




Economic Analysis of Organic Rice Production in Sri Lanka


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Introduction

We started with Organic farming. Population increase, introduction of fertilizer, introduction of fertilizer responsive varieties and input subsidies changed the dynamics




However strong arguments towards over utilization, misuse, environmental concerns, health concerns and budgetary concerns pushed the agenda towards organic again

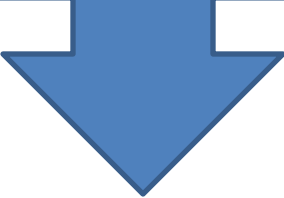


Introduction

Yet, as for paddy the organic movement has been slow. There are many self-acclaimed organic farmers. Yet only around 5% of paddy lands are been used for “True” organic rice. Subsidies does not exit, either at input or output level.



Main criticism is that organic rice is low yielding, can't feed a nation. Many studies beg to differ. Constrains are more with the production process and marketing and “barriers” in the value chain. For example: the use of organic fertilizer, opportunity cost of supply and willingness to pay for organic rice



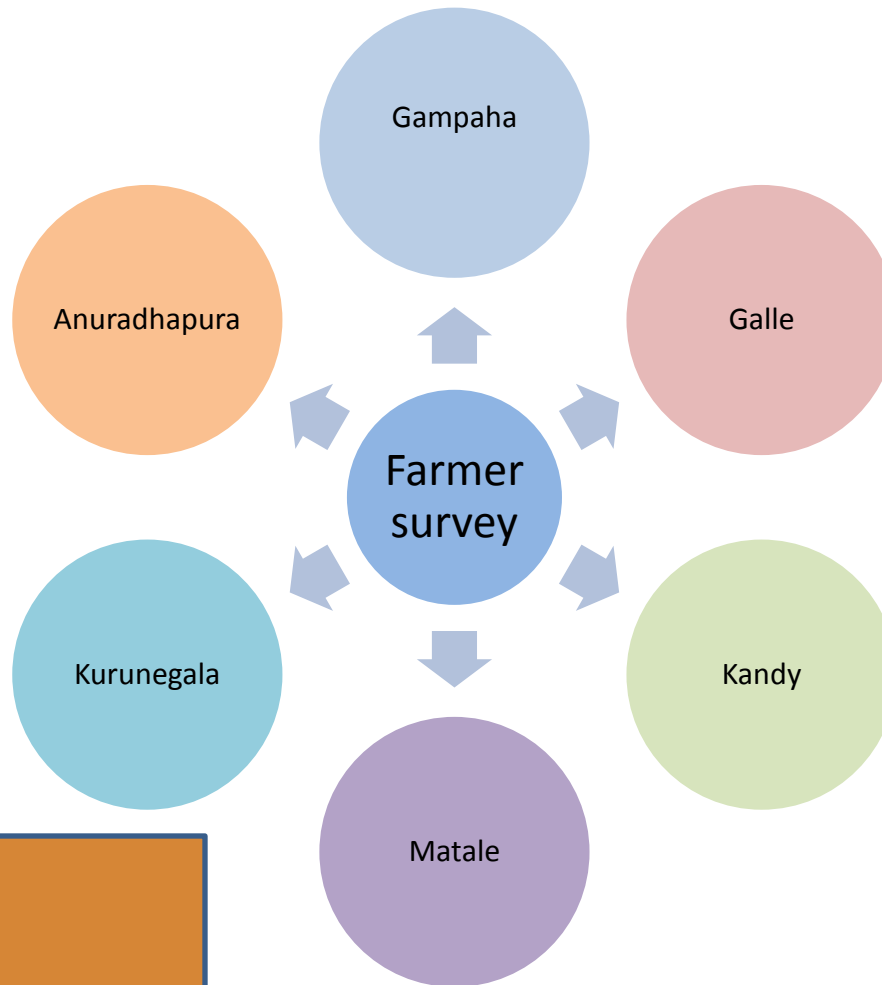
Research

To better understand this, the research ask following basic questions

1. What determines the use of organic fertilizer and what are the differences between the determinants of chemical fertilizer
2. What determines the profits for organic farmers and how that differ from profits of inorganic farmers
3. Value chain barriers: price of organic rice, marketing channels and organic certification

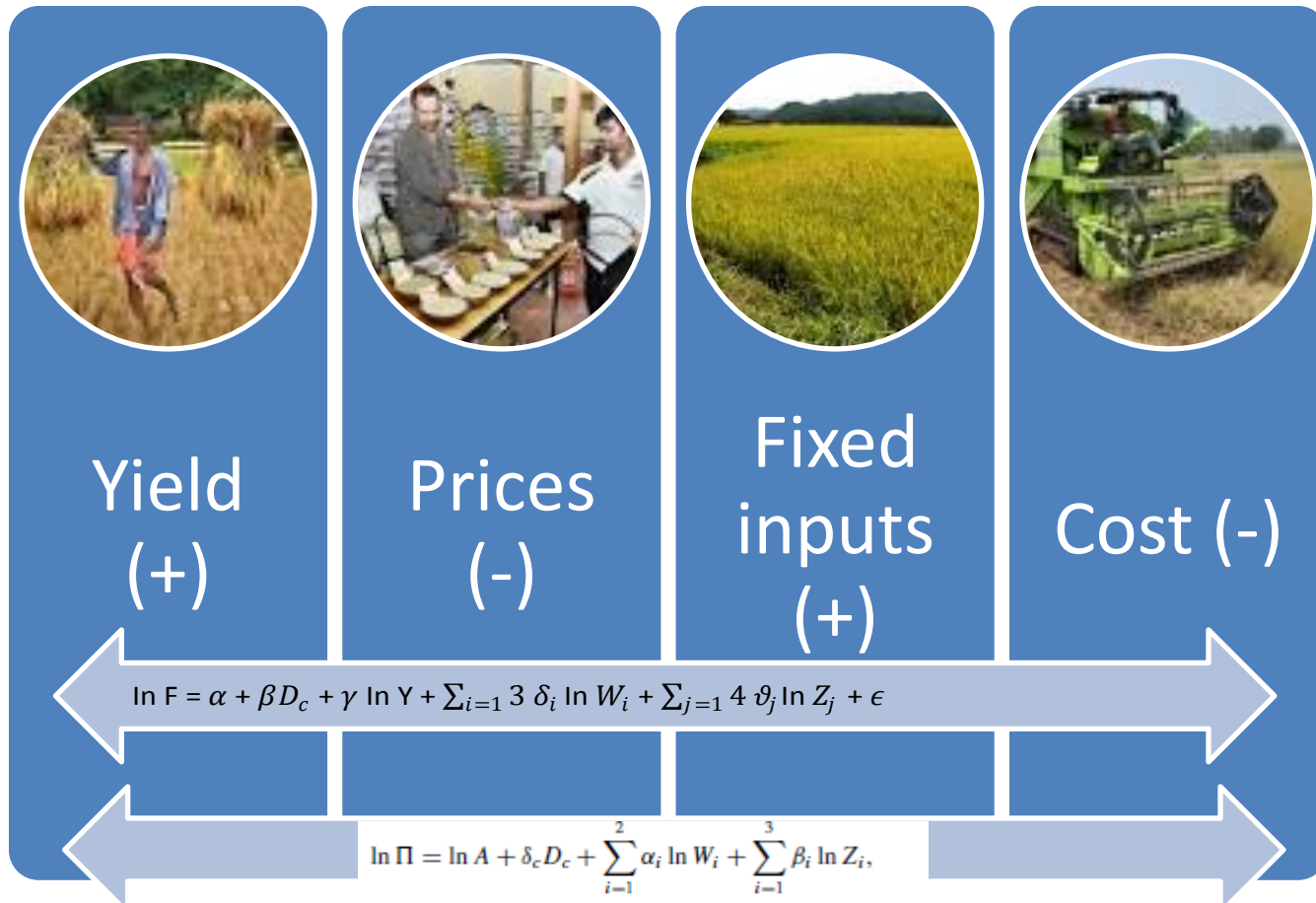
Research method

At district level
For Organic/Inorganic
2 FGDs
2 KIIs : Head of FO



At district level
50:50
Organic: Inorganic
Commercial: Non-commercial

Demand for fertilizer/Profits



Demand for fertilizer

Variable	Organic	Inorganic
Family size	0.274 (0.245)	0.055 (0.588)
Land size	0.184 (0.096)**	0.021 (0.538)
Price of organic fertilizer	-0.710 (0.006)***	-0.033 (0.712)
Price of seed	-0.557 (0.296)	-0.138 (0.505)
Cost of water management	-0.151 (0.330)	-0.055 (0.283)
Cost of land preparation	-0.130 (0.140) *	-0.097 (0.001) ***
Output	0.319 (0.005) ***	0.680 (0.000) ***

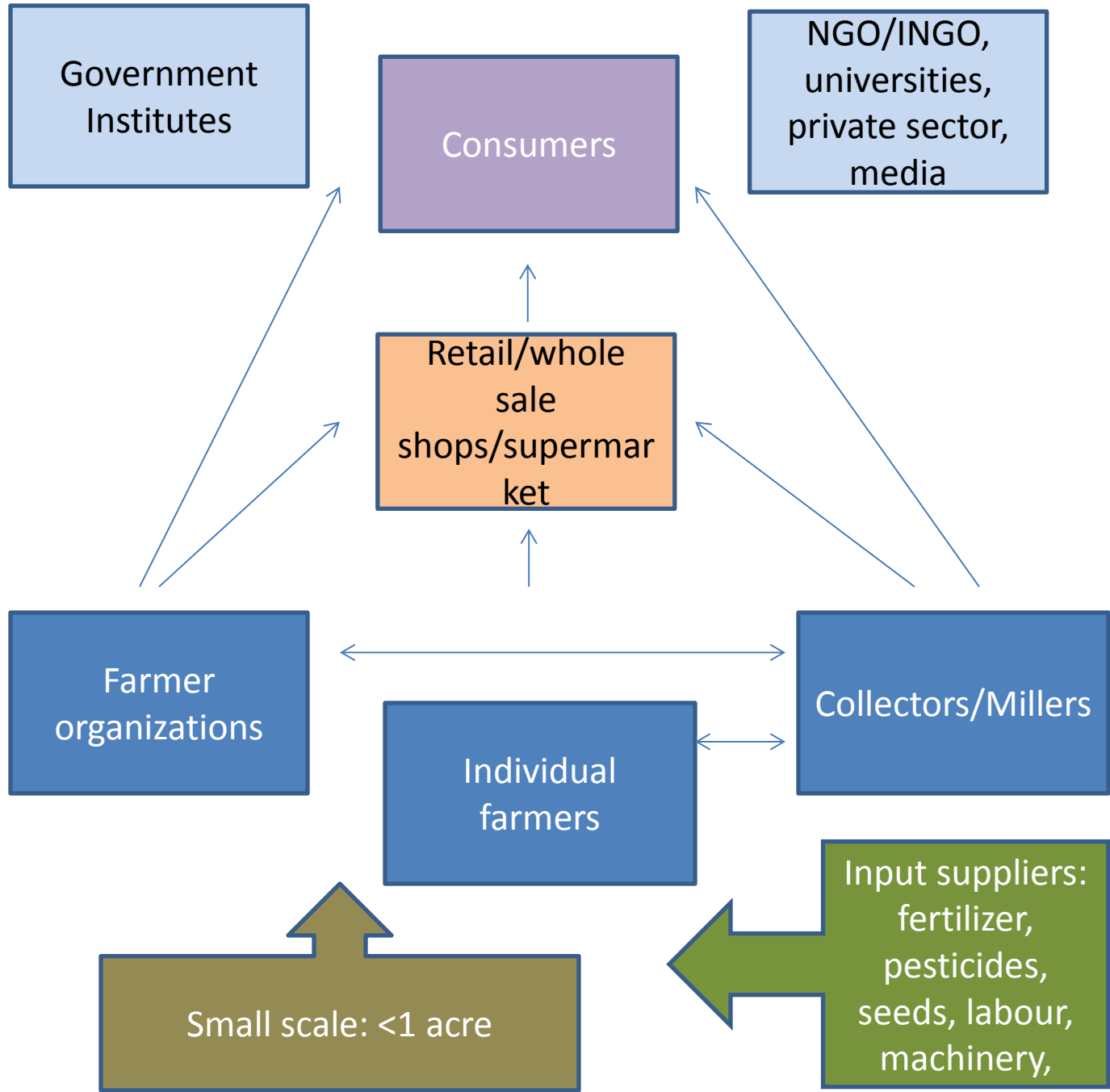
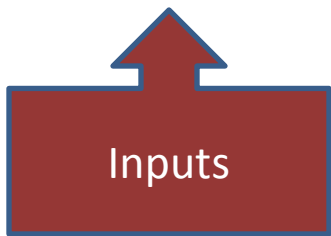
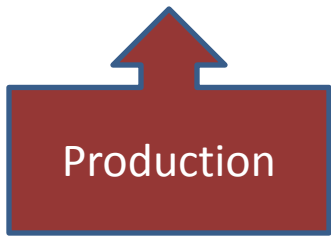
*** 99%, ** 90%, * 85%

Profits

Variable	Organic	Inorganic
Family size	0.248 (0.065) **	0.025 (0.876)
Land size	0.110 (0.098) **	0.029 (0.670)
Price of fertilizer	-0.357 (0.013) **	-0.227 (0.079) **
Price of seed	-0.009 (0.040) **	-0.095 (0.774)
Price of pesticides	-0.002 (0.000) ***	-0.365 (0.000) ***
Capital intensity	-0.013 (0.745)	-0.222 (0.000) ***
Commercial area	0.771 (0.000) ***	0.351 (0.002) ***

*** 99%, ** 90%

Profit= Revenue-out of pocket expenditures (seeds, bio-insecticides, bio-pesticides, fertilizer, machinery, transport and hired labour)



Value chain “Barriers”: Price of organic rice

- Many varieties of rice (Mainly traditional) grown in many different ways
- Price is not regulated either at farm gate level or wholesale/retail level.
- Mostly farmers work with farmer organization, hence a collective output price
- At the local level the price competition is higher. For example “SUWANDEL” within Galle district does not differ, but the difference is high between Gampaha and Galle.
- Generally price varies between Rs 150/Kg to Rs 220/Kg. However there are farmers who sell at beyond Rs. 350/Kg

Value chain “Barriers”: Marketing

- Mostly by farmer organization. There are individual farmers as well
- Mainly sold at local retail/whole sale shops. At supermarkets to a certain extent
- Some farmer organizations do target marketing: promoting organic varieties like “MASURANG” for cancer patients, and “MADATHAWALU” for diabetic patients
- Some use information sheets to educate the customer on the medicinal values and their production process
- However, marketing is still largely based on “word of mouth” and personal recommendations

Value chain “Barriers”: certification

- International certification is there. Farmers hardly follow that. Cost of certification is high.
- There is a “Trust Based” certification. But it involves a large transaction cost
- There is a risk factor if the farmer or the farmer organization is not known to the consumer
- Some farmer organizations print “True Organic”, But cant it be trusted??
- Lack of certification limits the market entry by farmers. Therefore piggybacking on established sellers is necessary. Ex: Ankumbura farmers tryig out Cargill.

A close-up photograph of a field of golden-brown grasses. The grasses are in sharp focus in the foreground, showing their intricate seed heads and long, thin blades. The background is a soft, out-of-focus expanse of similar grasses under a clear, light blue sky. The overall lighting is warm and bright, suggesting a sunny day. The text 'Thank You' is centered in the middle of the image in a bold, black, sans-serif font.

Thank You