



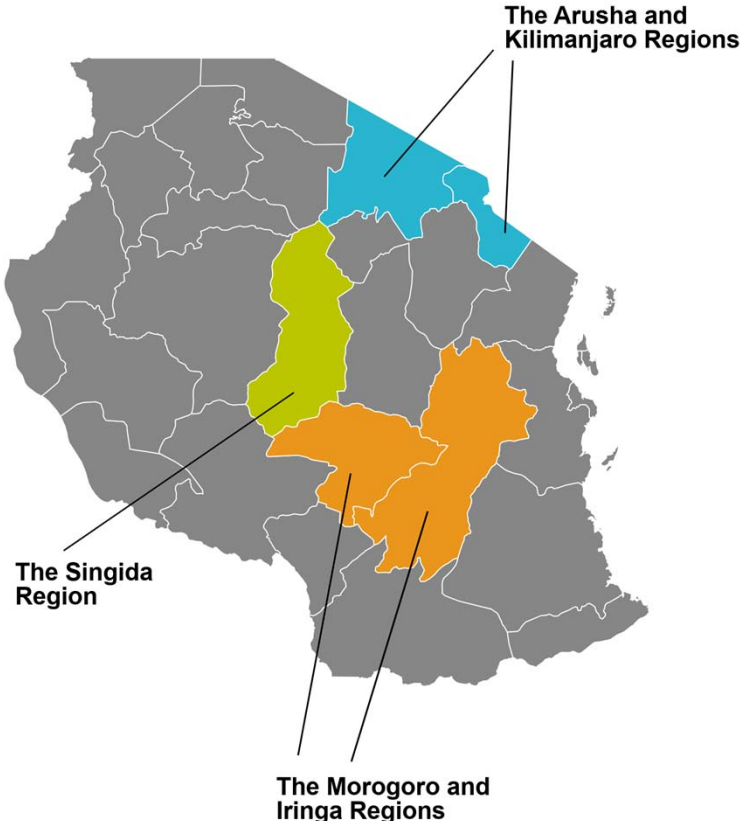
# Market Analysis: Solar Water Pumps for the Tanzanian Horticulture Sector

Makena Ileri, CLASP  
19 January 2019

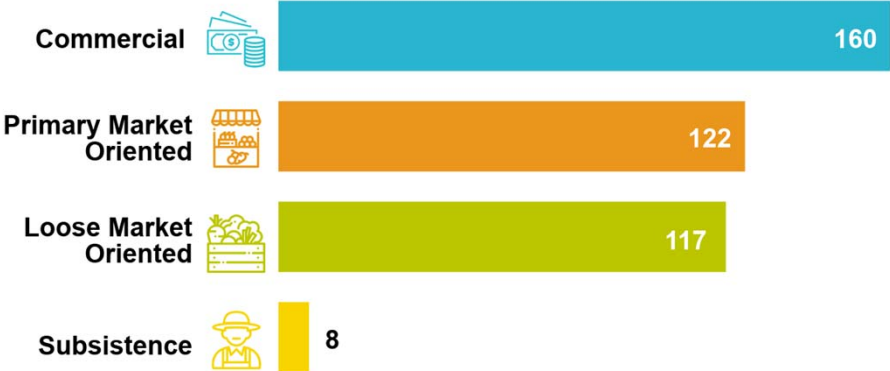


# Farm and Farmer Characteristics

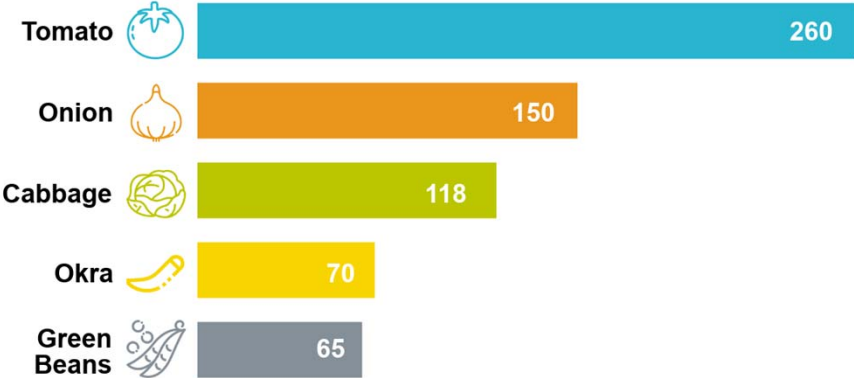
## Geographic Reach



## Farmer Type

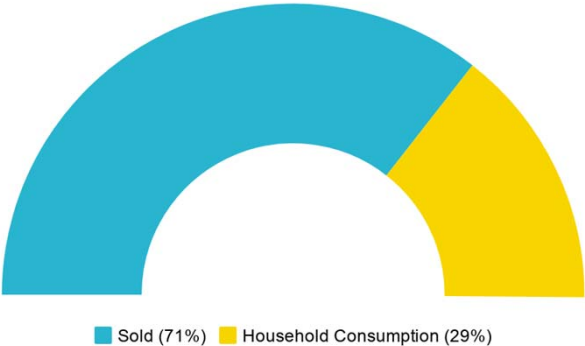


## Crops Cultivated



# Farm and Farmer Characteristics

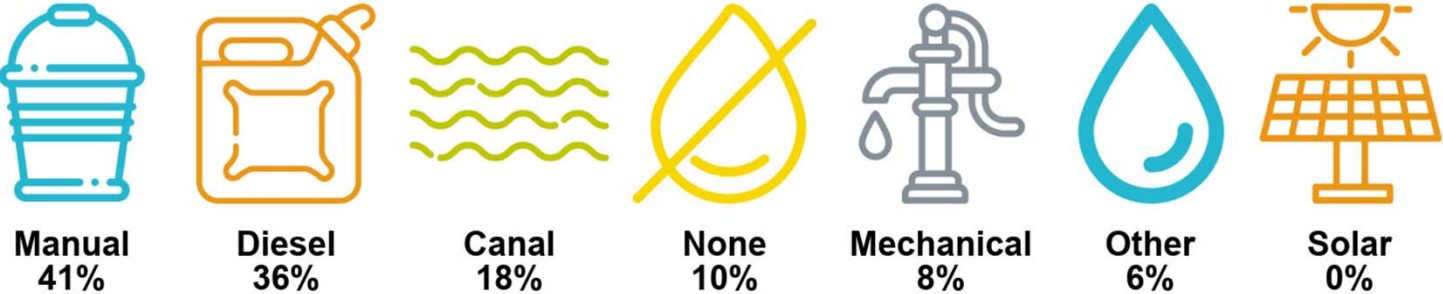
## Percentage of Produce Sold



## Main Product Market



## Technology Used





# Market Size and Farmer Typologies

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- Top-down approach to calculate the market size and potential for SWPs
- Developed two *a-priori* segmentation models
  - Market orientation approach
  - Current irrigation technology
- After carrying out the two *a-priori* approaches
  - Not enough differentiation between groups
  - Both methods underestimate the impact of purchase drivers
- Constructed six typologies from purchase driver analyses

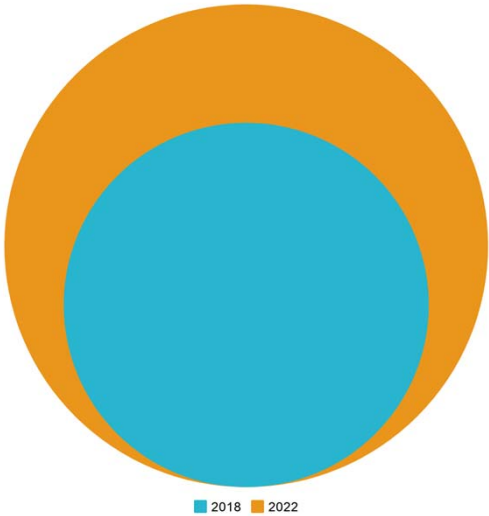


# Farmer Typologies

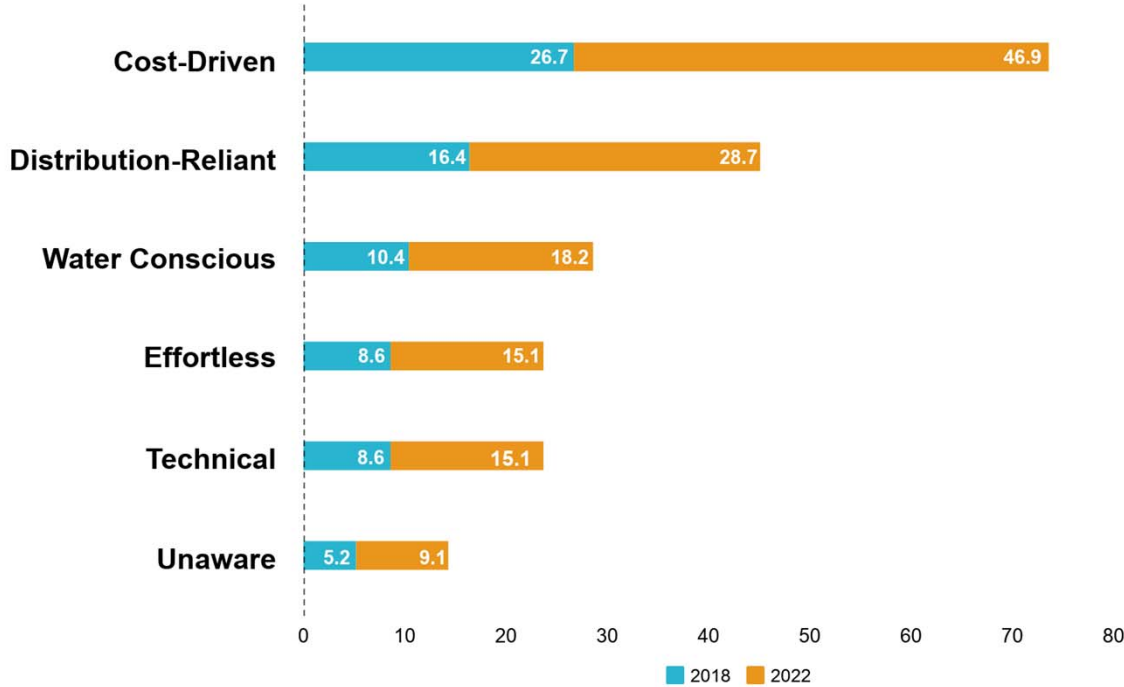
Segment	Market value (%)	Avg. Inc. (\$US)	CapEx (\$US)	Tech	Area (Acres)	Needs (L/hour)	Satisfied (%)	Channel(s)
<b>Cost-Driven Farmer</b>	31	2,044	32	Manual	0.7	2,216	47	Farm gate; local market
<b>Distribution-Reliant Farmer</b>	19	2,305	127	Diesel	0.8	1,961	40	Farm gate; wholesalers
<b>Water Conscious Farmer</b>	12	3,000	60	Canal	1.0	3,026	42	Farm gate; wholesalers
<b>Effortless Farmer</b>	10	2,174	79	Mechanical Manual	0.8	2,453	31	Farm gate; local market
<b>Unaware Farmer</b>	6	2,652	165	Canal	0.9	1,870	44	Wholesalers; farm gate
<b>Technical Farmer</b>	10	2,913	123	Diesel	0.8	2,655	55	Farm gate; local market

# Market Size

### Market Size for Irrigation (Million \$US)



### Market Size for Irrigation by Typology (Million \$US)



# Off-grid Cold Chain Challenge



- Off-grid cold storage companies have the potential to:
  - prevent food spoilage
  - raise incomes and increase food security
- The OGCCC will try to bridge technology gaps and reward promising business models
- First stage of challenge completed and 10 Finalists selected



# Finalist- Off-grid Cold Chain Challenge





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**Questions?**

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