

**ASSESSMENT OF CHANGES OF RESIDENTIAL LIVING STANDARDS
IN NHON CHAU ISLAND COMMUNE (BINH DINH PROVINCE)
AFTER THE IMPLEMENTATION OF THE NATIONAL TARGET PROGRAM
ON NEW RURAL CONSTRUCTION FOR THE PERIOD OF 2016-2020**

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Abstract. The article applies a multi-criteria analysis method from secondary data and the results of a survey of 150 households to assess the change in living standards of residents in Nhon Chau island commune, Binh Dinh province after implementing the National Target Program on building new rural areas for the period of 2016-2020. Research results show that 45.3% of households believe that living standards have been improved in a positive direction. In particular, indicators of income, expenditure, living conditions in housing, electricity, water, durable goods change greatly. At the same time, the indicators on health care, the percentage of people with health insurance and the educational indicators related to sending children to school at the right age increase; cultural and spiritual life are improved; the rate of multidimensionally poor households decrease, the quality of life improve. The explanation for this change is the promotion of infrastructure construction, capital investment, changes in science and technology in production to help people transform their livelihoods and form new production models, creating new job opportunities and increasing income. However, living conditions in an island commune are difficult, capital is limited, and some families are afraid to change and lack production means, so their living standards are difficult and they still fall into poverty. The current situation of people's living standards before and after the program implementation contributes to supplementing the scientific basis to provide solutions to stabilize livelihoods, successfully implementing the National Target Program for the period of 2021 - 2025 in Nhon Chau island commune, Binh Dinh province.

Keywords: residential living standards, new rural, Nhon Chau island commune, Binh Dinh province.

1. Introduction

Along with poverty reduction, improvement of living standards and quality of people's life is the core task in strategies, policies and action programs aimed at comprehensive

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human development and promoting “human capital” effectively and sustainably [1], [2], [3]. The period 2016 - 2020, is the time when localities promote the implementation of the National Target Program on building new rural areas in order to adapt to the economic transformation, marking a turning point for the locality, and simultaneously building objectives, orientations and solutions for the period 2021 - 2025. The gradual implementation of new rural construction has had obvious impacts on all areas of life, especially in poverty reduction, living standards and quality of people's life enhancement in disadvantaged communes, coastal communes and islands where the main livelihood is fisheries (accounting for more than 75% of the population) and the population is vulnerable to natural and social incidents.

Nhon Chau (also known as Cu Lao Xanh), is an island commune in Quy Nhon city (Binh Dinh province) recognized by the Prime Minister as an island commune under Decision No. 489/QĐ-TTg dated April 13, 2015 [4]. The natural area is 3.63 km², the population is 2,278 people, accounting for 1.36% of the area and 0.78% of the population of Quy Nhon city (in 2020) [5]. Distance from Quy Nhon city center is 24 km (about 12 nautical miles) to the southeast and Song Cau town (Phu Yen province) 12 km (about 7 nautical miles) to the northeast [6]. Regarding the division of administrative units, Nhon Chau island commune has 3 villages: East, Central and West and there are full of relics of religious activities of the inhabitants of coastal villages [6],[8]. With the geographical position between the two mouths of the bay, Quy Nhon (Binh Dinh) and Xuan Dai (Phu Yen), Nhon Chau island commune is one of the outpost islands near the shore, with special strategic significance in terms of security, national defense, marine economic development associated with the protection of territorial sovereignty [6], [8].

In the period 2016-2020, the living standard of people in Nhon Chau island commune has gradually increased, notably, the per capita income reached 2.9 million VND/month (2016) and increased to 3.6 million VND/month (in 2020). The percentage of poor households decreased from 4.6% to 2.5% according to the new criteria and activities of education, health care, culture, security, etc. increasingly improved in a positive direction [9],[10]. However, with the characteristics of island communes and in the current context, people's livelihoods and living standards lack stability and sustainability, many indicators are slow to change such as the rate of school absenteeism, the percentage of adults who know words, newly applied production models have not brought about synchronous efficiency for the locality [10]. Moreover, market fluctuations and epidemics have had a great impact on production and people's lives, especially in vulnerable communities. This has an important influence on the implementation of the program in the period of 2021 - 2025, aiming at the goal of “*focusing on economic development, promoting fishing and aquaculture in association with tourism and services, marine eco-community tourism of Nhon Chau commune in the period of 2020 - 2025*” according to the Resolution of the XV Party Congress of Nhon Chau commune for the 2020-2025 term [11].

From the perspective of Geography, the study was carried out with the objective of assessing the status and changes of Residential living standards, and simultaneously identifying the root causes affecting the production process and improving living

standards in island communes. In Nhon Chau, the timeline for making comparisons in household survey results is 2020 and before 2016, after the locality implements the National Target Program on new rural construction for the 2016-2020 period according to the national criteria for new rural communes in this period of the Prime Minister.

2. Content

2.1. Data and research methods

2.1.1. Research data

To conduct this study, the secondary source of documents used is the report on the results of the implementation of the National Target Program on new rural construction in the 2016-2020 period [9], [10]; annual socio-economic development reports of Nhon Chau island commune. At the same time, data sources related to people's living standards, local poverty reduction results, statistical yearbook of Quy Nhon city [5] and Binh Dinh province [12] for evidence when assessing and comparing.

Moreover, the primary data source is used through the results of the survey of 150 households, which is the most important data source to assess the extent as well as determine the causes of changes over time associated with the suitable subject and research territory.

2.1.2. Research methods

The research is carried out by using a system of typical methods of Geography such as analysis, comparison, synthesis; survey – fieldwork; collecting and processing data; expert methods, in-depth interviews, sociological investigation to clarify the set objectives.

In which, the method of sociological investigation is conducted as follows:

- *Determine the purpose of the investigation*: Collecting data to supplement the missing or insufficient information of secondary data, in order to analyze the situation, confirm and compare with the theory to have scientific conclusions about the change in living standards of the population according to the current situation in Nhon Chau island commune, Binh Dinh province.

- *Objects, locations, and contents of the investigation*: Surveying in households in 3 villages (Central, East, West) of Nhon Chau island commune. The contents focus on assessing the change in living standards of the population in the period before and after 2016: Production situation, per capita income; spending, spending purposes in life; equipment and means of daily life in the family; social services (education, health care) and living conditions in terms of housing, electricity, water, and sanitation. At the same time, the household survey process also assesses the household's economic status and poverty problem, the degree of change in living standards and identifies the causes of that change.

- *Sampling*: Determining the sample size to be investigated is a job to ensure reliability and science in the research process. There are many formulas to determine the sample size, but through research, research and homogeneity among statisticians, the author chooses Cochran's formula [15], [16]:

$$n = \frac{N}{1 + N \cdot \delta^2}$$

In which, n : Survey sample size (Household),

N : Total number of observations (Total number of households), δ : Tolerable error.

With N (in 2020): 547 households, accuracy 93% and allowable error δ is 7%, the minimum number of samples n to be investigated is 148.6 households (the author agrees on 150 samples). This is enough to represent the total number of households in the island commune. The samples were randomly stratified and distributed equally to each village with 50 questionnaires.

- *Processing results*: After conducting the investigation, the author synthesizes and uses SPSS 20.0 software to process and analyze descriptive statistics in the form of frequency of variables, thereby evaluating and giving results essay.

2.2. Changes in living standards of people in Nhon Chau island commune (Binh Dinh province) after the implementation of the national target program on new rural construction

2.2.1. Overview of the results of the process of building new rural area in Nhon Chau island commune in the period 2016-2020

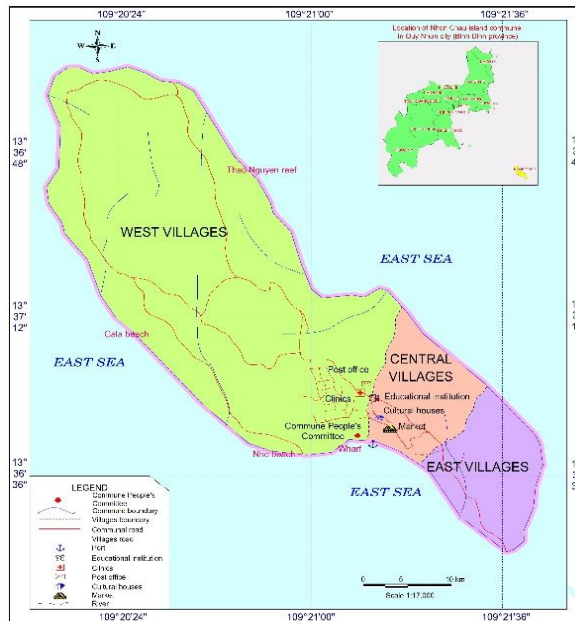


Figure 1. Research area map – Nhon Chau island commune

Starting to implement the National Target Program on new rural construction in 2013, the government and people of Nhon Chau island commune gradually completed 19 criteria in 5 groups according to Decision No. 1980/QĐ-TTg, dated October 17, 2016 of the Prime Minister on promulgating the national set of criteria for new rural communes in the 2016-2020 period. The results of the program implementation for the period 2016 - 2020 are the successor and maintenance of the results of the period 2013 - 2016 and are gradually improved to meet the requirements and carry out the advanced

new rural program in the period of 2021 – 2025. The results of new rural construction in Nhon Chau island commune are summarized as follows [9], [10], [14]:

First, the planning for the development of the transport system, cultural and sports facilities, electricity, commerce and social services has been gradually completed, meeting the requirements, which is put into use to serve the needs of the population.

Second, the issue of jobs and raising incomes for people with many sustainable economic development models and product development models have changed the lives of people on the island. Many households have actively participated in the application and replication of models with existing capital by expanding reproduction, which has brought positive effects, helping to transform their livelihoods and increase their ability to cope with the natural and social shock.

Third, the rate of poor households has decreased rapidly and sustainably over the years, thereby promptly solving basic and pressing problems of poor and near-poor households in terms of housing, medical examination and treatment, study, loans, and infrastructure. Poverty reduction regimes and policies have been basically resolved in a timely manner and in accordance with regulations, many households no longer expect or rely on the support of the State. Mass cultural, artistic and sports activities are promoted. The quality of education is increasing, the universalization of lower secondary education is maintained. Disease prevention and people's health care have achieved good results.

Fourth, the grassroots political system is constantly being strengthened and synergy is promoted. The situation of the security and social order is stable, people agree and respond strongly, creating a pervasive and effective effect on the new rural construction program.

However, the implementation process still has some limitations such as Criteria on education, environment, poverty rate have decreased but lack of sustainability. Cooperatives have not yet met the requirements of the production organization, the linkage between the agriculture - industry and the market is still limited, and the application of scientific and technical advances has not been much. Moreover, capital mobilization is still difficult, state budget capital is low, people's capital is still limited due to low income, no capital in enterprises...

2.2.2. Assessment of the change in living standards of the population after the implementation of the new rural program in the 2016-2020 period

a. On income and poverty indicators

As of 2020, the average income per capita/month of people in Nhon Chau island commune is 3.6 million VND/month, an increase of more than 1.2 times compared to 2016 is 2.9 million VND. Compared to Quy Nhon city, the average income per capita in Nhon Chau island commune is nearly 2 times lower and almost equivalent with Binh Dinh province [9], [10], [12].

According to the results of the household survey, there are 78 households with an income of 2-4 million VND /month, accounting for 52%, there are 40 households with an income of 4-6 million VND, accounting for 26.7%, the lowest income level under 2

million VND has 20 households (accounting for 13.3%) and the highest income level above 8 million VND has only 1 household (accounting for 0.7%).

Table 1. Per capita income in Nhon Chau island commune (processed from household survey results in 2020, n=150)

		Frequency (household)	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Valid	Below 2 million	20	13,3	13,3	13,3
	From 2 to 4 million	78	52,0	52,0	65,3
	From 4 to 6 million	40	26,7	26,7	92,0
	From 6 to 8 million	11	7,3	7,3	99,3
	Over 8,0 million	1	0,7	0,7	100,0
	Total	150	100,0	100,0	

People in Nhon Chau island commune achieved an average income and increased quite a lot compared to before 2016 thanks to the implementation of aquaculture models such as squid, fish, and blue lobster farming in the sea; fishing activities, processing fish sauce, dried fish and dried squid, etc. are effective thanks to the creation of product brands and market expansion [9]. This is the main livelihood of the people in the island commune (up to 108/150 households surveyed economic activities by the fishing and aquaculture industry, accounting for 72%). In addition, the mobilization of people to change business and tourism services when the commune is connected as a tourist destination on the island in the tourist route of the Quy Nhon city (with 24/150 households doing non-agricultural business, accounting for 16%), and some families with children of working age working in the southern provinces (Ho Chi Minh City, Dong Nai, Binh Duong, etc.) sent money back to their families, contributing to increasing income for local people (accounting for 10%, equivalent to 12/150 households with this income source).

Compared with before 2016, after the locality completed the program to build a new rural area in the period of 2013 - 2016, there were 102 households with a small increase in income, accounting for 68%, 29 households rated it unchanged, accounting for 19.3%, followed by 14 households with a significant increase, accounting for 9.3%.

Table 2. Assess the change in per capita income in Nhon Chau island commune compared to before 2016 (processed from household survey results in 2020, n = 150)

		Frequency (household)	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Valid	Much increased	14	9,3	9,3	9,3
	Little increased	102	68,0	68,0	77,3
	Unchanged	29	19,3	19,3	96,7
	Little decreased	5	3,3	3,3	100,0
	Much decreased	0	0,0	0,0	100,0
	Total	150	100,0	100,0	

Except, there are 5 households with low-income assessment (accounting for 3.3%) falling into the case of damage caused by natural disasters (fishing and aquaculture at a loss) and having sick relatives, requiring medical treatment at provincial and city hospitals and in Ho Chi Minh city. None of the households assessed that their income decreases much after the implementation of the new rural program in the locality. Through this, it can be seen that this is quite a remarkable achievement of Nhon Chau island commune when people's income level is gradually improved and will be a basic condition for people to invest in product development and improve living standards on their own in the near future.

About poor households: The number of poor households and the multidimensional poverty rate decreased significantly from 2016 to 2020, by 2020, there are 15 poor households in Nhon Chau island commune, accounting for 2.7% according to the multidimensional poverty line, while in 2016 there are 46 poor households, accounting for 8.2% (decreased by 31 households and by 5.5%). Compared to Quy Nhon city, the poverty rate in Nhon Chau island commune remained high in the whole period (the poverty rate in Quy Nhon City in 2016 was 0.9% and 0.26% in 2020), compared to the whole province at a lower level (the province in 2020 is 4.1%) [10], [12].

Regarding the policy of implementing programs to improve employment opportunities and reduce poverty in the area, during the implementation of the New Rural Program, Nhon Chau island commune regularly develops production models and creates favorable conditions for the development of new rural areas so that people can borrow capital to develop products to increase income. The Social Policy Bank of Binh Dinh province supports a preferential loan of 50-70 million VND for families who are engaged in fishing to purchase new means and fishing gear, ensuring fishing year-round, “any season, every profession”, combined on a vehicle with 3 - 4 different occupations to rotate the production line [9]. At the same time, the Economic Department of Ho Chi Minh City. Quy Nhon focuses on investing in funding to implement projects on lobster farming, fish farming, and commercial squid farming, attracting 20-30 households each year with partial state support and the rest capital in the people. Besides, the commune has actively encouraged young men of working age to continue to go to inland localities such as Quy Nhon, Hoai Nhon, etc. to participate in offshore fishing occupations, contributing to solving the problem on jobs, earn extra income in the months when the sea is out of season, all kinds of fishing activities do not work. Besides developing livelihoods, stabilizing people's lives also plays a great role in helping locals and people feel secure, reaching out to the sea and sticking to the sea to protect the sovereignty of the sea and islands in the current period.

b. Spending and accumulation

In this indicator, the secondary statistics of the locality are not sufficient, so the author evaluates the results of the household survey. By 2020, the common spending level is from 2 to 3 million VND/person/month, with 77/150 households, accounting for 51.3%, followed by 1-2 million VND, accounting for 27.3%. From 3 – 4 million VND, there are 16 households, accounting for 10.7%. There are 9 households with a spending level of less than 1 million VND, accounting for 6% (falling into poor and near-poor households) and 7 households, accounting for 4.7% of the total spending level is over 4

million VND (among these 7 households, there are 3 households spending over 5 million VND because the family has children going to university in Ho Chi Minh City). Thus, it can be seen that this level of expenditure is quite high (from 2 to over 4 million accounts for 66.7%) and less than 2 million accounts for only 33.3%.

**Table 3. Per capita expenditure in Nhon Chau island commune
(processed from household survey results in 2020, n = 150)**

		Frequency (household)	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Valid	Below 1	9	6,0	6,0	6,0
	From 1 to 2	41	27,3	27,3	33,3
	From 2 to 3	77	51,3	51,3	84,7
	From 3 to 4	16	10,7	10,7	95,3
	Over 4 million	7	4,7	4,7	100,0
	Total	150	100,0	100,0	

In terms of spending purposes in quite diverse households to meet the increasing needs of quality of life (concurrent expenditure for purposes), 100% of households spend on living expenses. everyday is eating, drinking. Next is spending on education - training with 60 households, accounting for 40.0%; spending on health - health care 47 households, accounting for 31.3%; expenditure on investment, production development 25 households, accounting for 16.7%, spending on construction of latrines, electricity and domestic water in the family 21 households, accounting for 15.4%. The remaining expenditures for construction, home repair and purchase of durable vehicles, visits and other expenses account for insignificant.

Compared to before 2016, the level of household expenditure increased significantly, according to the survey results, up to 105 households assessed that their spending increased, accounting for 70.0%, of which 44 households, accounting for 29, 3% rate spending increased much. There are 39 households, accounting for 26%, assessing the level of expenditure unchanged, 6 households having a small decrease in expenditure due to family circumstances and no household assessing the level of expenditure to decrease much after the implementation of the new rural program in this 2016-2020 period.

Thus, comparing the correlation between expenditure and per capita income, it can be seen that local people have the ability to accumulate assets and invest in economic development opportunities by survey pieces of evidence such as: Accumulation of assets by investment, expansion of production scale prevailed, up to 64 households, accounting for 42.7%, followed by savings bank accounts of 39 households, accounting for 26.0%, asset purchases in the quarter are 36 households, accounting for 24.0%, playing black credit has 28 households, accounting for 18.7%. While there are 24 households that do not have accumulated assets, accounting for 16.0% (most of them fall into the poor and near-poor households), this number may not be accurate, but it is also worth noting when the locality implementing programs that need to ensure equal enjoyment opportunities for households, as well as raise the sense of initiative of family

members when participating in economic development, seeking employment opportunities, improving increase income and expenditure, accumulate in life to ensure a stable and sustainable livelihood.

c. Indicators of education, health and health care

- *In terms of education:* Every year, the locality pays great attention to the investigation of education universalization from kindergarten to high school, so far Nhon Chau island commune has been approved by the City People's Committee. Quy Nhon recognized standards of universalization of lower secondary education, universalization of 5-year-old preschool education, illiteracy eradication, and universal primary school age. The rate of students graduating from lower secondary schools who can continue their high school education, vocational training and supplementary training is 90.1%, and the number of trained workers aged 18 and over is 40.2%. This is an important achievement in the cause of education and training for the island commune and is also a great opportunity for local workers to have access to new knowledge, improve their cultural and professional skills, and contribute to the community. local development. Compared to 2016, Nhon Chau is still facing many difficulties in education and training, the number of students going to school at the right age accounts for a very low percentage, trained workers over 18 years old account for only more than 20% of the workforce. The percentage of students graduating from lower secondary school who can continue their studies is only nearly 50% [9], [10].

In addition, according to the results of the household survey on the situation of children in the family attending higher education levels than lower secondary school, only 38 households (accounting for 25.3%) have children attending high school (12 households), Intermediate (3 households), College (13 households), University (10 households). The remaining 112 households do not have children to go to post-secondary school, accounting for 74.7% for the following reasons:

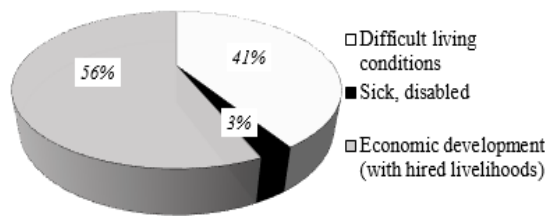


Figure 2. Structure of some reasons why households do not send their children to school after secondary school in Nhon Chau island commune
 (processed according to the results of the household survey in 2020, n = 150)

Among the three main reasons, it can be seen that economic development (taking into account wage livelihoods) accounts for the majority with 56.3%, followed by people saying that it is due to difficult living conditions, accounting for 41.1% and 2.7% of households, for reasons of illness or disability, do not send their children to higher education because they have to pay a huge amount of expenses. Although there may be overlapping or similarity and the relationship between the reason for difficult living conditions and economic development in household members, this shows us somewhat about the status of living standards and awareness in raising the standard of people.

- ***In terms of medical:*** Since 2013, Nhon Chau island commune started to issue health insurance cards to all people according to the policy of the Ministry of Health, Binh Dinh province and Quy Nhon city [17]. By 2020, 100% of people will be granted a health insurance card and this is also a locality that has maintained the national criteria for health since 2016 [9]. Compared with before 2016, the number of family members with health insurance has changed quite a lot, according to the results of the household survey, there are 81 households (accounting for 54%) who think that people who have an insurance card increased and 69 households (accounting for 46.0%) rated the level unchanged. Regarding the health system, there is currently 1 health station in the area with 6 staff (1 doctor, 3 paramedics, 2 intermediate levels) and 3 village health workers, and facilities have been gradually improved to meet the needs of the community, which meet the needs of on-site medical examination and treatment for people [9]. This shows the success in implementing the new rural program on health indicators to households in island communes after the locality conducted the second phase of the new rural program.

d. Indicators of living conditions in terms of housing, electricity, domestic water and environmental sanitation

- ***In terms of housing:*** Nhon Chau island commune has mobilized donations from organizations, individuals and benefactors to create capital to contribute to the eradication of temporary houses and simple houses in the locality. Up to now, in the island commune, there are no temporary houses, dilapidated houses and are approved by the City People's Committee. Quy Nhon awarded a certificate of credit to the locality that completed the construction program of "Great Solidarity House" and finished removing dilapidated houses for poor households in early 2013 [9].

Assessing housing quality according to the standards of the Ministry of Construction, there are 432/476 houses that meet the standards, accounting for 90.7%, the remaining 44 households have houses that do not meet the standards of the Ministry. According to the survey results of 150 households by the author's group, there are 42 households living in unstable houses, accounting for 28.0%, 64 households in semi-permanent houses, accounting for 42.7% and 44 households in living permanent houses, accounting for 29.3%. Compared to before 2016, more than 50% of households believe that housing conditions have changed in both area and quality when income, demand and housing construction expenditure increase, but the number of houses that lacks stability is still at a high level, so this is also an issue that needs to be taken into account to contribute to improving living standards and increasing the ability to respond to natural disasters with the characteristics of island communes, especially in the coastal areas, poor households.

- ***Regarding electricity use:*** The electrical system is regularly upgraded and repaired to meet the requirements of the electricity industry. Since 1995, in the area, there have been 2 operating units providing electricity for 100% of households, 300 KVA and 400 KVA. Total power generation hours are 12 hours/day (in which the daytime is from 9 am to 3 pm, and the night time is from 5 pm to 11 pm) [9],[10]. In particular, after a period of implementation, building a trans-sea cable system for Nhon Chau island commune with a total capital of more than 350 billion VND (of which the capital is 280 billion VND from the European Union, the rest is from the General

Corporation of Vietnam). Central Power Company). In October 2020, the people of the island commune connected to the national grid, contributing to ensuring product development and national security. Currently, there are 476 houses, reaching 100% of households using electricity regularly and safely in the electricity industry [18]. The completion of grid electricity to the people of Nhon Chau island commune is a great success in mobilizing funding sources, supporting policies along the implementation of the new rural program in the criteria of socio-economic infrastructure. According to the survey results, 150 households said that by the end of 2020, the type of electricity used and the number of hours used had changed significantly, having an important impact on production and daily life.

- **Regarding domestic water:** Since 2012, Binh Dinh Provincial People's Committee has invested in the construction of Nhon Chau Freshwater Lake with a cost of 170 billion VND, by 2019 the project has been put into use, contributing to ensuring hygienic and clean water supply for the people on the island [9], [10]. Results of household survey on water source used, 100% of households use tap water from Nhon Chau Freshwater Lake, 67 households (accounting for 44.7%) of households buy bottled water, large bottles for drinking. For additional use, 77 households (accounting for 51.3%) of households use water from dug wells/seawater/drilled drilling with pumps to serve more for production and life. Assessing the quality of water sources, 100% of households believe that the water used is more hygienic than before 2016, at this time people mainly use untreated water and some places are contaminated with salt and alum.

- **Regarding environmental hygiene:** Waste treatment, the locality has established an environmental sanitation team and organizes the waste collection and transport to the treatment site with 3 locations in 3 villages. Regarding toilets: There are 432 households with standard toilets and bathrooms, accounting for 90.7%, the survey results of 150 households have 51 households, accounting for 34.0% of the assessment of using latrines are more hygienic compared to 2016. The whole commune has rainwater and wastewater drainage systems and in residential areas, 03 villages have daily-life drainage systems to ensure that they do not pollute the environment [9], [10].

e. Norms for using durable household appliances

Along with the change in income, spending and needs in life, the consumption of durable goods in households in 2020 also has a significant improvement. According to household survey results, there are 114 households, accounting for 76.0% using televisions and entertainment systems; 128 households, accounting for 85.3% of family members using telephones, 62 households, accounting for 41.3% of households using electric and gas stoves for cooking; 22 households, accounting for 14.7% of households using refrigerators, hot water bottles in daily life and many other vehicles such as motorbikes and production vehicles.

Compared to 2016, the type of durable means that households are using with the most change is telephones of all kinds, with 44 households (accounting for 29.3%), followed by electric stoves, gas stoves with 42 households, accounting for 28.0%; there are 22 households having computers and internet, accounting for 14.7%, etc. Motorcycles are the least used means of transport, only 8 households choose

(accounting for 5.3%) because it is an island commune, the area is not large, so the need for travel is not significant, so people invest less.

f. Cultural norms, security

In the commune, there are 3 village cultural houses and 01 cultural and sports centers in Nhon Chau commune to meet the daily living needs of the residential community. In addition, the campus of the D.30 Mixed Company unit has an 11-person soccer field. In front of the western hamlet, there is a 7-person football field and a concrete volleyball court to serve the needs of sports activities [9], [10]. The situation of social order and security in the area is ensured, cultural, artistic, physical training and sports activities are always concerned, maintaining holidays and Tet to contribute to satisfying the entertainment needs in the population.

The general assessment of economic status and change of residential living standards through household survey results:

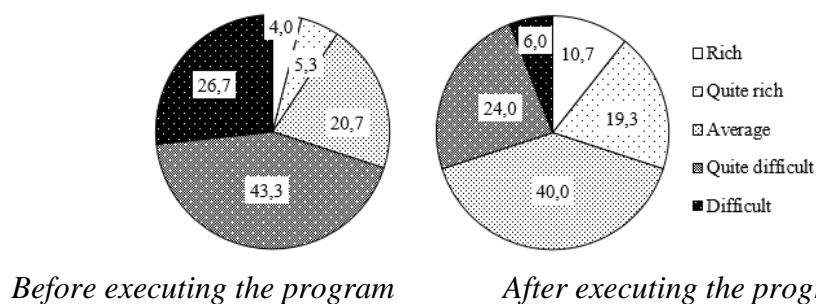


Figure 3. Structure of assessing the household economic status before and after the implementation of the New Rural Program in Nhon Chau island commune in the period 2016 - 2020

Regarding the assessment of the current economic situation and compared with before the program was improved, based on the given indicators, there are 16 households (accounting for 10.7%) selected as rich, 29 households (accounting for 19.3%) are quite rich, 60 households (accounting for 40.0%) are medium, 36 households (accounting for 24.0%) are in difficulty and 9 households (accounting for 6.0%) are in difficulty. This household belongs to the poor, near-poor household or has special circumstances such as illness and damage caused by natural disasters. Compared with before the implementation of the program, the economic status of households has changed significantly, respectively: 6 rich households (accounting for 4.0%), 8 quite rich households (accounting for 5.3%), 31 average households (accounting for 20.7%), there are 65 quite difficult households (accounting for 43.3%) and 40 poor households (accounting for 26.7%).

Similarly, when surveying the assessment of changes in living standards, up to 78 households chose a higher standard of living after the local implementation of the program, accounting for 45.3%, of which 10 households said that the standard of living was much higher, accounting for 6.7%. Meanwhile, 72 households, accounting for 48.0%, chose an unchanged standard of living, falling into households who are borrowing capital to invest in purchasing means of production and households with

children going to colleges, universities and working in rural, distant areas but they are not stable; none of the households reported that the standard of living was reduced.

2.2.3. Causes of the change in living standards of people in Nhon Chau island commune

To assess the causes leading to the change in living standards of the population in Nhon Chau island commune, inheriting information from the report on results of the new rural construction program in the 2016-2020 period and survey experience. During the research, the author has built into two groups of influencing factors: Favorability of natural conditions, natural resources and environment (including 7 observed variables) and degree of favorable socio-economic conditions (including 23 observed variables). Based on the survey of 150 households and simple statistical processing (percentage), the causes of the change in living standards of the population are ranked in the following order:

Table 4. Assessment of the causes affecting the change in living standards of the population in Nhon Chau island commune (processed from the results of the household survey in 2020, n = 150)

No.	Causes	Proportion (%)
1	The new production model is applied with high efficiency	89,6
2	The resources of the sea and islands are rich and diverse for production	86,0
3	State and local policies are appropriate and effective	78,2
4	Security, political stability, rich cultural and spiritual life	78,2
5	Effective application of science and technology	75,2
6	The authorities and officials are responsible, well implementing the programs	68,8
7	Effective coordination among mass organizations	62,4
8	Healthy living environment	61,0
9	Borrowing capital for production is easy and convenient	58,2
10	Good planning	48,7
11	Guaranteed water source	45,0
12	The electrical system is well-equipped for production and living	42,0
13	The COVID-19 epidemic has had little impact	38,0
14	Number of workers to meet production requirements	36,0
15	The link between the island and the mainland is favorable	35,9
16	Good source of information to support in production and life	35,8
17	Having income from distant relatives sent home a lot	35,6
18	Households effectively absorb planning work	35,1
19	Machines, equipment, vehicles are well equipped	34,8
20	Appropriate and effective sales channels for agricultural products	32,9
21	Employees are regularly trained and trained in techniques	32,1
22	Convenient transportation network	26,4
23	Favorable weather and climate conditions	26,0
24	Labor has a lot of experience in production	25,6

25	The market is less volatile (supply-demand)	24,1
26	The scale of land/water favorable for production	23,0
27	The ability to capture the market quickly and easily to expand	16,8
28	Hire workers in a favorable season	12,6
29	Services in production and consumption meet well	12,5
30	The island commune's geographical location is favorable (natural, economic...)	10,7

Similar to the local government's assessment, the implementation and development of new production models are effective in Nhon Chau commune such as raising colored chickens, raising commercial leaf squid, growing clean vegetables in plastic trays, forming a variety of fishing activities, etc. has brought high and stable income, especially helping people get out of poverty, and have conditions to improve living standards. There is up to 89.6% of households choosing this cause.

The reason that has a great influence (ranked 2nd, accounting for 86.0%) on the change in people's living standards is the abundance of marine and island resources for fishery production and tourism business. It is the richness of aquatic resources and sea and island tourism resources that have created great strengths and potential for people to exploit, moreover linking the formation of tourist attractions with typical tourism products such as sports. The sea, scuba diving to see corals, food, sightseeing, etc. along with accommodation service business, small restaurants, which also help improve people's income. The reasons related to the implementation of policies of the State, local authorities and officials were assessed as responsible and highly effective, with up to 78.2% of households choosing. Along with that, the situation of security, politics and social order also enriches spiritual life. At the same time, the application and implementation of science and technology, the coordination of mass organizations and creating opportunities for households to borrow loans easily and conveniently are also assessed by households as having a great influence on the economic development of households change in living standards of the population (fluctuating around 60.0%).

The causes of the market, the people's absorption of programs, experienced workers, linkages and information sources in production, etc. have a lot of influence on the change in living standards of the island's inhabitants. Nhon Chau with a selection ranging from 30-45% in the causes. The reasons of favorable geographical location, services in production and consumption of products, hiring of laborers, etc. have limited impact on the change in living standards, in which the geographical location of the island commune (natural, economic, transportation) is favorable, which were rated at the lowest level by the people (only 10.7% selected).

Thus, through simple statistics from household survey results, it is possible to identify the causes that affect the change of residential population in Nhon Chau island commune, from which it is possible to improve and promote the causes, major impacts and changes, creating new solutions for fewer impacts on the development of production and improvement of the rural population in the island communes in the coming time.

3. Conclusion

Along with stabilizing livelihoods, improving people's living standards is an important goal that the national target program on building new rural areas in particular and programs and projects in general aim at. There is a close relationship between the indicators of new rural construction and the population's living standards and between them as two parallel objects when implemented in a territory.

In the 2016-2020 period, Nhon Chau island commune, Binh Dinh province has implemented the New Rural Program phase 2 and has achieved many remarkable achievements in terms of indicators, thereby having a great impact on the change of rural areas' living standards of the community. On the basis of secondary data sources and household survey results, the study has determined the degree of change of residential living standards in island communes through a number of necessary indicators, identified areas of improvement that need to be promoted and other areas of improvement. The unachieved aspects need to be changed in the coming time and on that basis, determine and evaluate the causes affecting this change.

With existing research data, in the future, the assessment will determine the level of satisfaction with living standards as well as quantify the impact factors when implementing the New Rural Program on the living standards of residents in Nhon Chau island commune are research directions that can be carried out, and at the same time determining the vulnerability and adaptability of the population to natural and social incidents is also an urgent requirement.

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