THE FACTORS INFLUENCING MULTIDIMENSIONAL POVERTY OF HOUSEHOLDS: A CASE STUDY FROM BAC KAN PROVINCE

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SUMMARY
Multidimensional poverty is a novel approach that has been put into use in Vietnam in the period 2016-2020. This is a new basis for poverty assessment, prevailing the limitations of measuring by income. The study aims to determine key factors influencing multidimensional poverty and propose solutions to reduce multidimensional poverty for households in Luong Thuong commune, Na Ri district, Bac Kan province. By conducting a survey from 150 households in the study area and using Binary Logistic Regression model for data analysis, the study identifies five key factors significantly affecting multidimensional poverty of households in the study area, including: (1) land area of the household; (2) ability to access information by households; (3) participation in agriculture extension activities; (4) ethnicity of household head; and (5) number of dependant in the household. Based on that, four solutions were proposed to help households in study area escape from multidimensional poverty, including (i) increasing the land area for the poor household; (ii) improving access information for households; (iii) renovating agricultural extension; (iv) reducing the number of dependants in the household. These solutions can be used as valuable reference materials for developing policies of sustainable poverty reduction for households in the study area in particular and in whole country in general.
Keywords: households, influential factors, multidimensional poverty, solutions, sustainable poverty reduction.

1. INTRODUCTION

Poverty is a paradoxical state. Recognizable in the eld for any sensitive observer who travels in remote rural areas and urban slums and meets marginalized people in a given society, poverty still remains a challenge to conceptual formalization and to measure that is consistent with such formalization. The analysis of poverty is multidisciplinary. It goes from ethics to economics, from political science to human biology, and any type of measurement rests on mathematics (Asselin, 2009).

In order to comprehensively assess household poverty, its studies should be considered and analyzed according to different criteria. Thus, in addition to traditional research methods, the assessment of household poverty is based not only on the common criteria of income and expenditure, but also on the level of "multidimensional poverty" through the social aspects of residential life with the gaps that they may face such as social security, education, health, and housing. Because of that, in recent years, the Multidimensional Poverty Index (MPI) has been used by scientists around the world as a tool to identify poor households and, on that basis, proposes solutions to reduce sustainable poverty.

At present, nearly 2 million households in Vietnam still live in poverty, lacking basic education, nutrition, health, and other welfare (Vietnam Ministry of Labor Invalids and Social Affairs 2018). Poverty is one of the major barriers to the equalization of human, community and national development. Poor people often have no or less access to social services such as employment, education, healthcare, information and so on. That makes them less likely to escape poverty.

In order to successfully implement the hunger eradication and poverty alleviation, the Vietnamese government has implemented a number of concrete policies and programs of action, as well as in-depth studies on the causes of poverty. Since then, solutions to poverty reduction have also been explored by experts and scientists. In Vietnam, multidimensional poverty studies are not well developed and multidimensional poverty approaches are

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beginning to be approached (Ministry of Information and Communications, 2017).

In the past years, Bac Kan has been conducting the program of poverty reduction, with a tireless effort of departments, authorities, stakeholders and provincial residents, the affairs of reducing poverty have acquired some certain achievements (Bac Kan People's Committee, 2017). The rate of poor household reduced from 32.13% in 2011 down to 11.63% in 2016 (reduce averagely 4.10% per year). The rate of near-poor households reduced from 16.93% in 2011 down to 7.91% in 2016 (reduce averagely 1.80% per year) (Bac Kan People's Committee, 2017). This is a considerable effort of authorities of the executive committee (of party hierarchy), the Vietnamese Fatherland Front, departments, organizations, incorporations in the conduction of poverty reduction (Bac Kan People's Committee, 2017).

However, the poverty-escaping households are not really sustainable, the risk of re-poverty is still high, the number of poor households is large, and the conduction of poverty reduction meets increasingly more difficult. The reduction rate of poor households is low, the rate of trained laborers is small, and there are still unemployed people. Scientific application into practice is still limited. Investment and construction progress of infrastructure in difficult communes is still inadequate, the rate of disbursement is still low. The conduction of poverty reduction and hunger elimination (by the national target program of districts and cities) most concentrated on assisting directly plants and pets, fertilizer supplies, buying machines or equipment, building farming cages, improving ponds for the poor and near-poor households but lacking building marked model to expand the scale (Bac Kan People's Committee, 2016).

Bac Kan is a mountainous province located in the northeast of the north with a natural area of 4,859.41 km^2, in which agricultural land is 3,721.868 km^2 and another land is 958.39 km^2. There are 7 districts, 1 city with 122 communes, wards, towns in which 50 communes belong to Region III (ethnic minority and mountainous communes with the extremely difficult socio-economic conditions), 27 communes belong to Region II (ethnic minority and mountainous communes with difficult socio-economic conditions but has been temporarily stable), and 45 communes belong to Region I (remaining ethnic minority and mountainous commnues) (Ngo Trung Kien, 2016). There are 1,421 villages and residential areas. There are 2 poor districts assisted by the Program 30a (Resolution No. 30a/2008/NQ-CP dated December 27, 2008 of the Vietnamese Government on the support program for fast and sustainable poverty reduction in 61 poor districts) and 58 extremely difficult communes inherit from the Program 135 (Decision No. 135/1998/QD-TTg dated July 31, 1998 of Vietnamese Prime Minister to approve the program on socio-economic development in mountainous, deeplying and remote communes with special difficulties). The population of the province is 308,310 people including 7 ethnicities (Tay, Dzao, Nung, H'Mong, Hoa, San Chay, Kinh), in which ethnic minority accounts for over 86% (Tay: 52.93%; Dzao: 17.63%; Nung: 9.36%; H'Mong: 5.95%; Hoa: 0.36%; San Chay: 0.2%; others: 0.2%) (Bac Kan People's Committee, 2016).

The study aims to identify the main factor influencing multidimensional poverty of households and propose solutions to overcome poverty in Luong Thuong commune, Na Ri district, Bac Kan province. The findings of this study, therefore, provide implications for developing solutions in the strategy of sustainable poverty reduction in the study area.

2. STUDY LOCATION

2.1. Natural and biophysical conditions

Luong Thuong commune is located in the north of Na Ri district, about 24 km from the district center and 63 km from the north of Bac Kan City, with geographical coordinates: 22°16'42" North latitude; 106°4'26" East longitude. This commune is divided into 5

villages: Khuoi Noc, Na Lang, Vang Khit, Pan Xa, and Ban Giang. The total natural area is 3,794.23 ha with the population of 2,036 people. The East of Luong Thuong commune borders on Lang San commune; the South borders on Lang San, An Tinh and Kim Hy communes; The West borders on Kim Hy commune; and the North borders on Thuan Mang and Thuong Quan commune (Fig. 1).

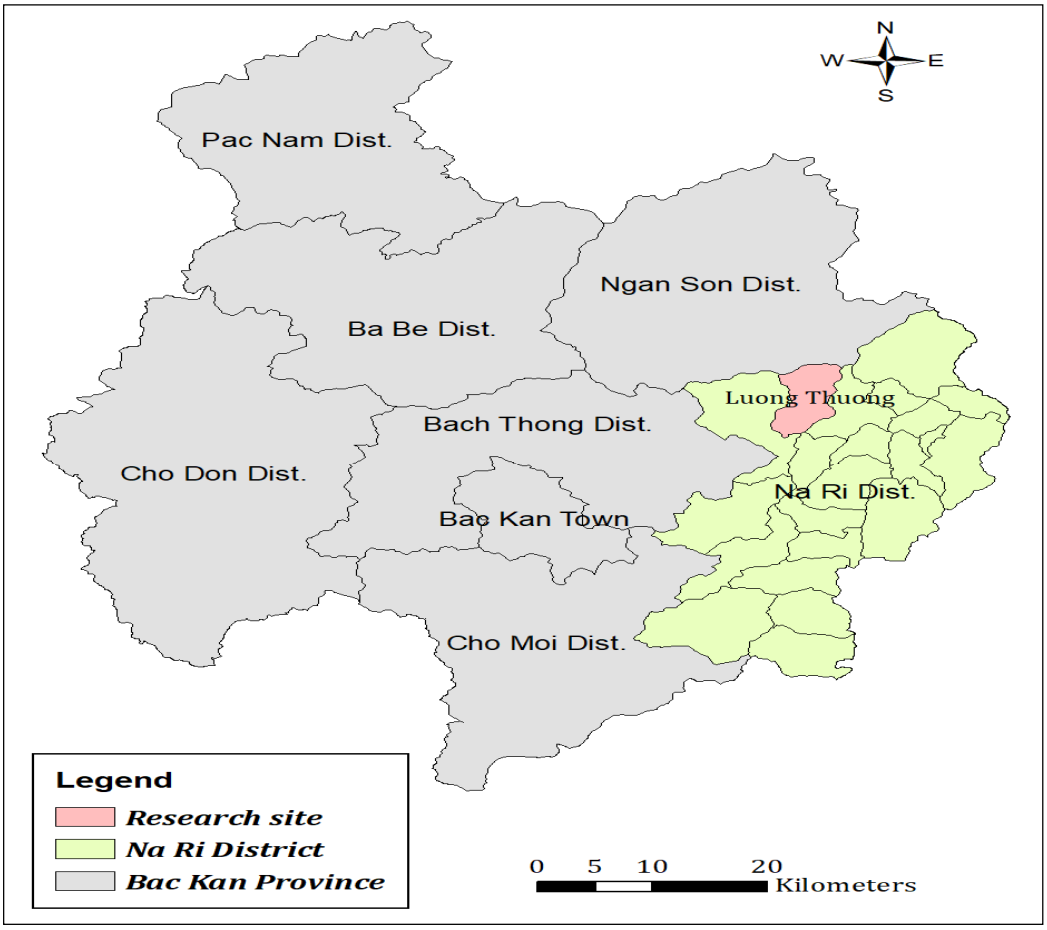

Fig. 1. Map of study location

Luong Thuong commune is located within the tropical belt of the monsoon Southeast region. In this location, there is a clear climate differentiation by seasons. The tropical monsoon climate is combined with topographical differentiation by height. The climatic regime is divided into 2 distinct seasons: rainy hot season lasts from April to October, dry season lasts from November to the March of the next year. Generally, climate and weather in the commune are relatively appropriate for daily life and agriculture-forestry production of the local people. However, the commune is influenced by rocky mountain so it is foggy and drizzling in the winter. In dry season, there is drought. In rainy season, due to high terrain and steep slope, it rains heavily, leading to flooding, erosion, a landslide in hill and mountain range.

2.2. Socio-economic conditions

According to Communal People Committee of Luong Thuong commune by 2015, the total of the population in Luong Thuong is 426 households comprising 2,036 inhabitants. Density population distribution of 52 people/km^2. There are 5 ethnic groups: Tay, Nung, Kinh, H'Mong, and Dzao. Besides Kinh language, Tay and H'Mong are the 2 languages mainly used. The inhabitants of Luong Thuong commune live in five villages: Khuoi Noc, Na Lang, Vang Khit, Pan Xa, and Ban Giang. At present, there are still 175 multidimensional poor households, accounting for 37.7% of total households in the commune (Data in 2017). In

general, the fluctuation of the population in Luong Thuong commune in the past few years was not considerable.

3. RESEARCH METHODOLOGY

3.1. Theory base for assessing multidimensional poverty of households

3.1.1. Multidimensional poverty concept

Multidimensional poverty is based not only on income but also on issues related to education, culture, health, living standards, vulnerability, lack of right to speak and small arms. According to the OPHI: *"Multidimensional poverty is made up of several factors that constitute poor people's experience of deprivation – such as poor health, lack of education, inadequate living standard, lack of income (as one of several factors considered), disempowerment, poor quality of work and threat from violence*" (Asselin, 2009).

Tradditionally, economists and policy analysts have focused on measures of income poverty, based on the assumption that a person's material living standard mainly decides their happiness and welfare (Ngo Trung Kien, 2016). The poor are then defined as those whose material living standards are measured by income or spending below a certain level - called the poverty line (Pham Quang Anh Thu, 2015; Ravallion 1992; Atkinson 1989, 1987). In fact, determining the exact amount of income or expenditure has been challenging, so recently it has led to the discovery of alternative, non-monetary, household welfare parameters. The prime example of these is the use of household asset indices, which mean that based on an aggregate measure of access and ownership rights of a list of household attributes (UNDP, 2017).

The above definition indicated agreement amongst nations, philosophists, and learners that: Poverty is a multidimensional phenomenon and viewed as a shortage of basic human demands. The definition and measurement of poverty are subject to debate and controversy. The level of poverty found at any one time in any one country is critically dependent upon assumptions concerning the choice of welfare indicator (whether to use household income or expenditure), the choice over how to take differences in households' sizes and compositions into account, and the choice of the appropriate poverty line to use (Falkingham & Namazie, 2002).

It is increasingly recognized that poverty measures based on household income or expenditure reflect a static concept, offering only a limited picture of household well-being. Recognition that monetary measures fail to capture other important dimensions such as community resources, social relations, culture, personal security, and the natural environment (Falkingham & Namazie, 2001). Poverty is often determined by one-way measures, such as income but no indicator can capture many of the dimensions of poverty.

In Vietnam, the concept of multidimensional poverty is new. This approach is to develop a set of multidimensional poverty criteria with a more comprehensive view of the present picture of poverty. At the same time, it will help relevant agencies to work out practical policies aimed at reducing poverty more thoroughly and sustainably. Accordingly, the poor are divided into many ages, according to the multidimensional poverty lines they are facing so that the state and the organizations focus on removing, providing practical, non-duplicative and more effective poverty reduction.

3.1.2. Multidimensional poverty measurement indicators

Multidimensional poverty is not only manifested in the lack of food and lack of money, but also reflected in the living standards of the people. Since 1997, UNDP has used the HDI to measure people's living standards, including three factors: life expectancy, education and income. Since 2010, the UN has adopted a new approach to measuring poverty in a more comprehensive way, including monetary and non-monetary elements. It called Multidimensional Poverty Index (MPI) which was created by Sabrina Alkire and Maria Emma Santor (two experts from OPHI). The MPI

covers directly the need, vulnerability to health effects, education and essential services (such as clean water, sanitation and energy). In some countries, day sources are provided at no cost or at a very low cost while others exceed the level of the worker's income. The MPI measures the poverty of OPHI in three dimensions and 10 indicators as shown in Fig. 2 (Alkire & Jahan, 2018).

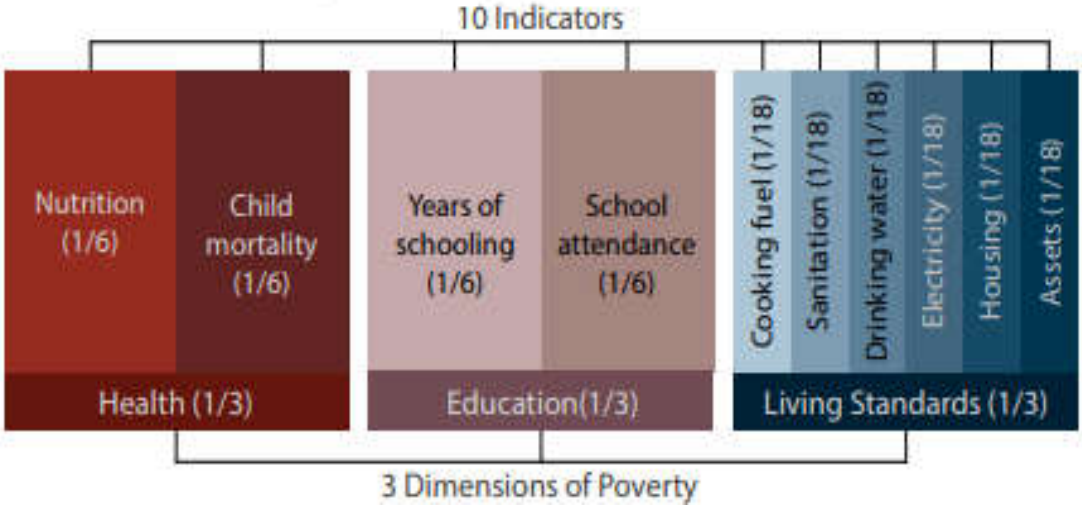

Fig. 2. The indicators of the Global MPI (Alkire & Jahan, 2018)

The Global MPI contains three dimensions and 10 indicators, which are shown in Fig. 2. Each dimension is equally weighted, each indicator within a dimension is also equally weighted, and these weights are shown in brackets within the diagram (Alkire & Jahan 2018). Poor households are missing at least 30% of the above indicators. Pursuant to the National Assembly's Resolution No.76/2014/QH13 of June 24, 2014, on accelerated achievement of the sustainable poverty reduction goal by 2020. In performance of the tasks assigned by the Government in Resolution No. 79/NQ-CP of November 4, 2015, on the Government's October 2015 regular meeting. At the proposal of the Minister of Labor, War Invalids and Social Affairs, the Prime Minister promulgates multidimensional poverty levels applicable during 2016-2020 (The Prime Minister, 2015).

Based on review by assessment methods, grading property, collecting the information about the characteristics and living conditions of the household to income estimation and determine the level of lack of access to basic social services of poor households and near-poor households. In short, norms for multidimensional poverty measuring applicable during 2016-2020 includes income norms and norms on deprivation of access to basic social services.

For income norm, poverty level is VND 700,000/person/month and VND 900,000 person/month in rural and urban areas, respectively; and near-poverty level is VND 1,000,000/person/month and VND 1,300,000/ person/month in rural and urban areas, respectively (Table 1).

Table 1. Criteria to classify poor households during period of 2016-2020

Rural areas	Urban areas
< VND 700,000	< VND 900,000
VND 700,000 - VND 1,000,000 Deprived of at least 3 indicators measuring deprivation of access to basic social services.	VND 900,000 - VND 1,300,000 Deprived of at least 3 indicators measuring deprivation of access to basic social services.

(Source: The Prime Minister (2015))

For norms on deprivation of access to basic social services, basic social services (5 services) consists of health; education; housing; clean water and sanitation; and information.

Additionally, indicators measuring die level of deprivation of access to basic social services (10 indicators) are access to medical services; health insurance; education level of adults; school attendance of children; housing quality; average housing area per capita; residential water sources; hygienic latrines and toilets; telecom services; and assets to serve information access.

3.1.3. Conceptual model of potential factors affecting multidimensional poverty of the households

In general, in Vietnam, there have been a number of studies on the factors affecting the poverty status of households in general and ethnic minority households in particular. The Vietnam Academy of Social Sciences (2011) showed that the difference between the per capita expenditure of ethnic minorities and that of the Kinh or Hoa group can be explained by the differences in observable resources, which include household structure (e.g. household size, age of family members), household education level, land ownership, and characteristics of the commune). Nguyen Minh Ha et al., (2013) with their research results have also identified six factors affecting poverty of households in rural areas, including: age of household head, employment status of the household head, the number of dependents in the household, the productive land area per capita in the household, the household's credit and the household's support. Research results of Swinkels (2006), Le Van Dung and Nguyen Quang Truong (2011), Ha Quang Trung (2014), Truong Van Thao (2015), Le Ha et al., (2015), Nguyen Thi Thuy Loan (2015), Ngo Trung Kien (2016), and Le Dinh Hai (2017) also show that the household's land area, number of employees participation in agricultural extension training, the age of the household head, the education level of the household head, the number of people, the number of dependents, the loan, the occupation of the household head all have a significant influence on the probability of household poverty.

Learning on the theoretical and practical basis of the previous researches and specific condition of the study site (Luong Thuong commune, Na Ri district, Bac Kan province), it is possible to identify potential factors influencing on multidimensionally poverty state of the local households, including 11 factors (Fig. 3).

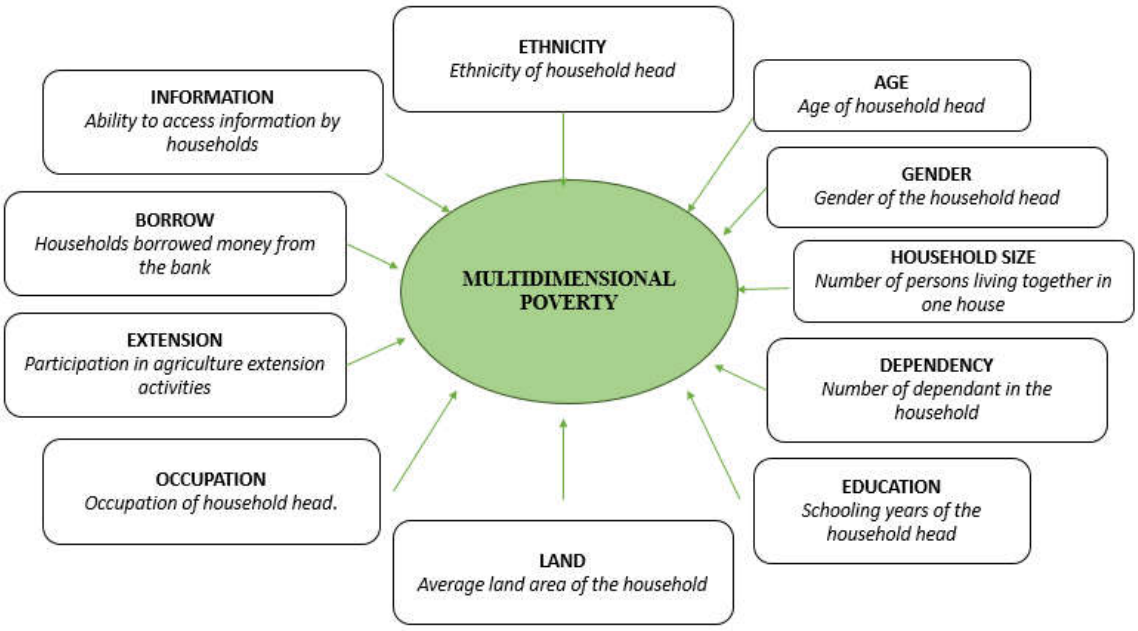

Fig. 3. Conceptual model for potential factors influence multidimensional poverty of households in the study area

3.2. Data Collection method

- *Primary data collection*

In this study, we selected 150 households (75 multidimensional poor households and 75 multidimensional non-poor households) for survey according to the criteria in Table 3. The selection of multidimensionally poor and multi-dimensional non-poor households is also based on the poverty line set by the Ministry of Labor, War Invalids and Social Affairs for the period 2016-2020. Selected sample size is based on formula of Tabachnick and Fidell (2007): n > 50 + (8 × m) = 50 + (8×11) = 138 (in which n is sample size and m is the number of independent variables in the Binary Logistic Regression model). The interview design was followed by a stratified random sampling approach. The parameters of the selected households for surveying in this study are presented in Table 2. The survey was based on the conceptual model for identifying key factors influencing multidimensional poverty of households in the study area (Fig. 3). A copy of the questionnaire is available on request. The questionnaire was administered face-to-face, usually the head of households. Informed consent was obtained from each sampled household before the survey, and interviewees could withdraw their consent at any time. The survey was conducted from March 2018 to May 2018.

Table 2. Sampling design in Thuong Luong commune, Na Ri district, Bac Kan province

Group interview	Village					Total
	Ban Giang	Pan Xa	Vang Khit	Na Lang	Khuoi Noc	
Multidimensional poor households	12	10	9	6	38	75
Multidimensional non-poor households	14	13	14	22	12	75
Total	**26**	**23**	**23**	**28**	**50**	**150**

- *Secondary data collection*

The data for that question was obtained from official government records, academic publication of different agencies such as the Communal People Committee of Bac Kan and Communal People Committee of Luong Thuong and Vietnam Bureau of Statistics.

3.3. Data analysis method

IBM SPSS Statistics 23 was applied for data analysis. Bivariate analysis was used to identify correlation between dependent variable and independent variables. Table 3 provides a full list of variables included in the analysis. Because the dependent variable in the stepwise binary logistic regression model is binary (0 or 1), the Student's t test was used to explore relationships with continuous independent variables and the Pearson $\chi 2$ test was used to explore relationships with categorical independent variables. Independent variables found to be significantly associated with the dependent variable in the bivariate analyses (Sig. <0.05) were considered as candidates in stepwise binary logistic regressions (Le Dinh Hai & Hoang Thi Lan Phuong, 2019).

The binary logistic regression model is represented as follows:

$$Ln\left[\frac{P}{1\quad P}\right] = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + ... + \beta_i X_i$$

Where:

P: Probability of the households belong to multidimensional poor households;

1- P: Probability of the households belong to multidimensional non-poor households;

Xi: Independent variables or factors;

βi: Coefficients estimated from the data for independent Xi.

Table 3. Description of variables

Variable name			Description	States
Independent variables	X_1	ETHNICITY	Ethnicity of household head (get value 1 if the ethnicity are Kinh, Tay, Nung, and the value is 2 if the ethnicity are Dzao and H'Mong)	1 = Kinh, Tay, Nung; 2 = Dzao, H'Mong
	X_2	GENDER	Gender of the household head (get value 1 if the gender is male and the value is 0 if the gender is female)	1 = Male; 0 = Female
	X_3	AGE	Age of household head	Year
	X_4	HHSIZE	Household size	People
	X_5	DEPENDENCY	Number of dependant in the household	People
	X_6	EDUCATION	Schooling years of the household head	Year
	X_7	LAND	Land area of the household	Ha
	X_8	OCCUPATION	Occupation of household head (get value 1 if working in the agricultural sector and get value 0 if working in the non-agricultural sector)	1 = Farming; 0 = Off-farm
	X_9	EXTENSION	Participation in agriculture extension activities (get value 1 if participate, get value 0 if not participate)	1 = Participate; 0 = Not participate
	X_{10}	BORROW	Households borrowed money from the bank (get value 1 if the bank loan, get value of 0 if not bank loans)	1 = Yes; 0 = No
	X_{11}	INFORMATION	Ability to access information by households (get value 1 if they have ability to access information and vice versa will receive value 0)	1 = Yes; 0 = No
Dependent variable	Y	MULTI_POVERTY	Multi-dimensional poor households (The value 1 if the household is multidimensional poverty and vice versa will receive the value 0)	1 = Yes; 0 = No

4. RESULTS

4.1. Descriptive statistics on surveyed households

The results from Chi square Tests in Table 4 show that ethnicity (Kinh, Tay, Nung vs. Dzao, H'Mong), participation in agriculture extension Yes vs. No), ability to access information by households (Yes vs. No) were significantly correlated with households belong to multidimensional poverty (Yes or No) at the 5% significance level. In contrast, gender of household head, and occupation of household head were not significantly correlated with households belong to multidimensional poverty (Yes or No) at the 5% significance level.

Table 4. Main characteristics of surveyed households for qualitative parameters

Parameter	Multidimensional poor household				Total		Sig. (Chi-Square Test)
	No		Yes				
	Count	%	Count	%	Count	%	
Ethnicity							
Kinh, Tay, Nung	63	84.0	36	48.0	99	66.0	.000***
Dzao, H'Mong	12	16.0	39	52.0	51	34.0	
Gender of household head							
Female	18	24.0	17	22.7	35	23.3	.500^{NS}
Male	57	76.0	58	77.3	115	76.7	
Participation in agriculture extension activities							
No	31	41.3	66	88.0	97	64.7	.000***
Yes	44	58.7	9	12.0	53	35.3	
Occupation of household head							
Off-farm	5	6.7	6	8.0	11	7.3	.500^{NS}
Farm	70	93.3	69	92.0	139	92.7	
Households borrowed money from the bank							
No	41	54.7	31	41.3	72	48.0	.071*
Yes	34	45.3	44	58.7	78	52.0	
Ability to access information by households							
No	31	41.3	70	93.3	101	67.3	.000***
Yes	44	58.7	5	6.7	49	32.7	
Total	**75**	**100.0**	**75**	**100.0**	**150**	**100.0**	

*Note: *** Sig. <0.01, ** Sig. <0.05, * Sig. <0.10, NS: Not significance (two-tailed tests)*

Results from independent samples t tests in Table 5 show there were no significant difference at the 5% level for age of household head, household size, schooling years of the household head between households belong to and households not belong to multidimensional poor households. There were significant difference at the 5% level only for number of dependants in the household and land area of the household between households belong to and households belong to multidimensional non-poor households.

Table 5. Main characteristics of surveyed households for quantitative parameters

Parameter	Multidimensional poor household				Total		Sig. for t-test (2 tailed)
	No		Yes		Mean	Std. Dev.	
	Mean	Std. Dev.	Mean	Std. Dev.			
Age of household head	42.87	8.72	43.96	14.01	43.41	11.64	.567^{NS}
Household size	5.12	1.23	4.84	1.58	4.98	1.42	.227^{NS}
Number of dependants in the household	1.53	.86	2.03	1.47	1.78	1.23	.013**
Schooling years of the household head	2.25	2.76	2.31	2.42	2.28	2.59	.900^{NS}
Land area of the household	.638	.809	.060	.069	.349	.642	.000***

4.2. Factors influencing multidimensional poverty of households in Luong Thuong commune, Na Ri district, Bac Kan province

Direct stepwise binary logistic regression was performed to assess the impact of a number of factors on the likelihood that households

belong to multidimentional poverty. The model contained five independent variables (ETHNICITY, DEPENDENCY, LAND, EXTENSION, and INFORMATION). The brief model containing five predictors was statistically significant, $\chi 2$ (5, N = 150) = 126.31, Sig. < .001, indicating that the model was able to distinguish between households which belong to and not belong to multidimentional poor households in the study area (Table 6). The model as a whole explained between 56.9% (Cox and Snell R squared) and 75.9% (Nagelkerke R squared) of the variance in households belong to multidimensional poverty in the study area, and correctly classified 86.0% of cases.

Table 6. Brief model summary for key factors influencing multidimensional poor households

Independent variables	B	S.E.	Exp(B)	Sig.	$Exp(B)_{adjusted}$	Ranking
ETHNICITY	1.615	0.706	5.028	0.022**	5.028	4
DEPENDENCY	0.541	0.249	1.717	0.030**	1.717	5
LAND	-14.174	3.880	0.000	0.000***	3861.0	1
EXTENSION	-1.838	0.722	0.159	0.011**	6.29	3
INFORMATION	-2.494	0.691	0.083	0.000***	12.04	2
(Constant)	-.030	0.988	0.970	0.976	-	-
Dependent variable: Multidimensional poverty						
Number of Observations			150			
Omnibus Tests of Model Coefficients:						
Chi-square			126.31			
Df			5			
Sig.			0.000			
Model summary:						
-2 Log likelihood			81.633[a]			
Cox & Snell R Square			0.569			
Nagelkerke R Square			0.759			
Predicted Percentage Correct (%)			86.0			

*Note: *** Sig. < 0.01, ** Sig. < 0.05, * Sig. < 0.10, NS Not significance (two-tailed tests);*
Ranking with 1: highest, 5: smallest;
If B > 0 then $Exp(B)_{adjusted}$ = Exp(B); and if B < 0, then $Exp(B)_{adjusted}$ = 1/Exp(B)

As shown in Table 6, the five independent variables put in decreasing order (land area of the household, ability to access information by households, participation in agriculture extension activities, ethnicity of households, and number of dependants in the household) were statistically significant in distinguishing between households statistically significant in discriminating between households falling into poverty or non-poverty status. The odds of households falling into non-poverty or poverty were improved by 3861 times if the land area of households increased one level, by 12.04 times if a household had "ability to access information", by 6.29 times if the household participated in agriculture extension activities, by 5.028 times if ethnicity of household is Kinh, Tay, Nung, by 1.717 times if the number of dependents in household decreased by one person (Table 6).

5. DISCUSSIONS

The results of our study show that land area held by households was the most important factor and had a significantly negative effect on households which belong to multidimensional poverty or not. The larger land that households

have the bigger chances for them to escape from multidimensional poverty. In the other hand, income of local people mainly come from agricultural production; in which, land area is one of the most important factors influencing producitivity and output of production.

From the results of our study, we found that better ability to access information, the higher chances of escaping multidimensional poverty compared with those who had no or less ability to access information. Access to information plays an important role in local community life. The information provided must be accurate and complete. The provision of information must be timely, transparent and convenient for citizens (Hoang Thuy et al., 2016). The government creates favorable conditions for people with disabilities, people living in border areas, islands, mountainous areas, areas with extremely difficult socio-economic conditions, to exercise access to information. Due to inadequate language, access to their information appears to be difficult, even inaccessible via TV, radio, network and telephone. Illiteracy among ethnic minority people is high, which means that a large number of people are unable to access information from reading.

Additionally, our study results indicated that the more households involved in agricultural extension activities, the more opportunities for them escape from multidimensional poverty. The local authorities are fully equipped with guidance sessions to improve the knowledge of farmers on how to produce effective agriculture. If local people participate in agricultural extension, their agricultural land will be also provided with all necessary elements such as water, pesticides, disease prevention and harvesting. In contrast, if local people do not participate in agricultural extension, people often use seedlings and they do apply out of date technologies. These will affect productivity and quality in agricultural production.

Ethnicity is also one of the factors that significantly affect multidimensional poverty of households in the study area. Different ethnic groups locate in different habitats. They also have different cultures, habits of living, ways of farming, etc. For instance, for the H'Mong, older households live on upland fields and apply shifting cultivation. That is main reason why proportion of Dzao, H'Mong households belong to multidimensional poverty is higher than that of Kinh, Tay, and Nung households.

The number of dependents is also one of the factors that significantly affect the multidimensional poverty of households in the study area. The greater the number of dependents, the more negatively they will affect the lives of ethnic minority people. Dependents include children, the elderly, and vulnerable groups. In particular, the elderly and children are unable to work.

All regression coefficients of independent variables in the model (Table 6) have negative signs except the coeeficicent for the variable of "DEPENDENCY", which means that if the ethnicity of households is Kinh, Tay or Nung, education level of the households is higher, the households have more land, the households access bank loans, and the households households have fewer dependents, the probability of households falling into poverty will be lower or in other words, the probability of not being poor will be higher and vice versa. The results of this study are similar to previous studies, not only in terms of influence and expected signs of independent variables or factors affecting the probability of multidimensional poverty of households.

6. CONCLUSION AND POLICY IMPLICATION

Multidimensional poverty of households is a problem that hinders the development and growth of the national economy in the present and in the future. The formulation of policies and solutions contributing to poverty reduction. This is not just a personal matter, it is a big problem for the whole society, so this requires the cooperation of all people and authorities. Hunger eradication and poverty reduction must be carried out thoroughly and in parallel with each stage of socio-economic development.

The results of interviewing 150 households (including 75 poor households and 75 non-poor households) in Luong Thuong commune, Na Ri district, Bac Kan province shows that there were five main factors affecting multidimensional poverty of households in study area, including: (1) land area of the household; (2) ability to access information by households; (3) participation in agriculture extension activities; (4) ethnicity of household head; and (5) number of dependant in the household. Therefore, it is essential to focus on increasing the land area for poor households; improving access to information by households; strengthening agricultural extension activities; and reducing the number of dependants in the households. These solutions can be used as valuable reference materials for making sustainable poverty reduction policies for ethnic minority people in Luong Thuong commune, Na Ri district in particular and in Bac Kan province in general.

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CÁC YẾU TỐ ẢNH HƯỞNG ĐẾN NGHÈO ĐA CHIỀU CỦA CÁC HỘ GIA ĐÌNH: NGHIÊN CỨU ĐIỂM TẠI TỈNH BẮC KẠN

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TÓM TẮT

Nghèo đa chiều là một cách tiếp cận mới đã được Việt Nam đưa vào áp dụng trong giai đoạn 2016-2020. Đây là cơ sở mới để đánh giá nghèo đói, khắc phục những hạn chế của việc đo lường theo thu nhập. Nghiên cứu nhằm xác định các nhân tố chính ảnh hưởng đến nghèo đa chiều và đề xuất các giải pháp giảm nghèo đa chiều cho các hộ gia đình tại xã Lương Thượng, huyện Na Rì, tỉnh Bắc Kạn. Với việc khảo sát 150 hộ gia đình trên địa bàn nghiên cứu và sử dụng mô hình hồi quy Logit nhị phân để phân tích dữ liệu, nghiên cứu đã xác định được 5 yếu tố chính ảnh hưởng đáng kể đến nghèo đa chiều của các hộ gia đình trên địa bàn nghiên cứu, bao gồm: (1) diện tích đất của hộ gia đình; (2) khả năng tiếp cận thông tin của các hộ gia đình; (3) tham gia các hoạt động khuyến nông; (4) thành phần dân tộc của chủ hộ; và (5) số người phụ thuộc trong hộ gia đình. Trên cơ sở đó, bốn giải pháp đã được đề xuất nhằm giúp các hộ gia đình trong khu vực nghiên cứu thoát nghèo đa chiều, bao gồm (i) tăng diện tích đất giao cho hộ nghèo; (ii) cải thiện thông tin tiếp cận cho các hộ gia đình; (iii) đổi mới công tác khuyến nông; (iv) giảm số lượng người phụ thuộc trong hộ gia đình. Các giải pháp này có thể được sử dụng làm tài liệu tham khảo có giá trị cho việc xây dựng chính sách giảm nghèo bền vững cho các hộ gia đình trên địa bàn nghiên cứu nói riêng và cả nước nói chung.

Từ khóa: các yếu tố ảnh hưởng, giải pháp, giảm nghèo bền vững, hộ gia đình, nghèo đa chiều.

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