



2nd Wave

Longitudinal Livelihood Study
(LLS)

Second Wave Report on Pig Sub- Sector in Ngada and Nagekeo

January 2017

PRISMA

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LONGITUDINAL LIVELIHOOD STUDY

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Table of Contents

List of Abbreviation and Expressions	ii
List of Figures.....	ii
List of Tables.....	iv
1 Introduction	1
2 Sampling	1
2.1 Quantitative Sampling.....	1
2.2 Table 1: Sampling Qualitative Sampling	2
2.3 Intervention Status in the Villages	2
2.4 Poverty Rate of Households using PPI	3
3 Five Livelihood Assets.....	3
3.1 Human Assets	4
3.2 Physical Assets	4
3.3 Natural Assets.....	15
3.4 Social Assets.....	17
3.5 Financial Assets.....	17
4 Income Generation.....	18
4.1 Agricultural Activity.....	19
4.2 Livestock Activities with focus on Pigs.....	22
5 Expenditure and Financing Expenditure	23
5.1 Educational Expenditure.....	23
5.2 Social Expenditures	28
5.3 Livestock Expenditures	33
5.4 Agricultural Assets.....	33
5.5 Repaying Debt.....	33
5.6 Food Expenditure	34
6 Income Use of Pig Earnings.....	39
7 Seasonality and Vulnerability	41

List of Abbreviation and Expressions

SD	Sekolah Dasar (Primary School)
SMP	Sekolah Menengah Pertama (Junior High School)
SMA	Sekolah Menengah Atas, (Senior High School),
SMK	Sekolah Menengah Kejuruan (Vocational High School)
UBSP	Unit Bersama Simpan Pinjam (Small Savings and Borrowings Group)
UPK	Unit Pengelola Kegiatan ((Government) Activity Managing Units)

List of Figures

Figure 1: Houses and land ownership by quintile 2015	5
Figure 2: Houses and land ownership by quintile 2016	5
Figure 3: Ownership of electricity supply, WC, and water source by quintile 2015	6
Figure 4: Ownership of electricity supply, WC, and water source by quintile 2016	6
Figure 5: Ownership of transport type by quintile (2015)	7
Figure 6: Ownership of transport type by quintile (2016)	7
Figure 7: Types of communication forms by quintile (2015).....	8
Figure 8: Types of communication forms by quintile (2016).....	8
Figure 9: Kitchen and storage ownership by quintile (2015).....	9
Figure 10: Kitchen and storage ownership by quintile (2016).....	9
Figure 11: Other household assets by quintile (2015)	10
Figure 12: Other household assets by quintile (2016)	10
Figure 13: Agricultural assets by quintile (2015)	11
Figure 14: Agricultural assets by quintile (2016)	11
Figure 15: Livestock ownership by quintile (cows, horses, buffalos) (2015).....	12
Figure 16: Livestock ownership by quintile (cows, horses, buffalos) (2016).....	12
Figure 17: Livestock ownership by quintile (goat/ sheep, ducks, chicken, fish) (2015)	13
Figure 18: Livestock ownership by quintile (goat/ sheep, ducks, chicken, fish) (2016)	13
Figure 19: Amount of livestock by quintile (cows, horses, buffalos, pigs) (2015)	14
Figure 20: Amount of livestock by quintile (cows, horses, buffalos, pigs) (2016).....	14
Figure 21: Amount of livestock by quintile (Goat and sheep, ducks, chicken, fish) (2015).....	15
Figure 22: Amount of livestock by quintile (Goat and sheep, ducks, chicken, fish) (2016).....	15
Figure 23: Land holdings in ha by quintile (2015)	16

Figure 24: Land holdings in ha by quintile (2016)	16
Figure 25: Own food production/ received food as percentage of total consumption (2015)	16
Figure 26: Own food production/ received food as percentage of total consumption (2016)	17
Figure 27: Saving and borrowing by quintile (2015)	17
Figure 28: Saving and borrowing by quintile (2016)	18
Figure 29: Income generation from agriculture and livestock (2015)	18
Figure 30: Income generation from agriculture and livestock	19
Figure 31: Frequency of crops mentioned as three most important in terms of income (2015)	19
Figure 32: Frequency of crops mentioned as three most important in terms of income (2016)	20
Figure 33: Crops for self-consumption (no reported sales) (2015).....	20
Figure 34: Crops for self-consumption (no reported sales) (2016).....	21
Figure 35: Crops which are mainly sold (respondents sell more than 50%) (2015)	21
Figure 36: Crops which are mainly sold (respondents sell more than 50%) (2016)	21
Figure 37: Sales season for livestock by month.....	22
Figure 38: Sales season for pigs by month (2015)	22
Figure 39: Sales season for pigs by month (2016)	23
Figure 40: Significant Expenditure (2015)	23
Figure 41: Significant Expenditure (2016)	24
Figure 42: Education Expenditure by Quintile (percentage) (2015)	24
Figure 43: Education Expenditure by Quintile (percentage) (2016)	25
Figure 44: Education Expenditure by Quintile (IDR) (2015)	25
Figure 45: Education Expenditure by Quintile (IDR) (2016)	25
Figure 46: Education expenditure by child by Quintile (IDR) (2015).....	26
Figure 47: Education expenditure by child by Quintile (IDR) (2016).....	26
Figure 48: Financing Education (percentage) (2015)	27
Figure 49: Financing Education (percentage) (2016)	27
Figure 50: Timing of Significant Expenditure – Education (2015).....	28
Figure 51: Timing of Significant Expenditure – Education (2016).....	28
Figure 52: Social Expenditure (2015)	29
Figure 53: Social Expenditure (2016)	29
Figure 54: Financial Marriage (2015)	30
Figure 55: Financial Marriage (2016)	30
Figure 56: Financing other Adat (2015).....	31

Figure 57: Financing other Adat (2016).....	31
Figure 58: Timing of Significant Expenditure – Other Adat/ Religious/ Village celebration (2015).....	32
Figure 59: Timing of Significant Expenditure – Other Adat/ Religious/ Village celebration (2016).....	32
Figure 60: Timing of Significant Expenditure – Marriage (2015)	32
Figure 61: Timing of Significant Expenditure – Marriage (2016)	33
Figure 36: Timing of Significant Expenditure – Buying Animal Stock (2015).....	33
Figure 63: Timing of Specific Expenditure - Repaying Debt (2015).....	34
Figure 64: Timing of Specific Expenditure - Repaying Debt (2016).....	34
Figure 65: Food Expenditure by Quintile (2015).....	35
Figure 66: Food Expenditure by Quintile (2016).....	35
Figure 67: Total food and non-food Expenditure (2015)	36
Figure 68: Total food and non-food Expenditure (2016)	36
Figure 69: Type of Food Expenditure by Quintile (percentage) (2015).....	37
Figure 70: Type of Food Expenditure by Quintile (percentage) (LLS- 2016).....	37
Figure 71: Type of Food Expenditure by Quintile (IDR) (2015).....	38
Figure 72: Type of Food Expenditure by Quintile (IDR) (LLS-2016).....	38
Figure 73: Most important use of income derived from pigs (2015).....	39
Figure 74: Most important use of income derived from pigs (2016).....	39
Figure 75: Second most important use of income derived from pigs (2015).....	40
Figure 76: Second most important use of income derived from pigs (2016).....	40
Figure 77: Month of reported food shortages for Household needs (2015).....	41
Figure 78: Month of reported food shortages for Household needs (2016).....	41
Figure 79: concern over Food Security (2015).....	42
Figure 80: concern over Food Security (2016).....	42
Figure 81: Coping with Food Security (2015)	43
Figure 82: Coping with Food Security (2016)	43

List of Tables

Table 1: Sampling Qualitative Sampling.....	2
Table 3: Current Status of the Intervention per Village	2
Table 4: Poverty Rate of Households using PPI	3
Table 5a: Per Capita Expenditure per Quintile in Rp. per Month (2015)	3

Table 6a: Per Capita Expenditure per Quintile in Rp. per Month (2016)	4
Table 7: Household Characteristics.....	4
Table 8: Control and Decision Power of Earnings from Pigs (2015).....	40
Table 9: Control and Decision Power of Earnings from Pigs (2016).....	40

1 Introduction

This second wave report is part of an overall Longitudinal Livelihood Study (LLS) initiative of PRISMA. The LLS, aims to gain a deeper understanding on how targeted households benefiting from interventions deployed by the project use additional income generated. It focuses on one intervention under PRISMA in Nusa Tenggara Timur (NTT), one of five provinces targeted by the program to alleviate poverty. The intervention seeks to increase the income of rural farmers by increasing the productivity of pig production.

The study concentrates on the districts of Ngada and Nagekeo, while other districts on the island of Flores are also involved in the intervention. The intervention promotes the use of healthier piglets, improved feed, pig pens and veterinary services which helps increasing the productivity of pig fattening as an economic activity. Selected households will be interviewed again in the final year of the LLS (2017) to see how their livelihood situation has changed over time and how it might relate to the intervention. Such a study is important for PRISMA because it helps assess whether targets selected for raising rural income are reasonable and how it can affect rural livelihoods.

The focus of this second wave report is to understand how the livelihood situation has changed from the baseline with a special focus on income generation, expenditure and the use of income. The second wave study used the same mixed method approach as the baseline, with both quantitative and qualitative data collected. Pig farmers interviewed whom were both the potential and actual users of the inputs and technologies (improved feed and piglets) proposed under the intervention.

The second wave report provides the 2016 data collection against the original baseline data, providing commentary and comparison analysis. The report is structured to provide a short overview of the intervention (Section 2); with the frame sampling for the study discussed in Section 3; the five assets of the sustainable livelihood framework are described in Section 4; with a discussion of income generation discussed in Section 5). Section 6 describes expenditure; while Section 7 focuses on use of income generated by pig earnings..

2 Sampling

2.1 Quantitative Sampling

Respondents of the 2nd wave LLS are largely the same respondents of the baseline conducted in 2015. As mentioned in the baseline report, the number of beneficiaries is estimated to be 1440 pig farmers in mid-2016 and 6720 pig farmers by mid-2018. The sub-sector team has provided a list of pig farmers for a sub-sample which might be potential beneficiaries. This list contained the names of 737 pig farmers in Kabupaten Ende, Kabupaten Ngada and Kabupaten Nagekeo and was collected at socialisation programmes as well as through the local government. The interviewees will be tracked next year to provide more information to come for the collection of both quantitative and qualitative data.

For the 2nd wave data collection, the same questionnaire as in the baseline was deployed, which was then used to interview 166 households. Some respondents from the baseline did not participate in the 2nd wave due to migration (to urban areas, other provinces, and overseas to work as migrant workers), and others did not want to join in this survey due to *adat* obligations. Therefore, where in the baseline LLS the total number of respondents was 197 households, in the 2nd wave LLS, 23 respondents of 1st LLS not join in this survey (for reasons see table 1) the **total number of respondents is 174**.

Table 1: Sampling

Village	No of HH respondents			reasons not participation
	2015	2016	Not participant	
Danga	5	4	1	Went to city for longtime
Gerodhere	14	13	1	Reject to interviewed because have adat ceremony
Kelimado	1	1	0	
Lape	8	8	0	
Mulakoli	7	7	0	
Nageoga	17	15	2	Move to other sub-district and migrant in malaysia
Nagerawe	13	10	3	Move to other sub-district and Kalimantan
Nagespadhi	14	13	1	House is empty during the survey. No information
Natanage	8	6	2	reject to be interview
Pagomogo	13	12	1	Went to other district for longtime
Penginanga	1	1	0	
Radabata	13	10	3	Migrant to other island and adat ceremony
Raja	12	9	3	Reject to be interview and other working in another sub-district
Rigi	12	12	0	
Rowa	1	1	0	
Tengatiba	14	13	1	Migrant to other sub-district
Totomala	14	14	0	
Ulupulu	15	12	3	Migrant to other disictrict and adat ceremony
Were	14	12	2	Migran
Wolopogo	1	1	0	
Total	197	174	23	

2.2 Table 2: Sampling Qualitative Sampling

Some quantitative sampling was undertaken in the second wave LLS. Target informant as many as 11 people, same as first LLS studies. Informants were eligible and did well as 9 informant. With an outline of the details of the status and condition of informants among others, namely: 8 of the districts. Nagekeo and one of the districts. Ngada. 4 women and 5 men; 7 informants only has fattening local pig and 2 inrofmants has fattening burox pigs.

2.3 Intervention Status in the Villages

Since some villages are more advanced in the intervention than others, table 3 provides an overview, of the situation in the villages at the time when data was collected.

Table 3: Current Status of the Intervention per Village

Village	Current status of intervention
	Socialisation
Radabata (Ngada)	Yes
Were (Ngada)	Yes
Boawae (Nagakeo)	Yes
Danga (Nagakeo)	Yes

Gerodhere (Nagakeo)	Yes
Mulakoli (Nagakeo)	No
Nageoga (Nagakeo)	No
Nagerawe (Nagakeo)	Yes
Nagesapadhi (Nagakeo)	Yes
Pagomogo (Nagakeo)	Yes
Raja (Nagakeo)	Yes
Rigi (Nagakeo)	Yes
Tengatiba (Nagakeo)	Yes
Totomala (Nagakeo)	Yes
Ulupulu (Nagakeo)	Yes
Kelimando (Nagakeo)	Yes
Lape (Nagakeo)	Yes
Natanage (Nagakeo)	Yes
Natanage Timur (Nagakeo)	Yes

Source: Sub-Sector Team

2.4 Poverty Rate of Households using PPI

The Poverty Rate of Households using PPI is given below.

Table 4: Poverty Rate of Households using PPI

	2015		2016	
	Nr. Obs	mean	Nr. Obs	mean
100% National Poverty Rate	182.00	24.49	171	25,67
150% National Poverty Rate	182.00	65.90	171	68,83
\$2.5 2005 PPP Poverty Rate	182.00	88.38	171	87,74

3 Five Livelihood Assets

Mean per capita expenditure has fallen in the lower three quintiles in 2016 (table 6a) compared to 2015 (table 5a). It rose for the top two quintiles. Especially the maximum expenditures in the top quintile has increased sharply from 6,931,291.5 Rp. Per month to 9.858.555,4. Maximum expenditure fell in the lower three quintiles. Overall a larger income disparity can be observed between 2015 and 2016.

Table 5a: Per Capita Expenditure per Quintile in Rp. per Month (2015)

	Nr. Obs	mean	sd	min	max
Q1	36.00	238,456.83	60,750.42	79,760.42	326,599.97
Q2	35.00	389,801.23	35,632.98	326,750.00	444,291.69
Q3	35.00	508,123.63	30,531.16	446,119.03	557,916.63
Q4	35.00	684,409.45	84,973.48	567,041.69	812,875.00
Q5	35.00	1,693,617.50	1,184,219.65	839,516.69	6,931,291.50

Table 6a: Per Capita Expenditure per Quintile in Rp. per Month (2016)

	Nr.Obs	Mean	Sd	Min	Max
Q1	32	161.137,9	37.488,8	68.319,4	223.791,7
Q2	32	304.152,1	48.096,9	227.533,3	373.819,4
Q3	32	433.330,8	41.333,4	374.160,0	496.527,8
Q4	32	656.890,8	133.318,7	505.000,0	919.944,4
Q5	31	2.235.754,4	1.918.288,9	935.041,7	9.858.555,4

3.1 Human Assets

3.1.1 Household Characteristics

The data shows that the size of households stayed relatively stable between 2015 to 2016 (table 7) from a reported 5.34 (2015) to 5.2 (2016). Data on the number of children and elderly was unavailable for 2016 and therefore a comparison could not be made.

Table 7: Household Characteristics

	2015		2016	
	Nr. Obs	mean	Nr. Obs	mean
hh size	197.00	5.34	159	5,2
Nr children	197.00	1.98		
Nr elderly	197.00	0.29		

3.1.2 Education

No data on education available.

3.2 Physical Assets

No data on physical assets available.

3.2.1 Housing, WC, Electricity and Water

House ownership increased slightly from 2015 (figure 1) to 2016 (figure 2) by several percentage points in the middle 3 quintiles. Slightly fewer people own a house in the 5th quintile in 2016 compared to 2015. While ownership of agricultural land remained little or unchanged for the lower three quintiles, the top two quintiles both now claim 100% land ownership compared to around 91.2% - 91.4% in 2015. Except for the lowest income quintile where other house/building ownership rate fell, there was an increase throughout all 4 higher quintiles. This was most pronounced in the second highest quintile that reported an increase from 25.7% to 56.3%.

Figure 1: Houses and land ownership by quintile 2015

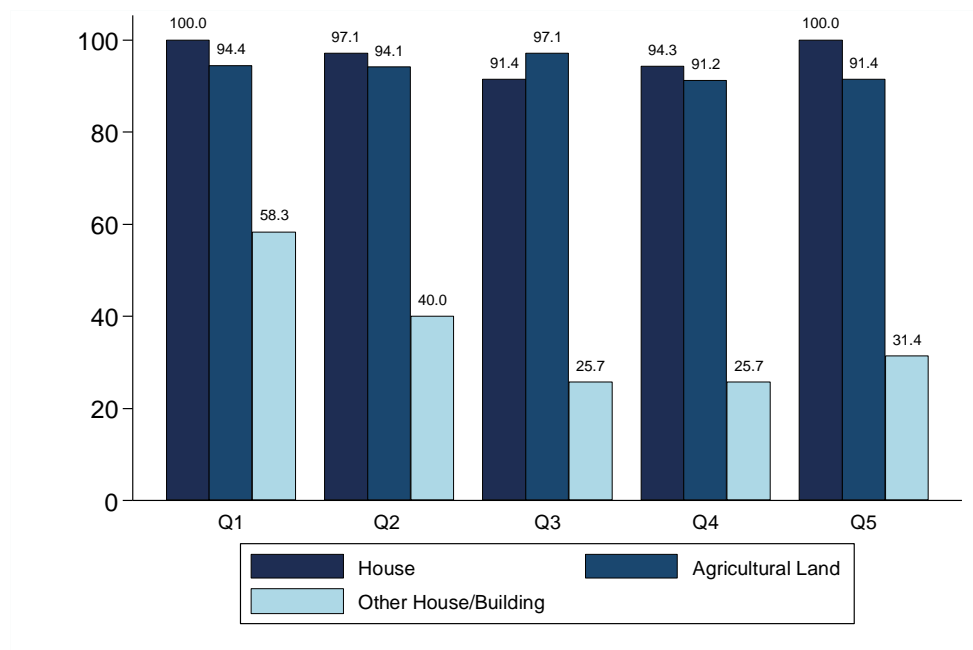
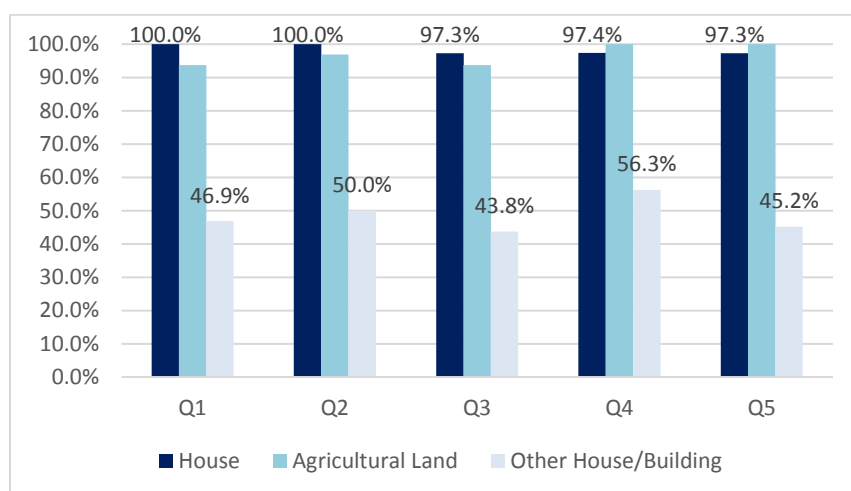


Figure 2: Houses and land ownership by quintile 2016



Ownership of electricity supply increased or remained steady for most quintiles between 2015 (figure 3) and 2016 (figure 4). Except for the third quintile, which saw a significant drop from 82.9% to 68.8% of participants. Access to having a floor and not just bamboo or earth ground in houses also increased for all but the first quintile, where percentage of people having an actual floor in their house fell slightly from 61.1% to 59.4%. Access to a toilet decreased for the top two quintiles, falling from 88.6% to 84.4% and from 85.3% to 83.9% respectively. Finally, when looking at access to wells and tube-wells, the lowest quintile still has zero percent access to such wells. The second, third and fourth quintiles reported a slight increase in access, whereas the highest quintile reported a drop.

Figure 3: Ownership of electricity supply, WC, and water source by quintile 2015

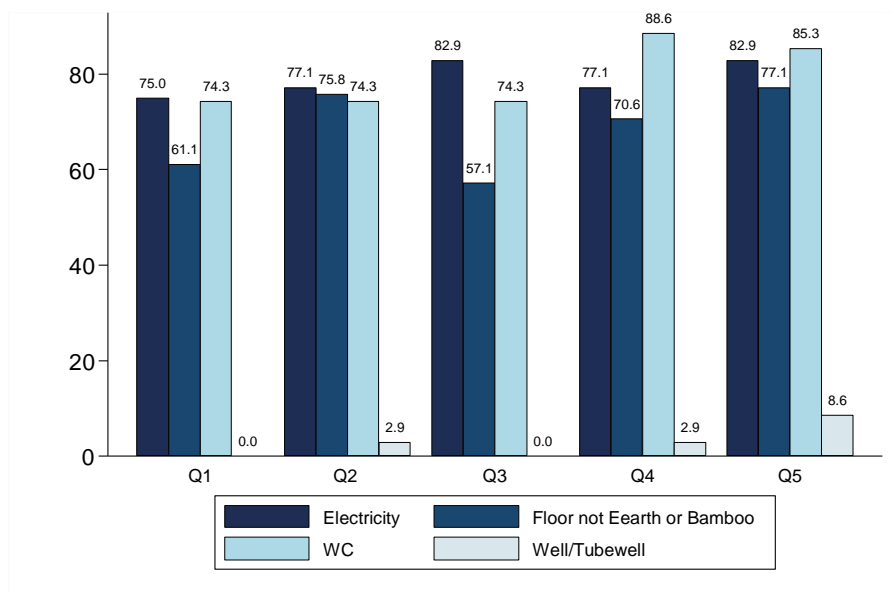
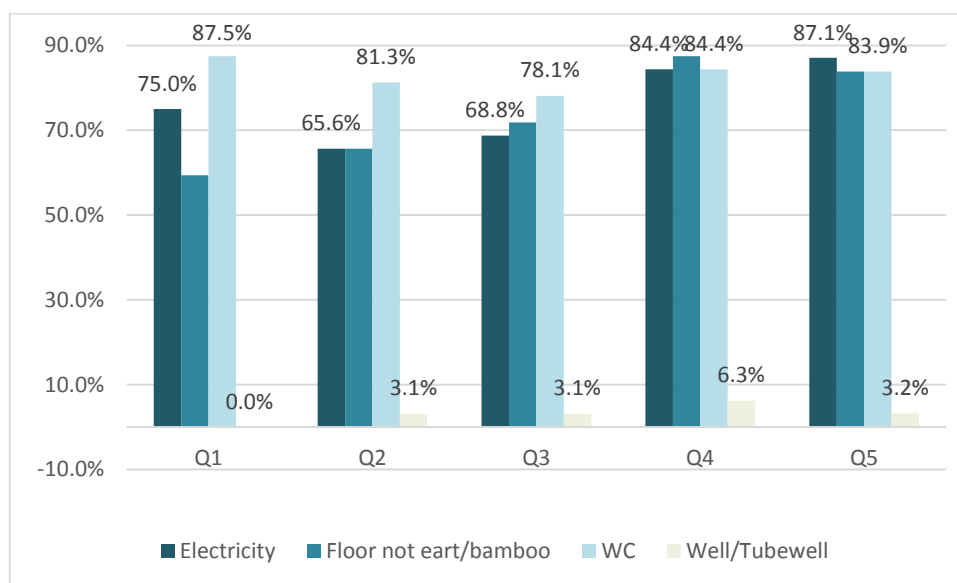


Figure 4: Ownership of electricity supply, WC, and water source by quintile 2016



3.2.2 Transport

There is a general increase to motorbike ownership. The lowest quintile and the three top quintiles all reported increases, with only the second quintile recording a reduction from 48.6% in 2015 (figure 5) to 37.5% in 2016 (figure 6). Bicycle ownership also saw an increase for almost all except the fourth highest quintile. Car and truck ownership increased particularly strongly in the highest quintile rising from 11.4% in 2015 to 35.5% in 2016. The second lowest quintile, however, saw a drop from 8.6% to 0%.

Figure 5: Ownership of transport type by quintile (2015)

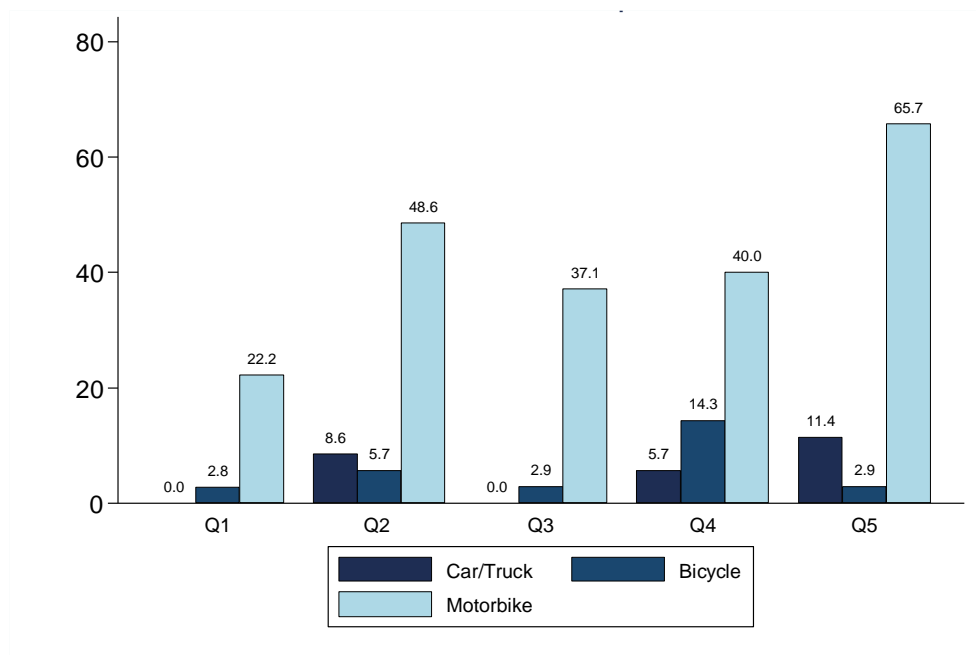
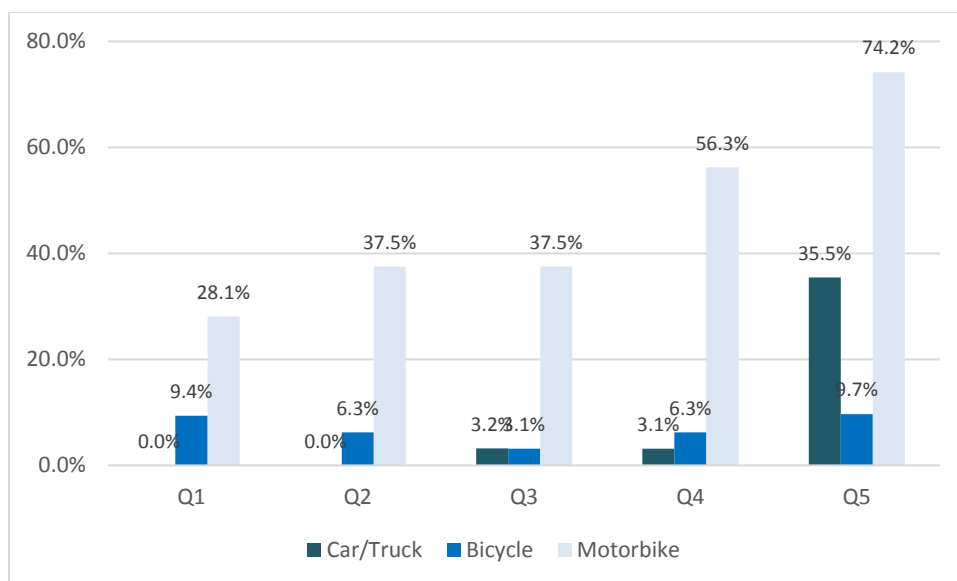


Figure 6: Ownership of transport type by quintile (2016)



3.2.3 Communications

Access to Radio, Transistor, Stereo and Cassette generally showed an increase between 2015 and 2016 (figures 7 and 8 respectively). However, the lowest quintile reported a fall from 19.4% to 15.6% and the highest quintile remained practically unchanged. Generally, there was quite a strong increase of TV ownership, except for the second quintile that recorded a drop from 40% to 31.3%. Computer ownership decreased in the first and third quintile and increased in the second, fourth and fifth quintile, in the latter one quite considerably more than doubling from 14.3% to 29%. Mobile phone usage also saw an uneven development, increasing in lower quintiles while observing small drops in the third and fifth quintile. Finally, land-line access to Internet increased from zero to 3.1% in the lowest two quintiles. The third quintile did

not have access to landline internet in 2016 compared to 5.7% in 2015. Overall access to landline internet remains restricted.

Figure 7: Types of communication forms by quintile (2015)

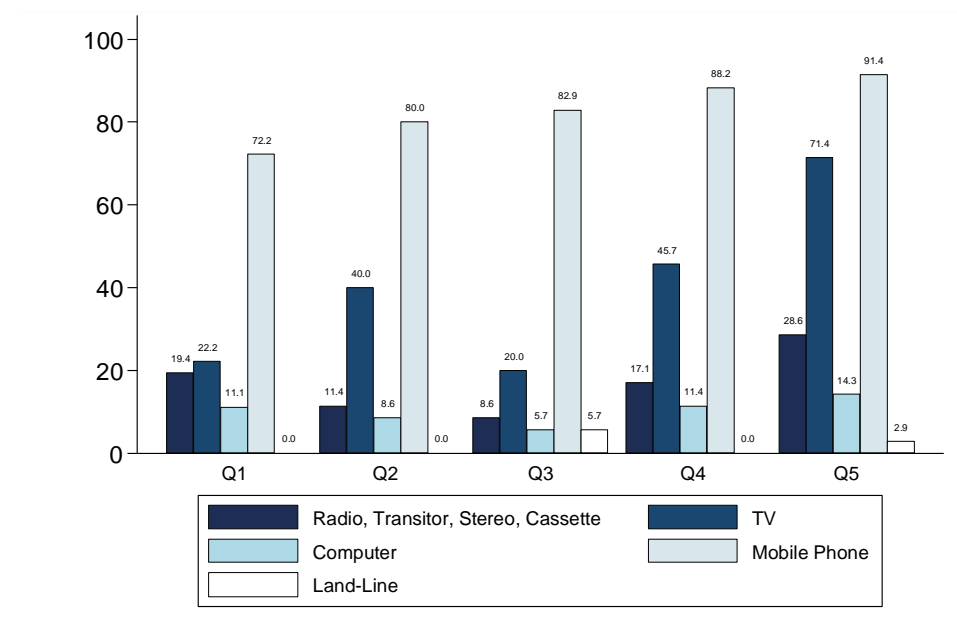
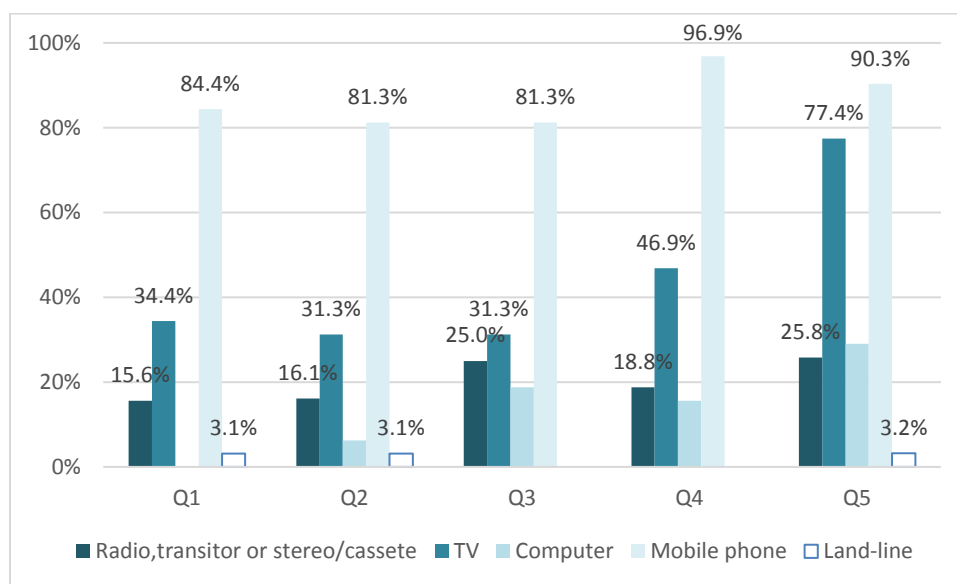


Figure 8: Types of communication forms by quintile (2016)



3.2.4 Storing and Kitchen Assets

Comparing storing and kitchen assets shows that access to stove decreased for the poorest quintile from 27.8% in 2015 (figure 9) to 15.6% in 2016 (figure 10), whereas all other quintiles reported an increase in the same time period. Access to grain storage containers indicate very mixed developments, depending on the quintile. The first quintile reports a slight increase in the given time period. The second and third quintile both report a drop in access to grain storage containers, whereas the fourth and fifth quintile again see an increase. While observations from 2015 still indicated that 5.6% of the first quintile and 14.7% of the second quintile use a fridge or freezer, this number dropped to zero in 2016. Quintile three also sees a drop from 11.4% to 3.1%. The top two quintiles both report an increase in the use of fridges and freezers.

Figure 9: Kitchen and storage ownership by quintile (2015)

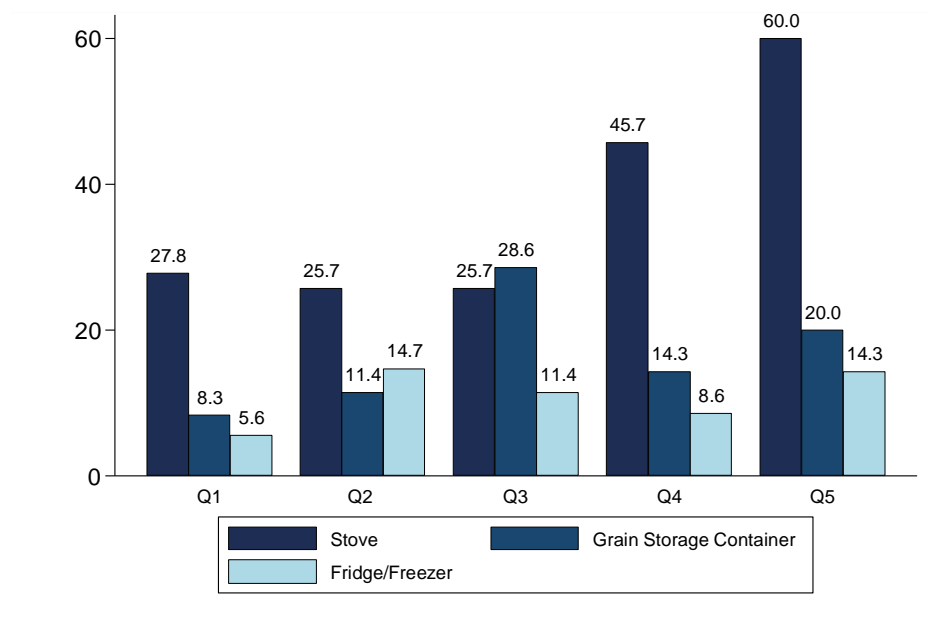
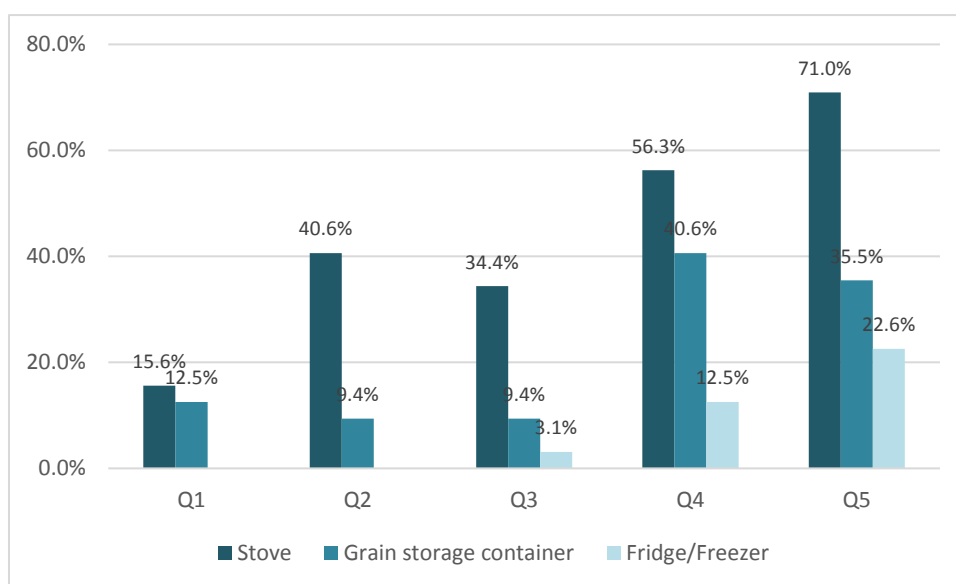


Figure 10: Kitchen and storage ownership by quintile (2016)



3.2.5 Other Household Assets

Other household tools also show great differences by quintile between 2015 (figure 11) and 2016 (figure 12). Sewing machines, have increased in the top four quintiles, while the lowest quintile still reports no access to that asset. The use of washing machines in quintiles 3 and 4 increased, but fell in the top and second quintile during this one- year period. In 2016 quintiles 1 and 2 still do not have any access to washing machines. Access to Jewellery increased in all quintiles except for the first where there was a drop from 5.6% to zero. VCR/VCP/VCD/DVD recorded a strong increase in all 5 quintiles. Especially in the higher quintiles numbers more than doubled in 2016 compared to 2015.

Figure 11: Other household assets by quintile (2015)

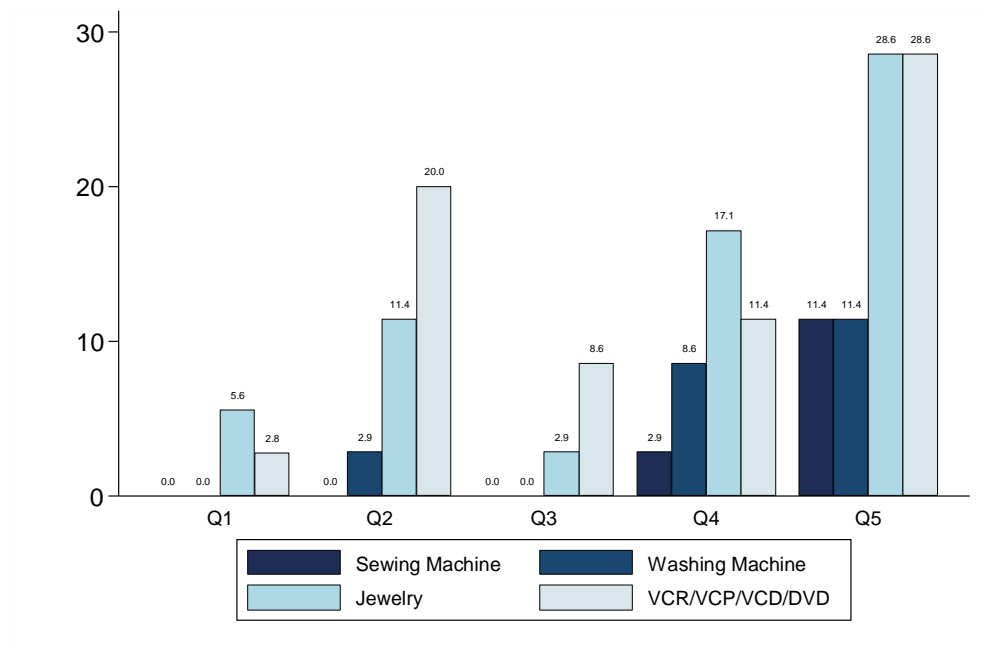
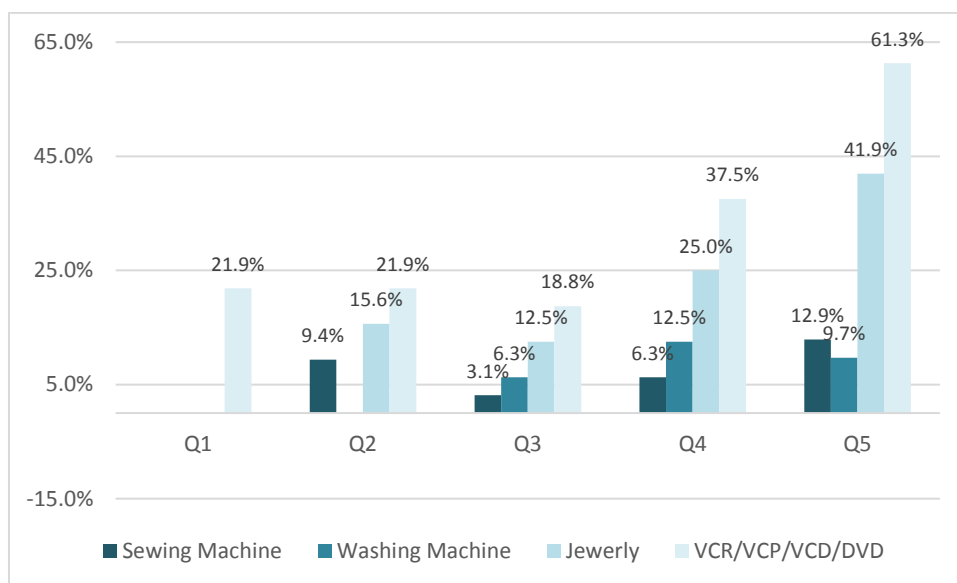


Figure 12: Other household assets by quintile (2016)



3.2.6 Agricultural Assets

Small tools used for agriculture witnessed a slight increase in the lower two quintiles and a small drop in the higher three quintiles from 2015 (figure 13) to 2016 (figure 14). Overall changes were small, changing only few percentage points. Heavy farming equipment saw both increases and decreases depending on quintile analysed. Quintiles 1, 3 and 5 saw a drop whereas quintiles 2 and 4 witnessed an increase of heavy farming equipment. Irrigation equipment increased slightly in the highest quintile, from 5.7% in 2015 to 9.7% in 2016. Q4 that had not used any such system in 2015, now had 3.1% of people using it. Q3 and Q2 that previously had a small percentage of irrigation system users, now report zero percentage. Overall Tractor usage increased albeit only a little. In Q5 from 8.6% to 9.7%, there was a decrease in tractor usage in Q3 and Q1, the latter one dropping to zero.

Figure 13: Agricultural assets by quintile (2015)

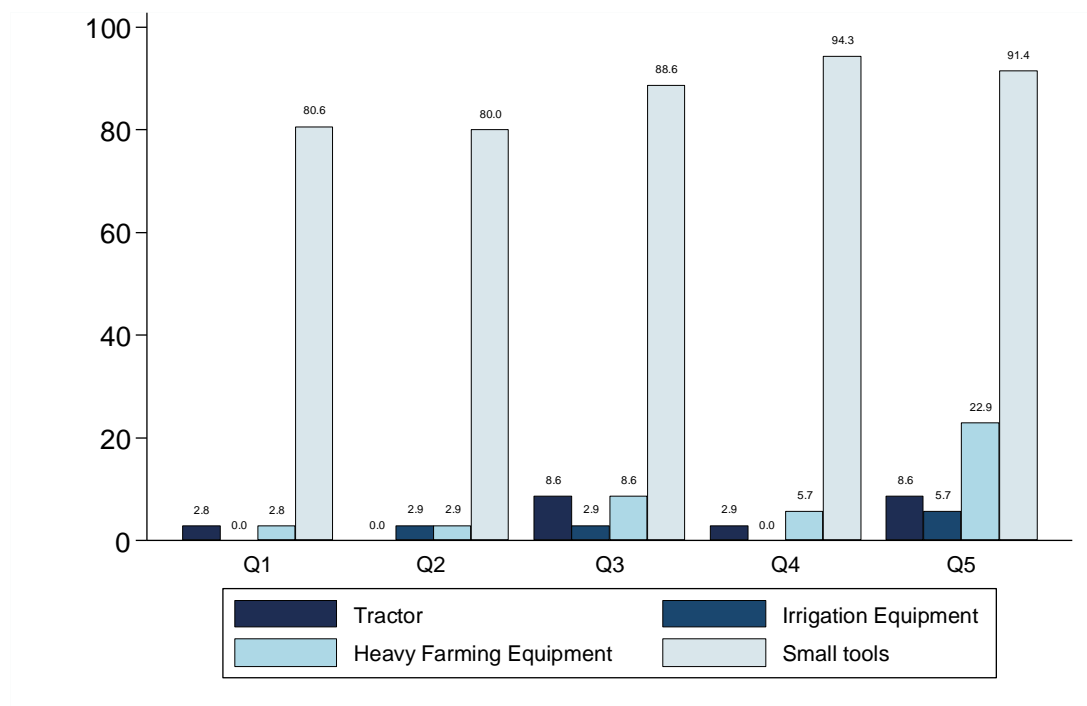
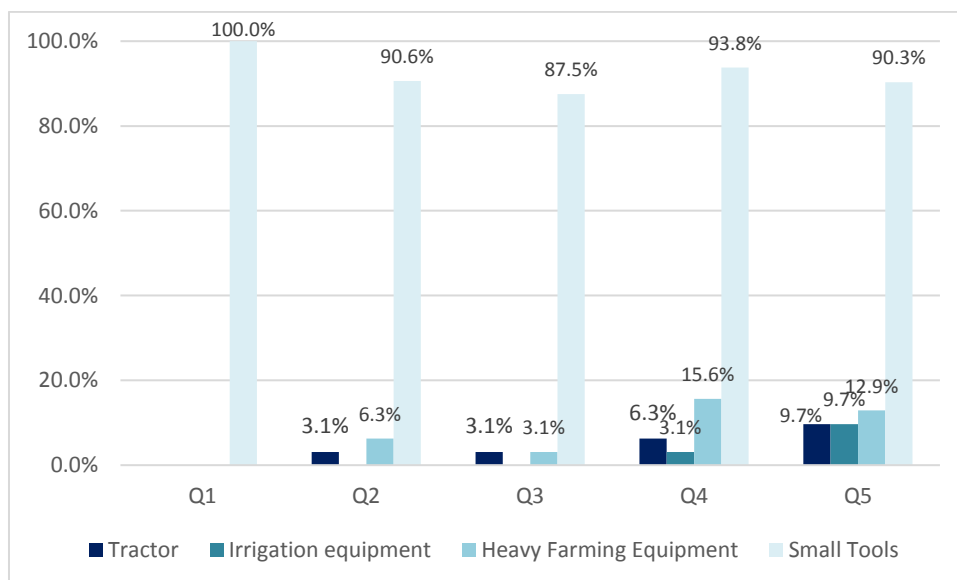


Figure 14: Agricultural assets by quintile (2016)



3.2.7 Livestock

Cow ownership showed a strong drop from 2015 (figure 15) to 2016 (figure 16), falling in almost all quintiles, except Q4, quite considerably. For instance, in Q2 from 71.4% to 50%. Buffalo ownership also fell in almost all quintiles except in the highest Q5, where it rose from 11.4% to 12.9%. Horse ownership also fell in almost all quintiles except for Q2 where it rose from 5.7% to 12.5%. Overall there is a clear reduction in Livestock with the three animals analysed from 2015 to 2016.

Figure 15: Livestock ownership by quintile (cows, horses, buffalos) (2015)

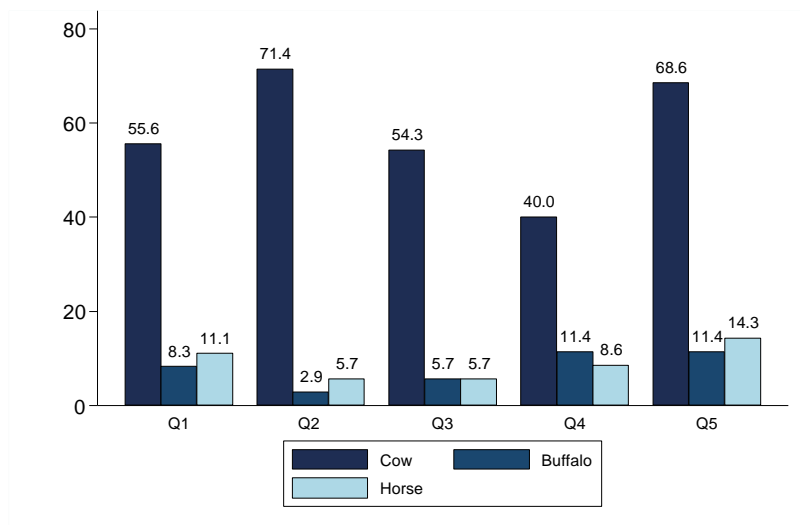
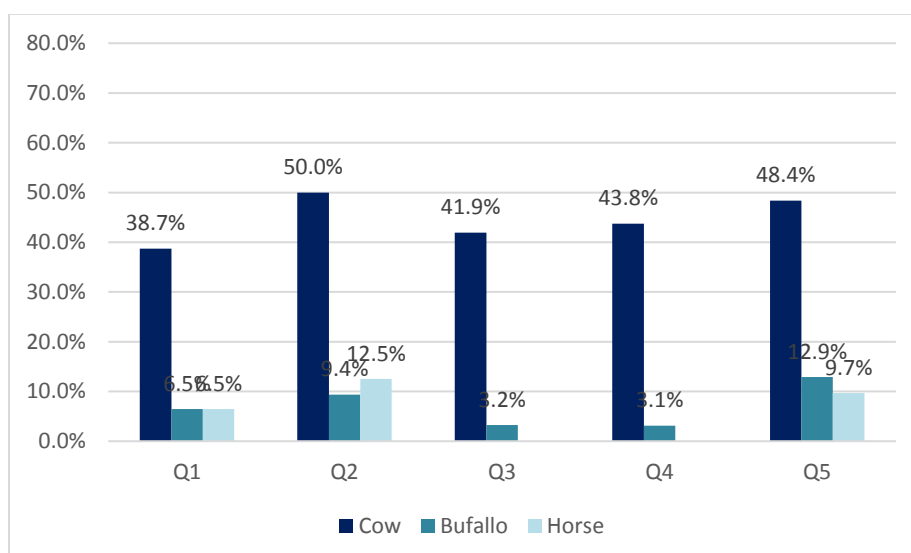


Figure 16: Livestock ownership by quintile (cows, horses, buffalos) (2016)



Data show that goat and sheep ownership decreased in all 5 quintiles between 2015 (figure 17) and 2016 (figure 18). Chicken ownership fell by between 30% - 40% depending on the quintile but was most pronounced in Q1, where it dropped by 50%. The ownership of ducks also fell in almost all quintiles except for Q3 where it rose from 2.9% to 9.7%. Fish is not held by any of the three lower quintiles in either year of observation. Q4 reported 2.9% fish ownership in 2015, which dropped to zero in 2016. Q5 on the other hand did not report any fish ownership in 2015 and one of 3.2% in 2016. Overall there is a strong decline in livestock held.

Figure 17: Livestock ownership by quintile (goat/ sheep, ducks, chicken, fish) (2015)

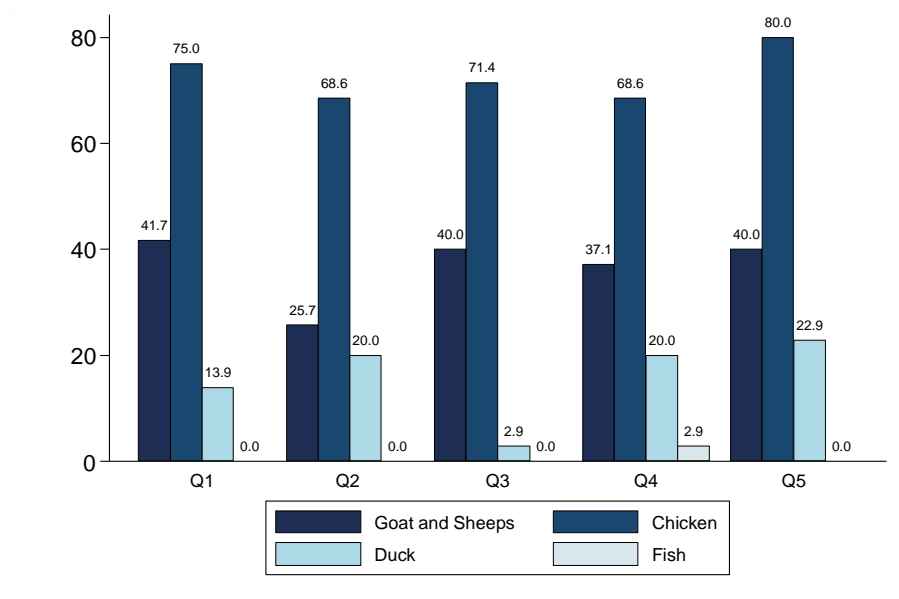
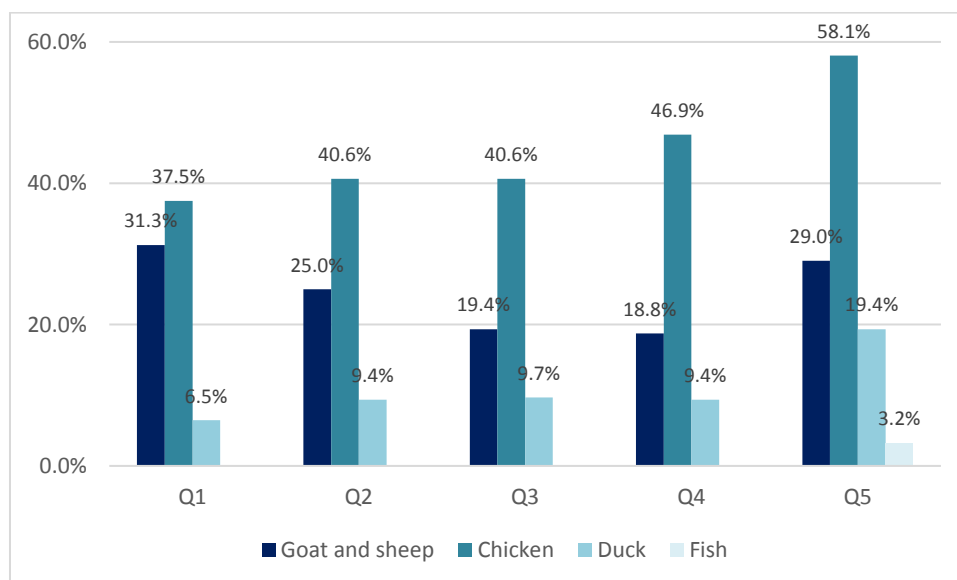


Figure 18: Livestock ownership by quintile (goat/ sheep, ducks, chicken, fish) (2016)



When looking at the amount of animals held most quintiles show a drop in the number of cows they hold. Except for Q3 that now hold on average 1.45 cows compared to 1.1 in 2015 (figure 19). The number of Buffalos owned by farmers in different income quintiles remained relatively unchanged between 2015 and 2016 (figure 20). Horse ownership per farmer also decreased moderately, especially in Q4 where it dropped from 0.9 to 0 within one year. Pig ownership per farmer shows an uneven picture. Farmers in quintile 1 and 3 own less pigs on average. Farmers in quintile 2, 4 and 5 own more pigs.

Figure 19: Amount of livestock by quintile (cows, horses, buffalos, pigs) (2015)

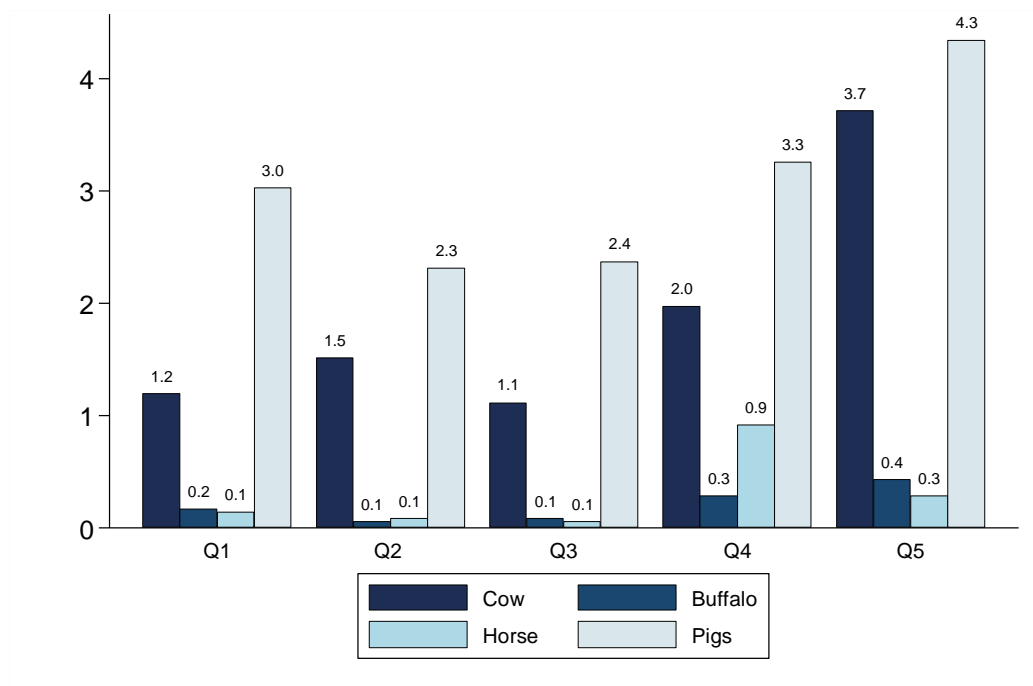
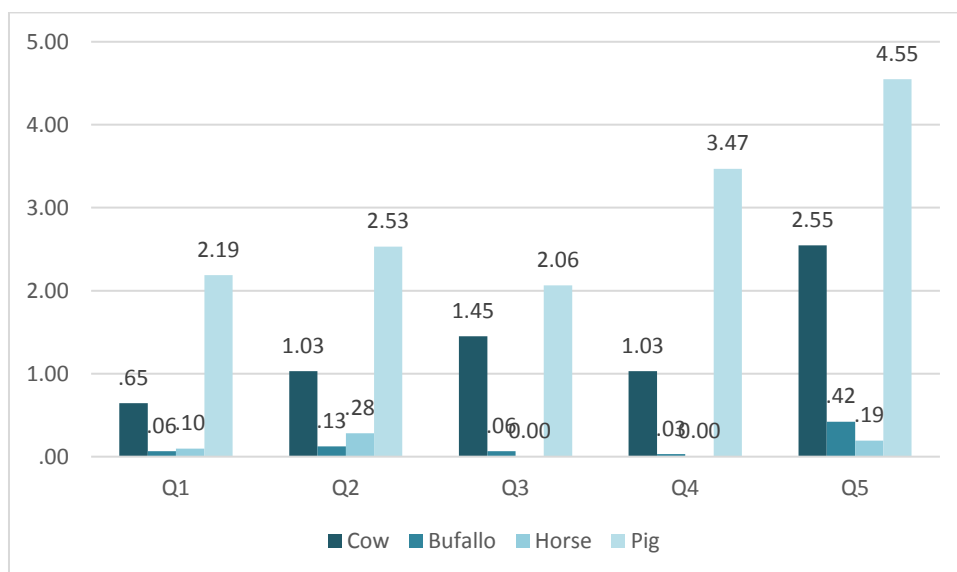


Figure 20: Amount of livestock by quintile (cows, horses, buffalos, pigs) (2016)



The amount of goats and sheep that each farmer owned decreased in all five quintiles, dropping up to 50% between 2015 (figure 21) and 2016 (figure 22). Similarly, the average amount of chicken each farmer owns also fell. In Q2 for instance from 7.7 per farmer in 2015 to only 1.7 in 2016. Average duck ownership fell in quintile 1, 2 and 4 but rose with quintile 3 and 5. Similarly fish ownership switched from Q4 in 2015 to Q5 in 2016.

Figure 21: Amount of livestock by quintile (Goat and sheep, ducks, chicken, fish) (2015)

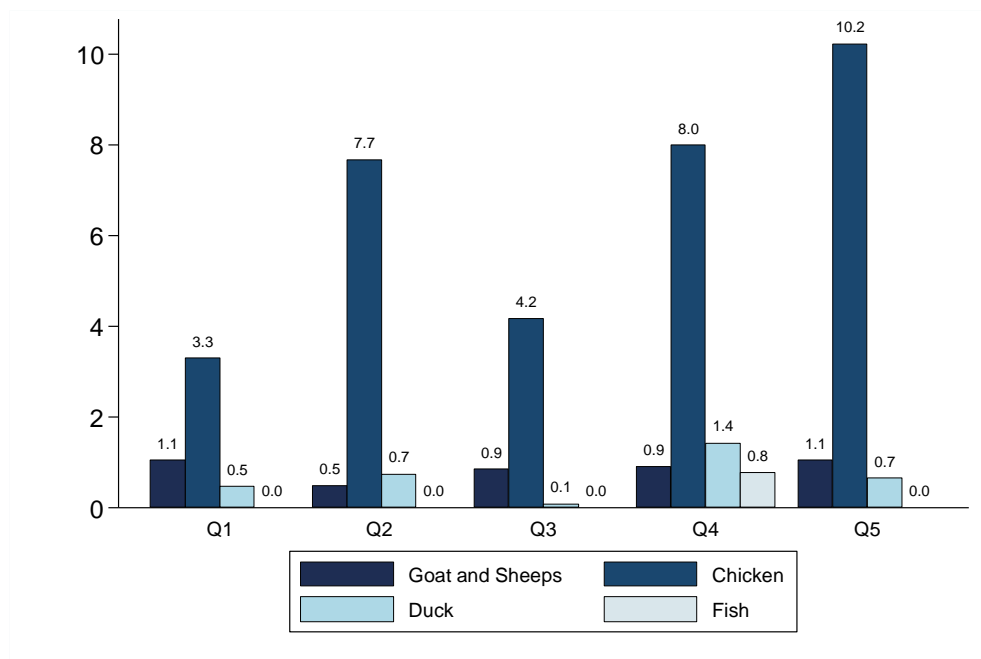
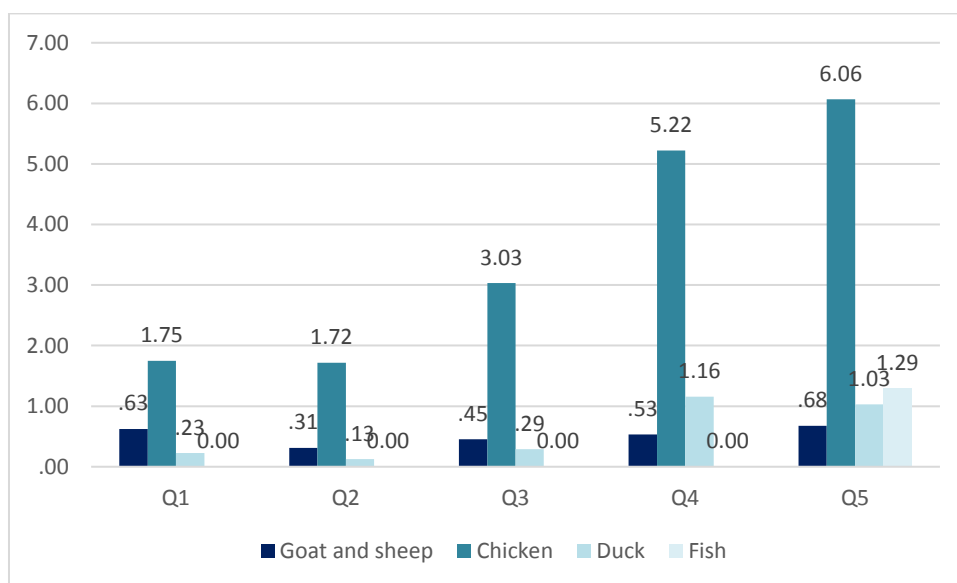


Figure 22: Amount of livestock by quintile (Goat and sheep, ducks, chicken, fish) (2016)



3.3 Natural Assets

Land holdings have decreased from 2015 (figure 23) to 2016 (figure 24) in all quintiles. The drop is particularly severe in the lowest and highest quintile, falling around 60% during the time period.

Figure 23: Land holdings in ha by quintile (2015)

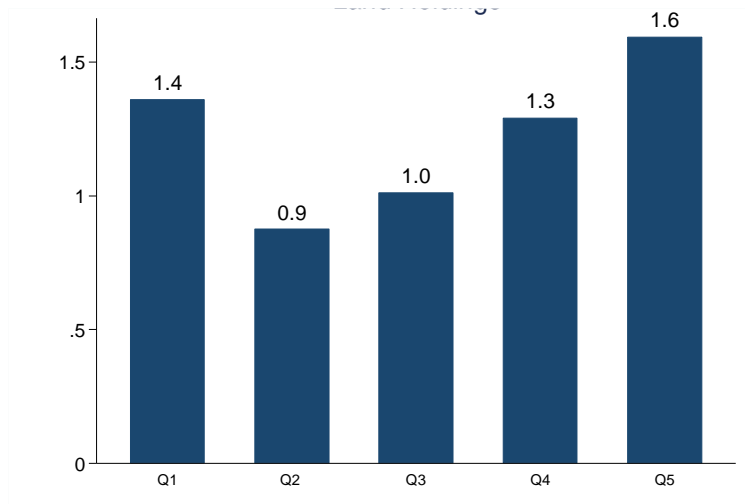
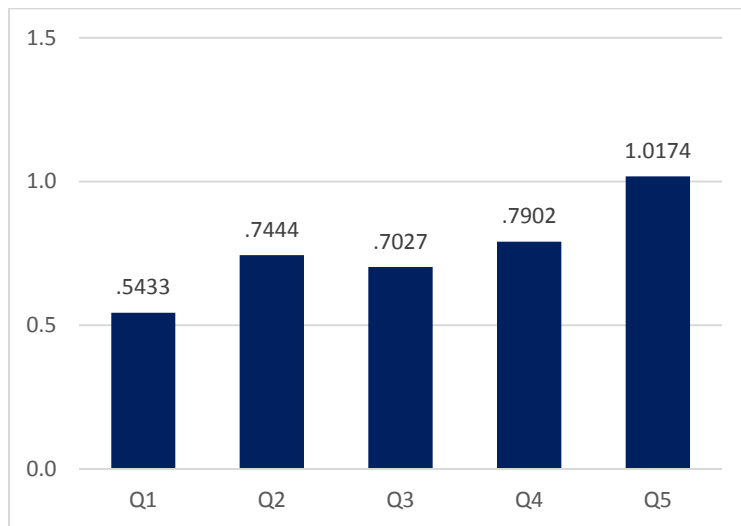


Figure 24: Land holdings in ha by quintile (2016)



Except for the highest quintile all participants of the study reported an increase in food produced/received as percentage of total consumption in 2015 (figure 25) and 2016 (figure 26). This was especially marked for the lowest quintile that saw a 15% increase while there was a 2% drop in the highest quintile.

Figure 25: Own food production/ received food as percentage of total consumption (2015)

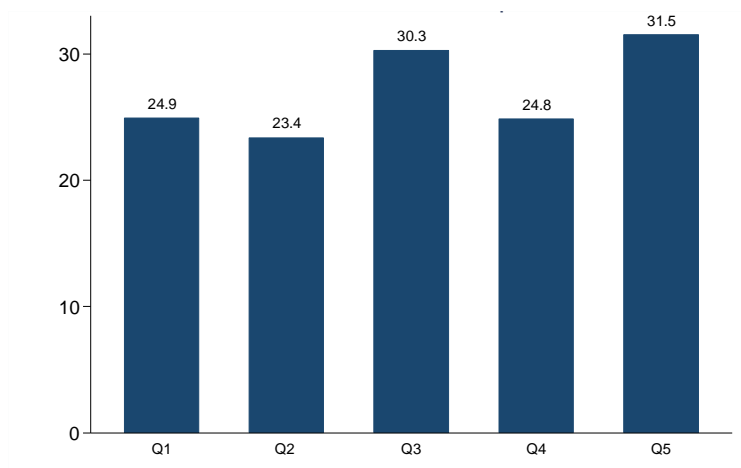
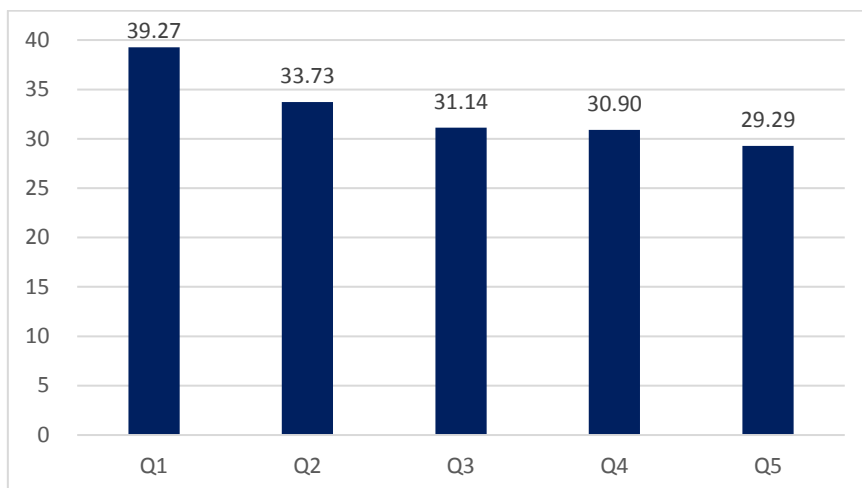


Figure 26: Own food production/ received food as percentage of total consumption (2016)



3.4 Social Assets

There is no data available on Social assets.

3.5 Financial Assets

Savings decreased for lower quintiles, dropping for Q1 from 6.3 million IDR to 2.3 million from 2015 (figure 27) to 2016 (figure 28). This drop, albeit less severe, can also be observed for Q2 and Q3. Quintile 4 reports increased savings of 8 million IDR compared to 5.8 million the year prior. Q5 saw a steep 50% decline in savings in the observed time period. Borrowings dropped for the lower two quintiles but increased for the higher three quintiles. The increase was particularly pronounced for Q3 and Q4.

Figure 27: Saving and borrowing by quintile (2015)

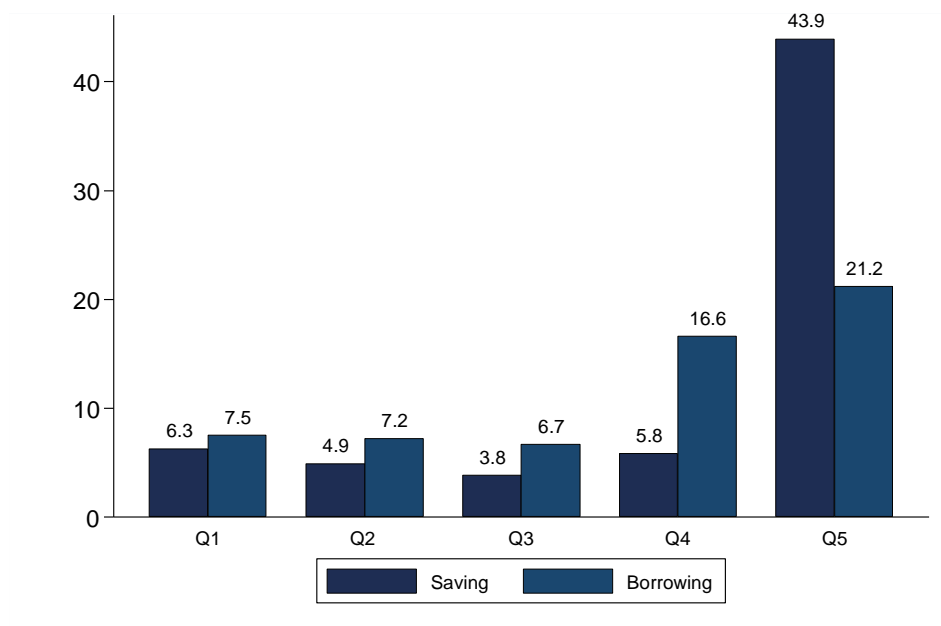
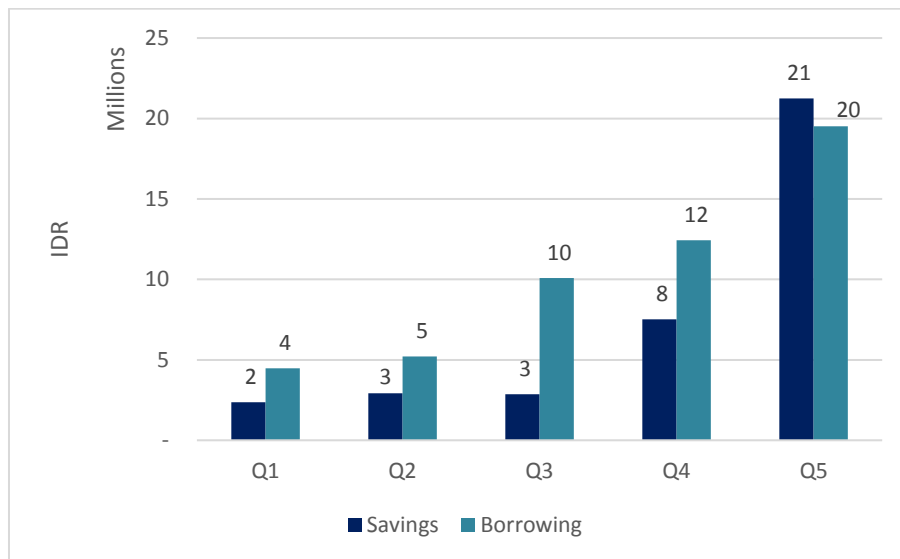


Figure 28: Saving and borrowing by quintile (2016)



4 Income Generation

The percentage of people who only earn a minority of income through agriculture increased from 2015 (figure 29) to 2016 (figure 30) by 7% reaching 45.3%. Those people that earned about half their income through agriculture fell by around 6% from 35.8% to 28.9%. And the percentage of those people that earn the majority of their income through agriculture remained practically unchanged

Figure 29: Income generation from agriculture and livestock (2015)

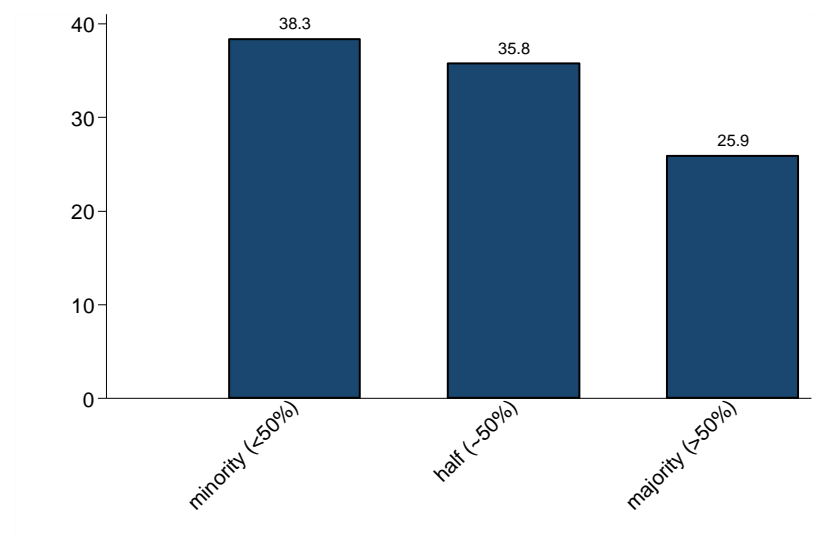
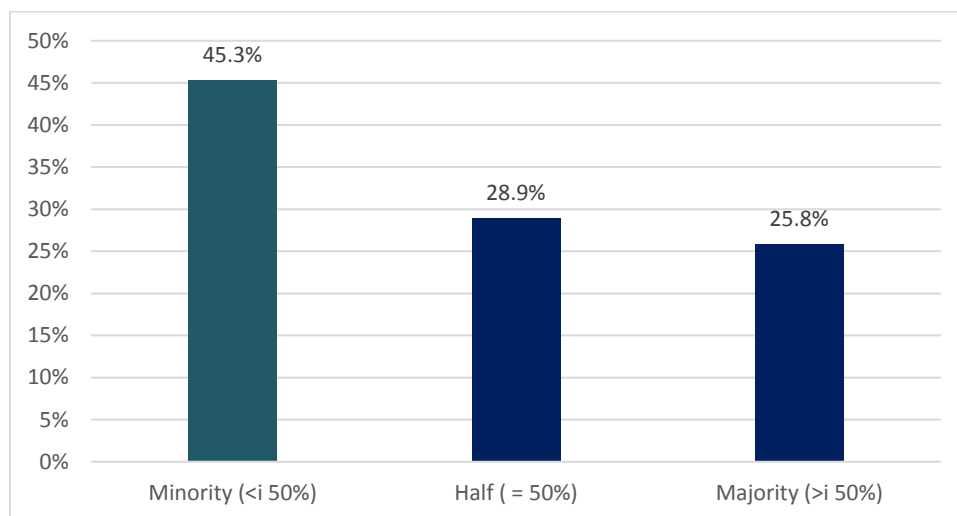


Figure 30: Income generation from agriculture and livestock



4.1 Agricultural Activity

The importance of crops only changed relatively little from 2015 to 2016 (figures 31 and 32). Cashew was still perceived as the important crops, followed by Rice. However, in 2016 Banana was ranked slightly more important than Candlenut which was placed fourth, a change from the year prior where other crops such as maize and coffee ranked higher than Banana.

Figure 31: Frequency of crops mentioned as three most important in terms of income (2015)

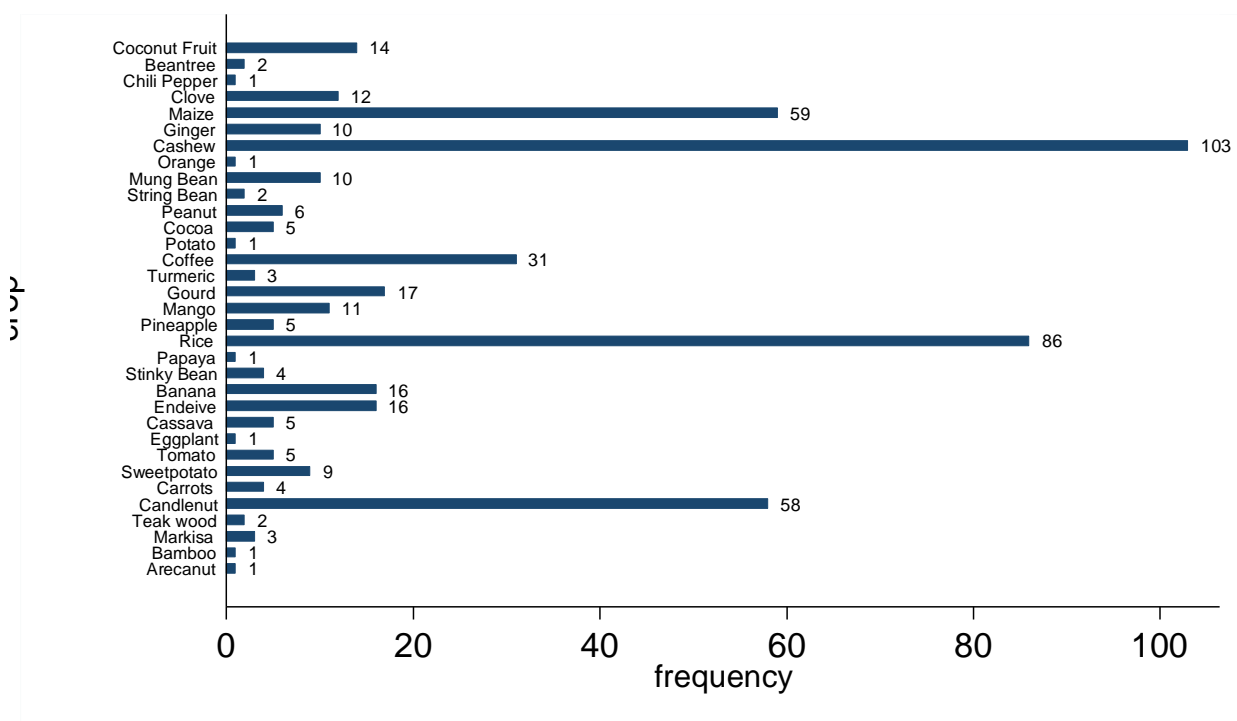
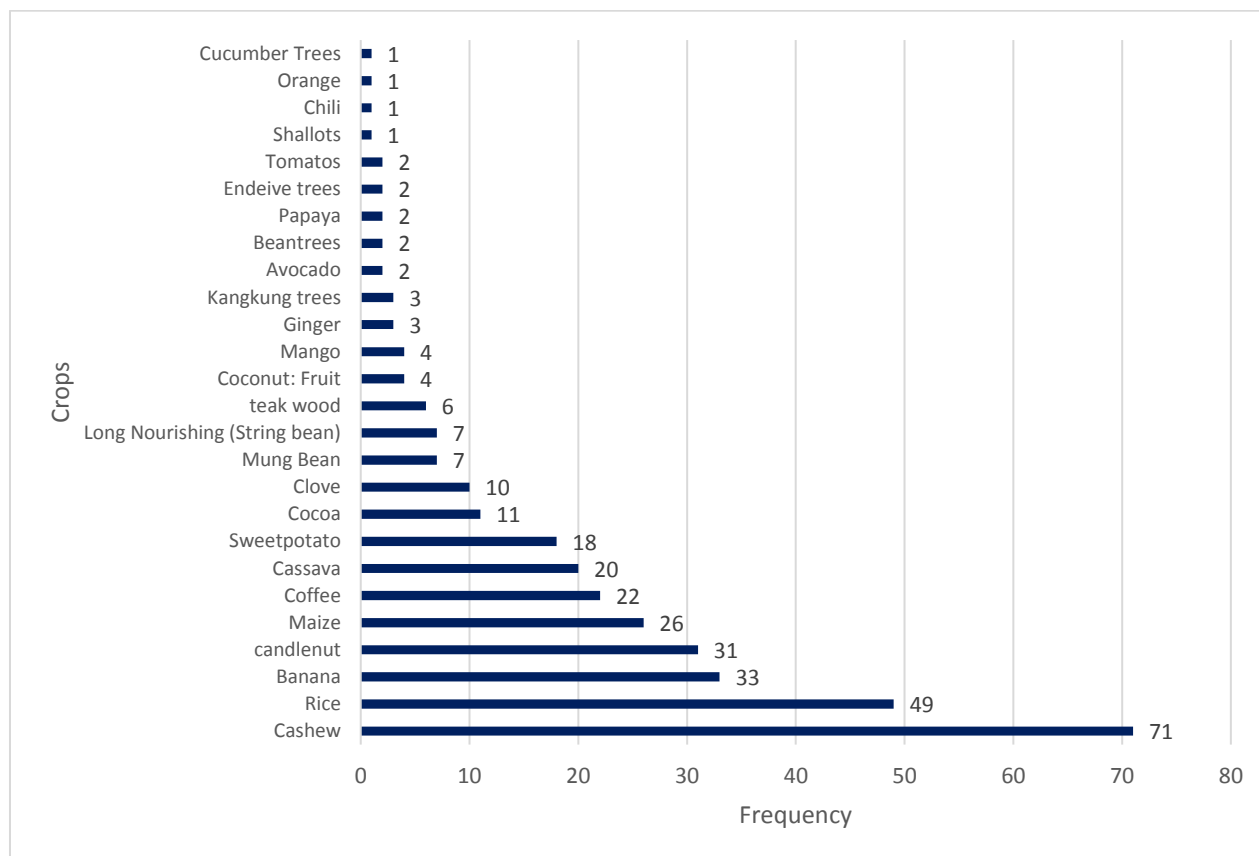


Figure 32: Frequency of crops mentioned as three most important in terms of income (2016)



When looking at crops for self-consumption maize ranked ahead of rice in 2016 (figure 34) compared to 2015 (figure 33), albeit only slightly. In both years Banana came in as the third most important crop. In 2015 Coconut fruit was ranked as fourth most important crop for self-consumption, this was replaced by Cassava in 2016.

Figure 33: Crops for self-consumption (no reported sales) (2015)

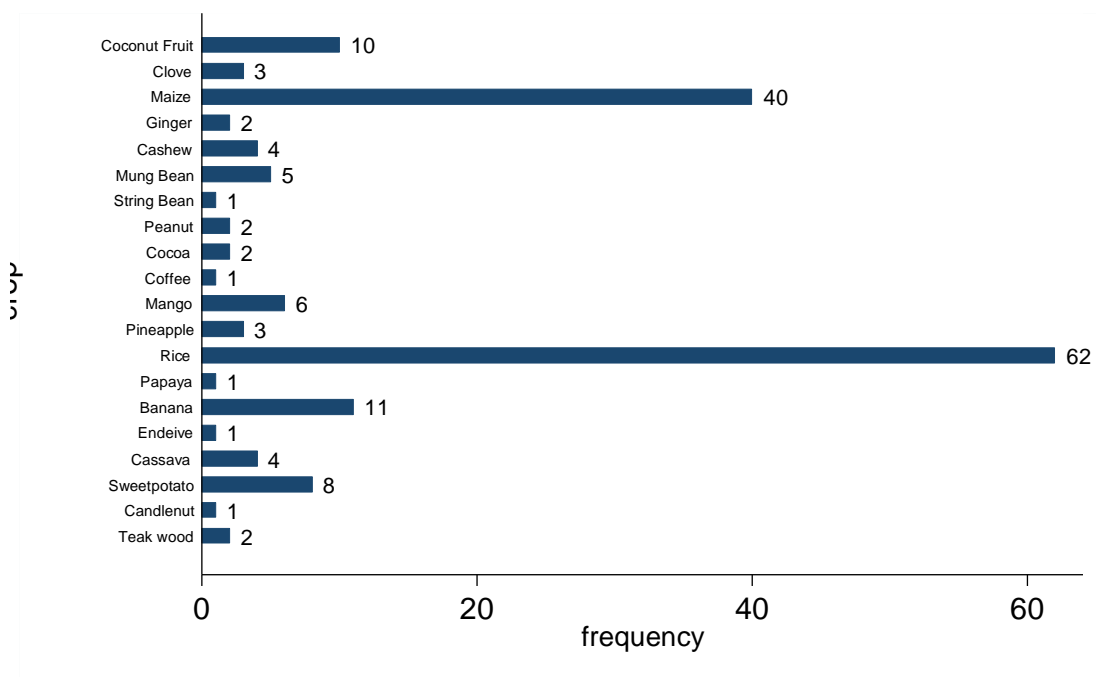


Figure 34: Crops for self-consumption (no reported sales) (2016)

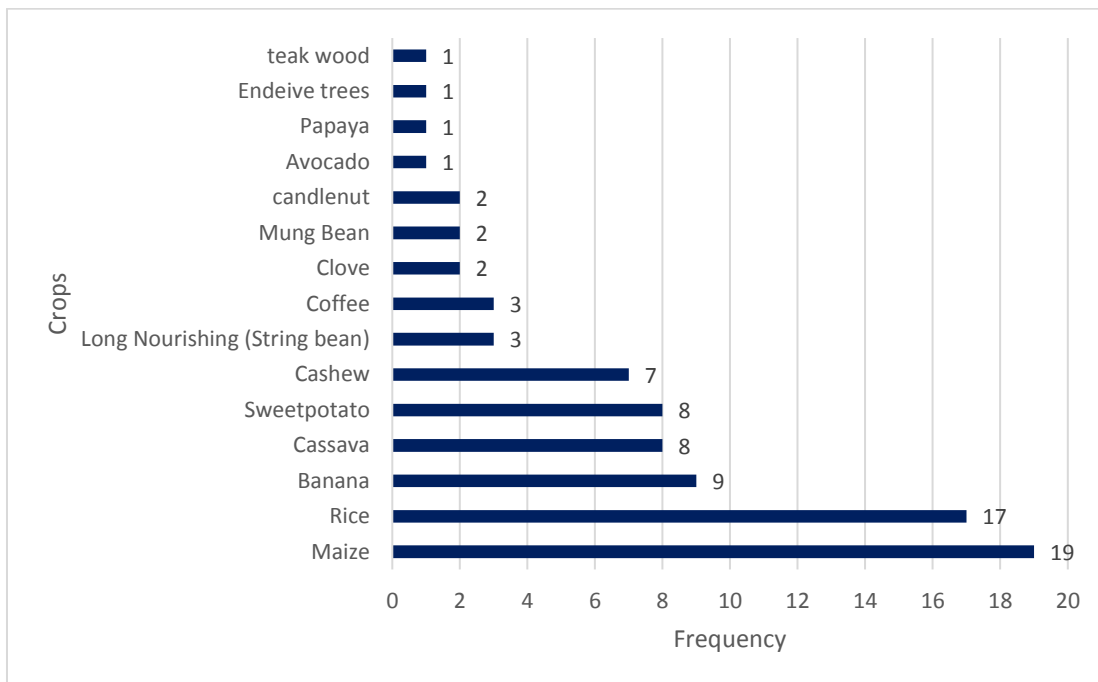


Figure 35: Crops which are mainly sold (respondents sell more than 50%) (2015)

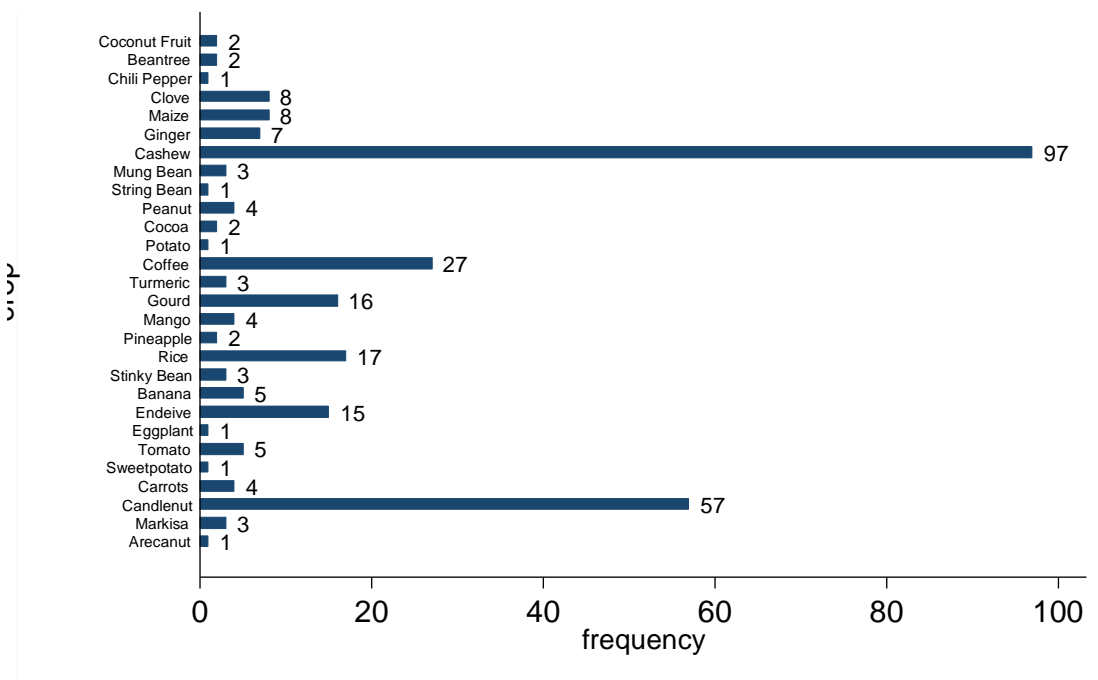
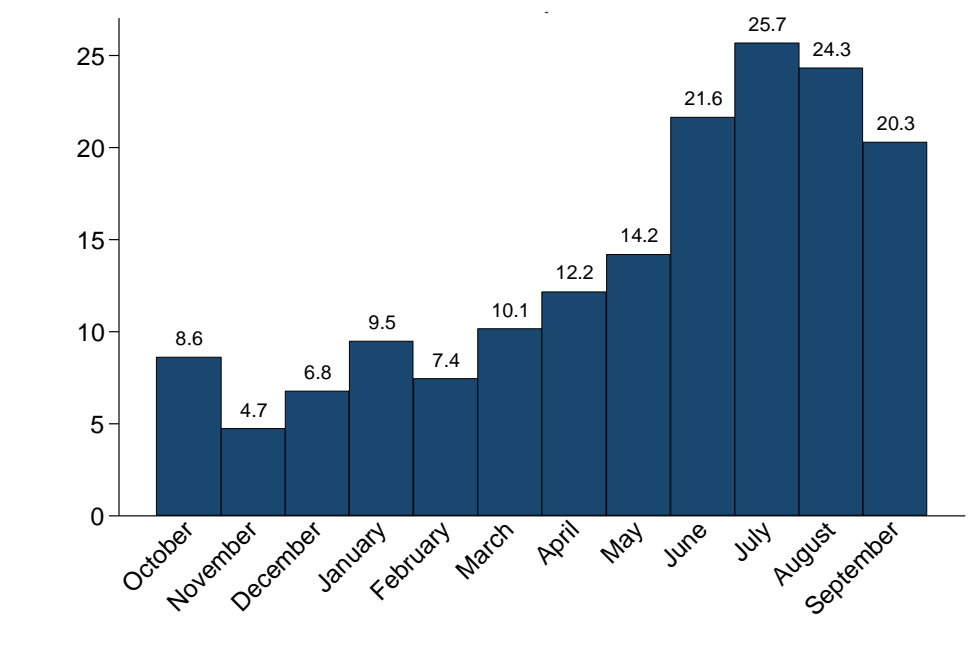


Figure 36: Crops which are mainly sold (respondents sell more than 50%) (2016)

4.2 Livestock Activities with focus on Pigs

Figure 37: Sales season for livestock by month



The sales season for pigs in both years peak during the July – September period. Whereas in 2015 (figure 38) the number one month was July, this shifted to September in 2016 (figure 39). Generally, the most important sales season for pigs lies between June and September, whereas the other times see very low sales numbers, especially the months of December and February.

Figure 38: Sales season for pigs by month (2015)

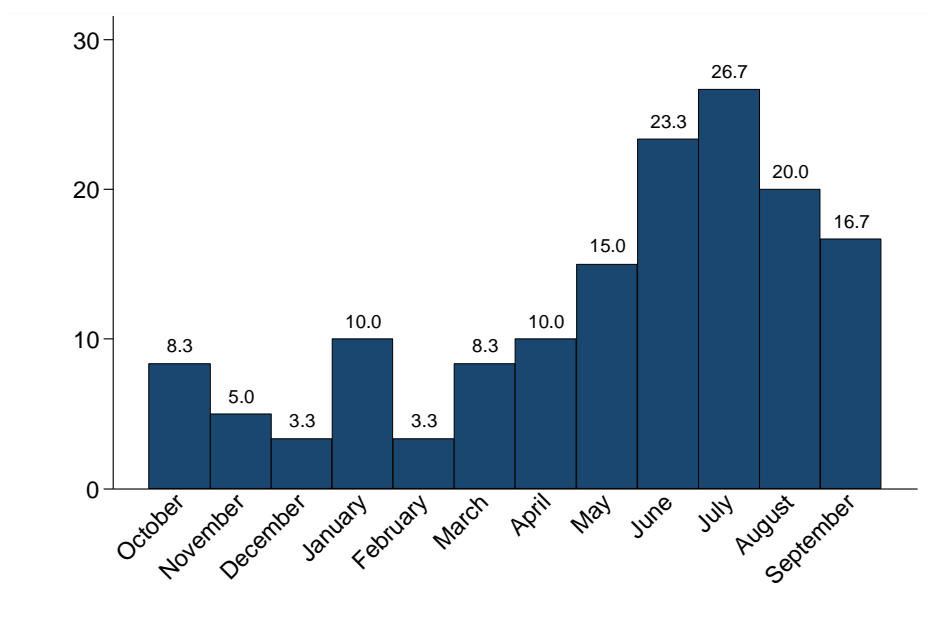
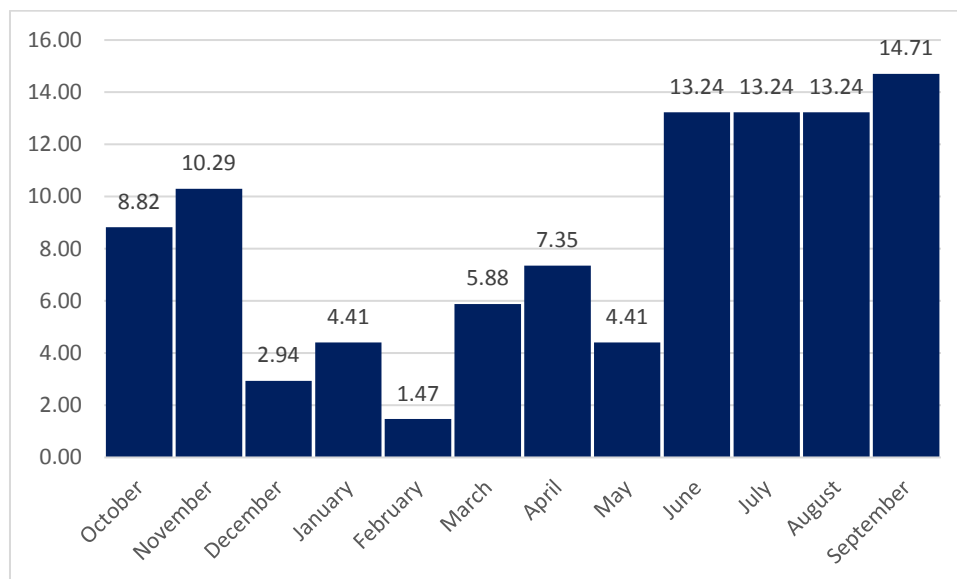


Figure 39: Sales season for pigs by month (2016)



5 Expenditure and Financing Expenditure

5.1 Educational Expenditure

In both years analysed education expenditure rank as top expenditure costs for households. In 2015 (figure 40) repaying debts was perceived as more expensive than Health expenditures, in 2016 (figure 41) it was the opposite. In 2015 the third most important expenditure was for religious or village celebrations, whereas in 2016 marriage costs were ranked higher.

Figure 40: Significant Expenditure (2015)

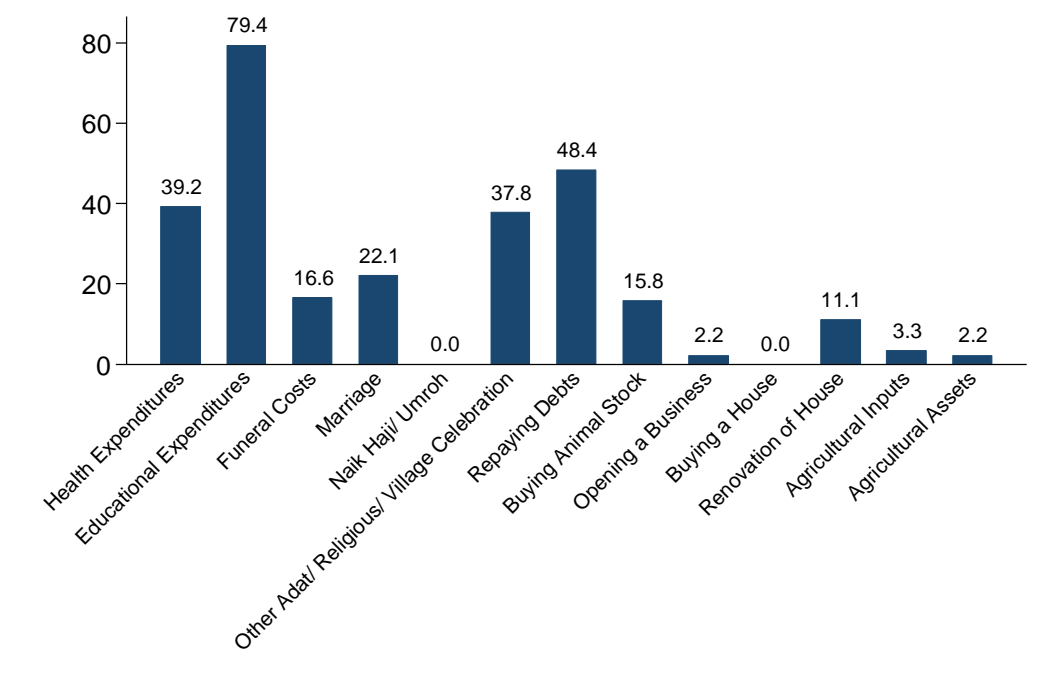
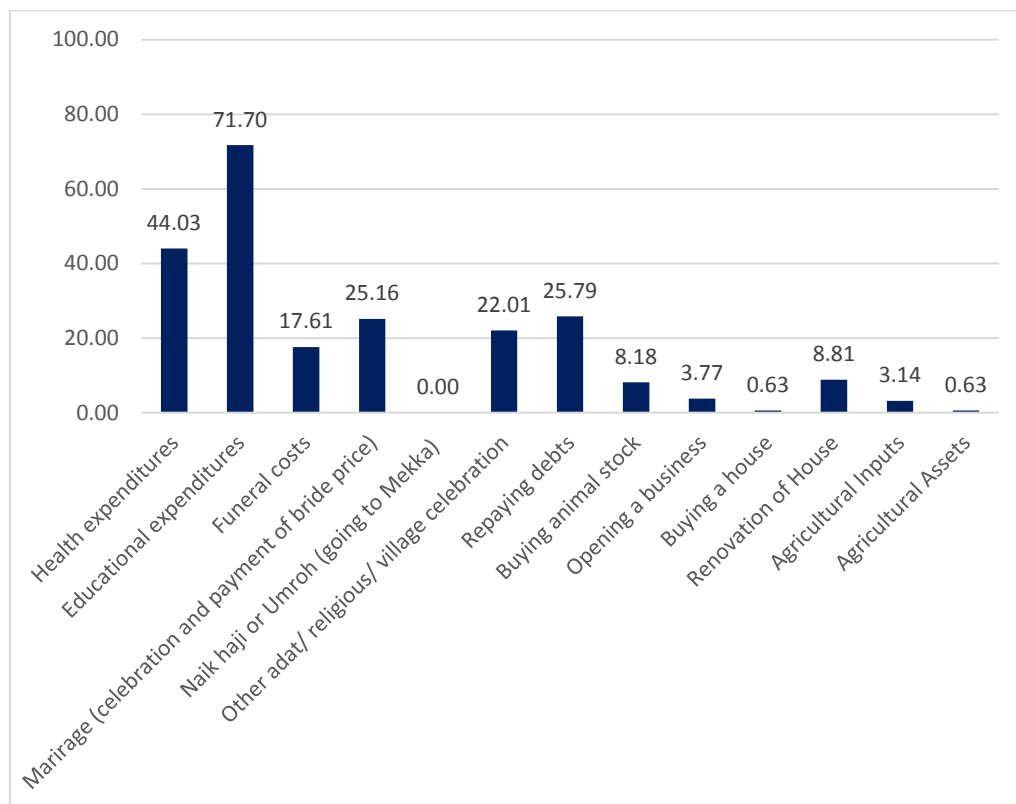


Figure 41: Significant Expenditure (2016)



Education expenditures were relatively evenly distributed among different income quintiles in 2016 (figure 43), but showed more differences in 2015 (figure 42). In 2016 Q1 had the highest share with almost 13%, whereas in 2015 Q2 paid for a share of 19.3% of total education expenditure.

Figure 42: Education Expenditure by Quintile (percentage) (2015)

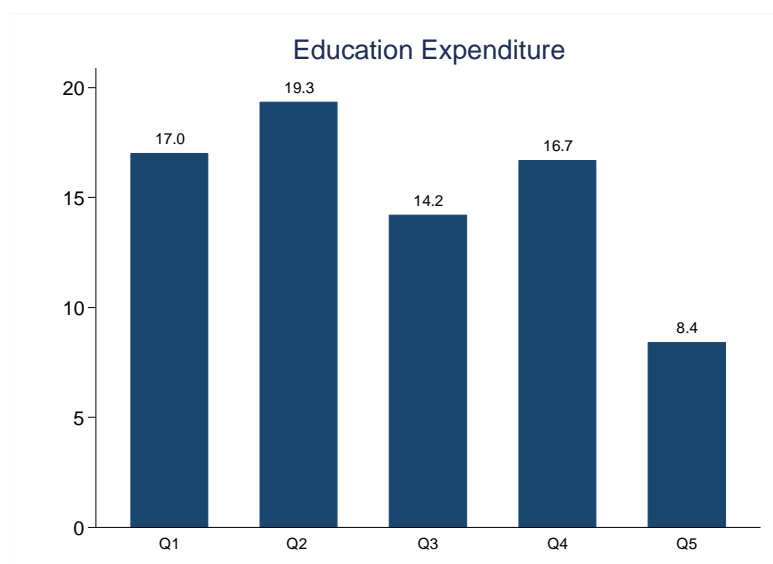
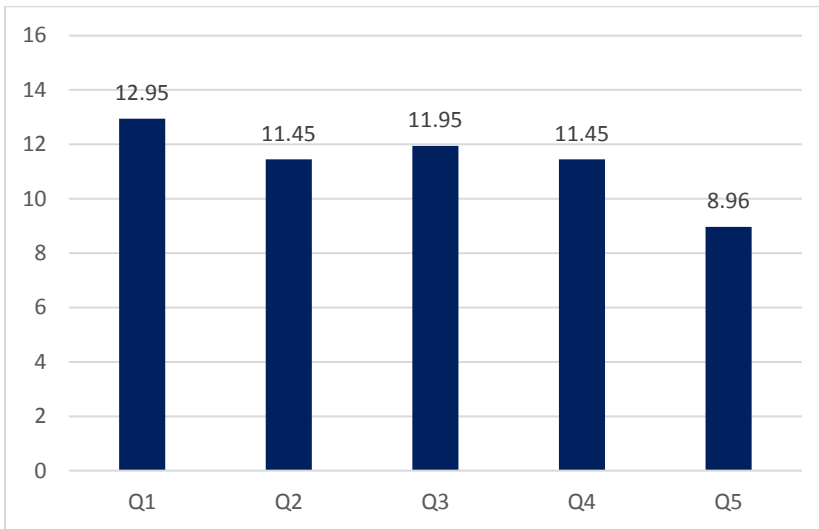


Figure 43: Education Expenditure by Quintile (percentage) (2016)



The highest nominal expenditure on education in 2015 (figure 44) was borne by Q4 and the lowest by Q1. In 2016 (figure 45) the largest nominal expenditure had shifted to Q3, Q1 still spent least on education compared to the other groups.

Figure 44: Education Expenditure by Quintile (IDR) (2015)

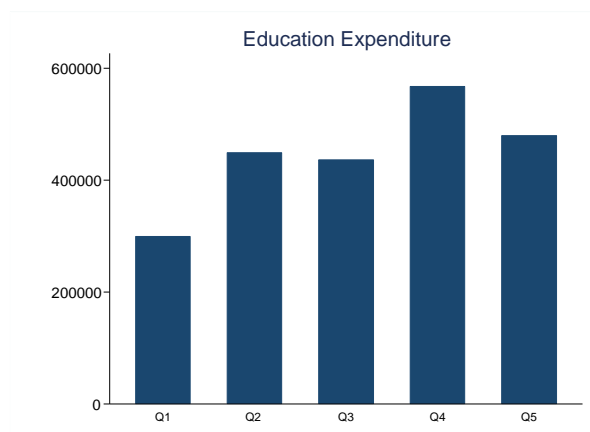
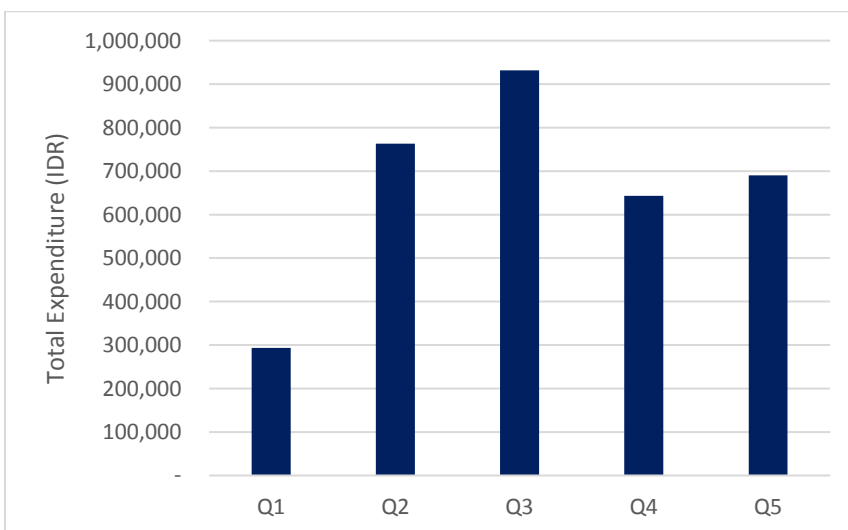


Figure 45: Education Expenditure by Quintile (IDR) (2016)



Broken down on a per child expenditure on education, the top four quintiles showed significantly more expenditure in 2016 than 2015 (figures 47 and 46). In both years, participants of income quintile 1 exhibited significantly lower education expenditures per child compared to the other income groups.

Figure 46: Education expenditure by child by Quintile (IDR) (2015)

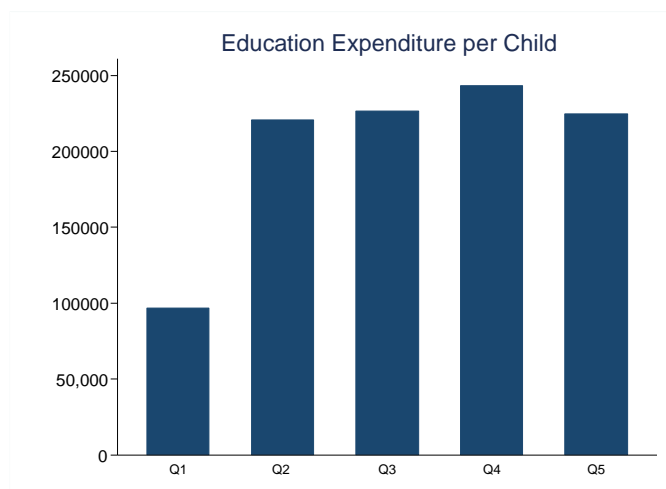
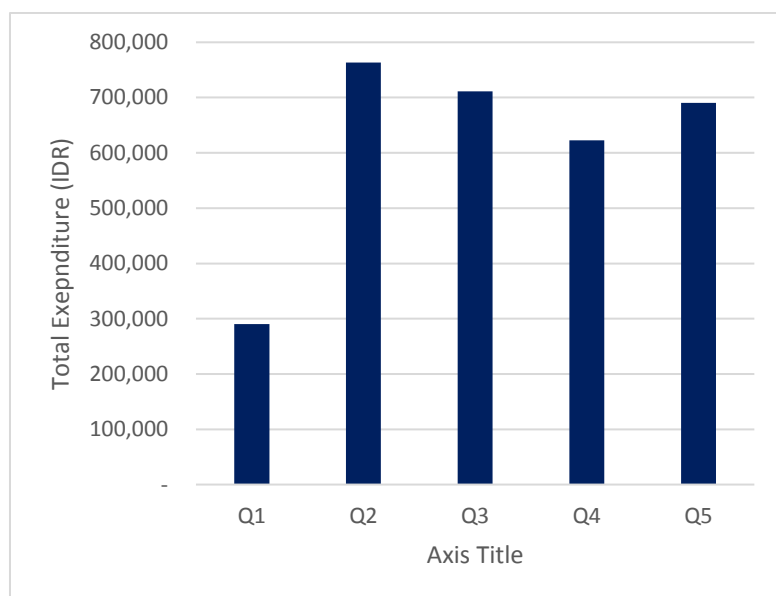


Figure 47: Education expenditure by child by Quintile (IDR) (2016)



Whereas in 2015 (figure 48) a majority of respondents named the sale of livestock as the primary means to finance education, this had shifted to relying on already existing savings in responses provided in 2016 (figure 49), with more than 50% giving that answer. Selling agriculture assets and livestock was ranked second and third in 2016. Whereas in 2015 participants survey named credit and

Figure 48: Financing Education (percentage) (2015)

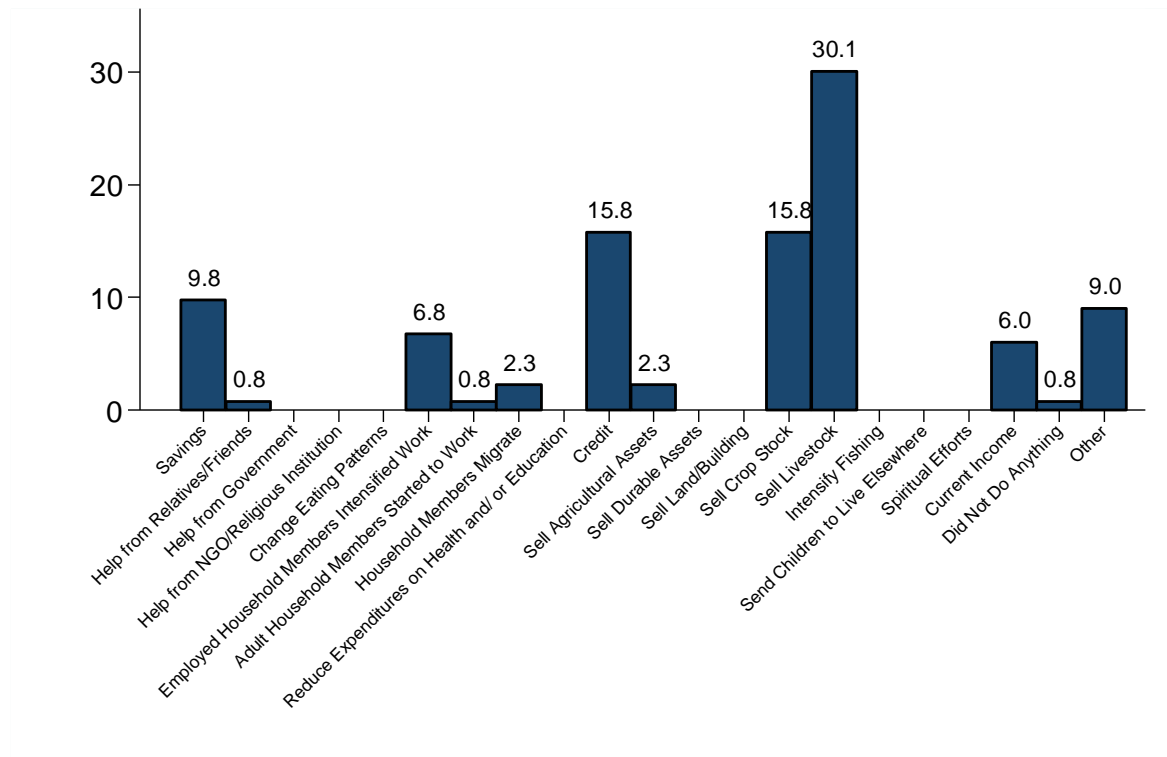
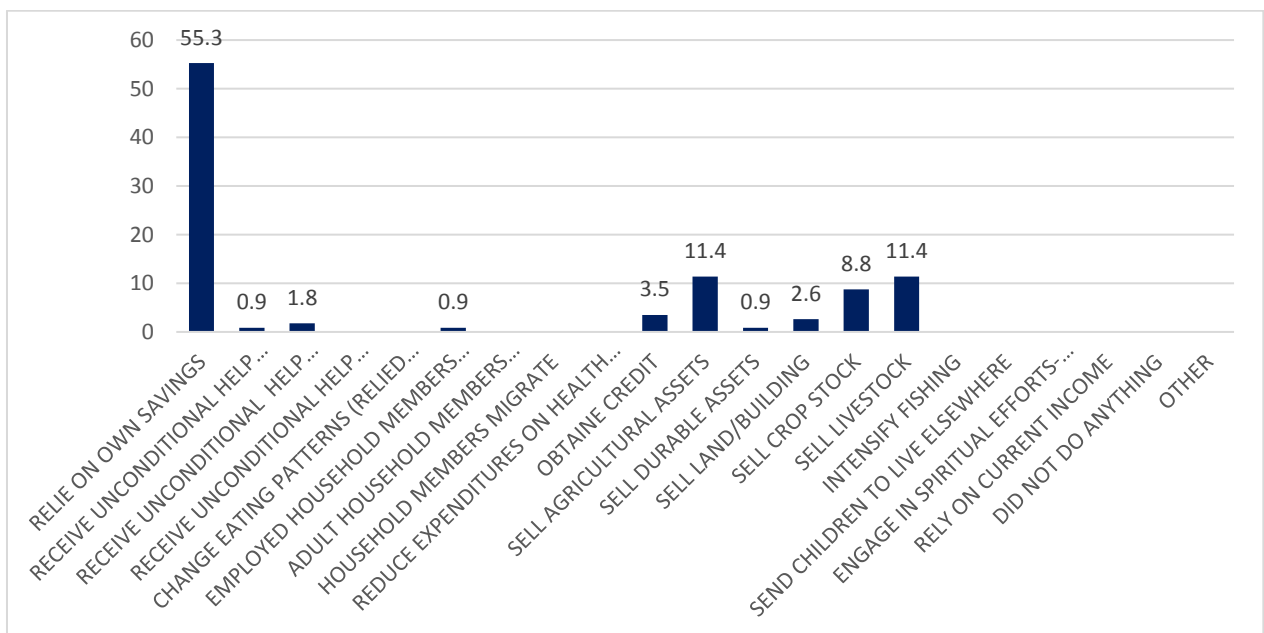


Figure 49: Financing Education (percentage) (2016)



In both 2015 (figure 50) and 2016 (figure 51) most education expenditure was paid in the months between June and October. In 2016 some respondents also named January as a month with some educational expenditures. The month with the most significant education expenditure is July for both 2015 and 2016.

Figure 50: Timing of Significant Expenditure – Education (2015)

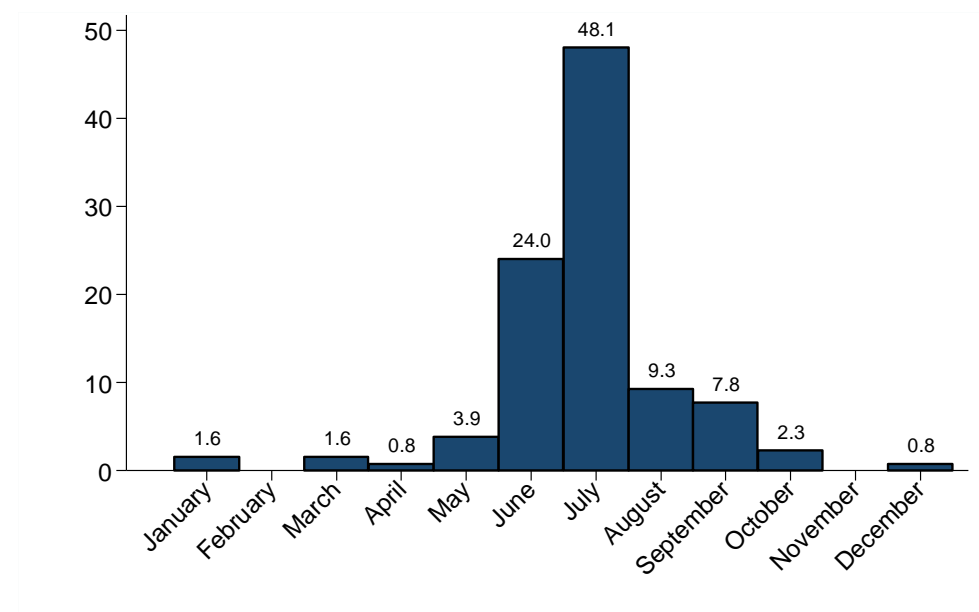
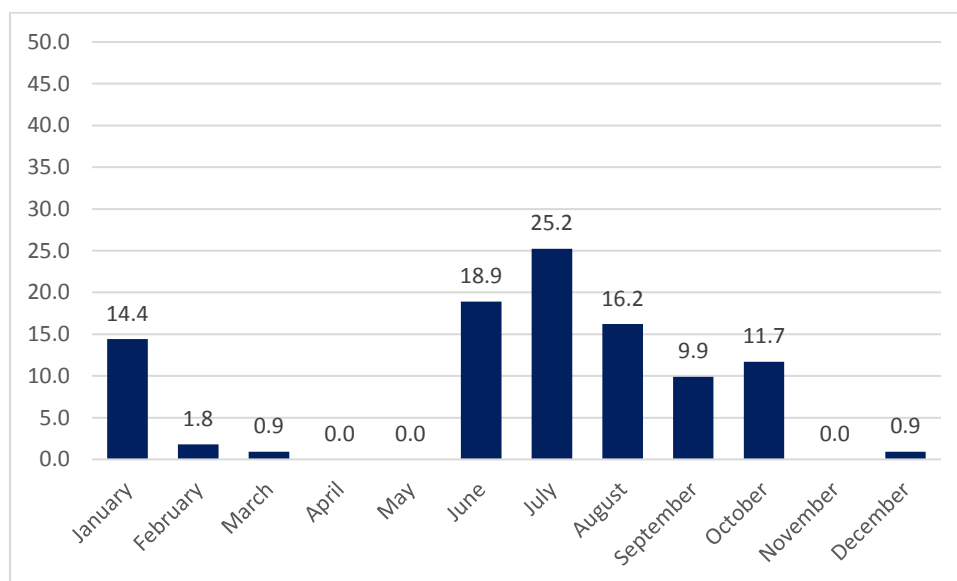


Figure 51: Timing of Significant Expenditure – Education (2016)



5.2 Social Expenditures

Overall the share of Tobacco and Alcohol on overall expenditures fell from 2015 (figure 52) to 2016 (figure 53) from around 7% to around 5%. In both years, expenditure was relatively evenly distributed among the lower 4 quintiles. People in Q5 spend on average less on these two products. Expenditure for ceremonies shows an increase with increasing income quintile in both years with Q5 spending between 7.9 and 8.5% of their total expenditure on ceremonies. Money spent for recreation and entertainment is minimal to non-existent for lower income quintiles. In Q5 only 0.5% of total expenditures was used for this purpose. Food

consumed outside of home remains a very small expenditure for all quintiles and in both years, ranging from zero to 0.7%.

Figure 52: Social Expenditure (2015)

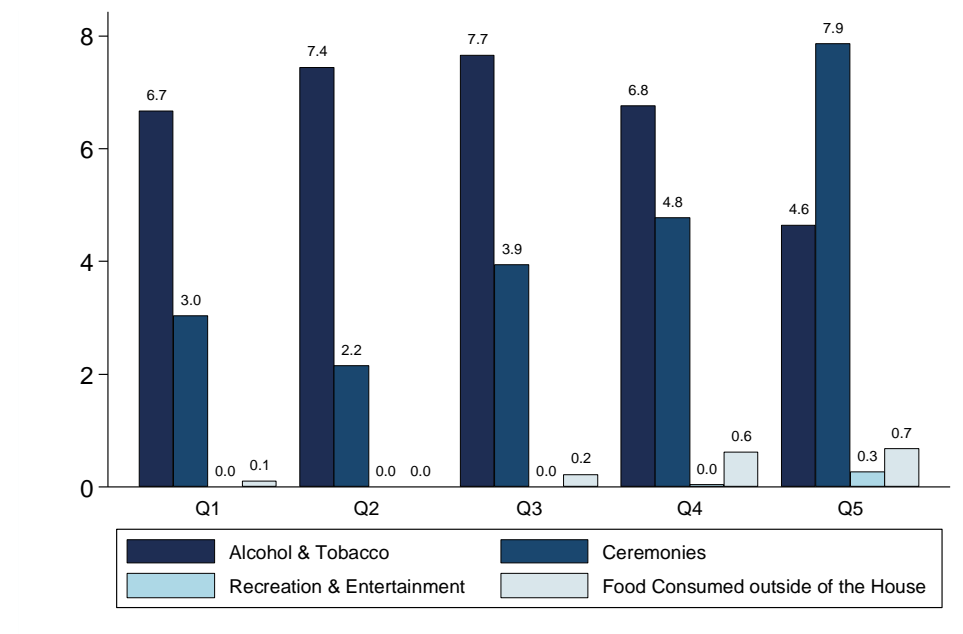
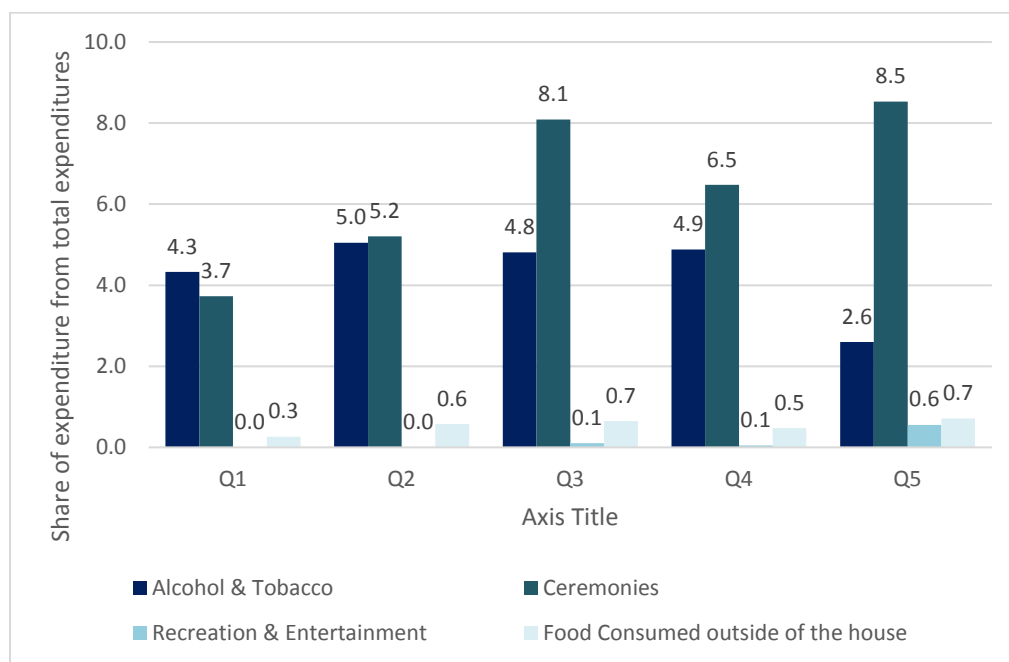


Figure 53: Social Expenditure (2016)



A similar discrepancy between replies from 2015 (figure 54) and 2016 (figure 55) is shown when looking at source of financing for marriage. Similarly, in 2015 a majority of respondents replied relying on selling crops and second and thirdly selling livestock and employing a household member for intensified work. In 2016 the main source of income for marriage was savings, with almost 50% providing that response. Followed by relying on current income and the sale of livestock.

Figure 54: Financial Marriage (2015)

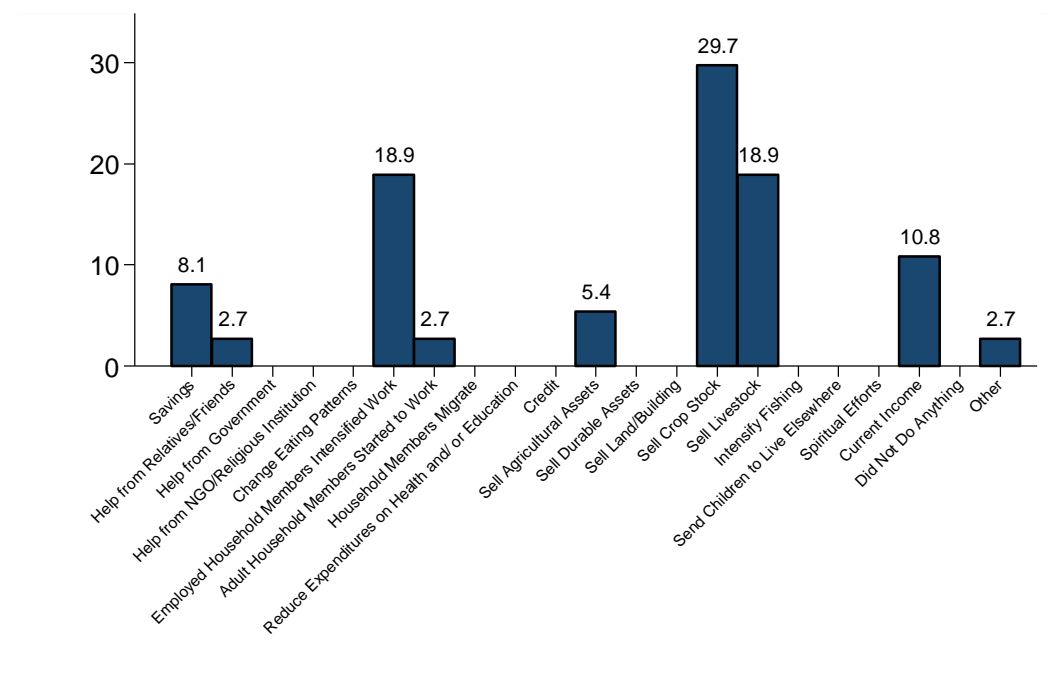
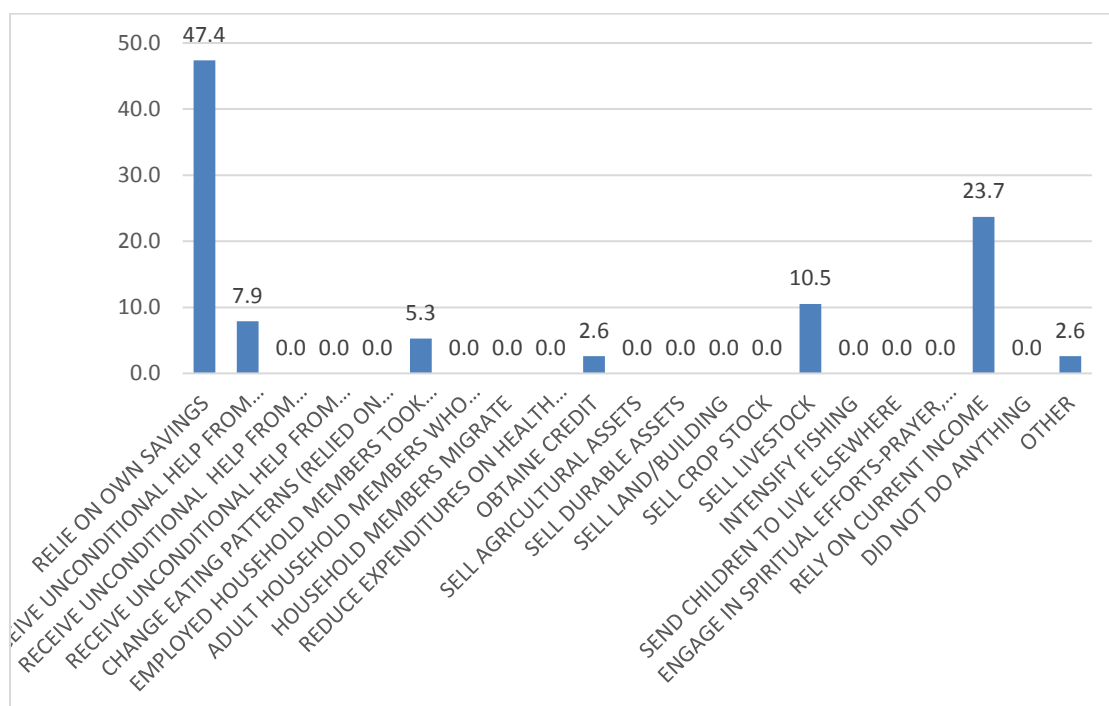


Figure 55: Financial Marriage (2016)



Similarly, financing for *adat* and other celebrations was primarily done through selling livestock and employing household member in intensified work in 2015 (figure 56), using personal savings only in third place. In 2016 (figure 57) 40% reported using personal savings and 25.7% relying on current income to pay for religious celebrations or *adat*. Selling livestock was only an option for 11.4%.

Figure 56: Financing other Adat (2015)

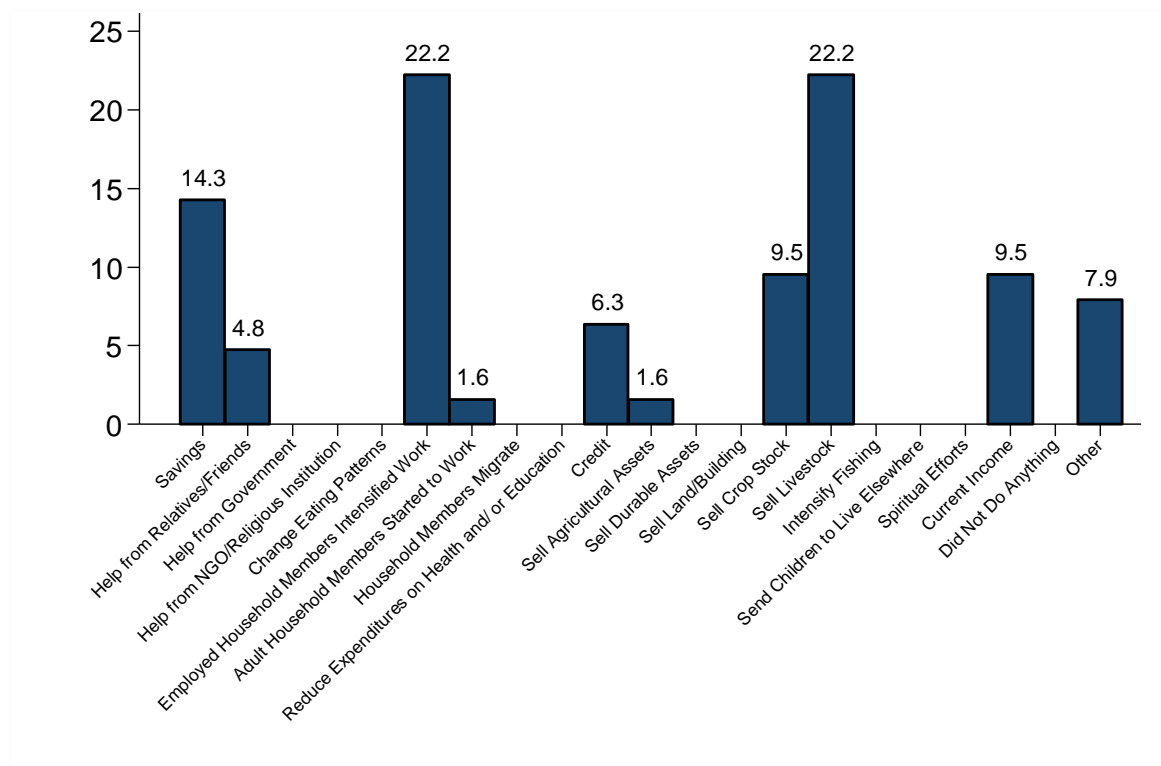
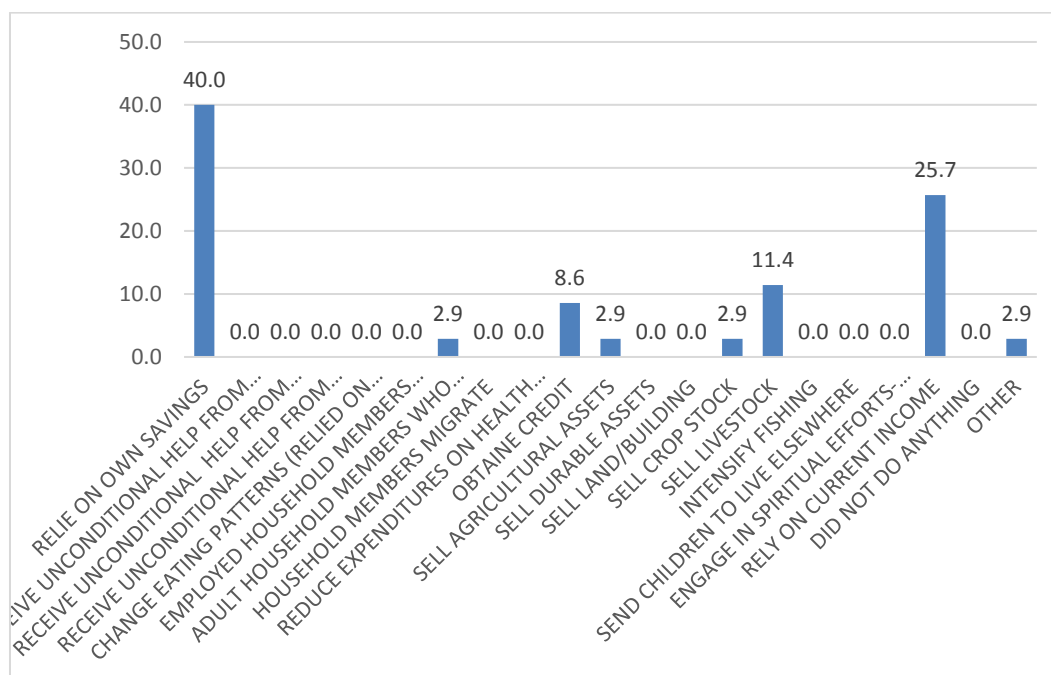


Figure 57: Financing other Adat (2016)



Most expenditure for religious, village celebrations and *adat* take place during the month of September followed by the two preceding months of July and August for 2015 and 2016 (figures 58 and 59). The other months see relatively little to low expenditures for such events.

Figure 58: Timing of Significant Expenditure – Other Adat/ Religious/ Village celebration (2015)

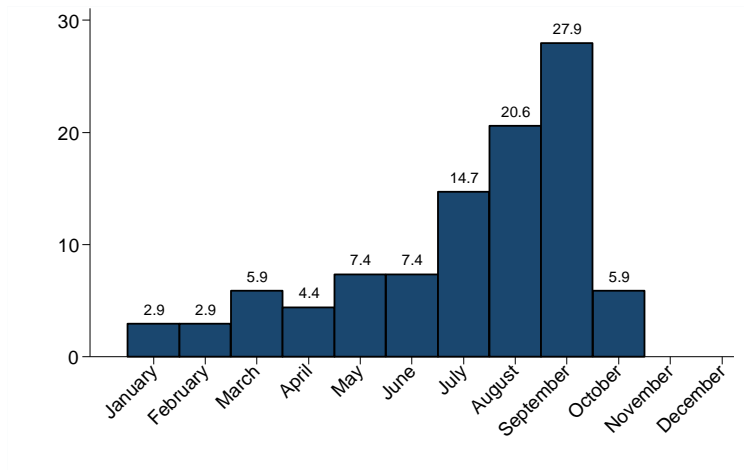
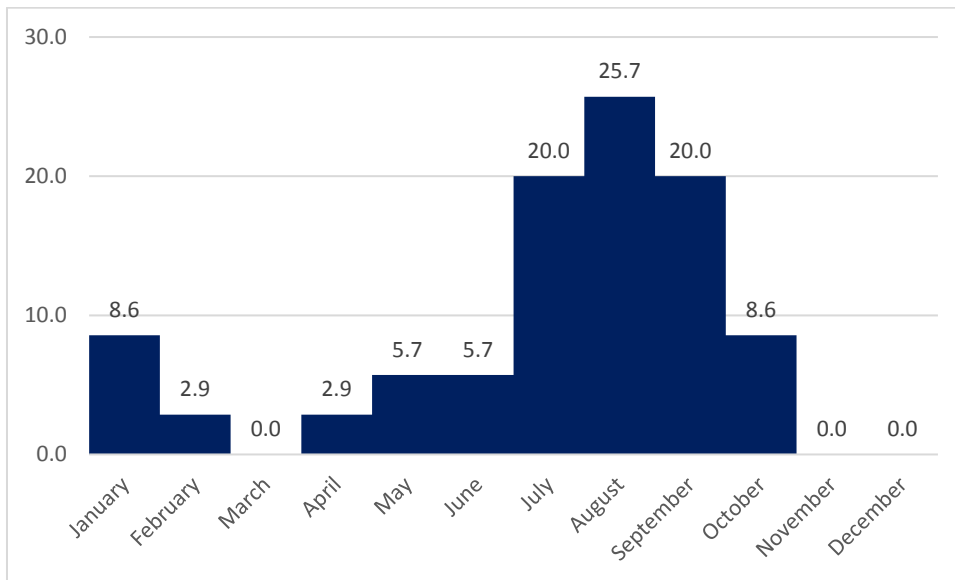


Figure 59: Timing of Significant Expenditure – Other Adat/ Religious/ Village celebration (2016)



Marriages also seem to be taking place mostly during the season of celebrations between July and September where expenditure is far higher than throughout other times. Between February and April there is zero expenditure on marriages in both years (figures 60 and 61).

Figure 60: Timing of Significant Expenditure – Marriage (2015)

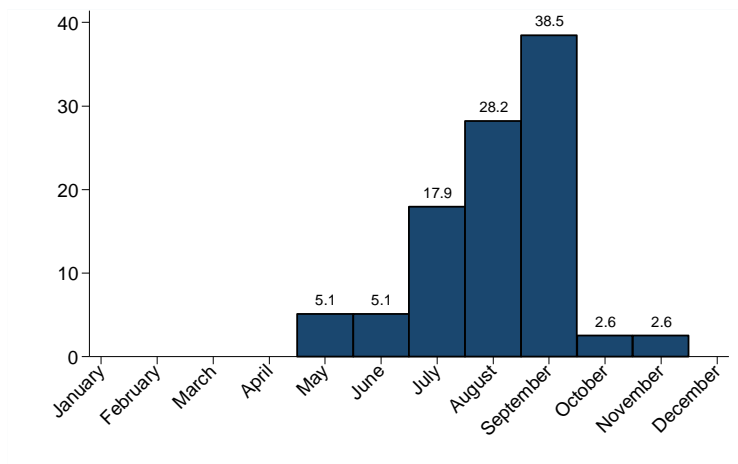
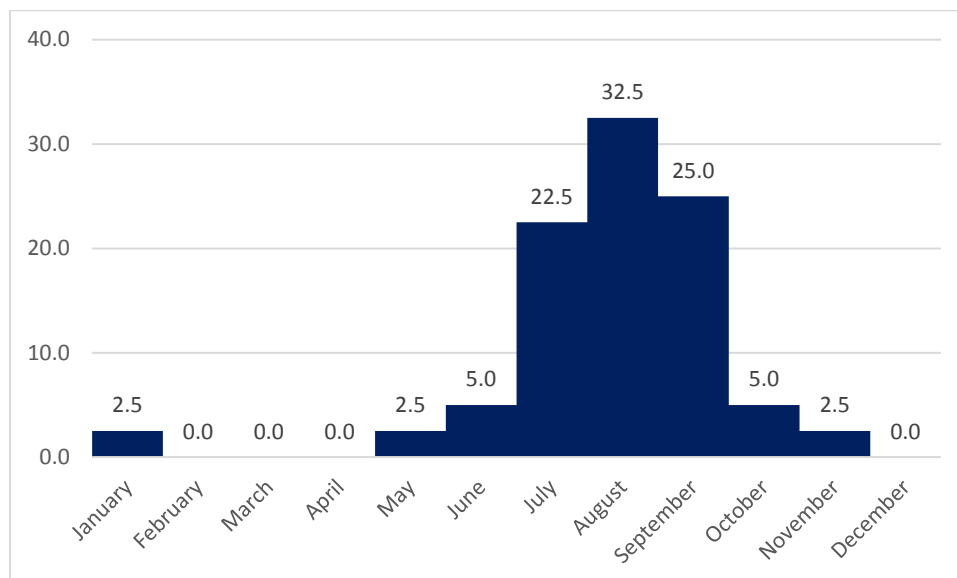
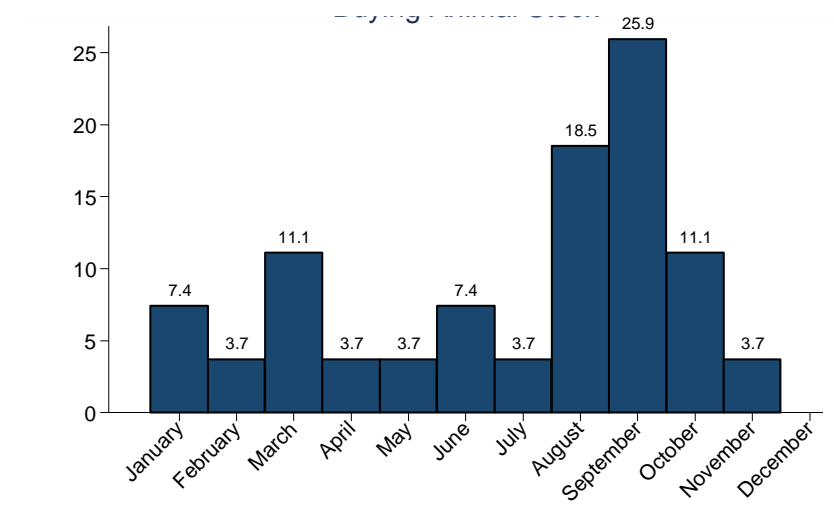


Figure 61: Timing of Significant Expenditure – Marriage (2016)



5.3 Livestock Expenditures

Figure 62: Timing of Significant Expenditure – Buying Animal Stock (2015)



5.4 Agricultural Assets

No data available.

5.5 Repaying Debt

Both in 2015 (figure 63) and 2016 (figure 64) farmers tend to repay their debt between August and October with September being the most important month for this activity. Generally, in 2015 repayment was also reported throughout other months of the year, albeit at a lower level, this was no longer the case for 2016.

Figure 63: Timing of Specific Expenditure - Repaying Debt (2015)

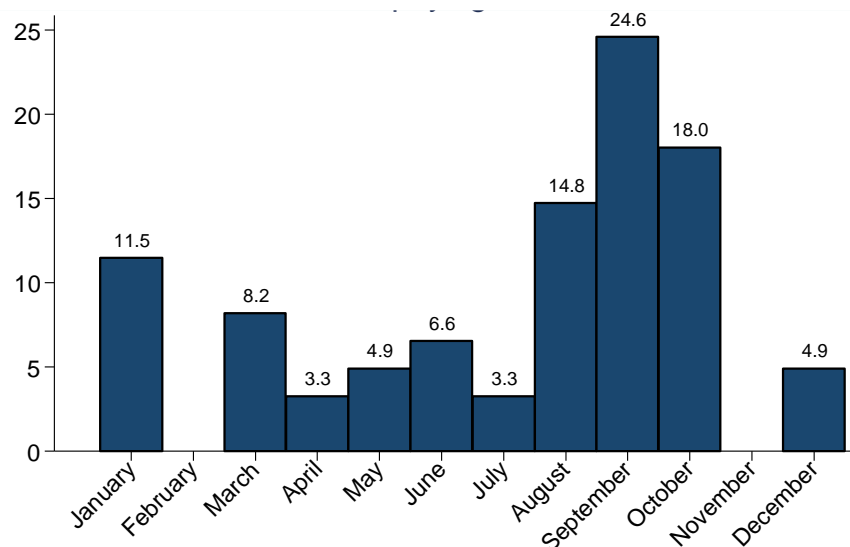
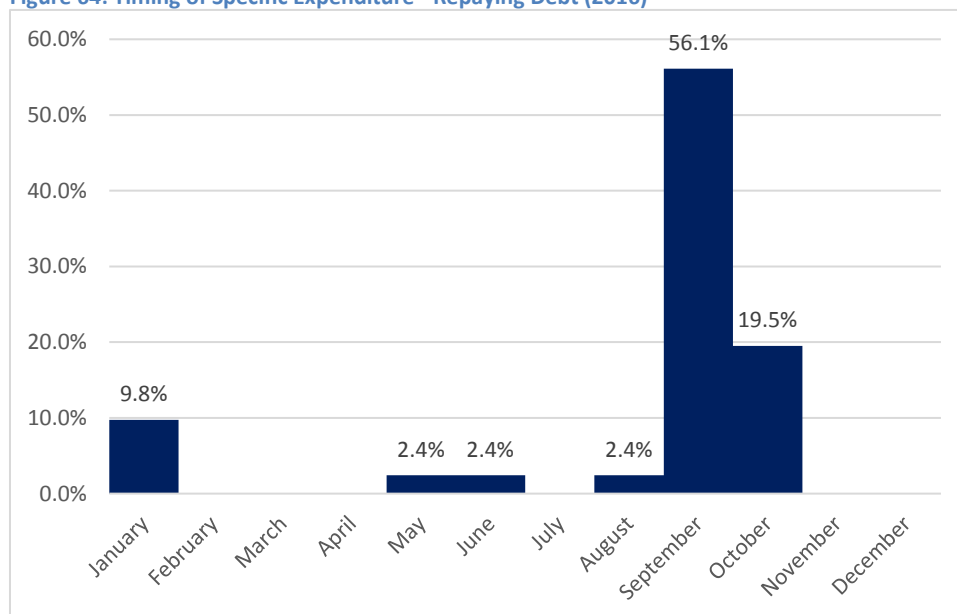


Figure 64: Timing of Specific Expenditure - Repaying Debt (2016)



5.6 Food Expenditure

Overall the share of money spent on food as a percentage of total expenditures dropped for all five quintiles in 2016 (figure 66) compared to 2015 (figure 65). There is a falling pattern for each higher quintile in both years, meaning that Q1 spends a higher share of its income on food and this gradually decreases towards Q5. In 2016 Q5 reported that 30% of their expenditures was on food compared to 53.6% in quintile one.

Figure 65: Food Expenditure by Quintile (2015)

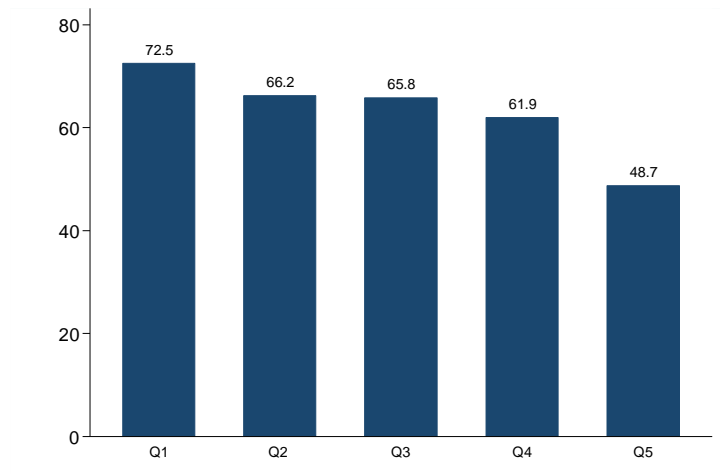
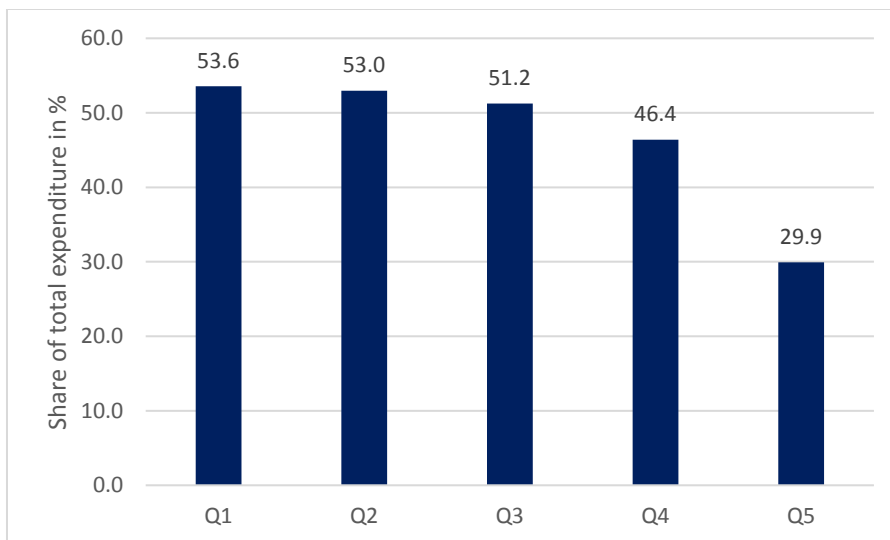


Figure 66: Food Expenditure by Quintile (2016)



Food expenditure overall fell from 2015 to 2016, and moved closer to expenditures for non-food items. In terms of total value of spending not much difference was noted between the two years. Generally, there is an decreasing trend of total expenditure with each higher income quintile.

Figure 67: Total food and non-food Expenditure (2015)

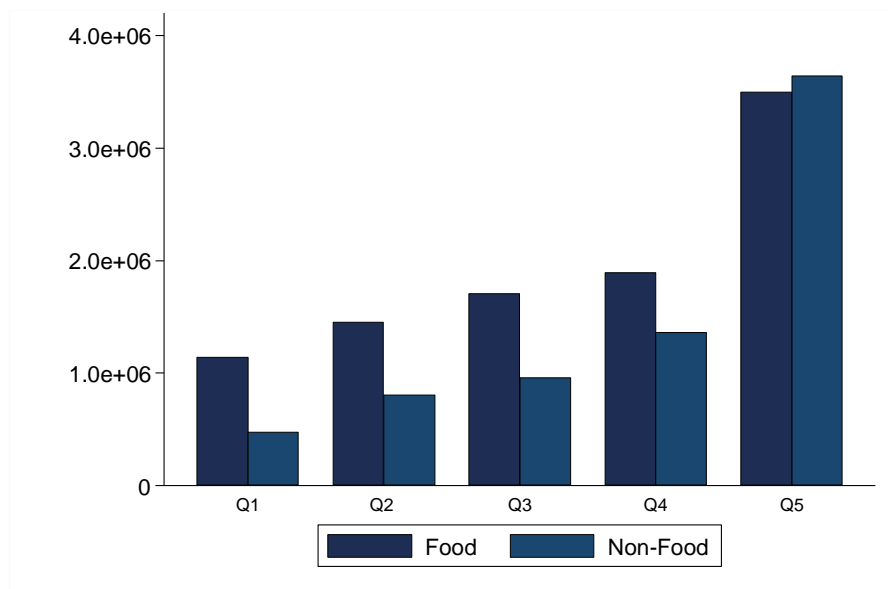
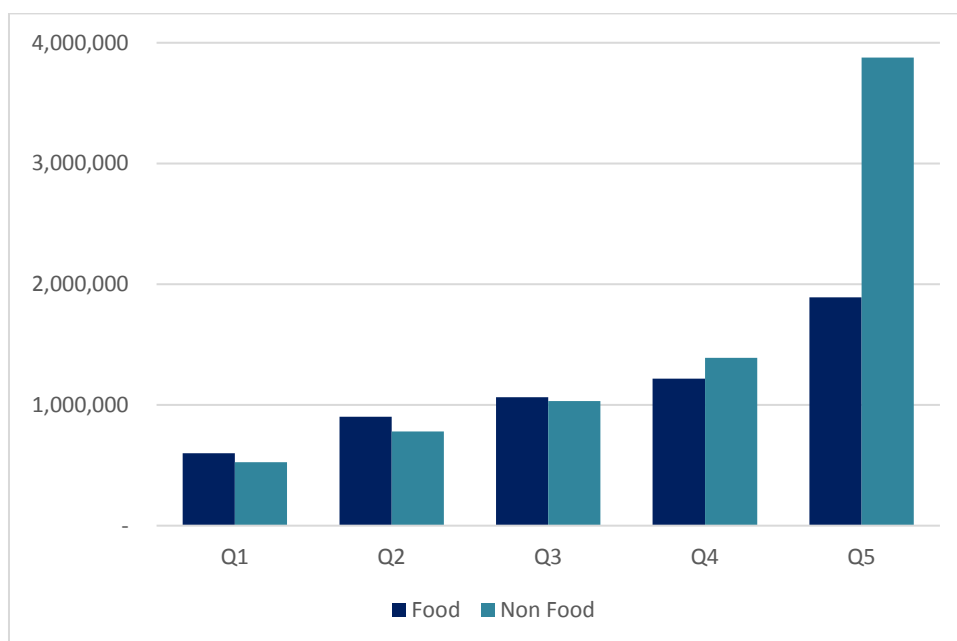


Figure 68: Total food and non-food Expenditure (2016)



The highest share of food expenditure was spent on staple food, followed by rice, constituting between 50-60 percent of total food expenditure. This applies to both 2015 and 2016 and to all 5 quintiles. In 2015 (figure 69) this was generally followed by vegetables, spices or fish and alcohol and tobacco, in all 5 quintiles. This was similar in 2016 (figure 70), however, in Q2 and Q5 sugar ranked higher than expenditures for alcohol and tobacco.

Figure 69: Type of Food Expenditure by Quintile (percentage) (2015)

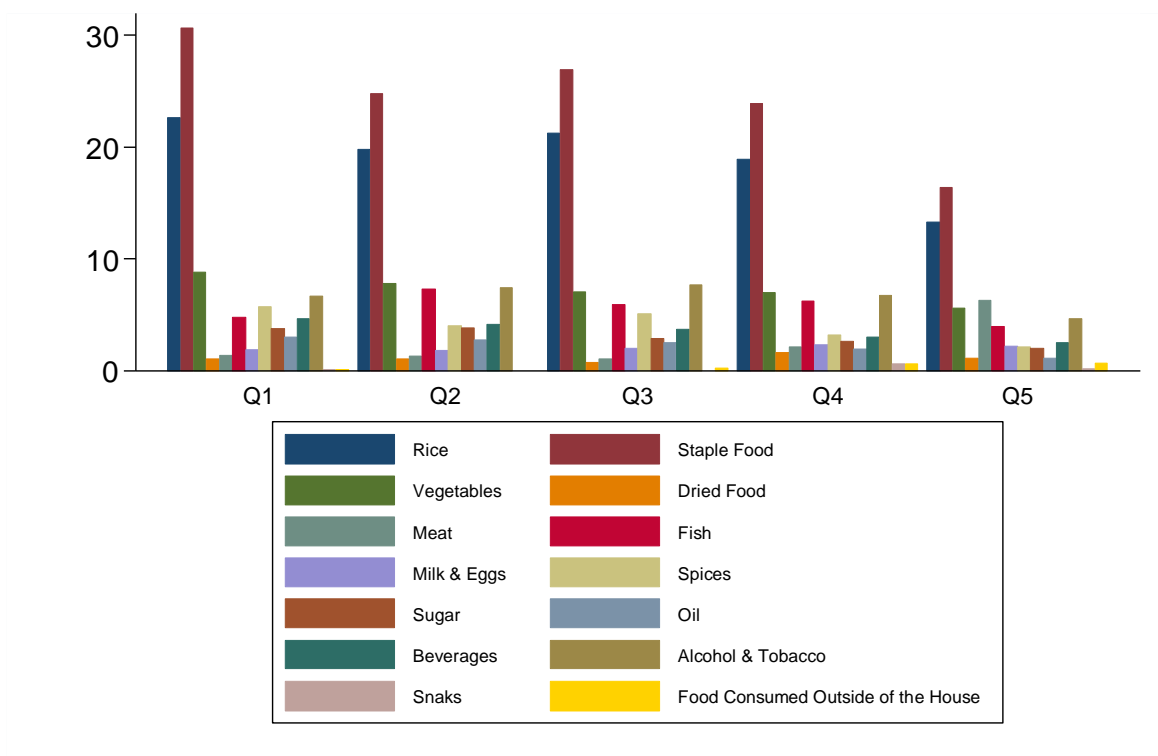
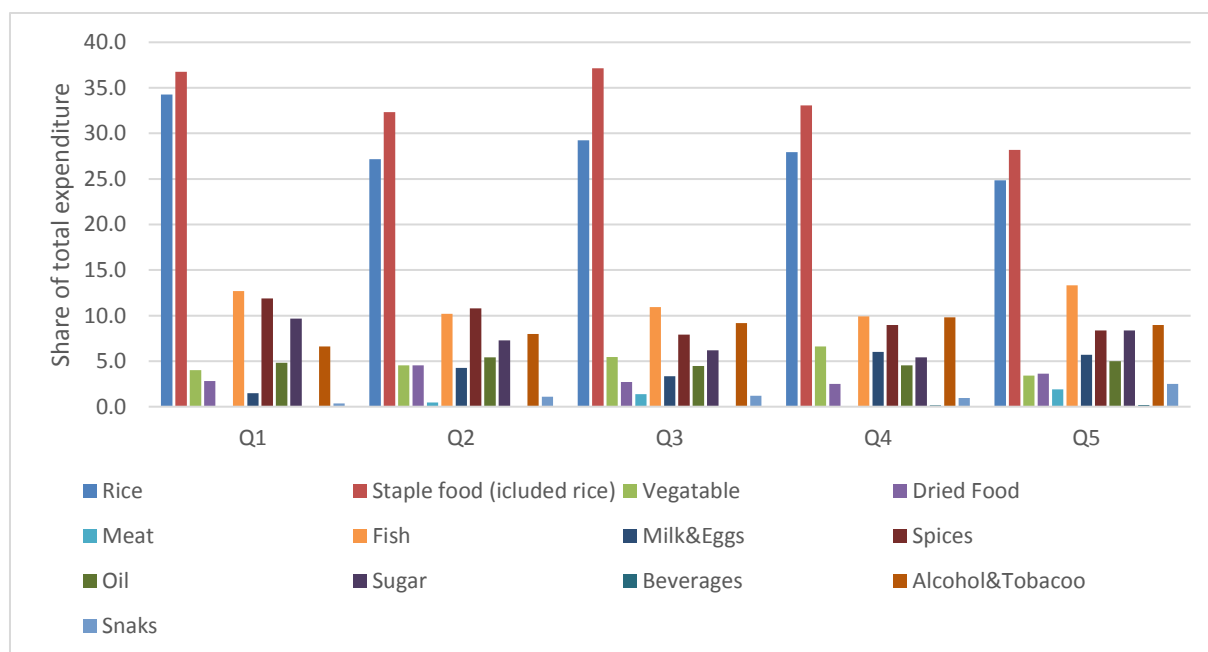


Figure 70: Type of Food Expenditure by Quintile (percentage) (LLS- 2016)



All quintiles spend most money on staple foods, except for Q2 in 2016 (figure 72). This is followed by rice, which ranks second in both years for all quintiles, except for Q3 in 2016. In 2015 (figure 71) this was followed by expenditure on vegetables and fish.

Figure 71: Type of Food Expenditure by Quintile (IDR) (2015)

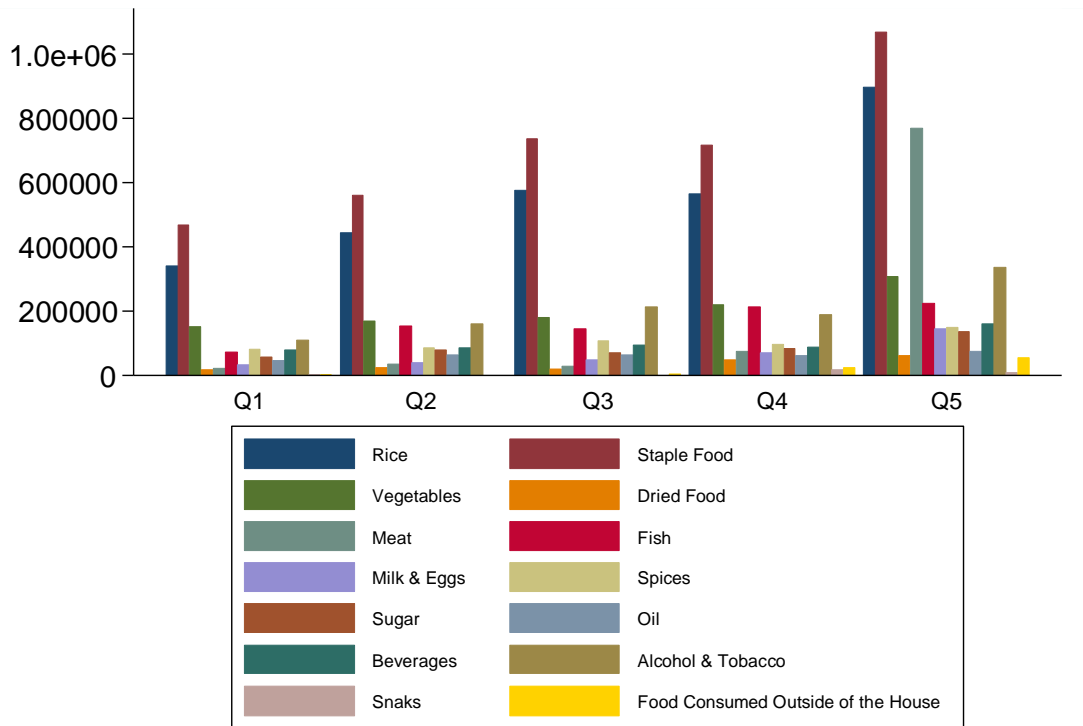
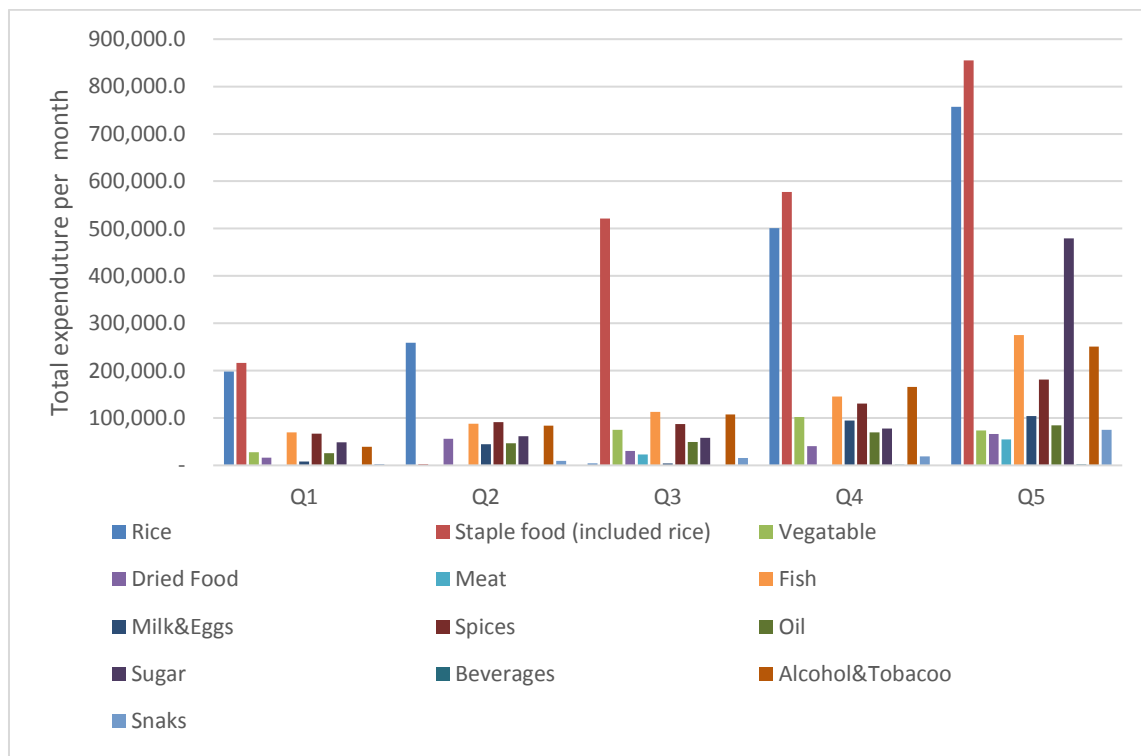


Figure 72: Type of Food Expenditure by Quintile (IDR) (LLS-2016)



6 Income Use of Pig Earnings

By far the most important use of income derived from pigs farming was used for educational expenditure. This was the case in both 2015 (figure 73) and rose from 46.6% to 61.7%. Second placed are daily household needs that accounted 25.9% in 2015 and 20% in 2016 (figure 74).

Figure 73: Most important use of income derived from pigs (2015)

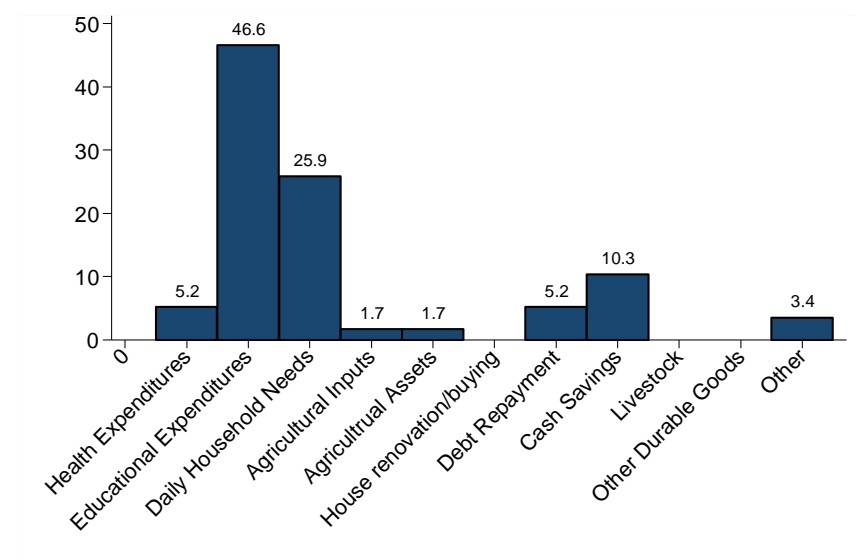
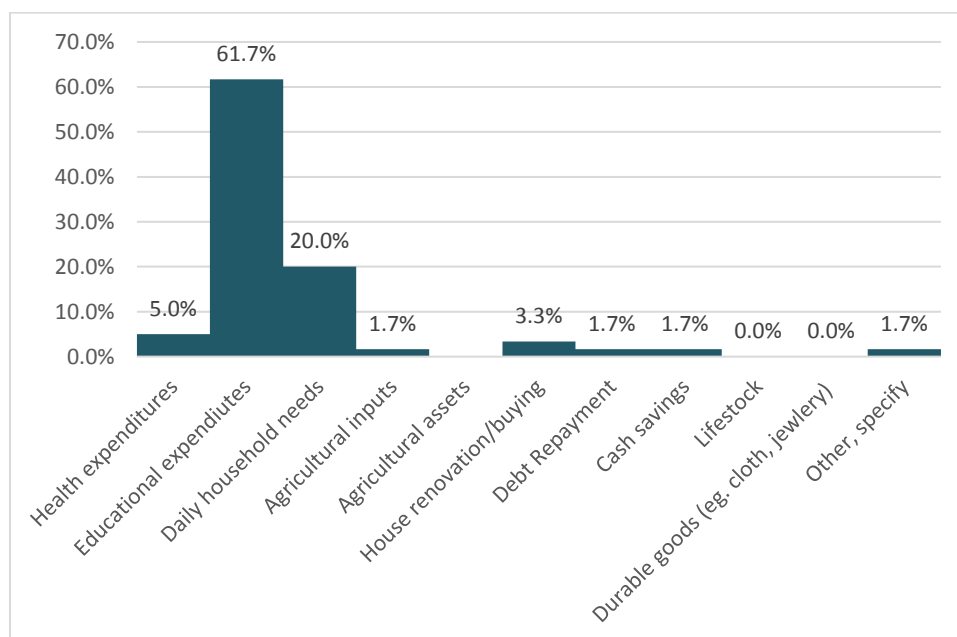


Figure 74: Most important use of income derived from pigs (2016)



The second most important use of income in both years (see figures 75 and 76) was daily household needs, followed by education expenditure for 2016 and debt repayment in 2015.

Figure 75: Second most important use of income derived from pigs (2015)

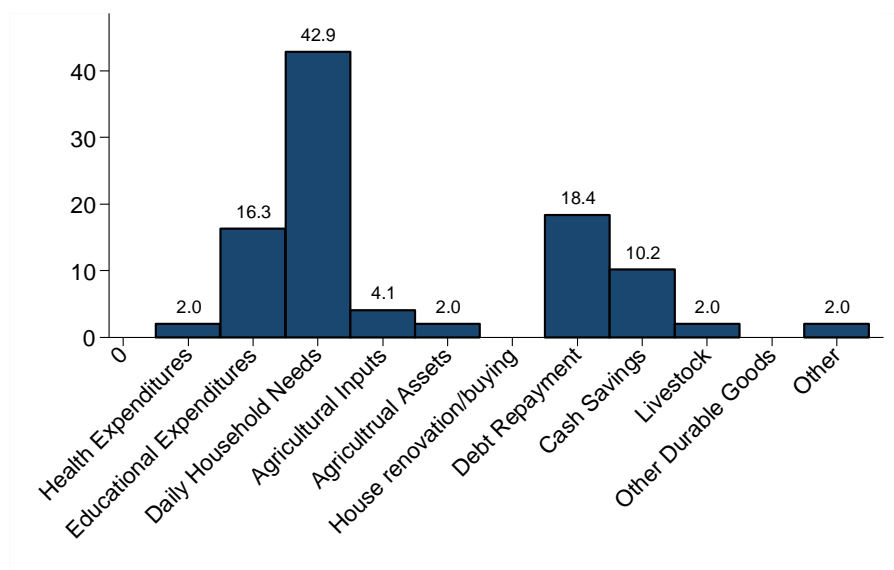
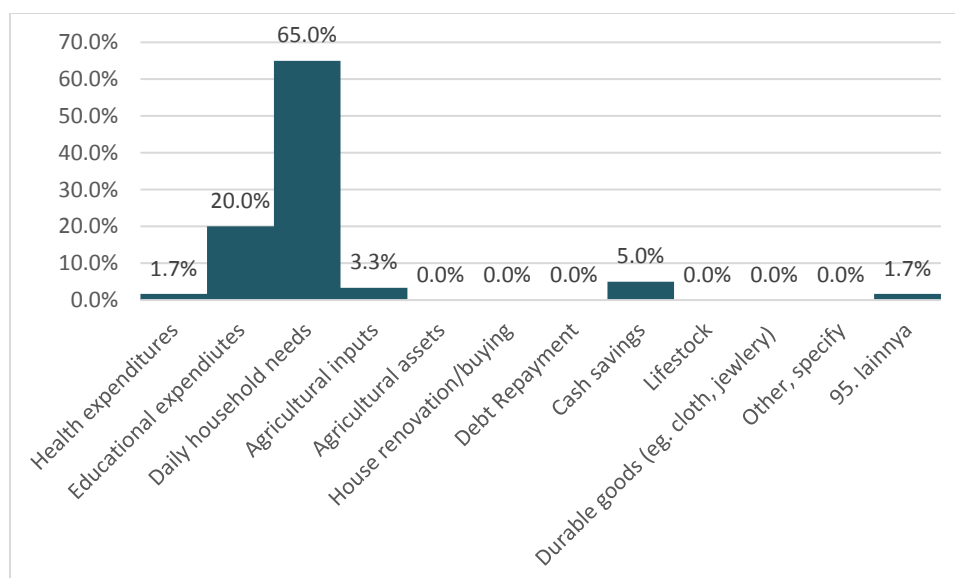


Figure 76: Second most important use of income derived from pigs (2016)



There is a large difference between decision making power over earnings from pigs between 2015 and 2016 (table 9). In 2015 (table 8), decision making over income generated from pig farming was relatively balanced, with 48.2% vs 52%. In the 2016 survey the majority of 76.7% respondents replied that women were the second important decision maker and not the most important one.

Table 8: Control and Decision Power of Earnings from Pigs (2015)

	Nr. Obs	%
Most important decision maker in HH is female	56.00	48.21
Second important decision maker in HH is female	50.00	52.00

Table 9: Control and Decision Power of Earnings from Pigs (2016)

	Nr. Obs	%
Most important decision maker in HH is female	60.00	18,3
Second important decision maker in HH is female	50.00	76,7

7 Seasonality and Vulnerability

In both years the most acute food shortages occur during the months of January and February. In 2015 (figure 77) December and March were also still ranked high with 46.9% and 43.8% respectively. Shortages throughout the remainder of the year are more equally balanced. Overall food shortages are lower in 2016 (figure 78) than in 2015.

Figure 77: Month of reported food shortages for Household needs (2015)

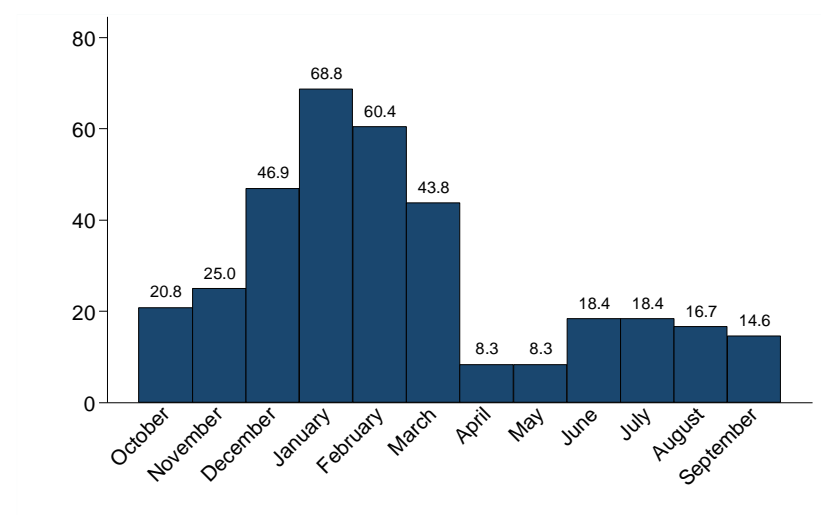
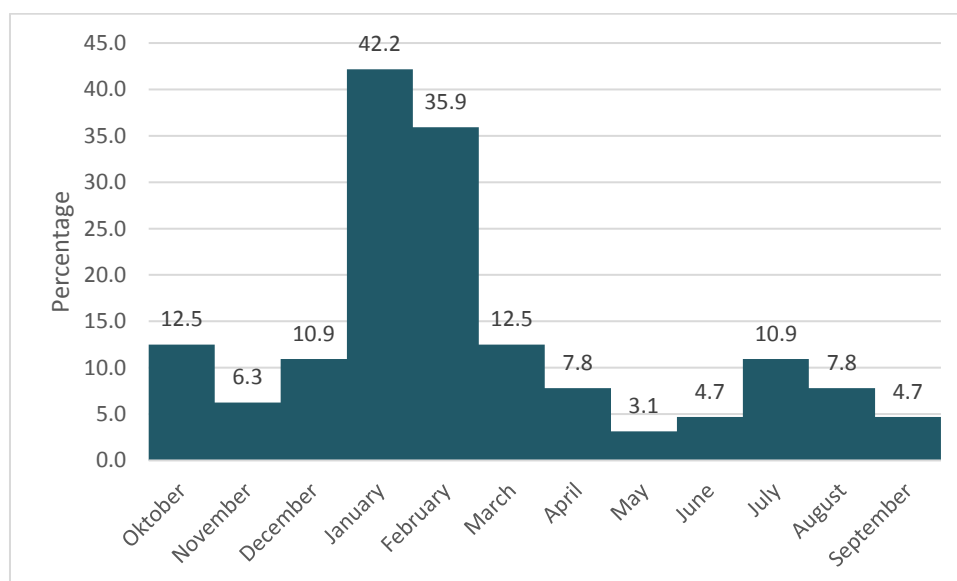


Figure 78: Month of reported food shortages for Household needs (2016)



Concern over food security in 2015 was highest in quintile 1 income group with 63.9% and lowest among the high quintile 5 income group with 23.5%. Compared to this in 2016 (figure 80) quintile group 2 was more concerned with 56.3% in quintile group four was the least concerned in that year with 15.6% of respondents. Households that actually did not have enough food correlate with food concerns. In 2015 (figure 79) this was primarily Q1 with 38.9% and in 2016 Q2 with 68.8% of respondents. Overall concern and lack of food is still higher in lower income quintiles compared to higher quintiles.

Figure 79: concern over Food Security (2015)

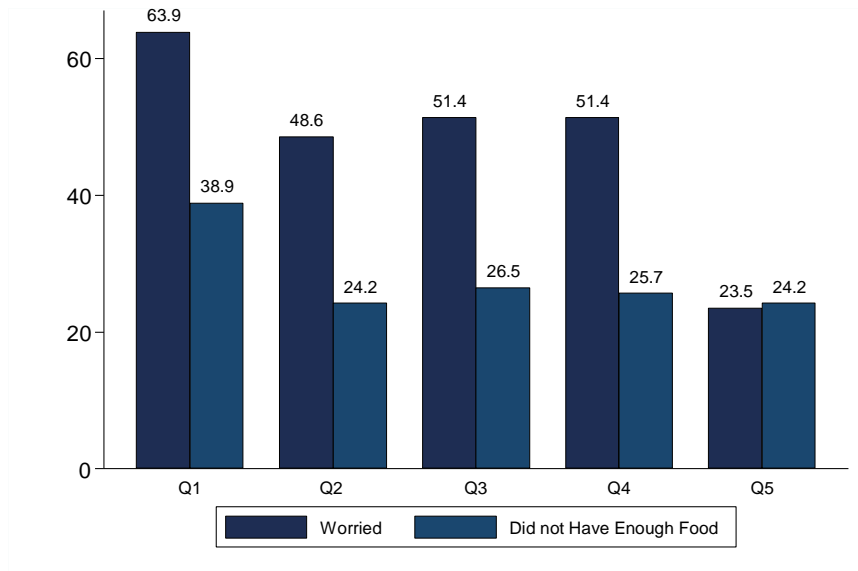
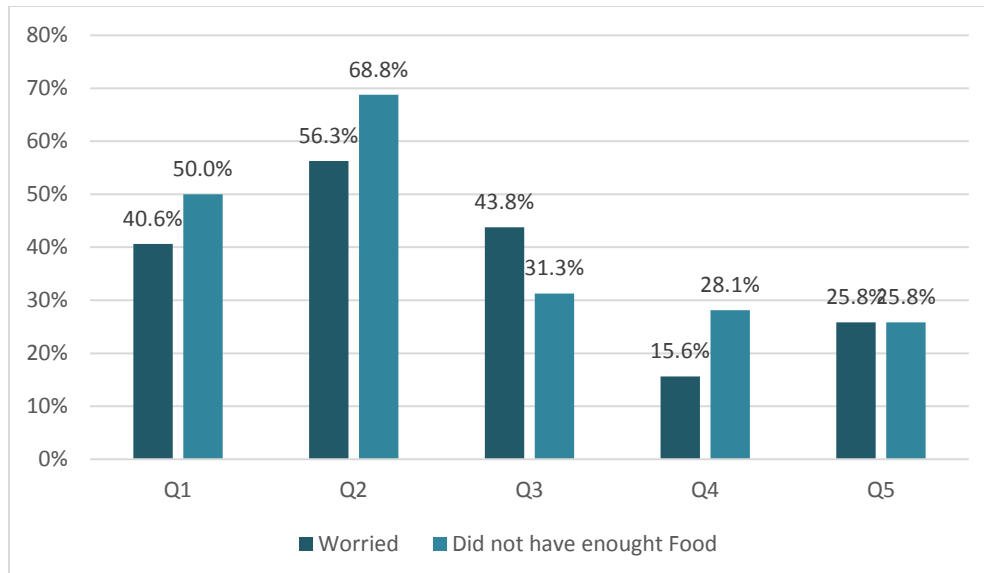


Figure 80: concern over Food Security (2016)



In 2015 the majority of respondents said they had to restrict consumption by adults for small children to eat and limit the portion size at meal times. Furthermore, limit the variety of foods eaten and reduce the number of meals eaten in one day. In 2016 the majority of respondents said they had to limit the variety of foods eaten and rely on less preferred foods, followed by limiting portion size at meal times and restrict consumption by adults for small children to eat.

Figure 81: Coping with Food Security (2015)

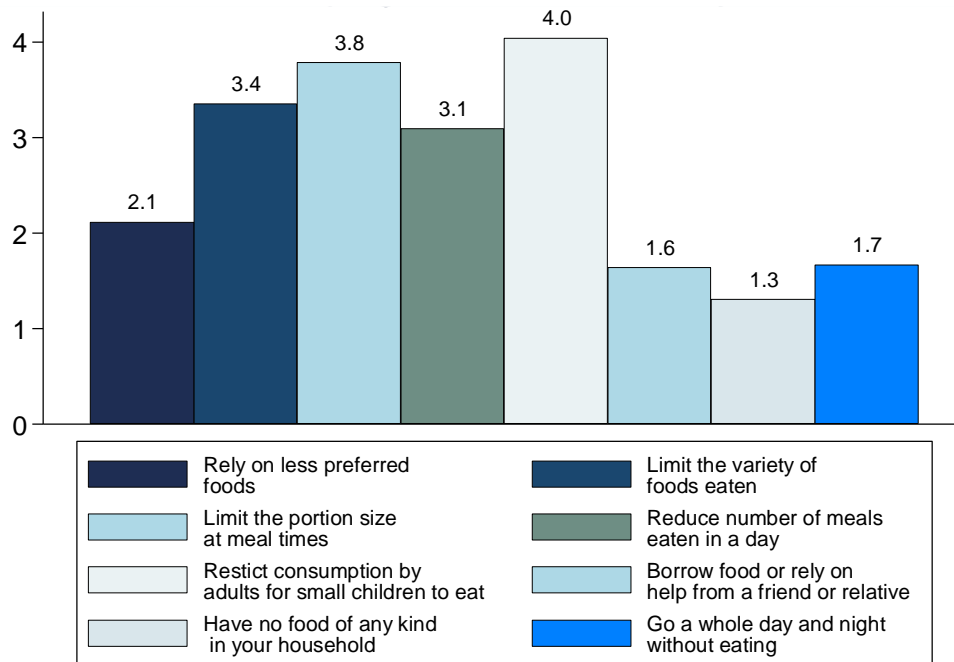


Figure 82: Coping with Food Security (2016)

