CURRENT STATUS AND ORIENTATION OF RESIDENTIAL AREAS IN QUANG XUONG DISTRICT, THANH HOA PROVINCE, VIETNAM

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Received date: 14.09.2012 Accepted date: 20.12.2012

ABSTRACT

The study aimed at analyzing the current status of residential areas of Quang Xuong District in response to *"Tam nong"* policy. The data were gathered from 392 residential areas of the district. The results show that Quang Xuong district has a population of 265,249 people, 65,172 households, and a total area of 22,780.12 hectares, of which the land for residential areas is 6,003.31 hectares, including 3,350.35 hectares for housing. The district consists of 41 communes with 392 residential areas. On average, each commune had 10 residential areas and each residential area includes 676 people and 166 households. Based on some criteria of Vietnamese standards No. 4418 in 1987, Resolution No.26/NQ-TW and A Set of National Criteria for Renewing Rural Areas in Decision No. 491/QD-TTg, 392, residential areas of Quang Xuong were classified into 3 levels: level 1 with 71; level 2 with 134; and level 3 with 187 residential areas. There are some drawbacks in terms of landscape architecture and great differences between urban and rural residential areas. By 2020, Quang Xuong District will develop into 4 regions with 5 towns and 1 center of commune group according to regional advantages. The district will have 363 residential areas: level 1 with 140; level 2 with 158; and level 3 with 65 residential areas. To develop united residential areas and enhance living quality of local people, local authorities should improve all types of planning and make appropriate policy to mobilize capital from government, NGOs, and people.

Keywords: Residential areas, renewing rural areas, Quang Xuong, "Tam nong" policy.

Thực trạng và định hướng phát triển hệ thống điểm dân cư huyện Quảng Xương, tỉnh Thanh Hóa, Việt Nam

TÓM TẮT

Mục đích của nghiên cứu là phân tích thực trạng hệ thống điểm dân cư huyện Quảng Xương, tỉnh Thanh Hoá trong bối cảnh cả nước đang thực hiện chính sách " Tam Nông". Số liệu được thu thập từ 392 điểm dân cư. Kết quả nghiên cứu cho thấy Quảng Xương có 265249 khẩu, 65172 hộ, với tổng diện tích tự nhiên là 22780,12ha, trong đó đất khu dân cư là 6003,31ha, gồm 3350,35ha đất ở. Huyện gồm 41 xã, thị trấn với 392 điểm dân cư. Trung bình mỗi xã có 10 điểm dân cư và mỗi điểm dân cư có 676 người và 166 hộ. Việc phân loại điểm dân cư dựa trên một số tiêu chí của tiêu chuẩn Việt Nam số 4418 năm 1987, Nghị Quyết số 26/NQ-TW và các tiêu chí xây dựng nông thôn mới theo Quyết định số 491/QĐ-TTg. Kết quả phân loại 392 điểm dân cư có 71 điểm dân cư loại 1, 134 điểm dân cư loại 2, và 187 điểm dân cư loại 3. Kiến trúc cảnh quan khu dân cư còn nhiều hạn chế và có sự khác biệt giữa khu vực đô thị và khu vực nông thôn. Đến năm 2020, hệ thống dân cư phát triển theo 4 vùng của huyện. Dựa vào đặc điểm phát triển của từng vùng sẽ hình thành 5 thị trấn và một trung tâm cụm xã. Khi đó toàn huyện sẽ có 363 điểm dân cư với 140 điểm dân cư loại 1; 158 điểm dân cư loại 2; 65 điểm điểm dân cư loại 3. Để phát triển hệ thống điểm dân cư thống nhất và nâng cao chất lượng cuộc sống của người dân, chính quyền địa phương cần phải xây dựng hoàn chỉnh các loại quy hoạch và có các chính sách huy động nguồn vốn từ ngân sách Nhà nước và nhân dân.

Từ khóa: Chính sách Tam nông, điểm dân cư, nông thôn mới, Quảng Xương.

1. INTRODUCTION

Residential areas play a crucial role in human life. They are places where almost people's daily activities take place. The land for residential areas is associated with the production and business activities creating material wealth for

society. Organizing the system of residential areas logically will create favorable conditions for the state management in terms of land, meeting the requirements of the organization and development of production of economic sectors, fulfilling the needs of people for employment, housing, communication, material requirements, spiritual culture, resting and entertainment, diversifying landscape and environmental protection (Do Duc Viem, 2005; NIAPP, 2007).

In 2008, the Political Bureau issued Resolution No.26/NQ-TW, namely "Tam nong" policy. This Resolution focuses on three hot issues in Vietnam, they are Agriculture, Farmer, and Rural Areas. Following this Resolution, in 2009, the Ministry of Agriculture and Rural Development issued "*A Set of National Criteria for Renewing Rural Areas*", including 19 criteria with 5 groups: planning, socio-economic infrastructure, economics and productive organizing, culture-society-environment; and politic system (Vietnamese Government, 2009). Thus, every commune should develop its orientation according to those policies to meet the process of industrialization and modernization. In order to see how the system of residential areas in Vietnam is organized nowadays, this paper provides an in-depth look into a typical district - Quang Xuong district of Thanh Hoa province, which is located in the centeral part of Vietnam with population of 265249 people, 65172 households, and its total area of 22780.12 hectares. There are a great number of aspects in the district which are worth studying. However, due to the limited investigation scope, the paper only focuses on two main points: the state of system of residential areas, and the orientation of residential areas in the district. The analysis shows that Quang Xuong district should have some types of planning which develop the system of urban residential areas and rural residential areas reasonably with the aim of improving living quality of local people.

The results of the study will hopefully help policymakers understand and appreciate the roles of system of residential areas in the sustainability of social-economic development efforts. The study would contribute to the practical and theoretical understanding of community performance in terms of planning for residential areas. The study also provides the local people with a better understanding of the nature of system of residential areas to enable them to adjust their practices accordingly and further empower them to adapt behaviors that bring opportunity and promise to their lives as well as their community.

The study aimed to analyze the state of organizing land use, constructing and developing the system of urban residential areas and rural residential areas in Quang Xuong district, Thanh Hoa Province. Moreover, the study made orientations for the development of the system of residential areas in order to meet the requirements of sustainable social and economic development.

2. METHODOLOGY

The study has been conducted in Quang Xuong District, Thanh Hoa, Vietnam, which is Coastal Delta area with its increasing volume of integrated economics of agriculture, industry, service, and tourist. The district is located as center of economic-triangle of Thanh Hoa city, Nghi Son Industrial Zone and Sam Son Beach.

2.1. Method of data collection

The secondary data of the study were collected from state agencies, departments, divisions in the district, the library, and research centers and the primary data were gathered by direct survey methods through the available questionnaire and supplementary investigation in 392 residential areas.

2.2. Methods of data analysis

In this study, the descriptive analysis, such as means, frequency counts, percentages, and standard deviation was used to describe the characteristics of each residential area. Besides that, the statistical data on land were processed by Excel program and the methods of classifying residential areas were also selected for the study. It should be noted that classifying residential areas is based on some criteria of Vietnamese

standards No. 4418 in 1987 and the criteria to build new rural areas, according to Political Bureau issued Resolution No.26/NQ-TW *and A Set of National Criteria for Renewing Rural Areas* in Decision No. 491/QD-TTg, including 19 Criteria with 5 groups: planning, socio-economic infrastructure, economics and productive organizing, culture-society-environment; and politic system. Based on the criteria of the Set and based on district's conditions, they were integrated into 9 groups of indicators: The role and significant influence of residential areas, the size of residential areas, population size of residential areas, the quality of transportation systems in residential areas, the quality of housing in residential areas, the ratio household getting standard of cultural-family, the education-level of people in residential areas, the structure of agricultural labor, non-agriculture in residential areas, and social infrastructure. Each group of indicators is classified into 4 levels and marked on a scale of 4 points (Table 4). The total number of points of each residential area was measured by computing data from the above 9 groups. This number was divided into 3 levels, i.e. level 1: over 25 points; level 2: from 20 to 25 points; level 3: below 20 points. In addition to those, the methods of calculating the future demands for land use of residential areas were also mentioned in the study. The noticeable thing is that the future demands for land use of residential areas include land for housing; land for public target; land for transportation; and land for planting trees in the district. These areas can be calculated on the basis on the Official Dispatch No. 5763/ *BTNMT - ĐKTK* dated on 2nd December, 2006 by Ministry of Natural Resources and Environment (MONRE, 2006).

2.3. Expert Method

In the process of researching and fulfilling the report, there has been a consultation with some experts on the fields of landscape architecture, social science, and on land use planning.

3. RESULTS AND DISCUSSIONS

3.1. Actual land use in Quang Xuong District in 2010

According to statistical data in 2010, Quang Xuong district has total natural area of 22780.12 hectares, of which 13654.03 hectares are agricultural land, making up 59.94% of total natural area; non-agricultural land area is 8342.64 hectares making up 36.62% and unused land area is 783.45 hectares, making up 3.44% total natural land area (DNRE, 2010).

Table 1. Actual of land use in Quang Xuong district in 2010

No	Type of land use purposes	Code	Area (ha)	Percentage (%)
1	Agricultural land	NNP	13654.03	59.94
1.1	Land for agricultural production	SXN	12115.90	53.19
1.2	Land for forestry	LNP	388.30	1.70
1.3	Land for aquaculture	NTS	1096.52	4.81
1.4	Land for salt production	LMU	26.64	0.12
1.5	Other agricultural land	NKH	26.67	0.12
2	Non-agricultural land	PNN	8342.64	36.62
2.1	Land for housing	OTC	3350.35	14.71
2.1.1	Land for rural housing	ONT	3307.03	14.52
2.1.2	Land for urban housing	ODT	43.32	0.19
2.2	Special land	CDG	3690.24	16.20
2.3	Land for religious and spirit facilities	TTN	10.94	0.05
2.4	Land for cementry	NTD	303.74	1.33
2.5	Land of river, stream and water surface	SMN	987.37	4.33
3	Unused land	CSD	783.45	3.44
	Total		22780.12	100

3.2. State of system of residential areas in the district

3.2.1. State of the residential areas in Quang Xuong District

According to the statistics in 2010, Quang Xuong district has 392 residential areas. The total population is 265,249 people with 65,172 households. On average, each commune has 10 residential areas and each residential area has 677 people and 166 households. They are grouped into 4 regions:

- The Center region includes 10 communes with 99 residential areas. On average, each commune has 9.9 residential areas and there are 565 people and 147 households in each residential area. Even it is center of the district, population density is quite lower than the average of the district.

- Northeastern region includes of 11 communes with 112 residential areas. On average, each commune has 10.1 residential areas and there are 675 people and 169 households in each residential area. Population density is as high as the average of the district.

- South East Region includes 10 communes with 85 residential areas. On average, each commune has 8.5 residential areas and there are 874 people and 200 households in each residential area. Population density is higher than the average of the district.

- Southwest Region includes 10 communes with 96 residential areas. On average, each commune has 9.6 residential areas and there are 621 people and 154 households in each residential area. Population density is below the average of the district.

3.2.2. Actual land use in residential areas

The area for housing in residential areas accounts for 76.95% which is the same as the standard set by Monre. The average area for housing per capita is 126.31m^2 which is 1.8 times as high as the standard of Monre. The noticeable thing is that the central region has the biggest area for housing with 139.43 m^2 per capita, twice as high as the standard of Monre. The smallest average area for housing region is the North-East, with 117.02 m^2 per capita which is, however, 1.67 times as high as the Monre's standard. Therefore, in the future, some solutions should be given to enhance the capacity for redistributing land from the area for gardening.

The average area for public construction is 9.85 m^2 per capita which is 3.3 times as high as the standard of Monre. It can be seen that the average area for public construction in the South-West is highest with 13.4m^2 per capita,

Table 2. State of System of residential area in Quang Xuong district in 2010

The regions/ communes	Residential areas	Population (person)	Households	Total area (ha)	Main purpose of land use in residential areas (ha)					
					Housing	Public construc-tion	Transpor-tation	Planting the trees	Home craft	Security
I. The Centre	99	57081	14844	1018.37	795.90	65.15	122.32		35.00	
II. North-eastern region	112	75554	18885	1082.68	884.13	68.72	129.83			
III. South-eastern Region	85	74265	16984	1133.11	881.85	46.81	152.04	10.64	41.77	
IV. South-western Region	96	58349	14459	1076.29	806.22	78.21	129.08	38.02	21	3.76
Total	392	265249	65172	4353.79	3350.35	261.30	526.52	97.59	114.27	3.76

Table 3. Comparison of status of land use in residential area in the district

Purpose of land use in 2012		The center region	North Eastern region	South East region	South West region	The average of the district	Standard[c]	Compare (times)
Housing	Percentage (%)	78.15	81.66	77.83	74.91	76.95	64 - 82	0.9 - 1.2
	Area (m^2/capita)	139.43	117.02	118.74	138.17	126.31	55 - 70	1.8 - 2.3
Public construc-tion	Percentage (%)	6.40	6.35	4.13	7.27	6.00	2 - 4	1.5 - 3.0
	Area (m^2/capita)	11.41	9.10	6.30	13.40	9.85	2 - 3	3.3 - 4.9
Transpor-tation	Percentage (%)	12.01	11.99	13.42	11.99	12.09	7 - 11	1.1 - 1.7
	Area (m^2/capita)	21.43	17.18	20.47	22.12	19.85	6 - 9	2.2 - 3.3
Planting the trees	Percentage (%)			0.94	3.53	2.24	4 - 6	0.4 - 0.6
	Area (m^2/capita)			1.43	6.52	3.68	3 - 4	0.9 - 1.2
Home craft	Percentage (%)	3.44		3.69	1.95	2.62	9 - 13	0.2 - 0.3
	Area (m^2/capita)	6.13		5.62	3.60	4.31	8 -11	0.4 - 0.5

Ghi chú: c: Official Dispatch No. 5763/ BTNMT - ĐKTK, issued on December 2nd, 2006 by Ministry of Natural Resources and Environment.

4.5 times as big as the standard of Monre, whereas, the average area for public construction in the South- East is the lowest with 6.30 m^2 per capita. This is still 2.1 times as high as the standard of Monre. Thus, in the future, there should be solutions to use up public constructions and reduce new constructions in order to avoid waste of land.

The average area for transportation is 19.85 m^2 per capita which is 2.2 times as high as the standard of Monre. The average area for transportation per capita is highest in the South-west region. In general, the average area for transportation of the regions in the district is evenly distributed. In order to save land for other purposes, the system of transportation in the district should be used up instead of building new ones.

The average area for planting trees is 3.68 m^2 per capita which is conforming to the standard of Monre. The highest average area for planting trees is the South-West region with 6.52 m^2 per capita. But the noticeable thing was that the area for planting trees was unevenly distributed. However, there were three regions: the centre, North-East, and South-East which do not have any space meters for planting trees. In order to protect our environment and improve the quality of our life, the area for planting trees in the district should be planned more evenly.

The table 3 also shows that the average area for home craft in the district is 4.31m^2 per capita which is 0.5 times less than the standard. The centre is the region in which the average area for home craft is highest, with 6.13 m^2 per capita that is, however, much lower than the standard. It is noteworthy that the North-East region posseeses no space for home craft. Therefore, more research on the development of traditional craft villages should be carried out so that the local people's income can be improved day by day.

3.2.3. Classification of system of residential areas

Based on the criteria for evaluation, 392 residential areas in Quang Xuong are classified into 6 urban residential areas and 386 rural residential areas (Table 4).

Table 4. The criteria for evaluation residential areas and results

Features, characteristics	Scores	Results	
		No. of residential area	Percentage (%)
Indicator group A: Assessing the role and significant influence of residential areas		392	100.00
A1: very important role and strong significant influence	4	4	1.02
A2: important role and strong significant influence	3	47	11.99
A3: quite important role and strong significant influence	2	88	22.45
A4: Others	1	253	64.54
Indicator group B: Assessing the size of residential areas		392	100.00
B1: Total area is higher than 25 ha	4	17	4.34
B2: Total area from 15 to 25 ha	3	2	0.51
B3: Total area from 10 to 15 ha	2	161	41.07
B4: Total area is lesser than 10 ha	1	212	54.08
Indicator group C: Assessing population size of residential areas.		392	100.00
C1: Total population is higher than 900 inhabitants	4	76	19.39
C2: Total population from 600 to 900 inhabitants	3	109	27.81
C3: Total population from 300 to 600 inhabitants	2	192	48.98
C4: Total areas is lesser than 300 inhabitants	1	15	3.83
Indicator group D: Assessing the quality of transportation systems in residential areas.		392	100.00
D1: proportion of harden main road is higher than 80% and no slushy road.	4	76	19.39
D2: proportion of harden main road is from 60% to 80% and proportion of slushy small road is higher than 90%.	3	109	27.81
D3: proportion of harden main road is lesser than 60% and proportion of slushy small road is higher than 90%.	2	192	48.98
D4: ratio of harden main road is lesser than 60% and almost of small road is slushy.	1	15	3.83
Indicator group E: Assessing the quality of housing in residential areas.		392	100.00
E1: proportion of solid housing is higher than 80% and no makeshift housing	4	31	7.91
E2: proportion of solid housing is higher from 50% to 80% and ratio of makeshift housing is lesser than 5%	3	113	28.83
E3: proportionof solid housing is lesser than 50% and proportion of makeshift housing is lesser than 10%	2	181	46.17
E4proportionof makeshift housing is higher than 10%	1	67	17.09
Indicator group F: Assessing of social infrastructure: Percentage of households using electricity, telephones, cleaned water in residential areas.		392	100.00
F1: proportionof households using electricity is higher than 95%; proportion of households using telephone is higher than 70%; ratio of households using cleaned water is higher than 85%	4	43	10.97
F2: proportion of households using electricity is from 65% to 95%; proportion of households using telephone is from 50% to 70%; proportion of households using cleaned water is from 60% to 85%	3	210	53.57
F3: proportion of households using electricity is from 45% t0 65%; proportion of households using telephone is from 30% to 50%; proportion of households using cleaned water is from 40% to 60%	2	71	18.11
F4: proportion of households using electricity is lesser than 45%; proportion of households using telephone is lesser than 30%; proportion of households using cleaned water is lesser than 40%	1	68	17.35
Indicator group G: Assessing the education-level of people in residential areas.		392	100.00
G1: Proportion of educated-labors is higher than 35% and proportion of junior school pupils getting higher education is higher than 85%.	4	247	63.01
G2: Proportion of educated-labors is from 25% to 35% and proportion of junior school pupils getting higher education is from 65% to 85%.	3	107	27.30
G3: Proportion of educated-labors is from 15% to 25% and proportion of junior school pupils getting higher education is from 50% to 65%	2	18	4.59

G4: Proportion of educated-labors is lesser than 15% and proportion of junior school pupils getting higher education is lesser than 50%.	1	20	5.10
Indicator group H: Assessing the structure of agricultural labor. non-agriculture in residential areas.		392	100.00
H1: proportion of agricultural labor is lesser than 35%	4	37	9.44
H2: proportion of agricultural labor is from 35% to 50%	3	16	4.08
H3: proportion of agricultural labor is from 50% to 65%	2	26	6.63
H4: proportion of agricultural labor is higher than 65%	1	313	79.85
Indicator group I: Evaluation of the proportion household getting standard of cultural-family.		392	100.00
I1: proportion of households getting standard of cultural-family is higher than 70%	4	203	51.79
I2: proportion of households getting standard of cultural-family is from 65% to 70%	3	19	4.85
I3: proportion of households getting standard of cultural-family is from 50% to 65%	2	77	19.64
I4: proportion of households getting standard of cultural-family is lesser than 50%	1	93	23.72

Table 5. The results of system of residential areas in 2010

Targets	Unit	Total	Level		
			1	2	3
1. Total residential areas	Areas	392	71	134	187
2. The total residential areas area	Ha	6003.31	1489.05	1989.59	2524.67
3. Land for housing	Ha	3350.35	739.32	1151.53	1459.5
4. Population	people	265249	60266	86254	118729
5. Household size (members per Household)	Person	4.07	3.88	4.09	4.16
6. Households	Household	65170	15529	21104	28537
7. Average indicators					
- The size of residential area	Ha	15.31	20.97	14.85	13.50
- Population per residential areas	Person	677	849	644	635
- Households per residential areas	Household	166	219	157	153
- The residential areas land per household	m^2	921.18	958.88	942.75	884.70
- Land for housing per household	m^2	514.09	476.09	545.65	511.44
- The residential areas area per capita	m^2	226.33	247.08	230.67	212.64
- Per capita land for housing	m^2	126.31	122.68	133.5	122.93

3.3. The direction of development system of residential areas in Quang Xuong to 2020

3.3.1. The direction of development system of urban residential areas and the urbanization

* In the center region: the town of Quang Xuong is the administrative center of politics, culture, science and technology of the district and the satellite town of Thanh Hoa City. During the planning period to 2020, the town of Quang Xuong is projected for expansion by merging with Quang Tan commune with an area of 591.24 hectares (People's Committee of Quang Xuong, 2007).

* By 2020 the North East region is projected to form two urban areas: Moi and Southern Sam Son. The natural area of Moi Urban with 200 hectares is planned for the development of commercial centers, the expansion of vocational schools and high-end residential junction which will form a city of Thanh Hoa with Sam Son town (People's Committee of Quang Xuong, 2007).

Urban travel with Southern Sam Son Beach is planned to occupy 300 hectares. The formation of the town of Southern Sam Son would exploit the tourism potential of the region, and the beauty of the beach lying along the Truong Le mountain - a buffer zone for Sam Son Town (People's Committee of Quang Xuong, 2007).

* By 2020 in the Southeast region, Trang Tien town is projected to expand across the land in Quang Loi commune, Quang Linh, Quang Thach. Therefore, Trang Tien town by 2020 will occupy an area of 300 hectares (People's Committee of Quang Xuong, 2007).

3.3.2. The direction of development system of rural residential areas

The population in rural areas is estimated at about 226,565 people with 55,666 households. Besides, many households come to the industrial and infrastructure development areas. By 2020, land for rural housing will increase to 90.45 hectares (including new land for housing and resettlement land).

By 2020, Thanh Hoa city will expand to the southeast and will take all the administrative boundaries of the three communes of Quang Thinh, Quang Dong and Phu Quang of Quang Xuong district. The total rural residential areas of the district will move to the Thanh Hoa city with 29 residential areas (8 residential areas in Quang Thinh, 12 in Quang Dong, 9 in Quang Phu), including 9 residential areas of level 1; 9 residential areas of level 2; and 11 residential areas of level 3 (People's Committee of Quang Xuong, 2007, 2006). Those residential areas will not be included in planning orientation.

3.3.3. The structure of land use in residential areas front and rear direction

Based on the above development direction of residential areas and the land use standard in the Official Dispatch No. 5763/ *BTNMT - ĐKTK*, the future demands for land use of residential areas can be calculated. Thus, by 2020, residential areas will change (Table 7), specifically:

- Non-agricultural land in residential areas will increase to 499.56 hectares, of which:

+ Land for housing will increase to 192.83 hectares, rural dwelling house land will decrease to 190.31 hectares, and urban dwelling house land will increase 383.14 hectares;

+ Land for head office and non-productive works will increase to 28.56 hectares;

+ Land for non-agricultural business, production will rise by 66.62 hectares;

+ Land for public target will reach 211.55 hectares (including land for ttransportation, land for cultural facilities, land for educational and training facilities, and land for sports facilities...)

Table 6. The planning orientation of system of residential areas in Quang Xuong in 2020

Targets	Unit	Total	Level		
			1	2	3
1. Total residential area	Areas	363	140	158	65
2. Total residential areas area	hectares	6132.87	2481.51	2804.79	846.57
3. Land for housing	hectares	3543.18	1340.54	1594.43	608.21
4. Population	people	292722	112895	127348	52479
5. Household size (members per household)	Person	4.03	3.99	4.16	3.83
6. Households	Household	72708	28325	30647	13709
7. Average indicators					
- Size of residential area	hectares	16.89	17.73	17.75	13.02
- Population per residential area	Person	806	806	806	807
- Households per residential area	Household	200.30	202.32	193.97	210.91
- Residential land per household	m^2	843.49	876.08	915.19	617.53
- Land for housing per household	m^2	487.32	473.27	520.26	443.66
- Residential areas area per capita	m^2	209.51	219.81	220.25	161.32
- Land for housing per capita	m^2	121.04	118.74	125.20	115.90

Table 7. The structure of land use in residential areas in 2010 and 2020

No.	Type of Land Use Purposes	Code	2010		2020		Compare
			Area (ha)	Percentage (%)	Area (ha)	Percentage (%)	Area (ha)
Total land area of residential areas			6003.31	100.00	6132.87	100.00	129.56
1	*Agricultural land*	*NNP*	*1484.33*	*24.73*	*1164.33*	*18.99*	*-320.00*
1.1	Land for agricultural production	SXN	1184.70	19.73	914.7	14.91	-270.00
1.2	Land for forestry	LNP	96.00	1.60	96.00	1.57	
1.3	Land for aquaculture	NTS	203.63	3.39	153.63	2.51	-50.00
2	*Non-agricultural land*	*PNN*	*4385.10*	*73.04*	*4884.66*	*79.65*	*499.56*
2.1	Land for housing	OTC	3350.35	55.81	3543.18	57.77	192.83
2.1.1	Land for rural housing	ONT	3307.03	55.09	3116.72	50.82	-190.31
2.1.2	Land for urban housing	ODT	43.32	0.72	426.46	6.95	383.14
2.2	Special land	CDG	998.26	16.63	1304.99	21.28	306.73
2.3	Land for religious and spirit facilities	TTN	3.76	0.06	3.76	0.06	
2.4	Land for burial ground	NTD	0.40	0.01	0.4	0.01	
2.5	Land of river, stream and water surface	SMN	27.57	0.46	27.57	0.45	
2.6	Other non-agricultural land	PNK	4.76	0.08	4.76	0.08	
3	*Unused land*	*CSD*	*133.88*	*2.23*	*83.88*	*1.37*	*-50.00*

3. CONCLUSION

Quang Xuong is located in the geographical area favorable for transportation and strong potential for developing tourism and handicrafts. The total natural land area is 22,780.12 ha, of which, the land for residential areas is 6003.31 hectares, including 3350.35 hectares for housing; 261.30 hectares for public construction systems; 526.33 hectares for transportation; 97.59 hectares for growing green trees; 114.27 hectares for small scale industries; 3.76 hectares for security; and 131.65 hectares for other purposes. It consists of 41 communes with 392 residential areas (6 urban residential areas and 386 rural residential areas). On average, each commune has 10 residential areas and there are 676 people and 166 households in each residential area. Based on "*A Set of National Criteria for Renewing Rural Areas*", 392 residential areas of Quang Xuong were classified into 3 levels: level 1 with 71; level 2 with 134; and level 3 with 187 residential areas. There are some drawbacks in terms of landscape architecture and great differences between urban and rural residential areas.

The findings also show that the average area for housing, public construction and transportation is much higher than the standard of Monre. Therefore, it is important for authorities to find out some solutions to enhance the capacity for redistributing land for gardening. Furthermore, the system of public constructions and transportation should be fully utilized and new constructions should be reduced in order to avoid waste of land.

It is noteworthy that the industrial and urban areas. It is important tat the average area for home craft which is much lower than the standard of Monre indicates that the process of industrialization has take place recently, along with the process of state and provincial innovation. However, the scale of industrial zones is still small and it is not fully invested. Thus, more studies on the development of industrial parks traditional craft villages should be invested so that the local people's living standard can be improved day by day.

Besides those, the process of urbanization occurrs slowly and it only focuses on the towns

and the communal centers. There are no planned areas for planting green trees which can strongly support industrial and urban areas. It is important that the area for planting trees in the district should be planned more evenly to protect environment and improve the quality of life.

Apart from those results, by 2020, the system of residential areas will develop into 4 regions with 5 towns and 1 center of commune group according to regional advantages. By that time, Quang Xuong district will have 363 residential areas: level 1 with 140; level 2 with 158; and level 3 with 65 residential areas. In which urban residential areas are 46 (level 1 with 26 and level 2 with 20 residential areas); rural residential areas are 317 (level 1 with 114 and level 2 with 138, and level 3 with 65 residential areas).

Additionally, the future demands for land use of residential areas can be calculated based on the development direction of residential areas and the land use standard in the Official Dispatch No. 5763. Thus, by 2020, non-agricultural land in residential areas will increase to 499.56 hectares, of which: land for housing will increase to 192.38 hectares, rural dwelling house land will decrease 190.31 hectares, urban dwelling house land will reach 383.14 hectares; and land for special purpose will increase 306.73 hectares; and unused land will decrease 50.00 hectares. There is no great difference between urban and rural residential areas. To develop united residential areas and enhance living quality of local people, the local authorities should improve all types of planning and make appropriate policy to mobilize capital from government, NGOs, and people.

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