

# Shan Agriculture and Rural Economy Survey: Selected Highlights

Ben Belton, Khin Zin Win, Aye Myintzu, Zin Wai Aung, Hnin Ei Win, Zaw Min Naing, Soe Thu Lin, Khaing Wah Soe, Sithu Kyaw, Eaindra Thein Thein Thu, Khun Moe Thun, Peixun Fang

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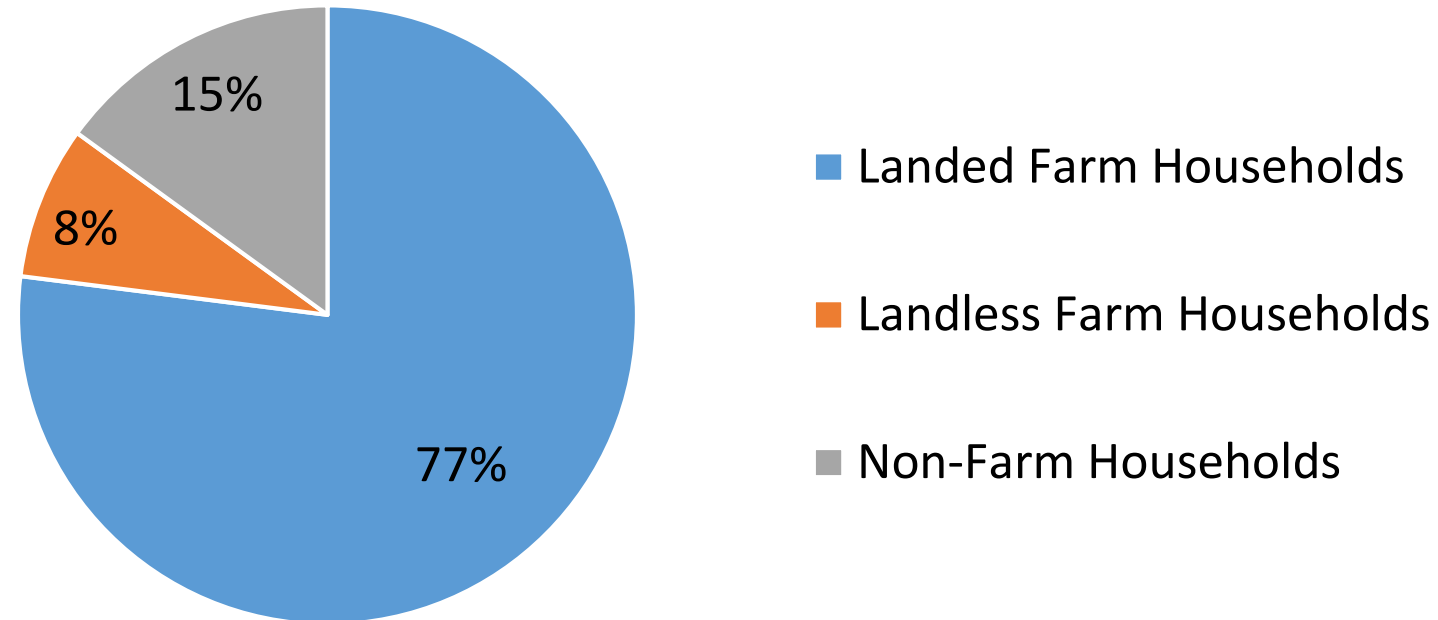
# SHARES Rationale

- Generate overview of South Shan rural economy and agriculture, and nature of recent changes
- Focus on maize and pigeon pea value chains – two major commercial crops produced for export
- Developed hypotheses based on review of literature, ‘conventional wisdom’, and field observations and interviews during scoping
- Special attention to arguments made in “*CP maize contract farming in Shan State, Myanmar*” (Woods, 2015)
- Set out to test hypotheses empirically, using household survey
- This presentation: Selected findings on Land, Off-farm employment, Migration, Mechanization, Maize & Pigeon Pea



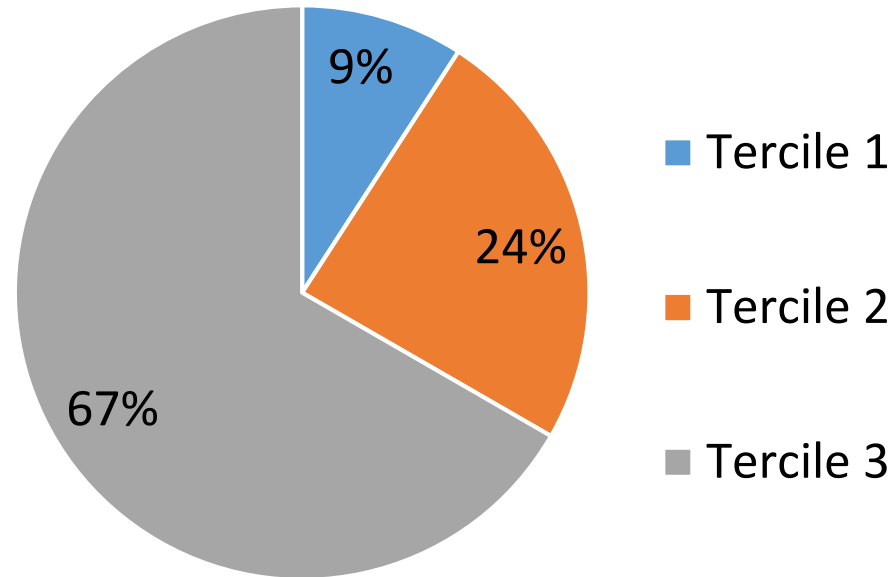
# LAND

# High levels of access to agricultural land



85% of HH have access to land (60% in DZ; 20% in Delta)

# Small landholdings

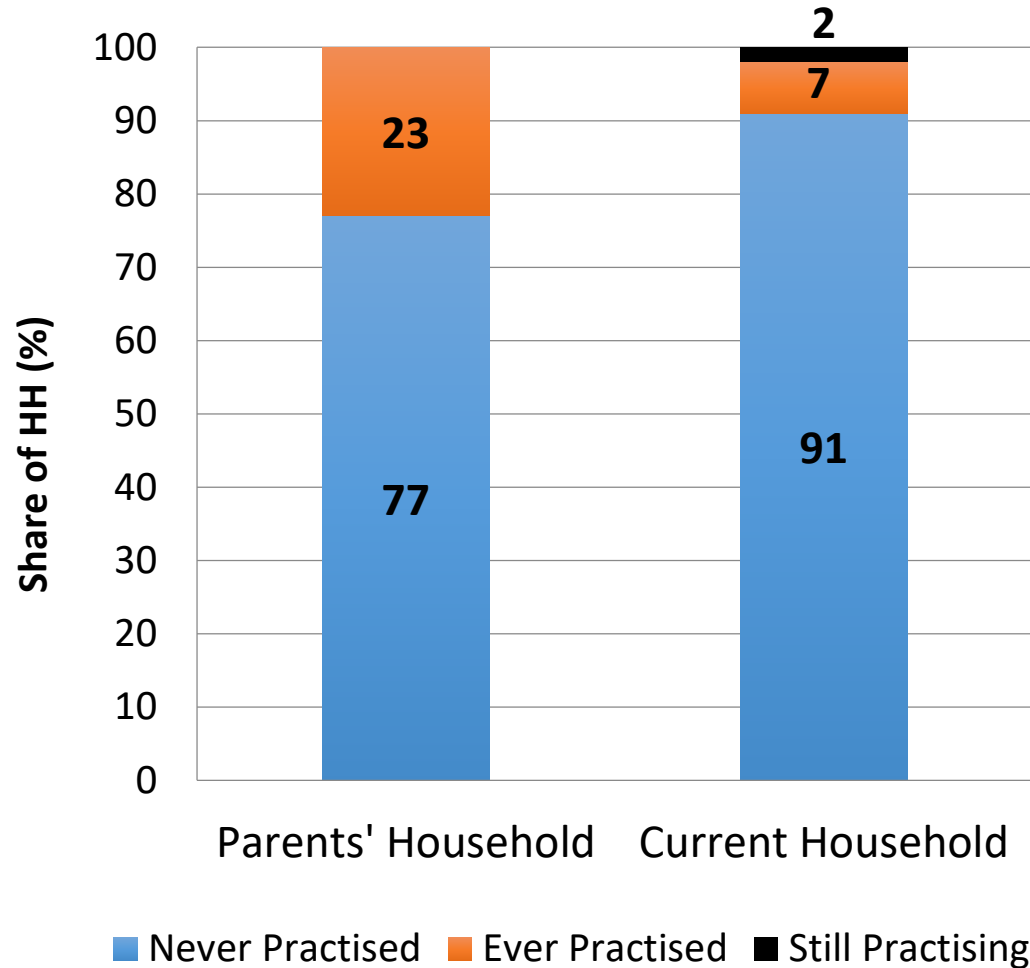


- Average Land Owned by Landed Farm Households
  - All – 3.5 acres
  - T1 – 1.5 acres
  - T2 – 4.3 acres
  - T3 – 10 acres

(Smaller on average but more evenly distributed than DZ & Delta)



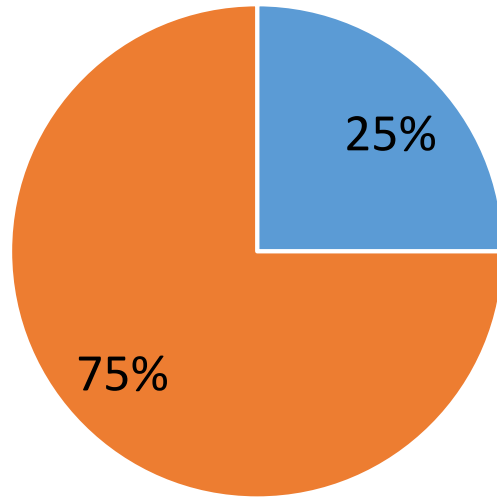
# The land frontier has closed



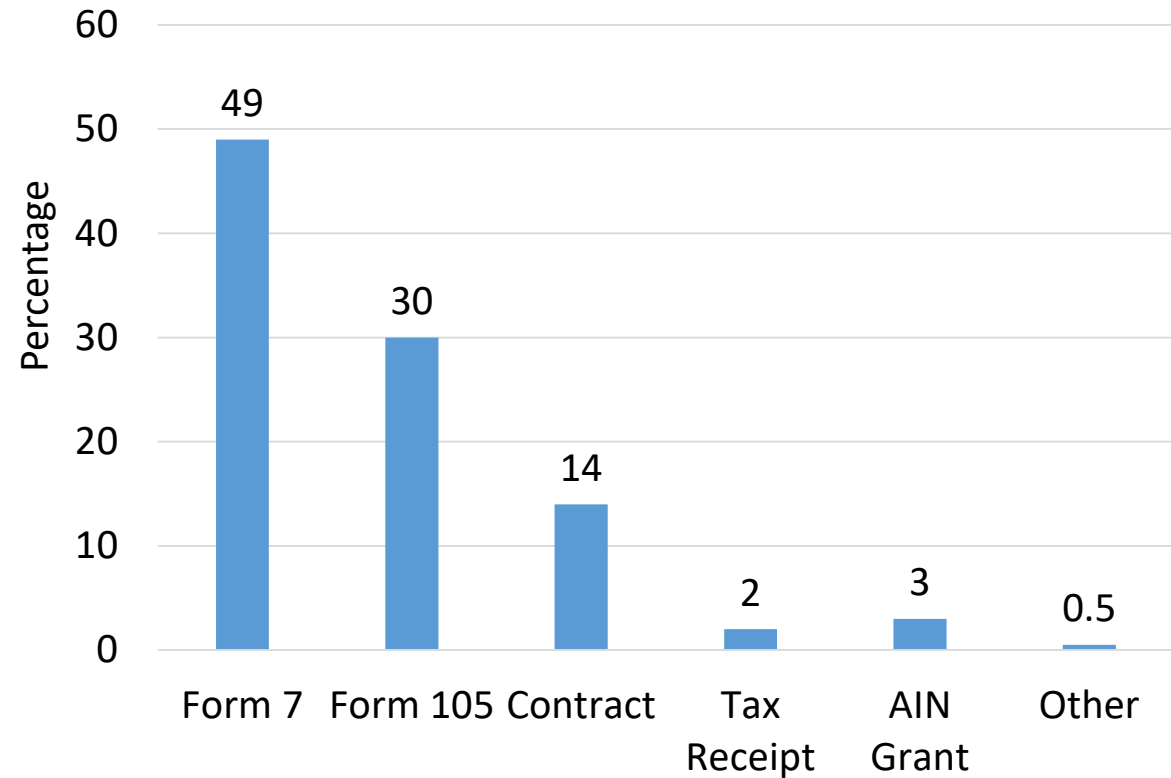
**Share of HH in present and parents' generation practicing shifting cultivation**

Reasons of Stopped Shifting Cultivation	% of Households
Not possible to access more forest land	41
Hard to reach area	21
Sedentary cultivation more profitable/easier	13
Insufficient labor	12
Unable to control weeds	6
Prevented from doing by authorities	4
Insufficient rainfall to grow crops	2

# Limited land titling

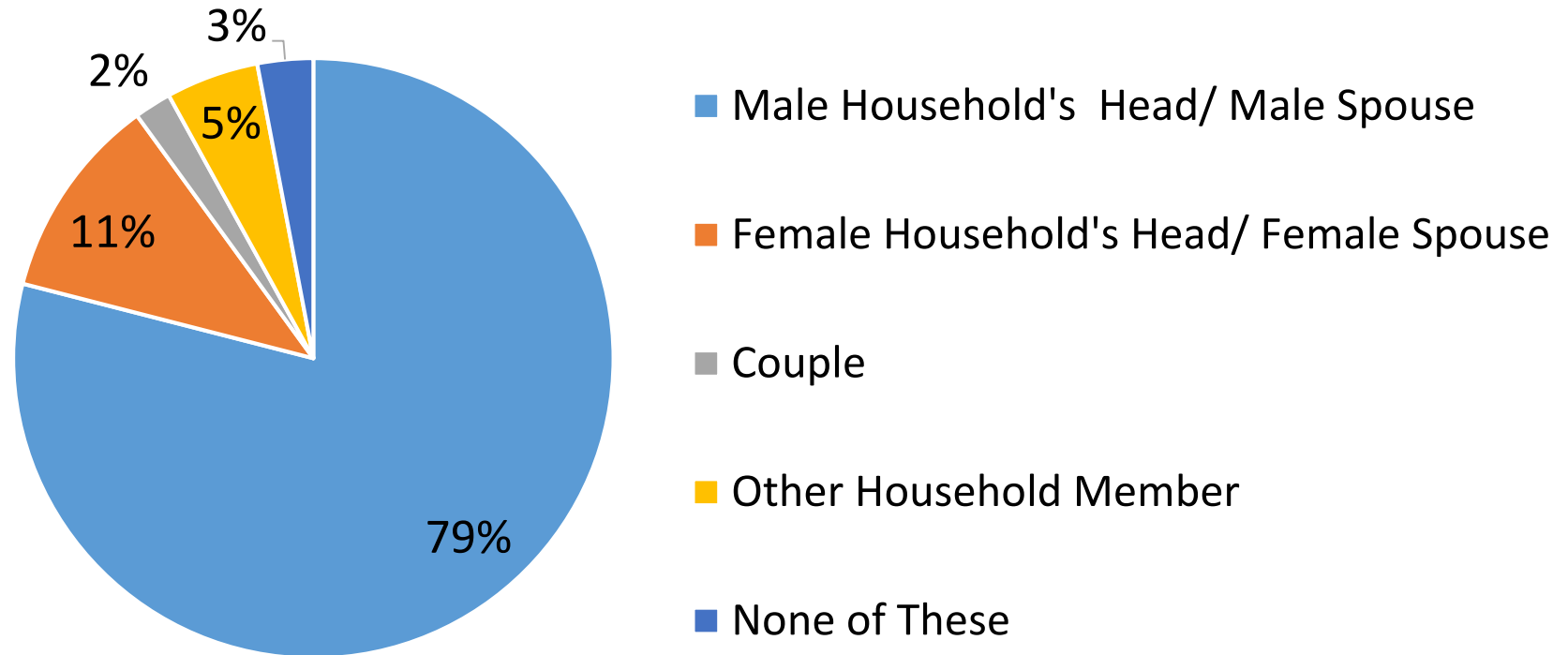


- Agri: Parcels with Land Document
- Agri: Parcels without Land Document



Most land tenure insecure (untitled land defined as 'wasteland');  
Cannot be used access formal credit (e.g. MADB)

# Land titles overwhelmingly in name of male HH head





# OFF-FARM

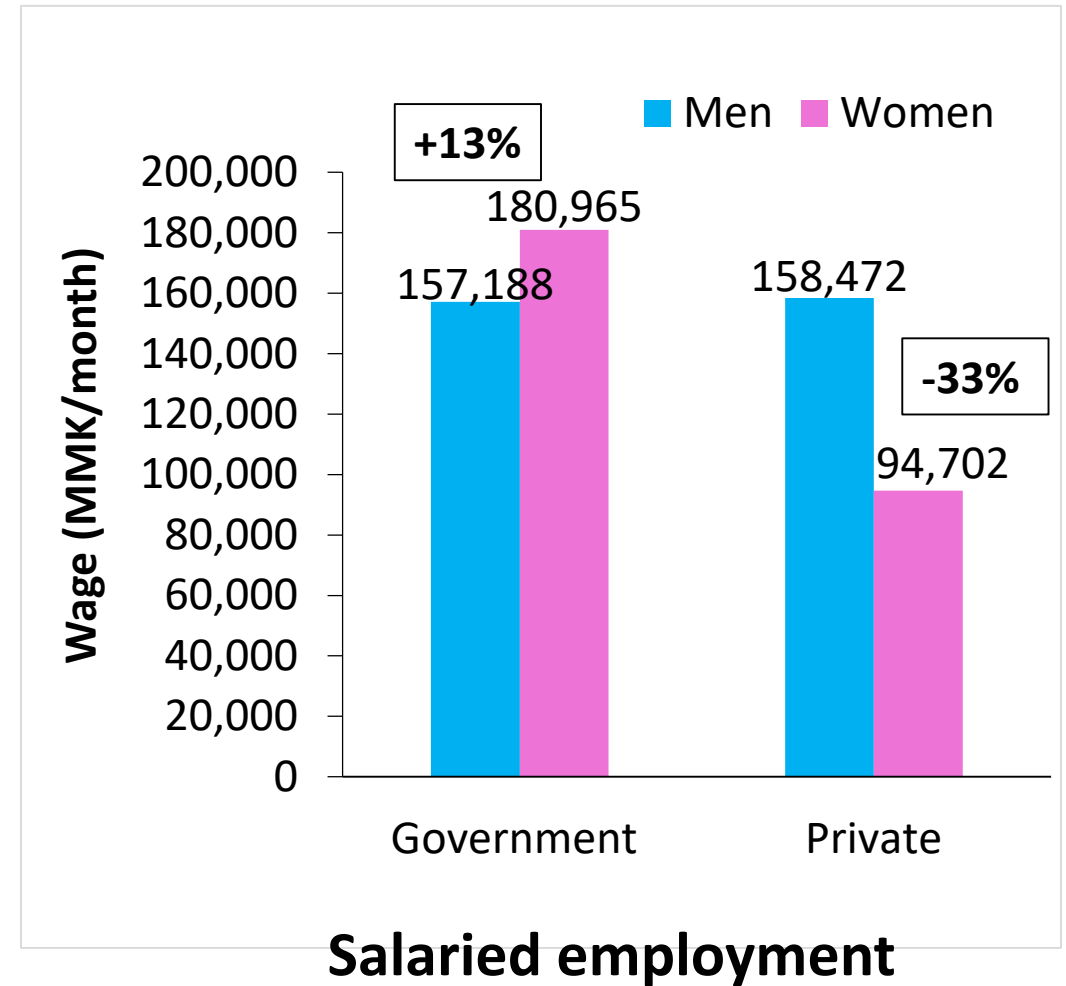
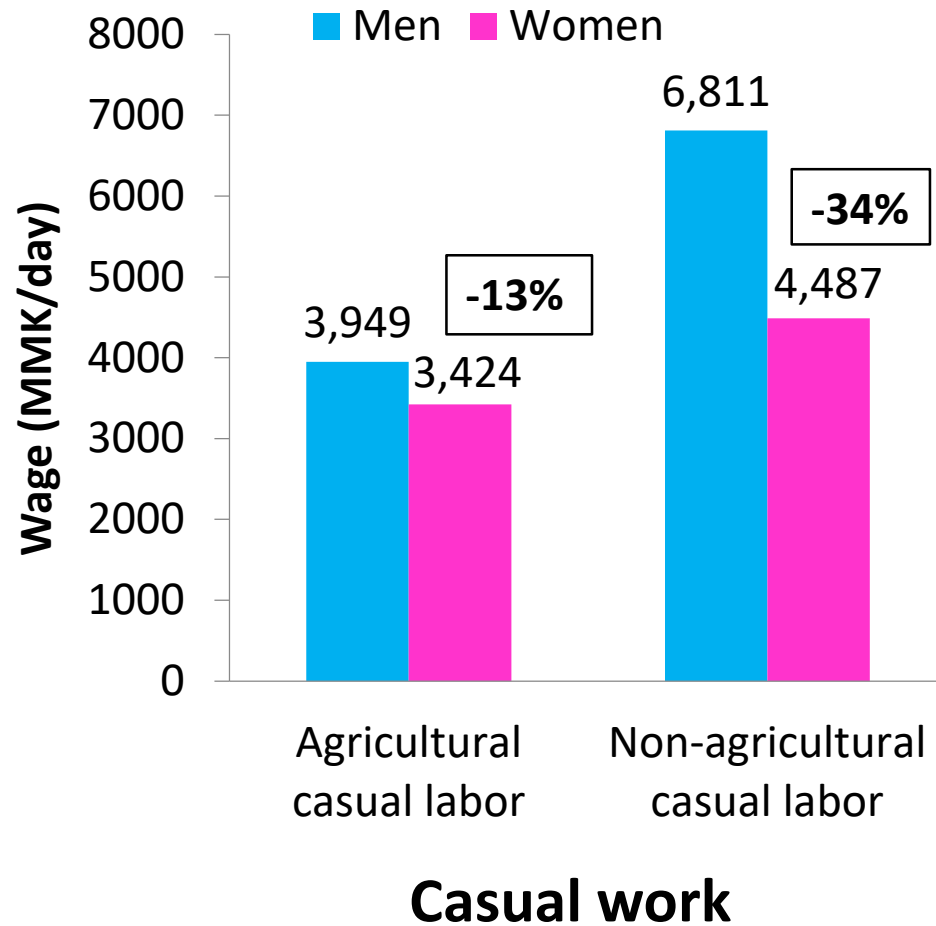


# Off-farm employment is important, irrespective of landholding

Type of Employment	Land Ownership				
	All	Landless	Tercile 1	Tercile 2	Tercile 3
<b>Off-farm employment</b>	<b>76</b>	<b>95</b>	<b>80</b>	<b>74</b>	<b>59</b>
- Casual Labor	61	75	66	63	43
- Non-Farm Enterprise	24	31	20	25	20
- Salaried Worker	7	17	6	3	4
- Natural Resource Extraction	5	8	6	4	3

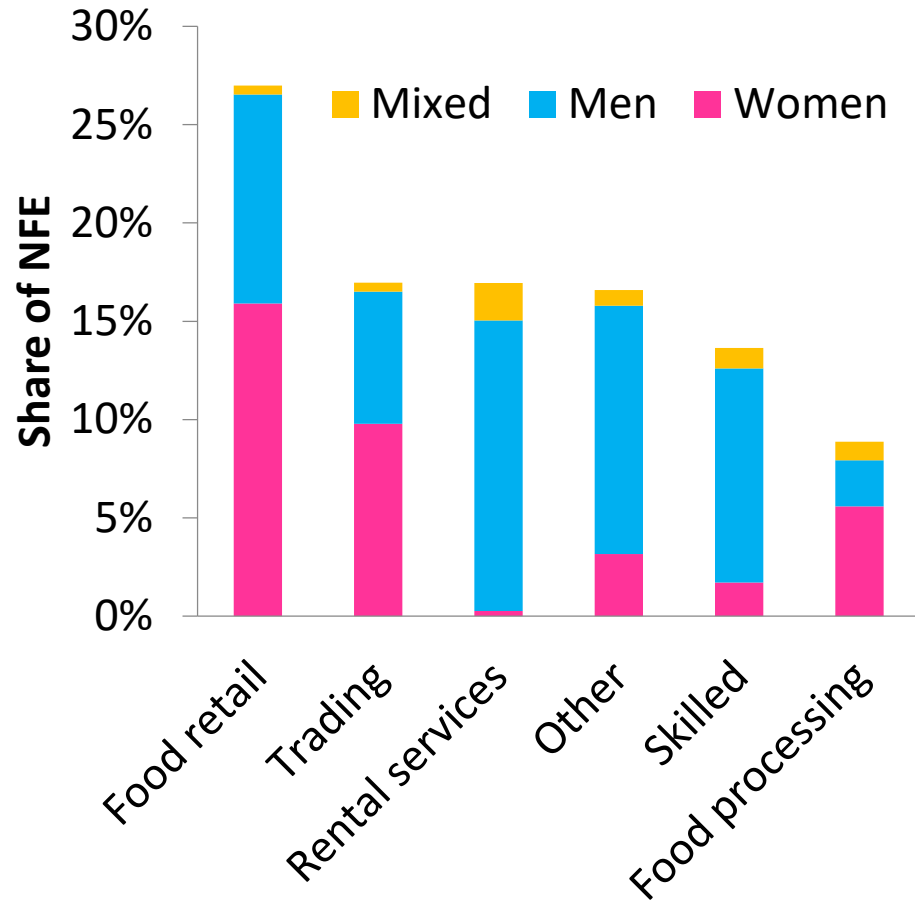
HH engagement in off-farm employment, by landholding group (%)

# Gendered employment characteristics

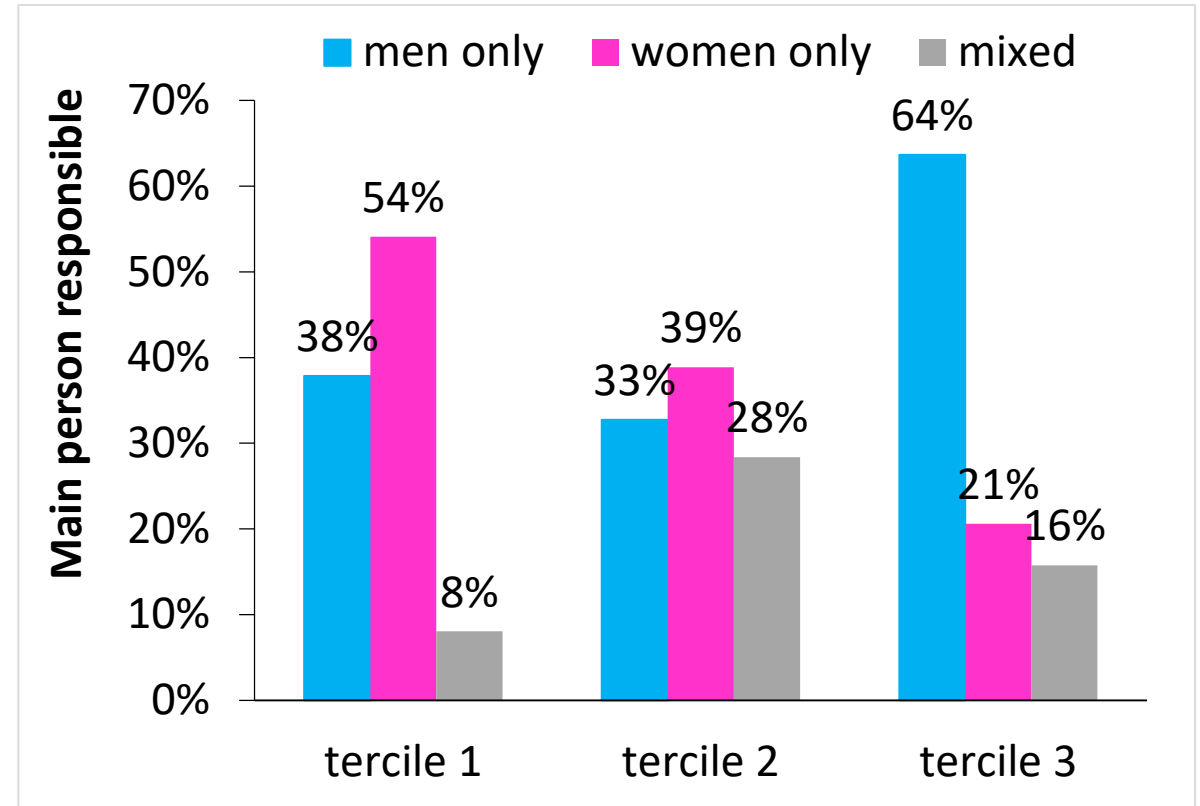


Rates of workforce participation by gender similar, but different occupation types and rates of pay

# Gendered differences in NFE

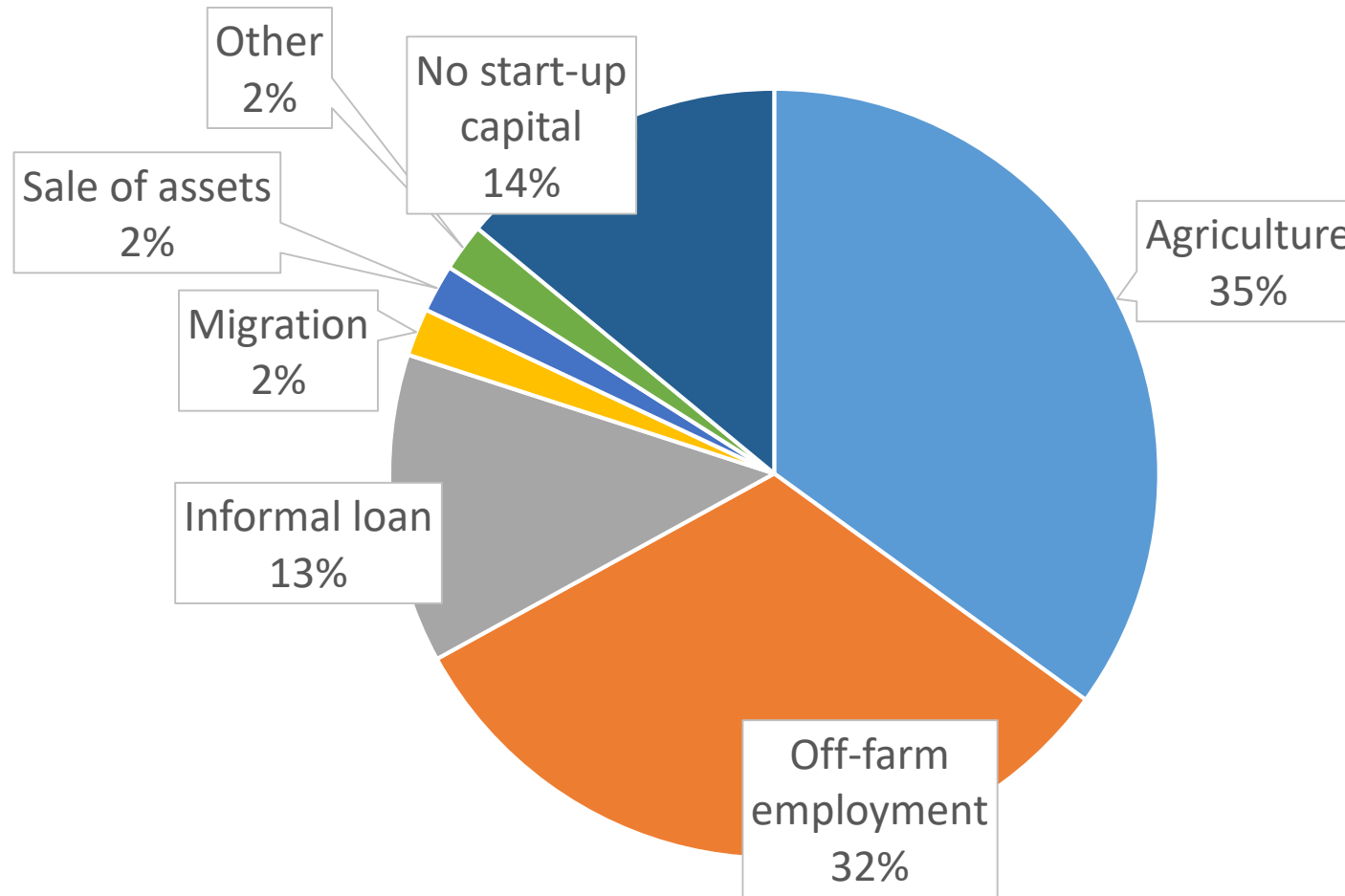


**Main person responsible for operating NFE, by enterprise type**



**Main person responsible for operating NFE, by enterprise size**

# Agriculture and off-farm employment are main sources of startup capital for NFE



**Sources of start-up capital for NFE**



# MIGRATION

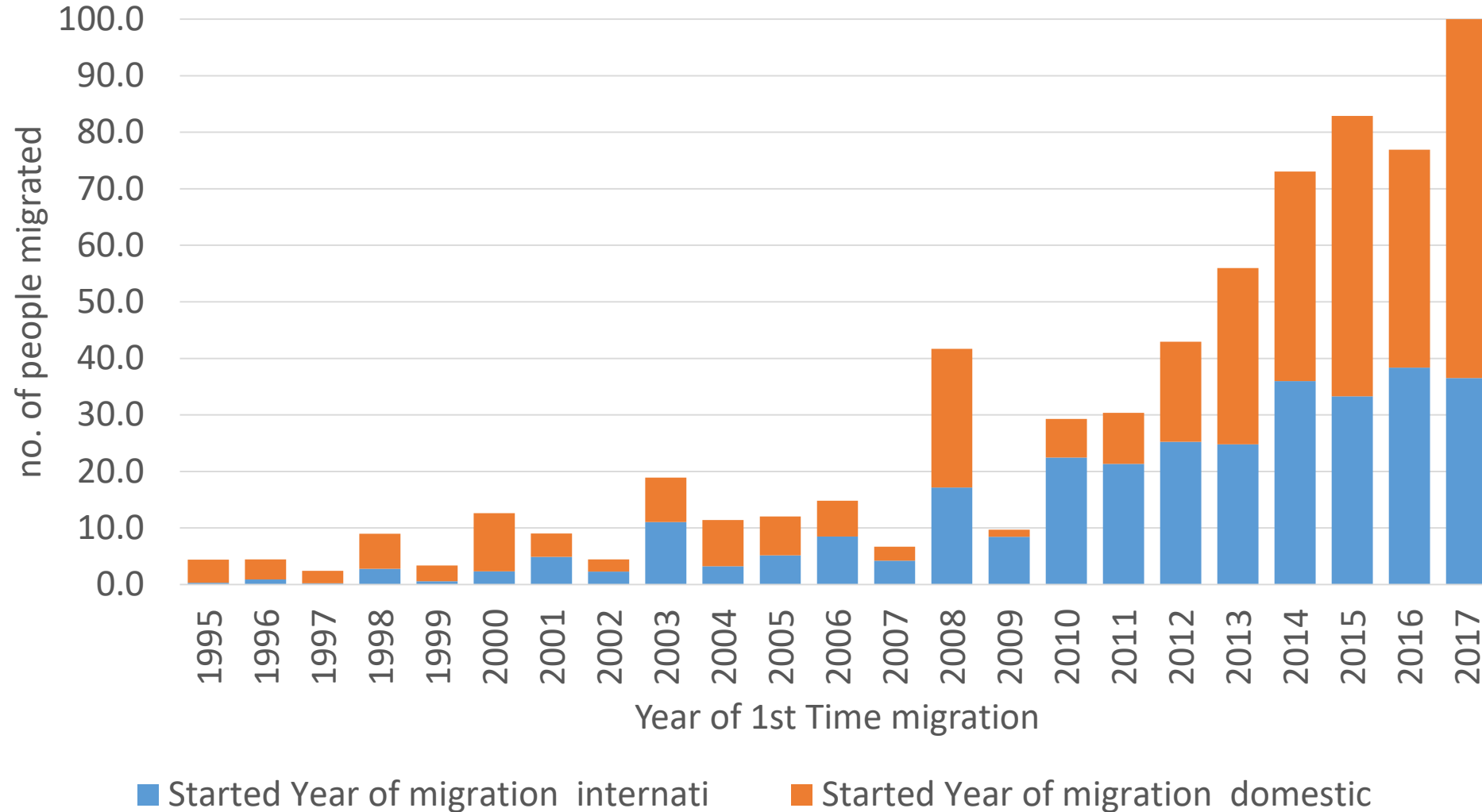


# Moderate levels of migration; mix of international and domestic

- 14% of HH have a migrant at present; 7% of individuals of working age are migrating (c.f. DZ 30% HH; Mon 49% HH)
- Migrants are young: 84% aged 15-29 at time of migration
- Roughly even gender split – Men 53%; Women 47%
- More current international migrants than domestic (65:35), but domestic increasing rapidly
- International: 88% Thailand
- Domestic: 79% urban; 63% within Shan



# Domestic migration growing faster than international



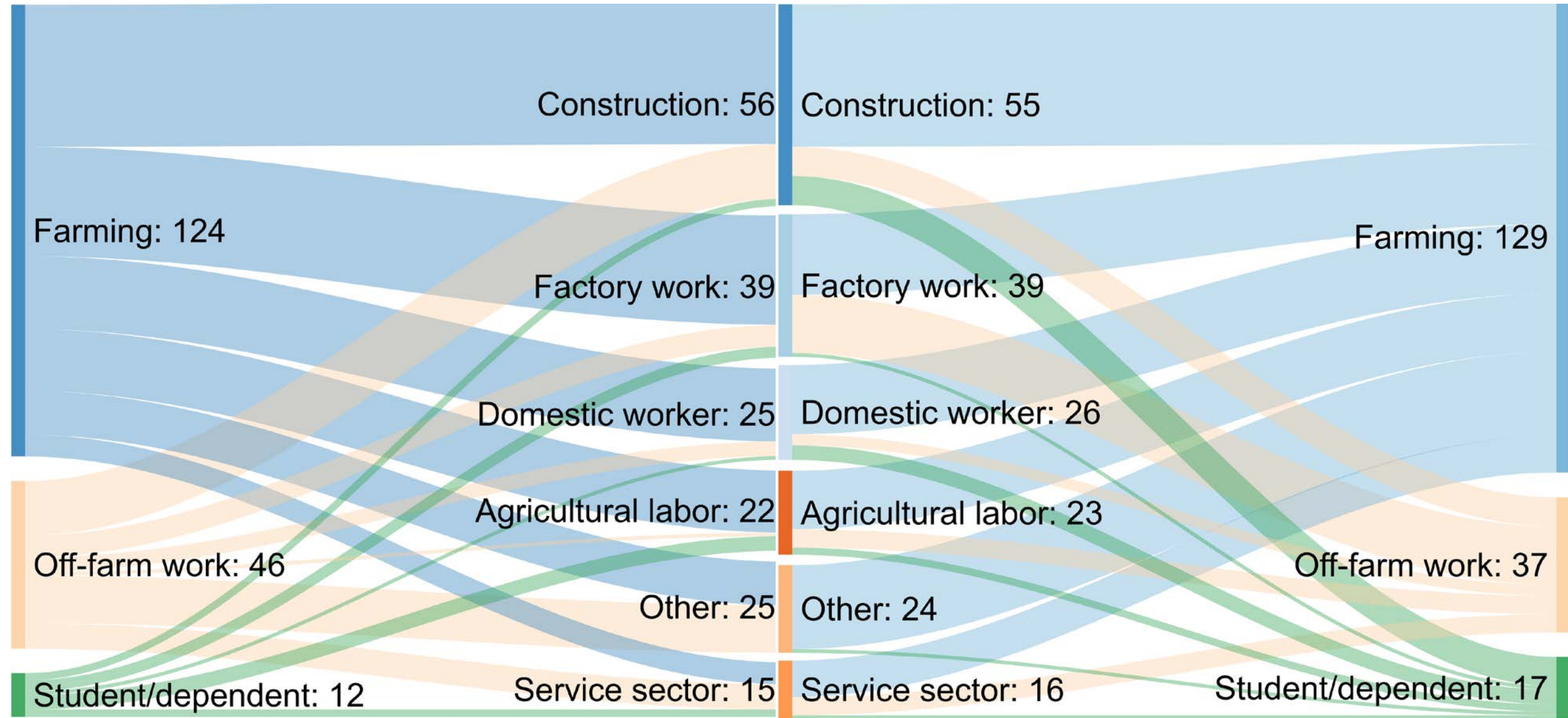
Timing of Migration: Number of People Migrated by Year of First Migration (by Destination)<sup>16</sup>

# Migration driven by mix of push and pull factors

Main reason for migration	Migration destination	
	International (%)	Domestic (%)
For higher income	33	28
Income low	20	17
Insufficient Land	31	10
Adventure/to gain new skill	9	9
Not willing to work agriculture	6	18
For professional work	0	17
Social pressure	1	3

- Average migration is short: 78% domestic & 49% international = 1 year or less
- Most return migrants have no intention to migrate again (72%) <sup>17</sup>

# Occupations before, during and after migration (international migrants)



# Most migrants send remittances, and remit significant amounts


Migrant type	Migrants remitting in past 12 months (%)	Average value of remittances (MMK/month)
All	58	66,791
Domestic	39	46,037
International	73	76,033
Male	58	61,544
Female	57	73,981

# Most remittances used to cover cost of everyday expenses

	1 <sup>st</sup> reason (%)	2 <sup>nd</sup> reason (%)
Day to day expenses	52	0
Farm operating costs	9	21
Medical expenses	7	17
Repayment of debt	7	1
Education costs	6	35
Housing	6	8
Child care	5	10
Savings	3	3
Purchase agricultural assets	5	4
Donations	2	1

# Decision to return driven by push more than pull factors

Reason of return	International (%)	Domestic (%)
Prospect of job at home	18	33
Poor working conditions	16	17
Loss of work/no job opportunity	10	16
Poor health	16	6
To take care of family members	18	7
Achieved goal (saving/new skill)	4	10
Marriage/pregnancy	7	5
No legal status	5	3
Others	7	4



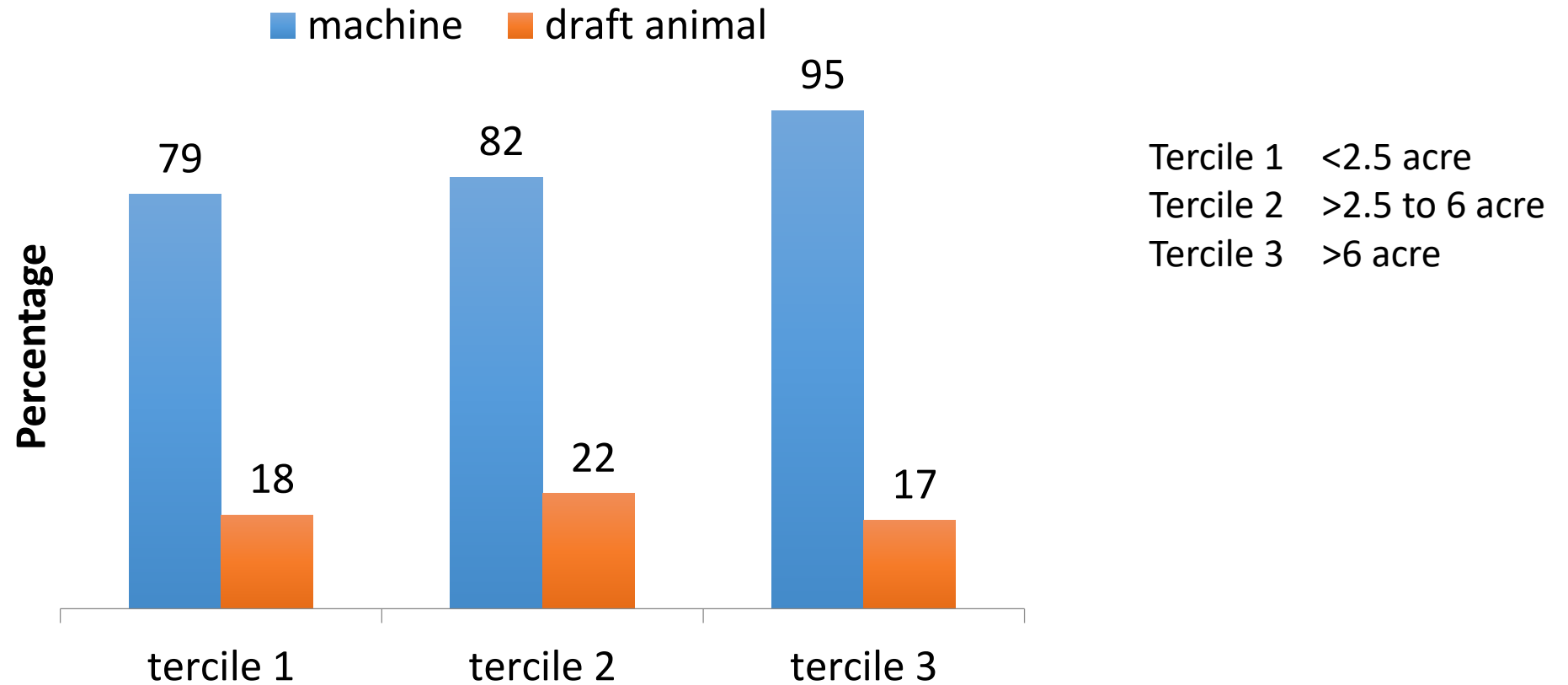


# MECHANIZATION



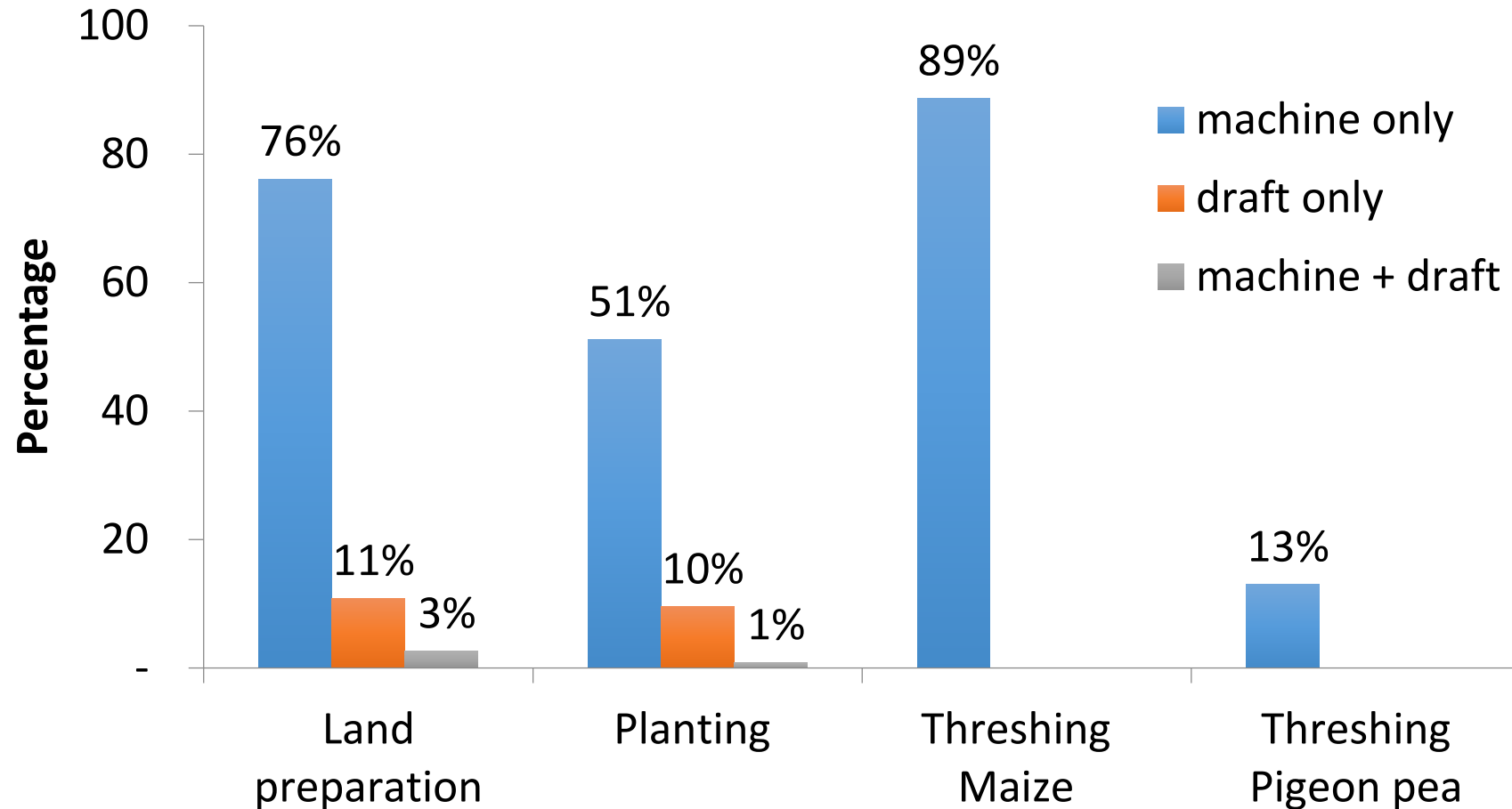


# Machines have rapidly replaced draft animals, irrespective of farm size



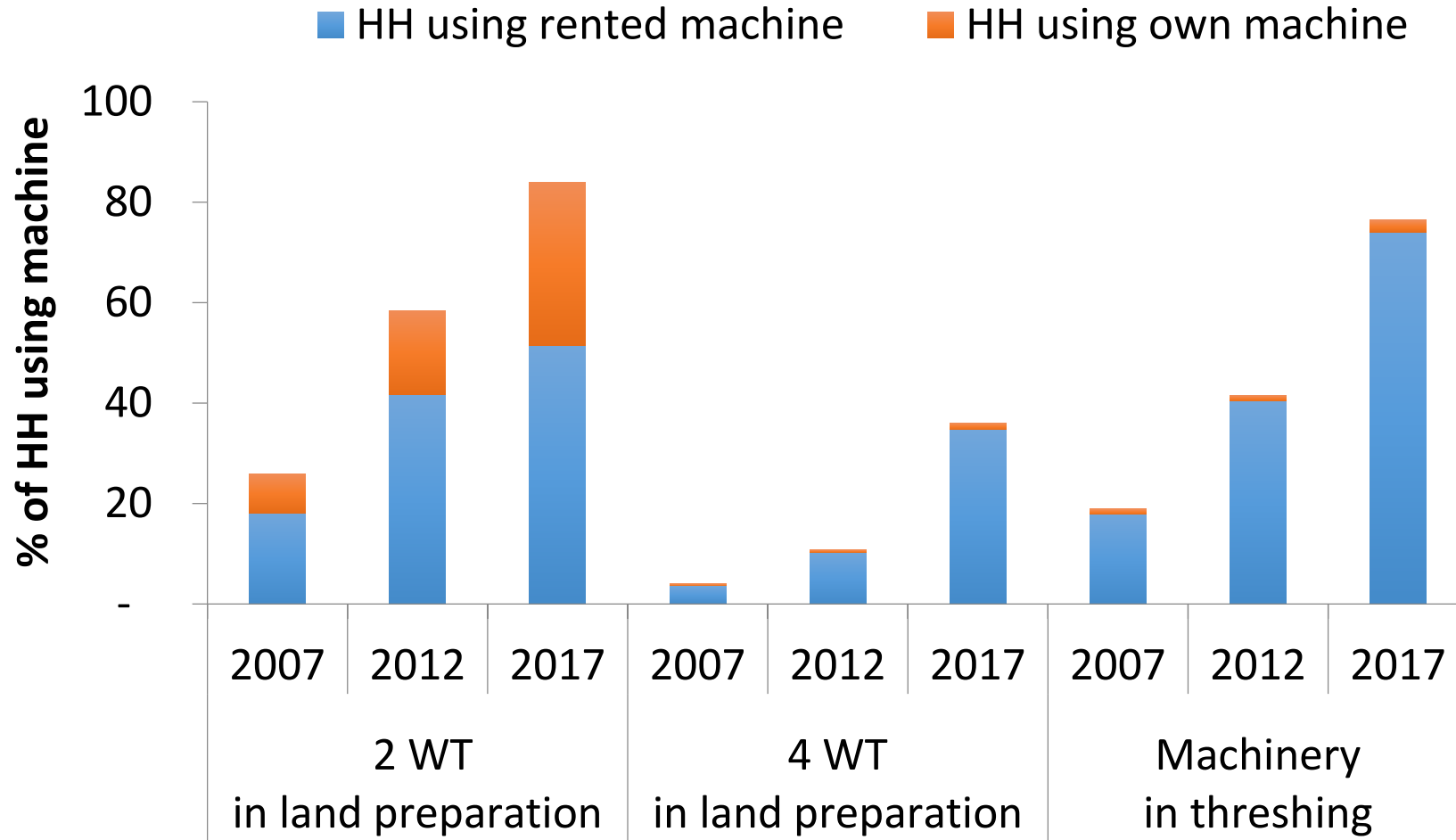
**Share of farm HH using machinery or draft animals  
in maize and pigeon pea production, by landholding tercile**

# Land preparation and maize threshing highly mechanized, little change in other activities (e.g. harvesting, sowing)



**Share of farm HH using machinery and draft animal for maize and pigeon pea production, by activity**

# Rental markets facilitate machine access



**Share of farming HH using own / rented machines in land preparation and threshing**



# AGRICULTURE













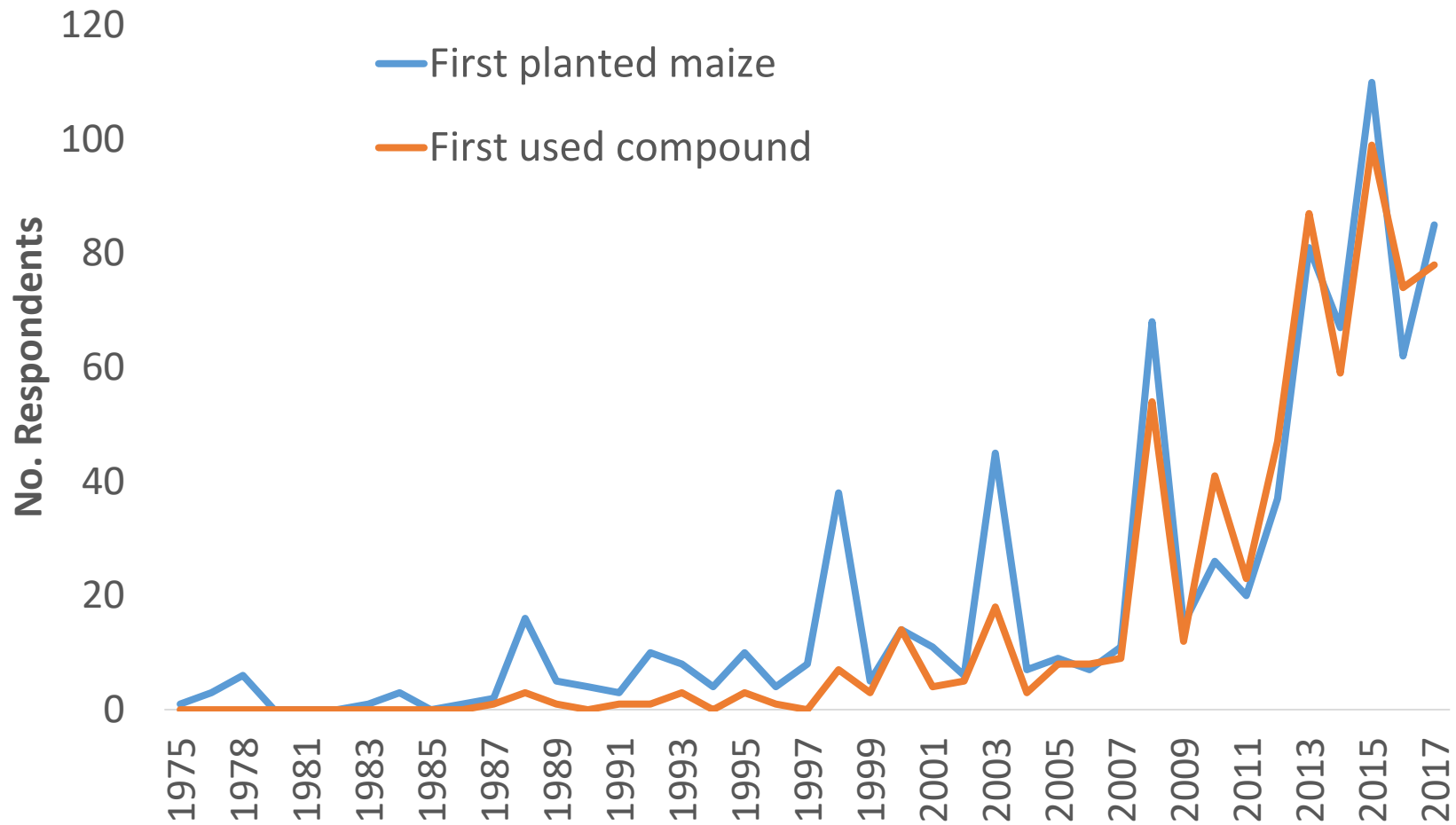






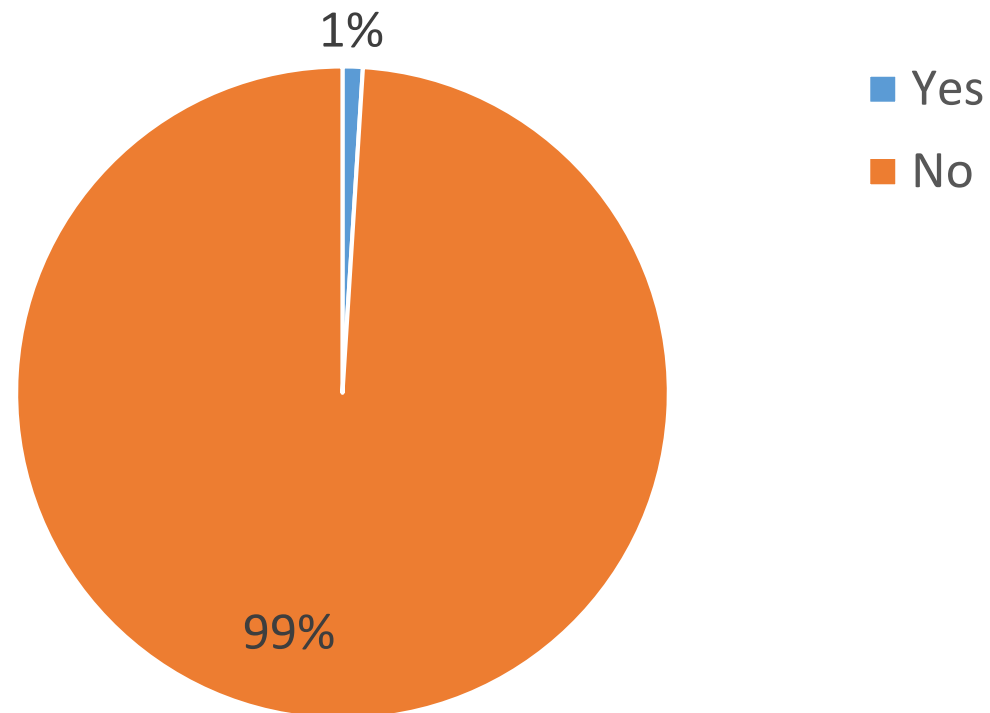


# Adoption of hybrid maize growing rapidly, associated with increased use of fertilizer inputs

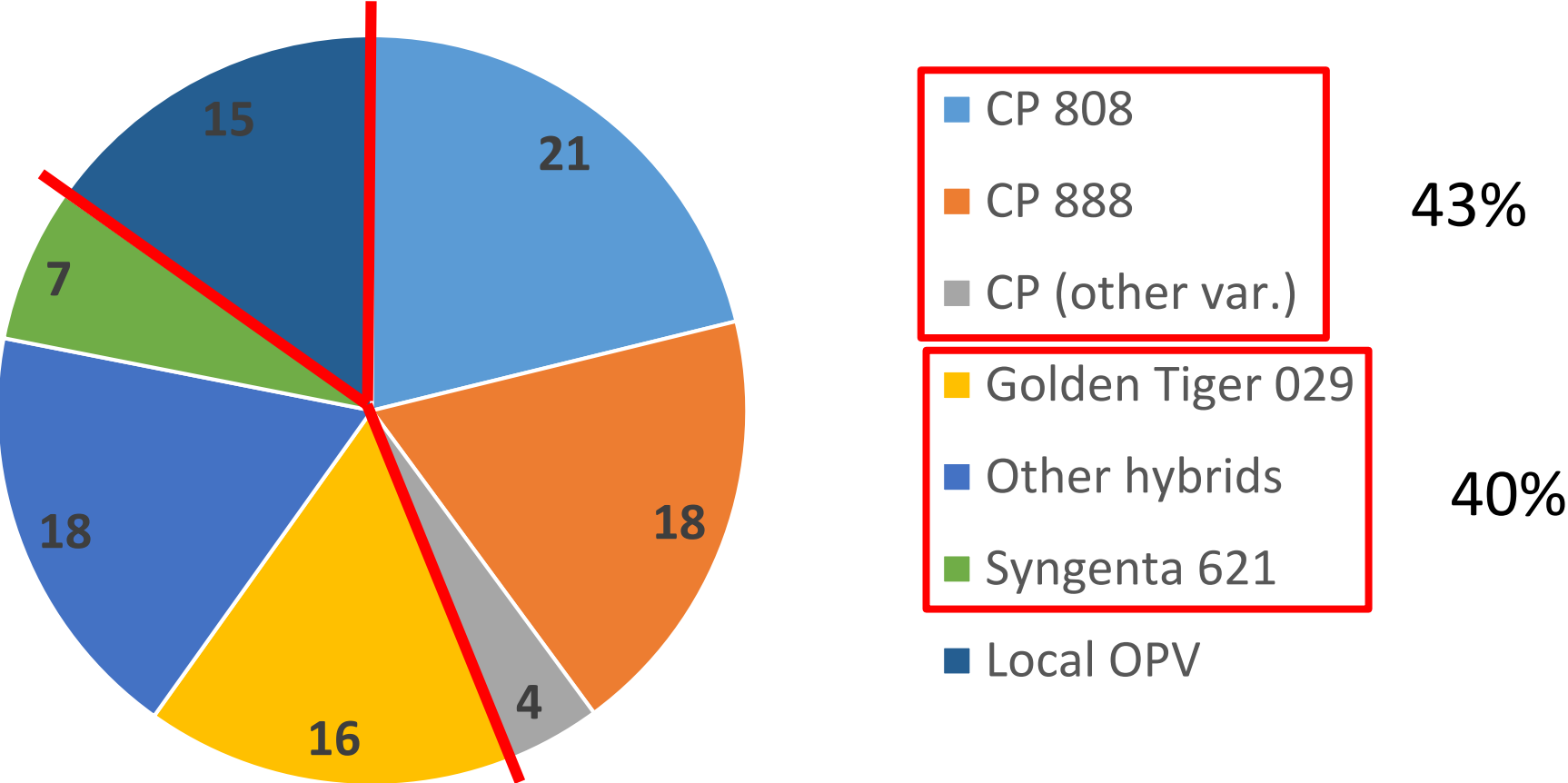


# There is no contract farming of maize

"Have you ever had a contract with CP company to grow maize?"



# The market for maize seed is diverse and competitive





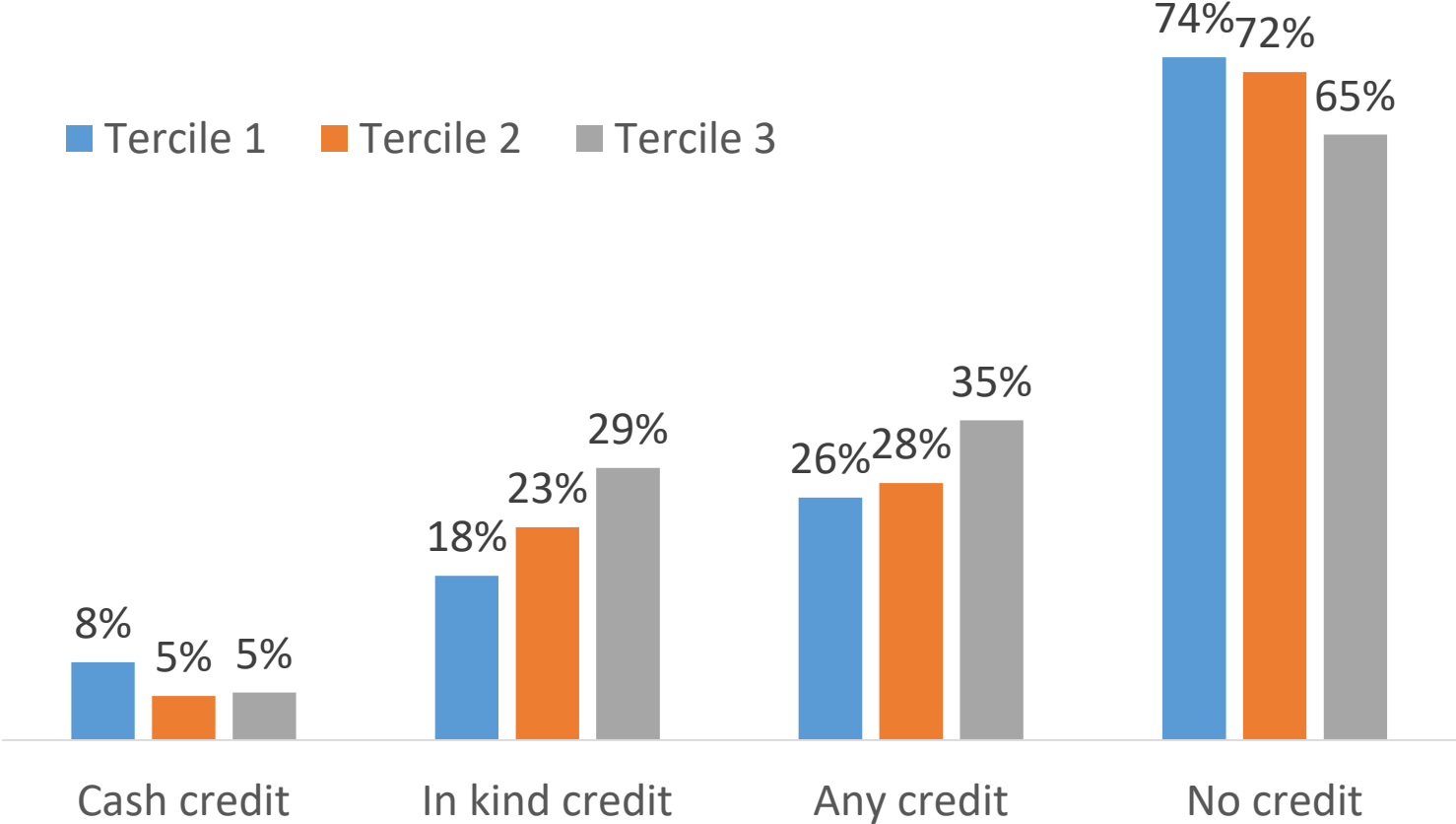
# Most farmers obtain maize seed by paying cash (not as credit in kind)

	Maize trader	Input shop	General store	Family/friend	Own farm	All
Source of seed (%)	49	35	3	7	5	100
Seed purchased in cash (%)	64	90	93	86	n/a	<b>76</b>
Seed obtained by credit in kind (%)	36	10	7	14	n/a	<b>24</b>

- Among 24% of transactions where maize seed was purchased as in kind credit, 61% were output-tied (only 14% of all transactions)



# Larger farmers are more likely to access trader credit than small farmers



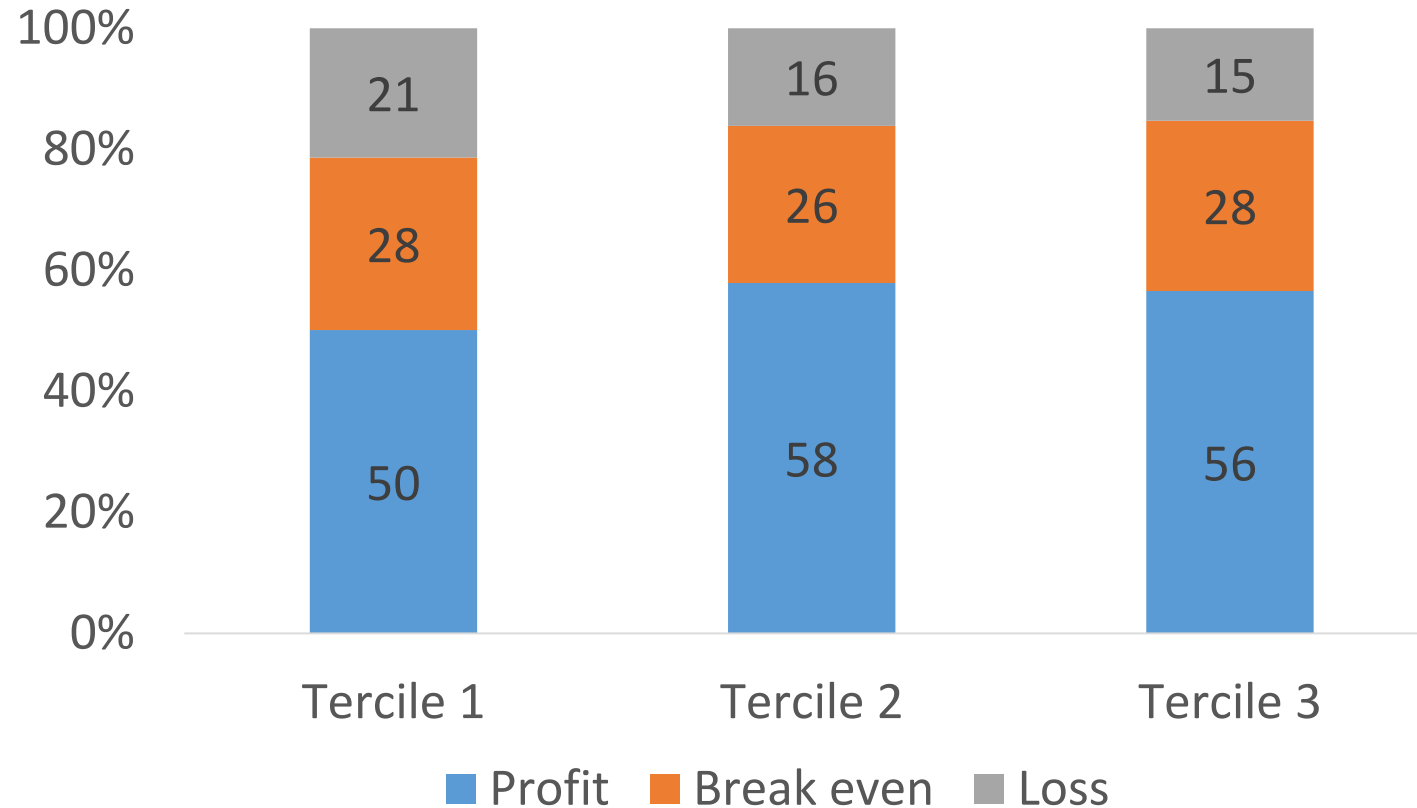
Share of maize farming HH using trader credit to buy maize seed, by credit type and landholding tercile



# Input use and yields vary little by farm size

	Tercile 1	Tercile 2	Tercile 3
Inorganic fertilizer use (% of HH)	84	83	92
Inorganic fertilizer application (kg/acre)	86	67	67
Maize yield (kg/acre)	1286	1397	1261
Price received without credit (MMK/kg)	215	232	238
Price received with credit (MMK/kg)	220	231	249

# Likelihood of returning a profit differs little by farm size



**Average share of respondents reporting making profit, breaking even, or making loss on maize crops grown during the past 10 years**

# Conclusions

- Shan unusual for Myanmar in having high levels of access to farm land
- Complementary mix of commercial and subsistence forms of farming
- Rapid agricultural mechanization, similar to elsewhere in country, driven more by convenience and availability than by rising labor costs
- Agricultural modernization driven by active private sector, access to input and output markets, and receptive farmers
- No evidence for negative social consequences of maize boom claimed by Woods
- No maize contract farming and no exploitative credit relations with traders



# Conclusions

- RNFE and agriculture closely interlinked through labor markets and flows of investment within households
- Off-farm work and business highly gender differentiated in roles and incomes
- Migration increasingly important, links to domestic urban growth
- Most migration brief, circular, individuals return to agriculture and rural labor force – limited impact on rural wages so far.
- Remittances significant for receiving HH, but migrant work precarious
- Little use of remittances or credit for productive investments apart from agriculture - Most remittances used for everyday necessities

# Implications for programming

- South Shan is highly promising in terms of potential for inclusive agriculture driven growth.
- Look for investments that can leverage additional value from existing crops (e.g. better varieties, improvements in cold chain, packing and handling for fruits and vegetables), geographical indications, branding, organic.
- Explore introduction of complementary technologies (e.g. greenhouses, small-scale irrigation) and modes of development (e.g. agro-tourism).
- Understand rationale for ways in which households use formal and informal credit, remittances, and farm and non-farm incomes to design and deliver effective financial services.
- Look for ways to reduce the risks and maximize the benefits of migration – language and skills training, loans, awareness of rights