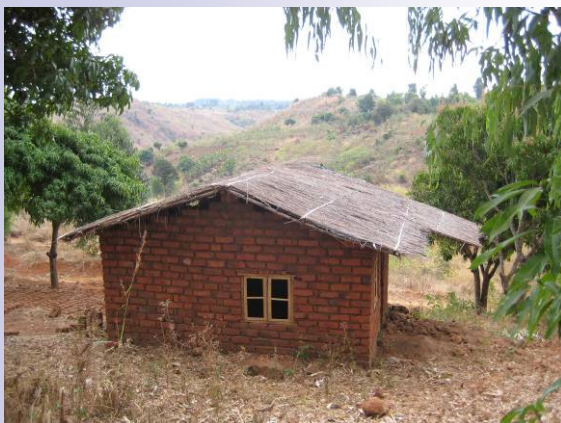


# Portable Electric Lighting Market Trial



Mwandama Cluster, Malawi  
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Villagers' primary local option is inefficient, costly kerosene lighting.



# How to provide poor villagers access to better sources of lighting?

Conduct market trial for solar LED lanterns.

## Assess the following:

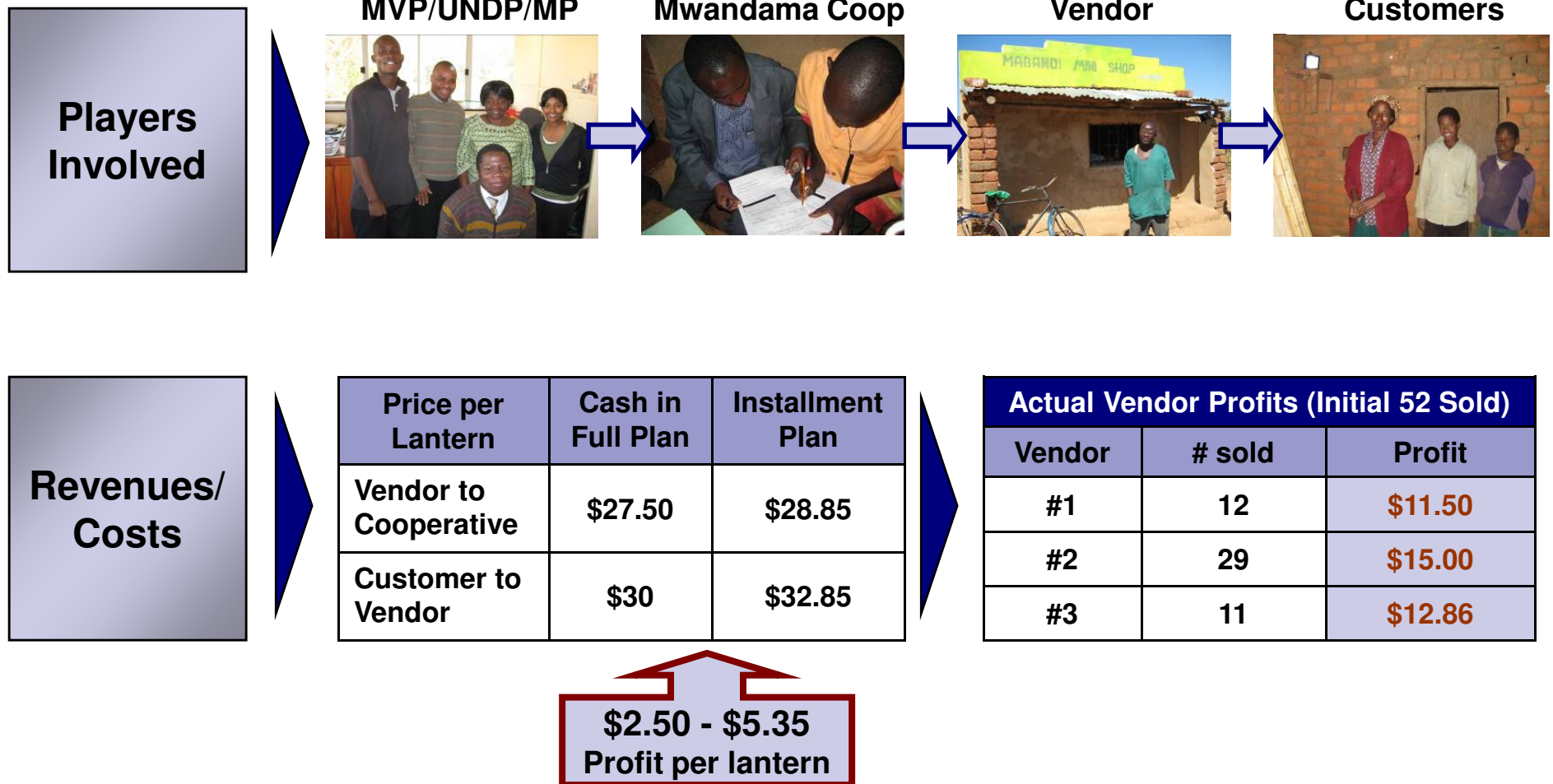
- Best **approach(es)** to “service delivery”
- Total **demand** estimate for lanterns for village(s)
- **Degree** to which lantern use acts as kerosene **substitute**



# Market trial approach focused on getting villagers' input & understanding benefits

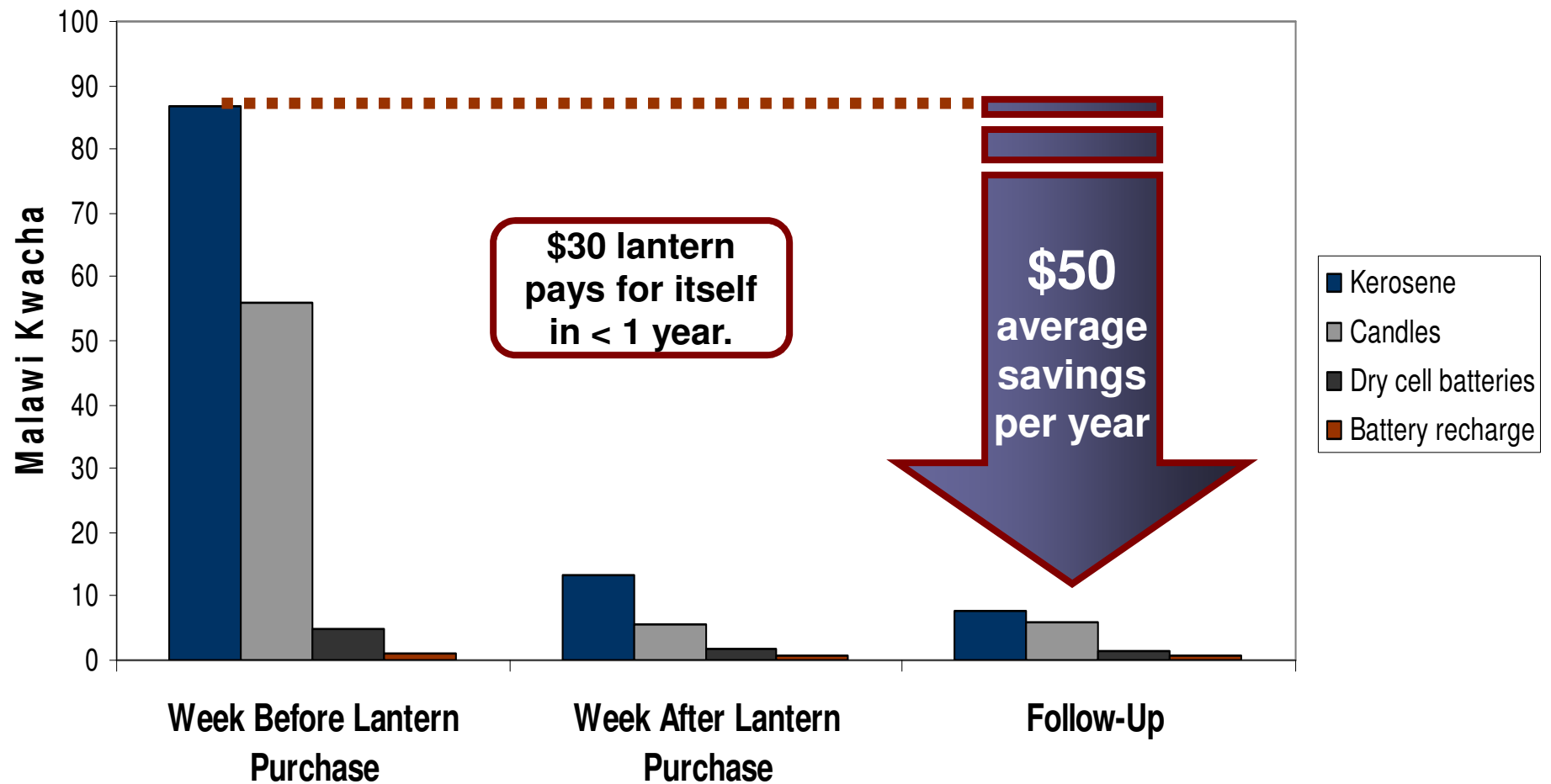


# Field research helped refine business model for sale of lanterns



# Initial results from lighting survey indicate 90% drop in weekly lighting expenses

## Average Weekly Household Lighting Expenditures for Customers

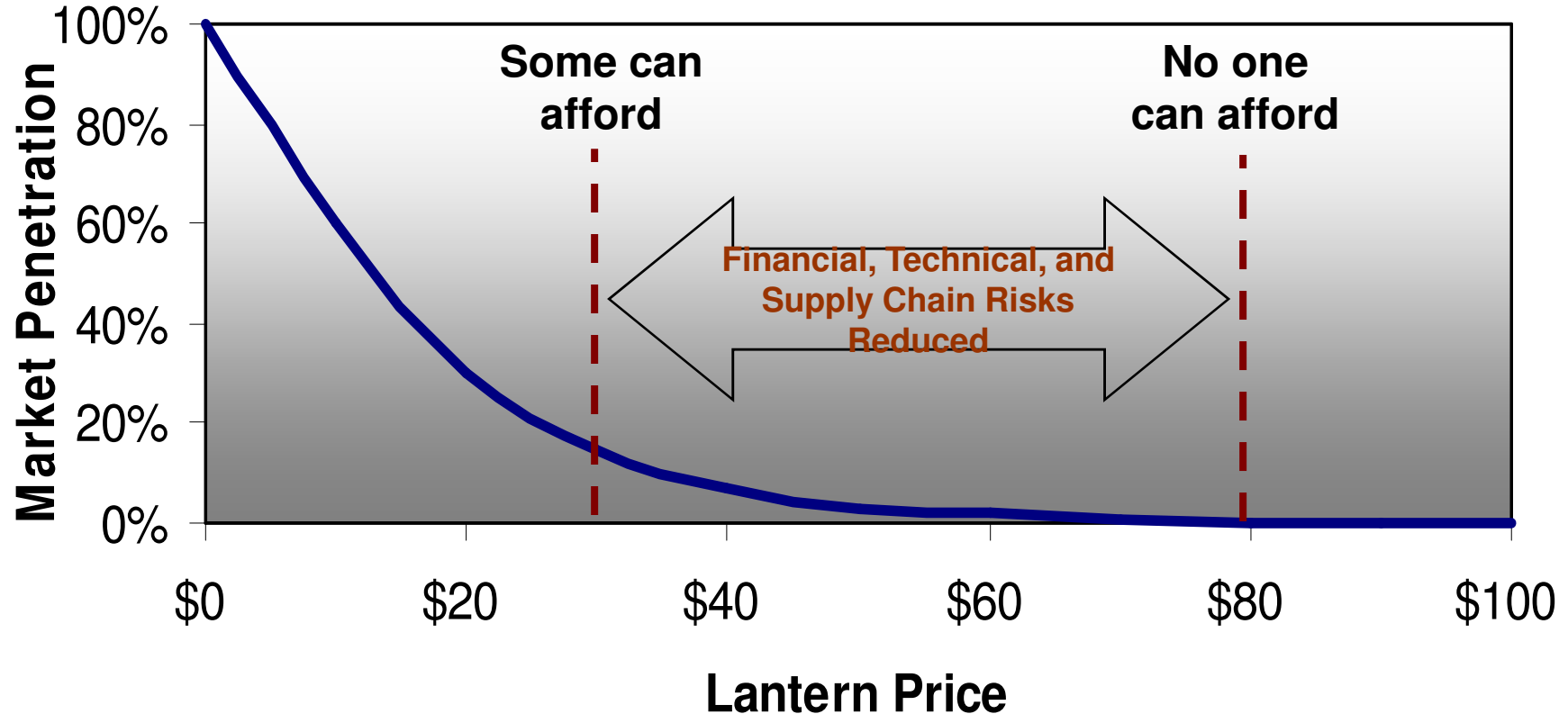


# Household lighting improves significantly with solar, LED lanterns



# MVP helped reduce risks that villagers face trying to access better light sources

**Hypothetical Market Penetration vs. Lantern Price Curve**



**Trial was successful but longer term success depends on a number of factors**

**Cooperative will operate on its own.**

**Livelihoods improve, i.e. in areas of education & income generation**

**Scale to other villages, countries**

**Lantern sales continue to be successful!**

# ***Many thanks*** to everyone involved!

## ***MVP NYC***

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- ***Edwin Adkins***
- ***Kristine Oppelstrup***
- ***Ruben Bushnell***

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- ***Flora Kaluwile***
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