

IMPACT OF POVERTY REDUCTION POLICIES ON HUMAN CAPITAL IN THE LIVELIHOOD ASSETS OF ETHNIC MINORITIES IN DONG VAN DISTRICT, HA GIANG PROVINCE, VIETNAM

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Abstract. This study aims to analyze the impact of poverty reduction policies on livelihood assets (human capital) of ethnic minorities in Dong Van district, Ha Giang province, Vietnam. The research sample is from more than 400 survey questionnaires of ethnic minority households in Dong Van district, Ha Giang province. Data were cleaned and analyzed using SPSS 22.0 software. The research results show the positive and main impacts of poverty reduction policies on the livelihood assets of ethnic minorities. Accordingly, in the 5 groups of livelihood assets (human, natural, financial, physical, and social), the impact of poverty reduction policies on human capital is the most important. The study provides policymakers with valuable insights into the impact of poverty reduction policies on livelihood assets of ethnic minorities. The study focuses on the northern border area of Vietnam, in Dong Van district, Ha Giang, which is an area of strategic importance for economic development and national security. The difference is that this regional study will provide insights into the ethnic minority economic dynamics of a particular region that is currently not widely studied.

Keywords: Poverty reduction policy, ethnic minorities, livelihoods, human capital, Dong Van district.

1. Introduction

Achievements in poverty reduction in Vietnam over the past 20 years have been highly appreciated by domestic and foreign studies. At the same time, Vietnam's efforts and determination to reduce poverty are recognized through an increasingly diverse and comprehensive policy system. These policies not only directly support the lives of poor groups but also open up many opportunities to escape poverty based on development policies on livelihoods, and access to and use of social services... Poverty reduction policies have a very positive impact, so the scale of poverty reduction in Vietnam occurs in all regions, areas, and population groups. Specifically, the rate of poor households nationwide has decreased, and the scale of poverty reduction has been strong in economic regions, especially in areas where ethnic minorities live, which have also achieved a relatively fast poverty reduction rate.

Research on poverty in ethnic minority areas is the subject of exploitation in many aspects, such as the current situation and solutions for poverty reduction, poverty reduction policies for ethnic minorities, assessment of the impact of poverty reduction policies on ethnic minorities,

poverty reduction models for ethnic minority communities,... [1] In the world, theoretical studies proposing solutions for poverty reduction, diversifying household livelihoods with poverty reduction have proposed appropriate poverty reduction solutions, but have only focused on exploiting poverty aspects from the perspective of policy beneficiaries [2], [3]. In Vietnam, in addition to theoretical studies, in recent times there have been a number of studies clarifying factors affecting poverty reduction and poverty reduction policies. The analysis of Le & Nguyen [3] focused on analyzing the policy system for mountainous areas and ethnic minority areas in the period 2011 - 2015 and 2016-2020, specifically stating and analyzing the advantages and achievements as well as the limitations and weaknesses in the implementation of these policies [11]. In particular, in the *Journal of Ethnic Minorities Research* No [4, to clarify the effectiveness of policies, some recent studies have focused on evaluating poverty reduction policies... specifically through the benefits of people with DID models or OLS regression models to analyze the impact of credit policies [6], [7]. In particular, many studies have in-depth assessed and analyzed poverty reduction policies on the lives of ethnic minority households [5], [8]. The studies mainly assessed each aspect and each indicator in the poverty reduction policy with separate impacts on the economy and society or assessed the poverty situation in general, without in-depth analysis to clarify the impact of poverty reduction policies on livelihoods and changes in livelihood assets for poor households in general and poor ethnic minority households in particular. From that, it can be seen that the impact of poverty reduction policies on people's livelihoods, especially the poor ethnic minorities, is a gap in both theory and practice. Although these are two different contents, they are closely related to each other, both as a condition and a premise in the process of implementing poverty reduction goals. However, up to now, there have not been many studies focusing on analyzing the impact of poverty reduction policies on a specific locality, especially with assessments of border areas such as Dong Van district, Ha Giang province. Dong Van is a mountainous district of Ha Giang province, with a poverty rate much higher than the average of Ha Giang province and the whole country. In reality, the implementation of poverty reduction policies for ethnic minorities faces many difficulties and obstacles, such as limited awareness of people and officials about poverty reduction work; inadequate allocation of investment resources, and promotion of investment efficiency.

In Dong Van district, poverty reduction policies in recent years have brought many benefits and progress in the local human development in general, especially having positive effects on ethnic minorities. In this study, the authors surveyed ethnic minority households on the impacts of poverty reduction policies on households in a number of aspects, such as production experience, agricultural production, forest protection and development, job creation, health care, education, cultural and sports activities, etc. The study was conducted in 3 regions (*region 1 includes communes near the center, with more favorable natural conditions, region 2 includes transitional communes, with less favorable natural conditions and traffic than Region 1, Region 3 includes communes on the border, with many unfavorable locations and natural conditions, limiting the economic development of the people*) in the district, the research results of each region will be analyzed, verified, and compared with each other, from which the authors analyzed the overall results of the whole district. The findings of the study provide policymakers with valuable insights into the impact of poverty reduction policies on human capital - one of the five livelihood assets of ethnic minorities. The study's recommendations can inform policies to promote sustainable economic development while contributing to improving the effectiveness of poverty reduction policies for ethnic minorities in Dong Van district in the coming time. These results suggest that in order to improve the living standards of ethnic minorities in the northern border areas of Vietnam in general and Ha Giang in particular, local authorities need to pay attention to the effectiveness of poverty reduction policy implementation.

2. Content

2.1. Research methods and instruments

2.1.1. Research methods

The study used primary data collected by the authors from a survey using a sociological investigation method on 400 ethnic minority households. The survey area was in 3 sub-regions of 6 communes, including Sung Trai, Lung Cu, Ma Le, Dong Van, Ta Phin, and Ho Quang Phin in Dong Van district. Region 1 includes communes near the center, with more favorable natural conditions, Region 2 includes transitional communes, with less favorable natural conditions and traffic than Region 1, Region 3 includes communes on the border, with many unfavorable locations and natural conditions, limiting the economic development of the people. The surveyed content included opinions on the impact of poverty reduction policies on ethnic minority households (*Production experience, agricultural production, forest protection and development, job creation, health care, education, cultural and sports activities, etc.*) Research results of each region were analyzed, verified, and compared with each other, from which the authors analyzed the overall results across the district.

2.1.2. Research instruments

The research sample was collected from ethnic minority households in Dong Van district, Ha Giang province. To administer the questionnaire, interviewees were randomly selected through face-to-face meetings, telephone calls, etc. The research team received 373 completed results out of more than 400 surveys sent. The data were then cleaned and analyzed using SPSS 22.0 software. Secondary data were cited in reports in the period from 2018 to 2022. Primary data was collected from survey data in 2023.

2.2. Research content

2.2.1. General Overview

In the DFID livelihood analysis framework, five livelihood assets play a central role. They are human capital, natural capital, social capital, physical capital and financial capital. Figure 1 indicates a pentagon of livelihood assets. The shape of the pentagon represents the level of ownership and access to livelihood assets of the household. The center of the shape is the point at which ownership and access to resources are zero. The pentagon will be skewed towards the resources that the household owns or has the most access to. Therefore, each household, each group of people, and each community will have a different shape of the resource pentagon.

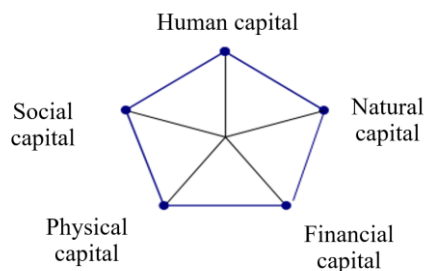


Figure 1. The Pentagon of livelihood assets

Source: [6], [13]

Human assets in ethnic minority household livelihoods

The concept of human assets is widely used in many scientific fields with many different meanings. According to DFID (1999), human capital is understood as the set of knowledge, skills, understanding, health, and labor capacity that enable people to pursue different livelihood activities to earn a living and achieve livelihood goals [9]. At the household level, human

resources are measured by many indicators such as household size, number of people of working age, management potential, production and business organization, health, skills, education level, level of diligence, ability to use other types of resources, etc.

Human capital plays a central role in the livelihood analysis framework. They are the resources that determine the use of other livelihood assets and the implementation of livelihood activities. The quantity and quality of human resources will determine the livelihood outcomes that households achieve.

To assess human capital, people can use many different indicators such as the number of workers, life expectancy, education level, vocational training level, etc. However, there is no completely accurate and complete measure of human capital, so the assessment of human capital depends largely on subjective assessment. Currently, people mainly use the assessment of changes in the current human capital compared to before and the causes of those changes.

To develop human capital, in addition to the self-efforts of ethnic minority households, there needs to be direct or indirect support from the central and local governments as well as socio-political organizations.

Characteristics of ethnic minority households in Dong Van

Dong Van is a mountainous district located in the North of Ha Giang province, Vietnam. The district has 19 administrative units including 17 communes and 02 towns, with a total natural area of 45,308.24 ha. The district has a typical terrain of rocky mountains with an average altitude of 1,500m above sea level. The terrain is quite complex, strongly divided and gradually lower from northwest to southeast. The district is divided into 2 main types of terrain, including mountain terrain with 7 communes, namely Lung Cu, Ma Le, Dong Van, Pho Bang, Pho La, Pho Cao and Sung Trai (Region I). The limestone terrain includes the remaining 12 communes, which are Ho Quang Phin, Lung Phin, Lung Tao, Lung Thau, Sang Tung, Sinh Lung, Sung La, Ta Lung, Ta Phin, Thai Phin Tung, Van Chai and Sa Phin commune (Region II)

The average population of the district in 2022 is 86,073 people. Dong Van district has 17 ethnic groups living, of which the Mong people account for the majority (60%), followed by the Tay (20%) and Dao (10%), and some small groups are the Kinh, Nung, Giay, La Chi, Hoa, Pa Then, Co Lao, Lo Lo, Bo Y, Phu La, Pu Peo, Muong, San Chay, Thai. The population density is about 190 people/km² [12].

The household head is an extremely important member, playing a key role in household economic development. Therefore, information about the household head is necessary and important in the system of information about the characteristics of the surveyed households. The research team surveyed 400 ethnic minority households in the surveyed communes, the number of valid questionnaires collected was 373.6, a rate of 93.75%. This rate ensures the sample size.

Some characteristics of the household heads are expressed in the aspects of ethnicity, gender, education level and age. In 373 ballots, there were many ethnic groups, in which the Mong ethnic group accounted for the majority (34.97%), followed by the Nung ethnic group (27.98%), Dao ethnic group (25.65%), etc. Information on the gender of the household head showed that most of the surveyed households had male heads (accounting for 52.3%), and most of them had only attended primary school (accounting for 76.68%). Information on educational level also showed that illiteracy still existed in the district, specifically, there were 4 illiterate household heads out of a total of 373 surveyed household heads. In addition, when calculating the age of household heads, the group of authors found that the majority of household heads were between the ages of 51 and 60 (accounting for 50.26%), followed by people over the age of 61 accounting for 24.87%. Thus, in the surveyed ethnic minority households, the head of household is often the oldest person in the family, making important family decisions.

Basic information on household livelihood assets

In Dong Van district, the livelihood resources for household development that need attention are labor, agricultural and forestry land, and capital. Clean water and clean toilets are necessary conditions for each household. For ethnic minorities, before enjoying policies to support access to basic services, most households did not have clean water and standard toilets in their daily lives. In border communes, after many years of implementing policies to support ethnic minorities in accessing basic services, the lives of beneficiary households have changed significantly, the conditions of clean water and toilet facilities of households have gradually improved, meeting the needs of people better and better, improving the quality of life of households [10], [11].

2.2.2. Experimental results of analyzing the impact of poverty reduction policies on human capital in the livelihoods of ethnic minority households in Dong Van district, Ha Giang province, Vietnam

Changes in human capital

Table 1. Impact of poverty reduction policies on changes in human capital

	Criteria	Region 1	Region 2	Region 3	Average
1	Training helps households gain more experience in production	3.10	4.84	3.53	3.99
2	Agricultural production training helps develop livestock farming	3.28	4.73	3.73	4.06
3	Training helps reduce diseases in livestock and poultry	3.58	4.07	3.60	3.79
4	Technical farming guidance program helps increase crop productivity	3.44	4.40	3.56	3.89
5	Propaganda helps people to be aware of forest protection	3.49	4.73	3.68	4.08
6	Results of projects are learned and followed by people	4.53	4.72	4.78	4.71
7	Vocational training programs provide skills and help find jobs	4.24	4.69	4.59	4.56
8	Family members receive free medical examinations	1.35	1.20	1.23	1.24
9	Support policies for sending people to work abroad help reduce unemployment	1.56	1.24	1.23	1.30
10	Children are exempted from or have reduced tuition fees when going to school	3.74	4.84	4.16	4.36
11	Free vocational training programs are participated in by people	3.88	2.83	2.88	3.06
12	Cultural activities are actively participated in by the people thanks to the community house	3.34	3.62	3.55	3.54
	Average	3.08	3.55	3.1	3.26

Test results of the difference in assessment scores of the impact of poverty reduction policies on human capital among 3 regions

F-statistic: 44.440; Statistical significance level: p-value: 0.000

Note: Impact level from 1.00 - 1.80: Poor; from 1.81-2.60: Weak; from 2.61-3.40: Average; 3.41-4.20: Fair; 4.21-5.00: Good

(Source: Author's synthesis and analysis of survey data, 2023)

Humans are one of the most important resources for socio-economic development in general and for household economy in particular. In Dong Van district, poverty reduction policies in recent years have brought many benefits and progress in human development of the locality in general, especially having positive effects on ethnic minorities. In this study, the authors surveyed ethnic minority households on the impacts of poverty reduction policies on households in a number of aspects, such as production experience, agricultural production, forest protection and development, job creation, health care, education, cultural and sports activities, etc. The study was conducted in 3 regions in the district, the research results of each region were analyzed, verified, and compared with each other, from which the authors analyzed the overall results in the whole district [12].

In terms of agricultural and forestry production, thanks to training programs, production experience, livestock development, disease reduction in livestock, crop productivity, improvement in backward farming, etc. ethnic minority households have made progress, and households assessed the level of influence at a fairly average level across the district. However, through surveys of each area, the study found that policies have different levels of influence in each area. Specifically, for the assessment of the impact of training on production experience, especially the impact on livestock development, and the efficiency of livestock farming of households, households in Region 1 only assessed it at an average level, but households in Region 2 assessed it at a good level, and households in Region 3 assessed it at a fair level. In addition, the difference in assessment between regions is also shown in aspects such as the impact of poverty reduction policies on farming techniques, crop productivity, guidance of agricultural extension officers on agricultural production activities of households, and people's awareness of forest protection and development. Specifically, ethnic minority households in Region 2 are affected at a good level while households in Region 1 and 3 are assessed at a fair level.

Regarding human resource training and job creation, poverty reduction policies have had positive impacts on ethnic minority households, which were rated as good on average across the district. When assessing the level of learning and following project results, the study found that on average across the district, ethnic minority households rated as good. Meanwhile, ethnic minority households in all three regions had negative assessments of the policy of supporting workers to work abroad, this policy was not well received by the people, especially ethnic minorities in Dong Van district. Although life still faces many difficulties, when interviewed, households were very satisfied with their current lives and did not want to leave their hometowns to work abroad. Therefore, it is necessary to consider the suitability of vocational training policies for labor export in ethnic minority areas [14], [15].

In terms of health care and education, ethnic minority households have assessed the impact of poverty reduction policies as poor. The issuance of health insurance cards is slow. Although ethnic minority students are supported with study costs, and tuition exemptions, and school and classroom infrastructure has been improved, the dropout rate is high. This shows that commune-level officials need to pay more attention to advocacy and propaganda work on education and health.

Regarding the assessment of poverty reduction policies on free vocational training for households, households in Region 1 rated it as good, while Regions 2 and 3 rated it as average. Meanwhile, when assessing the tuition exemption policy for children when going to school, ethnic minority households rated it as good on average across the district, but there were also different assessments in the regions, specifically households in Region 1 rated it as good while households in Regions 2 and 3 rated it as good.

After analyzing the impact of poverty reduction policies on each aspect of human resource development in areas in Dong Van district, the study synthesized all these aspects to obtain a general assessment of the impact of poverty reduction policies on changes in human capital of ethnic minority households in Dong Van district based on the results of calculating the average

value and analyzing variance using SPSS 22.0 software.

The results of calculating the average value show that households have a fairly good assessment of the whole district, however, when considering each region, there are specific differences. Accordingly, in Regions 1 and 3, the assessment is average, in Region 2, the assessment is quite good.

The results of comparing the difference in the impact score of poverty reduction policies on human capital between the 3 regions when tested using SPSS software (*Table 2*) with $F = 44.440$; p -value: 0.000, show that there is a difference between the 3 regions at the 5% significance level. This difference is because access to policy information varies from region to region.

Table 2. Testing the difference in the impact of poverty reduction policies on livelihood assets at 3 research sites ANOVA (Analysis of Variance)

Capital - Human	Sum of Squares	Df	Mean Square	F	p-value
Between Groups	41.224	2	20.612	44.440	.000
Within Groups	184.136	397	.464		
Total	225.360	399			

2.2.3. Assessing the impact of poverty reduction policies on human capital in the livelihoods of ethnic minority households in Dong Van district, Ha Giang province

Positive impacts

The poverty reduction policies have helped Dong Van district organize many training courses, and improve skills and knowledge for household members. Through training, households have learned to apply technical advances in production, increase crop and livestock productivity, have better awareness of afforestation and forest protection, and not cut down forests and hunt wild animals as before.

The well-implemented poverty reduction policies have helped the district organize many free vocational training classes for ethnic minorities, helping them gain more experience in production, and creating opportunities for them to have new jobs, thereby helping to diversify their income sources and gradually stabilize their lives. This is the foundation for ethnic minority households to escape poverty sustainably. [16]

The positive impact of the tuition exemption policy for poor ethnic minority students has received special attention from households. Because it helps children of poor ethnic minority households to go to school, especially those with many members of school age, this policy has a positive impact, helping to reduce the burden of education costs and create conditions for poor ethnic minority students to access higher levels of education, thereby helping them increase their chances of finding jobs in the future.

Regarding culture and arts, the clear positive impact of the poverty reduction policies is to support the construction of community houses in most communes in the district, where ethnic minorities can enjoy, participate in community and cultural activities and improve their quality of spiritual life.

Limitations

The educational level of poor ethnic minorities is still low, so the ability to absorb knowledge through training courses to apply to production is limited. There is a situation in ethnic minority households where those who are trained are not directly involved in production, because not everyone in the local ethnic minority community knows the common language (in ethnic minority households, men often attend training courses but women are directly involved in production); this is a major barrier in the application of science and technology to production.

In addition to short-term training courses, free vocational training courses for poor ethnic

minority households have also been implemented. However, opening vocational training courses has encountered many difficulties, such as vocational training quotas being assigned from top to bottom, one person studying in many different classes, causing inequality in the poor ethnic minority community, vocational training facilities do not have funds for practice, machinery, and equipment are outdated, there are subjects who are allowed to attend vocational training but do not attend the entire course due to the cost of food, accommodation, and travel, vocational training classes do not meet the needs. After finishing the course, there are few opportunities to find a new job, if found, the vocational level does not meet the requirements of employers, vocational training classes do not keep up with market trends, and the connection between vocational training facilities and businesses is still weak. Vocational training for labor export is not of interest to poor ethnic minorities; they do not want to look for new jobs abroad (there are cases where they go and then return), so this is a policy that needs to be adjusted to suit the needs of ethnic minority households.

Although tuition fees have been reduced, the number of children dropping out of school is still high. One of the main reasons is that the education system in the district's communes still has many difficulties, besides that there are also other expenses such as buying books, notebooks, uniforms, etc. Many poor ethnic minority households do not have enough money to pay for these expenses, especially for families with many members of school age.

Access to health services for ethnic minorities is still limited because propaganda and mobilization work from mass organizations has not been really effective, poor ethnic minorities rarely go to commune health stations for medical examination and treatment, the situation of medical examination and treatment at home, and asking for help from shamans still occurs. The issuance of health insurance cards for poor ethnic minorities is slow.

Discussion

In the 5 groups of livelihood assets, the study has analyzed the impact of poverty reduction policies on changes in human capital. However, these are assessments based on sample data, and initially only assess 1 group of resources in livelihoods, so it is necessary to analyze in terms of policy groups and assess the remaining 4 groups of livelihood assets to see more comprehensively the impact of poverty reduction policies on the livelihoods of ethnic minorities in Dong Van district, Ha Giang province.

3. Conclusions

This article studies the impact of poverty reduction policies on human capital in the livelihood assets of ethnic minorities in Dong Van, Ha Giang - a locality in the northern border region of Vietnam. Regarding the impact of poverty reduction policies on each aspect of human capital development in areas in Dong Van district, the study has analyzed all these aspects to obtain a general assessment of the impact of poverty reduction policies on changes in human capital of ethnic minority households in Dong Van district based on the results of calculating the average value and analyzing variance using SPSS 22.0 software. The results of calculating the average value show that households have a fairly good assessment of the whole district, however, when considering each region, there are specific differences. Accordingly, in Regions 1 and 3, the assessment is average, in Region 2, the assessment is quite good. The results of comparing the difference in the impact of poverty reduction policies on human capital among the three regions when tested by SPSS software with $F = 44.440$; p -value: 0.000, showed that there was a difference between the three regions at the 5% significance level. This difference is due to the different access to policy information in each region. The findings of the study provide policymakers with valuable insights into the impact of poverty reduction policies on human capital in the livelihood assets of ethnic minorities. The recommendations of the study can provide information for policies to promote sustainable livelihood development and contribute to

improving the effectiveness of poverty reduction policies for ethnic minorities in Dong Van district in the coming time. This study has some limitations that future studies can improve. First, the sample can be expanded to other regions of Vietnam. In addition, this paper only focuses on the impact of poverty reduction policies on human capital in the livelihood assets of ethnic minorities in Dong Van. Future studies can provide a more comprehensive picture by considering other resource factors such as natural, financial capital, etc.

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