

# Seasonality and Profitability of rice value chains for smallholder farmers at Nkhate Irrigation Scheme in Southern Malawi

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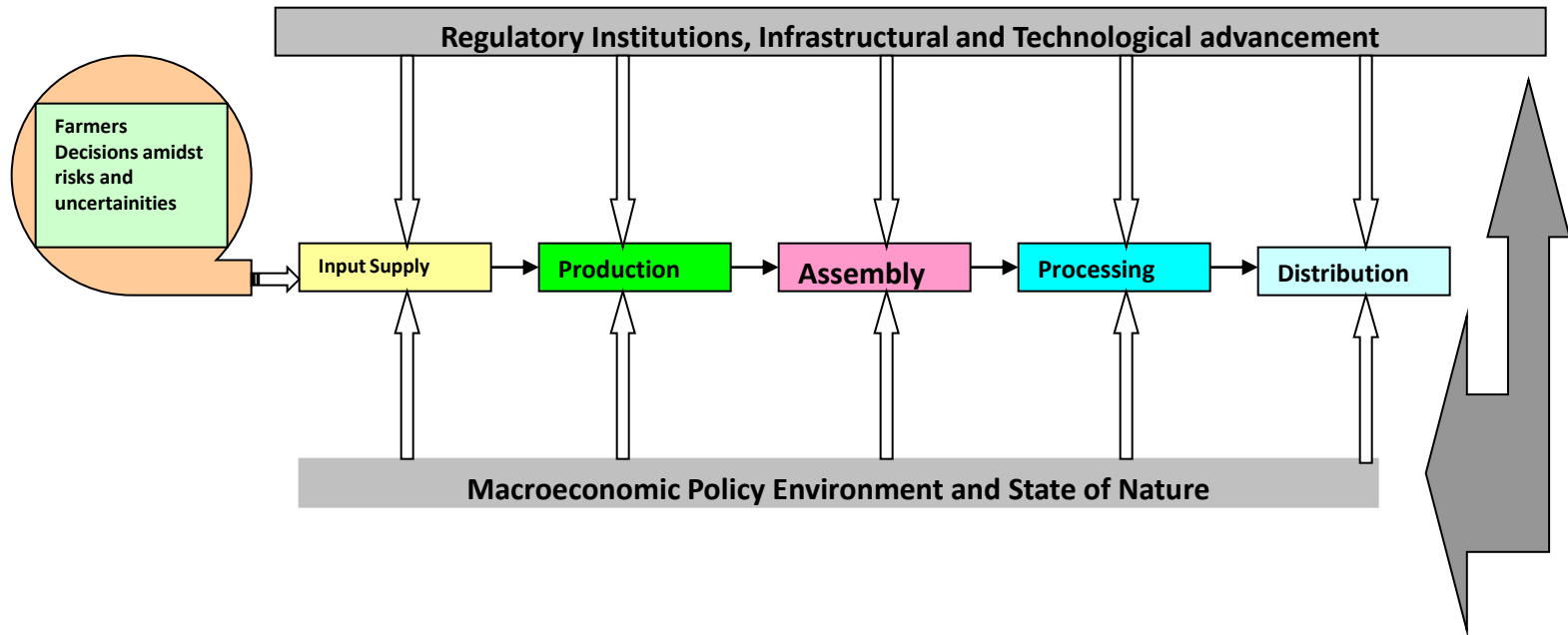
# Introduction



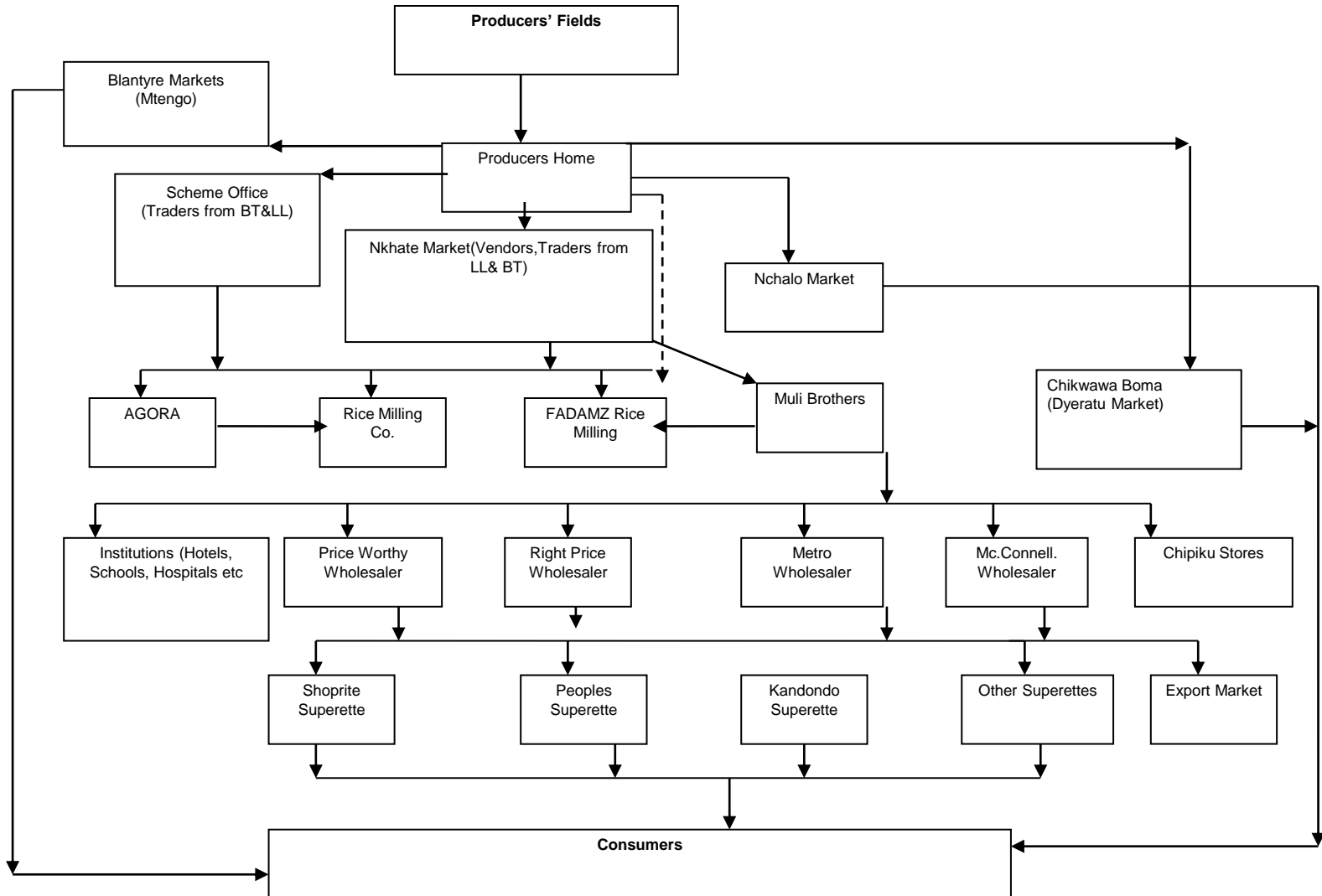
# Nkhate Irrigation Scheme



# Conceptual Framework



# Value Chain Map for Nkhate



# Research Question

- Does the intra annual, seasonal rice price changes affect the profitability of rice smallholder farmers?

# Data

$$n = \frac{Z^2(1-p)p}{e^2} = \frac{1.96^2(1-p)p}{0.05^2}$$

$$n = \frac{1.96^2(1-0.18)0.18}{0.05^2} \cong 228$$

Due to time and resources constraints the sample size of 150 rice farmers was used. This accounts for about 65.7% of the calculated sample size.

# Discussion of Results

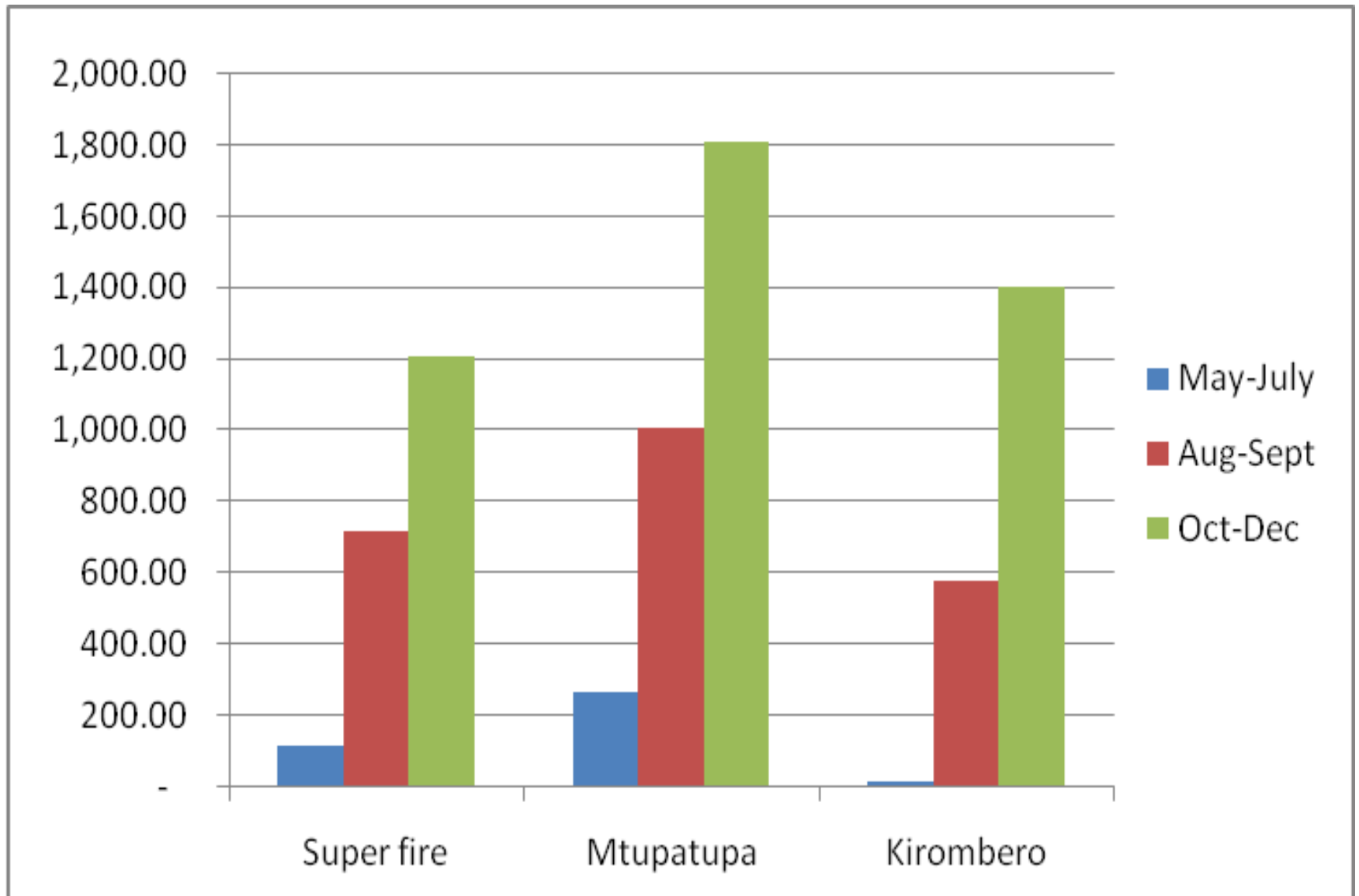
**Table : Mean farmers' gross margins [\[1\]](#) for each rice variety by season rice was sold**

<b>Season</b>	<b>Super fire</b>	<b>Mtupatupa</b>	<b>Kirombero</b>
May-July	116.66	266.47	15.24
August-September	718.17	1,009.15	578.26
October-December	1,210.70	1,810.44	1,402.19

These gross margins were calculated in US\$ ha<sup>-1</sup>, the exchange rate used was MK140 against 1US\$ in 2008



**Figure 1.0 Mean farmers' gross margin for each rice variety by season rice was sold.**



# Conclusions and Recommendations

- Rice gross margins were higher when farmers sold their rice in the seasons August-September and October - December.
- Policy implications:- rice storage and selling in the seasons when rice prices are reasonably higher

# Cont'd

- Need for policy interventions to promote rice storage by smallholder farmers
- The farmers' organisations can provide what is being referred to as a commodity warranty to farmers.
- Commodity Warranty Scheme.

# End of Presentation

- Thank You for your Kind attention.
- God bless you!

