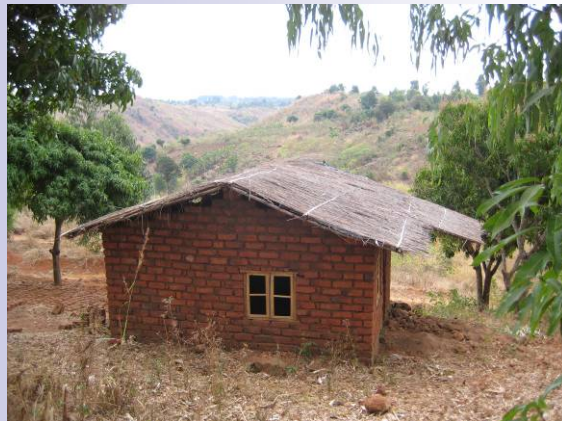


Portable Electric Lighting Market Trial



Mwandama Cluster, Malawi Summer 2008

Sandy Eapen

Joy Pankomera

Prof. Vijay Modi

Edwin Adkins

Flora Kaluwile

Rebbie Harawa

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

Players Involved

MVP/UNDP/MP



Mwandama Coop



Vendor



Customers



Revenues/ Costs

Price per Lantern	Cash in Full Plan	Installment Plan
Vendor to Cooperative	\$27.50	\$28.85
Customer to Vendor	\$30	\$32.85

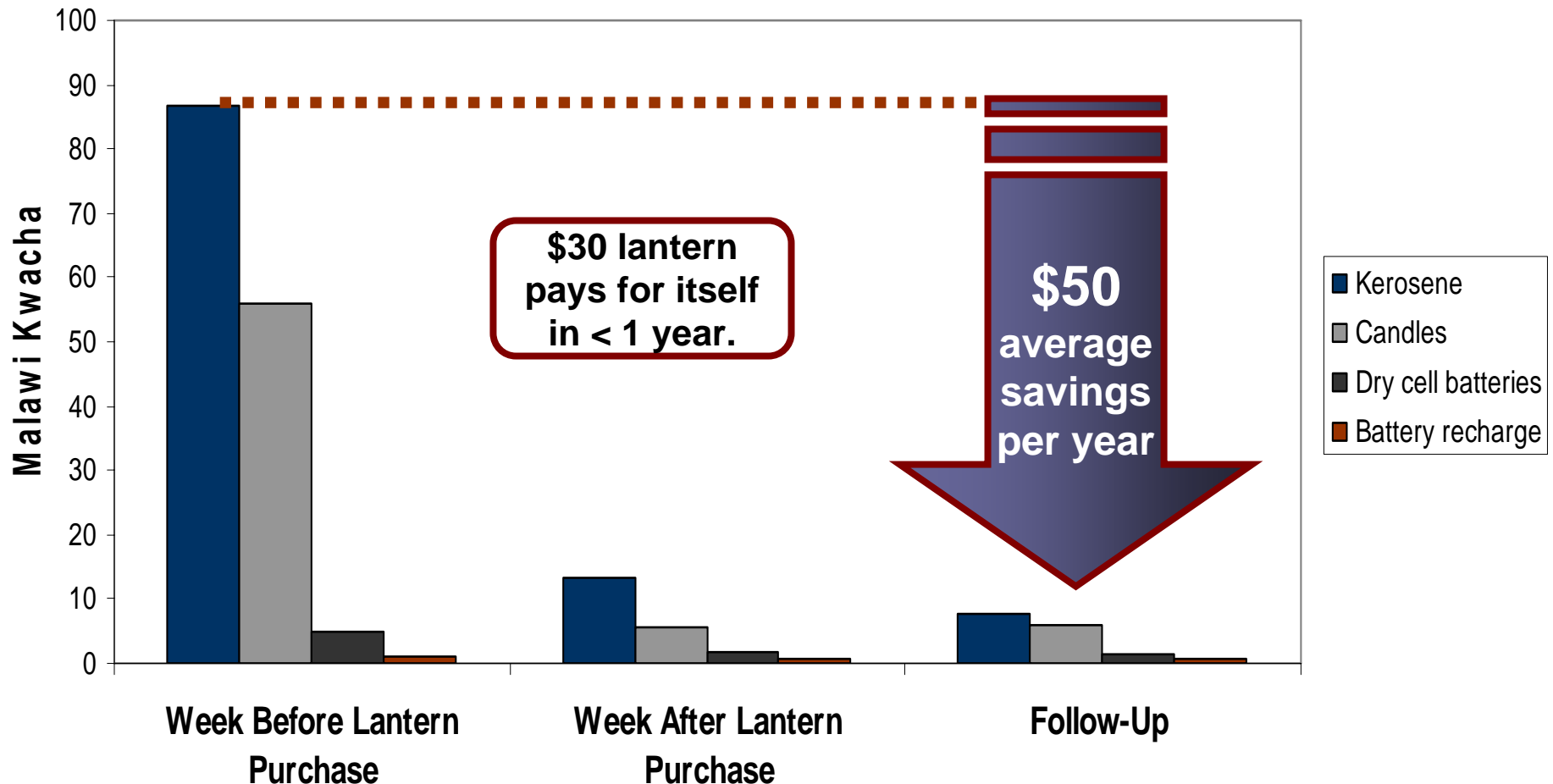
Actual Vendor Profits (Initial 52 Sold)

Vendor	# sold	Profit
#1	12	\$11.50
#2	29	\$15.00
#3	11	\$12.86

\$2.50 - \$5.35
Profit per lantern

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

Average Weekly Household Lighting Expenditures for Customers

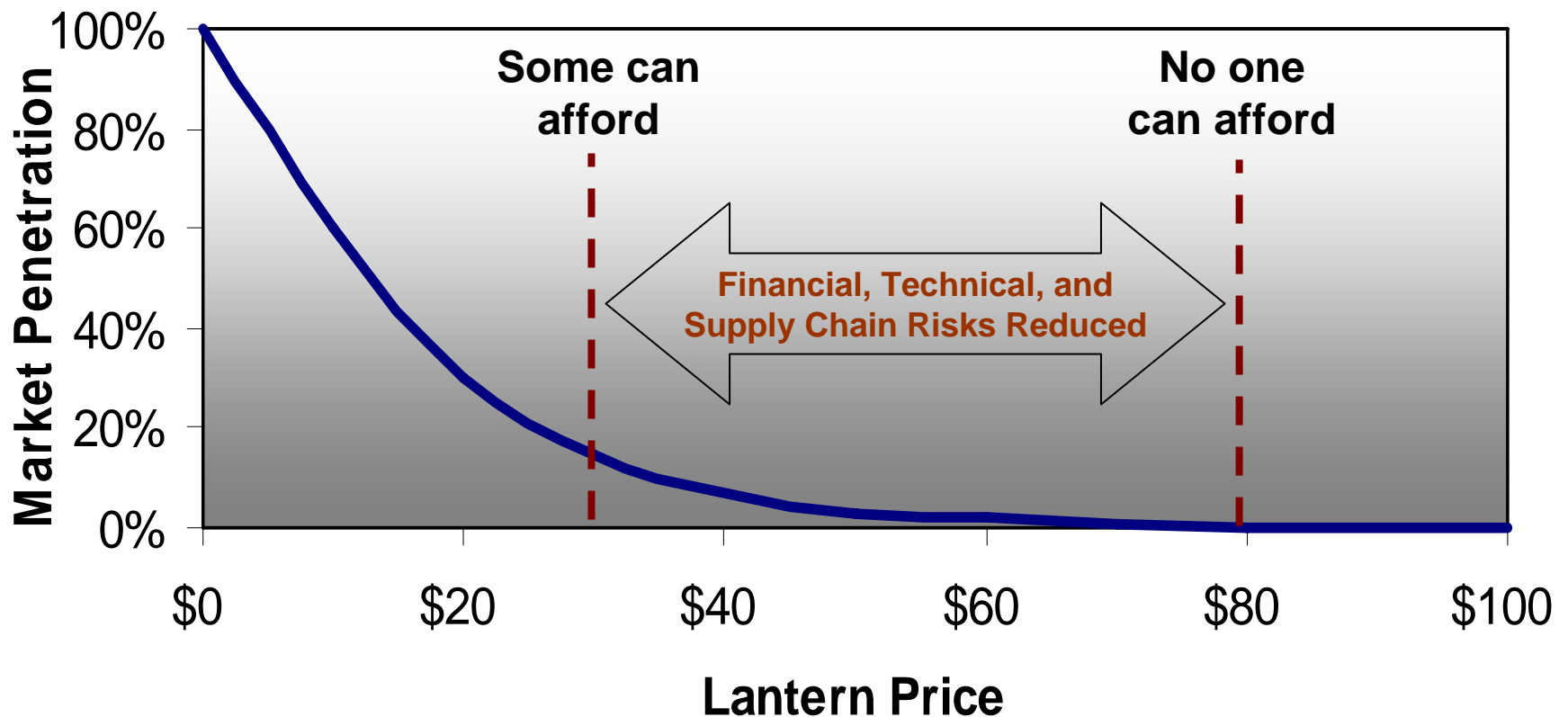


Household lighting improves significantly with solar, LED lanterns



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

- ***Prof. Vijay Modi***
- ***Edwin Adkins***
- ***Kristine Oppelstrup***
- ***Ruben Bushnell***

Millennium Promise

- ***Rustom Masalawala***
- ***Theresa Wolters***

MVP Malawi

- ***Joy Pankomera***
- ***Flora Kaluwile***
- ***Rebbie Harawa***
- ***William Nyirenda***
- ***Stevie Kazumbe***
- ***MVP Drivers & Staff***
- ***UNDP Malawi***