SOLUTIONS FOR LAND USE MANAGEMENT IN THE NEW RURAL CONSTRUCTION IN THO XUAN DISTRICT, THANH HOA PROVINCE

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Abstract

Land plays a crucial role in new rural construction. The study aims to assess the current situation of land use management, thereby proposing solutions for effective land use management during the implementation of new rural construction in Tho Xuan district. The random sampling method was used to survey 100 officers and 450 households in 3 representative communes for the study. The research results show that the government has promulgated and implemented land management policies in new rural construction effectively. Land use management is assessed at a high level, and there are differences among regions. The paper proposes some solutions to manage and use land effectively in new rural construction which include developing a plan of land use projects for each period; maintaining the supervision of the planning implementation process; clarifying the revenue from land to build new rural areas; placing landmarks in the field for areas with detailed plans and expand effective production models; allocating government bond capital timely; building a synchronized land database and strengthening the propaganda of community participation.

Keywords: land use management, new rural construction, Tho Xuan district

1. Introuduction

The land is not only a valuable national resource but also a particular factor of production. Regulating land efficiently and effectively for sustainable development is crucial in any country in the world. Agriculture, farmers, and rural areas have a strategical position in national industrialization and modernization. Our Party and Government have determined that until 2020, there will be 50% of the commune reach new rural standards. In Thanh Hoa province, since 2010, when it implemented the National Target Program for new rural construction, on average, each commune only achieved 4.7 new rural criteria. By July 2019, the whole province had reached 16.5 criteria per commune, of which the flat area reached 17.7 criteria per commune, and the mountainous area reached 13.5 criteria per commune. There are 321 communes which have met new rural area standards, accounting for 56% of the total number of communes in the province (People's Committee of Thanh Hoa Province, 2019c).

Tho Xuan district has been implementing the New rural construction program since 2011. In July 2019, 36/36 communes have met the new rural standard, and the district has completed the profile, awaiting recognition of the new rural standard district. In the process of new rural construction, the strong development of the economy, the increase in population, and the construction of new industrial zone in the Tho Xuan district cause great pressure to the land. Therefore, it is essential to assess the current situation and propose solutions to manage and use land appropriately for the new rural construction program.

2. Methodology

- *Method of selecting research locations:* As of December 31, 2018, all 36/36 communes met New Rural Area standards. Three communes of three regions were selected to analyze and assess land use management in the new rural construction. Xuan Truong commune represents region 1- central region; Tho Hai commune represents flat region -region 2; Xuan Son commune represents mountainous region region 3.
- Method of data collection: the secondary data is inherited, collected from departments and communes in the district and communes. In addition, the primary data is surveyed from 450 households (in 03 selected communes, each with 150 questionnaires) by using the random sampling method. The data have been used to assess the situation of making and implementing land use and essential infrastructure planning for the development of commodity agricultural production, handicrafts and services, land donation regulations, and land donation implementation results. Investigating 100 professional officials to assess the promulgation and

guidance of the implementation of documents related to land use management in new rural construction. *Data processing methods:*

The EXCEL software is used to group, process survey data and find land change rules in the past, based on the future socio-economic development orientation of the district, to propose to manage and use the land of different departments appropriately.

Using the Likert scale (Likert, 1932; Hoang Trong et al., 2008) to evaluate land use management in the New Rural Construction with 5 levels of words assigned values from 1-5. The overall rating is the weighted average of the number of respondents and the coefficient for each level of application. The overall rating scale is: Very high / very good: ≥ 4.20 ; High / good: 3.40 - 4.19; Average: 2.60 - 3.39; Low / poor: 1.80 - 2.59; Very low / very poor: < 1.80. T-test and ANOVA test are also used to check the differences in some indicators among the surveyed areas and between the survey subjects. If p-value (sig.) $\leq \alpha$ (significance level), we reject the H_0 statistical hypothesis, that is, there is a difference of research criteria among regions at 100% confidence level - α . If p-value (sig.)> α (significance level), the H_0 hypothesis is accepted, that is, there is no difference in the research targets among regions at 100% confidence level - α . In this study $\alpha = 0.05$, corresponding to the 95% significance level.

3. Research results and discussion

3.1. Characteristics of natural, economic and social conditions and the results of new rural construction in Tho Xuan district

Tho Xuan district is located 36 km to the east of Thanh Hoa city. The total natural area is 29,229.51 ha, of which: agricultural land 19,538.27 ha; non-agricultural land: 9,184.15 ha; unused land: 501,7 ha. The district has 41 administrative units (People's Committee of Tho Xuan district, 2019a). The average economic growth rate in 2018 reached 15.5%, of which: agriculture - forestry increased by 4.2%; industry, handicrafts - basic construction increased by 17.1%; services - trade increased by 17.5%. The district's economic structure has shifted towards reducing the proportion of agriculture and forestry to 17.0%, increasing the proportion of industry - handicraft - basic construction to 50.2% and services. - trade to 32.8% (Tho Xuan District People's Committee, 2019a).

The district population is curently 196,036, distributed in 38 communes and 3 towns (in 2019). Most of the district's residents live in rural areas (over 90.12% of the population), the urban population accounts for 9.88%, lower than the provincial average of 17.31%. The district has 10,231 laborers, accounting for 52.19% of the population. Agriculture and forestry workers accounted for 51.6%; industry – construction workers accounted for 31.7%, and service workers accounted for 16.7% (People's Committee of Tho Xuan district, 2019a).

As results of new rural construction as of June 30, 2019, the income of rural population increases by 3.1 times compared to 2011. This is partly because the rural socio-economic infrastructure has been improved to achieve the standard new rural criteria. The quality of people's life has been improved, the percentage of poor households is reduced to 2.42%; 16.11% lower compared to 2011. 99.7% of households use salubrious water, and 77.8% of households use clean water. The percentage of people participating in health insurance reached 92.1%, an increase of 40.06% compared to 2011. The proportion of employed workers with trained jobs reached 71.80%, an increase of 56.38% compared to 2011. The dike system and irrigation structures are invested in to improve in raising hamlets, contributing to improving the capacity of natural disaster prevention and mitigation. The protection of environment and landscapes in rural areas is respected and achieved many results (People's Committee of Tho Xuan district, 2019c).

In 2018, the whole district had 66 operating Cooperatives, including 47 Cooperatives operating in the field of agriculture. In 2018, the district's per capita income reached 37 million VND, an increase of 2.3 times compared to 2011; the rate of poor households decreases to 2.4%; 100% of communes and villages will achieve the New Rural Area cultural standard. By the end of 2018, all 36 communes of Tho

Xuan district have completed 19 criteria and been recognized as meeting the New Rural Area standard (Xuan Thang and Xuan Lai communes will become future urban centers under Resolution No. 37-NQ / Central Committee on December 24, 2018, of the Politburo and Plan No. 49 / KH-UBND dated March 25, 2019, of the People's Committee of Tho Xuan district). There is no public debt in the process of the new rural construction. Tho Xuan district completes the New Rural Area criteria of the district.

3.2. Land use management in New Rural Area construction of Tho Xuan district 3.2.1. Land management situation in Tho Xuan district in the period of 2010 – 2018

The management of land use in Tho Xuan district has been implemented through 15 contents of State management on land (it is specified in Article 22, 2013 Land Law). Land use planning and strategy have been reviewed and adjusted to suit the district's socio-economic development plan and are consistent with the New Rural Area construction planning. The planning plan is widely publicized so that officials and people know, implement, and supervise the implementation. Focus on promoting administrative reform to create favorable conditions for investors to accelerate the implementation of the project, especially investment projects on infrastructure construction and key industrial projects of the district. Land allocation and land lease for projects in the district are basically in line with master plans, land use plans, and New Rural Area construction planning. 41/41 communes and towns have been surveyed and drawn a cadastral map. The area of land allocated to farms has not been measured in detail. The district is implementing the "One-stop-shop" mechanism and proclaiming land-related procedures, applying information technology to the management of registration, mortgage, a guarantee of land use rights and properties attached to the land.

3.2.2. Land use management in new rural construction in 2010-2018 period in Tho Xuan district

Land-use change will shift the focus from agricultural restructuring to more efficient use of rural space, which is done through infrastructure planning, residential clusters, and agricultural production planning. In 2018, the current status area according to use purposes was 29,229.51 hectares. Of which: agricultural land is 19,538.27 ha, accounting for 66.85%, non-agricultural land is 9,184.15 ha, accounting for 131.42%, unused land is 507.10 ha, accounting for 1.73%. The total allocated area accorded to land users is 24,608.91 ha. In which: domestic individual households use 16,467.04 ha, economic organizations use 3,199.31 ha, state agencies use 4,842.34 ha, public non-business organizations use 163.17 hectares, residential communities and religious facilities use 17.04 hectares. The land area allocated by managed agencies is 4,620.60 ha. In which: Commune People's Committee manages 2,828.23 ha; community and other organizations manage 1,792.37 ha.

As of December 31, 2018, the total natural land area of the district was 29,229.51 hectares, down 0.02 hectares compared to 2010 due to errors in land statistics and land inventory periods. From 2010 to 2018, the land fluctuates in the tendency of increasing the area of agricultural and non-agricultural land, reducing the area of unused land (Table 1). This is a significant change in the exploitation and use of land resources to match the process of the new rural construction of the district.

Table 1: Change of land use in new rural construction in Tho Xuan district, period 2010–2018

No.	Use target	Code	Year 2018	Year 2014	Year 2010	Stage 2018 /2010
	Total natural area		29229.51	29229.49	29229.49	0.02
1	Agricultural land	NNP	19538.27	19742.38	19099.68	438.59
1.1	Land for agricultural production	SXN	16208.55	16427.82	15299.12	909.43
1.1.1	Land for cultivation of annual crops	CHN	14007.84	14222.62	13334.8	673.04
1.1.2	Land for cultivation of perennial trees	CLN	2200.71	2205.2	1964.32	236.39

1.2	Forestry land	LNP	2611.09	2630.74	3232.06	-620.97
1.2.1	Production forest land	RSX	2544.12	2563.78	3119.06	-574.94
1.2.2	Protective forest land	RPH			94.00	-94
1.2.3	Special forest land	RDD	66.96	66.96	19.00	47.96
1.3	Aquaculture land	NTS	554.3	557.03	539.47	14.83
1.4	Salt-production land	LMU				0
1.5	Other agriculture land	NKH	164.32	126.79	29.03	135.29
2	Non-agriculture land	PNN	9184.15	8974.74	8917.26	266.89
2.1	Residential land	OCT	3293.31	3192.25	2987.17	306.14
2.1.1	Rural residential land	ONT	3177.32	3080.3	2888.21	289.11
2.1.2	Urban residential land	ODT	115.99	111.95	98.96	17.03
2.2	Special land	CDG	4299.28	4194.22	4320.44	-21.16
2.2.1	Land for construction of offices	TSC	20.52	19.55	59.08	-38.56
2.2.2	National defense land	CQP	754.43	754.43	712.72	41.71
2.2.3	National security land	CAN	0.52	0.52	0.45	0.07
2.2.4	Land for construction of non-business facilities	DSN	192.53	186.98	104.82	87.71
2.2.5	Land for non-agricultural production and business	CSK	247.34	205.05	122.05	125.29
2.2.6	Land used for public purposes	CCC	3083.93	3027.68	3321.32	-237.39
2.3	Land used by religious establishments	TON	5.92	5.92	4.82	1.1
2.4	Land for beliefs	TIN	11.12	11.12	6.01	5.11
2.5	Land used for cemeteries, graveyards, funeral service centers and cremation centers	NTD	233.63	232.57	233	0.63
2.6	Land with rivers, streams, canals, springs	SON	1008.5	1006.14	1052.94	-44.44
2.7	Land with special-use water surface	MNC	331.79	331.79	304.8	26.99
2.8	Other non-agricultural land	PNK	0.61	0.73	8.08	-7.47
3	Unused land	CSD	507.1	512.37	1212.55	-705.45
3.1	Unused flat land	BCS	466.22	471.49	800.75	-334.53
3.2	Mountainous unused land	DCS	29.12	29.12	316.57	-287.45
3.3	Rock mountain without forest	NCS	11.76	11.76	95.23	-83.47

a) Assessment of managers and professional officials on the status of implementation of documents related to land use management in new rural construction

The promulgation and implementation of legal documents related to land use management in the process of new rural construction are very important. The study surveyed of 100 officials, of which 50 specialized cadres in the fields of agriculture, cadastral, construction ... and 50 managers (president, vice president of the commune). The research results in Table 2 show that the issuance and implementation of documents related to land use management are assessed at a high level (mean is 4.11) and there is a difference between 2 objects. Managers rated it with a very high level (mean is 4.29), and professional officials rated it with high level (mean is 3.93). Among the 6 evaluation criterion, the criteria for guiding the implementation of the documents and the results of the implementation of the documents were evaluated at a very high level and there was no difference between the two survey objects. The remaining 4 indicators are evaluated at a high level. This shows that the land use management in new rural construction is concerned and well implemented.

Table 2. Assessment of managers and professional officials on the status of implementation of documents related to land use management in new rural construction in Tho Xuan district

Evaluation criteria (Means)	Surveyed objects	N	Mean	Std. Deviation	Std. Error mean	Sig. (2-tailed)
Numbers of document	Professional officials	50	3.44	0.837	0.118	0.000
(3,83)	Managers	50	4.22	0.507	0.072	0.000
Contents of document	Professional officials	50	3.74	0.777	0.110	0.130
(3,86)	Managers	50	3.98	0.795	0.112	0.130
Guide for implementation of document	Professional officials	50	4.26	0.694	0.098	0.182
(4,35)	Managers	50	4.44	0.644	0.091	0.182
Procedure for implementation of	Professional officials	50	3.46	0.676	0.096	0.005
document (3,68)	Managers	50	3.90	0.839	0.119	0.005
Publish the document	Professional officials	50	3.60	0.926	0.131	0.000
(3,92)	Managers	50	4.24	0.716	0.101	0.000
Result of implementation of document	Professional officials	50	4.20	0.833	0.118	0.181
(4,30)	Managers	50	4.40	0.639	0.090	0.181
Mean for all	Professional officials	50	3.93	0.412	0.058	0.000
(4,11)	Managers	50	4.29	0.359	0.051	0.000

b) Local people's assessment of land use management in new rural construction in Tho Xuan district Decision 193 / OD-TTG of the Prime Minister emphasized the view that new rural construction must involve community participation. According to the guidance of the Thanh Hoa Provincial Party Committee, "people's evaluation" will aim at two goals to both ensure better the needs of implementing democracy at the grassroots level and bring practical benefits to the people, reduce achievement diseases, and race to the new rural construction movement. Within the scope of the study, conducting surveys on people's assessments in 03 communes of Xuan Truong, Tho Hai and Xuan Son of the results of land use planning and essential infrastructure for agricultural production development, goods, handicrafts and services, land donation regulations and land planning for land use purposes in communes. Research results show that the planning management, regulations on land donation and the results of land donation are assessed by the people at a very high level (mean is bigger than 4.20) and there are no differences (sig.> 0.05) among regions. The synchronization among plans, non-agricultural land planning, and unused land exploitation are assessed at a high level (mean is from 3.40 - 4.19) and there are no differences among regions. (sig.> 0.05). The details of the planning, inter-regional properties, land-use projects, and agricultural land planning are assessed by the people at an average level (mean is from 2.6-3.39) and there are differences among regions (sig. <0.05).

Table 3. People's assessment of the implementation of land use planning and land donation in new rural construction in Tho Xuan district

Evaluation criteria	Communes	N	Mean	Std.	Std. Error
				Deviation	mean
The synchronization among	Xuan Truong	150	3.97	1.013	0.083
the planning	Tho Hai	150	3.60	0.769	0.063
	Xuan Son	150	3.53	0.880	0.072
	Distict	450	3.70	0.911	0.043
The details of the planning	Xuan Truong	150	3.13	0.797	0.065
	Tho Hai	150	2.94	0.796	0.065
	Xuan Son	150	2.81	0.825	0.067
	Distict	450	2.96	0.815	0.038

Interregional properties	Xuan Truong	150	3.41	0.913	0.075
	Tho Hai	150	3.22	0.926	0.076
	Xuan Son	150	2.89	1.053	0.086
	Distict	450	3.17	0.987	0.047
Land use projects	Xuan Truong	150	3.56	1.126	0.092
	Tho Hai	150	3.21	0.938	0.077
	Xuan Son	150	2.72	1.037	0.085
	Distict	450	3.16	1.090	0.051
Planning management	Xuan Truong	150	4.46	0.748	0.061
	Tho Hai	150	4.25	0.761	0.062
	Xuan Son	150	4.28	0.883	0.072
	Distict	450	4.33	0.803	0.038
Agricultural land planning	Xuan Truong	150	3.58	1.038	0.085
	Tho Hai	150	3.27	0.917	0.075
	Xuan Son	150	2.71	0.999	0.082
	Distict	450	3.19	1.047	0.049
Non-agricultural land planning	Xuan Truong	150	4.01	0.983	0.080
	Tho Hai	150	3.81	0.893	0.073
	Xuan Son	150	3.99	0.890	0.073
	Distict	450	3.94	0.925	0.044
Exploiting unused land	Xuan Truong	150	3.80	1.017	0.083
	Tho Hai	150	3.46	0.924	0.075
	Xuan Son	150	3.43	0.915	0.075
	Distict	450	3.56	0.966	0.046
Regulations on land donation	Xuan Truong	150	4.44	0.807	0.066
	Tho Hai	150	4.12	0.866	0.071
	Xuan Son	150	4.26	0.839	0.068
	Distict	450	4.27	0.846	0.040
Results of land donation	Xuan Truong	150	4.44	0.755	0.062
	Tho Hai	150	4.15	0.903	0.074
	Xuan Son	150	4.27	0.858	0.070
	Distict	450	4.29	0.847	0.040

Table 4. Differences in evaluation results of land use planning and land donation in new rural construction in Tho Xuan district

	Communes		Mean		
Evaluation criteria		Difference (I-	Std.		
			J)	Error	Sig.
The synchronization	Xuan Truong	Tho Hai	0.367*	0.103	0.001
among the plans		Xuan Son	0.440^{*}	0.103	0.000
	Tho Hai	Xuan Son	0.073	0.103	0.757
The details of the	Xuan Truong	Tho Hai	0.187	0.093	0.112
planning		Xuan Son	0.320*	0.093	0.002
	Tho Hai	Xuan Son	0.133	0.093	0.325
Interregional properties	Xuan Truong	Tho Hai	0.187	0.112	0.216
interregional properties		Xuan Son	0.520*	0.112	0.000

	Tho Hai	Xuan Son	0.333*	0.112	0.008
	Xuan Truong	Tho Hai	0.347*	0.120	0.011
Land use projects		Xuan Son	0.840^{*}	0.120	0.000
	Tho Hai	Xuan Son	0.493*	0.120	0.000
Planning management	Xuan Truong	Tho Hai	0.207	0.092	0.066
		Xuan Son	0.180	0.092	0.126
	Tho Hai	Xuan Son	-0.027	0.092	0.955
	Xuan Truong	Tho Hai	0.313*	0.114	0.017
Planning management		Xuan Son	0.867*	0.114	0.000
	Tho Hai	Xuan Son	0.553*	0.114	0.000
NY 1 1 1 1	Xuan Truong	Tho Hai	0.200	0.107	0.147
Non-agricultural land planning		Xuan Son	0.027	0.107	0.966
pranning	Tho Hai	Xuan Son	-0.173	0.107	0.235
	Xuan Truong	Tho Hai	0.340^{*}	0.110	0.006
Exploiting unused land		Xuan Son	0.367^{*}	0.110	0.003
	Tho Hai	Xuan Son	0.027	0.110	0.968
Regulations on land	Xuan Truong	Tho Hai	0.320^{*}	0.097	0.003
donation		Xuan Son	0.180	0.097	0.151
	Tho Hai	Xuan Son	-0.140	0.097	0.318
Results of land donation	Xuan Truong	Tho Hai	0.287*	0.097	0.009
		Xuan Son	0.167	0.097	0.200
	Tho Hai	Xuan Son	-0.120	0.097	0.433

3.3. Solutions for land use management in new rural construction in Tho Xuan district

3.3.1. General assessment of land use management in new rural construction in Tho Xuan district

Advantages:

- Land management is carried out according to 15 contents of State management on land. The land has been shifted towards increasing non-agricultural land. The efficiency of agricultural land use has been high. Models of land accumulation and production linkages have been developed. The contents of land use planning in the new rural commune construction planning are basically consistent with the district-level land use plan.
- The promulgation and implementation of documents related to land use management in new rural construction have been highly evaluated by officials. Especially, the implementation of documents and results of an implementation of documents are evaluated at a very high level.
- In general, the formulation and implementation of land use planning and essential infrastructure for the development of agricultural production of goods, small industries and services are assessed from medium to high levels. The planning management, the regulations on the land donation, and the results of the land donation are highly appreciated by the people. The synchronization among plans, non-agricultural land planning, and unused land exploitation are assessed at a high level. This reflects the suitability and initial results in new rural construction.

Limitations:

- The construction planning of new rural communes still has been heavy in infrastructure construction, the content of product development has not been focused enough. The review and adjustment of new rural construction planning have no specific instructions.

- The conversion of land use structure in the process of new rural construction has created a number of large field models, high-tech agriculture but the expansion of effective production models has been slow
- Land use projects have not been classified yet as projects for new rural development or those for the social and economic development of the commune. Therefore, the evaluation of the work of land allocation, land acquisition and land allocation to new rural construction has been faced many difficulties.
- The adjustment of the content of land use planning in the new rural commune construction planning to ensure compliance with the district-level land use planning has not been carried out in a comprehensive manner. Mostly, it only partially adjusts the location of some project facilities to suit local resources.
- The details of the planning, the inter-regional properties of the planning, the implementation of land use projects and agricultural land planning have not been highly appreciated by the people.

3.3.2. Solutions for managing land use in new rural construction in Tho Xuan district

In order to improve the efficiency of land use management in the process of new rural construction, it is necessary to synchronously implement the following solutions:

- (i) It is suggested that a plan of priority land use projects should be developed for each period so that investors can feel secured to invest capital in the project, especially projects related to land use to develop production.
- (ii) The planning management is highly appreciated due to the specific and strict monitoring process. On the other hand, the Land Law clearly stipulates that land allocation and land acquisition are only done for projects already included in the approved plan. Therefore, it is necessary to maintain a close supervision of the planning implementation process. At the same time, it is necessary to strengthen interbranch management.
- (iii) The revenue sources should be clarified from auction of land use right, land allocation and land lease for new rural construction under the Prime Minister's Decision No. 1600 / QD-TTg of August 16, 2016.
- (iv) The authority should allocate funds for reviewing, adjusting the planning and setting landmarks in the field for areas with detailed planning and replication of effective production models. At the same time, it is necessary to allocate the capital of Government bonds in time to localities to counter the capital contributed by the people.
- (v) The management of new rural areas in terms of database system will contribute to improving the efficiency of new rural construction. Therefore, a synchronous and unified land database must be established and new rural construction management will be performed on that database.

Strengthening the dissemination and dissemination of land use management documents in new rural construction and creating favorable mechanisms will contribute to the confidence of investors and people involved in the construction process of new rural construction.

4. Conclusions

Tho Xuan district has geographical location with climate, land resources, water resources relatively favorable for socio-economic development. In the period of 2010 - 2018, land management has followed 15 contents on land management. The trend of district land fluctuations in recent years has been the trend of increasing the area of agricultural and non-agricultural land, reducing the area of unused land. This is a significant change in the process of new rural construction of the district.

Land management has successfully contributed to the district's new rural construction goal. However, attention should be paid to developing production and scaling up effective production models. At the same time, there are guidelines for reviewing and adjusting the overall content of land use planning in the construction planning of new rural communes suitable to local resources.

In order to improve the efficiency of land use management in the process of new rural construction, it is necessary to synchronously implement the following solutions: formulating plans of

land use projects for each period; maintaining supervision of the planning implementation process; clarifying the revenue from land for building new rural areas; placing landmarks in the field for areas with detailed plans and expanding effective production models; allocating the government bond capital timely; building a synchronized land database; strengthening the propaganda of community participation.

References

- 1. The Central Executive Committee (2008). Resolution No. 26-NQ / TW, August 5, 2008, The 7th Conference of the Central Executive Committee, Session X, on agriculture, farmers and rural areas.
- 2. Ministry of Natural Resources and Environment. 2006. Official Letter No. 5763 / BTNMT-ĐKTK of December 25, 2006. Guiding the application of land use norms in the formulation and adjustment of land use plannings and plans.
 - 3. Likert, R. (1932). A Technique for the Measurement of Attitudes. Archives of Psychology, Vol. 140, No. 55.
- 4. Hoang Trong and Chu Nguyen Mong Ngoc (2008). Analyze research data with SPSS, Statistical Publishing House. Hanoi.
 - 5. Division of Natural Resources and Environment of Tho Xuan district (2019). Land statistics report 2018.
- 6. Provincial People's Committee of Thanh Hoa Province (2019). Steering Committee of Agricultural Development Program and Construction of NTM Thanh Hoa.
- 7. People's Committee of Tho Xuan district (2019a). Report on socio-economic development situation in the first 6 months of 2019 and the plan for the last 6 months of the year.
 - 8. People's Committee of Tho Xuan district (2019b). Statistical yearbook of 2018 Tho Tho district.
- 9. Tho Xuan District People's Committee (2019c). Report No. 209 / BC-UBND dated July 22, 2019, of Tho Xuan District People's Committee on the Results of New Rural Construction to 2019.