

**[PRELIMINARY AND INCOMPLETE]**  
**TOWNSEND THAI HOUSEHOLD ANNUAL RESURVEY**  
**URBAN AND RURAL**  
**DATA SUMMARIES**

Robert M. Townsend  
The Elizabeth & James Killian Professor of Economics at Massachusetts Institute of Technology

Suparit Suwanik  
Research Assistant<sup>1</sup>

August 2016

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**References**

Townsend Thai Project Household Annual Resurvey: Questionnaires  
Townsend Thai Project Household Annual Resurvey: Data Codebook  
Robert M. Townsend Dataverse (University of Chicago), [www.robertmtownsend.net](http://www.robertmtownsend.net)

**Preliminary Reading**

Townsend, et al. "Chronicles from the field: The Townsend Thai project.", MIT Press, 2013.

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**Synopsis**

This report selects and summarizes interesting findings from the Townsend Thai Project Household Annual Resurvey in both Urban and Rural areas.<sup>2</sup> The data used for this purpose are from 1) Annual Urban Resurvey of 1,530 Thai households from the 96 communities in 6 changwats (provinces) - Chachoengsao, Lopburi, Buriram, Sisaket, Satun and Phrae - over 7 years, from 2008 to 2014 and 2) Annual Rural Resurvey of 1,229 Thai households from the same changwats and over the same period.

The aims of this report are to exhibit some characteristics and financial behaviors of some Thai households, in urban and rural areas, at a given time and how these have changed over time. The outline of the data summaries is as follows:

1. Household Characteristics
  - a. Locations
  - b. Household Composition
  - c. Occupation
2. Household Possession and Financial Behaviors
  - a. Household Assets
  - b. Agricultural and Livestock Assets

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<sup>1</sup> The authors would like to thank Xiaowen Yang for her help in creating the maps in the report.

<sup>2</sup> For more details, please read data descriptions at <http://cier.uchicago.edu/data/annual-resurvey.shtml> and <https://dataverse.harvard.edu/dataverse/rtownsend>.

- c. Household Business
- d. Land Cultivation
- e. Consumption
- f. Household Income and Expenses
- g. Borrowings
- h. Lending (Informal Lending)
- i. Savings

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### Household Characteristics<sup>3</sup>

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Please note that the currency presented in this report is Thai Baht (THB), in accordance with the original survey. The authors convert some selected numbers to US\$ in the writing in case the readers would like to compare these numbers to figures from other countries.

#### a. Locations

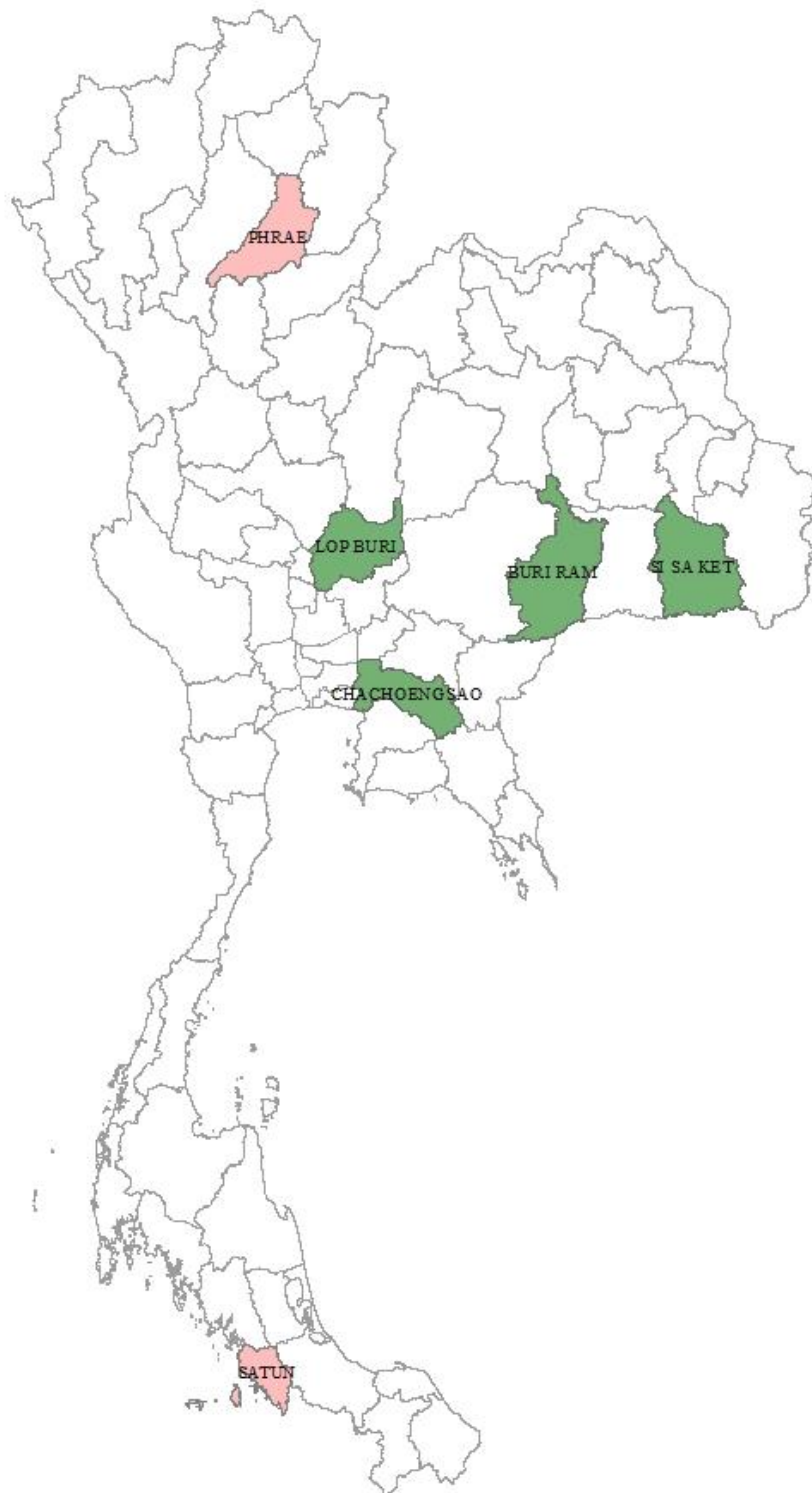
All findings presented in this report use the data of Thai households which are located in *urban* and *rural areas* across 6 changwats in four regions: the Central region – Chachoengsao and Lop Buri –, the Northeast region – Buriram and Sisaket, the South region – Satun, and the North region, Phrae. Therefore, the data *does not* represent characteristics and financial behaviors of the households nationwide.

The surveyed areas are shown in Figure 1, whereby the areas in green are the original 4 changwats and the areas in pink are the 2 changwats that have been added to the survey later<sup>4</sup>. In details, as shown in Figure 2 - 5, those are the villages in both urban and rural areas, whereas Figure 6 - 11 show infrastructures (traffic systems) in each changwat. It is worth noting that, in general, urban areas tend to be centers of transportation, i.e., they have more routes directed to and out of more than rural areas have. This is not surprising since the survey picks 16 communities in municipal areas of each amphoe (district), including the Muang district (City district), to be the samples of the Townsend Thai Project Household Annual Urban Resurvey.

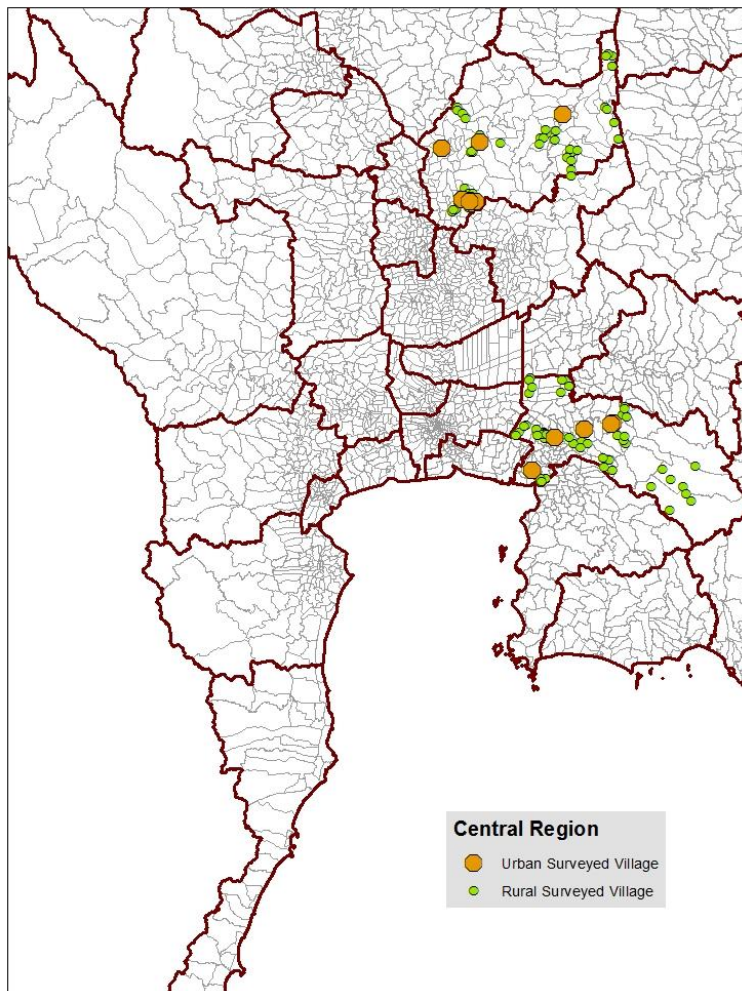
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<sup>3</sup> As mentioned earlier, the authors select and summarize only some of the household characteristics. The readers are encouraged to use the Townsend Thai Project Survey to study further topics they are interested.

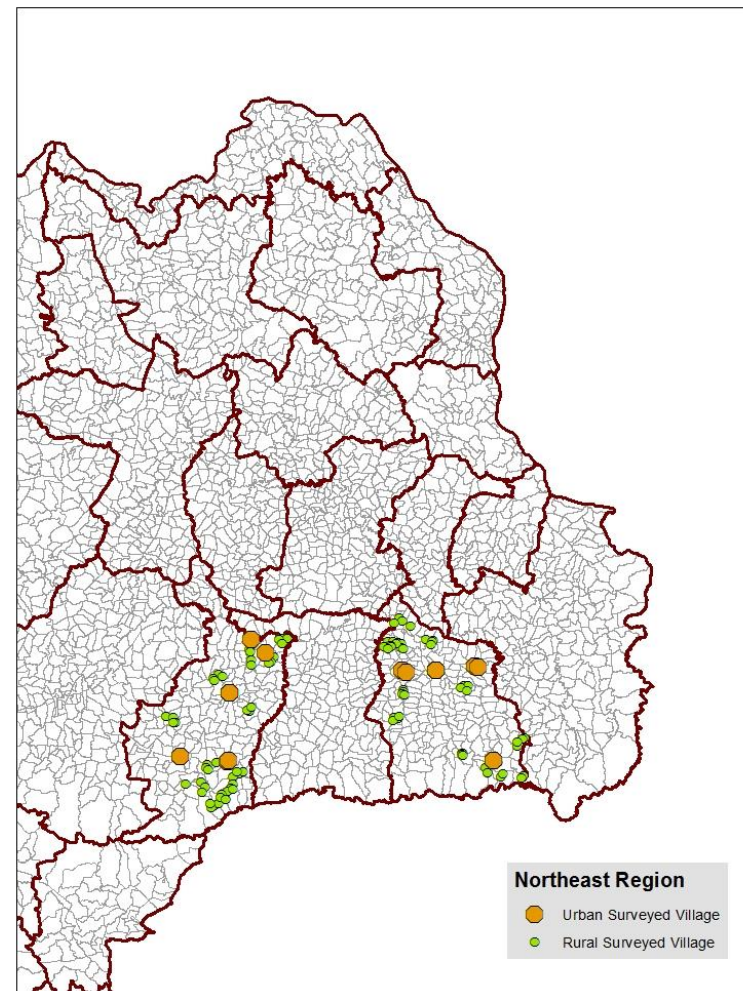
<sup>4</sup> The Townsend Thai Project Household Rural Resurvey started in Satun in 2003 and Phrae in 2004, before the initiation of the Townsend Thai Project Household Urban Resurvey in 2005, covering 6 changwats (Chachoengsao, Lopburi, Buriram, Sisaket, Satun, Phrae).



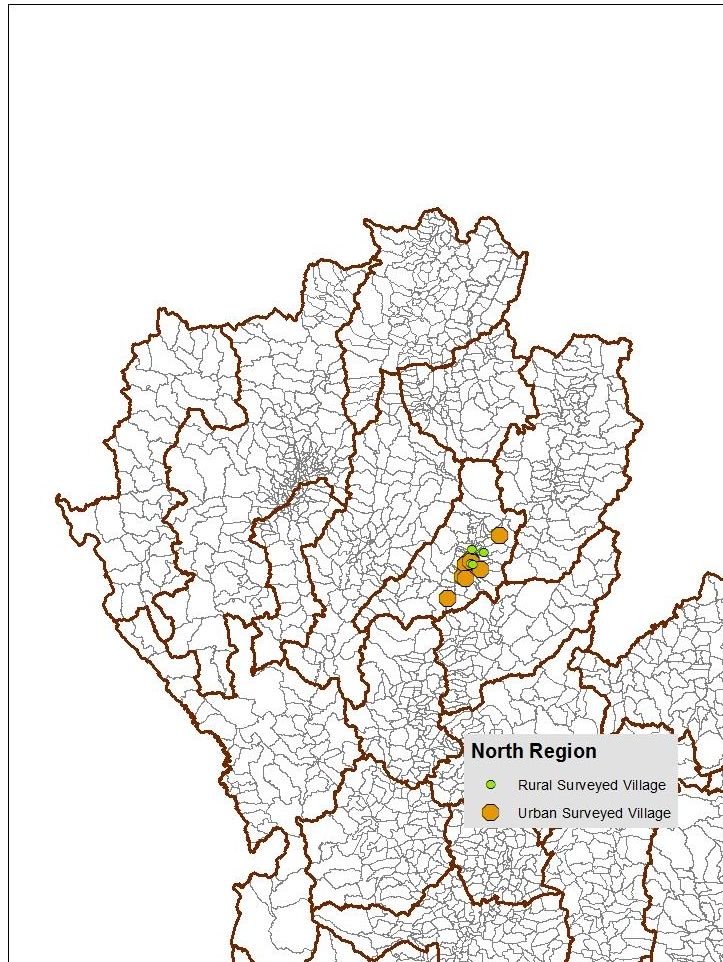
*Figure 1: The Townsend Thai Project Surveyed Areas*



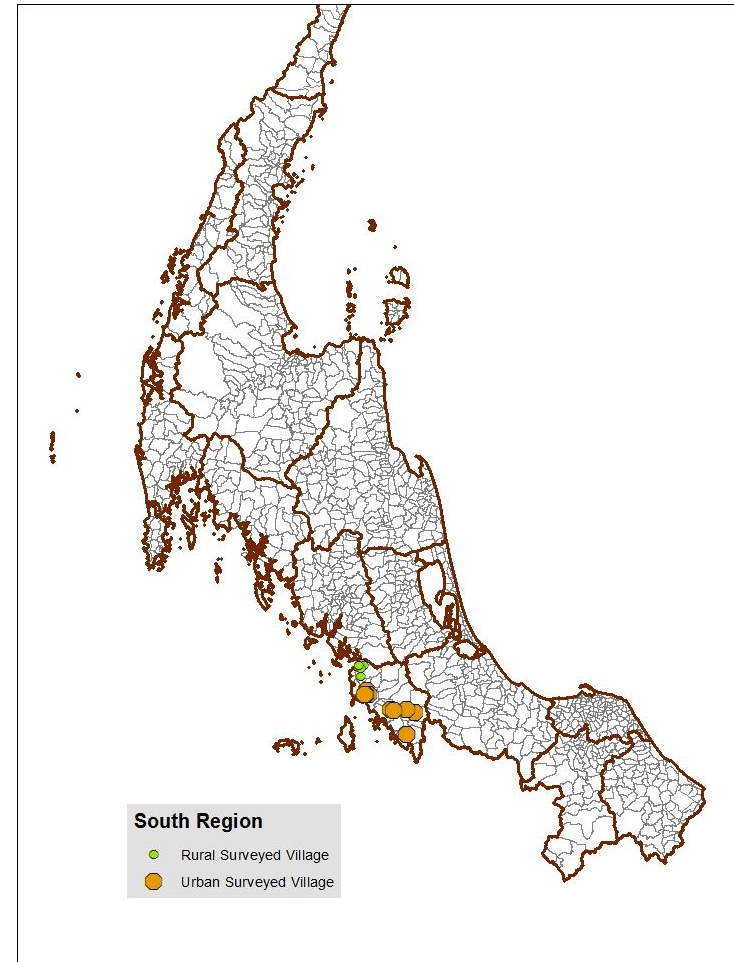
*Figure 2: The Surveyed Villages in Central Region*



*Figure 3: The Surveyed Villages in Northeast Region*

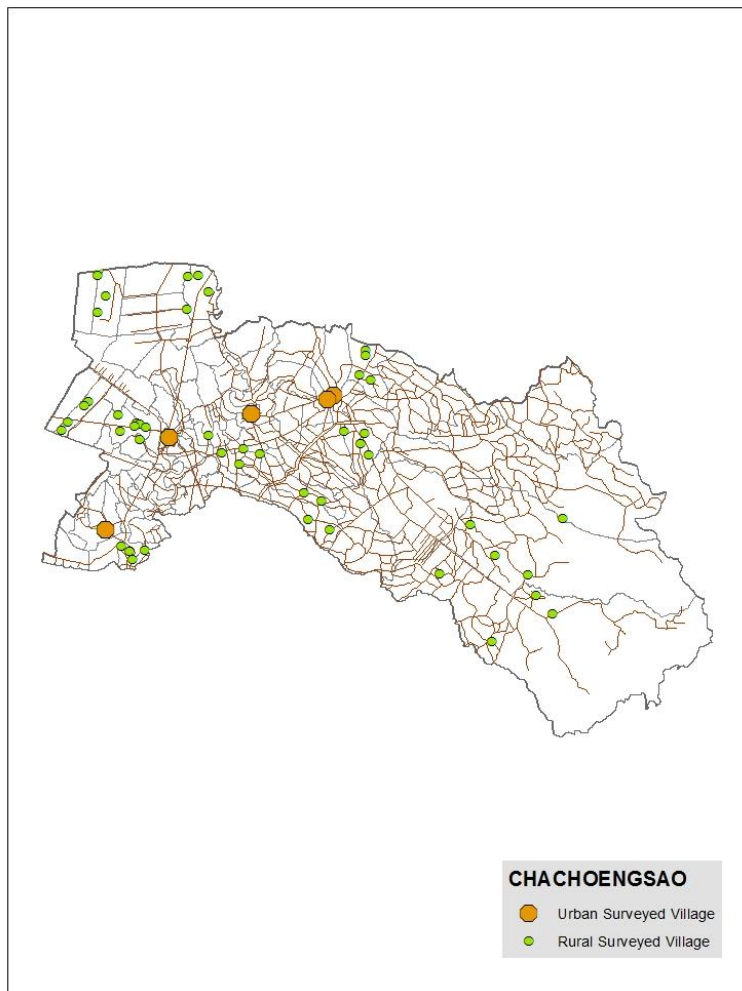


*Figure 4: The Surveyed Villages in North Region*

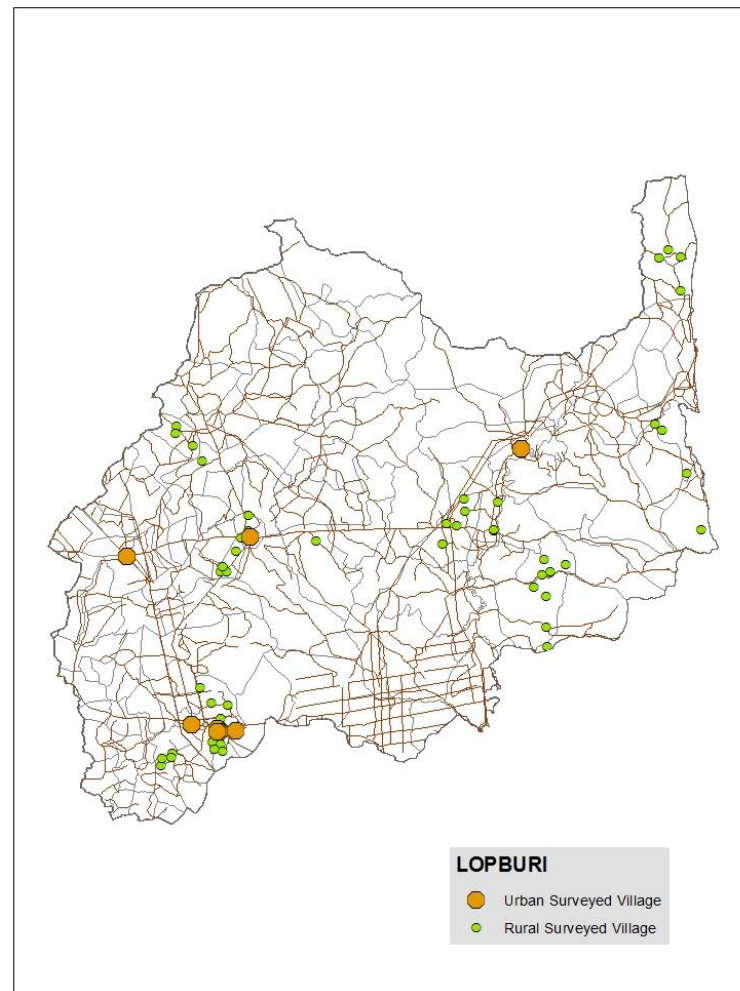


*Figure 5: The Surveyed Villages in South Region*

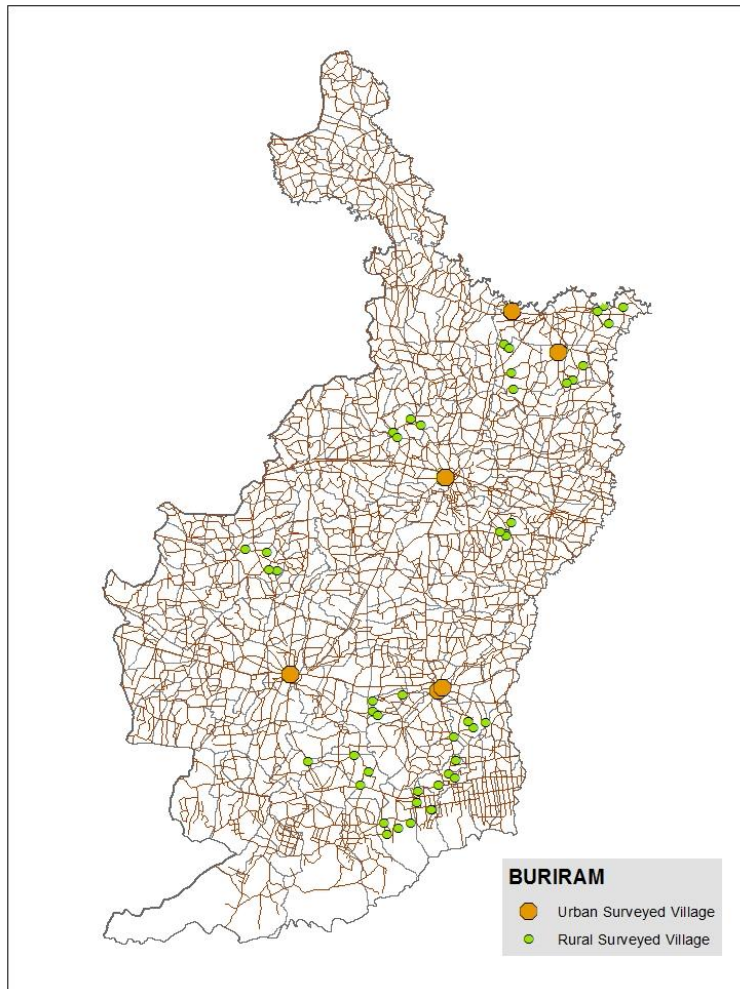




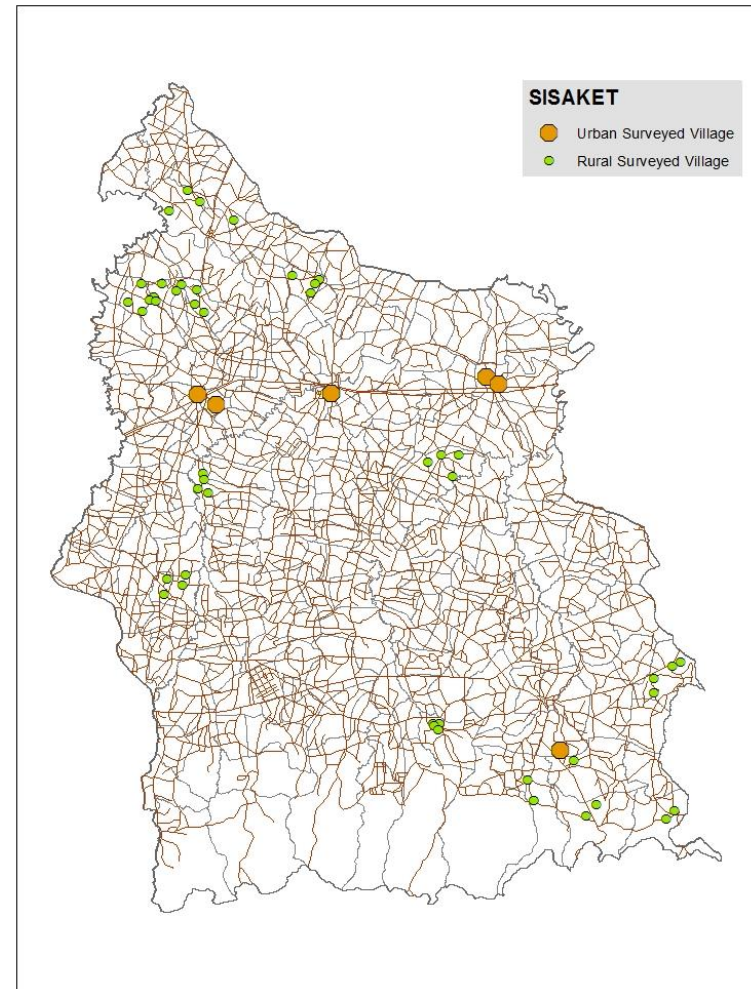
*Figure 6: The Surveyed Villages in Chachoengsao  
with Traffic System*



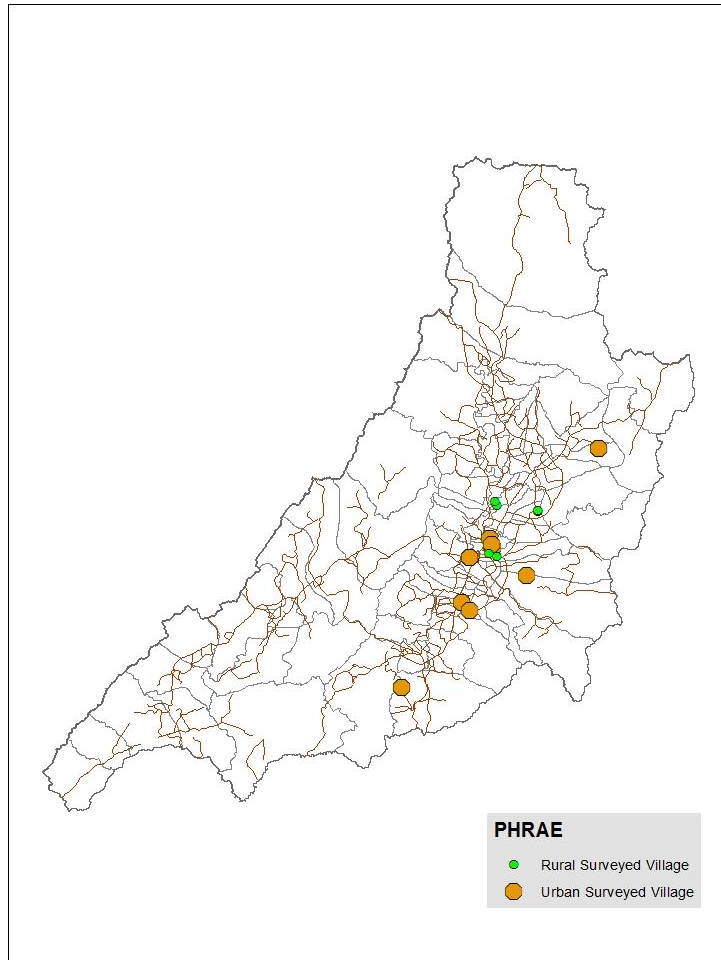
*Figure 7: The Surveyed Villages in Lopburi  
with Traffic System*



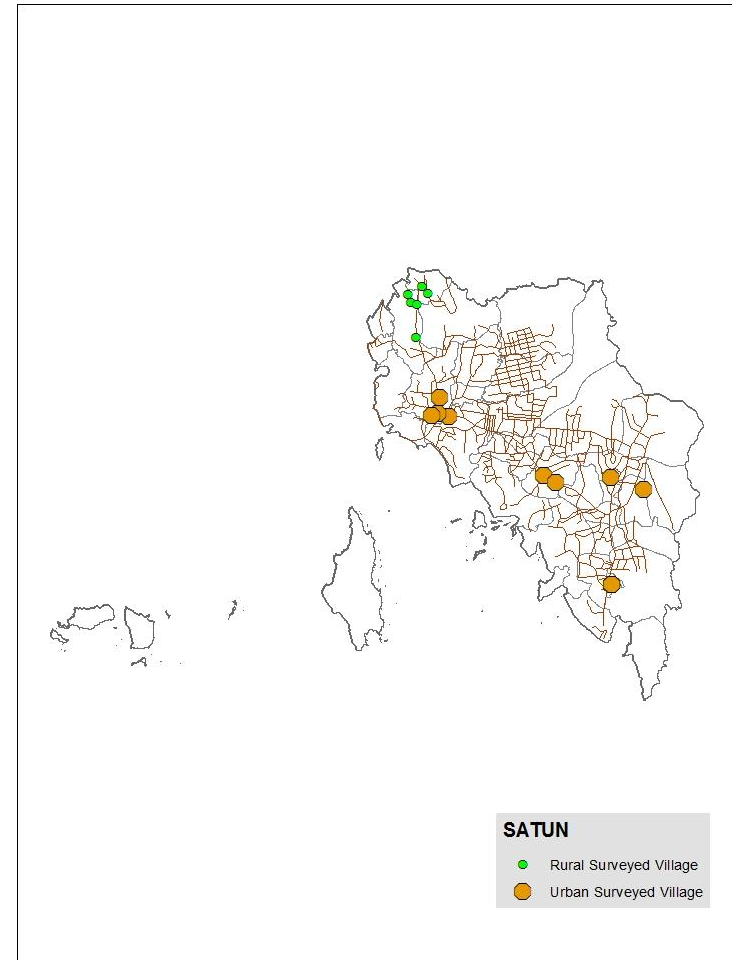
*Figure 8: The Surveyed Villages in Buriram  
with Traffic System*



*Figure 9: The Surveyed Villages in Sisaket  
with Traffic System*



*Figure 10: The Surveyed Villages in Phrae  
with Traffic System*



*Figure 11: The Surveyed Villages in Satun  
with Traffic System*



The number of Thai households in Townsend Thai Project Household Annual Resurvey, both Urban and Rural areas, are summarized in Table 1 and 2, respectively.

*Table 1: Total number of households surveyed in urban areas\* by changwats*

Changwats	Frequency	Percentage	Cumulative Percentage
<b>Chachoengsao</b>	252	16.47	16.47
<b>Lopburi</b>	248	16.21	32.68
<b>Buriram</b>	257	16.80	49.48
<b>Sisaket</b>	251	16.41	65.88
<b>Satun</b>	263	17.19	83.07
<b>Phrae</b>	259	16.93	100.00
Total	<b>1,530</b>	<b>100.00</b>	

\*These numbers include households which do not have complete data across 7 years (2008 – 2014)

*Table 2: Total number of households surveyed in rural areas\* by changwats*

Changwats	Frequency	Percentage	Cumulative Percentage
<b>Chachoengsao</b>	243	19.77	19.77
<b>Lopburi</b>	244	19.85	39.63
<b>Buriram</b>	247	20.10	59.72
<b>Sisaket</b>	247	20.10	79.82
<b>Satun</b>	123	10.01	89.83
<b>Phrae</b>	125	10.17	100.00
Total	<b>1,229</b>	<b>100.00</b>	

\*These numbers include households which do not have complete data across 7 years (2008 – 2014)

## **b. Household Composition**

Let's take a look at various aspects of the surveyed households. The surveyed households in urban areas consist of 4 household members, on average, and tend to be less of number in 2014. Considering only the head of each household, in 2008 and 2014, most of them, on average, are male and around mid-50 to 60 years of age. It is interesting that the head of households in Chachengsao turn into female, on average, in 2014, while Lopburi and Buriram still have female leaders as they do in 2008. It is also surprising that the highest grade of school that the head of each household has completed is only M or MS 2 (Grade 8 in American educational system). The summary on these statistics is shown in Table 3.

Please note that, although the households being surveyed are from exactly the same samples in both 2008 and 2014, the head in each household can change over time so that the statistics reported for the heads can vary accordingly.

Table 3: Urban Household Composition in 2008 and 2014\*

	2008				2014			
Changwats	Number of Household Members	Head of Household			Number of Household Members	Head of Household		
		Gender	Age (Years old)	Highest Grade Achieved		Gender	Age (Years old)	Highest Grade Achieved
<b>Chachoengsao</b>	4.12	Male	57	M/MS 2	3.76	Female	60	M/MS 3
<b>Lopburi</b>	4.12	Female	54	M/MS 1	3.66	Female	60	M/MS 1
<b>Buriram</b>	4.28	Female	54	M/MS 3	4.04	Female	58	M/MS 3
<b>Sisaket</b>	4.44	Male	54	M/MS 1	3.93	Male	58	M/MS 2
<b>Satun</b>	4.69	Male	50	P 7	4.33	Male	53	M/MS 1
<b>Phrae</b>	3.85	Male	52	M/MS 4	3.47	Male	58	M/MS 3
<b>Total</b>	<b>4.26</b>	<b>Male</b>	<b>54</b>	<b>M/MS 2</b>	<b>3.87</b>	<b>Male</b>	<b>58</b>	<b>M/MS 2</b>

\* Gender, Age and Highest Grade Achieved shown here are average numbers of only heads of households, not including other members.

On the other hand, in rural areas, though it is similar to urban areas that the surveyed households comprise the average of 4 household members, the characteristics of the head of households are quite different. In 2008 and 2014, most of them, on average, are entirely male across changwats. The highest grade achieved by head of households are generally lower than urban areas, i.e., P 5 (Grade 5 in American educational system). The summary on these interesting findings is shown in Table 4.

Table 4: Rural Household Composition\*

	2008				2014			
Changwats	Number of Household Members	Head of Household			Number of Household Members	Head of Household		
		Gender	Age (Years old)	Highest Grade Achieved		Gender	Age (Years old)	Highest Grade Achieved
<b>Chachoengsao</b>	4.04	Male	57	P 4	3.82	Male	58	P 5
<b>Lopburi</b>	4.08	Male	56	P 5	3.58	Male	60	P 5
<b>Buriram</b>	4.05	Male	54	P 4	3.90	Male	57	P 5
<b>Sisaket</b>	3.94	Male	55	P 5	3.58	Male	57	P 6
<b>Satun</b>	4.66	Male	51	P 6	3.88	Male	55	P 7
<b>Phrae</b>	3.74	Male	55	P 6	3.56	Male	60	P 6
<b>Total</b>	<b>4.07</b>	<b>Male</b>	<b>56</b>	<b>P 5</b>	<b>3.72</b>	<b>Male</b>	<b>58</b>	<b>P 5</b>

\* Gender, Age and Highest Grade Achieved shown here are average numbers of only heads of households, not including other members.

### c. Occupation

It is quite obvious that the most popular occupation for urban households is trader in both 2008 and 2014, as shown in Table 5. This is in contrast to rural households of which rice farmer is the most popular occupation in both years, according to Table 6. In 2008, most rural households in Chacheongsao and Lopburi are orchard farmers, whereas rural households in Satun and Phrae are, on average, rubber farmers and Sewing clothes, respectively. However, in 2014, they mostly become rice or sugarcane farmers<sup>5</sup> instead. It is also interesting that, in both urban and rural areas, the traders and rice farmers, respectively, either own their businesses or work for their family-owned businesses<sup>6</sup>. Note that most of the households do not have secondary occupation so that it is not shown in both Table 5 and 6.

Considering average monthly and daily wage that are paid to household members who are employees (not including owner of business which will be shown later in “Income” Section), urban households are paid more, compared to rural households. The average of amount for employees who receive *monthly payments* in 2014 is 12,099 THB or 367 US\$<sup>7</sup> (403 THB or 12 US\$ per day) for urban areas and 11,405 THB or 346 US\$ (380 THB or 12 US\$ per day) for rural areas, while the average of amount for employees who receive *daily payments* in 2014 is 8,700 THB or 263 US\$ per month (290 THB or 9 US\$ per day) for urban areas and 8,460 THB or 257 US\$ per month (282 THB or 8.5 US\$ per day) for rural areas.

Table 5: Urban Household Occupation\*

	2008			2014		
Changwats	Most popular primary occupation	Type of Work	Inflation-adjusted Average Monthly/ Daily Wage (THB)**	Most popular primary occupation	Type of Work	Inflation-adjusted Average Monthly/ Daily Wage (THB)**
Chachoengsao	Trader	Owner of business	10,541/ 252	Trader	Owner of business	14,590/ 333
Lopburi	Trader	Unpaid family worker	9,673/ 221	Housework	Unpaid family worker	12,540/ 298
Buriram	Trader	Owner of business	7,977/ 193	Trader	Owner of business	11,982/ 310
Sisaket	Trader	Owner of business	8,165/ 178	Trader	Unpaid family worker	10,058/ 245
Satun	General non-agricultural labors job	Unpaid family worker	7,817/ 254	Housework	Owner of business	9,944/ 278
Phrae	General non-agricultural labor jobs	Owner of business	10,406/ 206	General non-agricultural labor jobs	Unpaid family worker	12,692/ 287
Total	Trader	Owner of business	9,049/ 220	Trader	Unpaid family worker	12,099/ 290

\* Most households consist of more than one member which means each household can have more than one occupation. The occupation as being a student does not include here.

\*\* The 2008 Figures are inflation-adjusted in order to compare with 2014 figures, computed by the Bank of Thailand headline Consumer Price Index as a whole country (94.10 for 2008 and 107.26 for 2014). Average wages are calculated from two group of employees: a group that receives wage monthly and another group that receives wage daily. Therefore, the numbers shown here are averages of each group that are not related to each other.

<sup>5</sup> Sugarcane farmers are ranked no. 2 as the 2014 most popular occupation in Lopburi.

<sup>6</sup> For the farmers, it means they own and cultivate from their lands.

<sup>7</sup> For the values as of 2014 in this report, we convert the US\$ to THB from US\$/THB closing spot rate of 32.964 as of Dec 30, 2014.

Table 6: Rural Household Occupation\*

	2008			2014		
Changwats	Most popular primary occupation	Type of Work	Inflation-adjusted Average Monthly/ Daily Wage (THB)**	Most popular primary occupation	Type of Work	Inflation-adjusted Average Monthly/ Daily Wage (THB)**
Chachoengsao	Orchard farmer	Owner of business	9,225/ 233	Rice farmer	Owner of business	11,936/ 325
Lopburi	Orchard farmer	Employee – Daily wage	12,082/ 208	Housework	Unpaid family worker	12,259/ 287
Buriram	Rice farmer	Owner of business	8,135/ 174	Rice farmer	Owner of business	11,041/ 266
Sisaket	Rice farmer	Owner of business	7,672/ 165	Rice farmer	Unpaid family worker	8,801/ 245
Satun	Other***	Unpaid family worker	7,610/ 261	Other***	Unpaid family worker	11,366/ 282
Phrae	Other***	Owner of business	6,794/ 188	Housework	Unpaid family worker	9,004/ 264
Total	Rice farmer	Owner of business	9,367/ 198	Rice farmer	Unpaid family worker	11,405/ 282

\* Most households consist of more than one member which means each household can have more than one occupation. The occupation as being a student does not include here.

\*\* The 2008 Figures are inflation-adjusted in order to compare with 2014 figures, computed by the Bank of Thailand headline Consumer Price Index as a whole country (94.10 for 2008 and 107.26 for 2014). Average wages are calculated from two group of employees: a group that receives wage monthly and another group that receives wage daily. Therefore, the numbers shown here are averages of each group that are not related to each other.

\*\*\* Other occupations, e.g., Rubber plantation, Sewing clothes, Fishermen, and Non-identifiable.

### Household Possession, Business and Financial Behaviors

We now focus on assets, which are categorized into household assets, agricultural and livestock assets, following by household business and financial behaviors.

#### a. Household Assets

This household asset is defined as any asset the household possesses that is not related to agricultural nor business activities. The Townsend Thai Annual Survey, both in urban and rural areas, cover assets, i.e., TV Color, VCR, air conditioner (A/C), regular telephone, cellular phone, refrigerator, motorcycle, car, pick-up truck, long-tailed boat with motor, large fishing boat, washing machine, gas stove, bicycle, stereo, and VCD player, as listed on Table 7a, 7b, 8a and 8b.

The results show that, for both urban and rural areas, the households, on average, possess more assets throughout times, e.g., more cellular phones, cars, washing machines, gas stoves, whereas they tend to decrease the obsolete assets, e.g., VCR, VCD players, regular telephone. Please note that the survey doesn't include a category "DVD or Bluray Player" in the survey questions just yet.



Table 7a: Percentage of urban household in possession of each type of household assets in 2008\*

Of Changwats (% of total # of households)	TV Color	VCR	A/C	Regular Telephone	Cell Phone	Refrigerator	Motorcycle	Car	Pick- up Truck	Long Tail Boat	Large Fishing Boat	Washing Machine	Gas Stove	Bicycle	Stereo	VCD player
<b>Chachoengsao</b>	98	9	38	59	88	92	80	22	25	1	0	64	93	45	35	75
<b>Lopburi</b>	99	16	33	55	92	96	85	17	28	0	0	79	91	60	38	79
<b>Buriram</b>	100	18	21	50	91	95	87	13	20	0	0	74	89	78	32	83
<b>Sisaket</b>	99	14	14	41	83	90	84	12	25	0	0	59	83	59	25	95
<b>Satun</b>	98	27	5	29	85	95	94	6	15	3	1	74	96	37	18	58
<b>Phrae</b>	100	17	24	60	90	98	91	15	30	0	0	83	93	70	43	92
<b>Total</b>	<b>99</b>	<b>17</b>	<b>23</b>	<b>49</b>	<b>88</b>	<b>94</b>	<b>87</b>	<b>14</b>	<b>24</b>	<b>1</b>	<b>0</b>	<b>72</b>	<b>91</b>	<b>58</b>	<b>32</b>	<b>80</b>

\* This table counts when households possess that type of household assets (at least 1 unit) regardless of how many units of that asset they hold.

Table 7b: Percentage of urban household in possession of each type of household assets in 2014\*

Of Changwats (% of total # of households)	TV Color	VCR	A/C	Regular Telephone	Cell Phone	Refrigerator	Motorcycle	Car	Pick- up Truck	Long Tail Boat	Large Fishing Boat	Washing Machine	Gas Stove	Bicycle	Stereo	VCD player
<b>Chachoengsao</b>	97	3	40	43	93	88	79	27	25	1	0	70	88	42	25	21
<b>Lopburi</b>	98	14	40	42	96	95	84	23	23	0	0	80	91	56	30	49
<b>Buriram</b>	100	9	26	39	96	94	91	22	24	0	1	79	91	83	31	22
<b>Sisaket</b>	100	9	15	38	97	95	88	15	29	0	0	68	89	67	22	13
<b>Satun</b>	100	5	5	22	98	96	93	12	20	1	0	88	99	33	14	17
<b>Phrae</b>	100	20	25	43	96	97	88	27	27	0	0	85	92	74	37	36
<b>Total</b>	<b>99</b>	<b>10</b>	<b>25</b>	<b>38</b>	<b>96</b>	<b>94</b>	<b>87</b>	<b>21</b>	<b>25</b>	<b>0</b>	<b>1</b>	<b>78</b>	<b>92</b>	<b>59</b>	<b>26</b>	<b>26</b>

\* This table counts when households possess that type of household assets (at least 1 unit) regardless of how many units of that asset they hold.

Table 8a: Percentage of rural household in possession of each type of household assets in 2008\*

Of Changwats (% of total # of households)	TV Color	VCR	A/C	Regular Telephone	Cell Phone	Refrigerator	Motorcycle	Car	Pick- up Truck	Long Tail Boat	Large Fishing Boat	Washing Machine	Gas Stove	Bicycle	Stereo	VCD player
<b>Chachoengsao</b>	97	3	4	7	80	92	85	5	30	0	0	53	93	51	27	82
<b>Lopburi</b>	96	9	10	17	80	92	78	4	28	0	0	58	87	50	39	77
<b>Buriram</b>	98	1	0	2	80	74	82	1	13	0	0	24	63	77	19	81
<b>Sisaket</b>	95	9	0	8	60	66	67	3	11	0	0	18	50	69	22	94
<b>Satun</b>	98	33	3	28	76	94	92	7	18	5	0	64	97	26	24	54
<b>Phrae</b>	100	13	13	47	80	97	86	13	32	0	0	78	98	78	38	91
<b>Total</b>	<b>97</b>	<b>9</b>	<b>5</b>	<b>14</b>	<b>76</b>	<b>84</b>	<b>80</b>	<b>5</b>	<b>21</b>	<b>1</b>	<b>0</b>	<b>45</b>	<b>78</b>	<b>60</b>	<b>27</b>	<b>81</b>

\* This table counts when households possess that type of household assets (at least 1 unit) regardless of how many units of that asset they hold.

Table 8b: Percentage of rural household in possession of each type of household assets in 2014\*

Of Changwats (% of total # of households)	TV Color	VCR	A/C	Regular Telephone	Cell Phone	Refrigerator	Motorcycle	Car	Pick- up Truck	Long Tail Boat	Large Fishing Boat	Washing Machine	Gas Stove	Bicycle	Stereo	VCD player
<b>Chachoengsao</b>	100	0	7	1	92	95	86	10	42	0	0	61	92	48	22	40
<b>Lopburi</b>	98	5	15	10	94	95	81	12	34	0	0	70	91	50	35	55
<b>Buriram</b>	99	0	2	0	97	85	88	3	23	0	0	43	73	78	20	11
<b>Sisaket</b>	98	7	0	7	87	74	70	3	14	0	0	25	57	70	19	14
<b>Satun</b>	98	3	7	18	95	96	94	13	27	4	0	79	98	27	20	15
<b>Phrae</b>	99	17	12	33	92	99	88	15	38	0	0	80	95	80	31	48
<b>Total</b>	<b>99</b>	<b>4</b>	<b>7</b>	<b>9</b>	<b>93</b>	<b>89</b>	<b>83</b>	<b>9</b>	<b>29</b>	<b>1</b>	<b>0</b>	<b>56</b>	<b>82</b>	<b>60</b>	<b>24</b>	<b>30</b>

\* This table counts when households possess that type of household assets (at least 1 unit) regardless of how many units of that asset they hold.

## b. Agricultural and Livestock Assets

Before we take a look at agricultural and livestock assets, it is important to know how many households are related to agricultural activities. According to Table 9, it is quite obvious that households in rural areas involve more in agricultural activities than households in urban areas. However, compared to 2008, the latest year data, 2014, shows that both urban and rural households have less involvement in agricultural activities (24% versus 28% of total households in urban areas, 77% versus 84% of total households in rural areas), across all changwats.

*Table 9: Percentage of households involved in agricultural activities*

Of Changwats (% of total # of households)	2008		2014	
	Urban household	Rural household	Urban household	Rural household
<b>Chachoengsao</b>	3	86	3	78
<b>Lopburi</b>	10	62	7	53
<b>Buriram</b>	26	100	26	90
<b>Sisaket</b>	46	92	43	90
<b>Satun</b>	49	88	46	87
<b>Phrae</b>	31	70	22	60
<b>Total</b>	<b>28</b>	<b>84</b>	<b>24</b>	<b>77</b>

Considering types of agricultural activities with which the households involved, according to Table 10 and 11, the most popular one is still rice farming, both in urban and rural areas. It is worth noting that most of the farmers do not only involve in rice farming, but also farming other crops or raising livestock at the same time. We can see that the percentages of “Rice farming and Others” (A and Others in Table 10 and 11) are the highest and very large, especially for rural households. It may imply that households diversify its farming, not limited to only one specific crop at a time.

Satun is the only changwat that has the most proportion in “Other” agricultural activity (K in Table 10 and 11). This is because most of the activities are “Rubber farming”, i.e., cultivating rubber tree, which is quite specific to the South region in Thailand.

Chart 1 – 4 depict the distributions of agricultural activities, which are already shown on the Table 10 and 11 in “Total” column.

*Table 10: Percentage of types of agricultural activities in urban areas*

(Coding: A = Rice Farming, B = Corn Farming, C = Shrimp farming, D = Raise fish other than shrimp, E = Orchard farming, F = Vegetable farming, G = Growing another crop, H = Raising livestock: Chicken or duck, I = Raising livestock: Pig, Cow, or Buffalo, J = Working as a farm laborer, K = Other)

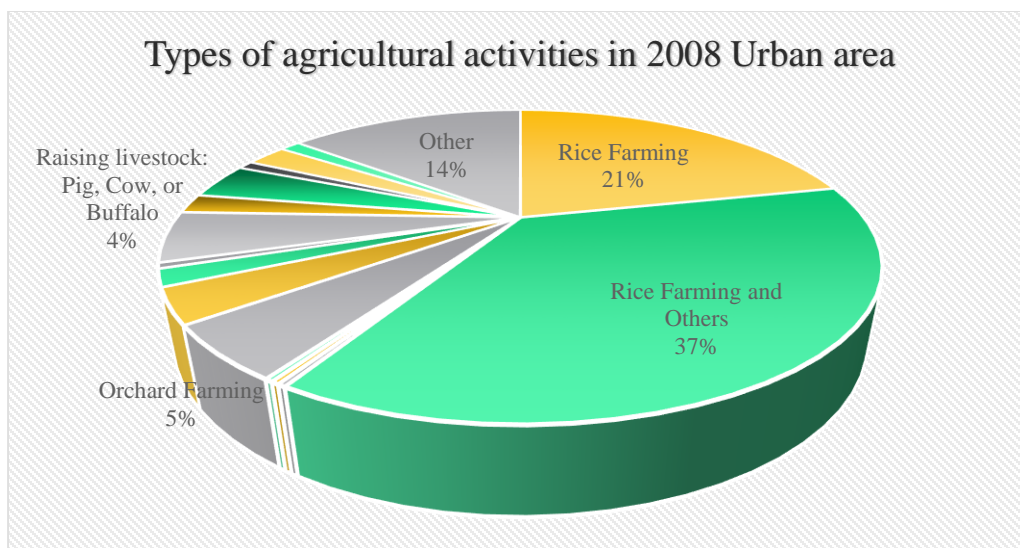
	2008							2014						
Of Changwats (% of total # of households)	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total
<b>A</b>	-	30.00	29.82	24.76	2.11	39.29	<b>21.47</b>	16.67	46.15	47.37	47.42	3.41	71.79	<b>37.00</b>
<b>A and Others</b>	-	5.00	54.39	60.00	15.78	26.78	<b>36.77</b>	-	30.76	33.33	44.33	20.45	12.83	<b>29.67</b>
<b>B</b>	-	-	-	-	-	1.79	<b>0.29</b>	-	-	-	1.03	-	2.56	<b>0.67</b>
<b>B and Others (not includes A)</b>	-	-	-	-	-	1.79	<b>0.29</b>	-	-	-	-	-	-	<b>-</b>
<b>C</b>	-	-	-	-	-	-	<b>-</b>	-	-	-	-	-	-	<b>-</b>
<b>C and Others (not includes A, B)</b>	-	-	-	-	-	-	<b>-</b>	-	-	-	-	-	-	<b>-</b>
<b>D</b>	-	-	-	-	-	-	<b>-</b>	-	-	-	-	-	-	<b>-</b>
<b>D and Others (not includes A, B, C)</b>	-	-	-	-	-	1.79	<b>0.29</b>	-	-	-	-	-	-	<b>-</b>
<b>E</b>	14.29	10.00	3.51	4.76	5.26	5.36	<b>5.29</b>	16.67	15.38	10.53	2.06	1.14	5.13	<b>4.67</b>
<b>E and Others (not includes A, B, C, D)</b>	-	-	3.50	-	8.41	3.58	<b>3.51</b>	-	-	-	-	5.69	2.56	<b>2.00</b>
<b>F</b>	-	10.00	-	-	-	7.14	<b>1.76</b>	-	-	-	-	1.14	-	<b>0.33</b>
<b>F and Others (not includes A, B, C, D, E)</b>	-	-	-	-	-	3.58	<b>0.58</b>	-	-	-	-	-	-	<b>-</b>
<b>G</b>	-	-	-	-	-	-	<b>-</b>	-	-	-	-	-	-	<b>-</b>
<b>G and Others (not includes A, B, C, D, E, F)</b>	-	-	-	-	-	-	<b>-</b>	-	-	-	-	-	-	<b>-</b>
<b>H</b>	57.14	10.00	3.51	2.86	3.16	7.14	<b>5.29</b>	50.00	-	1.75	-	-	-	<b>1.33</b>
<b>H and Others (not includes A, B, C, D, E, F, G)</b>	-	5.00	-	0.95	5.26	-	<b>2.04</b>	16.67	-	1.75	-	-	-	<b>0.66</b>
<b>I</b>	-	15.00	1.75	4.76	4.21	-	<b>3.82</b>	-	7.69	-	-	2.27	-	<b>1.00</b>
<b>I and Others (not includes A, B, C, D, E, F, G, H)</b>	-	-	-	-	3.16	-	<b>0.88</b>	-	-	1.75	-	4.55	-	<b>1.66</b>
<b>J</b>	14.29	5.00	3.51	0.95	5.26	-	<b>2.35</b>	-	-	1.75	2.06	5.68	-	<b>2.67</b>
<b>J and K</b>	-	-	-	-	4.21	-	<b>1.18</b>	-	-	-	-	10.23	-	<b>3.00</b>
<b>K</b>	14.29	10.00	3.51	0.95	43.16	1.79	<b>14.12</b>	-	-	1.75	3.09	45.45	5.13	<b>15.33</b>
<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>



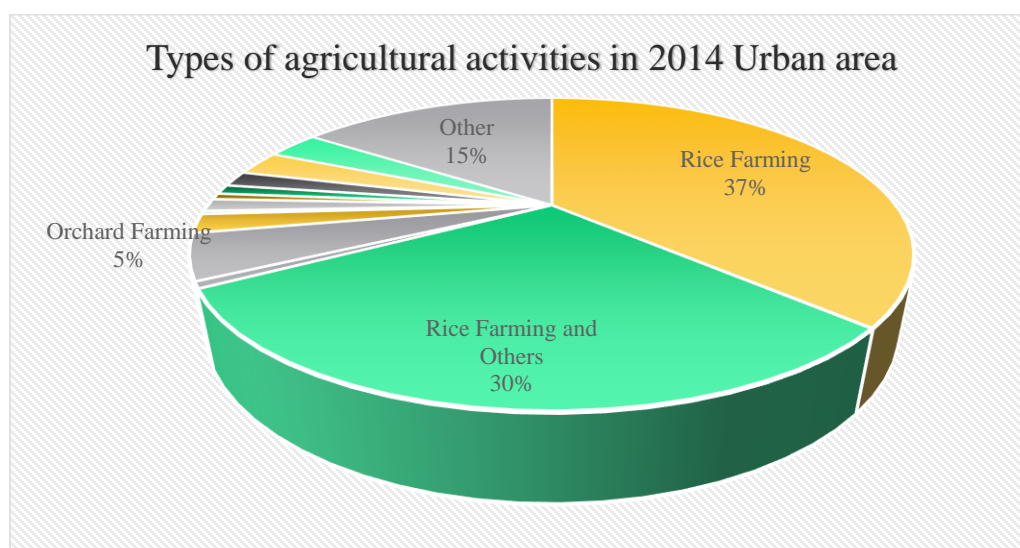
*Table 11: Percentage of types of agricultural activities in rural areas*

(Coding: A = Rice Farming, B = Corn Farming, C = Shrimp farming, D = Raise fish other than shrimp, E = Orchard farming, F = Vegetable farming, G = Growing another crop, H = Raising livestock: Chicken or duck, I = Raising livestock: Pig, Cow, or Buffalo, J = Working as a farm laborer, K = Other)

	2008							2014						
Of Changwats (% of total # of households)	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total
A	4.66	5.15	-	8.33	-	9.68	<b>4.37</b>	13.79	12.07	7.29	22.17	-	33.96	<b>13.91</b>
A and Others	47.15	25.73	83.57	72.23	3.15	67.74	<b>55.19</b>	40.81	18.96	73.96	64.62	-	54.72	<b>47.68</b>
B	-	3.68	-	-	-	-	<b>0.55</b>	0.57	6.90	-	-	-	-	<b>1.07</b>
B and Others (not includes A)	0.52	7.36	-	0.92	-	3.22	<b>1.65</b>	-	6.03	-	-	-	1.89	<b>0.96</b>
C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C and Others (not includes A, B)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D and Others (not includes A, B, C)	1.04	-	-	-	-	-	<b>0.22</b>	0.57	-	-	-	-	-	<b>0.12</b>
E	1.55	2.21	-	0.46	-	-	<b>0.77</b>	2.87	4.31	-	-	-	-	<b>1.19</b>
E and Others (not includes A, B, C, D)	5.72	4.42	1.88	0.46	2.10	-	<b>2.64</b>	8.02	0.86	81.77	0.47	1.06	-	<b>2.03</b>
F	0.52	0.74	-	-	-	4.84	<b>0.55</b>	1.72	0.86	-	-	-	3.77	<b>0.71</b>
F and Others (not includes A, B, C, D, E)	4.15	2.95	0.94	-	2.10	-	<b>1.76</b>	2.86	1.72	-	-	1.06	-	<b>0.96</b>
G	-	-	-	-	-	-	-	-	-	-	-	-	-	-
G and Others (not includes A, B, C, D, E, F)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
H	2.07	0.74	0.94	0.93	-	4.84	<b>1.20</b>	2.30	-	1.04	-	-	-	<b>0.71</b>
H and Others (not includes A, B, C, D, E, F, G)	7.78	3.68	10.34	4.16	7.37	1.61	<b>6.57</b>	4.01	2.58	6.76	0.47	1.06	-	<b>3.10</b>
I	2.59	2.94	0.94	3.70	1.05	-	<b>2.19</b>	1.72	-	1.56	1.42	-	1.89	<b>1.19</b>
I and Others (not includes A, B, C, D, E, F, G, H)	5.19	7.36	-	1.85	4.21	1.61	<b>3.17</b>	1.14	1.72	1.04	1.89	5.32	-	<b>1.79</b>
J	5.18	14.71	1.41	4.63	12.63	3.23	<b>6.23</b>	4.02	16.38	3.65	6.13	9.57	-	<b>6.54</b>
J and K	4.15	9.56	-	1.39	16.85	1.61	<b>4.37</b>	4.60	6.90	1.04	0.47	12.77	-	<b>3.69</b>
K	7.77	8.82	-	0.93	50.53	3.23	<b>8.63</b>	10.92	20.69	3.12	2.36	69.15	3.77	<b>14.39</b>
Total	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>



*Chart 1: Distribution of Agricultural activities in 2008 (By Types of Activities) for urban area*



*Chart 2: Distribution of Agricultural activities in 2014 (By Types of Activities) for urban area*

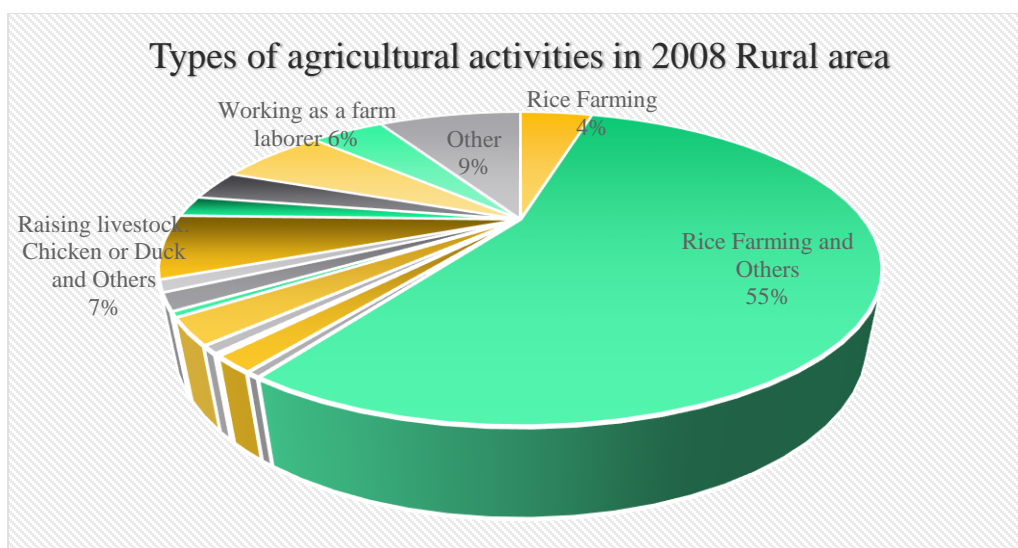


Chart 3: Distribution of Agricultural activities in 2008 (By Types of Activities) for rural area

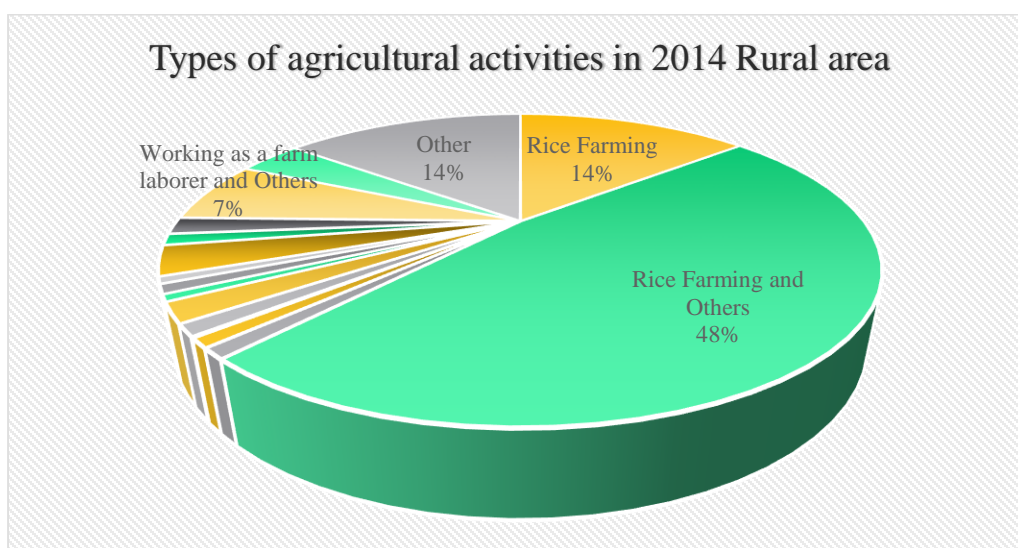


Chart 4: Distribution of Agricultural activities in 2014 (By Types of Activities) for rural area

The results also show that, on average, urban households related to agricultural activities tend to increase their holdings in agricultural assets, as shown in Table 12a and 12b, while rural households related to agricultural activities generate mixed results, as shown in Table 13a and 13b. The urban and rural households possess other agricultural assets<sup>8</sup> more than they do in 2008, e.g., pick-up car, propeller, or other advanced-technology equipment etc. This implies that the farmers use technology to make advances in agricultural activities.

<sup>8</sup> The items in “Others” category might be redundant with and can be categorized as “Other Important assets that are used in farming”. Therefore, it is suggested to consider these two categories as one category.

*Table 12a: Percentage of urban household in possession of each type of agricultural assets in 2008\**

Of Changwats (% of total # of households)	Walking Tractor	Large four- wheel tractor	Small four- wheel tractor	Set: Machine to put in seeds, pesticides etc.	Sprinkler	Threshing machine	Rice mill	Crop storage buildings	Large chicken coop	Other Large buildings for livestock	Other Important assets that are used in farming	Others
<b>Chachoengsao</b>	0	0	0	0	0	0	0	0	0	0	1	0
<b>Lopburi</b>	1	0	0	2	0	0	0	0	0	0	2	0
<b>Buriram</b>	5	0	0	2	0	0	0	17	0	0	7	1
<b>Sisaket</b>	11	0	0	0	1	0	0	18	0	1	8	1
<b>Satun</b>	3	0	0	8	0	1	0	6	0	1	4	0
<b>Phrae</b>	6	0	0	4	0	0	0	7	0	0	10	3
<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>1</b>

\* This table counts when households possess that type of agricultural assets (at least 1 unit) regardless of how many units of that asset they hold.

*Table 12b: Percentage of urban household in possession of each type of agricultural assets in 2014\**

Of Changwats (% of total # of households)	Walking Tractor	Large four- wheel tractor	Small four- wheel tractor	Set: Machine to put in seeds, pesticides etc.	Sprinkler	Threshing machine	Rice mill	Crop storage buildings	Large chicken coop	Other Large buildings for livestock	Other Important assets that are used in farming	Others
<b>Chachoengsao</b>	0	0	0	0	0	0	0	0	0	0	1	0
<b>Lopburi</b>	2	0	1	3	0	0	0	0	0	0	2	3
<b>Buriram</b>	4	0	0	2	0	0	2	12	0	0	1	6
<b>Sisaket</b>	11	0	0	0	1	0	1	16	0	2	1	13
<b>Satun</b>	4	0	0	12	0	0	0	12	0	0	2	57
<b>Phrae</b>	7	0	0	4	2	0	0	4	0	0	2	15
<b>Total</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>16</b>

\* This table counts when households possess that type of agricultural assets (at least 1 unit) regardless of how many units of that asset they hold.



Table 13a: Percentage of rural household in possession of each type of agricultural assets in 2008\*

Of Changwats (% of total # of households)	Walking Tractor	Large four- wheel tractor	Small four- wheel tractor	Set: Machine to put in seeds, pesticides etc.	Sprinkler	Threshing machine	Rice mill	Crop storage buildings	Large chicken coop	Other Large buildings for livestock	Other Important assets that are used in farming	Others
<b>Chachoengsao</b>	42	4	2	40	2	0	0	26	0	3	40	57
<b>Lopburi</b>	15	8	10	18	4	0	0	4	0	3	29	34
<b>Buriram</b>	55	0	0	4	0	0	1	78	0	0	64	28
<b>Sisaket</b>	43	0	0	4	0	0	0	52	0	5	35	4
<b>Satun</b>	1	0	0	16	2	0	0	5	0	1	3	0
<b>Phrae</b>	18	0	0	17	2	0	0	33	1	1	21	13
<b>Total</b>	<b>33</b>	<b>2</b>	<b>2</b>	<b>17</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>0</b>	<b>2</b>	<b>36</b>	<b>26</b>

\* This table counts when households possess that type of agricultural assets (at least 1 unit) regardless of how many units of that asset they hold.

Table 13b: Percentage of rural household in possession of each type of agricultural assets in 2014\*

Of Changwats (% of total # of households)	Walking Tractor	Large four- wheel tractor	Small four- wheel tractor	Set: Machine to put in seeds, pesticides etc.	Sprinkler	Threshing machine	Rice mill	Crop storage buildings	Large chicken coop	Other Large buildings for livestock	Other Important assets that are used in farming	Others
<b>Chachoengsao</b>	37	6	1	46	3	0	1	23	1	1	33	87
<b>Lopburi</b>	13	9	13	25	5	0	0	3	0	1	14	49
<b>Buriram</b>	48	2	0	8	0	0	1	69	0	0	15	77
<b>Sisaket</b>	43	0	0	5	0	0	1	46	0	1	5	58
<b>Satun</b>	1	1	1	25	1	0	0	5	0	0	9	120
<b>Phrae</b>	20	0	0	14	3	0	1	20	0	0	8	33
<b>Total</b>	<b>30</b>	<b>4</b>	<b>3</b>	<b>21</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>31</b>	<b>0</b>	<b>1</b>	<b>15</b>	<b>69</b>

\* This table counts when households possess that type of agricultural assets (at least 1 unit) regardless of how many units of that asset they hold.

Regarding livestock assets, rural households possess more than urban ones. As time goes by, both of urban and rural households own less livestock. This is not surprising since they tend to use more advanced technology, as earlier mentioned in agricultural assets. However, cows are the most popular among the livestock assets in both urban and rural area.

*Table 14: Percentage of urban households owning livestock assets\**

Of Changwats (% of total # of households)	2008					2014				
	Cow	Buffalo	Pig	Chicken (if ≥ 50)	Ducks (if ≥ 50)	Cow	Buffalo	Pig	Chicken (if ≥ 50)	Ducks (if ≥ 50)
<b>Chachoengsao</b>	0	0	0	0	0	0	0	0	0	0
<b>Lopburi</b>	0	0	2	1	0	2	2	3	2	2
<b>Buriram</b>	6	0	2	0	0	7	6	6	6	6
<b>Sisaket</b>	19	6	3	1	0	9	5	2	1	1
<b>Satun</b>	10	2	2	2	2	6	1	1	1	1
<b>Phrae</b>	2	0	0	2	1	5	5	5	5	5
<b>Total</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>

\* Each household can own more than one in each type of livestock and more than one type of livestock.

*Table 15: Percentage of rural households owning livestock assets\**

Of Changwats (% of total # of households)	2008					2014				
	Cow	Buffalo	Pig	Chicken (if ≥ 50)	Ducks (if ≥ 50)	Cow	Buffalo	Pig	Chicken (if ≥ 50)	Ducks (if ≥ 50)
<b>Chachoengsao</b>	22	3	0	7	0	6	1	0	2	0
<b>Lopburi</b>	11	0	1	1	0	4	0	2	0	0
<b>Buriram</b>	53	6	6	0	0	28	5	6	1	1
<b>Sisaket</b>	39	17	3	1	0	22	10	1	0	0
<b>Satun</b>	8	0	0	0	0	4	1	1	1	1
<b>Phrae</b>	3	0	3	4	0	3	3	4	3	3
<b>Total</b>	<b>27</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>13</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>1</b>

\* Each household can own more than one in each type of livestock and more than one type of livestock.

### **c. Household Business**

Let's take a look at household business. According to Table 16 and 17, both of urban and rural households hold the largest proportion in "other" businesses, following by being trader and shop owner. The most popular business in this "other" businesses category is raising cows.<sup>9</sup> Considering changwats, the special case lies with Satun where fishery and house renting are the most popular in 2014, whereas clothes sewing is for Phrae in the same year.

It is also worth noting that the distributions of business owning between urban and rural households are quite different, i.e., rural households are heavily skewed towards "other" businesses and have small proportions in the rest of categories, whereas, for urban households, the percentage of the second most popular business is much closer to the most popular one.

Considering household business assets, according to Table 18a - 19b, throughout times, households in urban and rural areas possess more household assets across most of the categories, although almost all business asset categories barely reach 50% household possession out of the total number of households.

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<sup>9</sup> Please note that types of businesses presented here include agricultural activities which might be redundant with the agricultural and livestock assets section (Section 2b). This is due to different purposes of survey questions: the survey would like to know what agricultural activities households involve with in Section 2b, whereas, in this section, the survey would like to know what type of businesses (including agricultural businesses) the households own.

Table 16: Percentage of urban households owning each type of business\*

Of Changwats (% of total # of households)	2008							2014						
	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total
Shop	23.29	15.27	17.14	15.19	17.89	11.88	16.99	20.15	17.76	15.38	17.74	12.50	19.51	17.24
Mechanic/Repair shop	-	2.29	1.43	6.33	1.05	3.96	2.59	1.49	2.80	1.54	5.65	1.04	3.66	2.67
Hair Salon/Barber	4.11	3.05	2.86	-	2.11	2.97	2.46	2.24	2.80	1.54	0.81	3.12	4.88	2.38
Rice Miller	-	-	1.43	-	-	0.99	0.39	-	-	-	-	-	-	-
Shrimp Farmer	1.37	-	-	-	1.05	-	0.39	-	-	-	-	-	-	-
Fish Farmer	-	-	-	-	-	-	-	0.75	-	-	-	-	-	0.15
Shrimp and Fish Farmer	0.68	-	-	-	-	-	0.13	0.75	-	-	-	-	-	0.15
Pickup Rental Service	-	-	-	-	1.05	-	0.13	0.75	0.93	-	-	2.08	-	0.59
Trader	31.51	28.24	32.86	28.48	13.68	25.74	27.63	36.57	37.38	36.15	28.23	29.17	17.07	31.65
Restaurant/Noodle Shop	10.96	16.79	6.43	9.49	10.53	7.92	10.38	9.70	12.15	6.92	10.48	7.29	12.20	9.66
Other	28.08	34.35	37.86	40.51	52.63	46.53	38.91	27.61	26.17	38.46	37.10	44.79	42.68	35.51
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

\* Each household may own more than one business.

Table 17: Percentage of rural households owning each type of business\*

Of Changwats (% of total # of households)	2008							2014						
	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total
Shop	10.38	14.12	9.77	2.40	3.57	10.81	8.56	9.41	17.02	14.02	7.23	3.45	16.00	11.17
Mechanic/Repair shop	-	-	0.75	-	-	2.70	0.39	-	-	0.93	-	-	-	0.27
Hair Salon/Barber	2.83	2.35	-	0.80	-	2.70	1.36	2.35	4.26	-	-	-	4.00	1.33
Rice Miller	0.94	-	1.50	2.40	-	-	1.17	-	-	-	-	-	4.00	0.27
Shrimp Farmer	-	-	-	-	7.14	-	0.39	-	-	-	-	3.45	-	0.27
Fish Farmer	5.66	-	-	-	-	-	1.17	2.35	-	-	-	-	-	0.53
Shrimp and Fish Farmer	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pickup Rental Service	0.94	-	-	-	-	-	0.19	-	-	-	-	-	-	-
Trader	9.43	32.94	9.77	3.20	32.14	8.11	13.04	15.29	29.79	7.48	2.41	31.03	4.00	12.50
Restaurant/Noodle Shop	6.60	3.53	2.26	1.60	7.14	2.70	3.50	5.88	2.13	3.74	1.20	3.45	12.00	3.99
Other	63.21	47.06	75.94	89.60	50.00	72.97	70.23	64.71	46.81	73.83	89.16	58.62	60.00	69.68
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

\* Each household may own more than one business.



Table 18a: Percentage of urban household in possession of each type of business assets in 2010\*

Of Changwats (% of total # of households)	A/C	Camera	Computers and Computer Accessories	Electric Pump	Fan	Plough Handle	Gas Stove	Land	Building	Warehouse	Coop	Chicken Coop	Livestock Corral	Cabinet/ Shelf/ Stall	Table and Chairs
<b>Chachoengsao</b>	0.97	0	0.49	0.49	1.46	0	15.53	0	3.40	0.49	0	0.97	0.49	11.65	14.56
<b>Lopburi</b>	0.60	0	0	0	2.40	0	24.55	0	1.80	0	0	0	1.20	17.37	16.77
<b>Buriram</b>	0	0	0.47	0	1.40	0	16.36	0	0.47	0.47	0	0	5.61	13.08	9.81
<b>Sisaket</b>	0.53	0.53	1.60	0	2.67	0	8.02	0	0	3.21	0	0.53	20.86	5.88	8.56
<b>Satun</b>	0	0	1.40	0	3.50	0	16.08	0	1.40	0	0	0.70	7.69	4.20	15.38
<b>Phrae</b>	0.79	0	0	0	2.36	0	6.30	0	0.79	0.79	0	0	0.79	12.60	9.45
<b>Total</b>	<b>0.48</b>	<b>0.10</b>	<b>0.67</b>	<b>0.10</b>	<b>2.20</b>	<b>0</b>	<b>14.75</b>	<b>0</b>	<b>1.34</b>	<b>0.86</b>	<b>0</b>	<b>0.38</b>	<b>6.32</b>	<b>10.92</b>	<b>12.36</b>

\* This table counts when households possess that type of business assets (at least 1 unit) regardless of how many units of that asset they hold.

Table 18a (Cont.): Percentage of urban household in possession of each type of business assets in 2010\*

Of Changwats (% of total # of households)	Sale Arch	Rice Mill	Hairdressing Equipment	Food Making and Selling Equipment	Noodle Processing Equipment	Equipment of Repair (machine)	Sewing Machine	Water Pump	Motor	Blade/ Propeller	Fridge/ Freezer	Wind Pump	Small Truck	Pick-up Car	Van	Others
<b>Chachoengsao</b>	12.62	0	1.94	9.22	17.96	0.97	1.94	0.49	0.49	0.49	14.56	2.43	0	2.43	0.49	85.22
<b>Lopburi</b>	23.35	0	1.80	22.75	31.74	1.20	6.59	0.60	0.60	0	23.35	3.59	1.20	15.57	0	91.29
<b>Buriram</b>	21.50	0.47	2.80	7.48	19.63	2.34	2.80	0.47	0.47	0	11.68	3.27	0	9.35	1.40	92.01
<b>Sisaket</b>	18.72	0.53	1.07	7.49	6.95	6.42	0.53	1.60	0.53	0	16.04	5.88	1.07	10.16	1.07	76.28
<b>Satun</b>	20.28	1.40	2.10	9.79	9.79	1.40	2.10	0	1.40	0	13.99	0.70	0	6.29	0	82.30
<b>Phrae</b>	10.24	0.79	1.57	4.72	9.45	2.36	9.45	0	1.57	0	11.81	3.94	0.79	8.66	0	88.79
<b>Total</b>	<b>18.01</b>	<b>0.48</b>	<b>1.92</b>	<b>10.25</b>	<b>16.38</b>	<b>2.49</b>	<b>3.54</b>	<b>0.57</b>	<b>0.77</b>	<b>0.10</b>	<b>15.23</b>	<b>3.35</b>	<b>0.48</b>	<b>8.62</b>	<b>0.57</b>	<b>86.39</b>

\* This table counts when households possess that type of business assets (at least 1 unit) regardless of how many units of that asset they hold.

Table 18b: Percentage of urban household in possession of each type of business assets in 2014\*

Of Changwats (% of total # of households)	A/C	Camera	Computers and Computer Accessories	Electric Pump	Fan	Plough Handle	Gas Stove	Land	Building	Warehouse	Coop	Chicken Coop	Livestock Corral	Cabinet/ Shelf/ Stall	Table and Chairs
Chachoengsao	2.23	0	0.56	0.56	1.68	0	16.20	0	3.91	0	0	0	0	10.61	16.20
Lopburi	0.68	0.68	0.68	0	4.73	0	24.32	0.68	1.35	0	0	0	1.35	15.54	13.51
Buriram	1.01	0	1.01	0	0.50	0	19.60	0	1.01	0	0	0	5.03	18.09	12.06
Sisaket	0.68	0.68	2.03	0	2.70	0	8.11	0	1.35	2.03	0	0	18.24	6.76	10.14
Satun	0	0	0.67	0	7.38	0	23.49	0	1.34	0	0	1.34	9.40	4.70	28.86
Phrae	0.83	0	0.83	0	8.33	0	10.83	0	1.67	2.50	0	0	0	17.50	16.67
<b>Total</b>	<b>0.95</b>	<b>0.21</b>	<b>0.95</b>	<b>0.11</b>	<b>3.82</b>	<b>0</b>	<b>17.39</b>	<b>0.11</b>	<b>1.80</b>	<b>0.64</b>	<b>0</b>	<b>0.21</b>	<b>5.62</b>	<b>12.30</b>	<b>16.01</b>

\* This table counts when households possess that type of business assets (at least 1 unit) regardless of how many units of that asset they hold.

Table 18b (Cont.): Percentage of urban household in possession of each type of business assets in 2014\*

Of Changwats (% of total # of households)	Sale Arch	Rice Mill	Hairdressing Equipment	Food Making and Selling Equipment	Noodle Processing Equipment	Equipment of Repair (machine)	Sewing Machine	Water Pump	Motor	Blade/ Propeller	Fridge/ Freezer	Wind Pump	Small Truck	Pick-up Car	Van	Others
Chachoengsao	16.76	0	1.12	8.38	17.88	1.12	1.68	0.56	0.56	0.56	12.29	2.79	0	3.35	1.12	100
Lopburi	18.92	0	0.68	18.92	27.03	0.68	4.73	0.68	1.35	0	22.30	4.05	0.68	11.49	0.68	100
Buriram	19.10	0	3.02	15.58	21.61	3.02	2.51	0	0.50	0	13.07	3.02	0	9.55	0.50	100
Sisaket	22.30	0	1.35	9.46	8.78	4.73	1.35	0.68	0.68	0	17.57	6.08	0.68	12.16	0.68	100
Satun	17.45	1.34	2.01	18.79	21.48	4.03	1.34	0	0.67	0	9.40	2.01	0	9.40	1.34	100
Phrae	16.67	0	5.83	12.50	17.50	2.50	6.67	0	2.50	0	18.33	6.67	0.83	15.00	0.83	100
<b>Total</b>	<b>18.56</b>	<b>0.21</b>	<b>2.23</b>	<b>13.89</b>	<b>19.19</b>	<b>2.65</b>	<b>2.86</b>	<b>0.32</b>	<b>0.95</b>	<b>0.11</b>	<b>15.16</b>	<b>3.92</b>	<b>0.32</b>	<b>9.76</b>	<b>0.85</b>	<b>100</b>

\* This table counts when households possess that type of business assets (at least 1 unit) regardless of how many units of that asset they hold.

Table 19a: Percentage of rural household in possession of each type of business assets in 2010\*

Of Changwats (% of total # of households)	A/C	Camera	Computers and Computer Accessories	Electric Pump	Fan	Plough Handle	Gas Stove	Land	Building	Warehouse	Coop	Chicken Coop	Livestock Corral	Cabinet/ Shelf/ Stall	Table and Chairs
<b>Chachoengsao</b>	0.70	0	0.70	0.70	2.82	0	1.41	0	9.86	0	0	7.75	20.42	4.23	8.45
<b>Lopburi</b>	1.19	0	0	0	0	0	2.38	0	2.38	0	0	3.57	16.67	5.95	1.19
<b>Buriram</b>	0	0	0	0	0.49	0	1.97	2.46	1.48	0.99	0.99	0	55.17	1.97	2.96
<b>Sisaket</b>	0	0	0	0	0.69	0	0	0	0	0.69	0	0.69	77.08	0	1.39
<b>Satun</b>	0	0	0	0	0	0	4.76	0	7.14	0	0	0	11.90	0	11.90
<b>Phrae</b>	1.79	0	3.57	0	1.79	0	3.57	0	3.57	1.79	0	1.79	3.57	8.93	7.14
<b>Total</b>	<b>0.45</b>	<b>0</b>	<b>0.45</b>	<b>0.15</b>	<b>1.04</b>	<b>0</b>	<b>1.79</b>	<b>0.75</b>	<b>3.58</b>	<b>0.60</b>	<b>0.30</b>	<b>2.38</b>	<b>40.69</b>	<b>2.98</b>	<b>4.47</b>

\* This table counts when households possess that type of business assets (at least 1 unit) regardless of how many units of that asset they hold.

Table 19a (Cont.): Percentage of rural household in possession of each type of business assets in 2010\*

Of Changwats (% of total # of households)	Sale Arch	Rice Mill	Hairdressing Equipment	Food Making and Selling Equipment	Noodle Processing Equipment	Equipment of Repair (machine)	Sewing Machine	Water Pump	Motor	Blade/ Propeller	Fridge/ Freezer	Wind Pump	Small Truck	Pick-up Car	Van	Others
<b>Chachoengsao</b>	7.75	0.70	2.11	1.41	2.11	0.70	2.82	4.23	1.41	0	9.15	0.70	7.75	2.11	0	11.67
<b>Lopburi</b>	14.29	0	1.19	0	0	0	0	1.19	0	0	16.67	0	1.19	19.05	1.19	9.72
<b>Buriram</b>	10.34	1.97	0	2.46	4.43	0.99	0.49	0	1.97	0	6.40	0.99	1.97	4.93	0.49	10.11
<b>Sisaket</b>	4.17	2.08	0.69	0	0	0.69	0.69	0	0	0	4.17	1.39	1.39	2.78	0	13.95
<b>Satun</b>	4.76	0	0	11.90	0	0	0	0	0	2.38	4.76	0	2.38	21.43	0	14.29
<b>Phrae</b>	8.93	1.79	1.79	1.79	3.57	1.79	30.36	5.36	0	0	10.71	3.57	3.57	28.57	0	6.80
<b>Total</b>	<b>8.49</b>	<b>1.34</b>	<b>0.89</b>	<b>1.94</b>	<b>2.09</b>	<b>0.75</b>	<b>3.43</b>	<b>1.49</b>	<b>0.89</b>	<b>0.15</b>	<b>8.05</b>	<b>1.04</b>	<b>3.13</b>	<b>8.64</b>	<b>0.30</b>	<b>10.71</b>

\* This table counts when households possess that type of business assets (at least 1 unit) regardless of how many units of that asset they hold.

Table 19b: Percentage of rural household in possession of each type of business assets in 2014\*

Of Changwats (% of total # of households)	A/C	Camera	Computers and Computer Accessories	Electric Pump	Fan	Plough Handle	Gas Stove	Land	Building	Warehouse	Coop	Chicken Coop	Livestock Corral	Cabinet/ Shelf/ Stall	Table and Chairs
<b>Chachoengsao</b>	0.75	0	0	1.50	2.26	0	5.26	0	12.03	0	1.50	11.28	15.04	6.77	12.78
<b>Lopburi</b>	1.64	0	1.64	0	4.92	0	4.92	0	1.64	0	0	1.64	18.03	4.92	6.56
<b>Buriram</b>	0	0	0	0	0	0	2.94	0	1.18	0.59	0.59	0.59	50.59	4.12	5.88
<b>Sisaket</b>	0	0	0	0	1.03	0	0	0	0	0	0	0	74.23	3.09	3.09
<b>Satun</b>	0	0	0	0	5.13	0	17.95	0	2.56	0	0	0	12.82	7.69	23.08
<b>Phrae</b>	0	0	0	0	0	0	6.52	0	2.17	0	0	0	2.17	10.87	6.52
<b>Total</b>	<b>0.37</b>	<b>0</b>	<b>0.18</b>	<b>0.37</b>	<b>1.65</b>	<b>0</b>	<b>4.58</b>	<b>0</b>	<b>3.85</b>	<b>0.18</b>	<b>0.55</b>	<b>3.11</b>	<b>35.71</b>	<b>5.49</b>	<b>8.42</b>

\* This table counts when households possess that type of business assets (at least 1 unit) regardless of how many units of that asset they hold.

Table 19b (Cont.): Percentage of rural household in possession of each type of business assets in 2014\*

Of Changwats (% of total # of households)	Sale Arch	Rice Mill	Hairdressing Equipment	Food Making and Selling Equipment	Noodle Processing Equipment	Equipment of Repair (machine)	Sewing Machine	Water Pump	Motor	Blade/ Propeller	Fridge/ Freezer	Wind Pump	Small Truck	Pick-up Car	Van	Others
<b>Chachoengsao</b>	9.77	0.75	3.76	3.01	7.52	0.75	3.76	3.01	1.50	0	9.77	1.50	5.26	1.50	0	12.75
<b>Lopburi</b>	9.84	0	1.64	3.28	1.64	0	0	0	1.64	0	18.03	0	0	22.95	1.64	6.82
<b>Buriram</b>	12.35	2.35	0	5.29	5.88	0	1.18	0	2.94	0	6.47	1.18	1.76	6.47	0.59	6.93
<b>Sisaket</b>	5.15	1.03	1.03	1.03	1.03	1.03	0	0	0	0	5.15	2.06	2.06	3.09	0	11.11
<b>Satun</b>	10.26	0	0	15.38	7.69	0	0	0	2.56	2.56	0	2.56	2.56	15.38	0	17.81
<b>Phrae</b>	10.87	2.17	0	4.35	10.87	4.35	26.09	2.17	2.17	0	8.70	4.35	0	34.78	4.35	9.52
<b>Total</b>	<b>9.89</b>	<b>1.28</b>	<b>1.28</b>	<b>4.40</b>	<b>5.49</b>	<b>0.73</b>	<b>3.48</b>	<b>0.92</b>	<b>1.83</b>	<b>0.18</b>	<b>8.06</b>	<b>1.65</b>	<b>2.38</b>	<b>9.52</b>	<b>0.73</b>	<b>11.09</b>

\* This table counts when households possess that type of business assets (at least 1 unit) regardless of how many units of that asset they hold.

#### d. Land Cultivation

On average, land cultivation in rural zone takes more area than it does in urban zone. In urban areas, as shown in Table 20a and 20b, Satun takes more area than any other changwats, following by Sisaket and Buriram, in terms of both mean and median, in both 2008 and 2014. Recall that households that are related to agricultural activities in Satun are mostly rubber farmers, while the majority of households in Sisaket and Buriram is rice farmers.

On the other hand, in rural areas, as shown in Table 21a and 21b, Chachoengsao is ranked no.1 as the largest area for cultivation, in terms of both mean and median, while the smallest is Phrae, in both years. Both of the changwats are mainly rice farmers, as mentioned in Agricultural and Livestock assets section.

Please note that the unit of measurement is Rai, of which 1 Rai equals to 0.3954 Acre (or 1 Acre equals to 2.529 Rai).

*Table 20a: 2008 Summary statistics on size of land cultivation in urban areas*

(Rai)	Min	Max	Mean	Std. dev.	1 <sup>st</sup> Quartile	Median	3 <sup>rd</sup> Quartile
<b>Chachoengsao</b>	0.01	5.075	0.19	0.44	0.04	0.065	0.175
<b>Lopburi</b>	0.025	21.25	0.93	3.32	0.08	0.13	0.25
<b>Buriram</b>	0.02	84.75	4.44	9.99	0.13	0.25	1.2
<b>Sisaket</b>	0.01	50.13	4.73	7.48	0.175	0.5	7.25
<b>Satun</b>	0.01	63	5.63	9.35	0.25	0.54	8
<b>Phrae</b>	0.05	31	1.82	3.91	0.2	0.3	1.25
All	<b>0.01</b>	<b>84.75</b>	<b>2.97</b>	<b>7.03</b>	<b>0.1</b>	<b>0.25</b>	<b>1</b>

*Table 20b: 2014 Summary statistics on size of land cultivation in urban areas*

(Rai)	Min	Max	Mean	Std. dev.	1 <sup>st</sup> Quartile	Median	3 <sup>rd</sup> Quartile
<b>Chachoengsao</b>	0.018	64.05	0.71	4.95	0.045	0.1	0.25
<b>Lopburi</b>	0.02	23.28	1.01	3.55	0.11	0.17	0.26
<b>Buriram</b>	0.01	66.25	4.44	10.08	0.1	0.2	3.15
<b>Sisaket</b>	0.028	40.25	5.18	7.70	0.25	0.5	8.38
<b>Satun</b>	0.06	69	6.27	9.82	0.16	1	8.66
<b>Phrae</b>	0.03	24.62	1.68	3.55	0.24	0.25	0.85
All	<b>0.01</b>	<b>69</b>	<b>3.25</b>	<b>7.51</b>	<b>0.12</b>	<b>0.25</b>	<b>1.12</b>

*Table 21a: 2008 Summary statistics on size of land cultivation in rural areas*

(Rai)	Min	Max	Mean	Std. dev.	1 <sup>st</sup> Quartile	Median	3 <sup>rd</sup> Quartile
<b>Chachoengsao</b>	0.1	276	23.73	33.06	3.06	17.5	30.75
<b>Lopburi</b>	0.05	341.25	18.33	36.23	0.25	1	24.18
<b>Buriram</b>	0.125	110.5	21.43	18.49	8.25	17.38	30.5
<b>Sisaket</b>	0.062	62	12.76	11.64	3.5	11	18.5
<b>Satun</b>	0.06	228.5	15.99	24.76	3.19	11	21.11
<b>Phrae</b>	0.175	42	5.04	7.37	0.5	2.25	5.98
All	<b>0.05</b>	<b>341.25</b>	<b>17.53</b>	<b>26.01</b>	<b>1</b>	<b>10.5</b>	<b>24.25</b>

*Table 21b: 2014 Summary statistics on size of land cultivation in rural areas*

(Rai)	Min	Max	Mean	Std. dev.	1 <sup>st</sup> Quartile	Median	3 <sup>rd</sup> Quartile
<b>Chachoengsao</b>	0.04	242	21.61	28.86	2	12	29.69
<b>Lopburi</b>	0.08	316.5	16.99	34.56	0.275	1	22.12
<b>Buriram</b>	0.25	141	19.46	18.62	5.75	14.75	29.25
<b>Sisaket</b>	0.062	74.75	13.54	12.17	4.25	11.25	19
<b>Satun</b>	0.06	175	15.77	21.08	2.39	11.12	20.95
<b>Phrae</b>	0.1	51.5	5.57	8.62	0.5	2.25	5.75
All	<b>0.04</b>	<b>316.5</b>	<b>16.65</b>	<b>24.06</b>	<b>1</b>	<b>10</b>	<b>23</b>

#### **e. Consumption**

Households in urban and rural areas largely consume rice they bought, according to Table 22 and 23, though there is some proportion in consuming rice they grow themselves, especially for households in rural areas (41.58% and 40.33% of total rural households in 2008 and 2014, respectively, as shown in Table 23). Over time, the percentage of households, either consuming rice they bought or rice they grew themselves, seems to be consistent.

Another interesting point is that households in both urban and rural areas tend to consume more meat and dairy products in 2014 than they do in 2008, let alone their already-exceeded 50% consumption out of total number of households since 2008. This is not to mention the value of these expenditures yet, since it will be shown in Table 24 and 25 later.

Regarding alcohol consumption, both households in urban and rural areas consume more in house than they consume out of home. By area wise, rural households consume more alcohol than urban ones. Interestingly, the percentage of alcohol consumption, either at home or outside, decreases in 2014, compared to 2008. 2014 total alcohol consumption is 20.14% of urban households and 34.09% of rural households versus 38.27% of urban households and 46.17% of rural households as of 2008, respectively.

Meanwhile, rural households proportionally consume more tobacco than urban households. However, it is such a good news that both households consume less tobacco over time: in urban area, the percentage of consumption decreases from 32.71% to 21.18% and decreases from 45.25% to 30.75% in rural area.

Consumption on fuel, ceremonies, vehicle repair, clothes, and eating out are basically constant throughout times. It is surprising that almost 100% of urban and rural households eat out.



Table 22: Percentage of urban households having each type of expenditures\*

Of Changwats (% of total # of households)	2008							2014						
	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total
Rice grew themselves (including sticky rice)	0	0.83	19.17	40.00	10.00	20.42	15.07	0	0.42	18.75	40.00	11.25	16.67	14.51
Rice bought (including sticky rice)	95.42	99.58	83.33	63.75	90.00	81.67	85.62	95.42	99.58	82.92	60.83	89.17	84.58	85.42
Other Grains	5.00	0	5.42	3.75	20.00	18.33	8.75	24.58	0.83	7.08	0	69.17	3.75	17.57
Dairy Products	78.33	79.17	73.33	60.42	75.83	80.83	74.65	84.58	86.25	71.67	92.92	78.75	71.25	80.90
Meat	92.50	95.00	97.92	98.33	98.33	97.08	96.53	93.33	94.58	99.17	99.58	99.17	98.75	97.50
Alcohol at Home	23.33	34.58	21.67	25.00	1.25	32.50	23.06	15.83	21.67	10.00	13.75	0.83	5.42	11.25
Alcohol Out of Home	11.67	10.00	21.67	22.08	1.67	24.17	15.21	16.67	7.92	11.25	15.83	0.42	1.25	8.89
Tobacco	34.17	28.75	27.08	40.83	43.75	21.67	32.71	29.58	14.17	15.83	20.00	42.50	5.00	21.18
Fuel	84.58	88.75	91.67	88.75	94.58	95.00	90.56	84.17	88.75	93.75	91.25	95.00	92.08	90.83
Ceremony	99.58	100	100	100	100	99.58	99.86	98.75	99.17	100	100	98.75	100	99.44
House Repair	17.05	30.65	18.06	13.78	31.05	13.81	20.52	17.51	23.62	18.06	4.44	20.53	11.60	15.80
Vehicle Repair	84.79	89.45	91.67	88.89	96.32	93.92	90.64	84.33	88.94	94.91	87.56	95.26	92.27	90.39
Education	60.37	63.82	65.28	70.22	68.95	54.70	64.09	50.23	53.27	56.94	55.56	56.84	45.30	53.18
Clothes	98.62	95.48	98.61	100	100	81.77	96.09	96.77	97.49	99.07	100	97.37	99.45	98.45
Eating Out	99.08	100	100	100	100	99.45	99.76	99.54	100	99.54	100	100	100	99.84

\* This table counts when households possess that type of expenditure (non-zero amount) regardless of how much expenditure they have.

Table 23: Percentage of rural households having each type of expenditures\*

Of Changwats (% of total # of households)	2008							2014						
	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total
Rice grew themselves (including sticky rice)	17.92	10.83	78.33	74.17	3.33	50.00	41.58	20.00	7.50	70.83	78.75	0	49.17	40.33
Rice bought (including sticky rice)	81.67	88.75	27.92	26.25	95.00	49.17	59.33	77.08	93.33	29.17	21.25	100	50.83	59.25
Other Grains	8.33	0	7.92	0.42	38.33	23.33	9.5	26.25	0.42	5.83	0	53.33	0.83	11.92
Dairy Products	67.50	62.50	60.00	50.00	75.83	64.17	62.00	78.33	75.83	62.50	86.25	70.83	85.00	76.17
Meat	96.67	95.83	97.50	95.83	95.83	96.67	97.25	95.42	98.33	99.58	99.58	100	99.17	98.50
Alcohol at Home	35.42	33.33	31.67	21.25	4.17	34.17	28.17	30.83	23.33	13.75	16.67	0.83	14.17	18.42
Alcohol Out of Home	18.33	13.33	32.92	19.17	2.50	10.00	18.00	16.67	10.83	15.42	22.08	1.67	25.00	15.67
Tobacco	57.08	39.58	47.92	46.25	50.00	20.83	45.25	38.33	25.42	25.42	30.83	60.00	7.50	30.75
Fuel	86.25	82.08	83.75	68.33	93.33	89.17	82.33	88.75	85.00	88.75	73.75	96.67	91.67	86.08
Ceremony	98.33	100	100	100	100	100	99.67	98.75	100	100	100	100	100	99.75
House Repair	24.11	19.72	23.83	21.79	24.07	17.98	22.17	23.21	21.56	19.63	23.08	19.44	12.36	20.88
Vehicle Repair	85.27	84.86	85.05	67.95	95.37	86.52	82.52	88.84	85.32	90.19	71.37	95.37	84.27	84.91
Education	54.46	61.47	62.62	64.10	62.96	60.67	60.90	51.79	50.92	59.35	55.98	42.59	46.07	52.62
Clothes	95.54	96.33	88.79	97.86	100	73.03	93.47	98.21	94.95	99.07	100	100	96.63	98.16
Eating Out	98.21	100	100	100	100	100	99.63	99.11	98.17	100	100	100	100	99.45

\*This table counts when households possess that type of expenditure (non-zero amount) regardless of how much expenditure they have

Now we take a look at value of these expenditures, as shown in Table 24 and 25. In terms of median, the most expensive one is, surprisingly, expenses on eating out (in 2014, 10,875 THB or 330 US\$ in urban area and 5,000 THB or 152 US\$ in rural area), following by education (in 2014, 3,000 THB or 91 US\$ in urban area and 2,000 THB or 61 US\$ in rural area) and clothes (in 2014, 3,000 THB or 91 US\$ in urban area and 2,000 THB or US\$ in rural area). The cheapest ones lie with expenses on other grains (in 2014, 80 THB or 2.43 US\$ in urban area and 76 THB or 2.31 US\$ in rural area).

We can notice that median of expenses on house repair is zero in both urban and rural areas. This is not true in terms of mean (around 10,000 THB or 303 US\$) due to the nature of this expense which is large but not frequently occur.

It is interesting that, if we consider changwats, Buriram leads the others in eating out expense (in 2014, 29,200 THB or 886 US\$ in urban area and 18,250 THB or 554 US\$ in rural area).

Table 24: Median total value of consumption expenditures per month in urban households\*

2008								2014						
Value in THB	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total
Rice grew themselves (including sticky rice)	0	1,860	1,017.5	1,320	857.5	600	1,000	0	540	750	1,260	660	870	900
Rice bought (including sticky rice)	600	770	840	1,080	840	525	750	525	600	750	1,080	740	750	700
Other Grains	40	0	60	100	90.5	40	72	150	880	25	0	75	25	80
Dairy Products	300	360	300	200	360	300	300	300	400	450	300	400	300	360
Meat	360	300	300	240	480	475	360	300	340	520	320	400	300	340
Alcohol at Home	1,012.5	660	317.5	200	840	235	350	415	765	600	480	307.5	200	500
Alcohol Out of Home	280	355	437.5	100	640	200	240	625	500	500	480	900	300	510
Tobacco	490	525	360	77.5	188	405	300	275	600	312.5	56	100	615	195
Fuel	990	825	1,080	900	1,140	601.5	960	1,200	1,026	900	1,200	780	1,140	1,000
Ceremony	300	300	300	200	500	300	300	300	300	300	300	300	200	300
House Repair	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Repair	1,000	1,500	1,200	1,000	1,200	800	1,000	1,600	1,200	2,000	1,500	1,000	2,000	1,500
Education	12,000	6,000	8,430	3,000	4,100	2,500	5,000	3,000	3,000	11,000	3,500	8,270	0	3,000
Clothes	3,000	2,000	2,550	1,000	2,000	1,000	2,000	2,800	3,000	3,000	3,000	3,750	2,500	3,000
Eating Out	20,000	12,000	10,000	1,200	1,500	3,000	5,000	26,000	25,000	29,200	5,000	3,000	5,000	10,875

\* This table shows median value of each type of consumption expenditure

Table 25: Median total value of consumption expenditures per month in rural households\*

2008								2014						
Value in THB	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total
Rice grew themselves (including sticky rice)	680	720	800	1,080	1,010	750	810	900	600	875	1,160	0	1,188	1,000
Rice bought (including sticky rice)	570	660	600	720	1,050	588	690	625	600	750	900	897.5	1,080	760
Other Grains	27.5	0	50	200	66	70	54	90	240	25	0	100.5	180	76
Dairy Products	300	300	300	165	480	288	300	300	300	450	200	450	300	300
Meat	390	360	360	240	500	360	330	400	560	480	300	540	300	420
Alcohol at Home	600	480	200	95	500	100	320	515	575	300	115	1,000	400	350
Alcohol Out of Home	400	370	270	90	600	90	240	535	432.5	350	180	685	245	287.5
Tobacco	46	50	40	20	122.5	50	45	197.5	100	30	30	100	30	100
Fuel	900	700	600	640	1,200	960	720	1,400	1,125	855	800	800	1,000	900
Ceremony	200	300	200	200	500	300	300	350	300	200	200	300	200	290
House Repair	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Repair	1,000	800	725	500	2,000	700	800	1,200	1,000	700	500	1,800	1,000	1,000
Education	3,740	3,000	4,000	1,000	2,750	4,000	2,500	2,250	2,000	8,000	2,000	0	0	2,000
Clothes	2,000	2,000	1,000	1,000	2,000	500	1,200	1,500	3,000	2,000	2,000	4,000	2,000	2,000
Eating Out	3,600	5,850	5,000	1,000	1,500	2,000	3,000	10,000	9,600	18,250	2,000	3,000	2,000	5,000

\* This table shows median value of each type of consumption expenditure

Figure 12 – 26 depicts the change over time. They show that expenditures on rice grew themselves (Figure 12), rice bought (Figure 13), dairy products (Figure 15), fuel (Figure 20), ceremony (Figure 21), and house repair (Figure 22) are quite steady over time. On the other hand, expenditures on other grains (Figure 14), alcohol consumed at home (Figure 17), tobacco (Figure 19), vehicle repairs (Figure 23), clothes (Figure 25) and eating out (Figure 26) are volatile, though finally increase in 2014, except urban household expense on tobacco that decreases in 2014 (Figure 19).

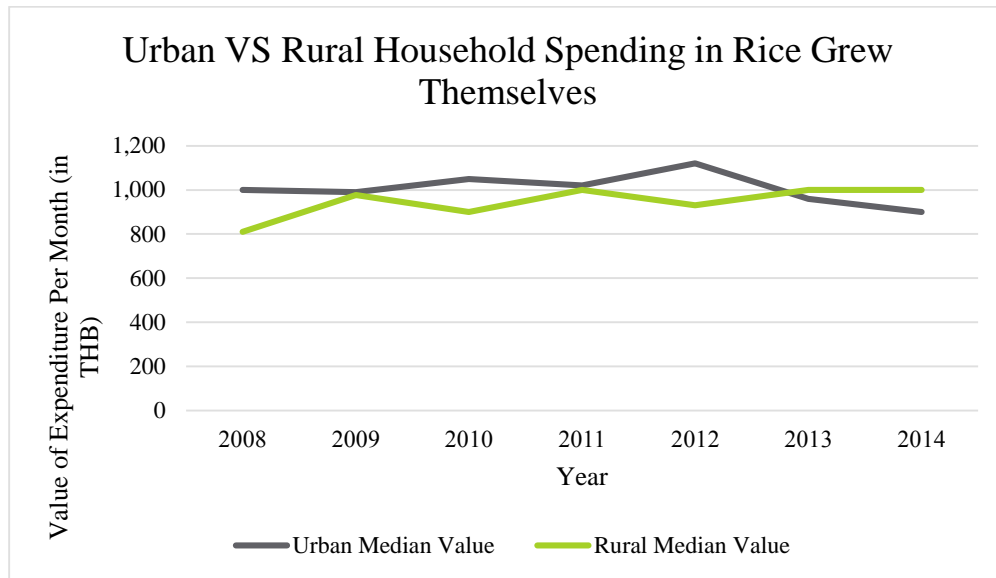


Figure 12: Urban VS Rural Household Spending in Rice Grew Themselves per month

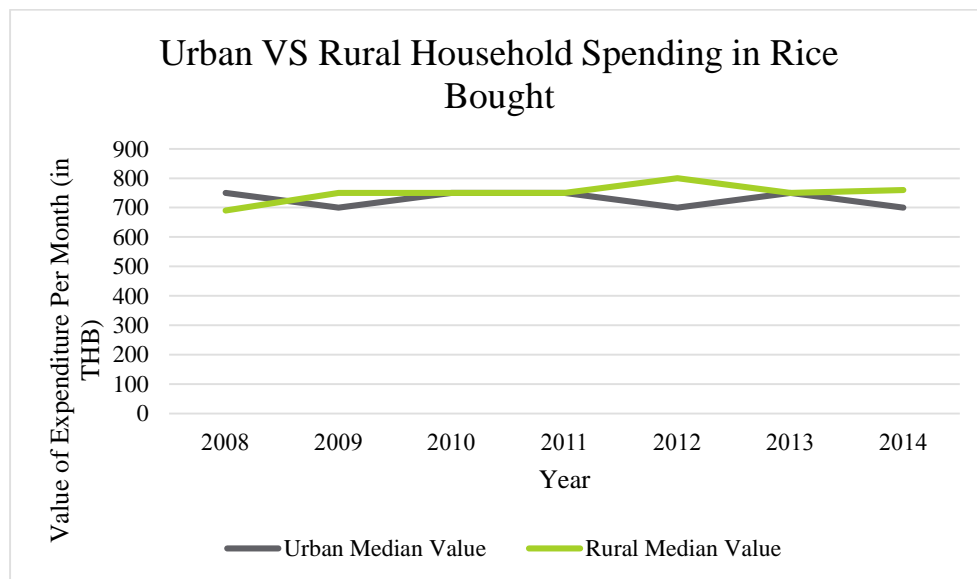
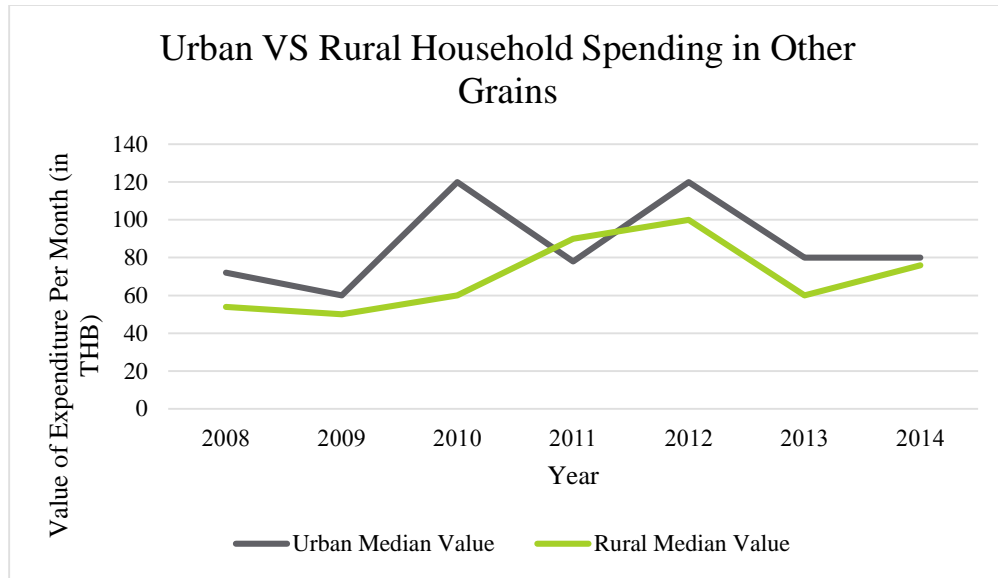
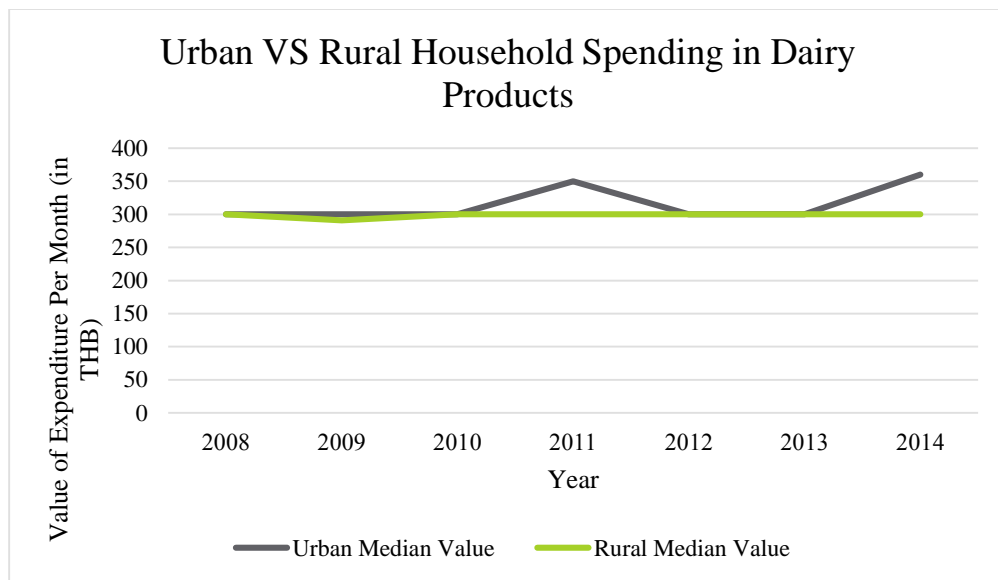


Figure 13: Urban VS Rural Household Spending in Rice Bought per month



*Figure 14: Urban VS Rural Household Spending in Other Grains per month*



*Figure 15: Urban VS Rural Household Spending in Dairy Products per month*



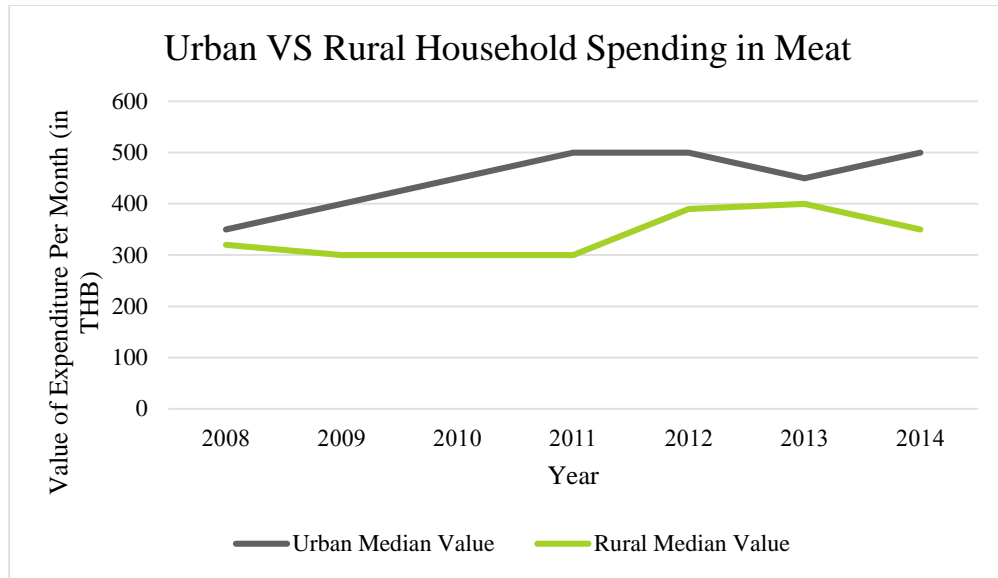


Figure 16: Urban VS Rural Household Spending in Alcohol Consumed at Home per month

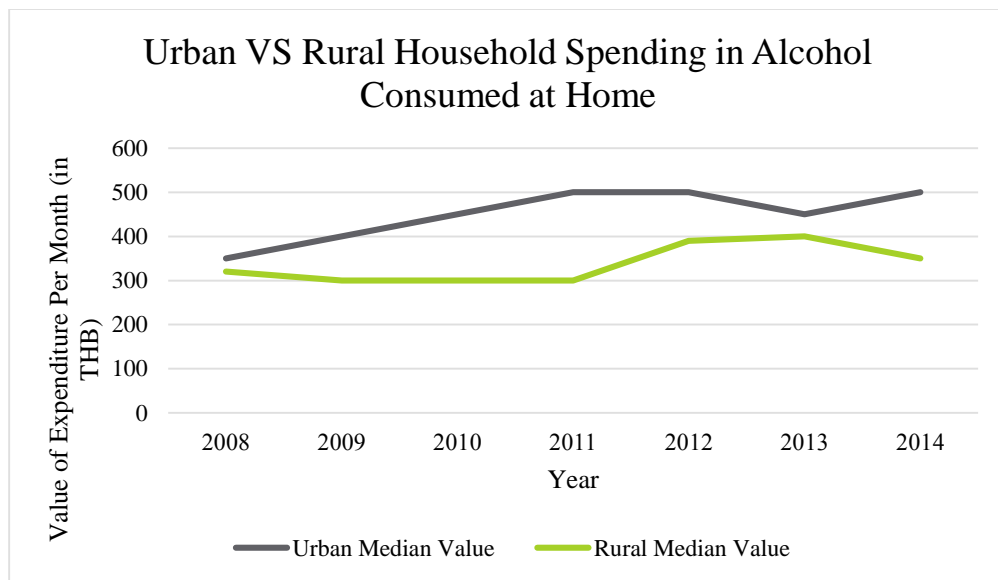
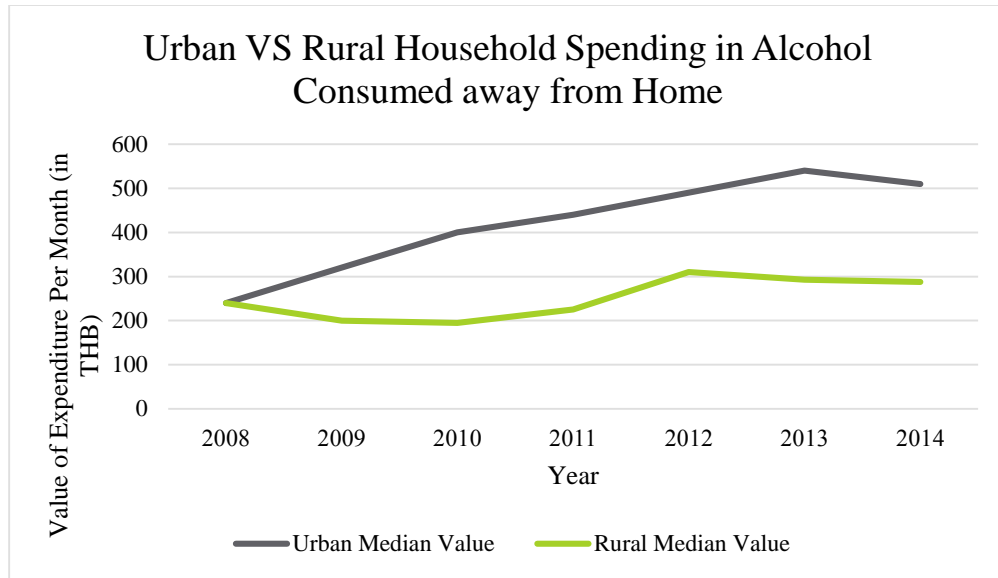
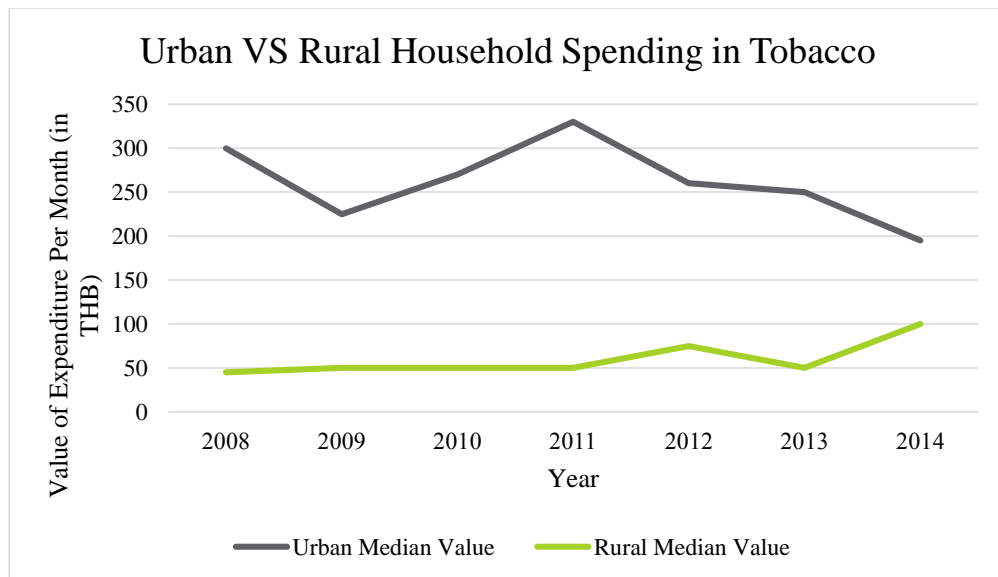


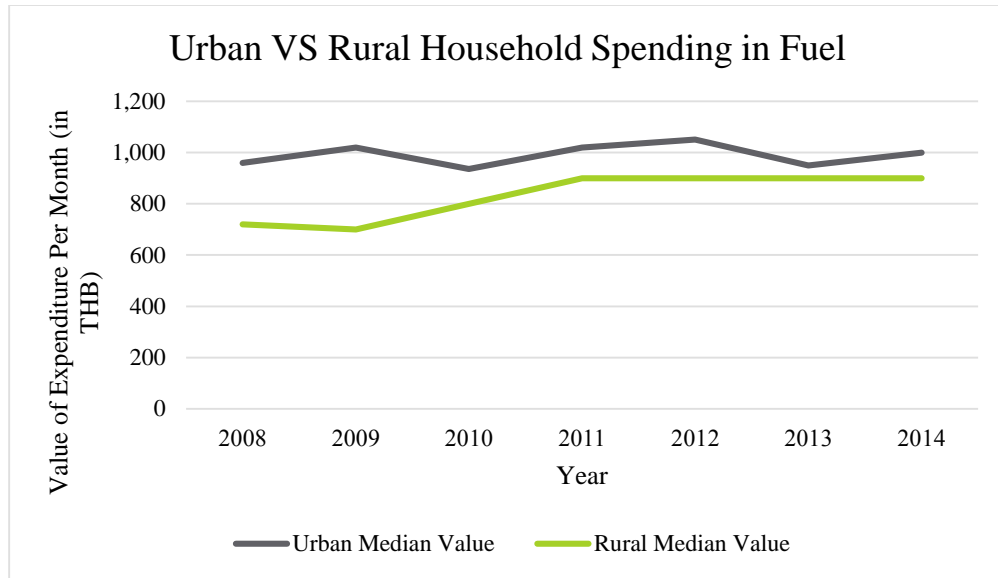
Figure 17: Urban VS Rural Household Spending in Alcohol Consumed at Home per month



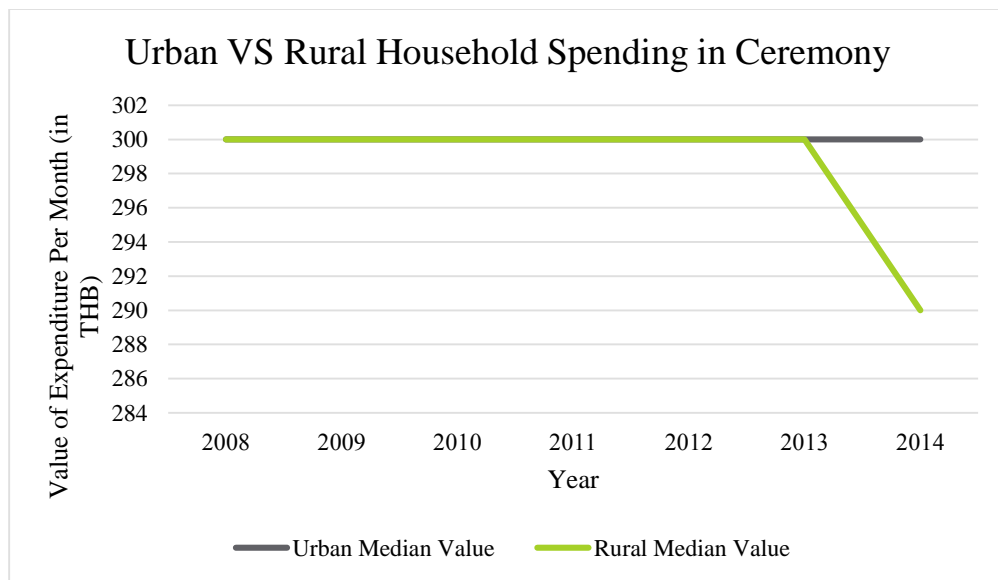
*Figure 18: Urban VS Rural Household Spending in Alcohol Consumed away from Home per month*



*Figure 19: Urban VS Rural Household Spending in Tobacco per month*



*Figure 20: Urban VS Rural Household Spending in Fuel per month*



*Figure 21: Urban VS Rural Household Spending in Ceremony per month*

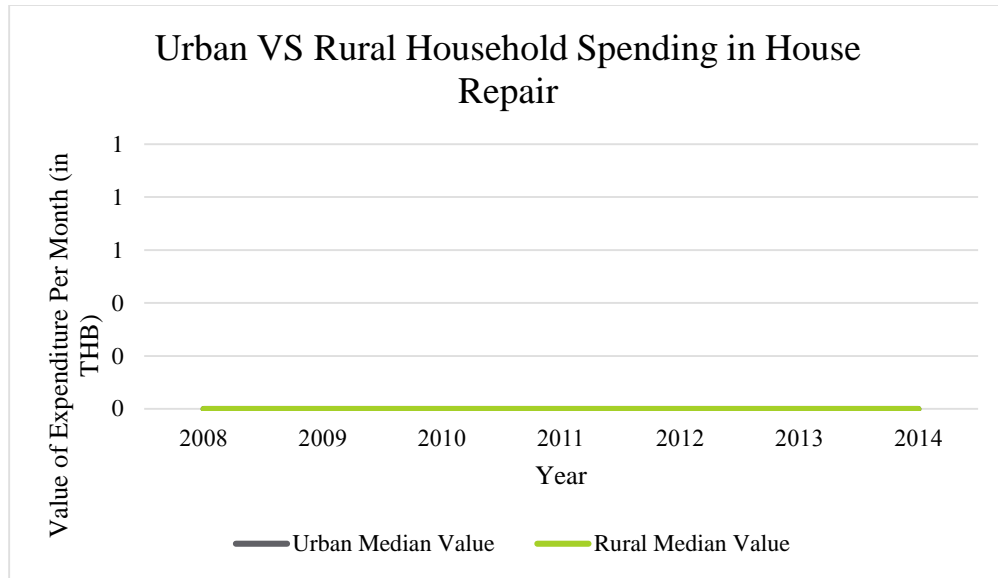


Figure 22: Urban VS Rural Household Spending in House Repair per month

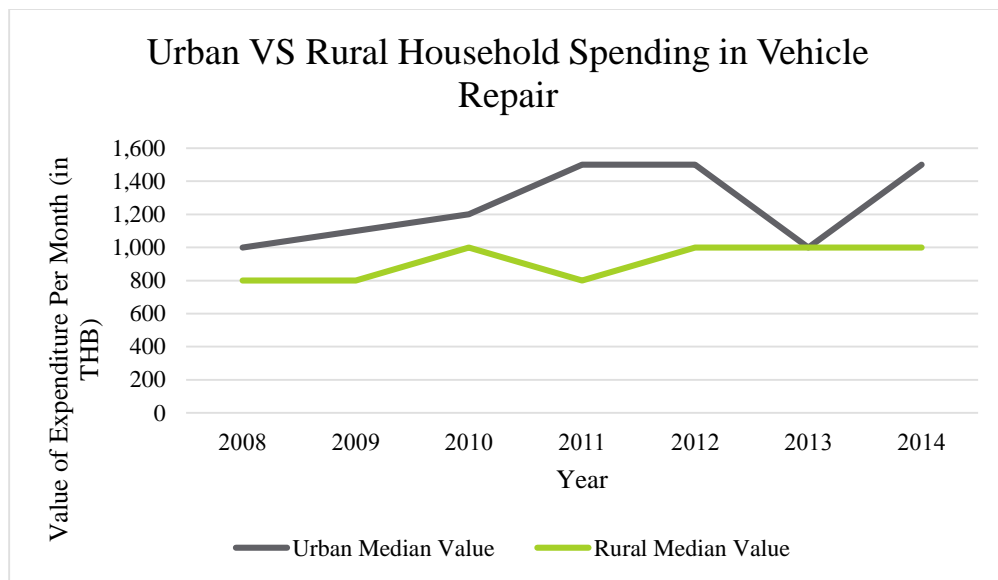
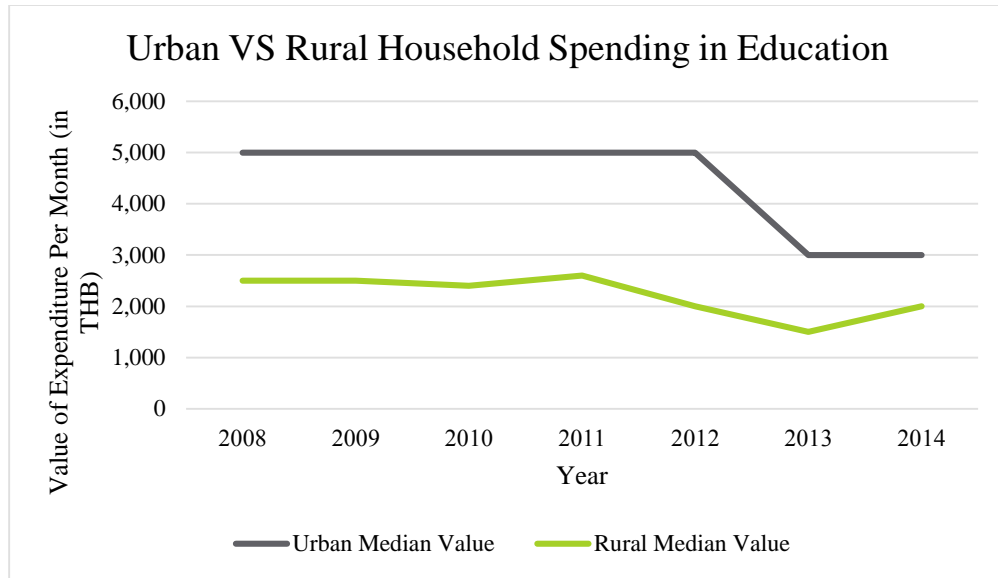
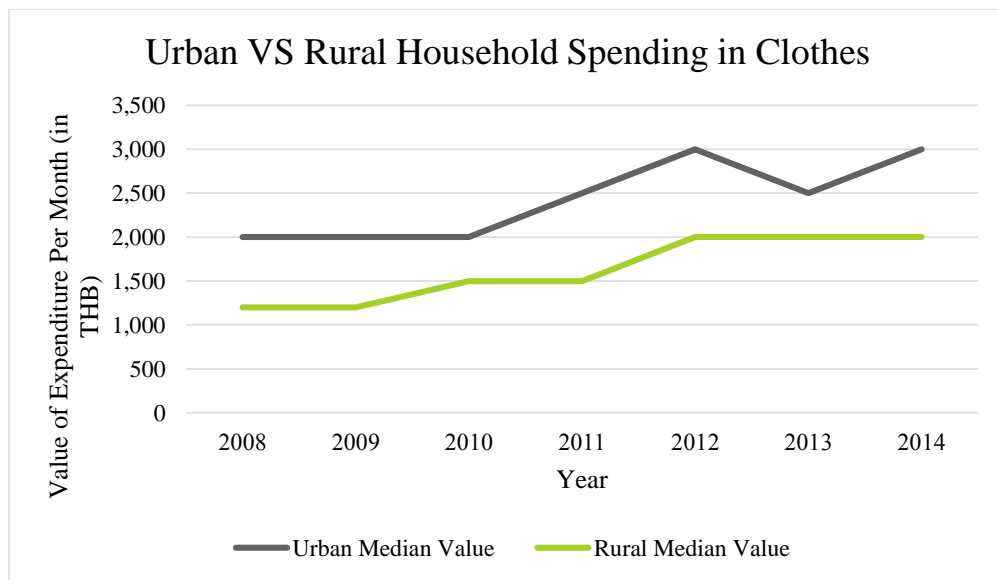


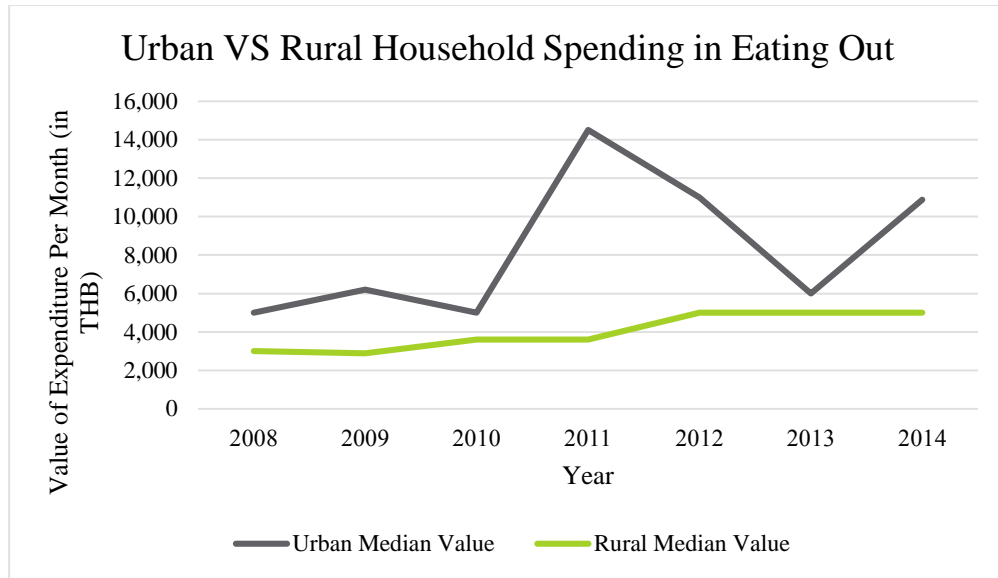
Figure 23: Urban VS Rural Household Spending in Vehicle Repair per month



*Figure 24: Urban VS Rural Household Spending in Education per month*



*Figure 25: Urban VS Rural Household Spending in Clothes per month*



*Figure 26: Urban VS Rural Household Spending in Eating Out per month*

## f. Household Income and Expenses

Overall, Thai households experience constant gross revenue throughout the years, as depicted in Figure 27 and 28. In 2008, the median value of urban household's annual gross revenue is 264,323 THB (7,568 US\$)<sup>10</sup> and increase to 354,319 THB (10,749 US\$) in 2014, while rural household's is 131,100 THB (3,754 US\$) and 213,039 THB (6,463 US\$) in 2008 and 2014, respectively. Note that since this is yearly data, there's no sign of seasonal pattern of household revenues.<sup>11</sup>

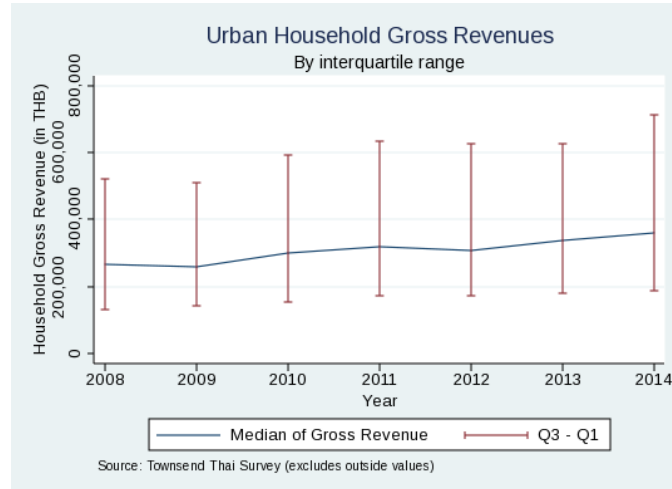


Figure 27: Urban Household Gross Revenues

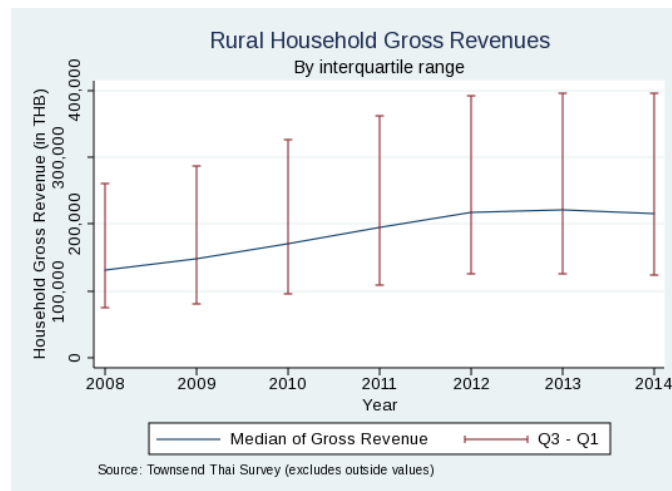


Figure 28: Rural Household Gross Revenues

<sup>10</sup> For the values as of 2008 in this report, we convert the US\$ to THB from US\$/THB closing spot rate of 34.926 as of Dec 30, 2008.

<sup>11</sup> Please see the details on Townsend, R. M., & Suwanik, S. (2016). Townsend Thai Monthly Rural Survey Household Financial Accounting: Data Summaries, *the Townsend Thai Project*.

Table 26 and 27 summarize sources of revenues. Please note that these tables show median value of gross revenues in each source and it is not necessary that each household needs to have several sources of revenue. A household can have revenue from merely one source.

The results show that, in 2014, the largest gross revenue of urban households, in terms of value, lies with business income (312,000 THB or 9,465 US\$), following by salaries (175,200 THB or 5,315 US\$) and wages (90,000 THB or 2,730 US\$). On the other extreme, orchard farming provides the lowest gross revenue in the same period (5,900 THB or 179 US\$). This fact is quite similar to that of rural households where business income is the highest in 2014 (210,000 THB or 6,371 US\$), except the lowest lies with income from rice mill (27,250 THB or 827 US\$).

Let's take a look at the development over time. According to Table 26, the highest value of income in urban households in 2008 is still with business income (200,000 THB or 5,726 US\$), but the second highest is with income from other crop (174,000 THB or 4,982 US\$), while the third is salaries (120,600 THB or 3,453 US\$). This ranking is exactly the same as the one in rural households in 2008, according to Table 27. However, as earlier mentioned, the second highest turns out to be salaries in 2014.



Table 26: Median gross revenues from various sources in urban households\*

2008								2014						
Value in THB	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total
Rice Farming	0	41,000	27,000	19,500	34,000	15,000	20,000	768,000	110,000	60,000	45,000	13,650	35,000	43,405
Corn Farming	0	250,000	0	0	0	37,500	50,000	0	0	0	34,500	0	33,000	33,000
Vegetable Farming	0	22,000	50,000	50,000	0	14,400	36,000	8,800	0	96,000	50,000	72,000	0	55,000
Orchard Farming	0	6,000	17,500	1,000	17,500	12,000	11,000	0	42,500	2,000	5,000	5,000	0	5,900
Other Crop	12,000	23,000	90,000	27,500	200,000	8,000	174,000	0	0	183,600	40,000	74,500	15,000	84,000
Raising Livestock**	900,000	30,000	14,500	10,000	19,000	13,500	15,500	1,200,000	67,500	55,000	30,000	25,500	0	42,500
Wages	60,000	50,000	36,000	43,800	80,000	60,000	56,980	104,500	77,500	75,000	60,000	82,500	102,500	90,000
Salaries	144,000	144,000	133,200	114,000	96,000	114,375	120,600	180,000	216,000	202,800	147,000	108,000	180,000	175,200
Rice Mill	0	0	13,200	0	0	9,750	12,000	0	0	0	0	54,500	0	54,500
Business Income***	237,500	234,000	264,000	240,000	120,000	168,000	200,000	300,000	256,000	520,800	300,000	230,400	374,000	312,000
Other Income****	72,000	36,000	43,200	50,000	80,000	54,000	54,000	43,000	29,000	48,000	36,000	36,000	48,000	39,000

\* This table shows median value of each type of revenue. It counts from households who have non-zero revenues from each source.

\*\* Raising Livestock consists of Raising Shrimp, Raising Fish, Raising Chicken or Ducks, raising Pigs, Cows or Buffalo, Raising other Livestock. The values shown on the table are the medians of the averages of these activities.

\*\*\* Business Income mainly consists of Store, Mechanic/Repair Shop, Hair Salon/Barber, Restaurant/Noodle Shop, Trading etc. The values shown on the table are the medians of the averages of these activities.

\*\*\*\* Other Income is, e.g., Payments for Renting Land, Payments for other Rentals, Government Assistant, Interest on Savings etc. The values shown on the table are the medians of the averages of these activities.

Table 27: Median gross revenues from various sources in rural households\*

2008								2014						
Value in THB	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total
Rice Farming	120,000	40,320	20,125	20,000	0	16,420	25,000	169,000	70,000	57,920	56,000	0	40,000	60,000
Corn Farming	13,500	110,000	10,000	30,000	0	50,000	40,000	40,750	50,000	0	0	0	88,000	60,000
Vegetable Farming	27,500	29,000	14,000	21,000	8,000	13,000	24,820	45,500	95,000	0	27,500	48,000	20,000	40,000
Orchard Farming	55,050	96,400	46,000	180,000	76,800	26,500	70,000	62,000	129,600	70,500	75,000	25,000	55,000	85,000
Other Crop	69,000	21,500	35,000	40,000	192,000	14,000	80,000	325,000	0	126,125	100,000	120,000	0	120,000
Raising Livestock**	19,500	24,000	16,250	14,000	109,475	29,200	17,000	8,000	65,000	40,000	26,000	28,000	29,750	33,000
Wages	52,920	60,000	23,040	29,400	75,000	35,000	38,000	75,000	96,000	54,000	50,000	75,000	70,000	72,000
Salaries	61,200	91,200	61,200	60,000	84,000	126,000	72,000	132,600	108,000	80,880	94,800	93,600	81,000	100,200
Rice Mill	50,000	0	9,000	26,000	0	72,000	20,000	0	0	30,000	21,250	0	64,800	27,250
Business Income***	120,000	156,000	118,000	72,000	120,000	96,000	120,000	210,000	284,000	264,000	87,000	132,000	210,000	210,000
Other Income****	31,590	20,000	19,200	20,000	80,000	24,000	24,000	30,000	25,000	36,000	31,850	48,000	24,000	30,000

\* This table shows median value of each type of revenue. It counts from households who have non-zero revenues from each source.

\*\* Raising Livestock consists of Raising Shrimp, Raising Fish, Raising Chicken or Ducks, raising Pigs, Cows or Buffalo, Raising other Livestock. The values shown on the table are the medians of the averages of these activities.

\*\*\* Business Income mainly consists of Store, Mechanic/Repair Shop, Hair Salon/Barber, Restaurant/Noodle Shop, Trading etc. The values shown on the table are the medians of the averages of these activities.

\*\*\*\* Other Income is, e.g., Payments for Renting Land, Payments for other Rentals, Government Assistant, Interest on Savings etc. The values shown on the table are the medians of the averages of these activities.

If we consider net income, which is the gross revenue deducted by business/farm expenses (we will elaborate the detail later), the similar patterns occur. In 2008, the median net income for urban households is around 173,540 THB (4,969 US\$) and increases to 265,930 THB (8,067 US\$) in 2014. Similarly, the median net income for rural households is a bit lower from urban households, i.e., 101,505 THB (2,906 US\$) and increases to 175,050 THB (5,310 US\$) in 2014.

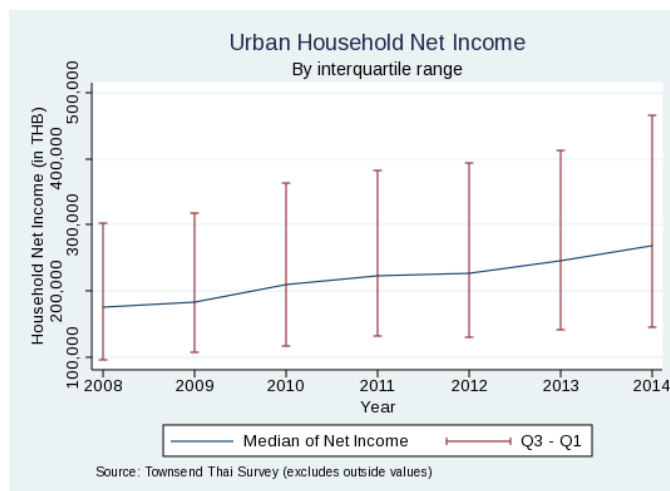


Figure 29: Urban Household Net Income

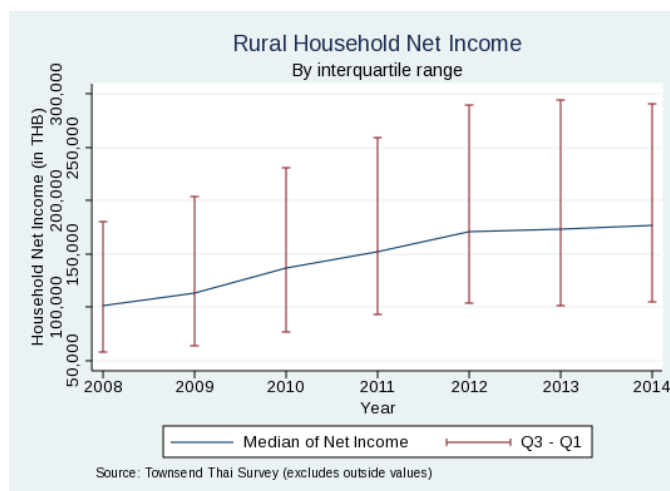


Figure 30: Rural Household Net Income

Regarding the net income distribution across changwats, according to Table 26a, we see that, in 2008, urban households in Chachoengsao possess the most net income both in terms of mean (8,600 US\$) and median (6,500 US\$), while urban households in Sisaket do the least, in terms of mean (5,352 US\$) and median (3,539 US\$). However, in 2014, the picture has changed for the most net income changwat in urban area: urban households in Buriram become the most net income changwat in terms of both mean (14,823 US\$) and median (the same value as mean). On the other hand, urban households in Sisaket and Satun are ranked the lowest in value of net income in terms of median (5,473 US\$) and mean (7,036 US\$), respectively.

Table 26a: Distribution of Urban Net Income in 2008 (By Changwats)

(in THB)	Min	Max	Mean	Std. dev.	1 <sup>st</sup> Quartile	Median	3 <sup>rd</sup> Quartile
<b>Chachoengsao</b>	11,000	2,812,800	300,337.4	321,713	120,200	227,000	366,600
<b>Lopburi</b>	-123,200	1,887,460	264,794.3	248,304.4	120,300	191,130	319,250
<b>Buriram</b>	29,868	1,482,272	262,563.2	213,658.3	121,425	204,110	337,750
<b>Sisaket</b>	7,650	1,336,000	186,906.8	190,424.2	66,400	123,600	241,090
<b>Satun</b>	7,900	1,463,300	214,789.3	192,903.4	102,000	162,302.5	262,660
<b>Phrae</b>	6,000	2,015,300	213,249.8	253,278.7	78,000	141,000	255,100
All	<b>-123,200</b>	<b>2,812,800</b>	<b>241,077.5</b>	<b>243,892.4</b>	<b>96,000</b>	<b>173,540</b>	<b>300,520</b>

Table 26b: Distribution of Urban Net Income in 2014 (By Changwats)

(in THB)	Min	Max	Mean	Std. dev.	1 <sup>st</sup> Quartile	Median	3 <sup>rd</sup> Quartile
<b>Chachoengsao</b>	27,200	1,697,600	424,194.3	315,882.5	180,000	340,310	577,200
<b>Lopburi</b>	7,200	1,396,435	321,123.1	257,323.1	145,040	256,180	389,357.5
<b>Buriram</b>	62,800	2,271,650	488,635.2	368,643.5	251,500	488,635.2	590,740
<b>Sisaket</b>	37,200	1,263,957	255,720.4	212,766.2	109,936	180,425	339,659
<b>Satun</b>	11,000	1,456,000	231,921.3	172,161.3	114,355	201,925	308,972.5
<b>Phrae</b>	40,800	2,065,300	351,951.2	320,189.7	137,652.5	270,000	439,412.5
All	<b>7,200</b>	<b>2,271,650</b>	<b>346,191</b>	<b>295,786</b>	<b>143,200</b>	<b>265,930</b>	<b>443,225</b>

Speaking of rural households, according to Table 27a, we see that, in 2008, Satun turns out to lead the competition, both in terms of mean (5,893 US\$) and median (4,570 US\$), whereas Sisaket has the least, in terms of mean (2,908 US\$) and median (2,001 US\$) (this is similar to urban households). However, in 2014, Chachoengsao turns out to be number one on the list in terms of both mean (10,362 US\$) and median (7,021 US\$), while Sisaket is still ranked the lowest in terms of mean (4,842 US\$) and median (3,612 US\$).

Table 27a: Distribution of Rural Net Income in 2008 (By Changwats)

(in THB)	Min	Max	Mean	Std. dev.	1 <sup>st</sup> Quartile	Median	3 <sup>rd</sup> Quartile
<b>Chachoengsao</b>	-418,000	1,508,500	192,023.3	193,002	72,650	147,060	238,532.5
<b>Lopburi</b>	-17,625	1,105,100	186,671.9	166,712.5	81,582	140,746	223,816
<b>Buriram</b>	-1,300	1,464,650	119,280.4	145,586.5	49,800	77,700	134,000
<b>Sisaket</b>	11,000	915,000	101,557.1	117,944.7	43,330	69,875	110,800
<b>Satun</b>	21,000	2,054,000	205,831	220,008.1	102,500	159,600	265,300
<b>Phrae</b>	-26,260	5,825,000	166,876.4	616,154.1	39,000	77,800	127,700
All	<b>-418,000</b>	<b>5,825,000</b>	<b>156,467.2</b>	<b>239,778.2</b>	<b>57,500</b>	<b>101,505</b>	<b>180,600</b>

Table 27b: Distribution of Rural Net Income in 2014 (By Changwats)

(in THB)	Min	Max	Mean	Std. dev.	1 <sup>st</sup> Quartile	Median	3 <sup>rd</sup> Quartile
<b>Chachoengsao</b>	-6,357	4,435,010	341,559.4	446,302.9	122,910	231,450	408,800
<b>Lopburi</b>	9,400	2,243,215	257,250.9	270,767.5	121,010	188,735	300,660
<b>Buriram</b>	33,960	4,405,070	290,201.9	390,368.4	134,525	193,860	325,225
<b>Sisaket</b>	20,400	1,152,500	159,620.9	132,708.8	88,000	119,059	185,600
<b>Satun</b>	29,160	1,054,000	230,725	189,645.7	98,000	178,720	279,200
<b>Phrae</b>	12,000	798,155	190,174.4	142,970.2	94,360	158,782.5	246,000
All	<b>-6,357</b>	<b>4,435,010</b>	<b>251,997.2</b>	<b>314,133</b>	<b>105,225</b>	<b>175,050</b>	<b>288,255</b>

Now we take a look at expenses, Figure 31 and 32 show total expenses, including business, fish/shrimp and farm expenses, which are relatively constant throughout the years. However, when we consider each category, we clearly see that urban household expenses mainly stem from business, whereas rural household expenses come from farming. This is exactly in line with the sources of revenue we mentioned earlier. Surprisingly, there's not much expenses in fish/shrimp farming as shown in Figure 35 and 36, i.e., within interquartile range, households do not have this kind of expenses.

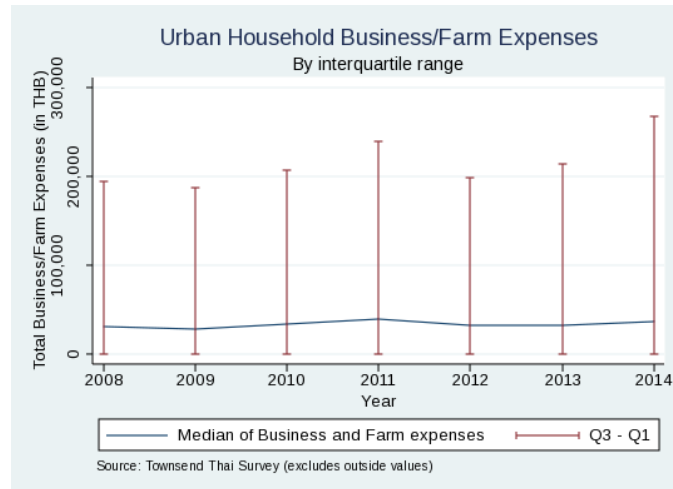


Figure 31: Urban Household Total Business/Farm Expenses

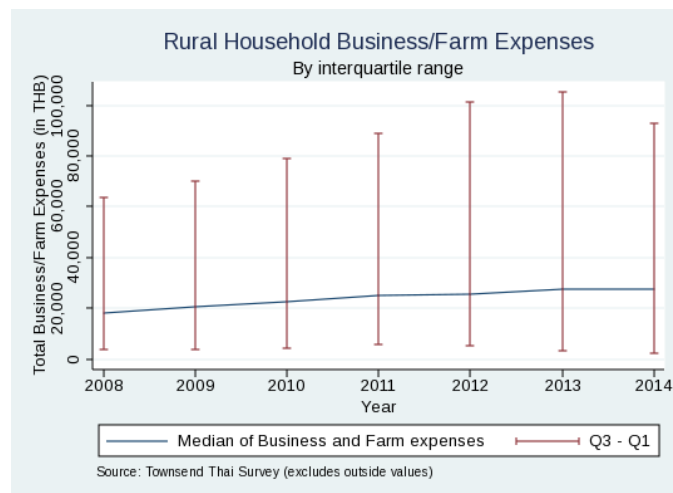


Figure 32: Rural Household Total Business/Farm Expenses

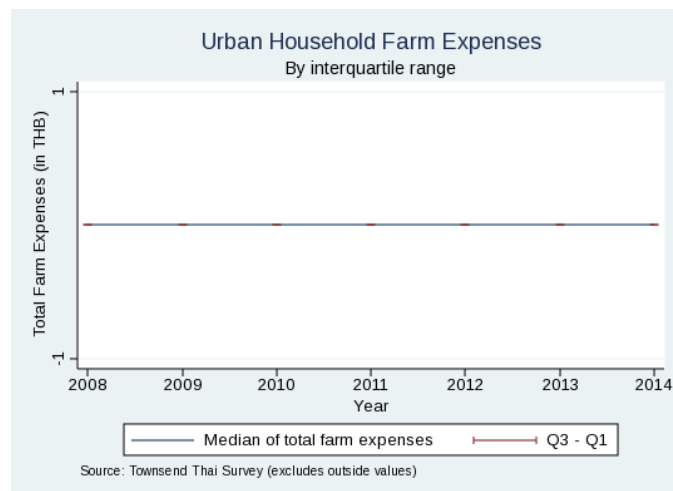
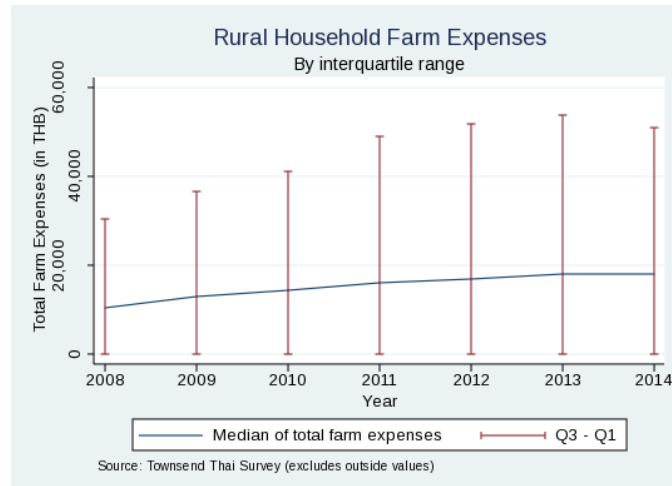
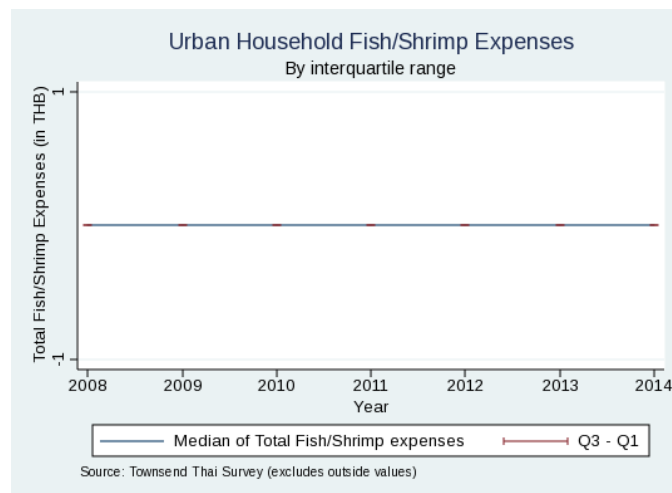


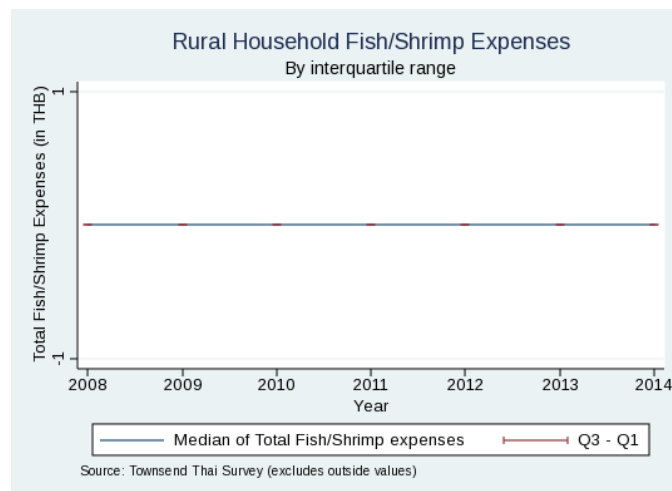
Figure 33: Urban Household Farm Expenses



*Figure 34: Rural Household Farm Expenses*



*Figure 35: Urban Household Fish and Shrimp Expenses*



*Figure 36: Rural Household Fish and Shrimp Expenses*

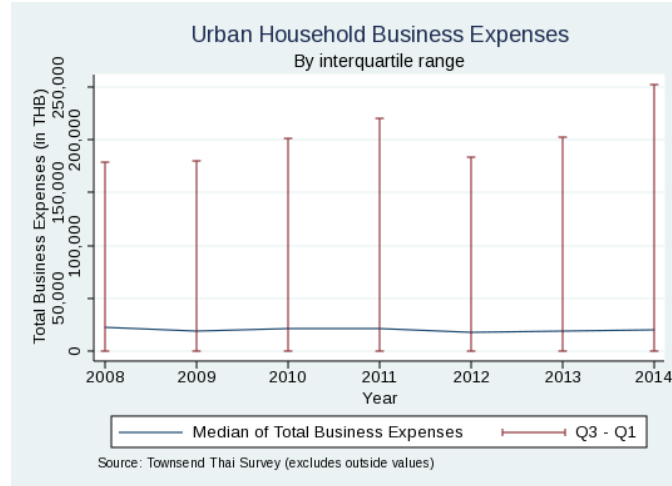


Figure 37: Urban Household Business Expenses

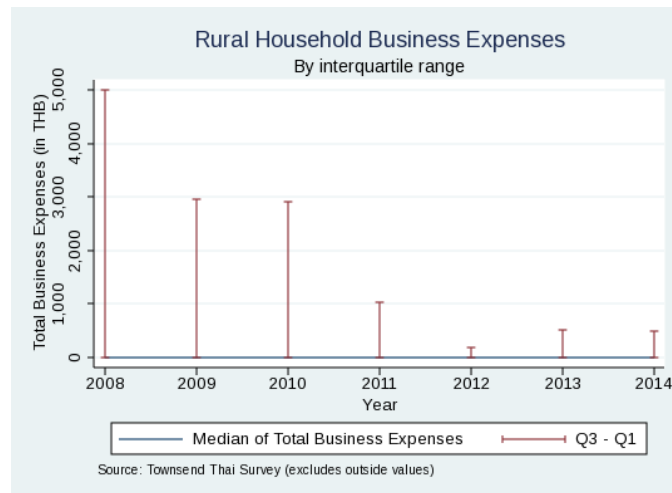


Figure 38: Rural Household Business Expenses

We now consider rural farm expenses (Table 28a and 28b) and urban and rural business expenses (Table 29a to 30b). By changwat wise, rural households in Chachoengsao have the highest farm expense in terms of both mean (approximately 59,260 THB or 1,697 US\$ in 2008 and 75,600 THB or 2,293 US\$ in 2014) and median (21,680 THB or 621 US\$) in 2008, except 2014 median, of which Buriram is the highest (34,950 THB or 1,060 US\$). The least farm expenses lie with rural households in Phrae, both in terms of mean (10,980 THB or 314 US\$ in 2008 and 12,520 THB or 380 US\$ in 2014) and median (approximately 3,950 THB or 113 US\$ in 2008 and 5,450 THB or 165 US\$ in 2014).

Throughout the years, the farm expenses in rural area are gradually higher, as earlier shown in Figure 34.



*Table 28a: Distribution of Rural Farm Expenses in 2008 (By Changwats)*

(in THB)	Min	Max	Mean	Std. dev.	1 <sup>st</sup> Quartile	Median	3 <sup>rd</sup> Quartile
<b>Chachoengsao</b>	0	920,000	59,258.34	106,643.6	0	21,680	79,015
<b>Lopburi</b>	0	607,700	31,874.49	75,348	0	0	28,050
<b>Buriram</b>	0	208,300	23,652.68	26,700.14	7,800	16,700	32,350
<b>Sisaket</b>	0	120,000	13,677.49	16,626.19	3,200	8,500	17,831
<b>Satun</b>	0	1,946,000	42,580.33	189,773.4	0	9,250	25,284
<b>Phrae</b>	0	118,300	10,980.51	20,565.52	0	3,950	13,050
All	<b>0</b>	<b>1,946,000</b>	<b>31,334.55</b>	<b>86,819.86</b>	<b>0</b>	<b>10,400</b>	<b>30,250</b>

*Table 28b: Distribution of Rural Farm Expenses in 2014 (By Changwats)*

(in THB)	Min	Max	Mean	Std. dev.	1 <sup>st</sup> Quartile	Median	3 <sup>rd</sup> Quartile
<b>Chachoengsao</b>	0	1,086,000	75,598.43	121,946	0	27,070	115,701.5
<b>Lopburi</b>	0	1,439,800	44,628.61	122,819	0	0	43,000
<b>Buriram</b>	0	707,050	62,254.4	88,400.64	15,060	34,950	80,200
<b>Sisaket</b>	0	94,750	23,618.96	21,646.41	7,700	18,900	35,100
<b>Satun</b>	0	1,029,100	35,459.53	106,743.8	3,000	12,300	31,000
<b>Phrae</b>	0	85,170	12,523.26	18,231.33	0	5,452.5	16,175
All	<b>0</b>	<b>1,439,800</b>	<b>46,473.65</b>	<b>96,452.98</b>	<b>0</b>	<b>17,750</b>	<b>49,320</b>

For urban households, Chachoengsao holds the highest business expenses in terms of both median (48,280 THB or 1,382 US\$ in 2008 and 33,400 THB or 1,013 US\$ in 2014) and mean (approximately 329,670 THB or 9,439 US\$) in 2008, except 2014 mean, of which Phrae is the highest (around 278,170 THB or 8,439 US\$, though its median is zero). The least farm expense lies with rural households in Phrae, both in terms of mean (10,980 THB or 314 US\$ in 2008 and 12,520 THB or 380 US\$ in 2014) and median (approximately 3,950 THB or 113 US\$ in 2008 and 5,450 THB or 165 US\$ in 2014).

In 2008, the least business expenses lie with urban households in Satun, both in terms of mean (49,560 THB or 1,419 US\$) and median (0 THB or 0 US\$). This fact is still true in 2014 (around 154,455 THB or 4,686 US\$ in terms of mean).

Table 29a: Distribution of Urban Business Expenses in 2008 (By Changwats)

(in THB)	Min	Max	Mean	Std. dev.	1 <sup>st</sup> Quartile	Median	3 <sup>rd</sup> Quartile
<b>Chachoengsao</b>	0	1.24e+07	329,672.9	994,363.6	0	48,280	306,960
<b>Lopburi</b>	0	1,977,600	201,329.5	339,183.6	0	45,000	300,000
<b>Buriram</b>	0	4,760,400	209,045.7	463,208.6	0	41,285	257,600
<b>Sisaket</b>	0	4,516,000	226,275.9	542,034	0	20,250	198,000
<b>Satun</b>	0	813,000	49,559.56	123,713.1	0	0	39,600
<b>Phrae</b>	0	2,892,000	110,500.2	345,793.9	0	8,500	78,800
All	<b>0</b>	<b>1.24e+07</b>	<b>193,067.1</b>	<b>558,130.4</b>	<b>0</b>	<b>21,500</b>	<b>172,900</b>

Table 29b: Distribution of Urban Business Expenses in 2014 (By Changwats)

(in THB)	Min	Max	Mean	Std. dev.	1 <sup>st</sup> Quartile	Median	3 <sup>rd</sup> Quartile
<b>Chachoengsao</b>	0	4,855,200	251,932.7	553,807.5	0	33,400	252,000
<b>Lopburi</b>	0	3,558,200	163,547.5	361,109.4	0	24,950	193,480
<b>Buriram</b>	0	7,272,700	366,944.6	822,738	0	68,400	425,000
<b>Sisaket</b>	0	6,808,600	191,733.8	618,180.4	0	0	138,000
<b>Satun</b>	0	7,200,760	154,455.5	592,005.3	0	0	128,790.5
<b>Phrae</b>	0	7,006,500	278,173.1	765,376.1	0	0	218,150
All	<b>0</b>	<b>7,272,700</b>	<b>234,160.8</b>	<b>636,842.5</b>	<b>0</b>	<b>14,350</b>	<b>223,000</b>

Like urban area, rural households in Chachoengsao, in 2008, have the highest business expenses in terms of mean (approximately 91,470 THB or 2,619 US\$), though median is zero. However, in 2014, rural households in Satun becomes the changwat that has the highest business expenses (143,320 THB or 4,348 US\$).

The least business expenses are, approximately, with Satun in 2008 (19,060 THB or 546 US\$) and Sisaket in 2014 (11,890 THB or 361 US\$).

*Table 30a: Distribution of Rural Business Expenses in 2008 (By Changwats)*

(in THB)	Min	Max	Mean	Std. dev.	1 <sup>st</sup> Quartile	Median	3 <sup>rd</sup> Quartile
<b>Chachoengsao</b>	0	2,292,560	91,467.71	283,146.8	0	0	22,450
<b>Lopburi</b>	0	1,314,000	63,535.19	182,881.7	0	0	21,000
<b>Buriram</b>	0	1,230,320	65,770.79	204,641.2	0	0	12,000
<b>Sisaket</b>	0	3,303,000	39,095.04	313,190	0	0	0
<b>Satun</b>	0	835,800	19,061.57	86,242.28	0	0	0
<b>Phrae</b>	0	595,300	44,100.79	102,705.4	0	0	25,480
All	<b>0</b>	<b>3,303,000</b>	<b>58,460.21</b>	<b>233,417.9</b>	<b>0</b>	<b>0</b>	<b>5,000</b>

*Table 30b: Distribution of Rural Business Expenses in 2014 (By Changwats)*

(in THB)	Min	Max	Mean	Std. dev.	1 <sup>st</sup> Quartile	Median	3 <sup>rd</sup> Quartile
<b>Chachoengsao</b>	0	2,793,200	81,579.46	267,165.6	0	0	13,770
<b>Lopburi</b>	0	2,034,600	55,631.84	224,830	0	0	0
<b>Buriram</b>	0	3,917,980	124,780.5	461,556.8	0	0	13,450
<b>Sisaket</b>	0	830,000	11,886.51	67,380.65	0	0	0
<b>Satun</b>	0	7,680,000	143,320.7	818,844.7	0	0	0
<b>Phrae</b>	0	733,204	52,235.57	138,480.9	0	0	32,700
All	<b>0</b>	<b>7,680,000</b>	<b>73,469.27</b>	<b>369,742.3</b>	<b>0</b>	<b>0</b>	<b>350</b>

### g. Borrowings

We categorize borrowings into formal borrowing (from BAAC (Bank for Agriculture and Agricultural Cooperatives), PCG (Production Credit Group), Commercial bank, Agricultural Cooperative, Village Fund and Rice Bank) and informal borrowing (from neighbor, relative, moneylender, store owner, supplier of inputs, landlord and purchaser of output).

*Table 31: Percentage of households borrowing money*

Of Changwats (% of total # of households)	2008		2014	
	Urban	Rural	Urban	Rural
	household	household	household	household
<b>Chachoengsao</b>	39	76	18	59
<b>Lopburi</b>	87	81	65	65
<b>Buriram</b>	66	91	46	79
<b>Sisaket</b>	79	79	68	75
<b>Satun</b>	52	57	49	41
<b>Phrae</b>	69	74	44	62
Total	<b>65</b>	<b>78</b>	<b>48</b>	<b>66</b>

As shown in Table 31, both households in urban and rural areas tend to decrease their borrowings over time. The percentage of borrowing in most of urban households in 2014, specifically households in Chachoengsao, Buriram, Satun and Phrae is less than 50% of total number of urban households. However, for rural households, only Satun has less than 50% of households borrowing money.

Regarding sources of borrowing, both households in urban and rural areas heavily rely on formal sources. Besides, it tends to increase this proportion in formal borrowing in 2014, according to Table 32 and 33.

Considering changwats, it is worth pointing out that urban households in Chachoengsao in 2008 is the exception. It relies mainly on informal borrowings (63.39%), which is largely from money lender as shown in Table 32. However, it turns out to borrow more from formal channels, which becomes the largest part of borrowings in 2014. This is in line with other changwats, eventually.

Table 32: Percentage of urban households borrowing from each source

2008								2014						
Of Changwats (% of total # of households borrow)	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total
<b>Formal Borrowings</b>	<b>17.37</b>	<b>77.50</b>	<b>76.02</b>	<b>83.82</b>	<b>77.55</b>	<b>74.33</b>	<b>71.58</b>	<b>42.55</b>	<b>85.95</b>	<b>81.87</b>	<b>94.22</b>	<b>69.89</b>	<b>91.71</b>	<b>85.89</b>
- BAAC	-	4.11	9.25	15.30	26.53	16.33	10.14	-	5.04	15.03	17.63	22.58	11.40	12.31
- PCG	-	3.21	7.53	3.33	3.06	1.33	3.24	-	2.92	8.29	2.11	13.98	-	3.74
- Commercial Bank	5.16	3.93	0.34	2.44	-	3.33	2.87	10.64	3.98	0.52	2.11	4.30	1.55	2.81
- Agricultural Coop	-	0.89	3.08	6.65	10.20	3.67	3.40	-	0.80	3.11	7.63	11.83	2.59	4.21
- Village Fund	12.21	65.36	55.82	56.10	37.76	49.67	51.93	31.91	73.21	54.92	64.74	17.20	76.17	62.82
- Rice Bank	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Informal Borrowings</b>	<b>63.39</b>	<b>11.79</b>	<b>9.58</b>	<b>6.88</b>	<b>8.16</b>	<b>3.67</b>	<b>14.58</b>	<b>21.27</b>	<b>1.60</b>	<b>2.08</b>	<b>0</b>	<b>1.08</b>	<b>1.56</b>	<b>1.88</b>
- Neighbor	0.47	-	0.68	0.67	1.02	-	0.37	-	-	0.52	-	-	-	0.08
- Relative	2.82	2.86	3.42	1.33	1.02	2.33	2.40	6.38	0.80	0.52	-	-	-	0.55
- Money lender	46.95	6.61	4.45	3.77	1.02	0.67	8.88	8.51	0.27	-	-	-	0.52	0.47
- Store owner	13.15	2.32	1.03	1.11	5.10	0.67	2.93	6.38	0.53	1.04	-	1.08	1.04	0.78
- Supplier of inputs	-	-	-	-	-	-	-	-	-	-	-	-	-	-
- Landlord	-	-	-	-	-	-	-	-	-	-	-	-	-	-
- Purchaser of output	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Others</b>	<b>19.25</b>	<b>10.71</b>	<b>14.38</b>	<b>9.31</b>	<b>14.29</b>	<b>22.00</b>	<b>13.85</b>	<b>36.17</b>	<b>12.47</b>	<b>16.06</b>	<b>5.79</b>	<b>29.03</b>	<b>6.74</b>	<b>12.24</b>
<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

Table 33: Percentage of rural households borrowing from each source

Of Changwats (% of total # of households borrow)	2008							2014						
	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total	Chachoengsao	Lopburi	Buriram	Sisaket	Satun	Phrae	Total
<b>Formal Borrowings</b>	<b>71.02</b>	<b>73.82</b>	<b>81.14</b>	<b>85.57</b>	<b>86.66</b>	<b>82.65</b>	<b>78.18</b>	<b>86.00</b>	<b>80.16</b>	<b>85.47</b>	<b>97.90</b>	<b>71.73</b>	<b>94.57</b>	<b>87.58</b>
- BAAC	26.68	13.03	25.67	26.60	35.00	18.88	22.91	30.25	14.68	28.49	29.56	39.13	13.04	25.16
- PCG	4.31	4.74	9.49	5.13	3.33	-	5.70	4.29	3.77	0.58	2.69	-	1.09	2.42
- Commercial Bank	0.67	1.18	-	0.32	-	1.53	0.58	0.90	1.59	0.14	0.58	2.17	1.09	0.79
- Agricultural Coop	4.45	8.16	2.34	7.05	10.00	8.67	5.58	3.16	5.95	4.17	8.64	13.04	3.26	5.43
- Village Fund	34.91	46.71	42.97	46.47	38.33	53.57	43.23	47.40	54.17	52.09	56.43	17.39	76.09	53.78
- Rice Bank	-	-	0.67	-	-	-	0.18	-	-	-	-	-	-	-
<b>Informal Borrowings</b>	<b>12.39</b>	<b>6.58</b>	<b>6.36</b>	<b>4.32</b>	<b>6.66</b>	<b>4.59</b>	<b>7.28</b>	<b>2.48</b>	<b>3.38</b>	<b>2.44</b>	<b>0.19</b>	<b>4.34</b>	<b>0.54</b>	<b>2.18</b>
- Neighbor	0.54	0.92	0.45	1.44	-	-	0.73	-	-	-	-	2.17	-	0.04
- Relative	3.91	1.84	2.68	0.96	-	2.04	2.35	0.68	0.60	0.72	-	-	0.54	0.63
- Money lender	1.08	2.50	2.90	1.60	3.33	0.51	2.01	-	0.79	1.58	0.19	-	-	0.67
- Store owner	4.04	0.66	0.22	0.32	3.33	2.04	1.37	0.90	1.39	0.14	-	2.17	-	0.54
- Supplier of inputs	2.56	0.53	-	-	-	-	0.70	0.90	-	-	-	-	-	0.17
- Landlord	0.13	-	-	-	-	-	0.03	-	-	-	-	-	-	-
- Purchaser of output	0.13	0.13	0.11	-	-	-	0.09	-	0.60	-	-	-	-	0.13
<b>Others</b>	<b>16.58</b>	<b>19.61</b>	<b>12.50</b>	<b>10.10</b>	<b>6.67</b>	<b>12.76</b>	<b>14.52</b>	<b>11.51</b>	<b>16.47</b>	<b>12.09</b>	<b>1.34</b>	<b>23.91</b>	<b>4.89</b>	<b>10.24</b>
<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

Speaking of the amount borrowed in formal channels over time, as depicted in Figure 39, it shows that rural households' borrowings are always higher than urban households', though the trend is quite steady.

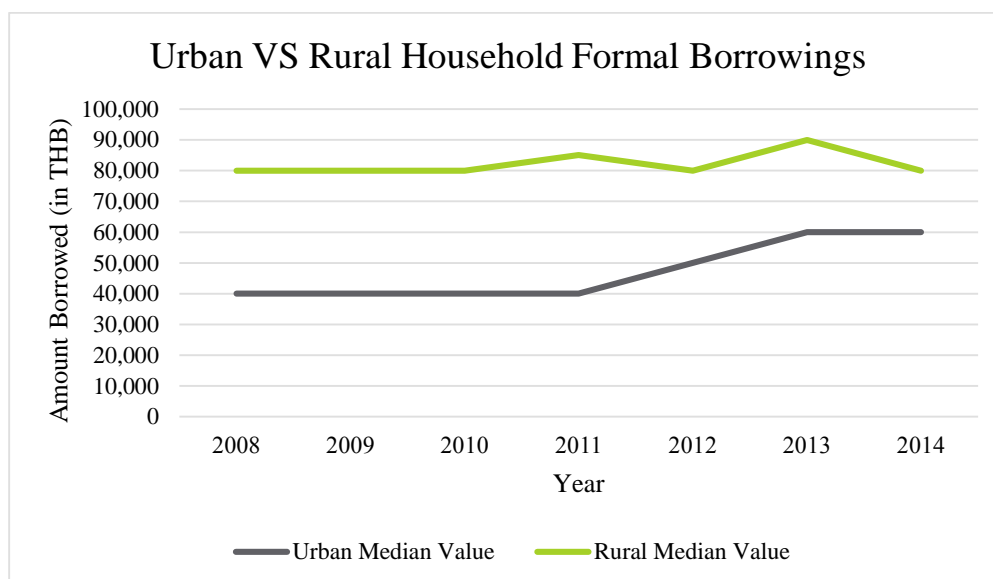


Figure 39: Urban VS Rural Formal Borrowings

Figure 40 shows that urban households in Phrae have the most volatile amount of borrowings from year to year. In terms of the highest amount in 2014, Satun is still the winner, following by Buriram and Phrae/Lopburi. On the other hand, Chachoengsao almost always has the lowest amount of borrowings. However, please recall that Chachoengsao has the smallest proportion of formal borrowings among other changwats.

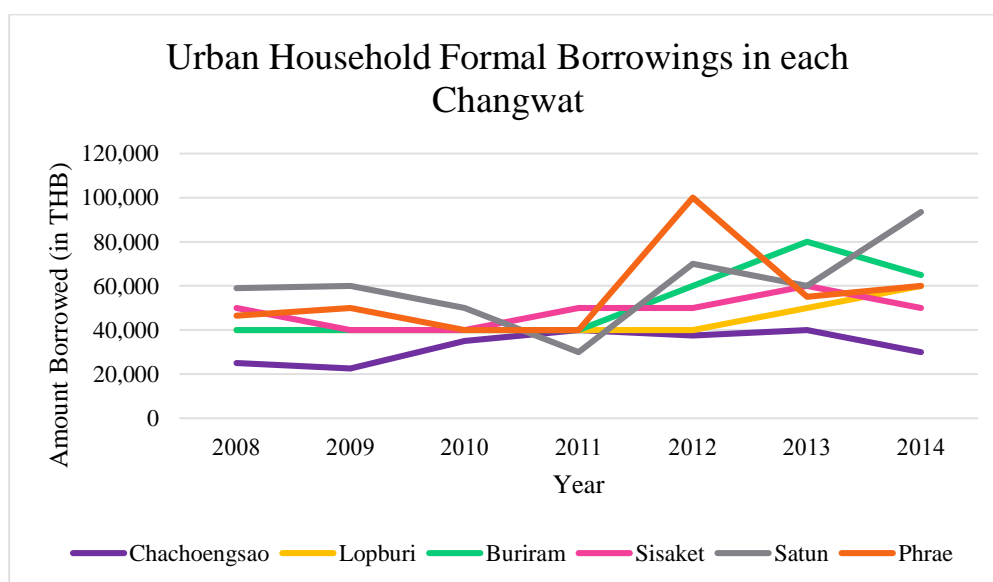
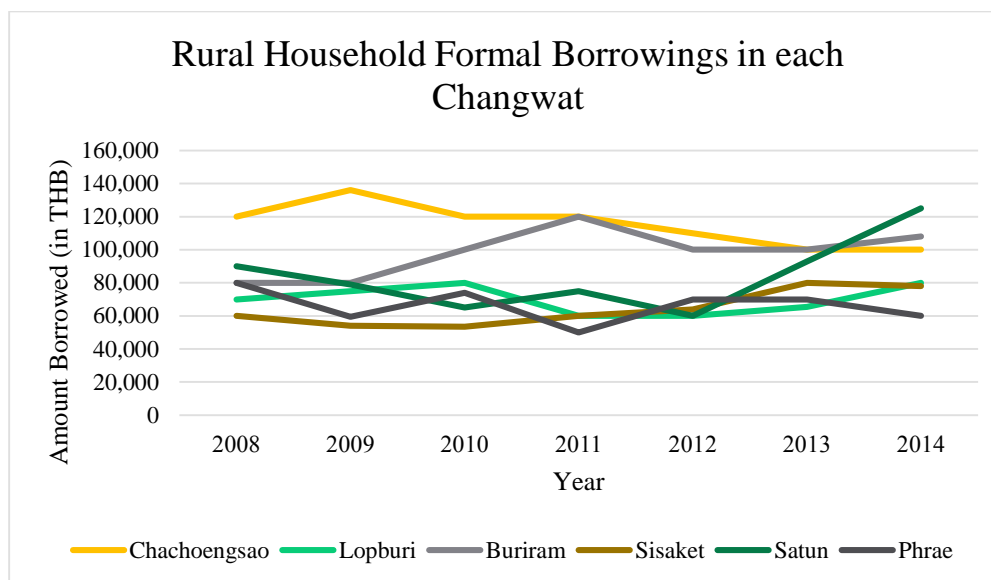


Figure 40: Urban Formal Borrowings in each changwat

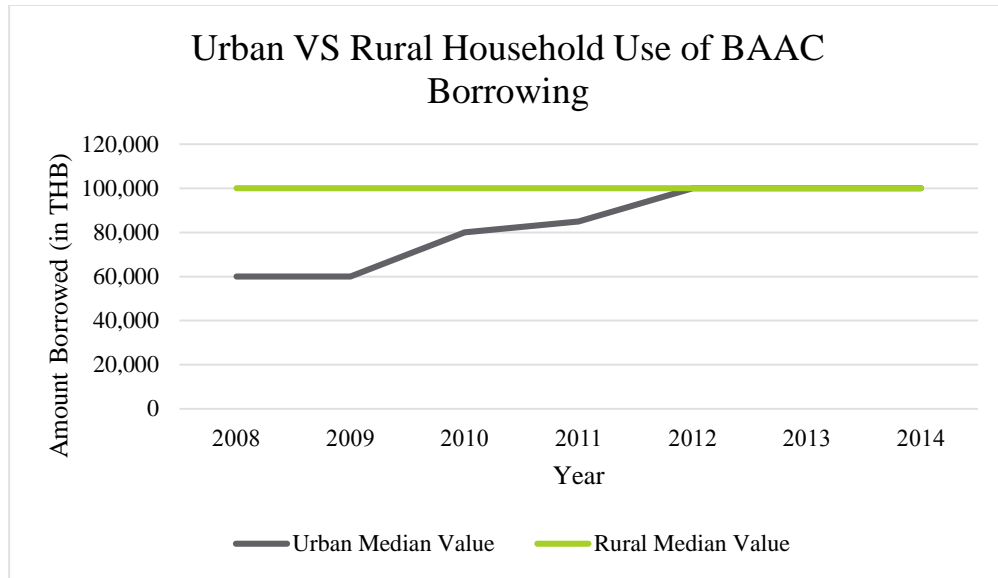
Now we take a look at rural households. It is clear that Chachoengsao has been the highest in terms of amount borrowed during 2008 – 2013. However, in 2014, Satun and Phrae dominate Chachoengsao, which becomes the third place. The lower tier still lies with Sisaket, Lopburi, and Phrae.



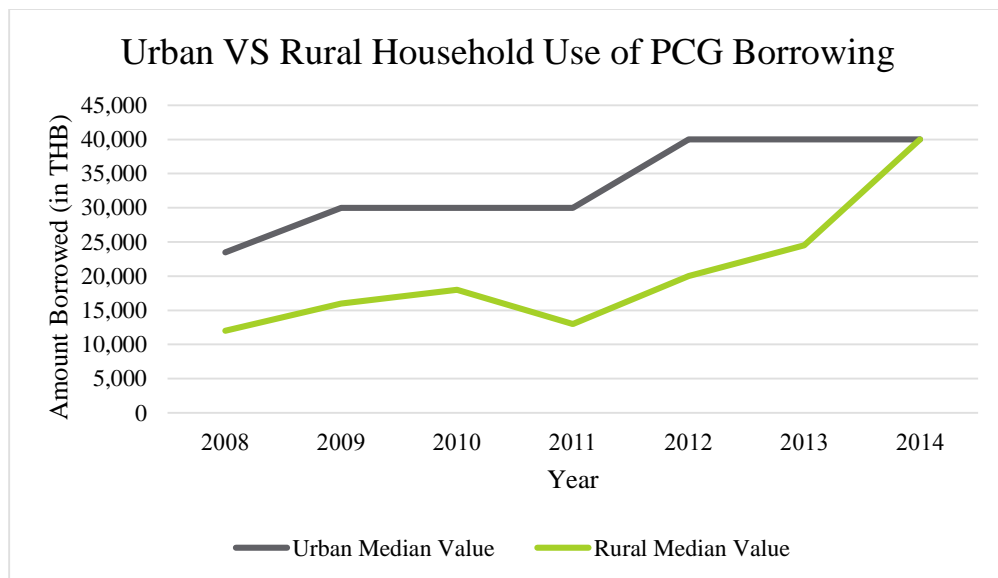
*Figure 41: Rural Formal Borrowings in each changwat*

If we take a look at each source of formal borrowings, from Figure 42 to 47, it is clear that amount borrowed from commercial bank, in terms of median value, is the highest (in 2014, around 450,000 THB or 13,651 US\$ for urban households and 350,000 THB or 10,618 US\$ for rural households). It follows by BAAC (in 2014, around 100,000 THB or 3,034 US\$ for both urban and rural households) and Agricultural Cooperative (80,000 THB or 2,427 US\$ in 2014). Please note that, in Figure 46, both urban and rural households borrow from village funds in constant amount throughout the years, in terms of median value, of 40,000 THB or 1,213 US\$. However, recall that the percentage of borrowing from village fund in both urban and rural households, is increasing over time, as earlier shown in Table 32 and 33, except Satun.

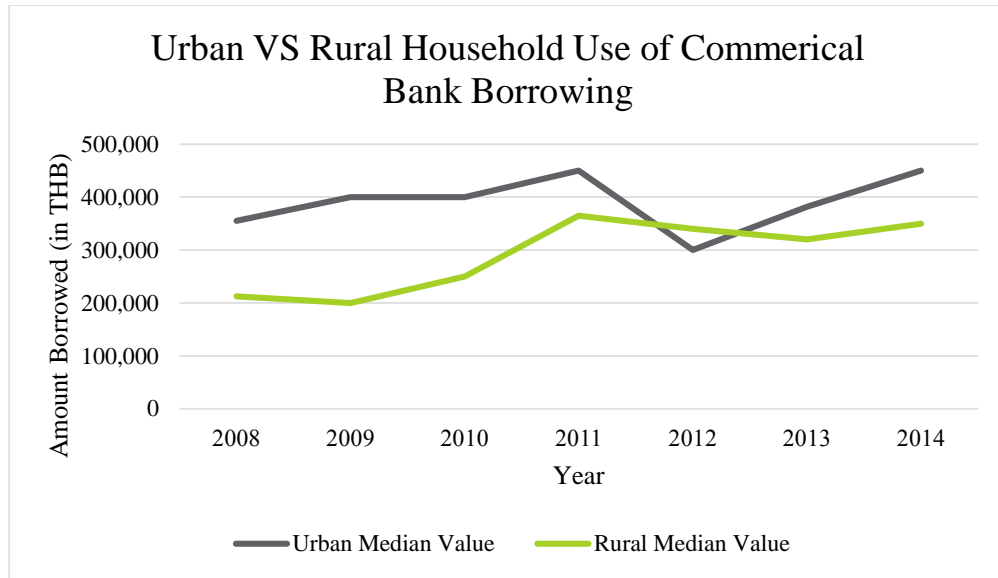




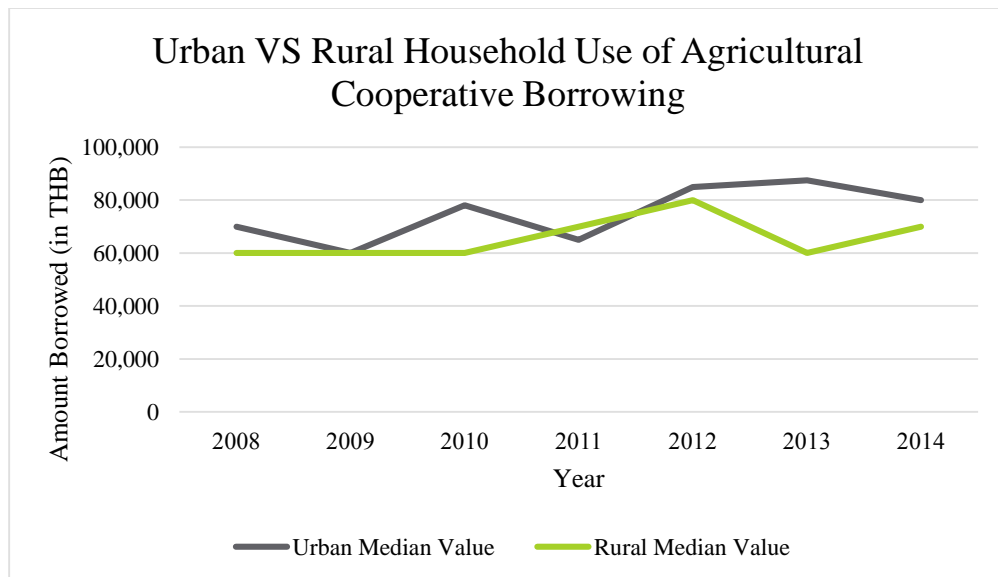
*Figure 42: Urban VS Rural Borrowing from BAAC*



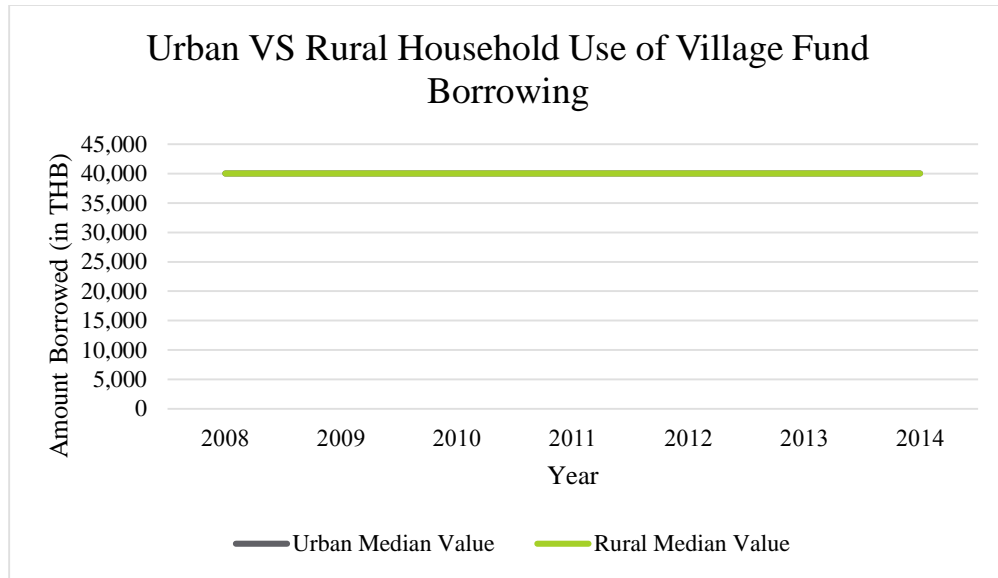
*Figure 43: Urban VS Rural Borrowing from PCG*



*Figure 44: Urban VS Rural Borrowing from Commercial Bank*

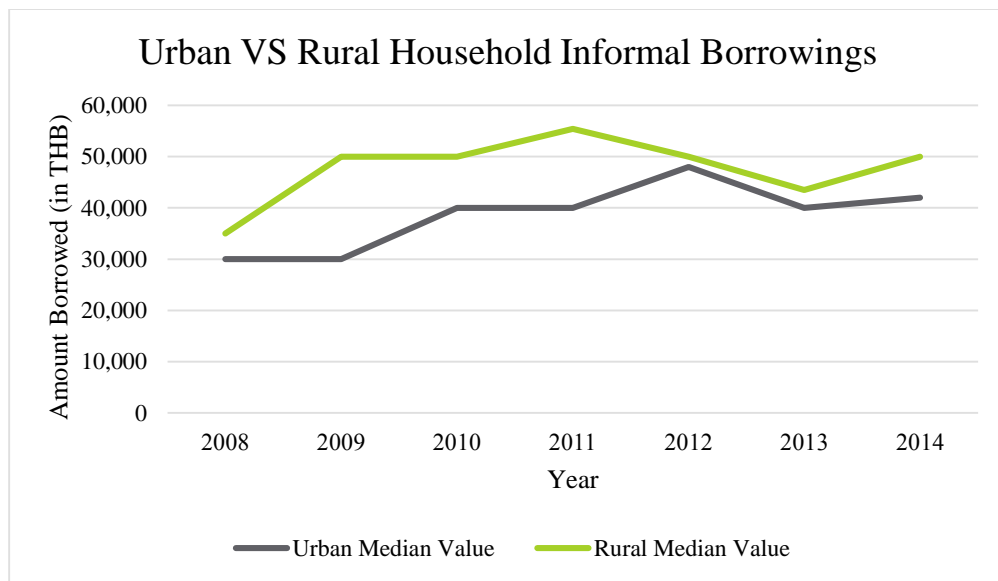


*Figure 45: Urban VS Rural Borrowing from Agricultural Cooperative*



*Figure 46: Urban VS Rural Borrowing from Village Fund*

Last but not least, the informal borrowings, as shown in Figure 47, depicts that both urban and rural households borrow around 30,000 to 55,000 THB (or 859 to 1,668 US\$) during 2008 to 2014. Compared to Figure 39, this amount is still less than formal borrowings. Also, households in rural area have been borrowing more than households in urban area.



*Figure 47: Urban VS Rural Informal Borrowing*

#### h. Lending (Informal Lending)

Informal lending is defined as loans anyone currently owe to households, as opposed to savings at the banks, which is categorized as formal lending. According to Table 34, the informal lending is very limited in both urban and rural households. In addition, this activity tends to decrease over time as the percentage of informal lending turns out to be only 1% of total households in urban area and 2% of total households in rural area, as of 2014.

*Table 34: Percentage of households lending money (not include savings)*

Of Changwats (% of total # of households)	2008		2014	
	Urban household	Rural household	Urban household	Rural household
<b>Chachoengsao</b>	4	8	1	2
<b>Lopburi</b>	3	3	1	0
<b>Buriram</b>	2	11	0	5
<b>Sisaket</b>	2	10	1	2
<b>Satun</b>	2	3	0	0
<b>Phrae</b>	7	6	0	1
Total	<b>3</b>	<b>7</b>	<b>1</b>	<b>2</b>

### **i. Savings**

Savings here include many types of savings, but not including lending, which is defined as informal lending in the last section. The savings can be in form of savings at financial institutions or in cash or commodity (e.g., rice or crops). Table 35a to 36b show the proportion of savings in various sources in urban and rural areas. In 2008, both urban and rural households would like to hold savings in cash. However, the second and third popular channel for savings in urban households are other savings and commercial banks, respectively, whereas they are other savings and bank account at BAAC in rural households.

As time goes by, in 2014, the most popular channel is still cash in both urban and rural households. Nevertheless, for urban households, the second popular channel becomes commercial banks, following by gold and jewelry. This is exactly the same case with rural households.

One interesting point is that there's no any savings in Rice Bank, though there's still some proportion in 2008 for the rural households (while there's never been any urban household savings in this bank).

Table 35a: Percentage of urban household possessing each source of savings in 2008\*

Of Changwats (% of total # of households)	Commercial Bank	Agricultural Cooperative	Bank Account at BAAC	PCG account	Rice Bank	Gold, Jewelry	Cash	Other Savings	Rice in Storage	Other crops in Storage	Others**
<b>Chachoengsao</b>	84.17	0.83	2.50	0	0	71.67	100	45.42	0.83	0	6.81
<b>Lopburi</b>	77.92	2.08	7.08	8.75	0	76.67	100	94.17	0.42	0	33.89
<b>Buriram</b>	73.33	2.92	12.50	19.58	0	61.67	100	85.00	19.17	0.42	28.06
<b>Sisaket</b>	49.17	10.83	24.17	11.25	0	58.75	100	83.33	37.08	0.83	25.14
<b>Satun</b>	63.33	12.08	32.08	4.58	0	63.33	100	50.00	8.75	0	8.75
<b>Phrae</b>	57.08	6.67	38.75	2.92	0	57.50	100	80.83	15.83	0	20.42
<b>Total</b>	<b>67.50</b>	<b>5.90</b>	<b>19.51</b>	<b>7.85</b>	<b>0</b>	<b>64.93</b>	<b>100</b>	<b>73.12</b>	<b>13.68</b>	<b>0.21</b>	<b>20.51</b>

\* This table counts when households save (at least 1 account/unit) in each source regardless of how many accounts/units of that saving they hold.

\*\* Others are the average of percentages of other sources of savings.

Table 35b: Percentage of urban household possessing each source of savings in 2014\*

Of Changwats (% of total # of households)	Commercial Bank	Agricultural Cooperative	Bank Account at BAAC	PCG account	Rice Bank	Gold, Jewelry	Cash	Other Savings	Rice in Storage	Other crops in Storage	Others**
<b>Chachoengsao</b>	95.83	0	1.25	0	0	85.83	100	5.83	0	0	0.40
<b>Lopburi</b>	80.00	1.67	9.17	5.00	0	50.00	100	77.92	1.25	0	27.80
<b>Buriram</b>	88.33	4.17	13.75	8.33	0	74.17	100	59.17	19.58	0	14.90
<b>Sisaket</b>	94.17	9.58	28.33	5.00	0	91.67	100	84.17	40.42	0	27.90
<b>Satun</b>	70.83	12.08	34.58	11.25	0	85.00	100	42.08	9.58	0	2.60
<b>Phrae</b>	84.58	1.25	20.83	0	0	75.83	100	67.08	13.75	0.42	15.80
<b>Total</b>	<b>85.62</b>	<b>4.79</b>	<b>17.99</b>	<b>4.93</b>	<b>0</b>	<b>77.08</b>	<b>100</b>	<b>56.04</b>	<b>14.10</b>	<b>0.07</b>	<b>14.90</b>

\* This table counts when households save (at least 1 account/unit) in each source regardless of how many accounts/units of that saving they hold.

\*\* Others are the average of percentages of other sources of savings.

Table 36a: Percentage of urban household possessing each source of savings in 2008\*

Of Changwats (% of total # of households)	Commercial Bank	Agricultural Cooperative	Bank Account at BAAC	PCG account	Rice Bank	Gold, Jewelry	Cash	Other Savings	Rice in Storage	Other crops in Storage	Others**
<b>Chachoengsao</b>	38.33	9.17	65.42	12.92	0	63.75	100	60.00	40.42	0	5.1
<b>Lopburi</b>	62.50	18.75	36.25	39.58	0	66.67	100	77.50	6.25	0.42	21.4
<b>Buriram</b>	48.75	7.50	70.42	30.83	0.42	54.58	100	80.00	77.92	0	15.4
<b>Sisaket</b>	24.58	15.42	59.17	13.75	1.25	43.75	100	75.00	77.92	1.25	12.8
<b>Satun</b>	52.50	16.67	65.00	4.17	0	63.33	100	30.00	0.83	0	0.3
<b>Phrae</b>	32.50	15.83	60.00	2.50	0	46.67	100	62.50	50.00	1.67	7.5
<b>Total</b>	<b>43.33</b>	<b>13.42</b>	<b>58.75</b>	<b>20.08</b>	<b>0.33</b>	<b>56.75</b>	<b>100</b>	<b>67.75</b>	<b>45.58</b>	<b>0.50</b>	<b>11.7</b>

\* This table counts when households save (at least 1 account/unit) in each source regardless of how many accounts/units of that saving they hold.

\*\* Others are the average of percentages of other sources of savings.

Table 36b: Percentage of urban household possessing each source of savings in 2014\*

Of Changwats (% of total # of households)	Commercial Bank	Agricultural Cooperative	Bank Account at BAAC	PCG account	Rice Bank	Gold, Jewelry	Cash	Other Savings	Rice in Storage	Other crops in Storage	Others*
<b>Chachoengsao</b>	73.33	5.42	74.58	14.58	0	75.00	100	39.58	25.83	0	3.6
<b>Lopburi</b>	75.42	10.00	36.25	19.17	0	47.50	100	63.75	8.33	0.42	17.9
<b>Buriram</b>	63.75	8.75	77.50	5.00	0	53.75	100	77.08	74.17	0	18.5
<b>Sisaket</b>	66.25	11.25	62.08	5.42	0	76.67	100	72.92	78.75	0.42	12.1
<b>Satun</b>	60.00	12.50	75.00	0.83	0	95.00	100	14.17	0	0	1.4
<b>Phrae</b>	76.67	9.17	77.50	2.50	0	89.17	100	70.83	53.33	0.83	8.3
<b>Total</b>	<b>69.42</b>	<b>9.25</b>	<b>65.33</b>	<b>9.17</b>	<b>0</b>	<b>69.00</b>	<b>100</b>	<b>59.17</b>	<b>42.75</b>	<b>0.25</b>	<b>11.4</b>

\* This table counts when households save (at least 1 account/unit) in each source regardless of how many accounts/units of that saving they hold.

\*\* Others are the average of percentages of other sources of savings.