



# Fintech in water for agriculture

Journey towards financial sustainability

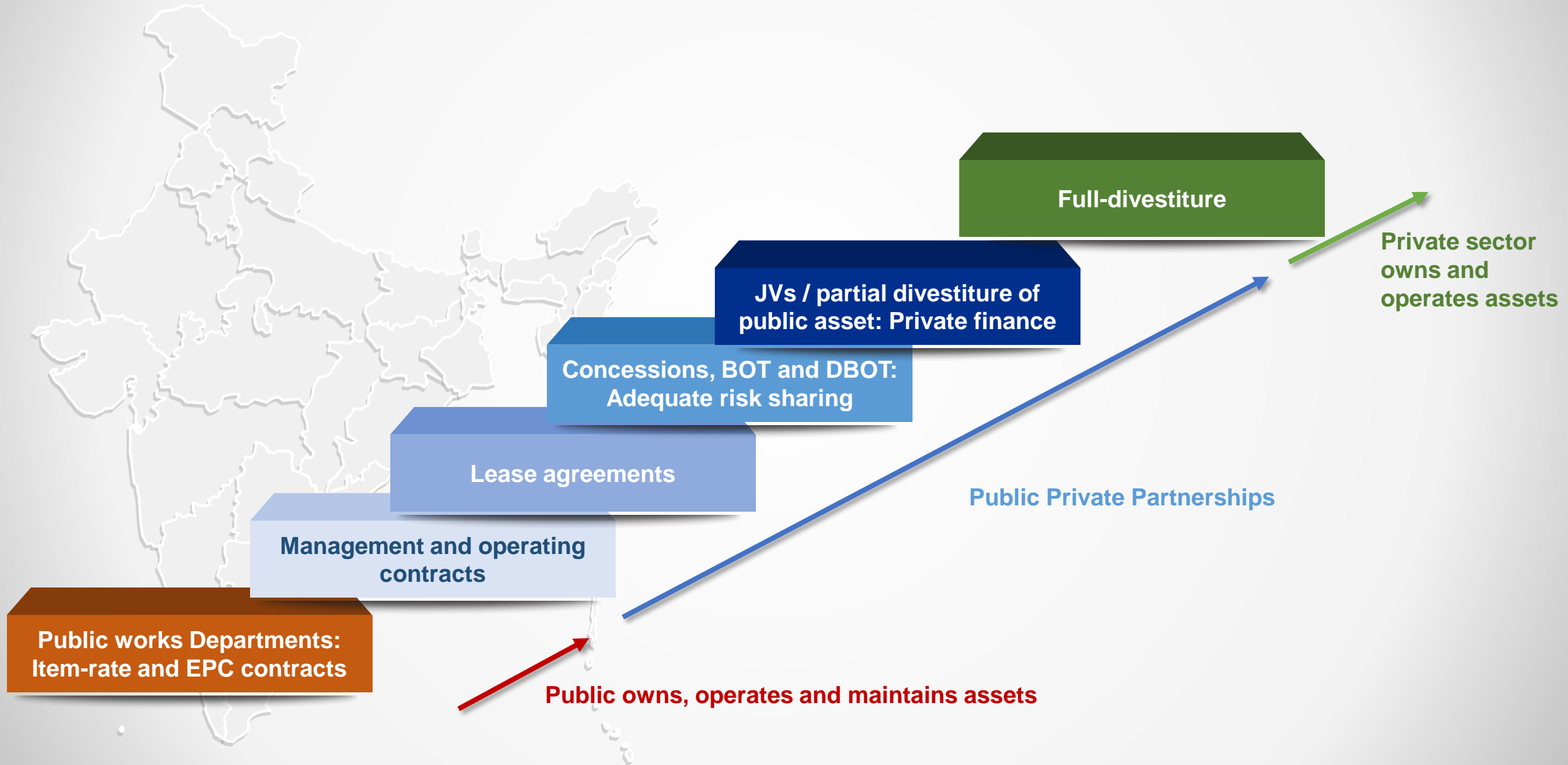
SIWI World Water Week  
August 2018

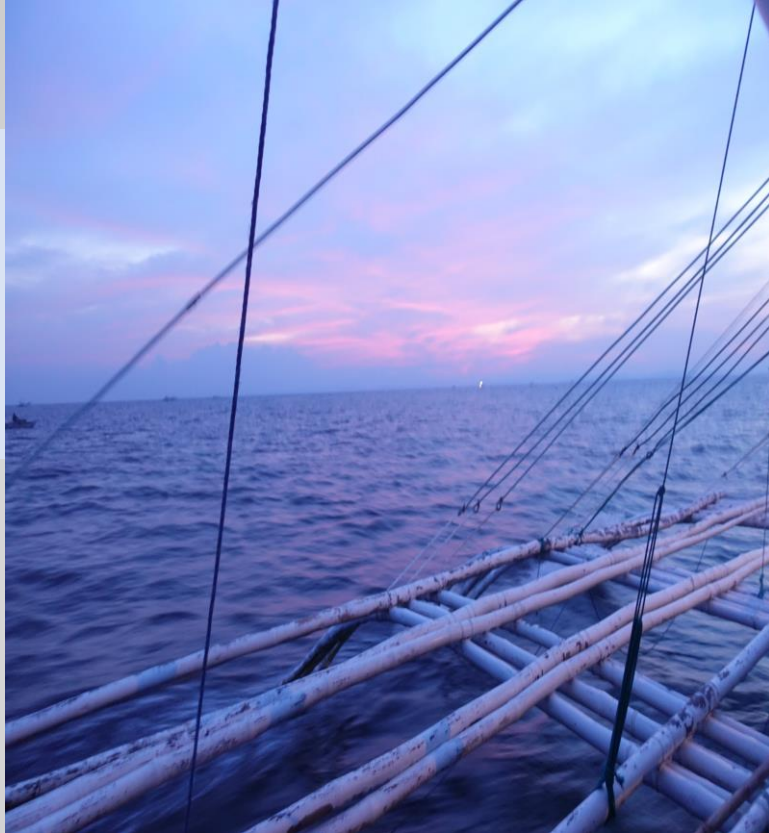
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# Where do these projects lie on the spectrum of private sector participation? What can we do to help them on the path to financial sustainability?





# Accessing market finance

What are the gaps? How can we use technology to plug these?



# What are the key gaps in harnessing / attracting private finance? Can fintech help?

1 Glaring gap in our knowledge of farmer ownership, and credit worthiness

2 Inadequate risk allocation across the value chain

3 Demand-supply mismatch for finance leads to available lenders (formal/informal) hiking rates



Establish credit worthiness baseline



Spread out risks over stakeholders, and over time



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# Where has this been done with success? Fintech players in Irrigation & Agriculture



Establish credit worthiness  
baseline

## First Access

A technology platform and algorithm captures data including “hidden” points – such as consumers’ prepaid mobile money history or utility bills.



## Farm Drive

Farmers upload information about their expenses, revenues and yields through a mobile app. Combines this information with data from other sources to build personal credit scores and request loans via mobile phone.



## Harvesting

Uses existing data sets to build credit scores and statistical models with GIS monitoring for predicting default risk.



# The role of Non-Banking Finance Corporations

## Ex. De-risking pressurized piped irrigation



Spread out risks over stakeholders, and over time

### Farmer risk:

Upfront payments / Insurance mechanisms

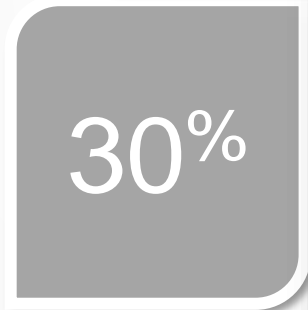


### Local Bank Risk:

Public de-risking

### Local Bank Risk:

Private sector / off-taker de-risking



# Easing the collection burden and encouraging payments

## Can the market help?



**WhatsApp peer to peer payment system -  
Unexplored potential or crazy idea?  
Over 40% of their business in the next 5  
years will be from rural India**



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# Easing the collection burden and encouraging payments

## Can the market help?



**Claro Energy: Providing irrigation as a service**  
RFID enabled prepaid cards for irrigation and energy meters for electricity supply makes the recharge mechanism transparent and customer friendly



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