

PRICE TRANSPARENCY THROUGH ICTs

Livelihood impacts for small farmers in Sri Lanka

Celling South Asia: The Mobile Phone's Impact on a Region
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Agriculture in South Asia – lowest share of GDP but often highest share of labor

		Bangladesh (%)	India (%)	Pakistan (%)	Sri Lanka (%)
Share of GDP (2009)	Agriculture	19	17	21	14
	Industry	29	28	24	28
	Services	53	55	55	58
Share of labor (year)	Agriculture	48.1 (2005)	52 (2008)	43.6 (2007)	31.3 (2007)
	Industry	14.5 (2005)	N/a	21 (2007)	26.6 (2007)
	Services	37.4 (2005)	N/a	35.4 (2007)	38.7 (2007)

AGRICULTURE = LOW PRODUCTIVITY!

- 75% of the world's poor live in rural areas (WB, 2007)
- Rural poverty in Sri Lanka accounts for 82% of the poor

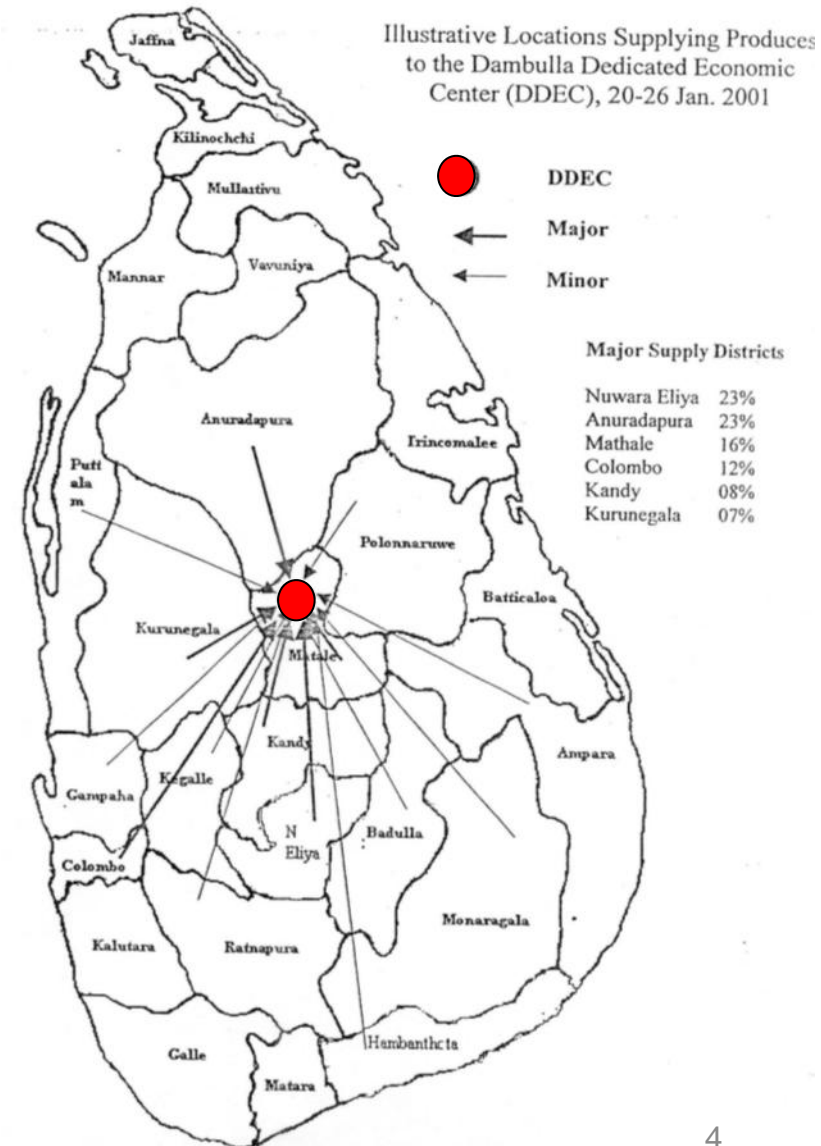
Why the low productivity?

- Lots of reasons:
 - Fragmented land ownership/ use
 - Market inefficiencies
 - Etc.

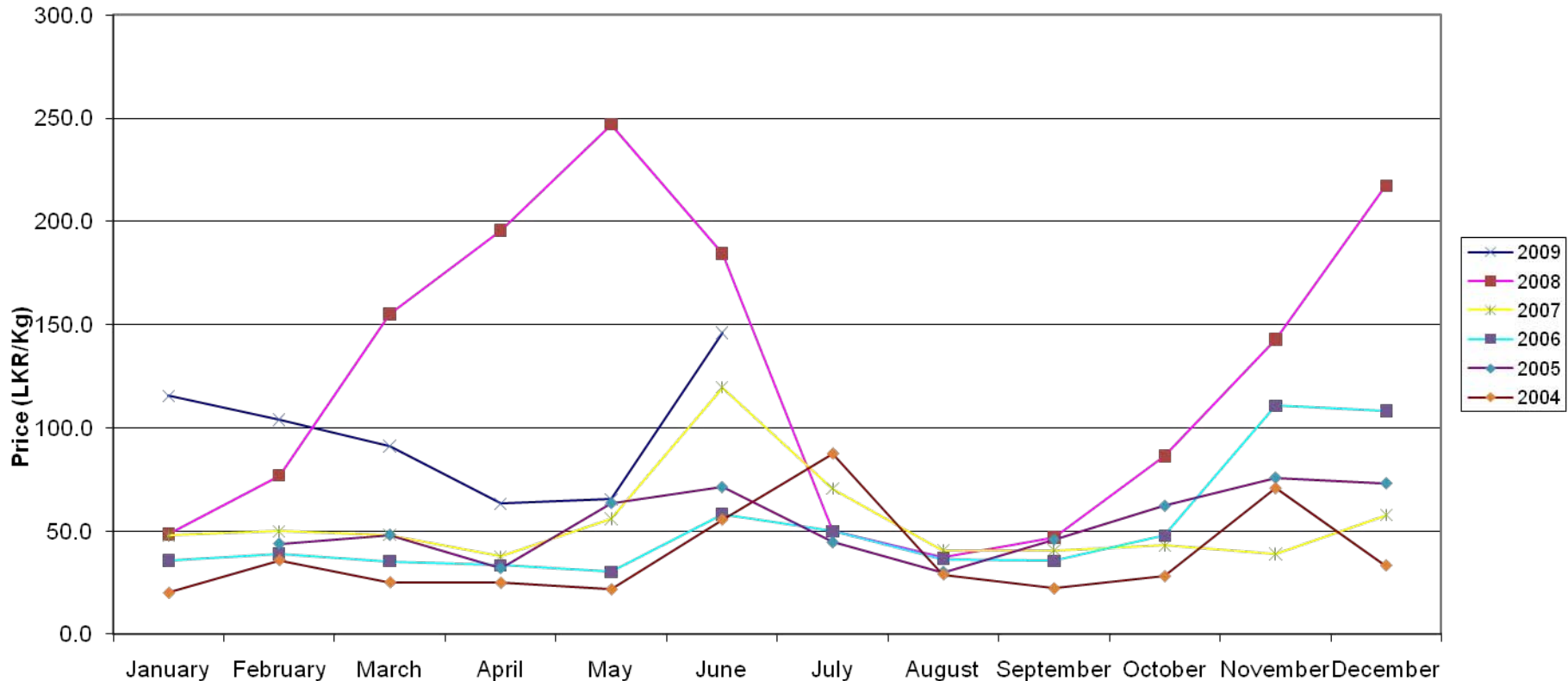
- Lets look at just market inefficiencies for the moment
 - Case in point: Sri Lankan markets

Agricultural markets in Sri Lanka

- 8 “regulated” markets in the country
- The largest is the Dambulla Dedicated Economic Centre (DDEC)
 - Handles nearly 80% of wholesale trade in agricultural commodities.
 - Located in the centre of the country with good transportation linkages to the rest of the country.



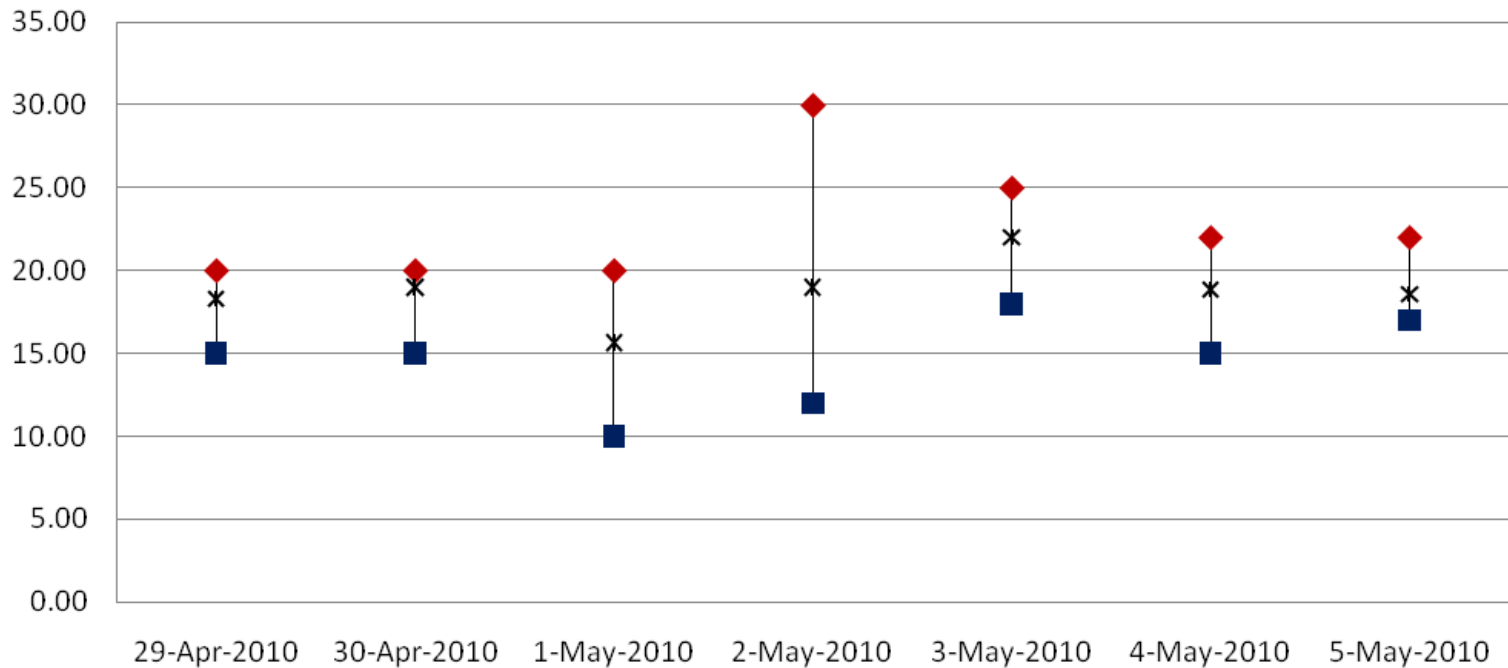
Sri Lankan agricultural markets have high seasonal price volatilityBut that's not all



Average monthly price for Cabbage at the DDEC (Jan 2004-June 2009)

...Inter-day and intra-day volatilities are high as well

Daily Price Movements at DDEC
Cabbage - Dambulla, Melsiripura



	29-Apr-2010	30-Apr-2010	1-May-2010	2-May-2010	3-May-2010	4-May-2010	5-May-2010
◆ High	20.00	20.00	20.00	30.00	25.00	22.00	22.00
■ Low	15.00	15.00	10.00	12.00	18.00	15.00	17.00
✱ Average	18.29	19.00	15.67	19.00	22.00	18.83	18.60



Reasons for high price volatility

- Supply vulnerable to adverse weather patterns – obvious but doesn't explain constant pattern of high price volatilities
- So what else....
 - Lack of market information (prices+)
 - Lack of standardized grading measures

Market inefficiencies in Sri Lanka's agricultural sector

- High information asymmetry with respect to market information
 - De Silva & Ratnadiwakara (2008) found that a 300 sample of farmers near Dambulla, Sri Lanka spent as much as 11% of their total production cost on information search, mainly at the deciding stage
 - Publishing weekly/ monthly average price or even price of one trade is not good enough. Furthermore even this is not easily accessible.
 - Multiple varieties of a single crop – but often only an average price encompassing multiple varieties are reported publicly
- Lack of standardized grading metrics
 - My *Thilina* tomato is not the same as your *Thilina* tomato
 - Difference of opinion on visual characteristics between trader and farmer
 - Informal system of “Vilasama” (Grade based on who the farmer is) is too rudimentary

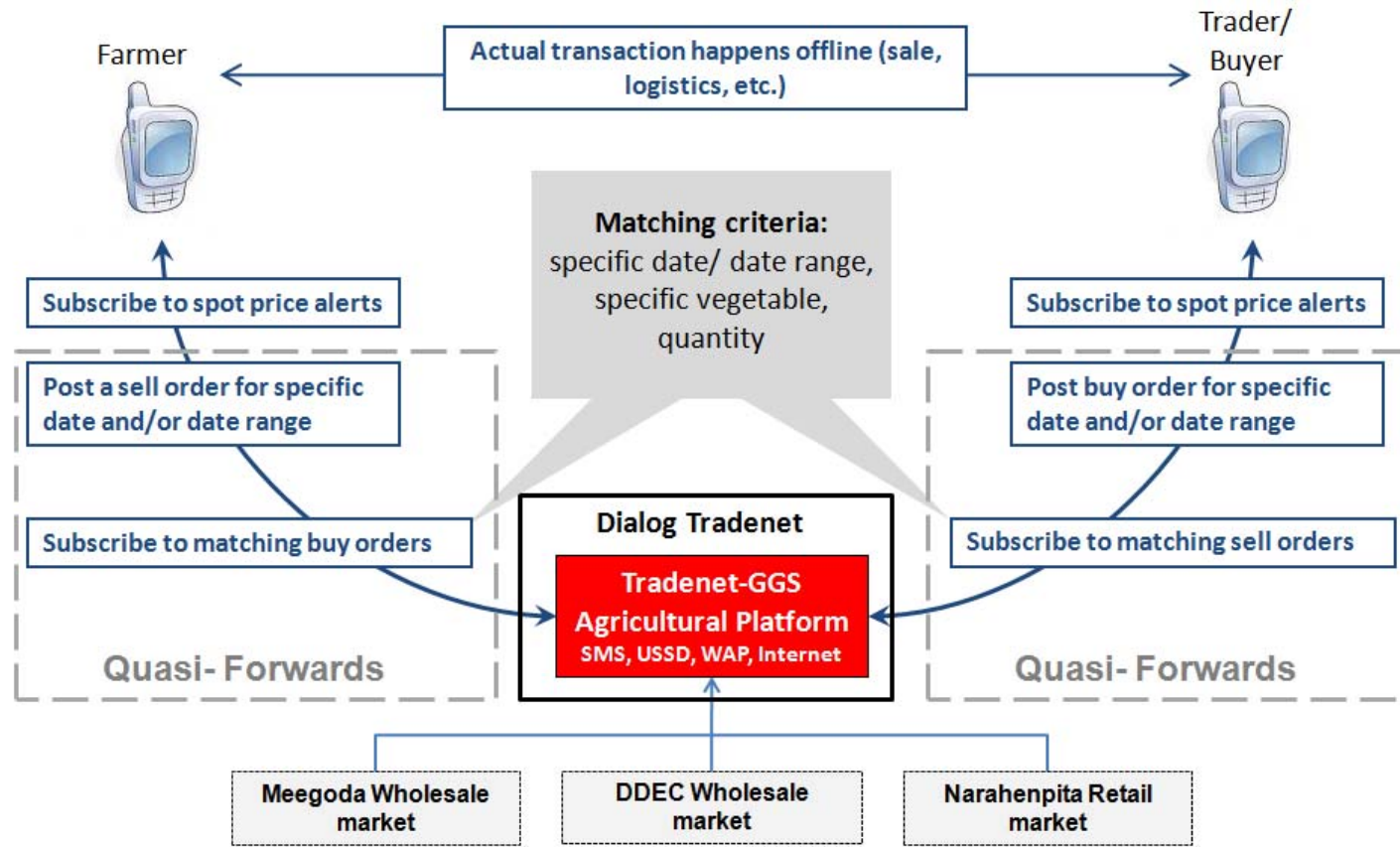
Improving price transparency through Tradenet (tradenet.dialog.lk)

Tradenet:

Partnership between a not-for-profit company called Govi Gnana Seva (GGS) and Sri Lanka's largest mobile operator (Dialog Axiata PLC)

Launched Dec 2009

GGS: main source of wholesale agricultural price information in the country

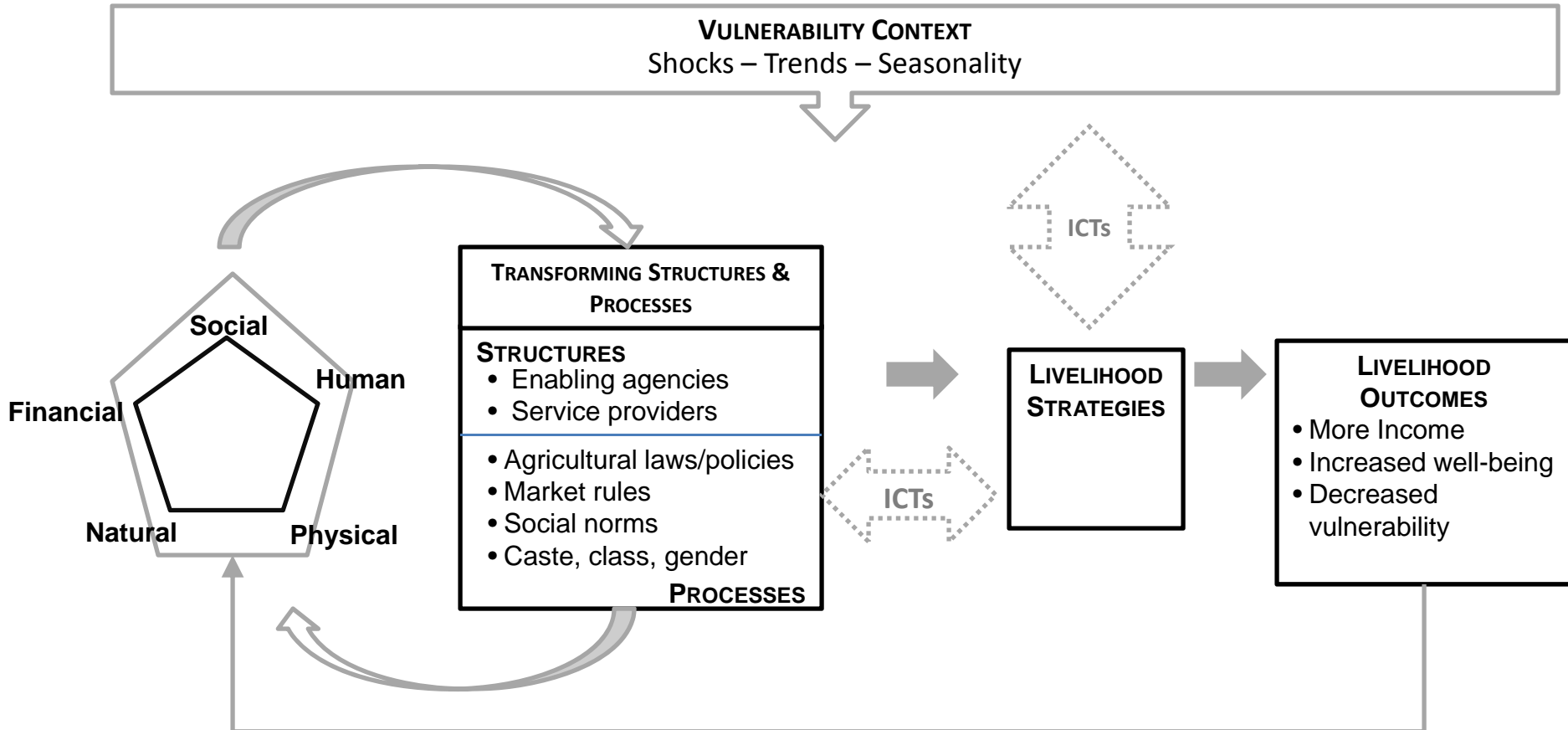




Livelihood impacts of Tradenet on small farmers in Sri Lanka

A poverty focused approach for accessing livelihood impacts of this new service

Sustainable Livelihood Framework (SLF)



Study particulars

- Study period: Dec 2009 – November 2010 (covered both Yala and Maha seasons)
- Two farmer groups with similar profiles were selected, with the second group serving as a control
- 4 rounds of surveys including a baseline
 - Assessed willingness to pay for new service, price received for crops, perception of service.
- Multiple focus groups discussions
 - To understand vulnerabilities, livelihood strategies, behavioral changes as a result of the new service & livelihood impacts

Farmer selection

	Intervention group	Control Group
Number of farmers	55	30
Location	10-15km from DDEC	10-15km from DDEC (opposite side of intervention group)
Household income	USD 100-200/ month	USD 100-200/ month
Land size	0.5-2 acres	0.5-2 acres
Crops	Cabbage, Sweet potato, Brinjol, Tomato, Beet root, Marrow, Gotukolla, Green Chilie, Okra, Long beans, Cauliflower, Big onion, Capsicum, Batana, Corn, Black gram, Knolkhol, Mimini Pumpkin	Cabbage, Beans, Brinjols, Papaya, Wing beans, Capsicum, Cauliflower, Long beans, Green Chilli, Drumstick, Melon, Big onion
Access to Tradenet	LKR 200/ month of phone credit was given, except for last 3 months. Those who didn't have Dialog SIMS (14) were given one.	No mention was made of Tradenet. Whilst some had heard of it by the end, but no one had used the service yet.
Level of engagement by researchers	Continuous including training on how to use the service	Only to conduct surveys

An SLF assessment of the overall impacts of the service on farmers (over a one year period)

SL Component		Intervention Group	Control Group
Livelihood assets	Financial	An average PREMIUM OF 6.4% on average daily market prices	An average LOSS OF 2.3% on average daily market prices
	Social	Increase in interactions with traders, other farmer groups, relatives and neighbors; increased trust in market negotiations with traders.	No increase in interactions
	Human	Increased knowledge of price trends (their crops + new crops)	No changes noted
Vulnerabilities		Reduced vulnerability to price volatility	Not assessed
Livelihood strategies		<ul style="list-style-type: none"> • Chose harvesting and selling times based on price alerts; • Hoping to leverage their strategic advantage over farmers with lesser price information to grow higher value crops in the short term. 	Not assessed

Conclusions

- ***Timely & accurate*** market price information does have an impact on farmers' livelihoods
- Reduction in information asymmetry even with respect to market prices allows farmers to:
 - Find a better crop mix to hedge against market volatilities
 - Improve their decision making ability
- Forward trades not conducive till there is some form of enforcement possible
 - either legal (may be pointless in developing countries)
 - social (aggregation, repeat business might create right incentives)

Recommendations

- ***Meet the demand for other services***
 - This study reveals the need for reliable crop advisory service.
 - But other services will also be needed e.g. warehousing, cold storage, crop insurance, crop working capital loans.
- ***Building stakeholder support***
 - Not just farmers, but traders and government
- ***Improve capacity of farmers***
 - Capacity building for farmers: do not need much assistance on using the service, but need help to understand how they can leverage service in future

Recommendations (contd)

- ***Market reform***: the evidence of livelihood impacts in the agricultural sector must be leveraged to persuade government to reform market functioning so as to increase price transparency further e.g. utilizing auctions like in India.
- ***Introduce transparent and standardized grading metrics***

Thank you

More information at www.lirneasia.net

Search term: “agStrategy”