



INITIATIVE ON
Rethinking
Food Markets

Micro-equity contracts for livestock in Bangladesh

Kate Ambler, Mehrab
Bakhtiar, Alan de Brauw,
Riad Uddin

Agricultural finance in Bangladesh



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- Smallholders have limited access to finance, and struggle to access credit from banks and other financial institutions
- Microfinance was an innovation in this space, expanding access, but can be expensive and inflexible
- The private sector has been developing new models that seek to harness new technology and financing mechanisms to improve on the microfinance model

Study motivation



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- Access to low-cost/flexible financing options
 - Cattle farmers in Bangladesh don't have easy access to credit
 - Existing credit facilities from NGOs are also costly
 - Due to the high operating costs in rural locations, banks are unwilling to provide loans to farmers.
- Access to market/logistics
 - Farmers often do not receive a fair price for their final product in the local market.
- Quality inputs
 - Quality inputs are mostly expensive and may not be easily accessible.
 - Although local input producers may offer lower-priced inputs, may not be high quality

Profit sharing and asset-based financing



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- Company purchases cow, farmer takes care of cow
- Cow is sold 4 - 5 months later, “profit” split between farmer and company
- Cow is insured against death
- **Profit sharing:** Spreads risk between farmer and financier
- **Asset-based financing:** Reduces risks for financier
- Design rooted in traditional product present in context

Investing in Agriculture, Simplified

We seek to improve the lives of 10 Million farmers in Bangladesh.
Download the WeGro App and join us on our journey.



Long Term Project

Company
received financing
from:

- Peer to peer financing
- Venture capital
- Bank financing



Cattle Trade-6

₹ 50,000 /Unit



Sonali Chicken – 2

₹ 20,000 /Unit

Project design

Control villages: No WeGro activities

Profit-sharing villages:

- WeGro offered profit-sharing contract to eligible households
- WeGro assists with purchase of cow, preferably preferred breed
- WeGro supervises sale of cow
- Farmer payout is $\frac{2}{3}$ of sale price – buying price

Loan villages:

- WeGro offered a standard loan contract to eligible households
- WeGro assists with purchase of cow, preferably preferred breed
- WeGro supervises sale of cow
- Farmer pays WeGro back the purchase price plus 10% interest





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Sampling strategy

- Villages selected from list shared with research team by WeGro
 - 105 villages in Joypurhat, Bogura, Rangpur, and Gaibandha districts in northwest Bangladesh
- Research team conducted listing survey to determine household eligibility
 - Adequate facilities to shelter cow, prior experience
 - Interest and willingness to engage in study
- From eligible households, random selection of 10 households per village for baseline: 1,517 household
- Village level randomization following baseline
 - Created “blocks” of 7 villages
 - 3 control, 3 profit sharing, 1 loan
- Household level randomization
 - Women perform most labor for cattle fattening but no market access
 - Random assignment at household level of contract offer to male or female
- Treatment offers made following baseline and randomization

Sample description



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	<i>Mean</i>
Average per capita weekly food expenditure	509 taka (4.25 USD)
Female education	7.8 years
Male education	7.8 years
Female daily hours on livestock rearing	2.5 hours
Male daily hours on livestock rearing	1.7 hours
Female daily work hours	5.6 hours
Male daily work hours	10.6 hours

Operational challenges

- Farmer concerns: Terms of financing, timing, fears of theft, eligibility concerns, health concerns, financial concerns
- Livestock health issues: Spread of Lumpy Skin Disease
- Natural disasters: Heavy rainfall and floods affected supply chain and farmer capacity
- Political instability: Demonstrations/strikes around elections in December 2023, demonstrations leading to change in government in August 2024
- Funding challenges: Decline in peer-to-peer funding
- Operational challenges: New fintech company learning on the ground

Implementation data

	N	Overall	Profit Sharing	Loan	Female Offer	Male Offer
		<i>Mean</i>				
Ever accepted the offer	864	0.372	0.396	0.297	0.369	0.374
Ever received cow if accepted offer	321	0.642	0.624	0.714	0.642	0.642
Ever did not receive cow if accepted offer	321	0.555	0.581	0.444	0.591	0.519
Ever received cow in both cycles	864	0.046	0.043	0.057	0.056	0.037
Cow buying price (taka)	246	80,059	79,383	82,299	79,500	80,645
Cow buying weight (kg)	246	214	212	220	215	213
Cow selling price (taka)	234	96,340	95,797	98,150	97,809	94,741
Cow selling weight (kg)	227	254	253	258	252	256
Price difference (taka)	234	15,941	15,850	16,242	18,454	13,203
Weight difference (kg)	227	38	38	39	36	40

Midline data

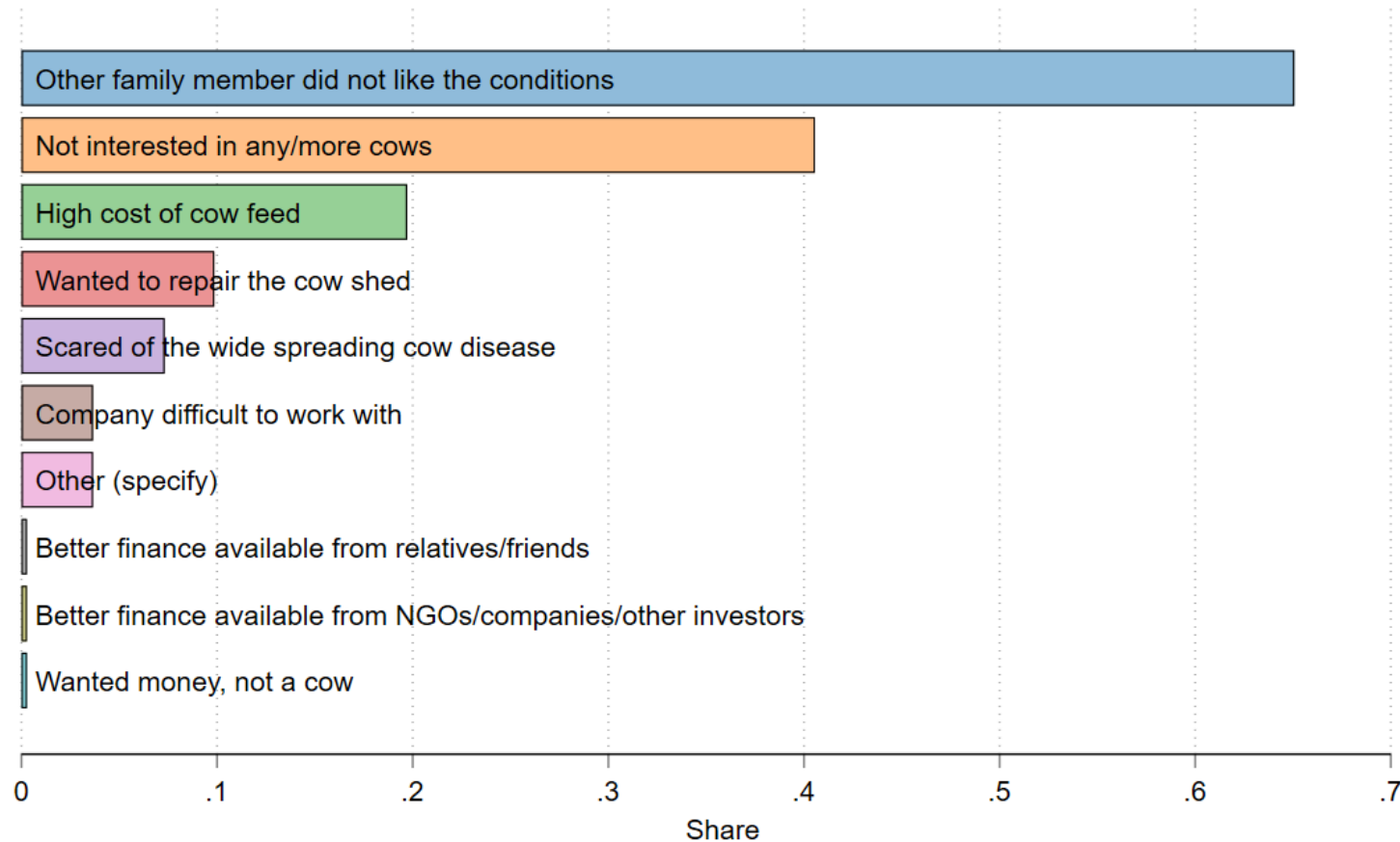


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	N	Overall	Profit Sharing	Loan	Female Offer	Male Offer
		<i>Mean</i>				
Received visit	811	0.959	0.957	0.965	0.958	0.960
Offered contract	778	0.986	0.988	0.979	0.987	0.984
Accepted offer	767	0.537	0.548	0.503	0.556	0.518
Received a cow	811	0.243	0.252	0.215	0.244	0.241
Received a cow if offered & accepted contract	412	0.478	0.486	0.453	0.465	0.492

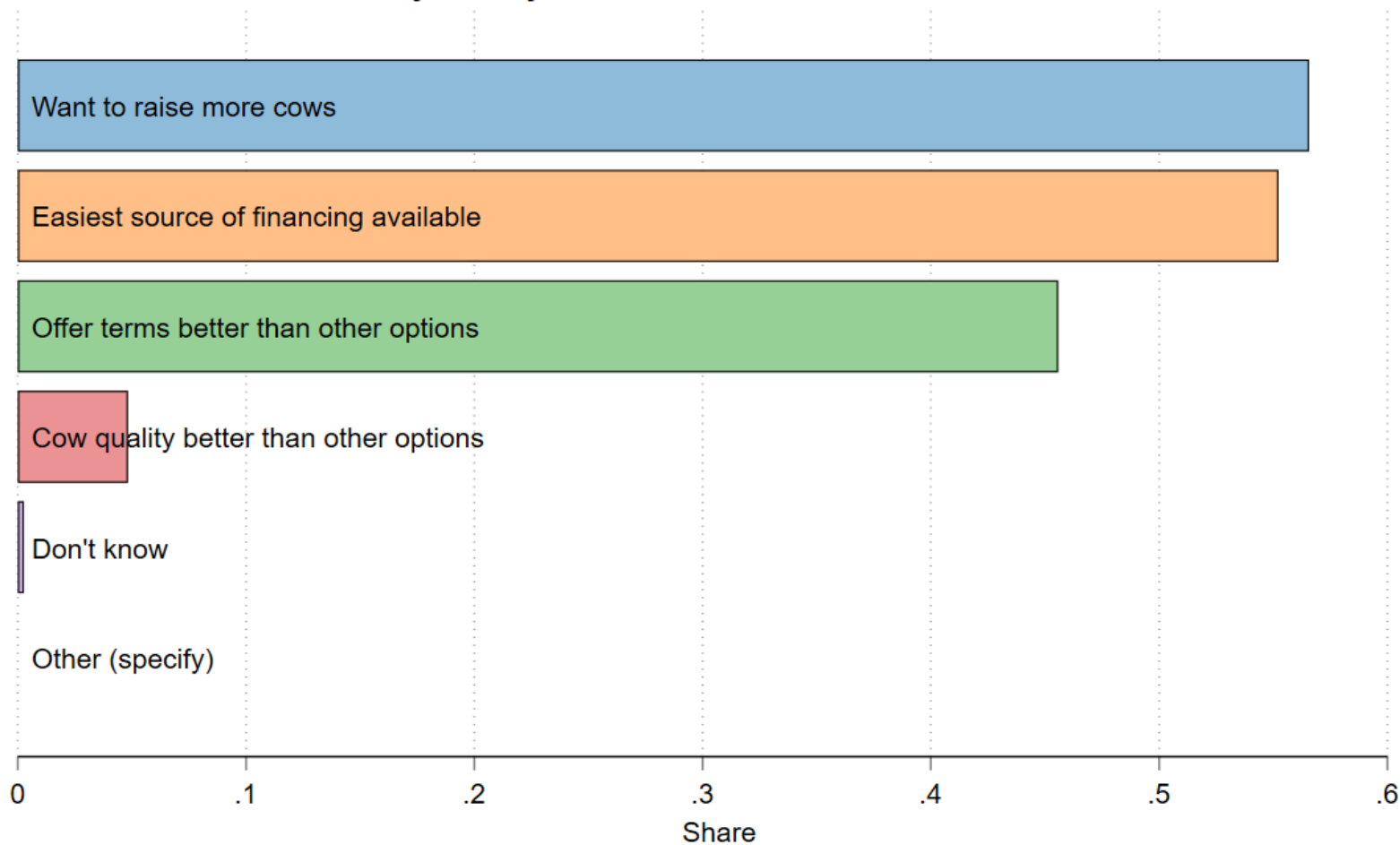
Midline data

Why did you refuse the offer?



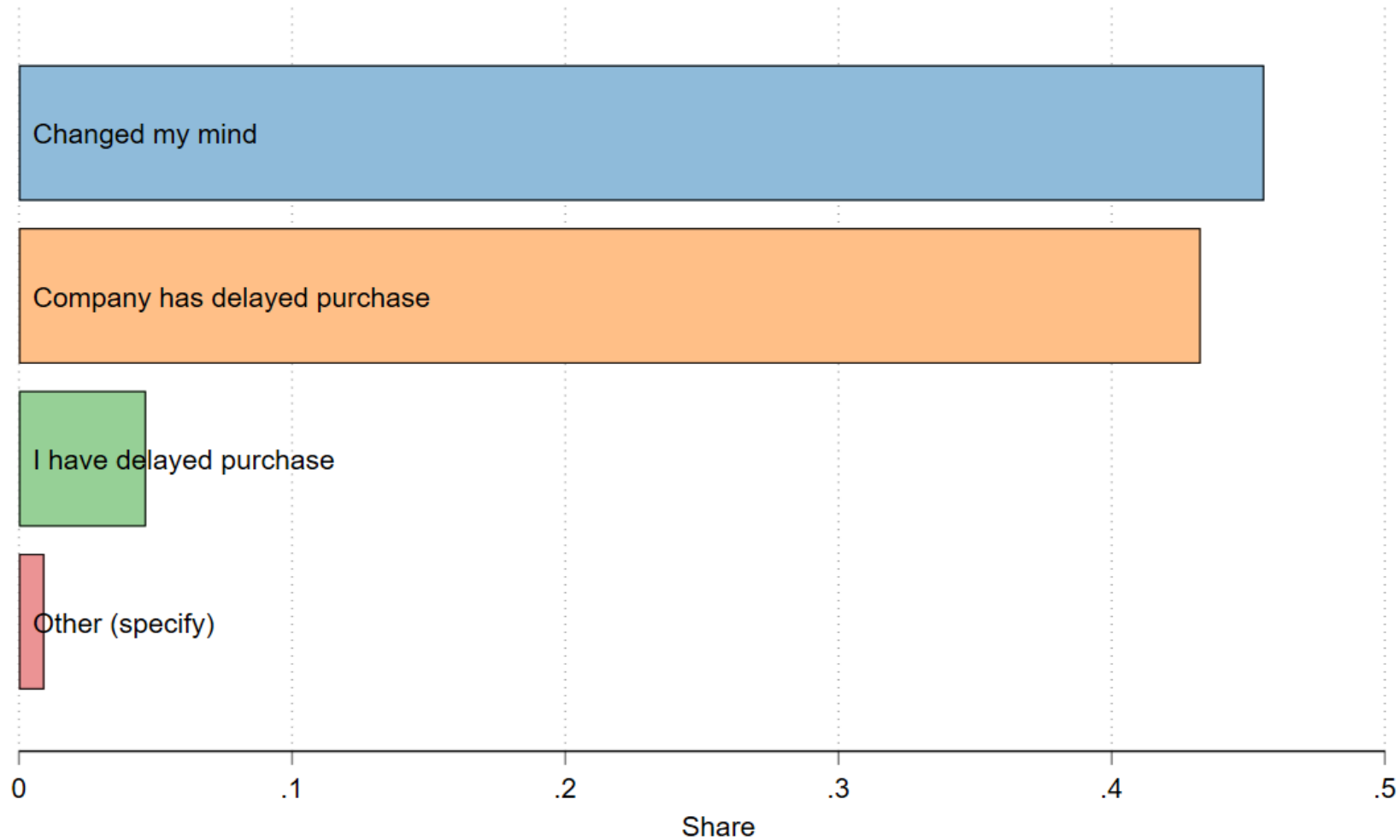
Midline data

Why did you want to receive a cow?



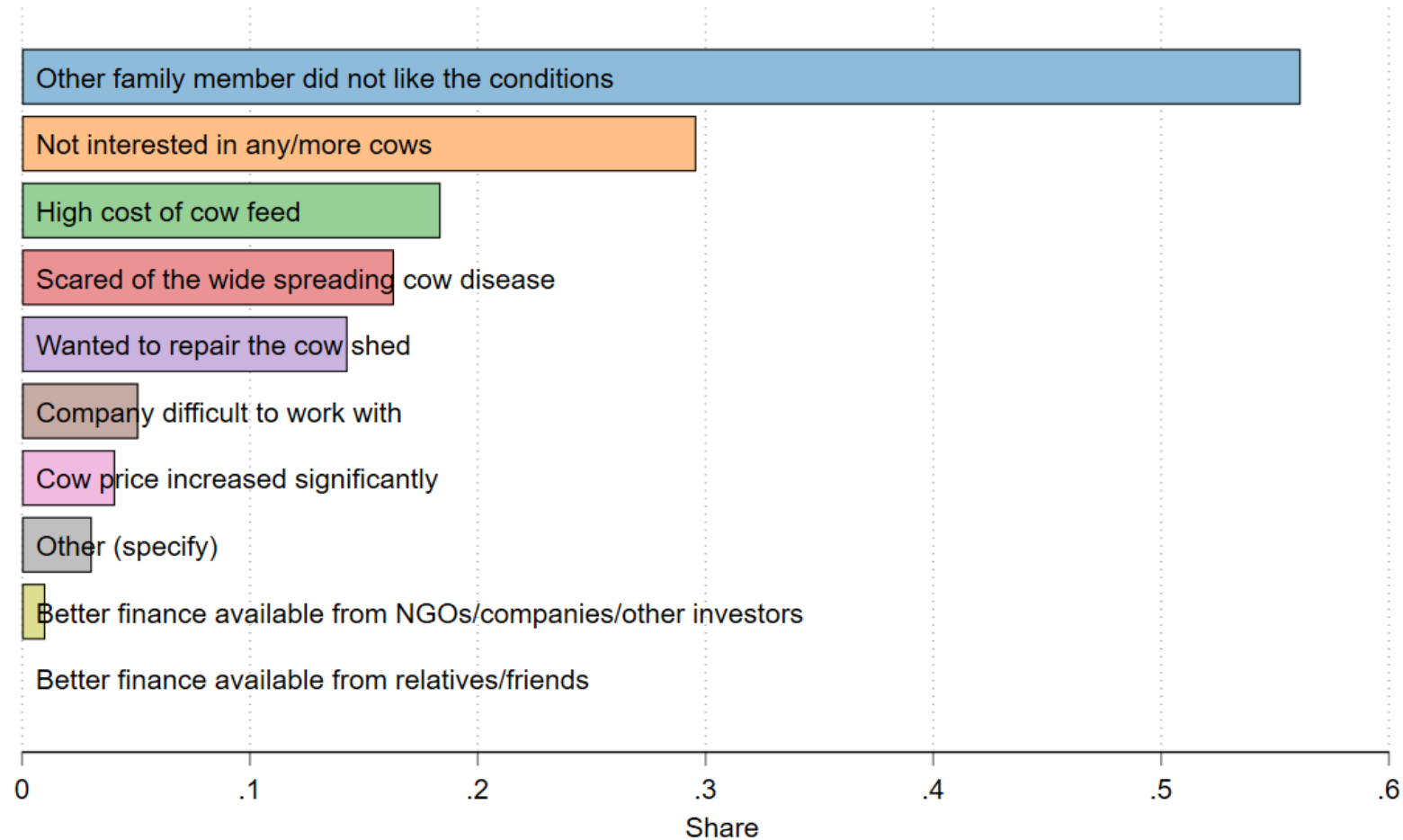
Midline data

Why did you not receive a cow?



Midline data

Why did you change your mind?



Midline data



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	Overall	Profit Sharing	Loan	Female Offer	Male Offer
	<i>Mean</i>				
# of cows owned today	1.989	1.897	2.214	1.897	2.052
# of cows owned since baseline (no longer owned)	0.465	0.495	0.561	0.528	0.494
Total # of cows owned since baseline (past + current)	2.454	2.393	2.776	2.425	2.546
# of cows financed through: Profit sharing from WeGro	0.181	0.384	0.112	0.330	0.300
# of cows financed through: Profit sharing from local investor	0.106	0.079	0.147	0.088	0.105
# of cows financed through: Loan from WeGro	0.043	0.007	0.259	0.060	0.083
# of cows financed through: Loan from NGO	0.113	0.072	0.056	0.042	0.094
# of cows financed through: Bank loan	0.008	0.005	0.021	0.000	0.018
# of cows financed through: Loan from other source	0.009	0.005	0.000	0.004	0.004
# of cows financed through: Self financing	1.388	1.320	1.350	1.326	1.329
# of cows financed through: Interest-free loan	0.015	0.010	0.028	0.011	0.018
# of cows born or received as gift	1.374	1.281	1.486	1.302	1.362