PRISMA Promoting Rural Income through Support for Markets in Agriculture

Kementerian PPN/ Bappenas

Australian Aid

2nd Wave

Longitudinal Livelihood Study (LLS)

Second Wave Report on Maize Sub-Sector in Sumenep

JANUARY 2017

PRISMA

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LONGITUDINAL LIVELIHOOD STUDY

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List of Abbreviation and Explanation of Expressions

Abbreviations

DVD	Digital Versatile Disc
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 Kagiatan ((Government) Activity Managing Units)
VCR	Videocassette Recorder
VCP	Videocassette Player
VCD	Video Compact Disc

Expressions

Adat	Local traditions
Arisan	Group-based rotating savings and lending fund
Desa	Village
Koperasi,	Cooperative
Pasar	Local traditional market
Warung	Local shop/ restaurant

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1 Introduction

This second wave report is part of a study, which aims to gain a deeper understanding on how targeted households use additional income generated through the PRISMA intervention. Sumenep is one of many districts in East Java that has been targeted by PRISMA and where the project tries to alleviate poverty. PRISMA supports maize farmers by promoting hybrid seed for dry land farming. The goal is to increase the productivity of maize and therefore increase the income of maize farmers. The goal of this longitudinal livelihood study (LLS) is to gain a deeper understanding on how the maize farmers use their additional income anticipated to be generated through the intervention. This will run until the end of the program. The households interviewed during this year will be tracked during the following years to see how their livelihood situation has changed and how the changes 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 goal of this second wave report is to give an overview over the current livelihood situation to see in later stages how this situation changed. The report provides an overview with special focus on income generation and use of income. The second wave study uses a mixed method approach including the collection of both qualitative and quantitative data. 175 households were interviewed for quantitative data collection with a questionnaire and nine respondents were interviewed for qualitative data collection through semi-structured interviews. Together this data provides a picture of the current livelihood situation of the farmers. The same households will be interviewed in coming years as part of the next waves of the LLS.

The second wave report initially provides the frame sampling for the study (Section 2); the five assets of the sustainable livelihood framework are described in Section 3; with a discussion of income generation discussed in Section 4. Section 5 describes expenditure; while Section 6 focuses on use of income generated by maize earnings. Section 7 discusses seasonality and vulnerability of the households.

2 Sampling

2.1 Sampling Quantitative

Table 1: Sampling

	2015	2016
Babbalan	20	17
Batu Dinding	25	22
Bilapora Timur	20	19
Kasengan	34	28
Kebundadap Timur	15	14
Kopedi	20	18
Manding Timur	19	19
Moncek Tengah	20	20
Sarokah	4	2
Totosan	20	16
Total	197	175

2.2 Sampling Qualitative

Table 2: Sampling of Quantitative Data Collection

Name of Desa	Number of respondents 2015	Number of respondents 2016
Bilapora Timur	1	1
Babbalan	2	2
Moncek Tengah	2	2
Kopedi	2	2
Kebondadap Timur	2	1

2.3 Poverty Rate of Households using PPI

The Poverty Rate of Households using PPI is given below:

Table 3: Poverty Rate of Households using PPI

	2015		2016	
	Nr. Obs	mean	Nr. Obs	mean
100% National Poverty Rate	155.00	9.48	175	8,36
150% National Poverty Rate	155.00	42.30	175	39,35
$2.5 2005 PPP Poverty Rate	155.00	74.27	175	66,35

3 Five Livelihood Assets

The discussion of five livelihood assets of the sustainable livelihood framework gives a good overview over the resources that are available to a household (DFID, 1999). The assets are classified in five categories which are human assets, physical assets, natural assets, social assets, and financial assets. As discussed in the baseline report, the sample and understand information about different quintile levels. Table 5 is reproduced from the baseline report, table 6 provides the updated figures for 2016.

Table 4: Per Capita Expenditure per Quintile in Rp. per Month (2015)

	Nr. Obs	Mean	Sd	Min	Max
Q1	37.00	[illegible]	49,446.83	193,222.22	[illegible]
Q2	36.00	[illegible]	37,792.70	400,305.53	[illegible]
Q3	37.00	[illegible]	54,087.71	548,416.63	[illegible]
Q4	36.00	[illegible]	52,424.34	711,805.56	[illegible]
Q5	36.00	[illegible]	740,344.44	930,955.56	[illegible]

Table 5: Per Capita Expenditure per Quintile in Rp. per Month (2016)

	Nr. Obs	Mean	Sd	Min	Max
Q1	35.00	235.448,2	51.643,0	95.597,2	294.900,0
Q2	35.00	333.799,3	21.409,2	298.750,0	364.783,3
Q3	35.00	405.845,0	25.018,6	364.812,5	444.633,3
Q4	35.00	521.771,3	51.262,4	455.606,7	622.444,4
Q5	35.00	759.369,1	109.137,5	634.086,7	992.861,1

3.1 Human Assets

Human assets describe assets which lie with the person or household itself. This might be health, education or other household characteristics. This sub-section first focuses on household characteristics and then on education.

3.1.1 Household Characteristics

The number of households is also categorised as human assets because it determines the labour force in the household. In the sample the average number of household members has remained constant at 4.1 (see table 6). The number of female-headed households has increased from 1% to 6% (see table 7)

Table 6: Household Characteristics

	Nr. Obs	mean	Sd
HH size 2015)	197.00	4.06	1.40
HH size (2016)	175.00	4.1	1.1

Table 7: Female-headed households

	2015		2016	
	Nr. Obs	Percent	Nr. Obs	Percent
female headed	186.00	1.08	175	6

3.1.2 Education

Regarding education, the percentage of people over 15 years of age who responded that they could read and write and had attended school increased. Table 8 shows an increase from 66% and 65% in the baseline respectively, to around 75% for both categories.

Table 8: Education of People 15 Years or Older

	2015		2016	
	Nr. Obs	Mean	Nr. Obs	Mean
Can Read and Write	637.00	66.56	600	74.5
Ever Went to School	642.00	64.95	600	76.8

As seen in table 9, most but not all children go to school. Responses show that education of 7-15 years boys and girls was relatively constant, with a slight increase for boys claiming they can read and write between 2015 and 2016.

Table 9: Education of children 7-15 years

2015	Nr. Obs Boys	mean Boys	Nr. Obs Girls	mean Girls
Can Read and Write	65.00	89.23	58.00	93.10
Ever Went to School	66.00	96.97	59.00	96.61
2016	Nr. Obs Boys	mean Boys	Nr. Obs Girls	mean Girls
Can Read and Write	61.00	100.00	50.00	94.00
Ever Went to School	61.00	100.00	50.00	94.00

As can be seen in table 10, in the baseline (2015) school enrolment for the age group 9-11 years is the highest and is reported to be 100% for girls and boys. In the second wave the school enrolment is showing significantly higher figures with all categories showing 90% or above for school attendance across both girls and boys. The figure is derived from a relatively small number of observations however and should be investigated further in subsequent surveys.

Table 10: School Enrolment by Age Group (2015)

	ALL		Male		Female	
	Mean	Nr. Obs.	Mean	Nr. Obs.	Mean	Nr. Obs.
age 6-8	72.7	33.0	82.4	17.0	60.0	15.0
age 9-11	100.0	40.0	100.0	16.0	100.0	23.0
age 12-14	95.0	40.0	95.5	22.0	94.1	17.0
age 15-18	92.6	54.0	90.9	33.0	95.0	20.0
age 19-22	56.4	55.0	68.0	25.0	46.7	30.0

Table 11: School Enrolment by Age Group (2016)

	All %	Obs	Male	Obs	Female	Obs
age 6-8	90.6%	32	81.3%	16	100.0%	16
age 9-11	100.0%	38	100.0%	22	100.0%	16
age 12-14	97.1%	35	100.0%	21	92.9%	14
age 15-18	100.0%	55	100.0%	29	100.0%	26
age 19-22	97.6%	41	94.4%	18	100.0%	23

In terms of educational achievement, the 2016 data shows a dramatic change in both males and females that have no education/ not finishing elementary school (No SD) from 43% and 50% (2015) to 20% and 24% respectively (2016). This reduction is accompanied by an increase in the those enrolled in elementary school – with males increasing from 28% to 41% and females from 28% to 47% between 2015 and 2016.

Figure 1: Highest Education of Persons 25+ years (2015)

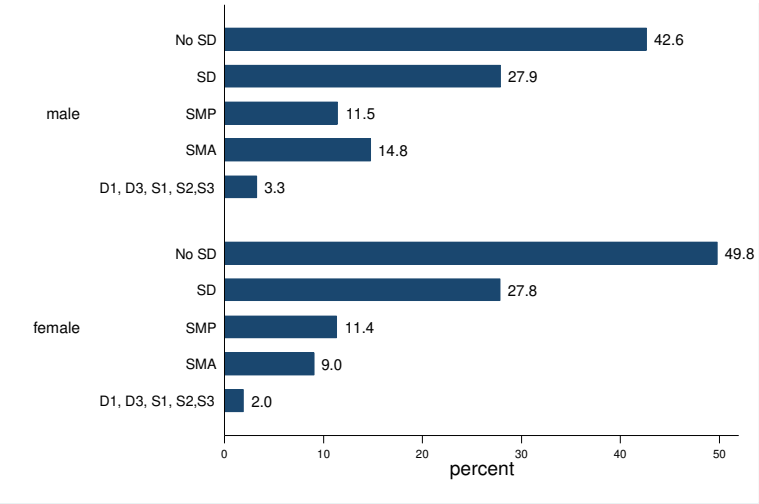
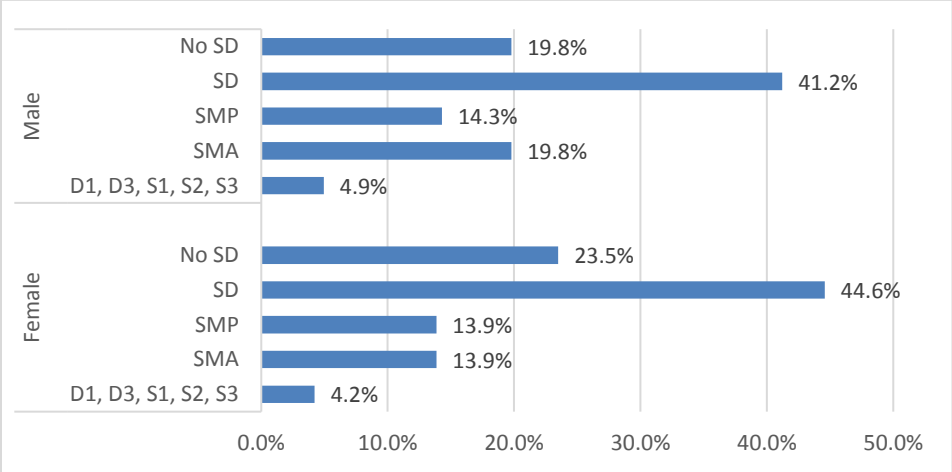


Figure 2: Highest Education of Persons 25+ years (2016)



Terms: No SD = not going/ not finishing elementary school; SD = Elementary school; SMP = Secondary school; SMA = Senior High school; D1, D3, S1, S2, S3 = Higher education such as Academy, University, and post-graduate.

3.2 Physical Assets

Physical assets comprise the basic infrastructure and producer goods needed to support household members to pursue their livelihood strategies (see DFID, 1999). These can include: infrastructure, the physical environment that help people to meet their basic needs and to be more productive; and producer goods, the tools and equipment that people use to function more productively.

3.2.1 Housing, WC, Electricity and Water

Almost 100% of the respondents have their own house and this is unchanged between 2015 and 2016. There is no significant difference in assets between 2015 and 2016 in terms of houses and land.

Figure 3: Assets - House and Land (2015)

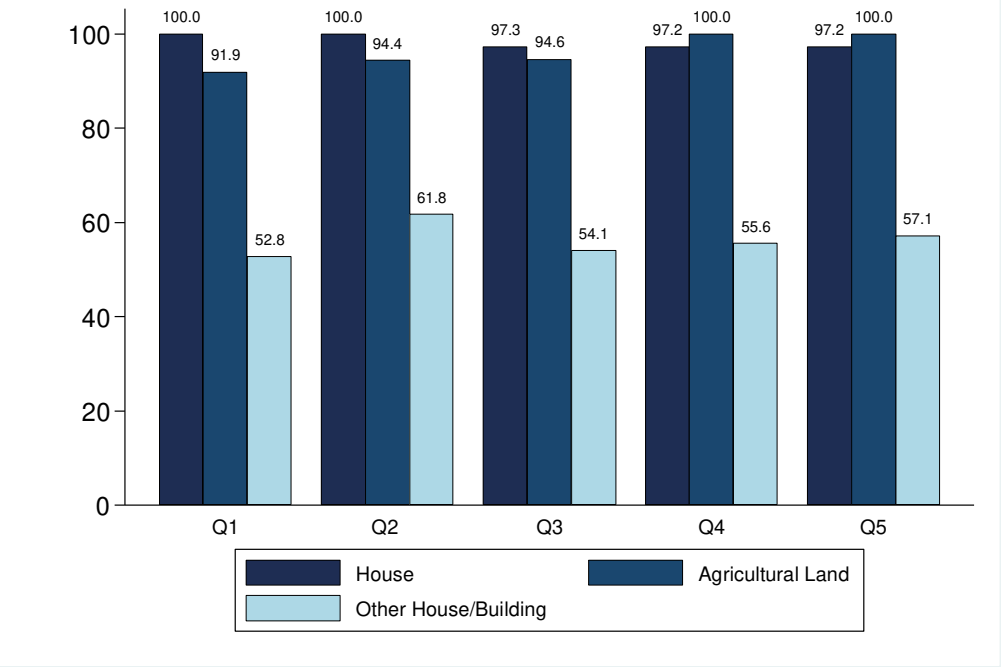
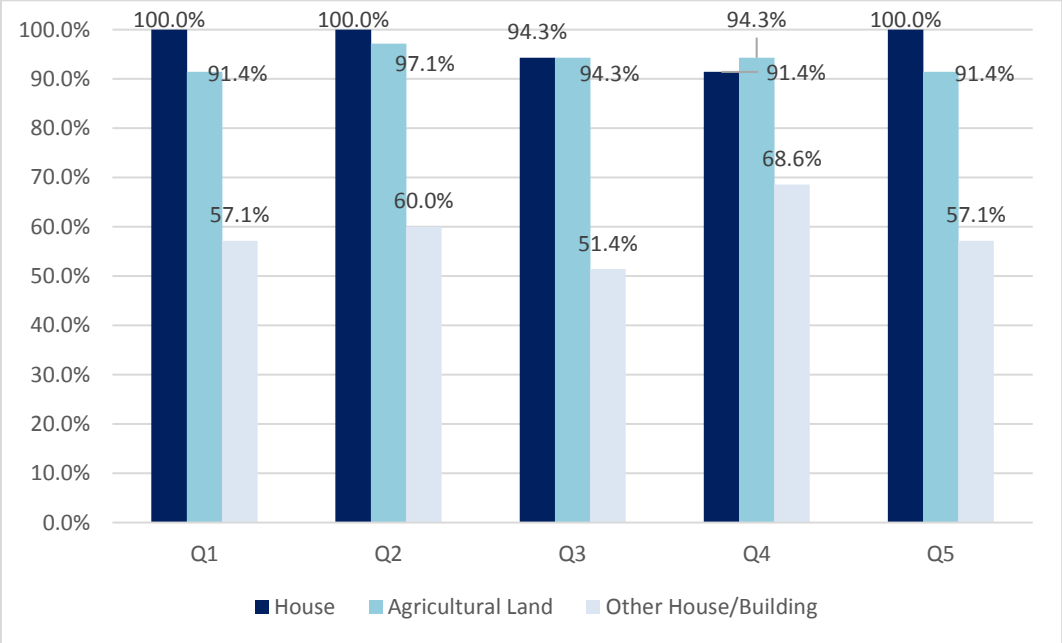


Figure 4: Assets - House and Land (2016)



Not all households have electricity. In 2015 (figure 5) over 80% of the households have electricity across all expenditure quintiles, this is unchanged in 2016. Significantly the data shows that while in 2015 more than 50% of homes had a W/C (with the percentage rising to over 90% in the highest quintile) the 2016 data shows that ownership is steady across all quintiles at around 40-45%. Well/ Tube-well ownership appears to have increased significantly across all quintiles and dramatically amongst lower quintiles (from 17% to 51% in Q1). These figures should be investigated further before any conclusions can be drawn in terms of attribution to the intervention.

Figure 5: Assets – Housing 2015)

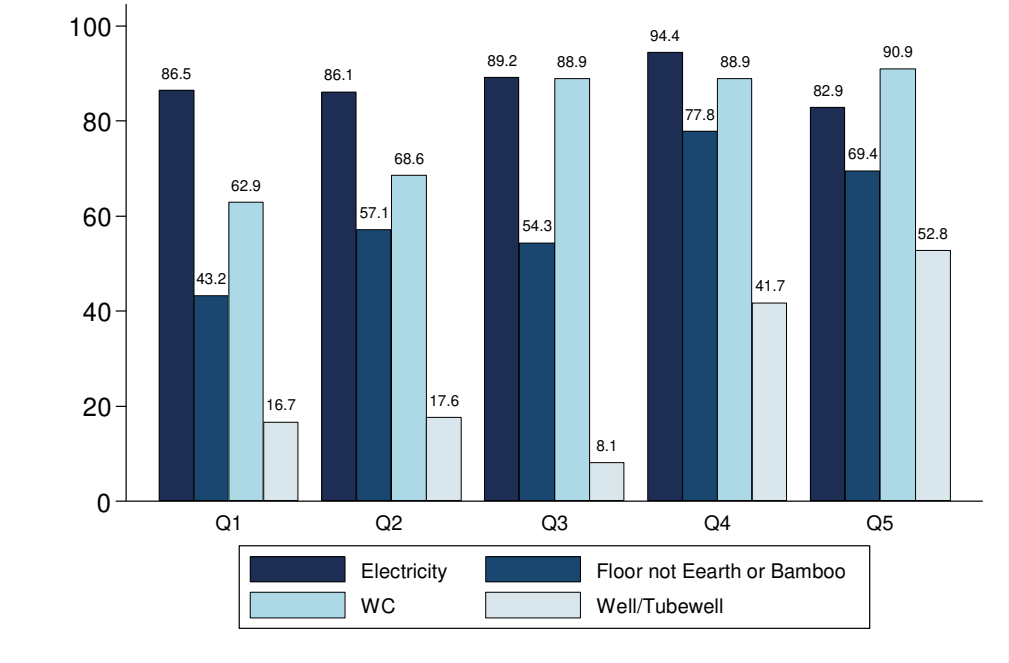
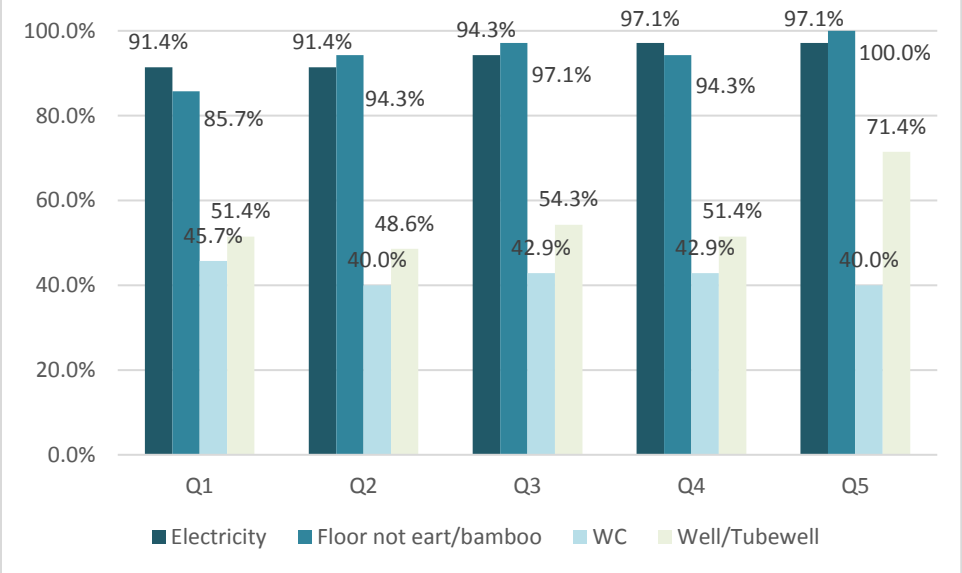


Figure 6: Assets – Housing 2016)



3.2.2 Transport

The most common means of transportation in Sumenep remains the motor cycle (figures 7 and 8). More households possess motor cycles in higher expenditure quintiles. Bicycle ownership appears to have reduced though ownership remains proportionately less than motor-cycles and more than cars/ trucks.

Figure 7: Assets – Transport (2015)

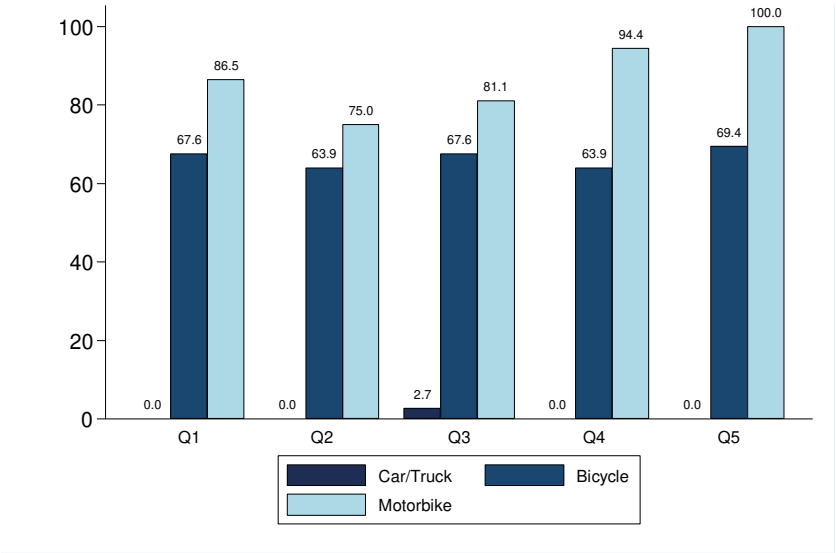
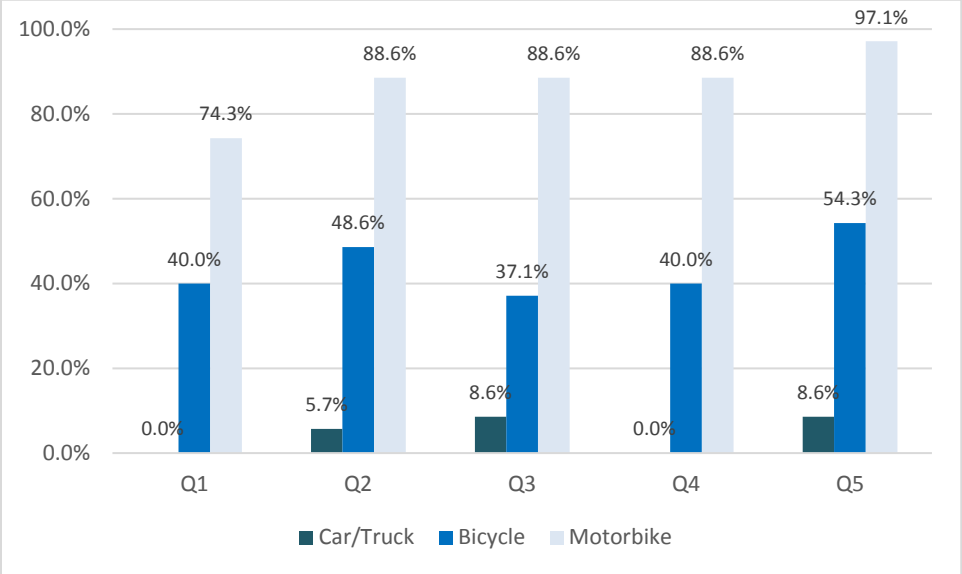


Figure 8: Assets – Transport (2016)



3.2.3 Communication Assets

As seen figures 9 and 10, television and mobile phone are the most common communication assets. There is no significant change across 2015 and 2016, except that the number of respondents claiming ownership of stereos/ radios has reduced.

Figure 9: Assets – Communication (2015)

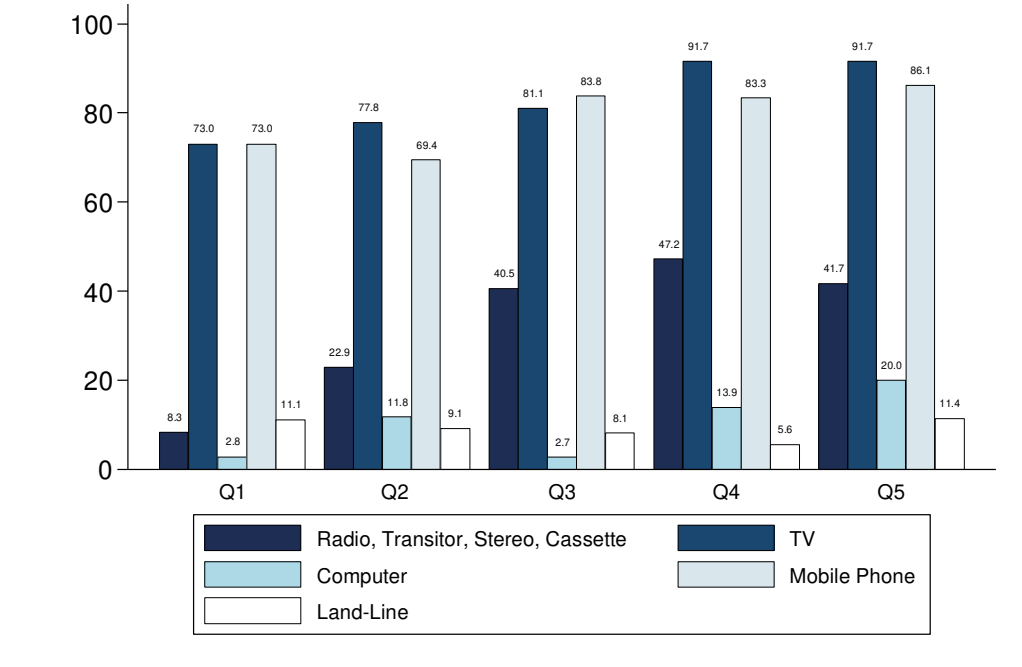
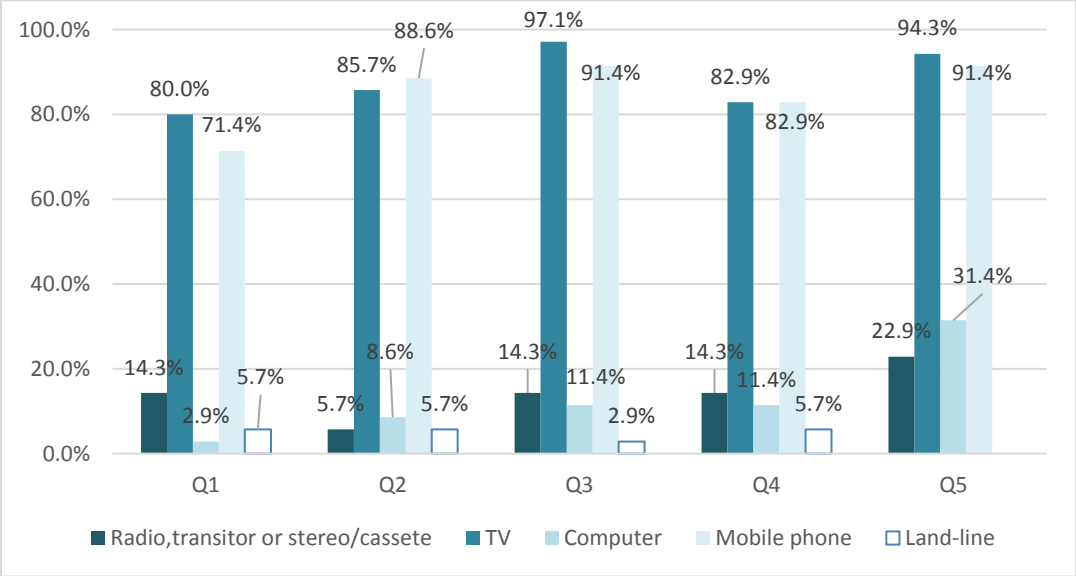


Figure 10: Assets – Communication (2016)



3.2.4 Storing and Kitchen Assets

Most of respondents have stoves across all expenditure quintiles (both 2015 and 2016). The data shows that grain storage container ownership rises per quintile in 2016 (though from a lower base than 2015). Many more respondents reported ownership of refrigerators in 2016 compared to 2015. See figures 11 and 12.

Figure 11: Assets – Kitchen and Storage (2015)

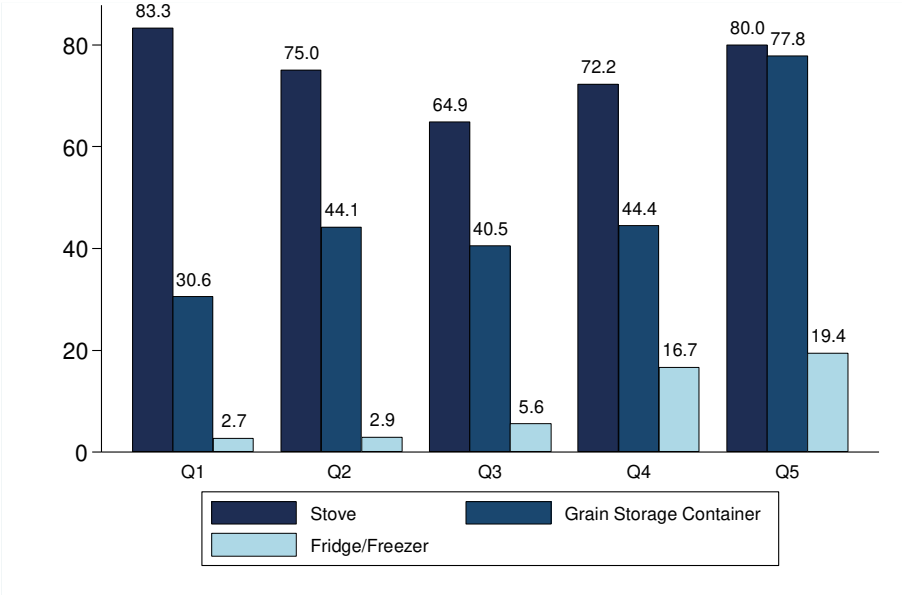
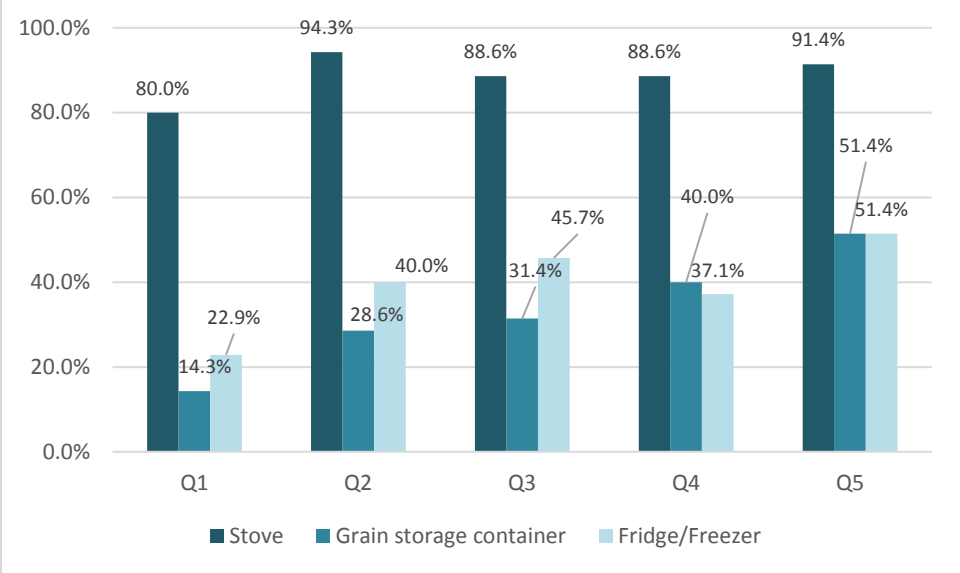


Figure 12: Assets – Kitchen and Storage (2016)



3.2.5 Other Household Assets

Washing and sewing machines remain uncommon amongst households in the 2016 sample (figure 14). Most respondents have jewellery in their household. VCR/CP/VCD/DVD ownership increases by wealth quintile.

Figure 13: Assets – Other Household Items (2015)

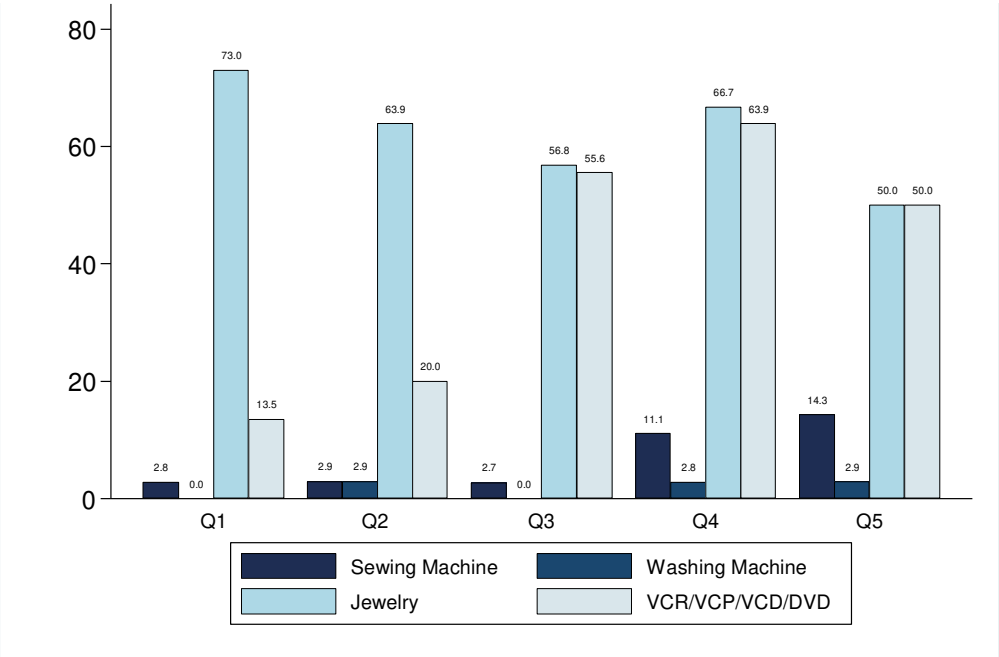
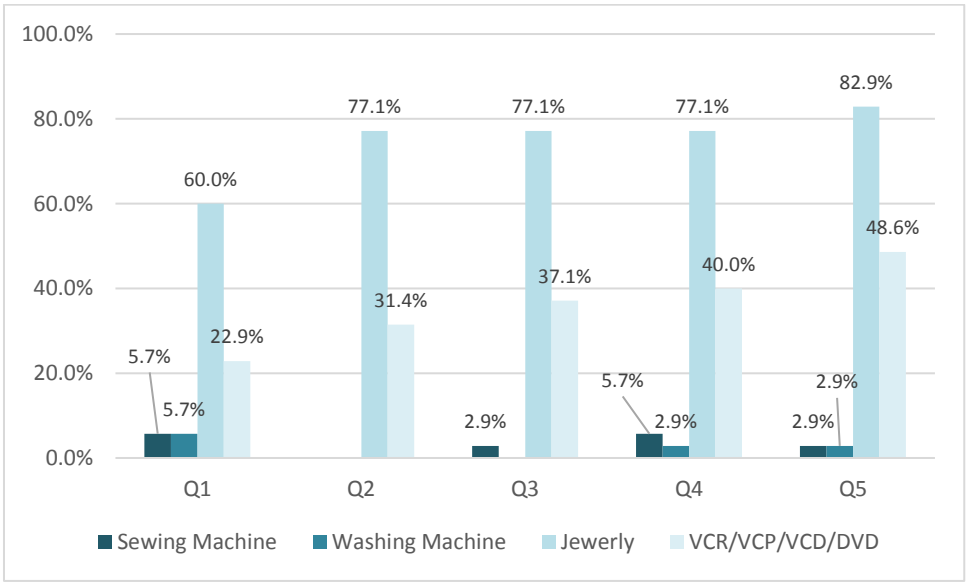


Figure 14: Assets – Other Household Items (2016)



3.2.6 Agricultural Assets

2016 (figure 15) is consistent with the 2015 data (figure 14) in that very few households reported owning tractors or other heavy farming equipment. Irrigation systems are not common locally with around 20% of respondents across all quintiles (2016). Ownership of small tools is common across all expenditure quintiles.

Figure 15: Assets - Agricultural Items (2015)

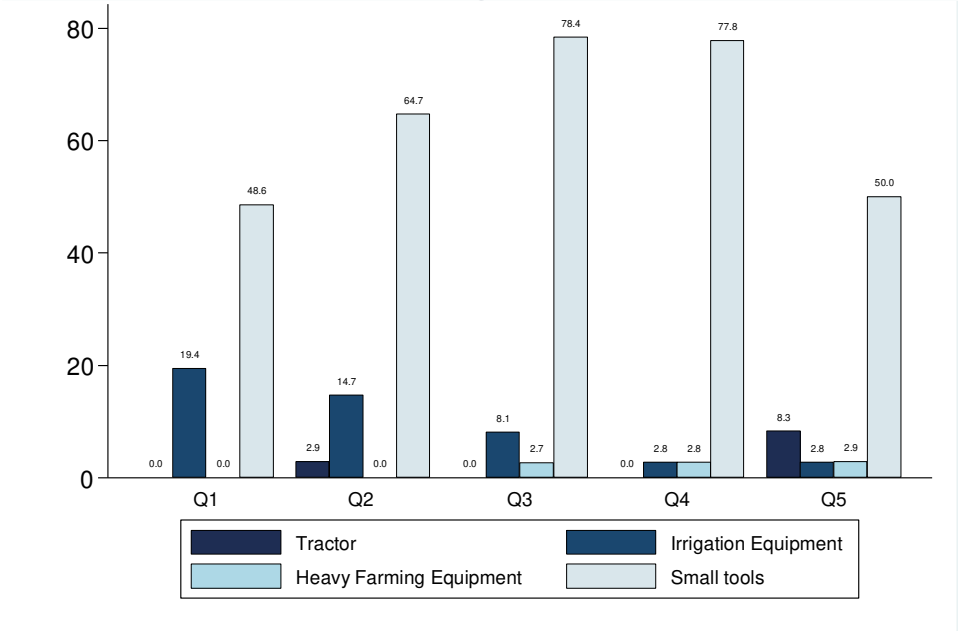
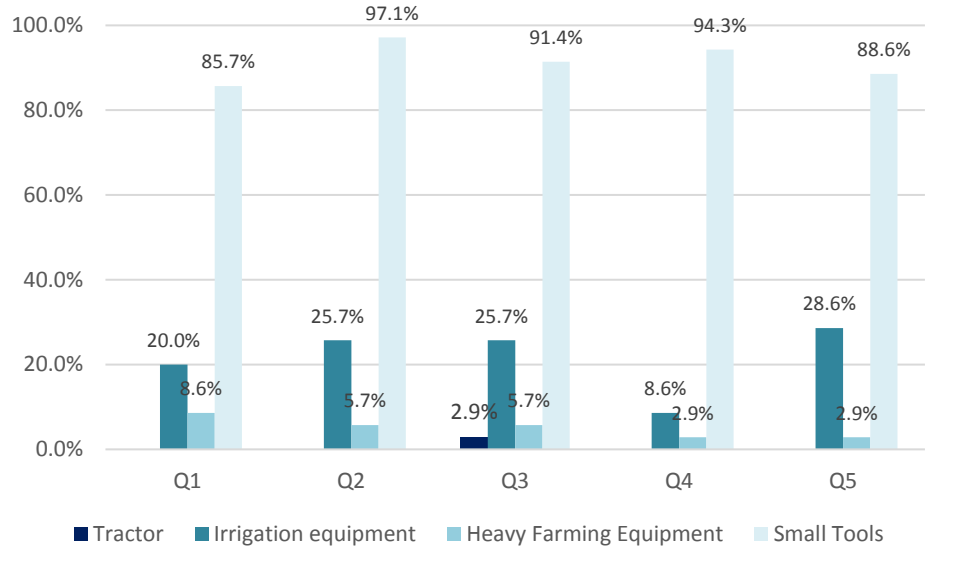


Figure 16: Assets - Agricultural Items (2016)



3.2.7 Livestock

Cows are the most common type of livestock in Sumenep. With almost no respondents claiming ownership of other large animals (buffalo, horse, pigs). The 2016 data (figure 18) shows cow ownership rising per quintile from a low base (49%) to a majority in Q5 (71%), whereas in 2015 (figure 17) ownership was reported consistently by around 85% of the respondents.

Figure 17: Large Livestock by Quintile (2015)

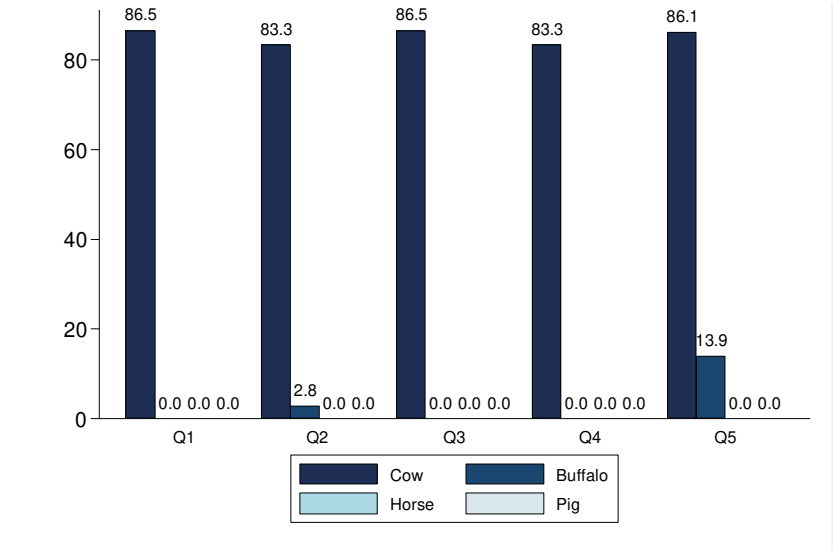
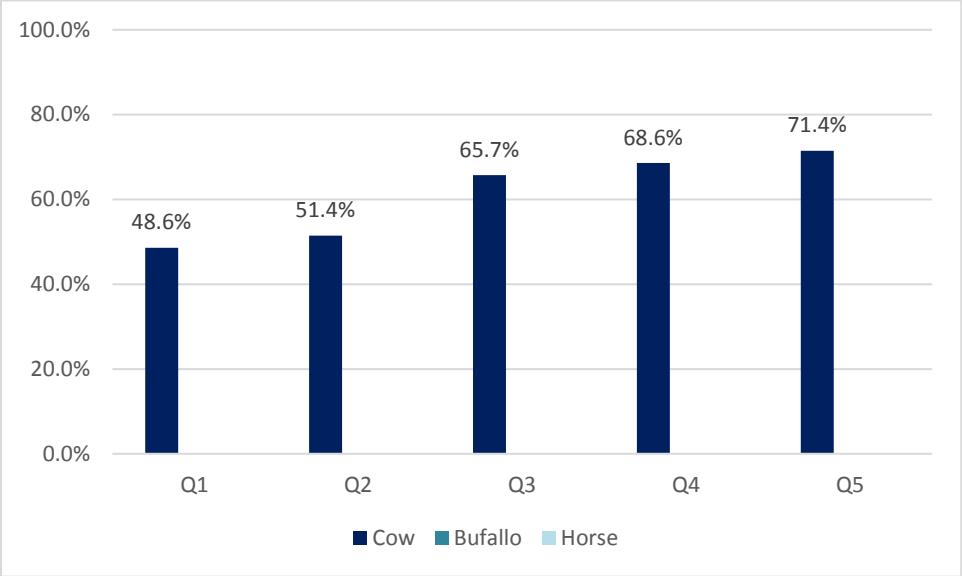


Figure 18: Large Livestock by Quintile (2016)



The 2016 data for smaller animals (figure 20) shows that chickens are the most common livestock after cows in Sumenep. The 2015 data (figure 19) and the 2016 data show a broadly similar picture – with chicken ownership with around 40-65% of households, and goat and sheep ownership at around 10 – 35% depending upon expenditure quintile.

Figure 19: Other Livestock by Quintile (2015)

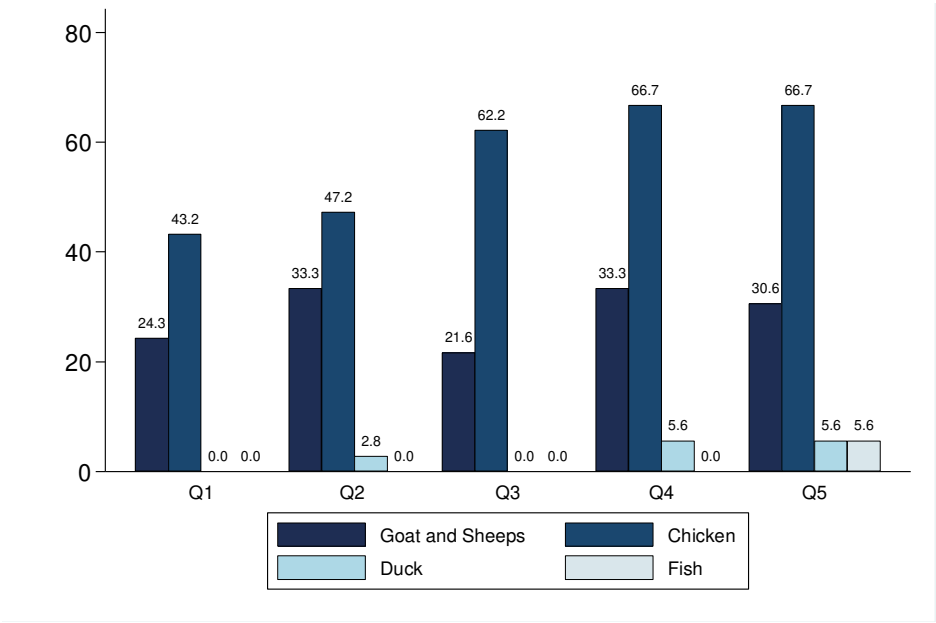
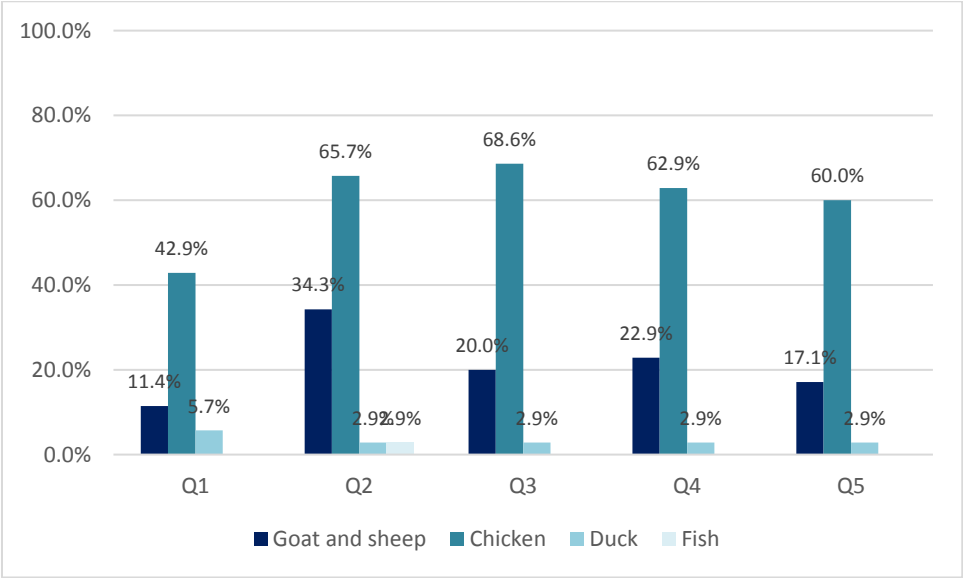


Figure 20: Other Livestock by Quintile (2016)



In terms of the amount of large livestock owned by respondents in Sumenep, the 2016 data (figure 22) shows a sharp increase per wealth quintile, consistent with the findings in 2015 (figure 21). However, the 2016 data also shows a greater disparity between the lowest quintile (at 0.83 animals per household – in the 2015 the figure was 1.8) and the highest (1.8 in 2016 – compared with 2.3 in 2015). It is notable that the 2016 amount of livestock for the highest quintile is the same as the 2015 amount for the lowest.

Figure 21: Amount of Large Livestock by Quintile (2015)

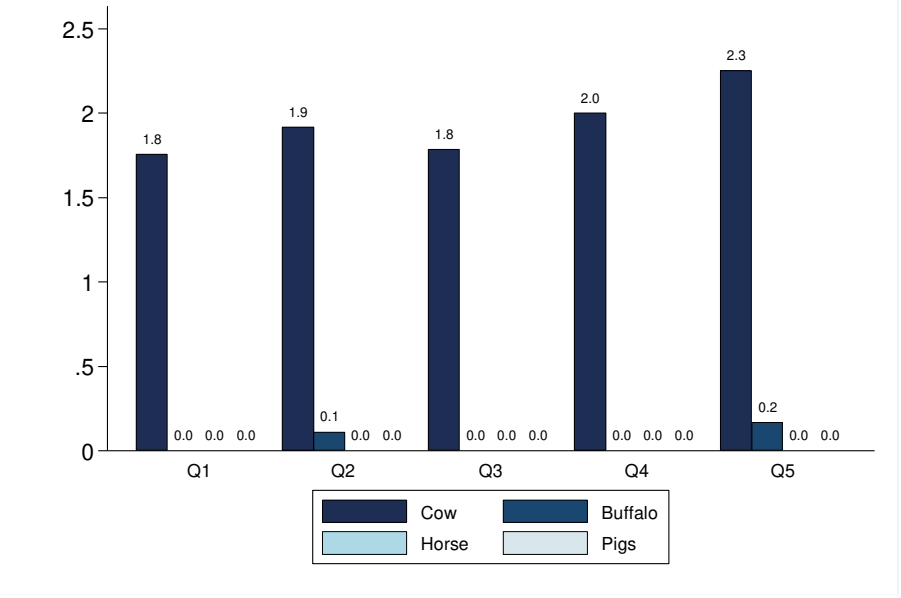
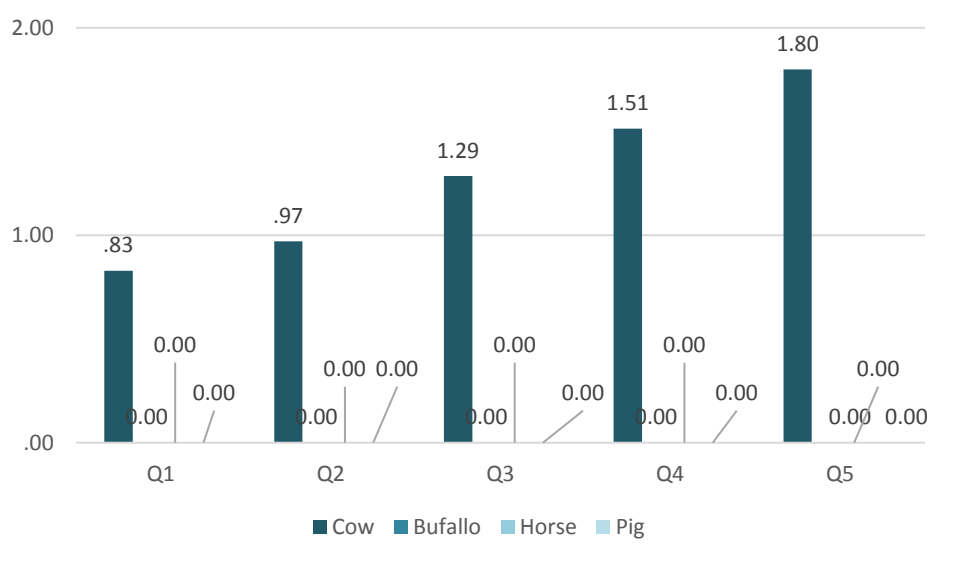


Figure 22: Amount of Large Livestock by Quintile (2016)



As seen in figures 23 and 24, the amount of other livestock by quintile in 2015 and 2016 respectively, generally can be seen to increase by wealth quintile. The amounts are broadly similar between the respondents in each year, however there is a spike in Q5 in 2016 (see figure 24) where the amount of chickens jumps from 5 to over 11 between Q4 and Q5.

Figure 23: Amount of Other Livestock by Quintile (2015)

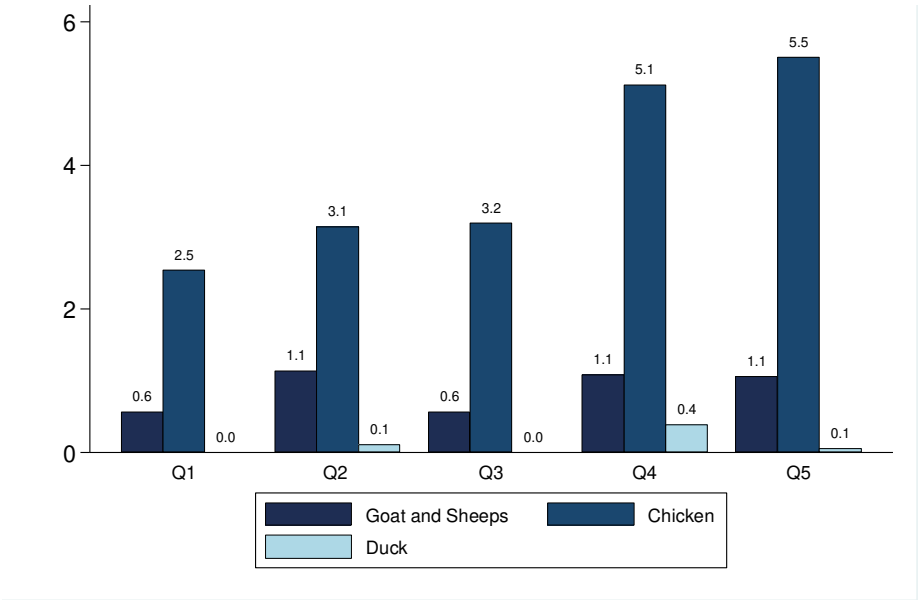
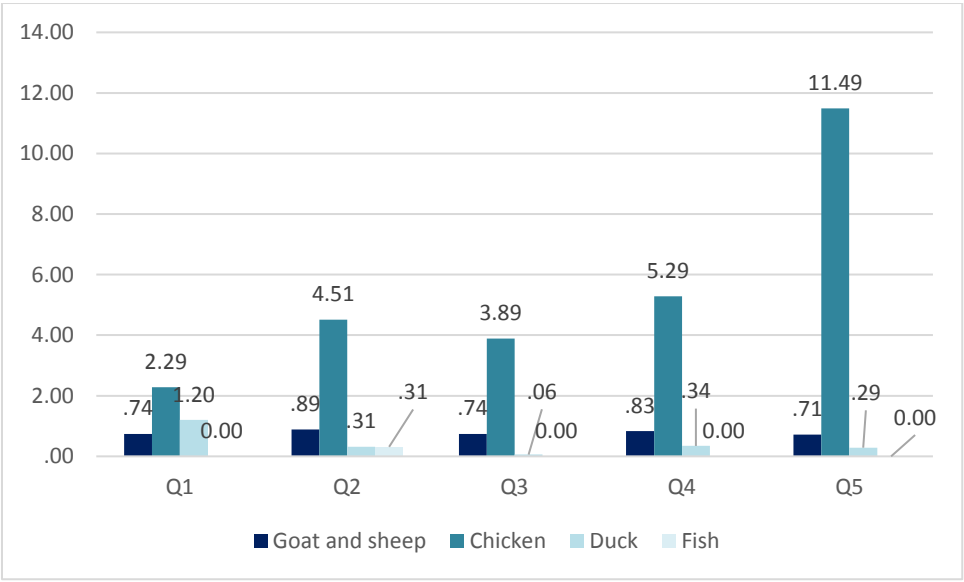


Figure 24: Amount of Other Livestock by Quintile (2016)



3.3 Natural Assets

Land holdings by quintile in 2016 (figure 26) are generally correlated by wealth quintile (the exception being Q5). Consistent with the 2015 data (figure 25) is that there is little different between the quintiles in terms of land ownership – varying between 0.4 and 0.6 hectares (2016), in the 2015 the disparity was between 0.6 and 0.9 hectares.

Figure 25: Land Holdings by Quintile (2015)

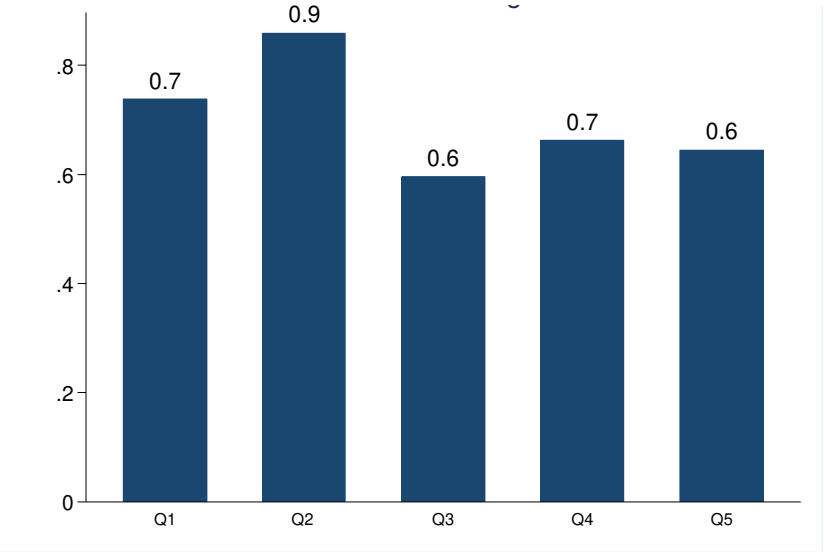
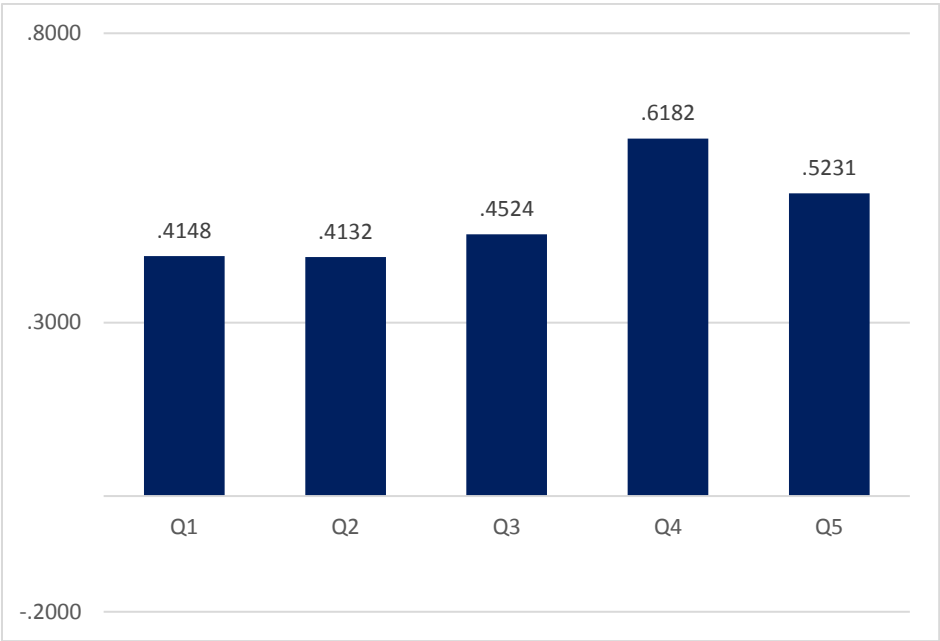


Figure 26: Land Holdings by Quintile (2016)



Consistent with the 2015 data (figure 27), the general trend regarding the share of own production used for consumption decreases with expenditure quintile for respondents in 2016 (figure 28). However, the percentage is much larger in 2016 with Q1 (2015) showing 16.5% consumption compared to Q1 (2016) showing over 30%. This percentage increase for 2016 compared to 2015 is consistent across all wealth quintiles.

Figure 27: Own Production and Received Food/ Total Food Consumption (2015)

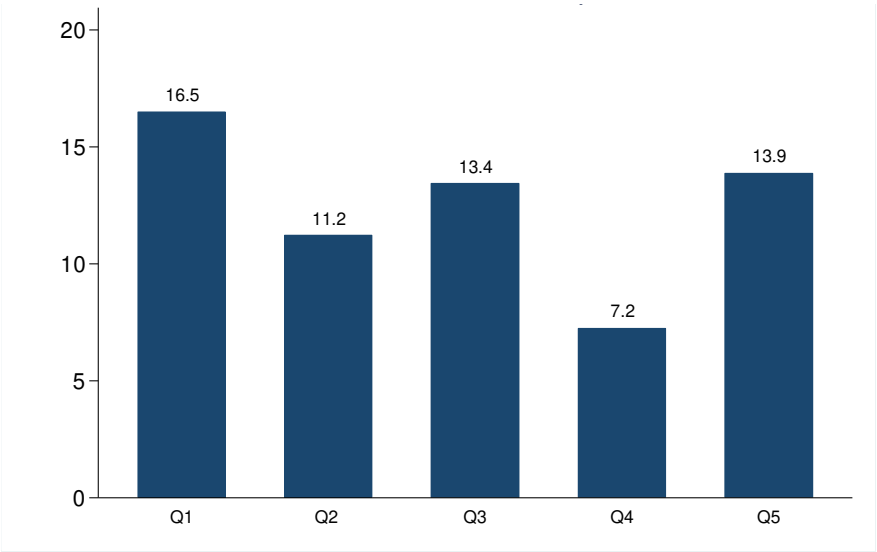
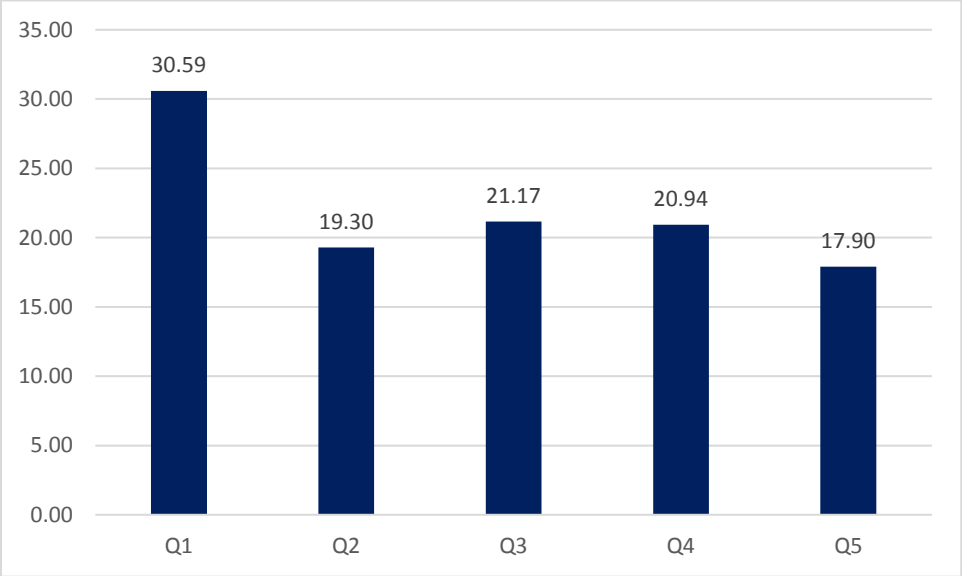


Figure 28: Own Production and Received Food/ Total Food Consumption (2016)



3.4 Social Assets

No new qualitative data collected for social assets.

3.5 Financial Assets

Financial assets show a stark difference between 2015 data (figure 29) and 2016 data (figure 30). In 2015 a far higher percentage of respondents claimed to have savings in lower quintiles while borrowing was relatively stable across all wealth quintiles (with the exception of Q3). In 2016 the picture is reversed, with over 50% of respondents in lower quintiles claiming to have borrowed, and savings being relative stable across all quintiles. It is unclear at this stage why the data would show such a profound change and it is recommended that this is investigated for the final analysis.

Figure 29: Saving and Borrowing by Quintile (2015)

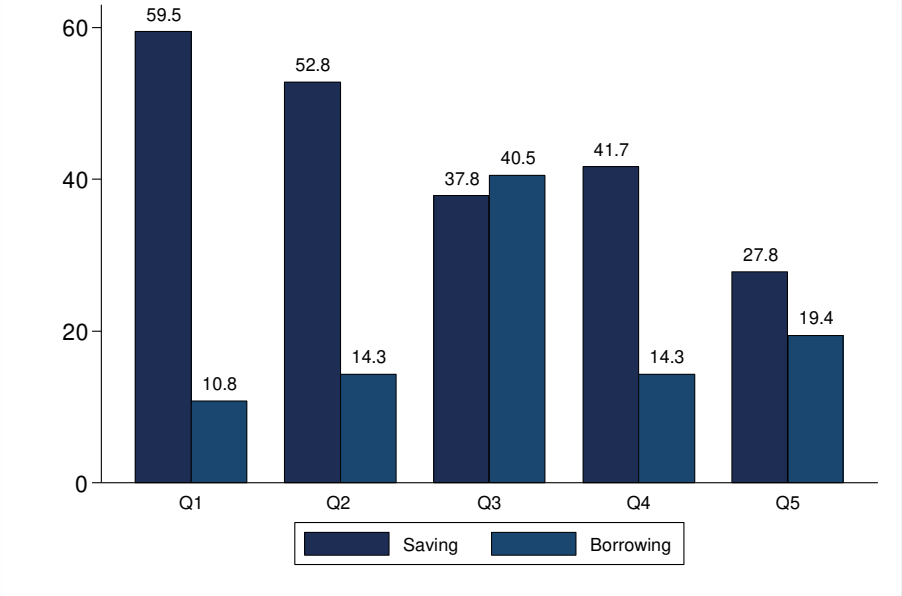


Figure 30: Saving and Borrowing by Quintile (2016)

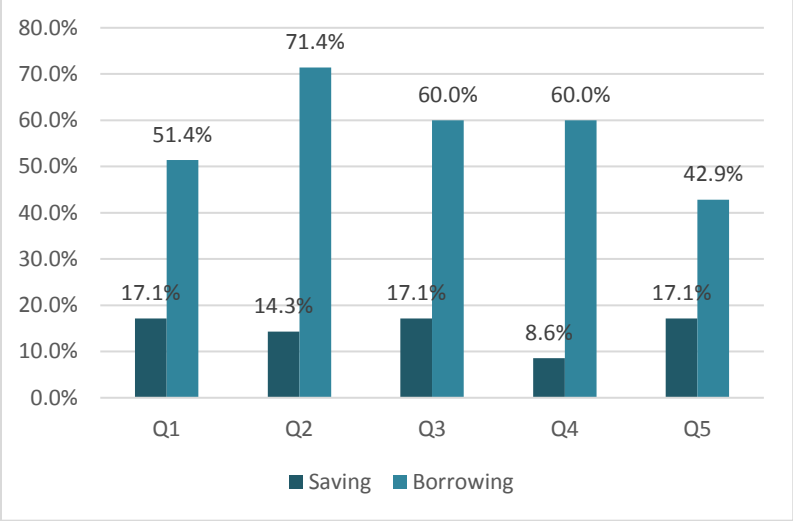


Figure 31: Saving and Borrowing by Quintile - total amount in IDR (2015)

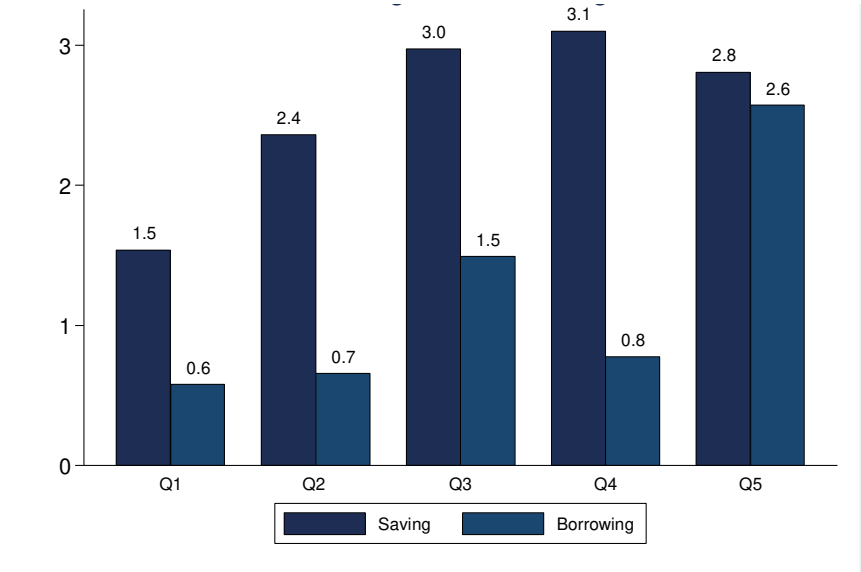
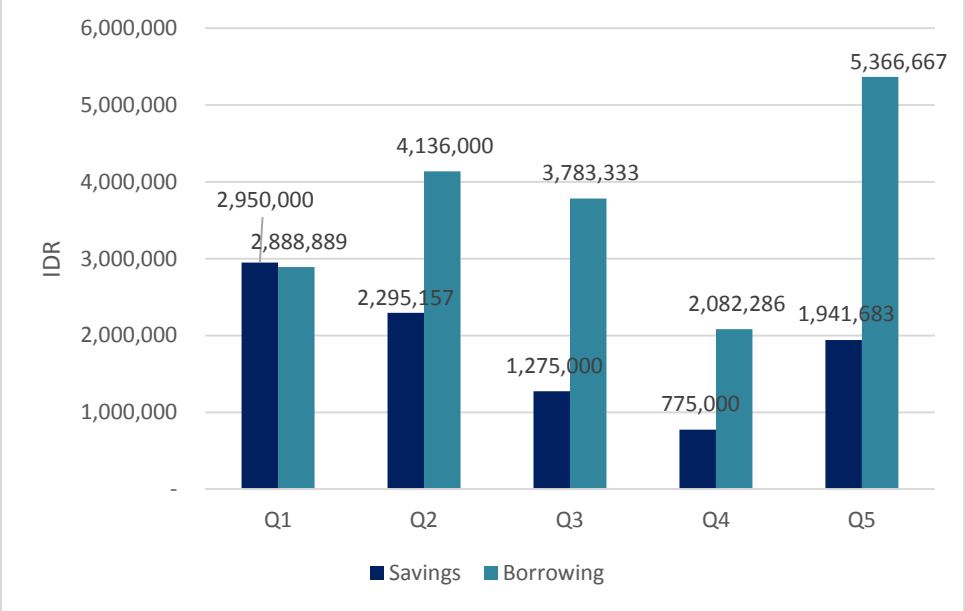


Figure 32: Saving and Borrowing by Quintile - total amount in IDR (2016)



Regarding the amounts saved or borrowed per quintile, the 2015 and 2016 data show significant deviation. As with the percentage of savings vs borrowings (figures 29 and 30), the data shows a reverse picture of the amounts on borrowing and savings in 2016 compared to 2015. Also the absolute values have changed substantially, with the highest reported borrowing amounts in Q5 at 2.6M IDR (2015) where in 2016 it is over 5.3M IDR. The 2016 data shows no correlation between borrowing amount and quintile, where savings appears to reduce by wealth quintile.

4 Income Generation

Regarding the income generation strategies of the households, as can be seen in figures 33 and 34, a similar percentage of respondents confirmed that a majority of their income is derived from agriculture and livestock (just over 20%) in both 2015 and 2016. A higher proportion of respondents claimed that

half of their income was derived from agriculture and livestock in 2016 (39%) compared to 2015 (26%). This indicates that the importance of agriculture and livestock has increased as a proportion of income generation amongst respondents in Sumenep.

Figure 33: Agriculture and Livestock Income Generation (2015)

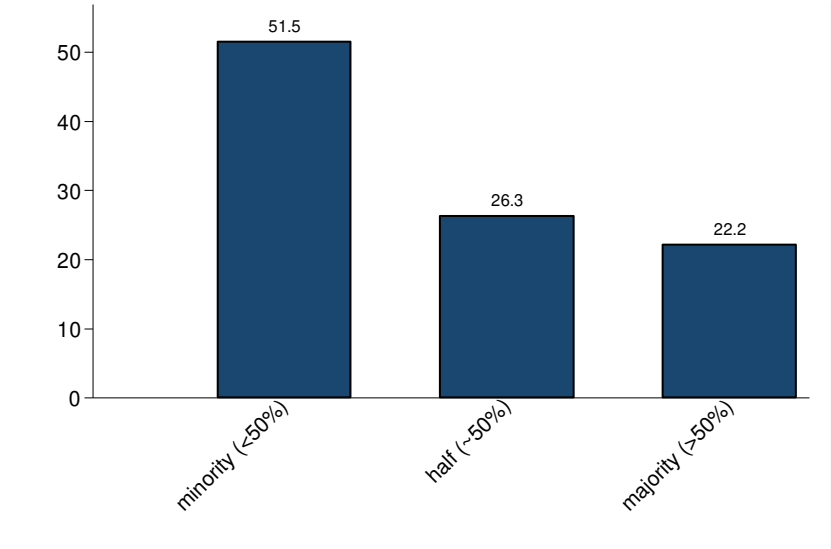
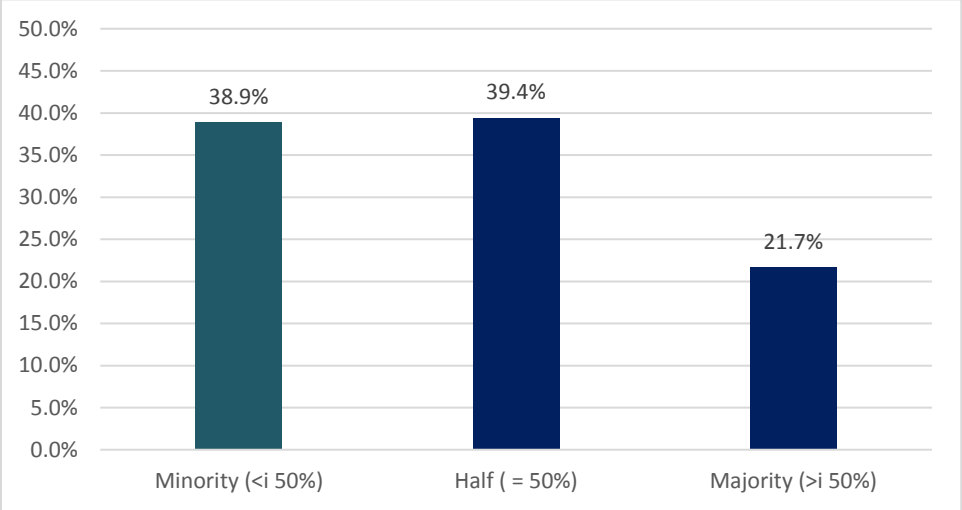


Figure 34: Agriculture and Livestock Income Generation (2016)



4.1 Agricultural Activity with Focus on Maize

While maize is important there are other crops that are also important for the households. In 2015 tobacco was reported as a the most reported non-maize crop with rice second (figure 35), in 2016 respondents claim that rice, mung bean, and peanut are all more important than tobacco in agricultural activity other than maize (figure 36).

Figure 35: Frequency of Crops mentioned as one of the three most important (except maize) in terms of income (2015)

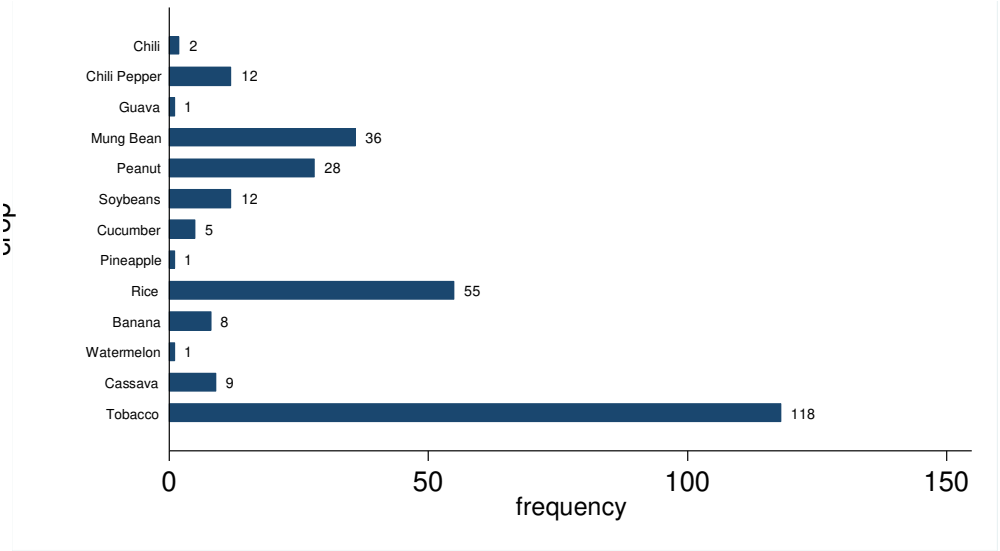
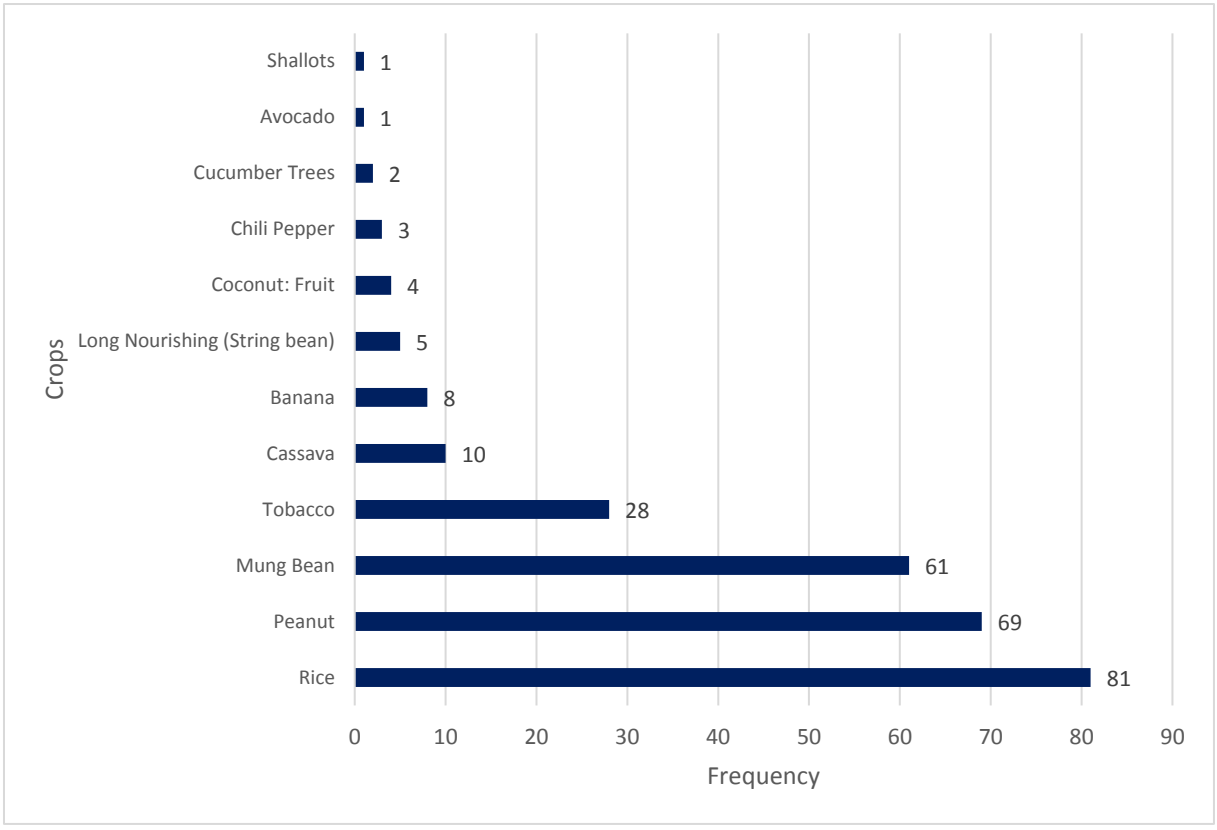


Figure 36: Frequency of Crops mentioned as one of the three most important (except maize) in terms of income (2015)



Regarding self-consumption crops (where no-selling was reported), maize remains the most important crop for self-consumption relative to the others, with rice second (figures 37 and 38). Mung bean and peanut are also used as a source of consumption by a significant number of respondents.

Figure 37: Crops for Self-consumption (reported no selling) 2015)

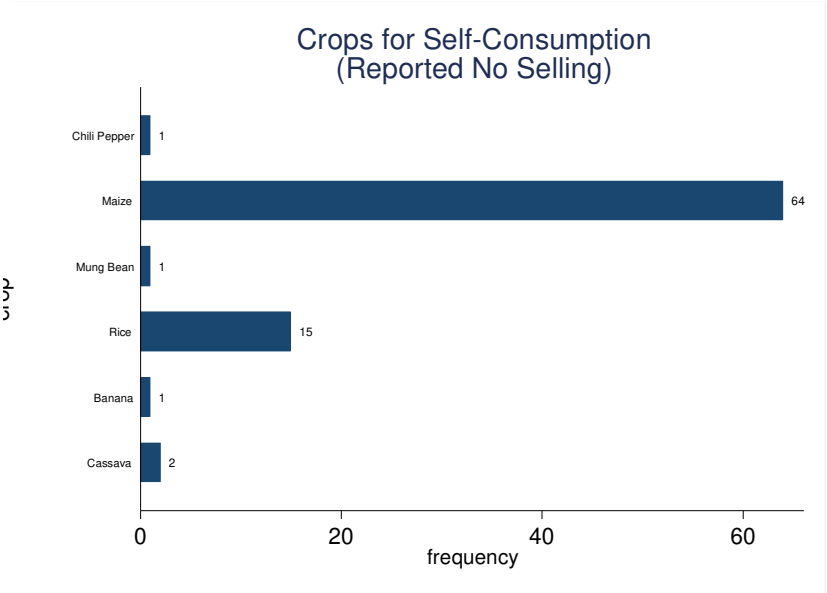
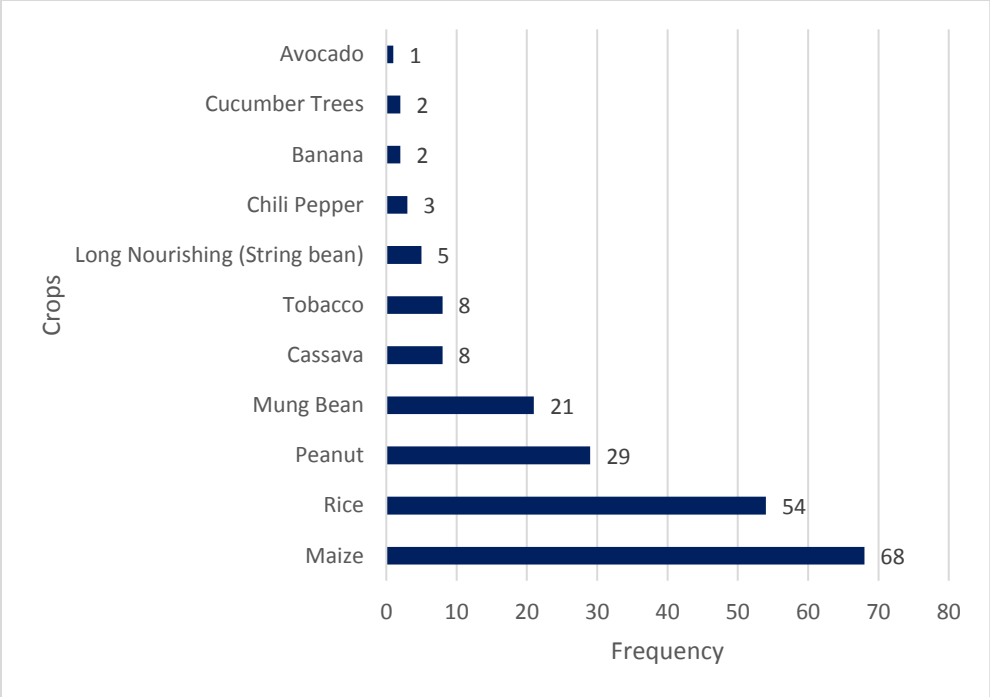


Figure 38: Crops for Self-consumption (reported no selling) 2016



The picture for crops that are primarily sold (more than 50%+ going to market), has changed dramatically between 2015 and 2016 (see figures 39 and 40). Where in 2015 the most sold crops were maize and tobacco, in 2016 is mung bean (21 respondents), tobacco (14), and peanut (12), with a very low number of respondents (3) claiming to sell maize. This is derived from a fairly small sample size however.

Figure 39: Crops which are mainly sold (reported as 50%+ selling) (2015)

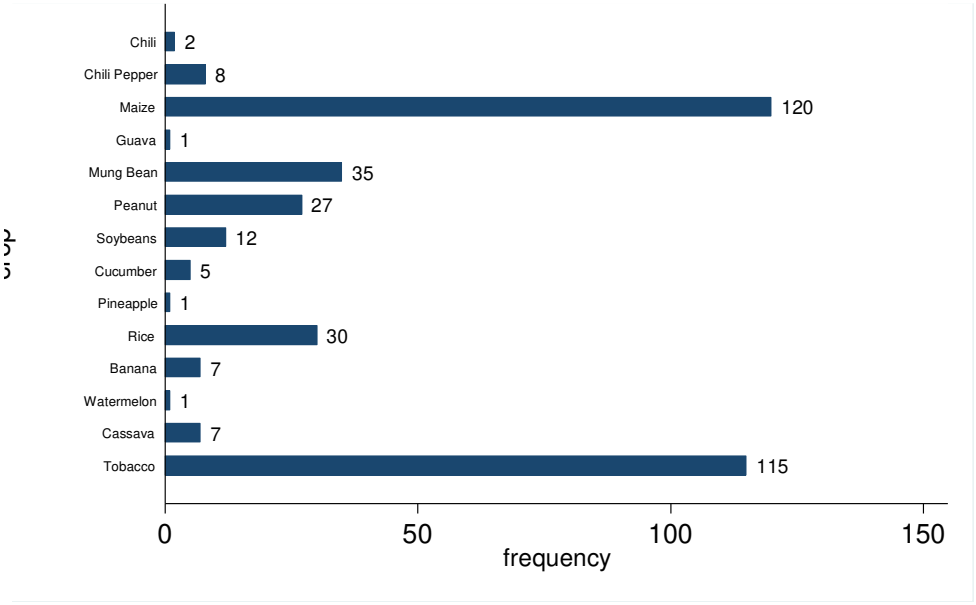
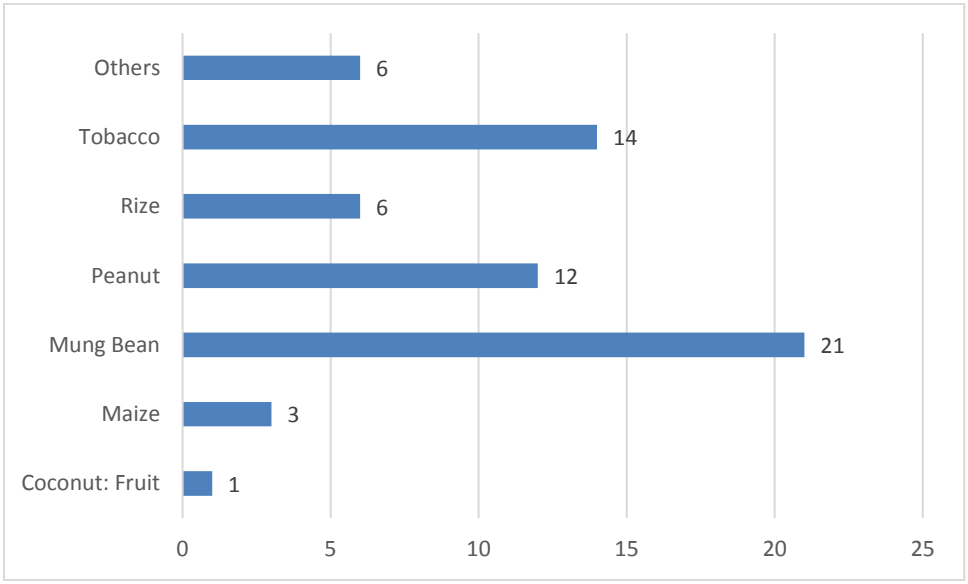


Figure 40: Crops which are mainly sold (reported as 50%+ selling) (2016)



In 2015 households generated most income from maize between April and June (figure 41) whereas in 2016 (figure 42) there is a more even distribution with most sold between June and September.

Figure 41: Maize selling by calendar month (2015)

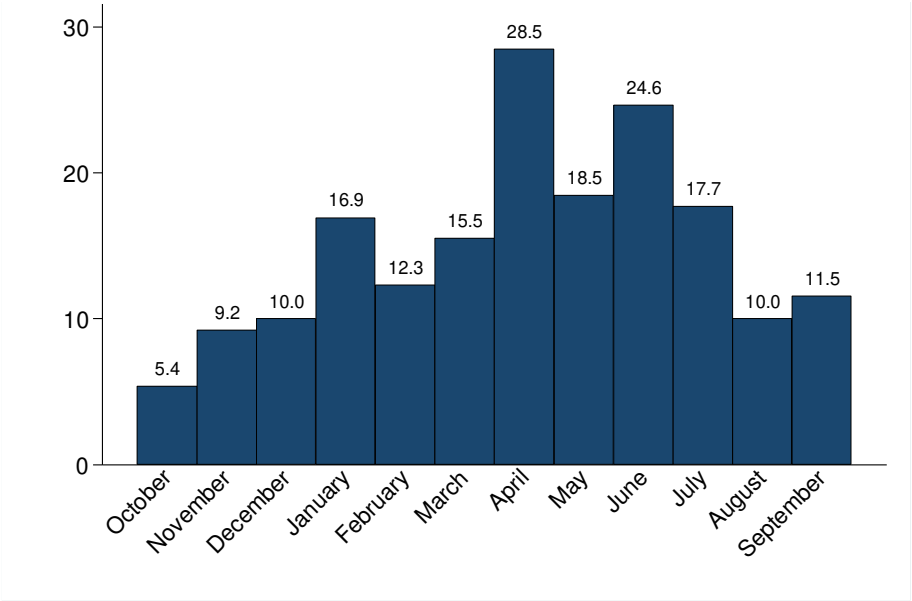


Figure 42: Maize selling by calendar month (2016)

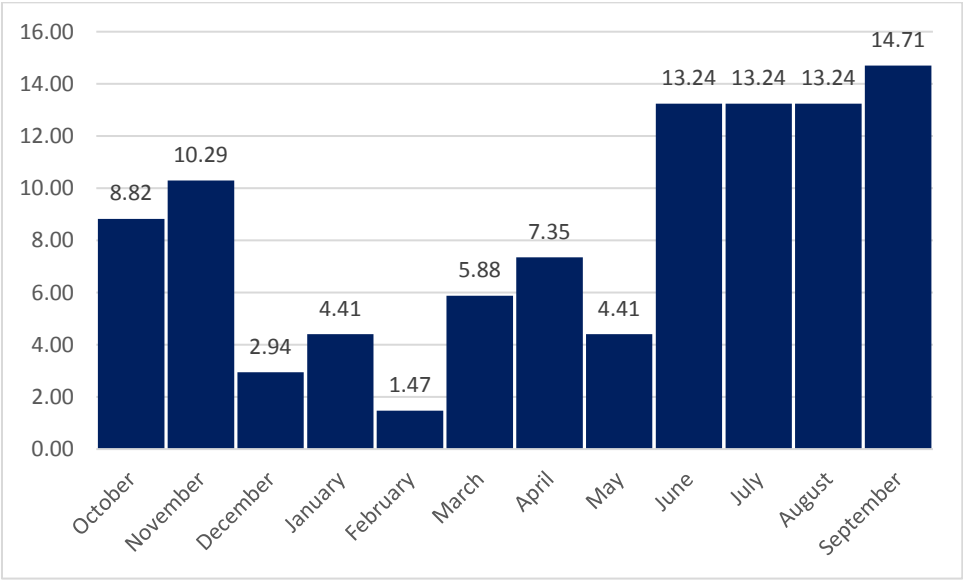


Table 12 shows the percentage that maize contributes to the total income from households. These households claim that around a third (31%) of their income comes from maize in 2015, where in 2016 this has increased to nearly two-thirds (64%). This indicates that the importance of maize for sales has increased between 2015 and 2016.

Table 12: Income Earned with Maize

	2015		2016	
	Nr. Obs	%	Nr. Obs	%
Percent of Total HH Income Earned with Maize	193.00	30.83	195	64

Table 13: Female Decision Making Power and Engagement in Maize Activities

	2015		2016	
	Nr. Obs	mean	Nr. Obs	mean
Most important decision maker in HH is female: Selling Maize	129.00	27.13	112	34,8
Second important decision maker in HH is female: Selling Maize	128.00	75.78	112	56,2

Table 13 shows the responses regarding female decision-making power in selling maize. This shows a small increase in the respondents' reporting that the most important decision-maker is female from 27% (2015) to 35% (2016). Correspondingly there is a reduction in the second most important from 76% female (2015) to 56% (2016). This may be related to the number of female-headed households in the locality.

4.2 Livestock Activities

Livestock rearing is also part of household income. As discussed the livestock can be seen as a form of investment. They are sold throughout the year as can be seen in figure 24.

Figure 43: Month when people sell Livestock (2015)

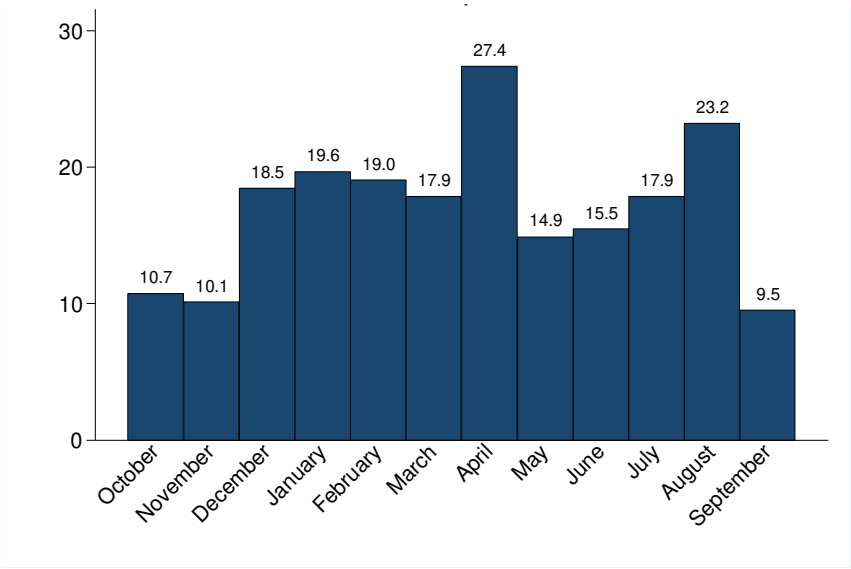


Figure 44: Month when people sell Livestock (2016

5 Expenditures and Financial Expenditure

As can be seen in figure 45, in 2015 education expenditure was mentioned by 66% of the households to be a significant expenditure in the last 12 months. Also health, marriage and other *adat* celebrations were mentioned as most significant expenditure. For 24% of the households buying animal stock is a significant expenditure and 21% consider agricultural inputs are a significant expenditure. In 2016 (figure 46) there is a similar picture with education, health, and marriage seen as the most significant expenditure.

Figure 45: Significant household expenditure (2015)

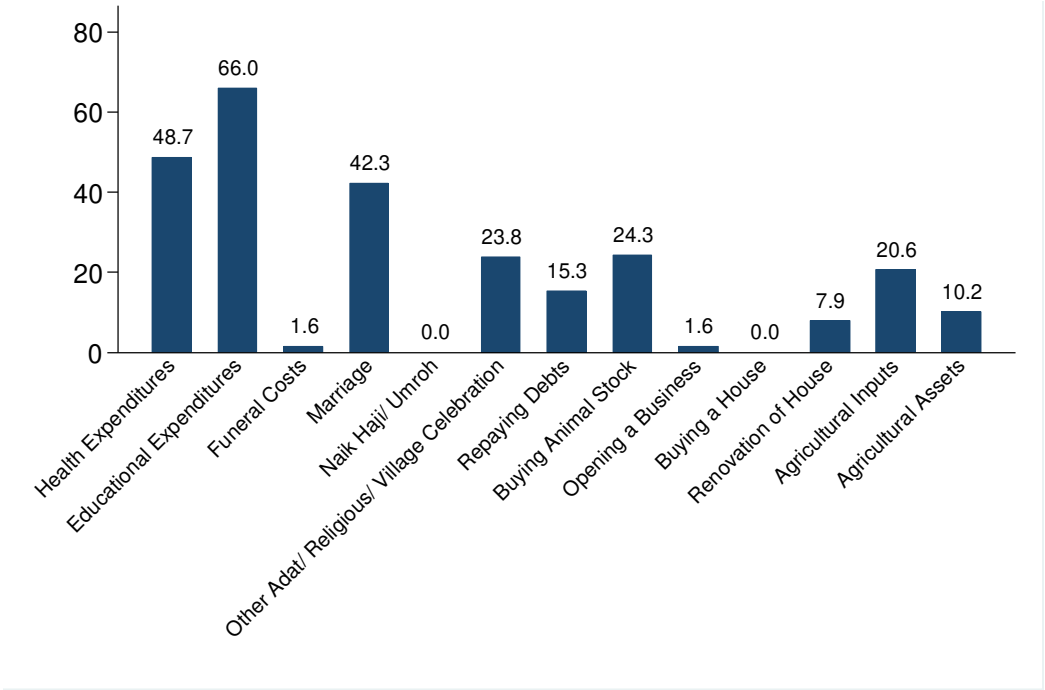
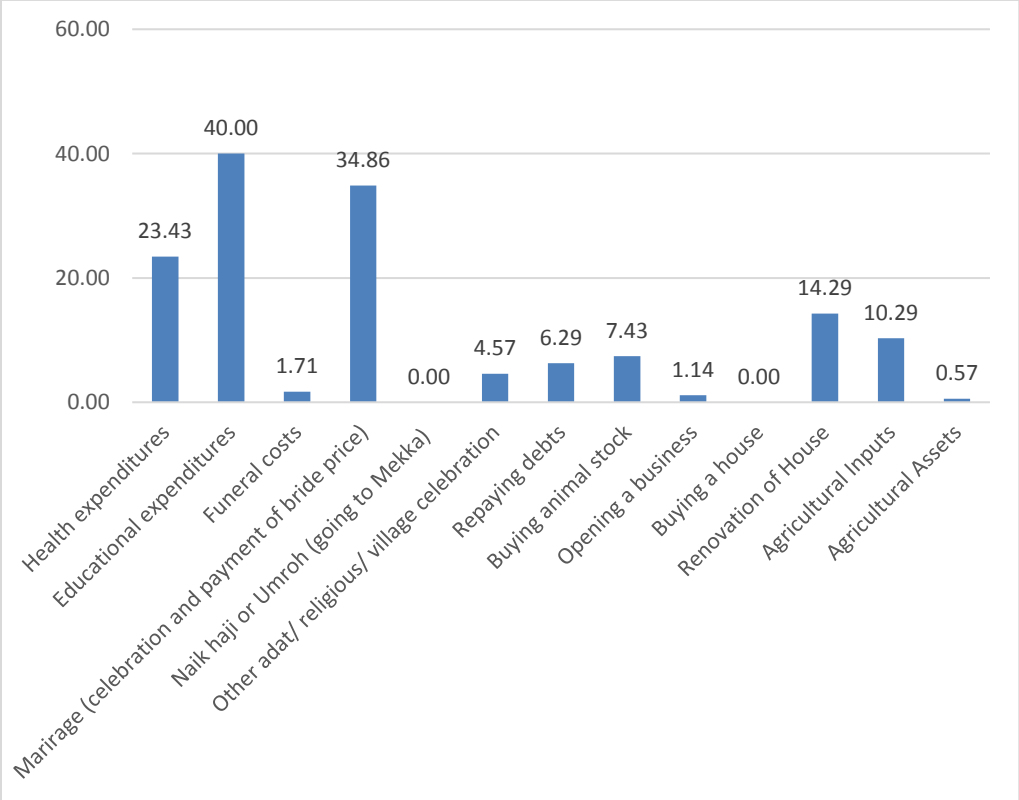


Figure 46: Significant household expenditure (2016)



5.1 Education Expenditure

As can be seen in figures 47 and 48, in 2015 the share of total expenditure on education decreased by expenditure quintile where in 2015 the distribution is more even for the lower wealth quintiles.

Figure 47: Expenditure on Education (total) (2015)

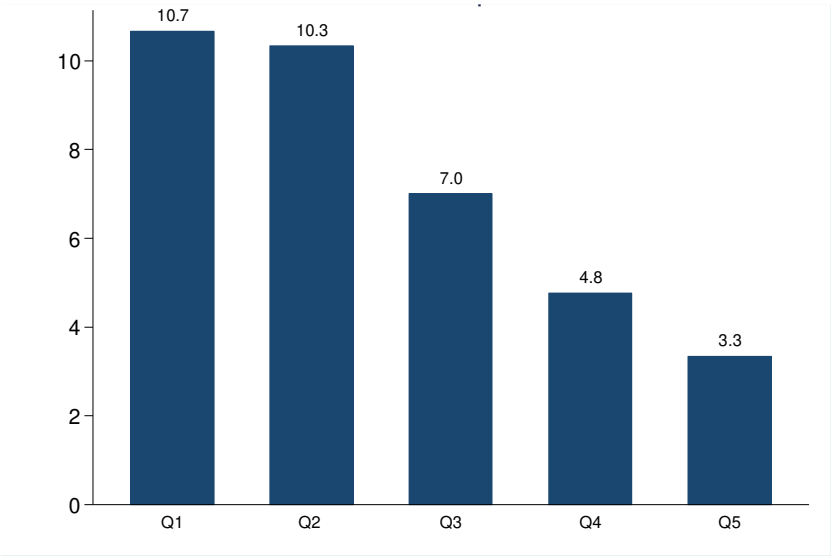
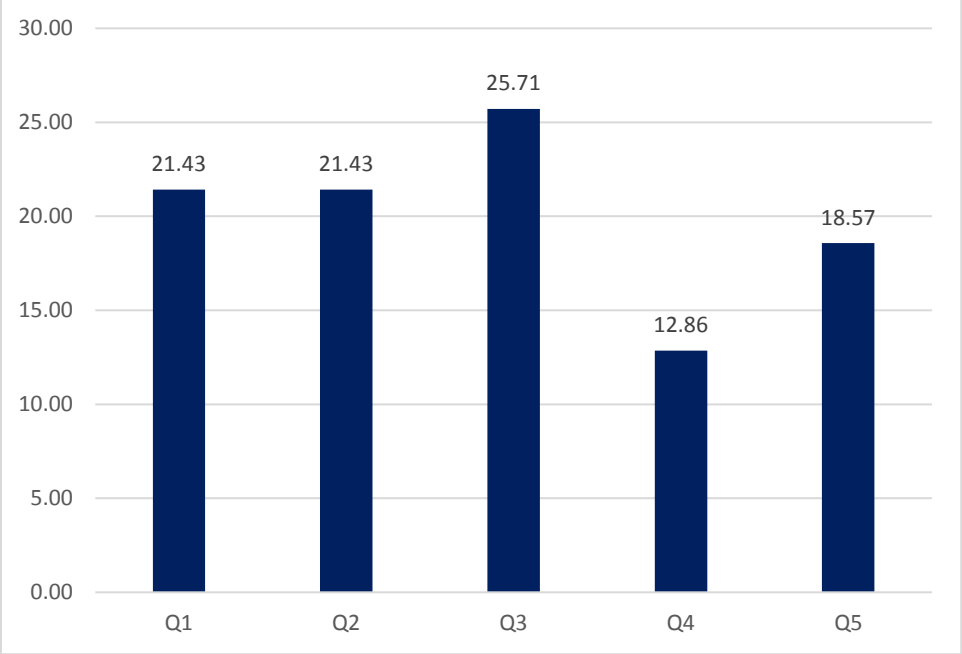


Figure 48: Expenditure on Education (total) (2016)



In terms of actual expenditure on education, the distribution across quintiles and the total amounts are broadly similar between 2015 (figure 49) and 2016 (figure 50). The outlier is Q5 (2016) where there is a large increase in reported expenditure (from under 200,000 IDR to over 400,000 IDR).

Figure 49: Expenditure on education per child (2015)

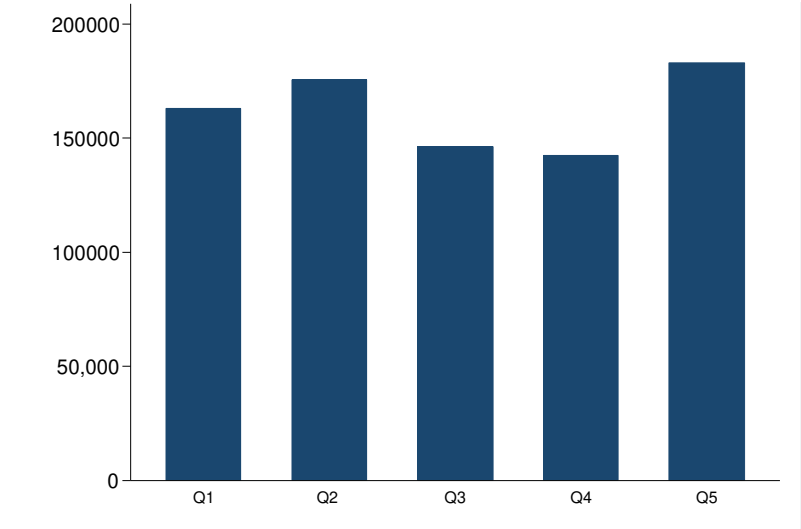


Figure 50: Expenditure on education per child (2016)

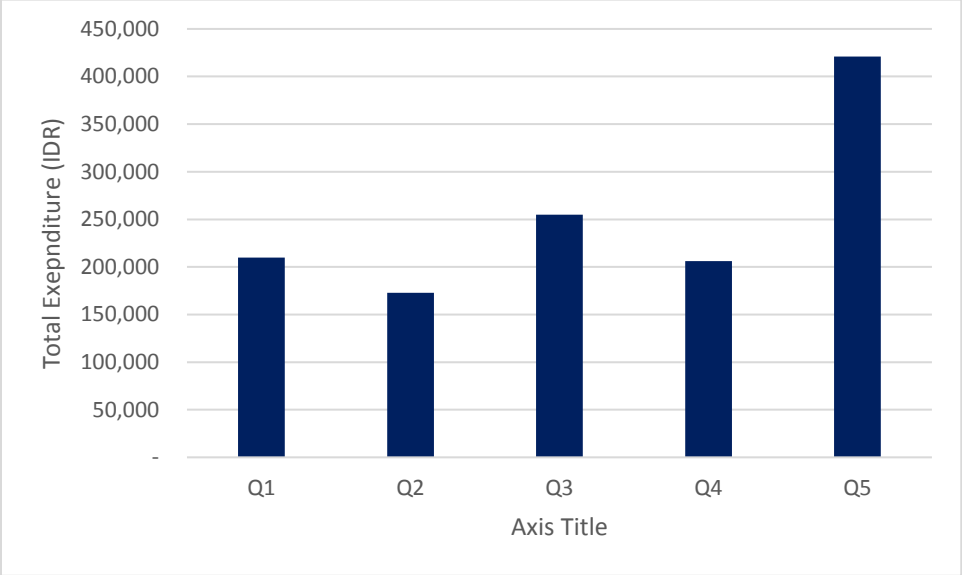


Figure 51: financing of Education (2015)

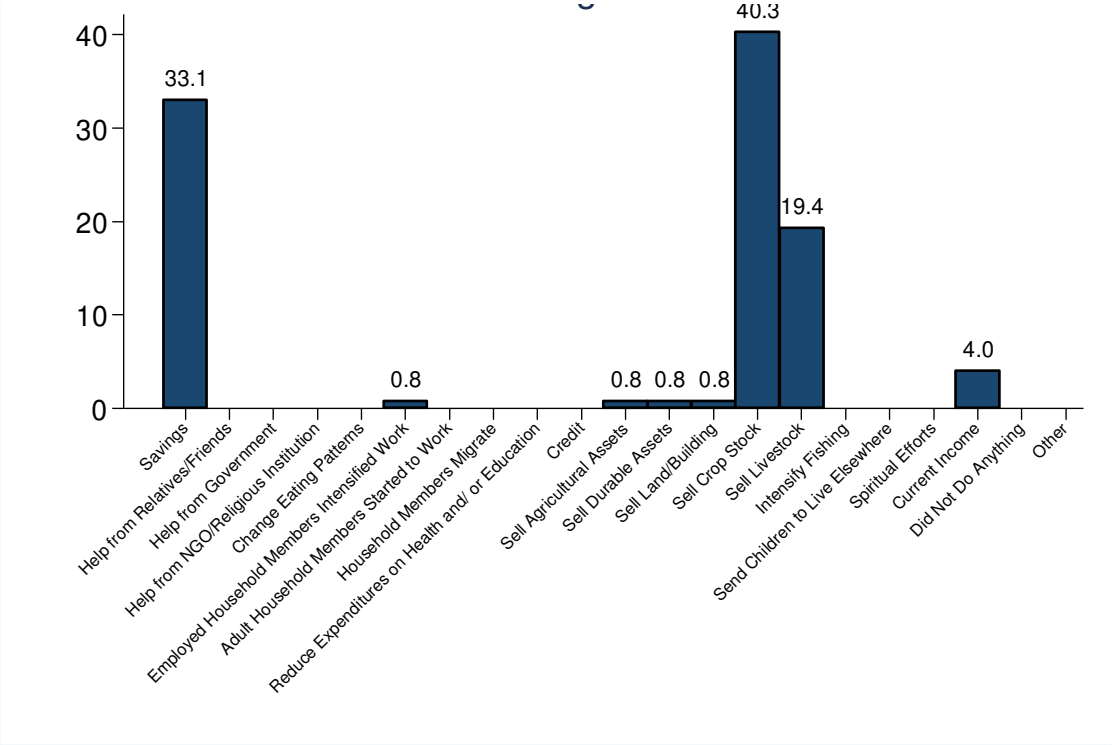
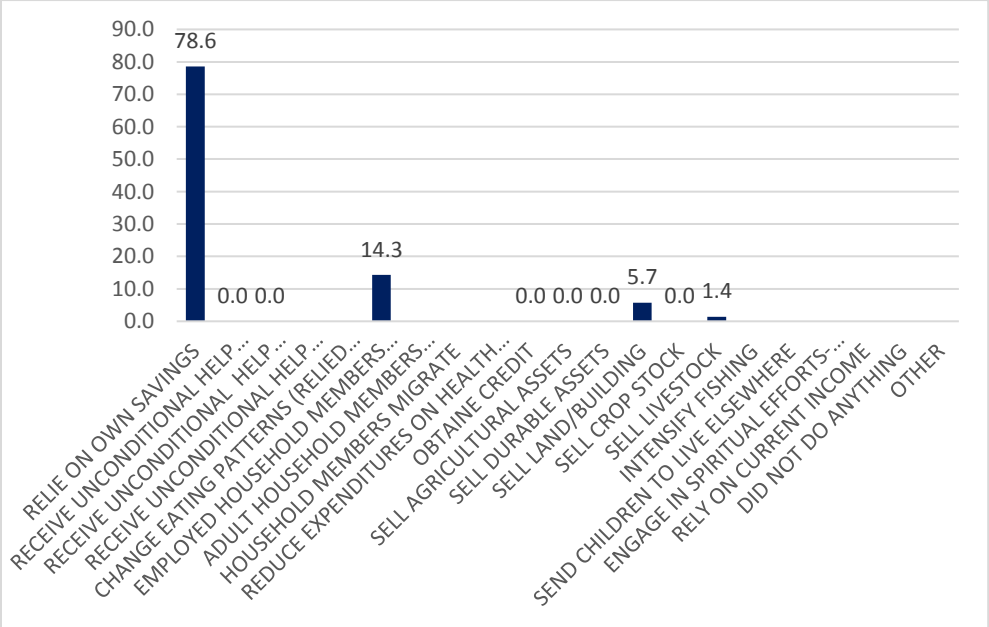


Figure 52: financing of Education (2016)



As can be seen in figure 51, in 2015 most households financed education through selling crops and livestock or by drawing upon their savings. In 2016 (figure 52) the majority of respondents claimed that education was financed through savings with no respondents claiming they sell livestock for this reason. This is a significant change given that this was the main mains of financing education in 2015.

The timing of significant expenditure remains similar across both 2015 and 2016 (figures 53 and 54 respectively) with these expenditures being made in July.

Figure 53: Timing of significant expenditures: Education (2015)

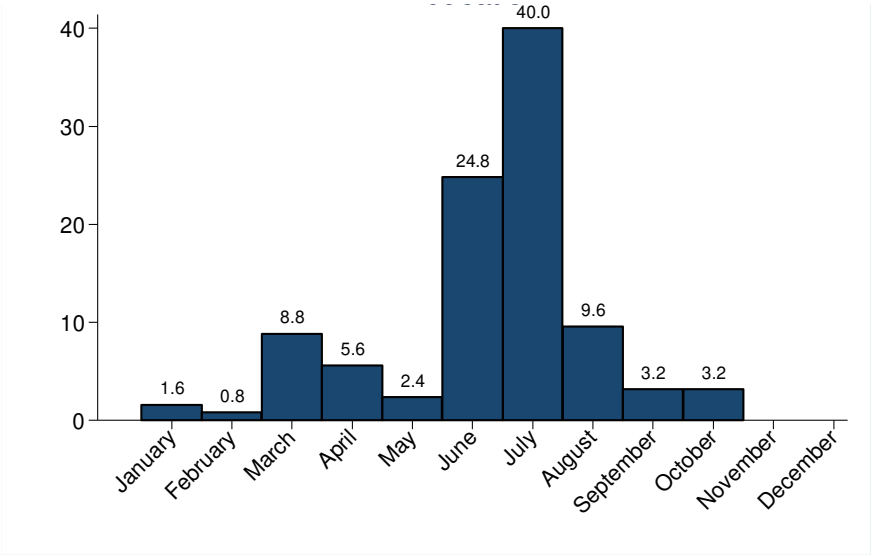
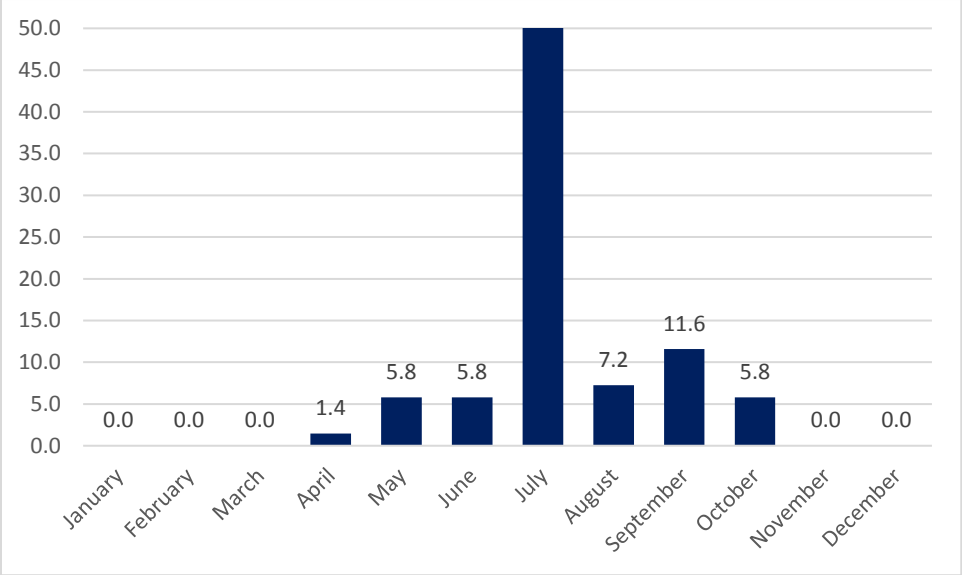


Figure 54: Timing of significant expenditures: Education (2016)



5.2 Social Expenditure

Social expenditure remains the same across both 2015 (figure 55) and 2016 (figure 56) with alcohol and tobacco being the main areas of expenditure. A significant change in 2016 is that more respondents across all wealth quintiles claimed ceremonies as a major expense. The proportion of expenses is relatively evenly distributed across the wealth quintiles.

Figure 55: Social Expenditure (2015)

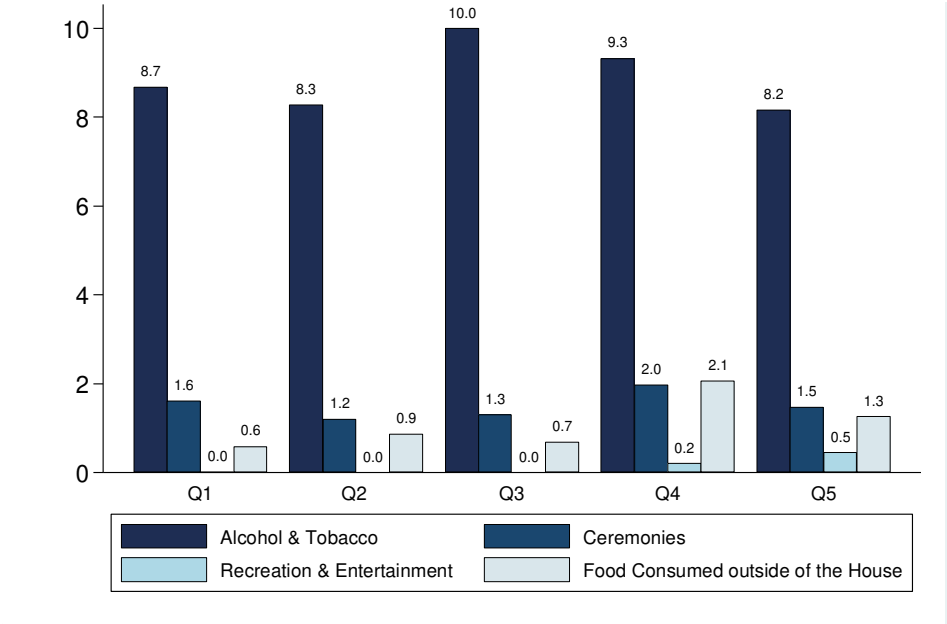
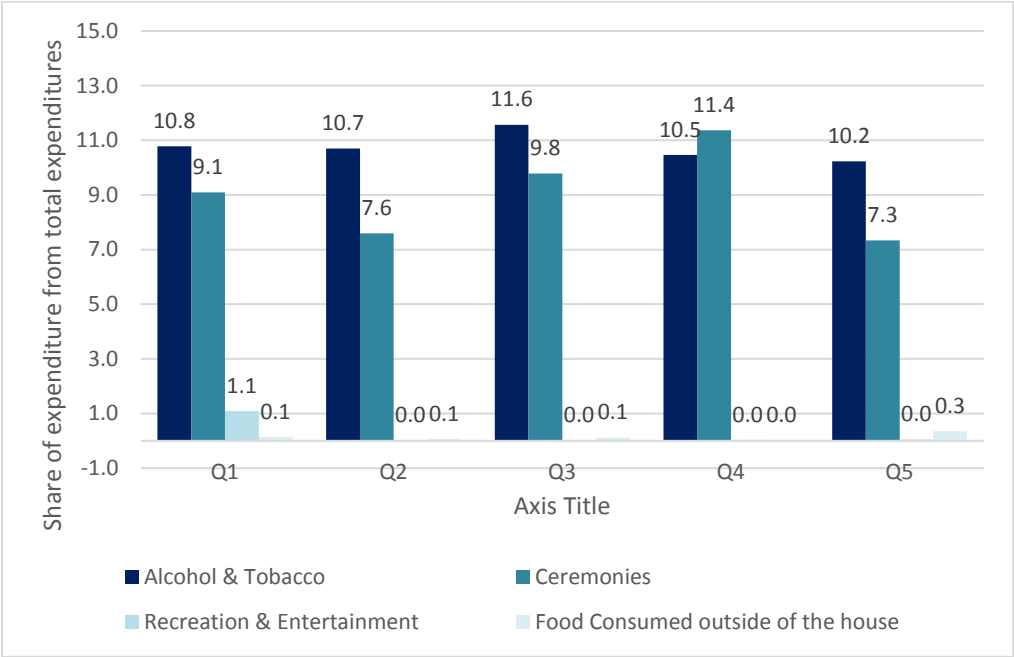


Figure 56: Social Expenditure (2016)



Marriage is a major expenditure for respondents in Sumanep. This was generally financed through selling crops/ livestock in 2015 (see figure 57) whereas in 2016 (figure 58) the overwhelming majority of respondents claimed their own savings were the primary source of funding marriage. This is a significant difference and corresponds with the financing of education in figures 51 and 52 which similarly shifted from selling of assets to savings between 2015 and 2016.

Figure 57: Financing Marriage (2015)

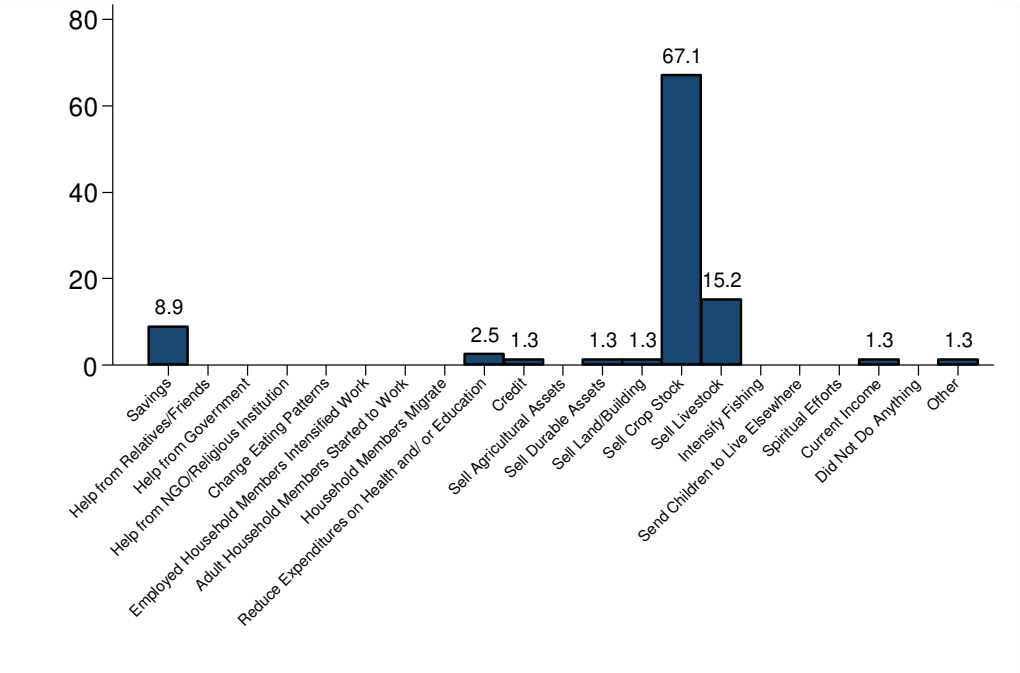
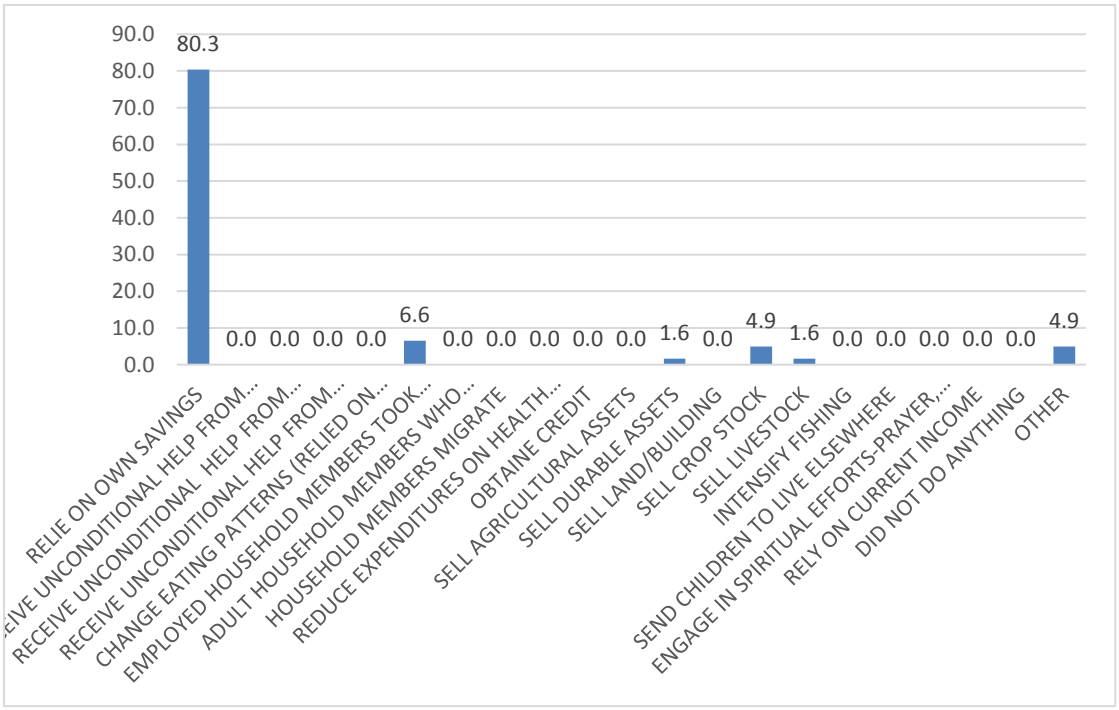


Figure 58: Financing Marriage (2016)



As can be seen in figure 59, in 2015 other *adat* expenditures (generally village or religious celebrations), respondents claimed these were financed with savings, selling crops and livestock. In 2016 (figure 60) the main means of financing other *adat* is savings.

Figure 59: Financing other Adat (2015)

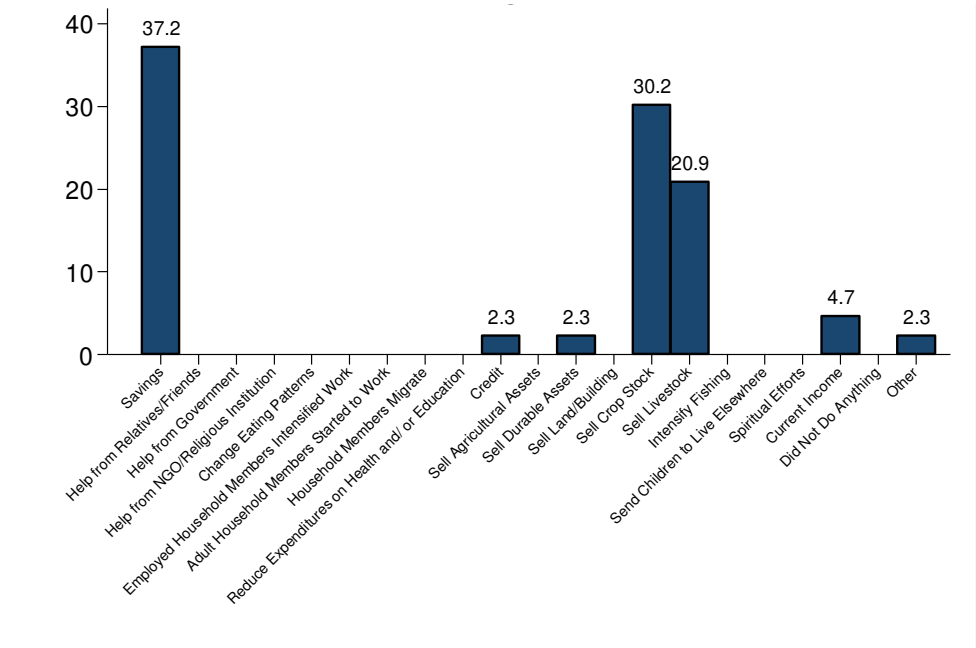
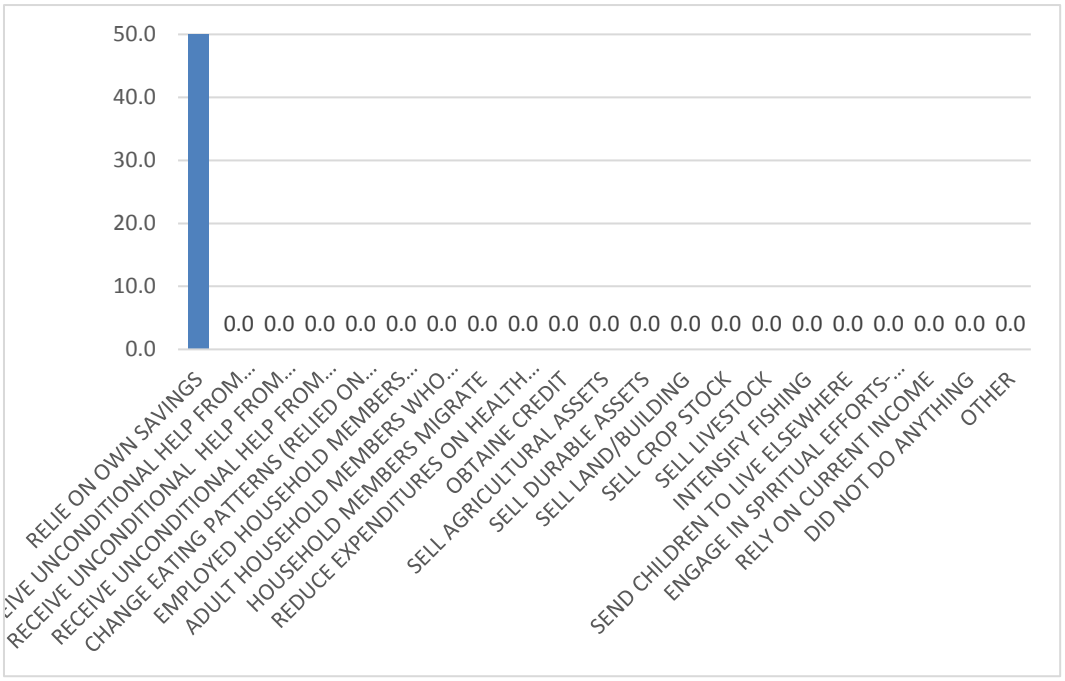


Figure 60: Financing other Adat (2016)



The timing of marriage in Sumanep is generally in May-June and August-September – this is consistent across 2015 (figure 61) and 2016 (figure 62). In the 2016 more respondents also claimed that marriage expenditure is timed in February than respondents in 2015.

Figure 61: Timing of significant expenditure – Marriage (2015)

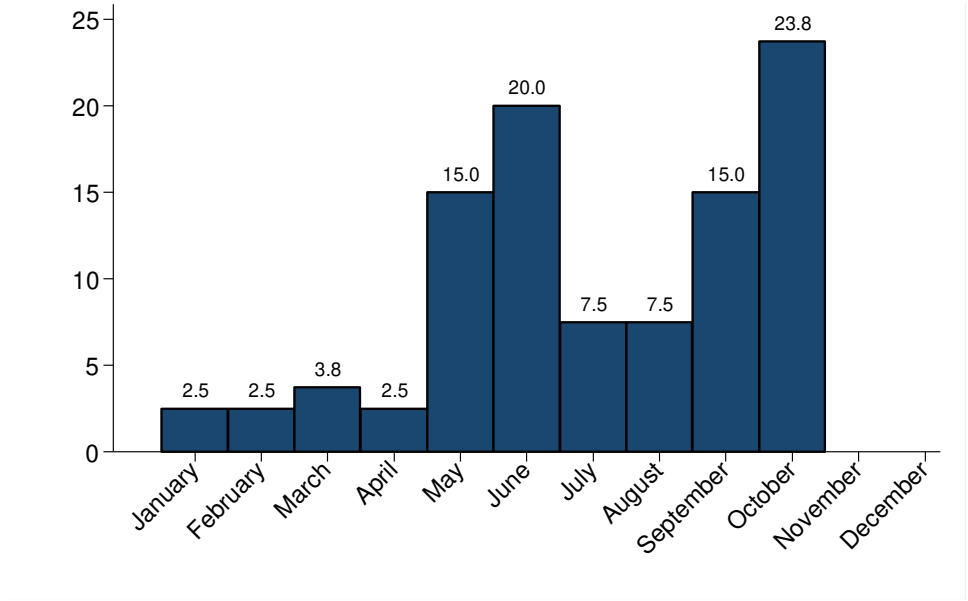
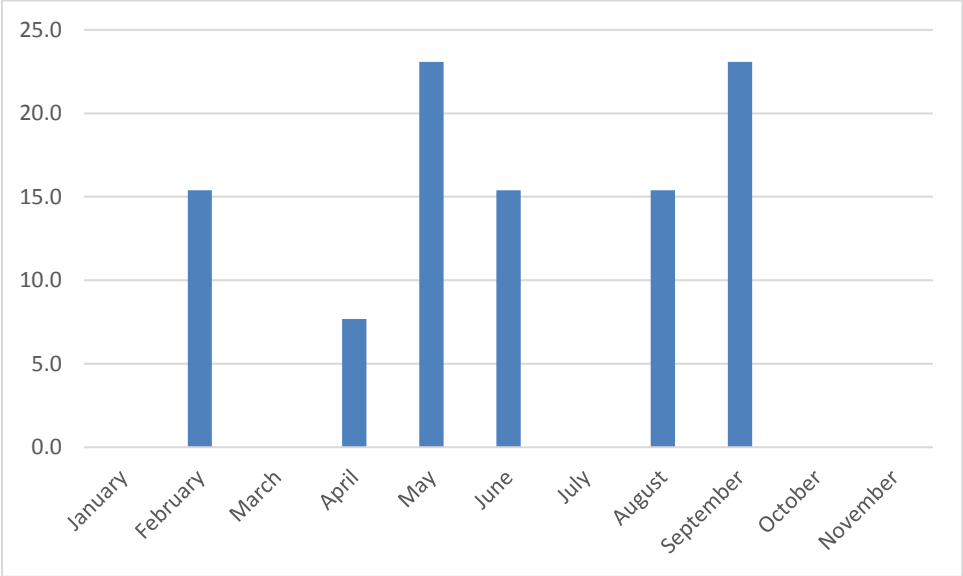


Figure 62: Timing of significant expenditure – Marriage (2015)



Regarding the timing of significant other expenditure (such as other *adat*, religious or village celebrations), the months of August and September are the peak months for both 2015 (figure 63) and 2016 (figure 64).

Figure 63: Timing of significant expenditure (other Adat/ religious/ village celebration) (2015)

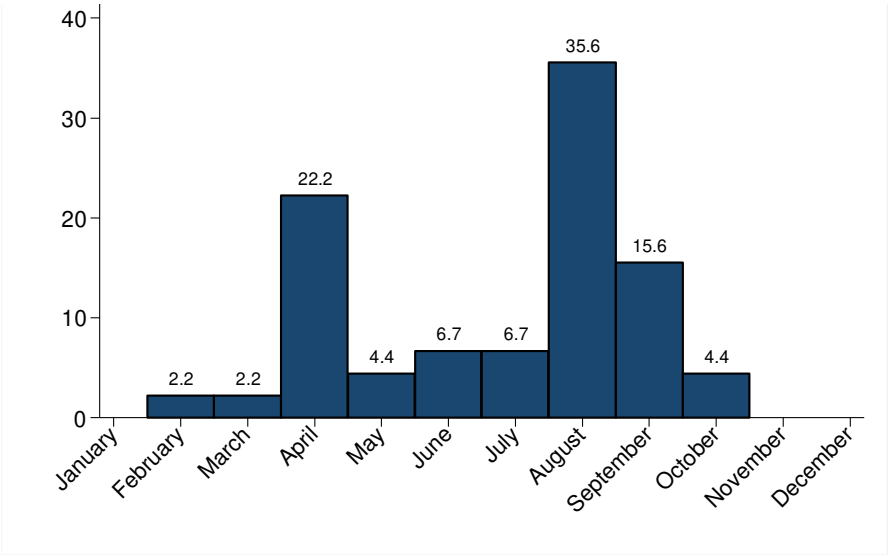
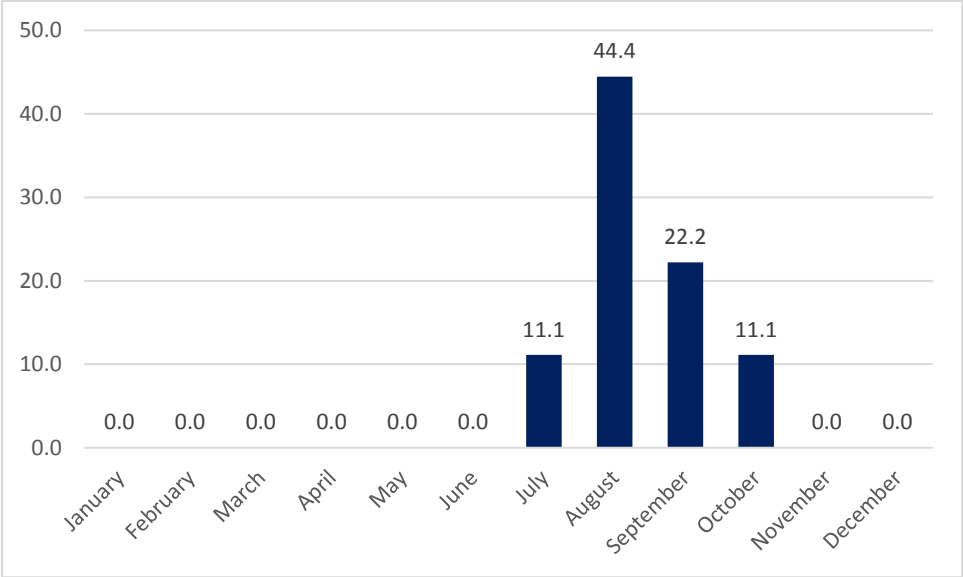


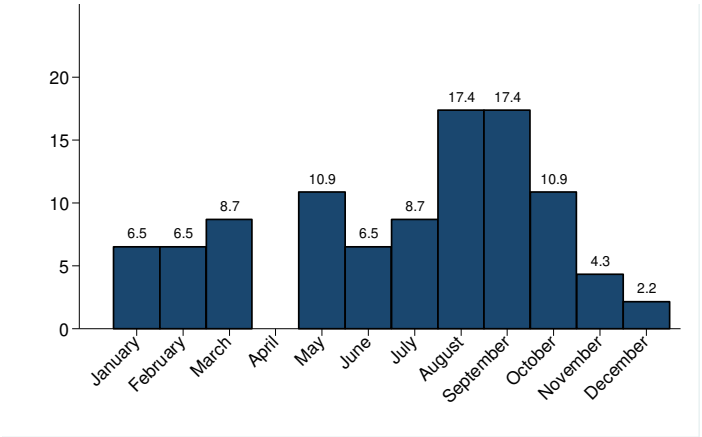
Figure 64: Timing of significant expenditure (other Adat/ religious/ village celebration) (2016)



5.3 Livestock Expenditure

As reported by some households during qualitative data collection, small livestock is often financed by the earnings from selling grown livestock, business profits or by other forms of daily income. As discussed previously, livestock is also considered a form of investment and savings. Especially goats and cows are reported to being held to finance large expenditures in the future which might be or educational, business related (more livestock), or to finance healthcare.

Figure 65: Timing of Significant Expenditure - buying animal stock (2015)



5.4 Agricultural Assets and Inputs

No data available for 2016.

5.5 Repaying Debt

Usually households borrow money from their neighbours, family, and friends but have also access to formal institutions as discussed previously. Data from 2015 (figure 66) and 2016 (figure 67) are consistent in showing that the majority of expenditure on repaying debt is in the August-September window.

Figure 66: Timing of significant expenditure - repaying debt (2015)

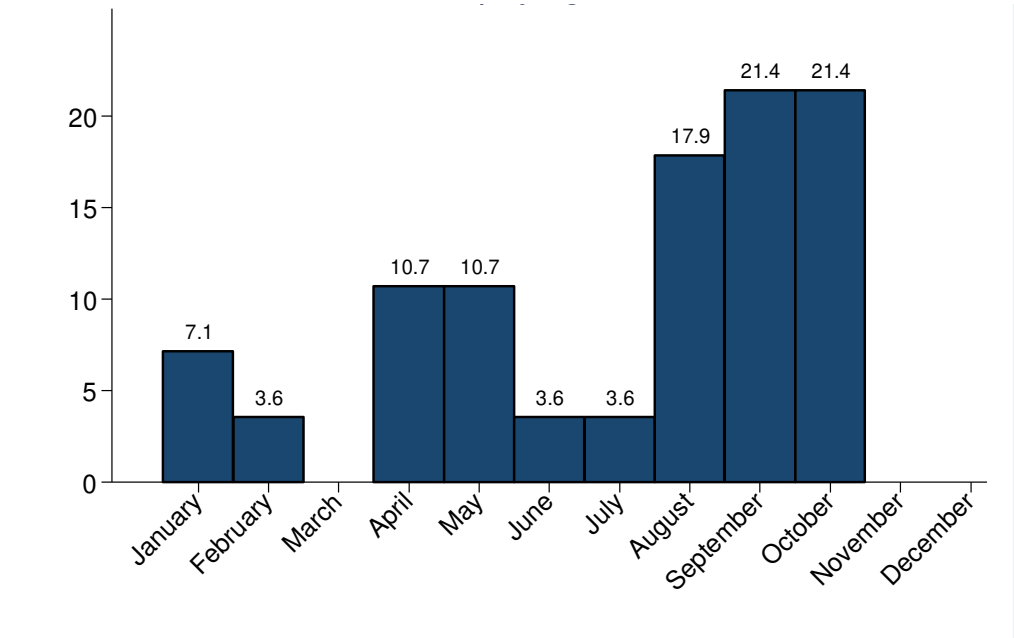
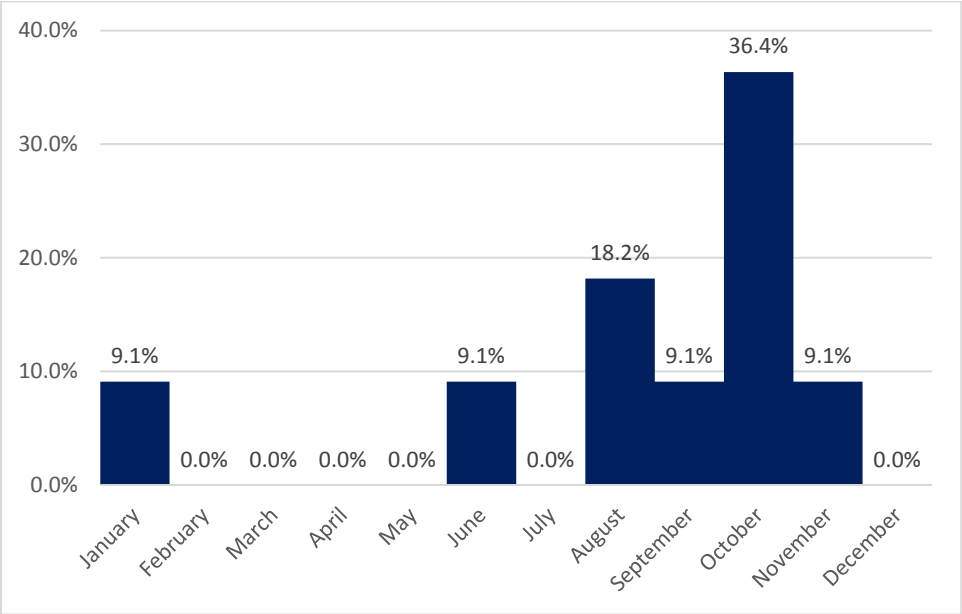


Figure 67: Timing of significant expenditure - repaying debt (2016)



5.6 Food Expenditures

The share of food consumption is increased with expenditure quintile in 2015 (figure 68), which was surprising, since wealthier households usually tend to have lower shares of food expenditure. In 2016 (figure 69) the data shows a slight decline in the percentage of expenditure on food by wealth quintile.

Figure 68: Food Expenditure by Quintile (2015)

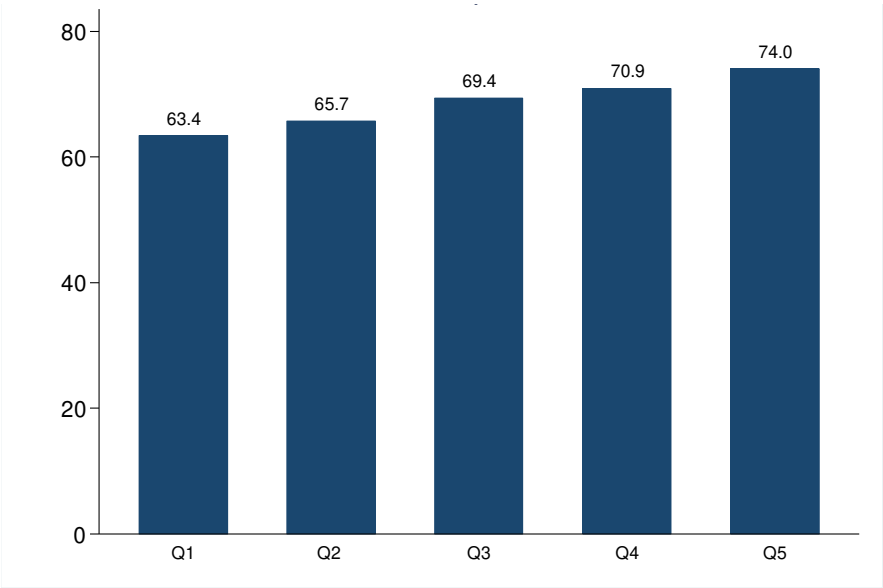
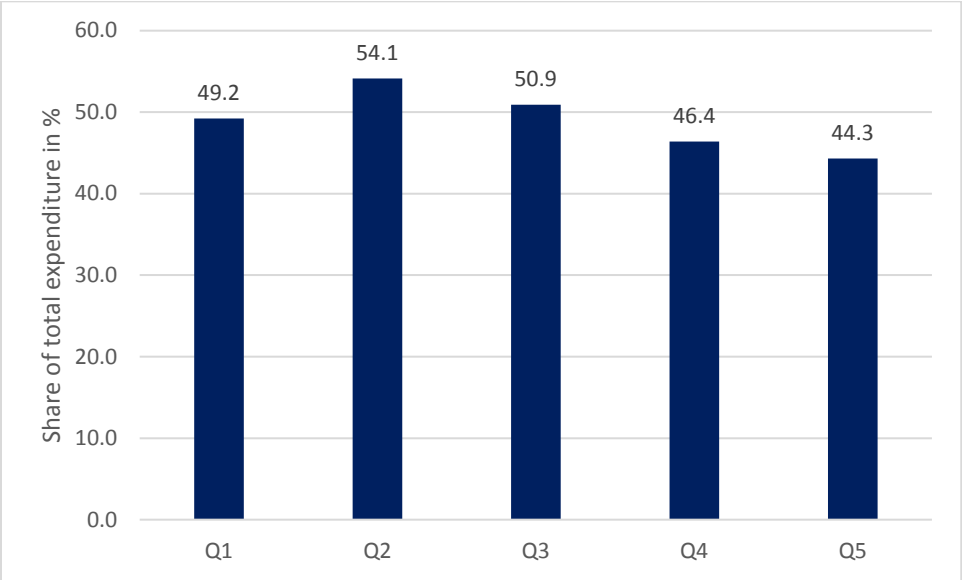


Figure 69: Food Expenditure by Quintile (2016)



The data for the amounts of food and non-food expenditure shows increases in expenditure in higher wealth quintiles for 2015 (figure 70) and 2016 (figure 71). The key change in the responses relates to the relative amounts spent on food vs non-food – in 2015 respondents across all quintiles claimed more expenditure on food than non-food – in 2016 it is more event with significantly more spent on non-food in higher quintiles (Q4-Q5). This can be explained through higher consumption in these quintiles of meat and fish (2015) and alcohol and tobacco and fish (2016). It is also more evenly distributed across the quintiles in 2016.

Figure 70: Total Food and non-food Expenditure by Quintile (2015)

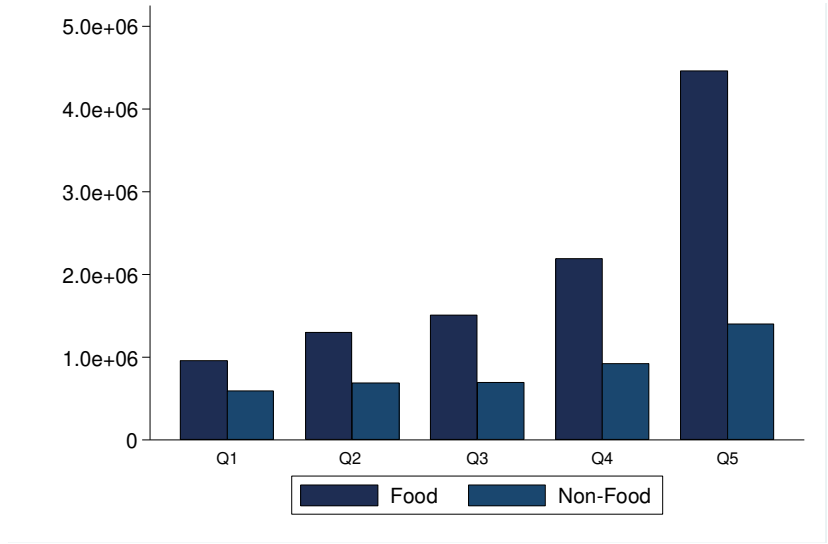


Figure 71: Total Food and non-food Expenditure by Quintile (2016)

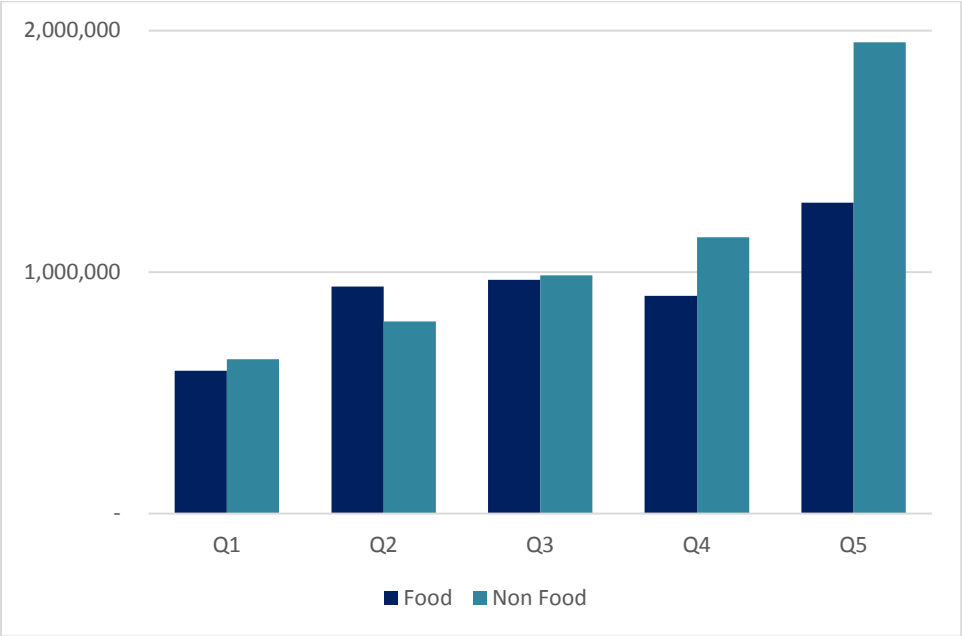


Figure 72: Type of Food Expenditure by Quintile (total spend) (2015)

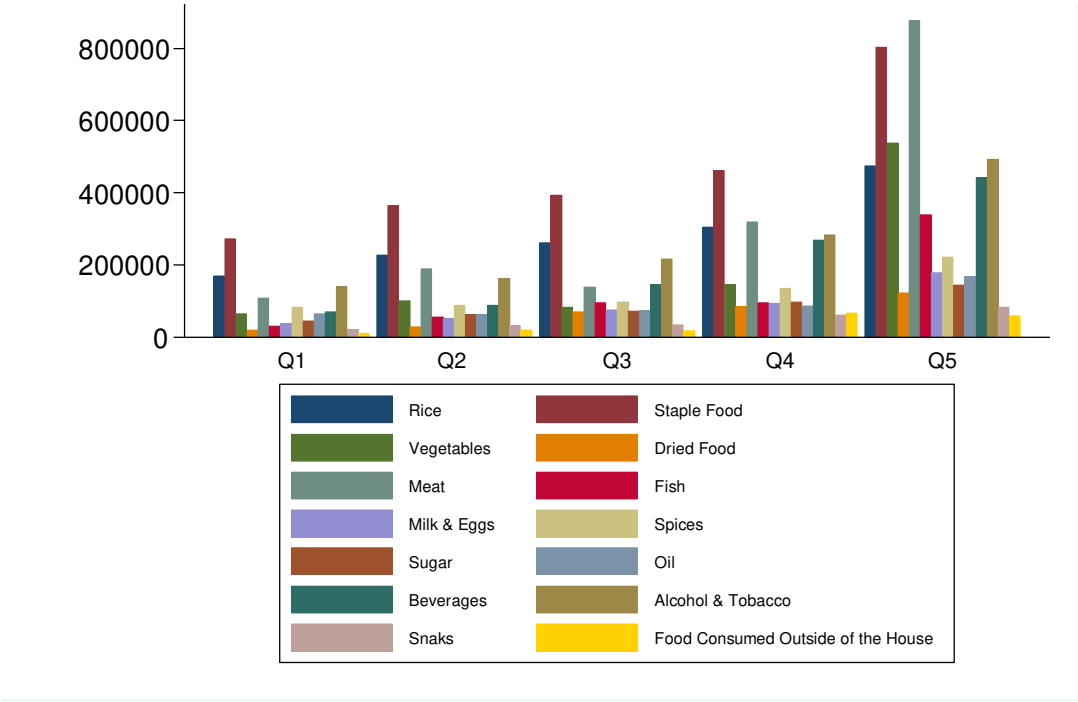
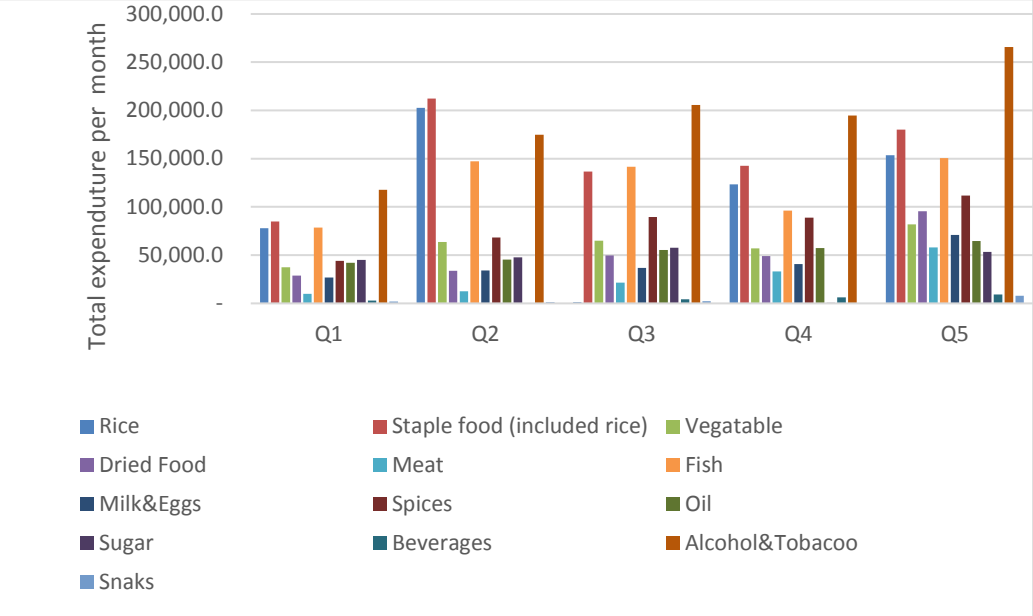


Figure 73: Type of Food Expenditure by Quintile (total spend) (2016)



The share of expenditure on rice and other staples is largely similar between 2015 (figure 74) and 2016 (figure 75). The percentage of expenditure on staples is around 15-20% in 2015 and 2016, where rice is around 10-15% for both years (with exception being Q2 in 2016). The reported expenditure on alcohol and tobacco is substantially increased in 2016 against 2015.

Figure 74: Share of Expenditure on Rice and Other staples by Quintile (2015)

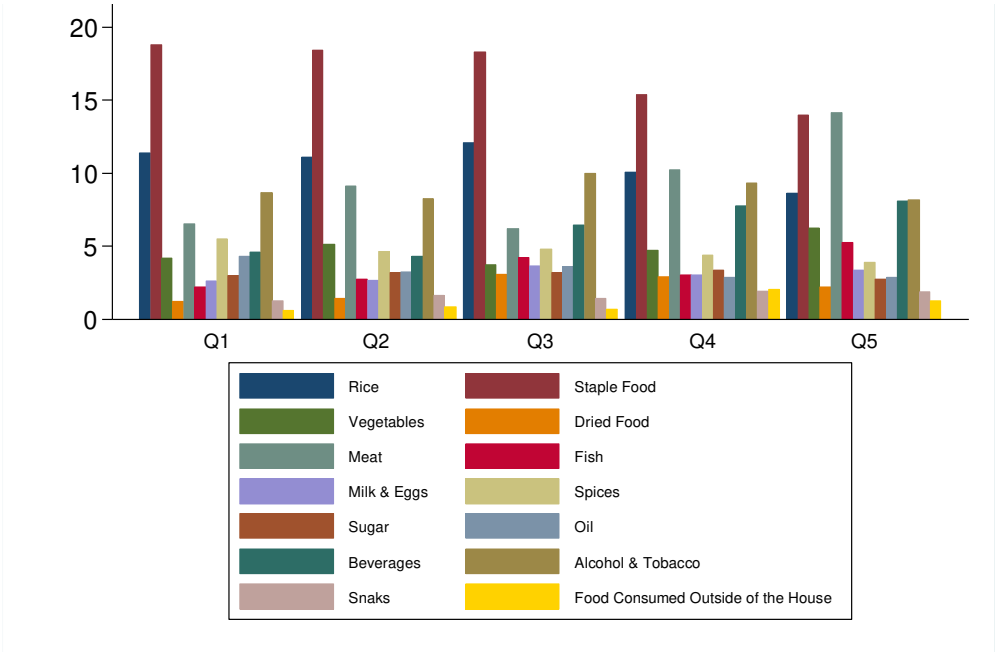
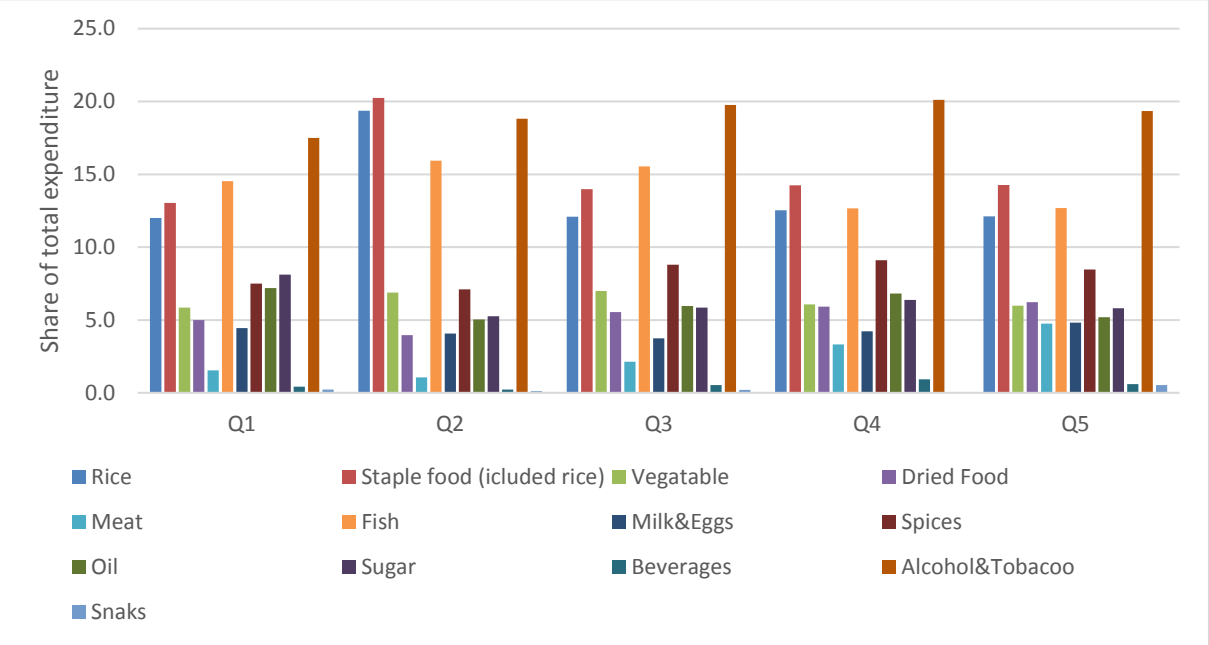


Figure 75: Share of Expenditure on Rice and Other staples by Quintile (2016)



6 Income Use of Maize

The way income of maize is reported to be used. As can be seen in 2015 (figure 76) ad 2016 (figure 77), maize earnings are mainly used to finance daily household needs.

Figure 76: Most important use of income derived from maize (2015)

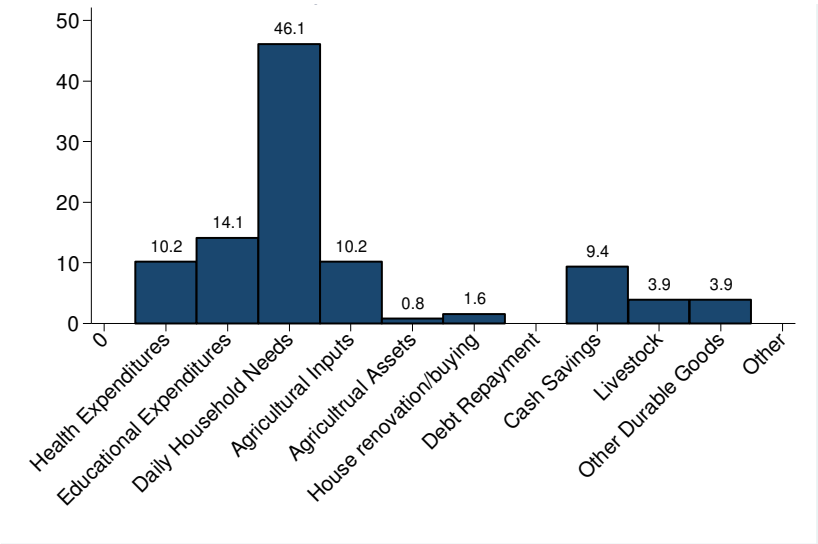
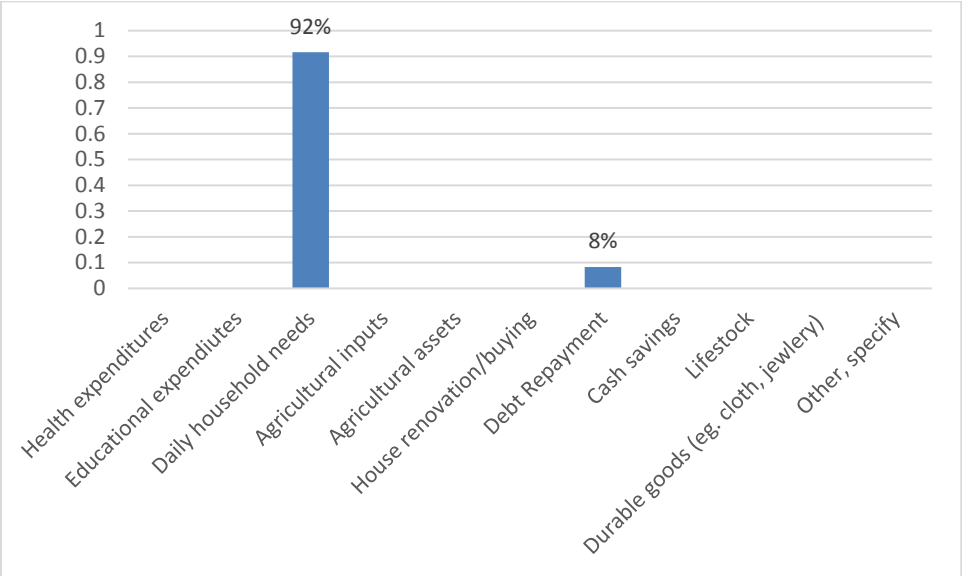


Figure 77: Most important use of income derived from maize (2016)



The picture for the second most important use of income derived from maize is also consistent between 2015 (figure 78) and 2016 (figure 79) with the main uses being cash savings and educational expenditure.

Figure 78: Second most important use of income derived from maize (2015)

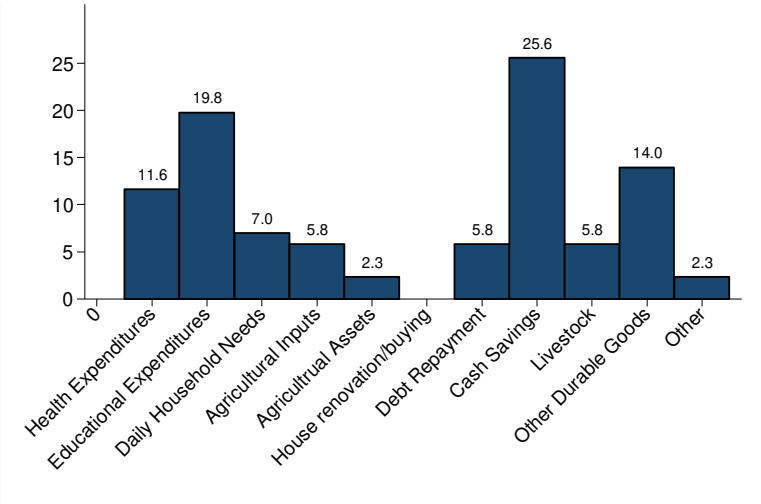


Figure 79: Second most important use of income derived from maize (2016)

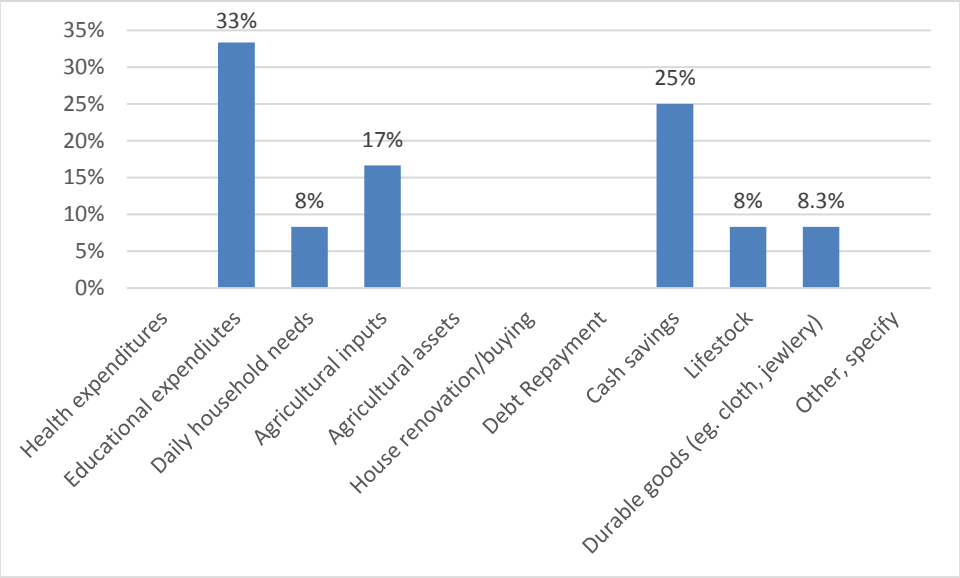


Table 14: Control and Decision Power of Earnings from Maize

	2015		2016	
	Nr. Obs	mean	Nr. Obs	mean
Most important decision maker in HH is female	129.00	23.26	175	41,7
Second important decision maker in HH is female	128.00	76.56	175	58,3

Regarding the control and decision-making power of earnings from maize, the data shows a shift towards increased decision-making power by women. In 2015 the most important decision-maker was reported to be a woman by 23% of respondents, in 2016 (table 14) this had risen to 42% of respondents.

7 Seasonality and Vulnerability

As can be seen in table 15, in 2015 only 2% of households worried that they did not have enough food to eat in the last seven days and 0.5% of the households faced a situation within the last 12 months were they did not have enough food in their household. In 2016 this has changed to nearly 6% of respondents claiming that they are worried about food security with over 3% claiming they did not have enough food to eat. This shows a decrease in the food security situation of the respondents between 2015 and 2016.

Table 15: Food Security

	2015		2016	
	Nr. Obs	%	Nr. Obs	%
Worried	193.00	2.07	175	5,7
Did not Have Enough Food	192.00	0.52	175	3,4