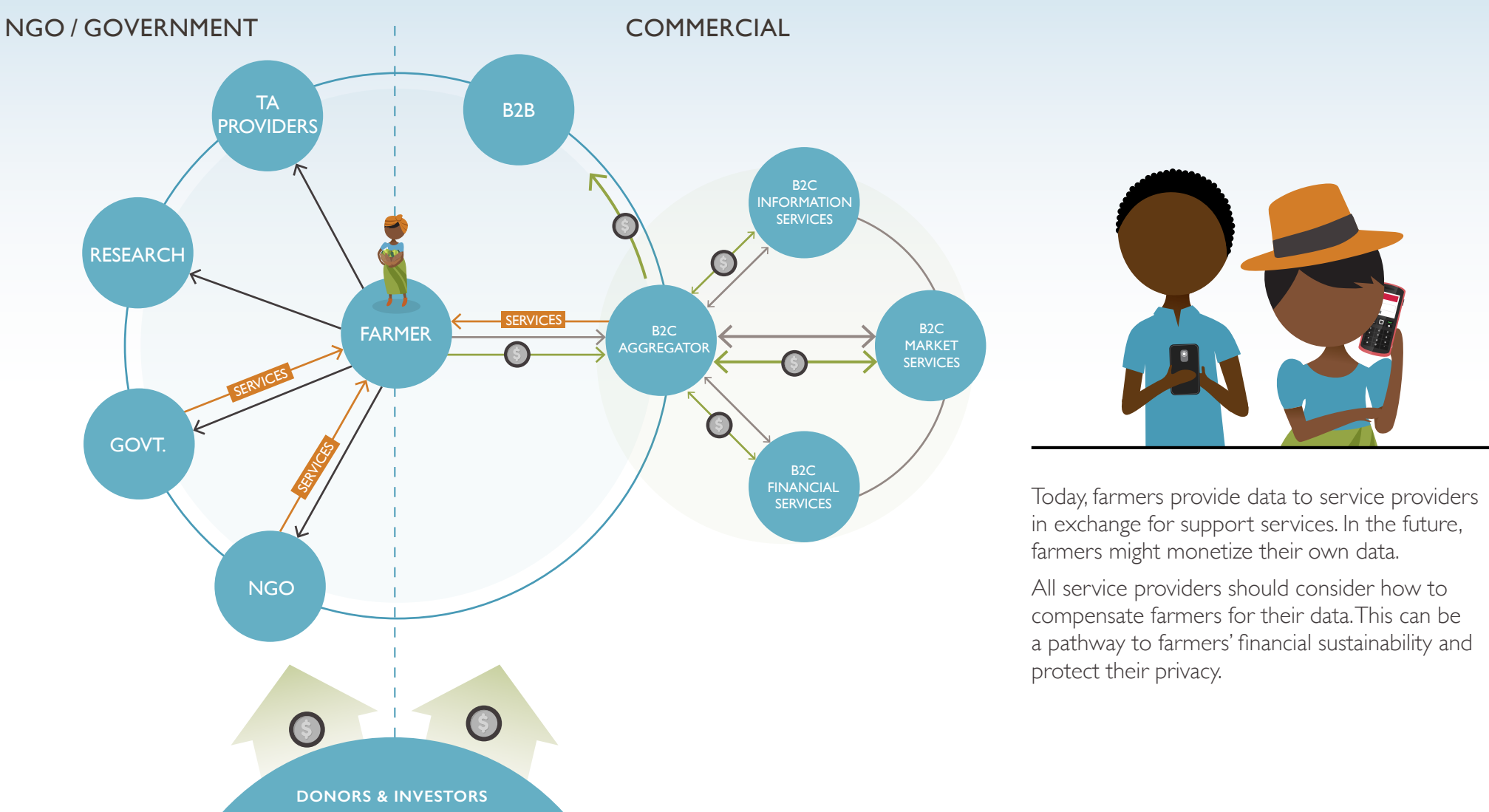
### DATA CAPTURE, ANALYSIS AND USE

Digital data capture is the starting point for developing a digital farmer profile ecosystem. Leveraging the three methods of data capture below increases the accuracy of profiles.



### DATA AND REVENUE FLOWS

Changing methods of data capture are giving rise to new configurations within service provider models.



### KEY CONSIDERATION

When assessing how to leverage farmer profile data USAID staff and Feed the Future partners should consider:

- How are smallholder farmers defined?
- What is the landscape of service provider models?
- What is the technology environment for supporting digital capture, analysis and timely use of data?
- What data is commonly collected, what are the gaps and is data being shared?
- Are there farmer profile data sources that can be leveraged to build dynamic farmer profiles?
- What farmer archetypes have been created by programs and can they be leveraged by other service?
- What is the policy and legal environment for data sharing, consumer protection and privacy?
- How is data shared post-project?
- What may be the utility of the projects' data assets for other service providers?
- What investments by USAID and other donors can support the development of a digital data ecosystem for farmer profiles?