

## **Evaluating the Efficiency of Rural Labor Use in Chau Thanh A District, Hau Giang Province**

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**ABSTRACT:** *The objective of this study is to evaluate the efficiency of rural labor use in Chau Thanh A District, Hau Giang Province. The data were collected from 160 households in rural areas. The descriptive statistics are used to analyze the situation, actual use and effective use of agricultural labor resources. Research has shown that the rural labor workforce in Chau Thanh A District is quite abundant; however, their educational backgrounds and professional qualifications are poor. The efficiency of rural labor use is still inadequate, and labor potentials are not fully exploited to create material values.*

**Key Words:** *efficiency, labor, agriculture sector, non-agriculture sector.*

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### **I. INTRODUCTION**

Chau Thanh A District is located in the north of Hau Giang Province, where many advantages for developing agricultural economy are gathered. Most of Chau Thanh A District's land is used for agricultural production purposes. By the end of 2017, the total agricultural land area is about 13,878 ha, accounting for 86.42% of the natural land area. In recent years, the local government has been focusing on developing the agricultural economy together with job creation and human resource development. However, due to subjective and objective conditions, the efficiency of rural labor use is still low which leads to local human resource waste. Therefore, the study "Evaluating the efficiency of rural labor use in Chau Thanh A District, Hau Giang Province" is essential to provide a scientific foundation and practical basis for the local government to build rational human resource development strategies.

### **II. LITERATURE SURVEY**

Human resource is one of the most important factors for the development of every country. The quality of human resource is a primary measurement to review countries' development. Therefore, countries around the world consider human resource development is essential (Nguyen Thi Quynh Trang, 2017). The workforce is the decisive factor for the success and progress of each country, in which the level of human resource development is the key measurement for the level of social progress, justice and sustainable development (Dang Xuan Hoan, 2015). Vietnam's economic development process has affirmed that when rural labor is used reasonably and effectively, agricultural and rural areas will develop quickly and sustainably. The efficient use of labor helps increase labor productivity, save costs, time, effort, and improve production efficiency. Therefore, human resource needs to be expanded and developed, especially effectively managed.

### **III. METHODS**

#### **3.1 Data collection method**

The stratified sampling method is applied in this study. Currently, according to many researchers, samples with large size are better than small size (Nguyen Dinh Tho, 2011). The personal interview method was applied for 160 households in 5 communes of Chau Thanh A District, Hau Giang Province which are Tan Phu Thanh, Thanh Xuan, Nhon Nghia A, Truong Long A, and Truong Long Tay. Sample sizes are shown in Table 1.

**Table 1: Sample size**

No	Commune	Number of households	Ratio (%)
1	Tan Phu Thanh	35	21.63
2	Thanh Xuan	33	20.63
3	Truong Long A	32	20.00
4	Nhon Nghia A	30	18.87
5	Truong Long Tay	30	18.87
Total		160	100.00

Source: Survey data, 2018

### 3.2 Data analysis methods

This study used descriptive statistic with indicators such as average, max, min, standard deviation, frequency, ratio to analyze the situation, actual use and effective use of rural labor resource in Chau Thanh A District, Hau Giang Province.

## IV. RESULTS

### 4.1 Current situation of rural labor source in Chau Thanh A District

The data in Table 2 shows that each household in Chau Thanh A District’s rural area has 5 members on average, in which 3 members are in working age.

**Table 2: Household labor scale in rural areas**

No	Criteria	Min	Max	Mean	S.D
1	Household-scale	1.00	8.00	4.65	1.52
2	Workforce	1.00	5.00	2.77	1.06
2.1	+ Male worker	0.00	4.00	1.71	0.78
2.2	+ Female worker	0.00	3.00	1.05	0.74
3	Worker/household	0.25	1.00	0.61	0.26

Source: Survey data, 2018

The number of male workers per household is higher than female workers per household, corresponding to 1.71 compared with 1.05. The ratio of the member in working age in each household is 0.61. This shows that the ratio of dependents in each household is quite high (approximately 39%).

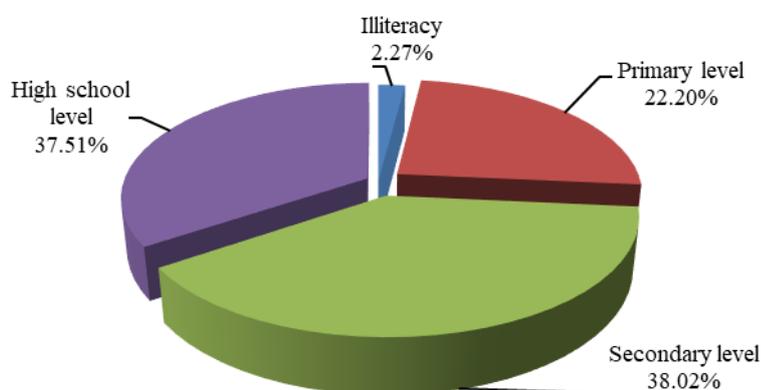


Figure 1. Worker’s educational level

Source: Survey data, 2018

According to Figure 1, the number of rural workers with secondary level is the highest (38.02%), followed by high school level (37.51%). The proportion of agricultural worker with primary level accounts for 22.2% and illiteracy accounts for 2.27%. The majority of low educational level workers are older workers or those with low income who are unable to attend school. With the above data, rural worker's educational level in Chau Thanh A District is quite low, which has a specific effect on general labor quality.

**Table 3: Rural worker's professional qualification**

No	Criteria	Worker/ household	Ratio (%)
1	Unskilled worker	2.24	80.72
	Intermediate	0.07	2.66
2	Skilled worker	0.13	4.48
	College	0.30	12.04
	University	0.50	19.28
3	Total	0.38	76.00
3	Worker working in proper professional fields		

*Source: Survey data, 2018*

Table 3 shows that there are 19.28% of agricultural workers that are professionally trained, of which the proportion of worker with a university degree is the highest (12.04%), college level is 4.48%, and intermediate level is only 2.66%. The number of worker working in proper professional fields accounts for 76%. The majority of qualified worker work in administrative agencies, such as civil servants, teachers, doctors. A small percentage of them work in local private enterprises. The data points out that the employment rate in non-government agencies is low. Thus, rural workers do not have various career choices.

**Table 4. Rural worker's health condition**

No	Variable	Worker/household	Ratio (%)
1	Good health condition	2.21	79.78
2	Average health condition	0.45	16.25
3	Poor health condition	0.11	3.97
4	Worker participating in health insurance	2.33	84.11

*Source: Survey data, 2018*

Table 4 indicates that the proportion of worker with good, average and poor health condition is 79.78%, 16.25%, and 3.97% accordingly. Most of the rural workers in the poor health group are between the age of 50 and 60. Rural areas need manual workers. This leads to worker's health exhaustion, low ability to regenerate health, and poor health condition. Another result shows that the proportion of worker participating in health insurance is quite high, accounting for 84.11%. This is a positive signal, and workers need to concern about health insurance to protect the health and improve labor quality.

#### 4.2 The efficiency of rural labor use in Chau Thanh A District

According to the survey result in Figure 2, the proportion of rural workers whose average working time less than 7 hours per day accounts for the highest (60%). The average working time of Chau Thanh A District's worker is 6.4 hours per day and 22.4 days per month, while a worker's working time can reach 8 hours per day and 24 days per month typically. Thus, rural workers in Chau Thanh A District have not used the Working time to create material values effectively. The least working time per day is 3 hours while the most are 12 hours, and the least working time in one month is 10 days while the most are 30 days.

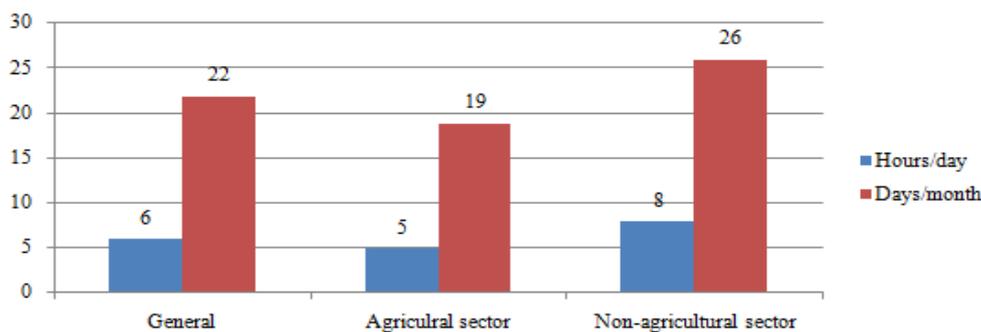


Figure 2: Rural worker's average working time by labor area

Source: Survey data, 2018

The average working time of rural workers working in the agriculture sector is 5.2 hours per day and 19.5 days per month. The majority of working time is used for planting, tending, harvesting rice and fruit-tree, or raising the pig, chicken, and duck. Meanwhile, the average working time of those working in the non-agriculture sector is 8.2 hours per day and 26.2 days per month. This is the working time with high intensity which significantly affects the ability to regenerate labor power.

According to Figure 3, in the non-agriculture sector, the average working time of rural workers working at home (8.7 hours per day and 27.1 days per month) is more than those working outside (7.8 hours per day and 24.2 days per month). Rural workers who work at home are mainly engaged in selling food and beverage, garments, goods, etc. These jobs do not require good health, professional qualifications or working time regulations so workers can do anytime during the day and any day of the month. Therefore, the working time per day and month is high in total. Meanwhile, for workers working outside, most of them work in administrative agencies or private enterprises. Their working time is about 8 hours per day and 24 days per month.

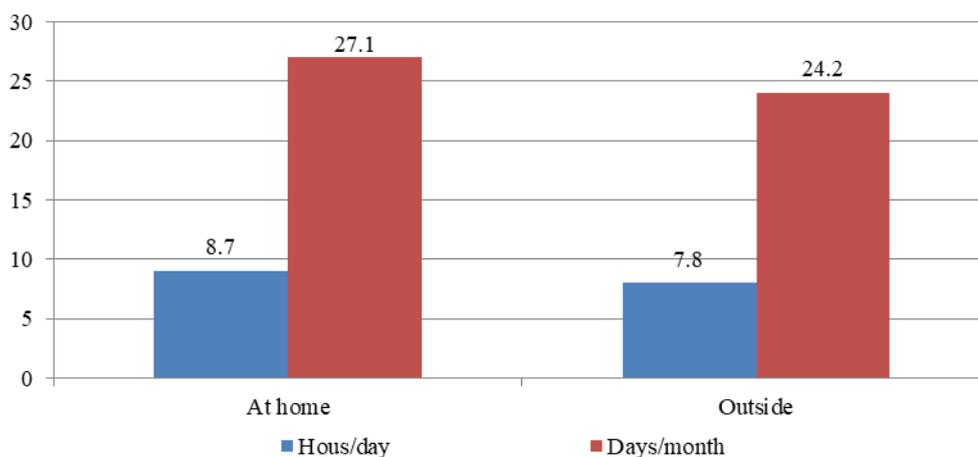


Figure 3: Rural worker's working time in the non-agriculture sector by workplace

Source: Survey data, 2018

The statistics in Table 5 show that rural workers that have a job in the agriculture sector have a very low working time rate, only 46.75%. Although they have a significant amount of remaining time, only a small number of them use this time to work part-time to boost their income. Workers in the non-agriculture sector have a working time utilization rate of 110.58%, much higher compared to agricultural laborers. In particular, rural workers working outside the household have a working time utilization rate of 96.89% compared to laborer working in their households who have the percentage of working time utilization of up to 124.23%. In general, only rural laborers working in the non-agriculture field outside their households have a reasonable working time utilization rate. Other groups need to adjust their working time utilization rate properly to increase the quality of labor.

**Table 5. The rate of utilizing labor time divided by the labor sector**

*Unit: thousand VND/hour*

No	Labor sector	The rate of utilizing labor time	The rate of wasting labor time
1	Agriculture	46.75	53.25
2	Non-agriculture Total	110.58	-10.58
3	In their households	124.23	-24.23
	Outside their households	96.89	3.11
	Total	80.74	19.26

*Source: Survey data, 2018*

Table 6 shows that the average labor productivity of workers in Chau Thanh A district is 31,980 (Vietnam dong - VND per hour). Compared to the minimum income of laborers in Chau Thanh A districts as required by law which is 3,090,000 (VND/ month), the average labor productivity of the respondents is fairly good. However, with a standard deviation (SD) of 17.52, this indicates that workforce productivity is not uniform and highly dispersed. The workers that have the lowest productivity earns 5,000 (VND/hour) while the one with the highest productivity can produce up to 92,000 (VND/hour).

**Table 6: Labor productivity divided by labor sectors**

*Unit: thousand VND/hour*

No	Labor sector	Minimum values	Maximum values	Mean	S.D
1	Total	5.00	92.17	31.98	17.52
2	Agriculture	4.38	141.32	49.15	34.11
3	Non-agriculture Total	5.95	227.24	27.15	21.87
	In their households	4.17	103.77	23.24	19.65
	Outside their households	7.69	227.29	30.83	25.13

*Source: Survey data, 2018*

As can be seen from Table 6, there is a considerable difference in workforce productivity by labor sectors. Labor productivity created in the agriculture field is 49.15 thousand VND/ hour, much higher in comparison with labor productivity generated in the non-agriculture field – which is 27.15 thousand VND/hour. The main reason is that the working time utilization rate in the agricultural field is much lower in comparison with the non-agriculture field. In the non-agricultural area, laborers working in their households have the productivity of 23,24 thousand VND/hour, lower than the productivity of laborers working outside their homes with a variance of 7.5 thousand VND/ hour

#### 4.3 Labor use efficiency

According to the survey statistics, although the labor productivity of workers in Chau Thanh A district is quite good, their waste in using working time is considerable.

As can be seen from Figure 4, workers in Chau Thanh A district have an average labor productivity of 31.98 thousand VND/ hour. Nevertheless, they waste almost 20% of the time that is available for work. Therefore, there is a possibility that they can boost their income as long as they rationally make the best use of their working time. On the one hand, laborers working in the non-agriculture sector have the labor productivity of 27.15 thousand VND/ hour, 45% lower in comparison with productivity in the agriculture sector; on the other hand, they have 58% higher working time utilization. It suggests that rural workers in both fields: the agriculture and non-agriculture fields should consider the labor quality in 2 aspects: working time and labor productivity.

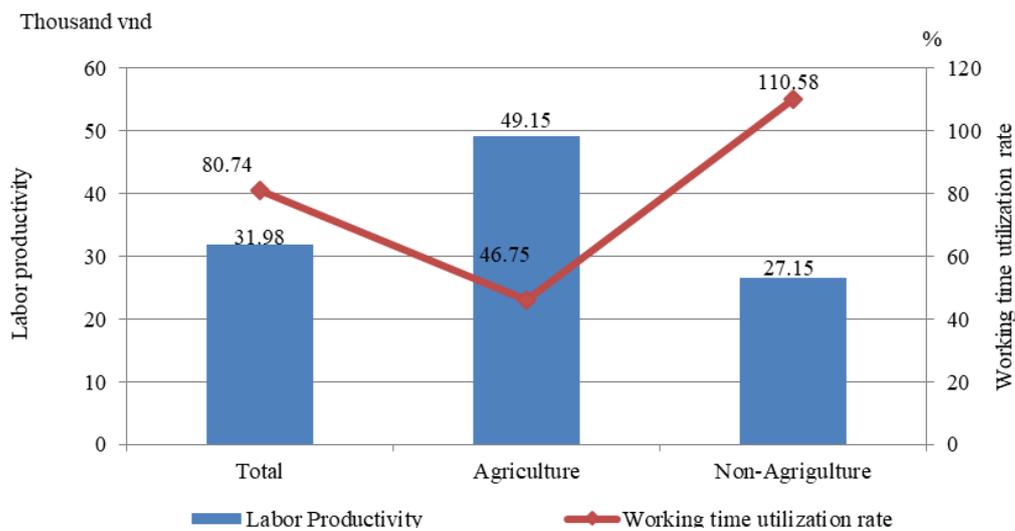


Figure 4: Labor productivity and Working time utilization rate

Source: Survey data, 2018

The statistics in Figure 5 demonstrate that rural laborers that work in the non-agricultural field for their households are lower in efficiency than the ones working outside their homes – results in labor productivity: 23.24 thousand VND/ hour and 30.83 thousand VND/ hour respectively. Moreover, the rural laborers working outside their homes hardly waste their time and use their available working time appropriately, at 97% working time utilization rate. As a result, the monthly income that the rural laborers working outside of their family earn is higher than the ones working for their households.

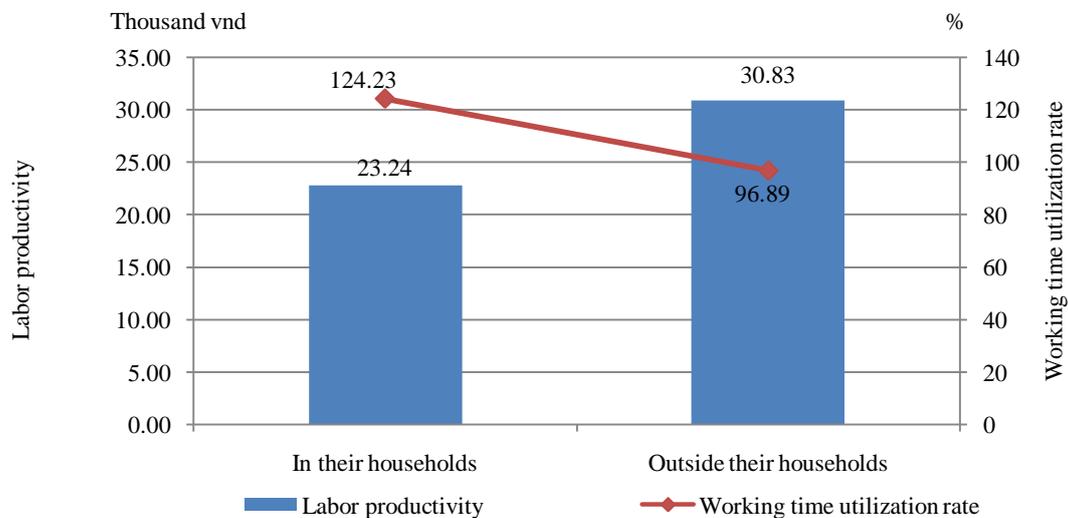


Figure 5: Labor productivity and Working time utilization rate of workers in the non-agriculture sector by working place

Source: Survey data, 2018

Rural workers in agriculture field have high labor productivity per hour; however, their working time waste is considerably huge; hence their monthly income is quite low compared to workers in the non-agricultural field. According to statistics in table 7, the monthly income of laborers in the non-agriculture field is 5.15 million VND. Specifically, monthly earning of laborers working in their house is 4.33 million VND, and for laborers working outside their houses, it is 5.31 million VND. Meanwhile, workers in agriculture field only make 4,12 million VND monthly.

**Table 7: Income of rural workers divided by labor sectors**

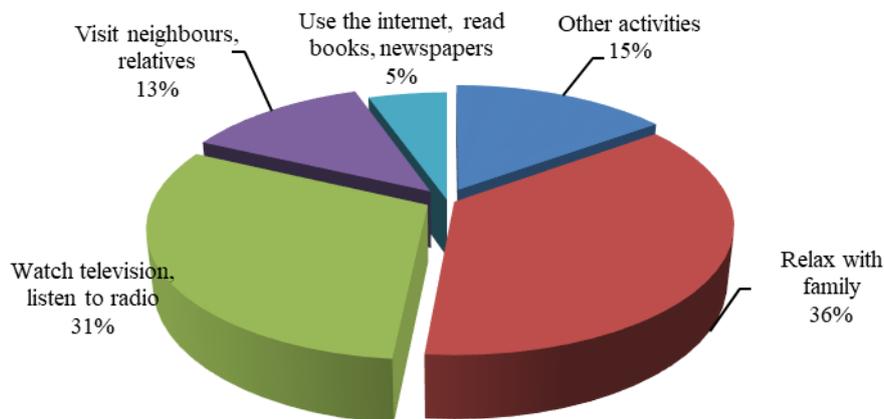
*Unit: million VND/ month*

No	Labor sector	Minimum values	Maximum values	Mean	S.D
1	Agriculture	0.60	13.50	4.12	2.97
2	Non-agriculture Total	0.95	10.40	5.15	2.12
	In their households	0.75	10.00	4.33	2.28
	Outside their households	0.95	11.50	5.31	2.15

*Source: Survey data, 2018*

Statistics suggest that workers in Chau Thanh A rural district waste a great deal of their time, notably 13% of female workers only engaging in household chores (average time for housework is 5 hours/ day). Main reasons for wasting working time, resulting in reducing labor use efficiency, are: 30.82% laborers do not know how to manage their working time; 28.08% laborers lack knowledge and technical qualification; 32.88% laborers do not have sufficient capital goods such as land, capital, labor tools, etc. Also, there are 8.22% of the workers that do not show the determination and ambition in working to increase their income and improve their quality of life.

As shown in Figure 6, 85% of the workers use their leisure time for relaxation and entertainment. Specifically, 36% of the workers relax and play with their child or grandchild, 31% watch television and listen to the radio, 13% visit their neighbours, relatives, and friends and 5% use the internet, read books or newspaper. However, the workers use the rest 15% of their leisure time to go fishing or growing vegetable to increase the food supply for their families.



*Figure 6: Leisure time activities of rural workers*

*Source: Survey data, 2018*

## V. CONCLUSION

In general, the workforce in Chau Thanh A district is quite abundant. However, the proportion of dependents in households is quite high, causing considerable pressure on the economic conditions of rural families. The level of education and professional qualifications of workers are limited, especially the rate of unskilled labor which makes up the large proportion of the workforce. This dramatically affects the labor quality. Besides, the practice of using the labor force effectively in Chau Thanh A district has numerous shortcomings – the laborers have not fully exploited their labor potential to create material values. One the one hand, the labor productivity per hour of workers in agriculture area is higher than workers in the non-agriculture area; on the other hand, the labor utilization rate of the non-agriculture field is much higher in comparison with agriculture field. Consequently, the monthly income of workers in the non-agriculture field is much higher compared to agricultural workers in Chau Thanh A.

From these findings, the research team proposes some recommendations to increase the labor use efficiency of rural workers in Chau Thanh A district:

Firstly, the increase in labor quality. Workers need to enthusiastically study, improve their level of education and qualifications, especially professional skills that local areas require. At the same time, they should also consider the matter of labor regeneration, health protection by proper relaxation, buying health insurance, work accident insurance and other kinds of coverage that is necessary for their careers.

Secondly, effectively use family labor resources. The division of labor in the family should consider factors such as the nature of work, working time and professional qualifications. If the division of labor in the family is reasonable, it will contribute to improving the labor use efficiency thus improving income for the household.

Thirdly, uplift their work spirit and attitude. Workers should have a standard and serious work attitude, enthusiastic work spirit as well as actively learn new knowledge, promote the value of work, make the best use of their leisure time to work to create material values and to improve their future career development.

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