

FACTORS AFFECTING THE CAPITAL MOBILIZATION OUTCOME OF THE NATIONAL NEW RURAL DEVELOPMENT PROGRAM IN THE NORTHERN MIDLANDS AND MOUNTAINOUS REGIONS

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SUMMARY

Effective capital mobilization is the most challenge task in the National New Rural Development Program (NNRD) in practice. So far, the capital for this program has mainly been mobilized from the local government, and the local community. This study has been conducted based on the structured survey of 345 people in 3 provinces Son La, Phu Tho, and Lang Son. The EFA (Exploratory Factor Analysis) method has been applied to quantify the main factors affecting the capital mobilization outcome in these provinces.

Keywords: Capital mobility, New rural development, Northern midland and mountainous regions.

I. INTRODUCTION

In the last over 5 years successfully implementing the National New Rural Development Program (NNRD) in the Northern midland and mountainous regions, the program has turned the old countryside into a modern face with various favourable conditions for socio-economic development in the future.

To attain this achievement, the NNRD Program has mobilized financial resources from both government and non-government sectors. The management ability and the volume of capital gain set the pace and the quality of the program implementation.

Beside such a remarkable achievement, the program also faces various limitations such as the difficulty in mobilizing capital from the non-government sectors, the unproductive financial expense, and the existence of a high volume of fraud.

The Northern midland and mountainous regions have typical featured with hilly landscapes, insolation topography, hash economic conditions, and population disperse; Therefore, the program usually requires high expenditure, especially for infrastructure development.

Because of these disadvantage conditions,

the NNRD Program in the Northern midland and mountainous regions depends heavily on the capacity of capital mobilization from different sources and the ability to manage and use them.

In this research, the financial resources mobilizing from the community is defined as the total amount of financial contribution from individuals, households, and enterprises for the program.

Because the government budget is highly constrained, the volume of the capital mobilizing from the community for the NNRD Program plays a crucial role for the program's implementation in the practice. Thus, it is important to conduct a research on the factors affecting the capital mobilization capacity, in order to propose feasible solutions to enhance the capital mobilization volume from the community for the NNRD Program in the Northern midland and mountainous regions.

II. RESEARCH METHODOLOGY

2.1. Selection of study sites

The whole region of Northern midland and mountainous contains 14 provinces that divided into 2 sub-regions including the North-West region and the North-East region. This research selected only 3 provinces for the case studies including Son La (representing by

the North-West sub-region), Lang Son (representing by the North-East sub-region) and Phu Tho (which is in between the other two sub-regions). In each province, we selected 3 communes representing for different degrees of achievement in implementing the NNRD program: fast, slow, and average achievement.

2.2. Data collection

+ *Secondary data:*

The secondary data has been collected from various published sources such as Statistic Book of provinces, Reports of the NNRD Program of provinces, and the research results of other related studies.

+ *Primary data:*

The primary information has been investigated through structured surveys. The informants are individuals involved in the capital mobilization processes in the studies areas, including local people, individuals representing for the social-political unions, commune authorities, heads of hamlets, and enterprise representatives. The sampling size is 345 people.

2.3. Data analysis method

+ *Statistical methods to be used:*

Descriptive statistics, comparative statistics, measurement of index, and estimation of the development trends for related economic phenomena.

+ *Exploratory Factor Analysis method:*

The EFA method is applied to determine the factors affecting the outcome of the NNRD Program and their elasticity in the study equation.

The statistical software SPSS 22 is used for calculating and synthesizing collected data and developing regression equation.

III. RESEARCH RESULT

3.1. The current implementation status of NNRD program

The Northern midland and mountainous region has 14 provinces including Ha Giang, Cao Bang, Lao Cai, Bac Can, Lang Son, Tuyen Quang, Yen Bai, Thai Nguyen, Phu Tho, Bac Giang, Lai Chau, Dien Bien, Son La, and Hoa Binh provinces. Area of the whole region is 95,266.8 m² (equivalent to 28.6% of the total area of Vietnam), and is divided into 2 sub-regions including North-West and East-West regions where 2,287 communes are located.

The Northern midland and mountainous regions has tropical wet climate with rich potential of natural resources, and has important strategic location in developing social and securities for the whole country.

The population of the whole region is 11.67 million people with population density of 122 people per m². The population of minority groups accounts for 62% of total population in the study area, including Thai, Tay, Nung, Muong, Kinh, H'Mong, Dao, Kho Mu, Khang, Giay... ethnic groups. These groups have very rich and diverse culture.

Although the Northern midland and mountainous region faces many disadvantage conditions, it gains some important achievements in socio - economic development in recent years. In the period 2006 – 2010, its annual GDP growth rate is 10.5%; In the period 2011 – 2015, this growth rate is 7.5%. The economic transition has been shifting toward a more productive development.

The NNRD program has been implemented in large scales in the whole Northern midland and mountainous region. Table 01 demonstrates the program's achievement by the end of 2015.

Table 01. The criteria for achievement measurement of NNRD program in the Northern midland and mountainous regions

No.	Criteria	Measuring unit	By 31/12/2015	
			Total number	Percentage
1	Number of commune in the regions	Commune	2,280	
2	Average number of criteria per commune meets the NNRD standard	Number of criteria satisfied per commune	9.3	
3	Number of commune classified in groups:	Commune	2,280	100.00
a	<i>Group 1 (satisfied 19 criteria)</i>	Commune	165	7.24
b	<i>Group 2 (satisfied from 15 to 18 criteria)</i>	Commune	153	6.71
c	<i>Group 3 (satisfied from 10 to 14 criteria)</i>	Commune	509	22.32
d	<i>Group 4 (satisfied from 5 to 9 criteria)</i>	Commune	1,028	45.09
e	<i>Group 5 (satisfied less than 5 criteria)</i>	Commune	425	18.64

Source: Report of The NNRD Program in the Northern midland and mountainous regions, 2015.

There was no commune satisfied more than 15 criteria at the time the NNRD program started to implement in large scale in Northern midland and mountainous regions in 2010. However, five years later, until 31/12/2015, 165 communes accounting for 7.24% of the total communes in the region have already satisfied 19 criteria. Nevertheless, there were only 1,028 communes satisfied 5 to 9 criteria (45.09%) and 425 communes (18.64%) satisfied less than 5 criteria. These numbers reveals that the achievement of the program was limited; Therefore, there are many important tasks need to be done in the coming years.

Such a low achievement can be blamed to the disadvantages of the region such as the unfavorable natural conditions, low economic

development, and the limitation of the capacity to mobilize capital for the NNRD program.

3.2. The current status of capital mobilization activities for the NNRD program in the Northern midland and mountainous regions

In order to implement the NNRD program, all the provinces in the regions have mobilized financial resources from different channels such as the Government budget (including direct funding for the program, indirect funding from other related projects), and non-government budgets (borrowing credits, community contribution).

The result of financial mobilization from various sources in the Northern midland and mountainous regions is summarized in Table 02.

Table 02. The result of financial mobilization from various sources in the Northern midland and mountainous regions

No.	Criteria	The whole region (billion VND)	Percentage (%)	Average value per province (billion VND)	Average value per commune (billion VND)
I	Total amount of money mobilised	151,229	100.00	10,802	66.33
1	Government budget	59,749	39.51	4,267	26.21
a	Central government budget	52,490	34.71	3,749	23.02
	+ <i>Direct funding for the project</i>	4,694	3.10	335	2.05
	+ <i>Indirect funding from other projects</i>	47,796	31.61	3,414	20.96
b	Provincial government budgets	7,259	4.80	518	3.18
2	Non-government budgets	91,481	60.49	6,534	40.12

a	Borrowing credits	62,720	41.47	4,480	27.51
b	Community contribution	28,761	19.02	2,054	12.61
	+ <i>Enterprises contribution</i>	16,695	11.04	1,192	7.32
	+ <i>Local people contribution</i>	8,708	5.76	622	3.82
	+ <i>Contribution from other sources</i>	3,358	2.22	239	1.47

Source: Report of The N NR D Program in the Northern midland and mountainous regions, and the author's calculation.

Table 2 shows that the total volume of money mobilized in the whole Northern midland and mountainous region is 151,229 billion VND, equivalent to 10,802 billion VND on average per province, or 66.33 billion VND on average per commune.

Regarding to the budget sources, the government budget (including the indirect contribution from the other sources) accounts for 39.51%; The non-government budget accounts for 60.49%; The central government accounts for only 3.10%; and the provincial government budget accounts for 4.80% due to the real estate market undergone collapse.

The financial mobilization from the non-government budget accounts for 60.49%, in which the capital mobilized from local community (e.g. local people and local enterprises) for the NNRD program reaches 28,761 billion VND, accounting for 19.02% of the total share. This capital source has contributed significantly to the NNRD program and will continue playing an important role in the future.

Infrastructure was responsible for 80% of the expenditure of the NNRD program while only 20% of the financial budget was expensed for the other related activities. Such a bias in expense share is understandable since this

region has unfavorable landscape conditions with poor infrastructure and low economic development.

3.3. Factors affecting the financial mobilization outcome

This study assumes that financial mobilization outcome has positive relation with the local people's willingness to participate in NNRD. As a result, this study investigates the factors affecting the willingness to contribute financially of the local community.

This study has interviewed 345 people in 3 selected provinces, using structured surveys designed by Likert method to investigate the opinions of the informants.

The survey contains 4 groups of variables to investigate opinions on the following aspects: (i) the persuasion and propaganda campaign (group X1) (ii) the management system of NNRD program (group X2), (iii) the functioning mechanism of the financial mobilization system (group X3), and (iv) the transparency of the NNRD program (group X4). Each group of variables contains several surveying questions to measure different aspects of the issues. The variables are grouped and summarised in Table 03.

Table 03. The groups of variables used in the study

No.	Variables	Code
A	<i>The propaganda and persuasion campaign for the NNRD program</i>	X1
1	People are provided sufficient information about the NNRD program	X11
2	People fully understand all the activities related to the NNRD program	X12
3	People are provided clear and sufficient information about their benefits, responsibilities and rights in relation to the NNRD program	X13
4	All the local unions have participated in the propaganda and persuasion campaign	X14
B	<i>The management board of the NNRD program</i>	X2
1	The management board of the program has clear guidance through out all activities	X21

2	The local authorities are accountable and has sufficient ability to carry out the NNRD program	
3	All the members of the management board have contribute financially for the NNRD program	X22
4	People believe in the leadership of the NNRD board	X23
C	<i>The participation of people on the NNRD program</i>	X3
1	People are allowed to participate in all the meeting and discussion	X31
2	People are allowed to vote and raise their opinions in all activities of the program	
3	People are allowed to oversee and check all activities of the NNRD program	X32
4	People are informed fully about the expense, and financial mobilization outcome of the NNRD program	X33
D	<i>The transparency in the financial mobilization activities and in the use of the budget</i>	X4
1	People know the need for capital of the NNRD program	X41
2	People know the purpose of every expenses of the program	X42
3	People are allowed to discuss and vote in all financial mobilization activities	X43
4	People are allowed to oversee the financial use and mobilization activities	X44
E	<i>The over evaluation</i>	
1	Willingness to contribute financially to the NNRD program	Y

Based on the data collected from the survey, we have investigated the EFA model using SPSS 22 software.

3.3.1. Data investigation

Using the result of 345 surveys, Cronbach

Alpha test reveals that all the 4 groups of variables are statistically significant. Specifically, the result of Cronbach Alpha test are reported in Table 04.

Table 04. The significance of the variables

No.	Group of variables	Sub-variables	Results of the Cronbach Alpha test
1	X1	X11, X12, X13, X14	0.861
2	X2	X21, X22, X23, X24	0.711
3	X3	X31, X32, X33, X34	0.896
4	X4	X41, X42, X43, X44	0.895

Source: author's calculation, using SPSS

The result of the Cronbach Alpha test shows that the teststatistic value is greater than the critical value of 0.6; therefore, the variables group has statistically impacts on the willingness to contribute financially of the local community.

3.3.2. The results of the model regression

using EFA framework

a. The evaluation on the survey result
- Suitability of the selection of EFA, using Kaiser Meyer Olkin (KMO) method

The result of the model regression, using KMO method is reported in Table 05.

Table 05. The regression results of KMO test and Bartlett test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.929
Bartlett's Test of Sphericity	Approx. Chi-Square	3256.594
	Df	120
	Sig.	0.000

Source: author's calculation using SPSS

Table 05 reveals that KMO test statistic value = 0.929 which falls within the critical value range (0.5 < KMO < 1); therefore, the

EFA method is accepted in this case.
- Investigate the relationship among variables

We also can see from Table 05 that the Bartlett test has statistic value less than 0.05; therefore, the independent variables have linear relationship with the dependent variables.

- Investigate the explanatory power of variables

The column Cumulative in Table 06 shows that the variance value is 66.199%, which indicates that 66.199% of the value of dependence variables (the component of Factor) is explained by the independent variables.

Table 06. The explanatory power of variables (Total Variance Explained)

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.380	46.124	46.124	7.380	46.124	46.124	5.362	33.510	33.510
2	2.195	13.718	59.842	2.195	13.718	59.842	3.038	18.990	52.500
3	1.017	6.357	66.199	1.017	6.357	66.199	2.192	13.699	66.199
4	.774	4.839	71.038						
5	.647	4.045	75.082						
6	.574	3.590	78.673						
7	.541	3.380	82.053						
8	.472	2.951	85.004						
9	.389	2.431	87.436						
10	.366	2.289	89.725						
11	.339	2.119	91.843						
12	.331	2.066	93.909						
13	.298	1.860	95.770						
14	.257	1.608	97.378						
15	.216	1.353	98.731						
16	.203	1.269	100.000						

Extraction Method: Principal Component Analysis.

Source: author's calculation, using SPSS

b. The regression results using EFA framework

The regression results using EFA framework are summarized in Table 07. Because all the independent variables have

factors loading with the values greater than 0.5, the 3 variables groups representing for the willingness to contribute financially to the NNRD program are now rearranged.

Table 07. Rotated Component Matrix

Rotated Component Matrix ^a			
	Component		
	1	2	3
X41	.863		
X32	.806		
X42	.800		
X31	.764		
X44	.752		
X43	.740		
X34	.729		
X33	.713		
X12		.796	
X11		.771	
X13		.747	
X14		.671	

X21	.762
X22	.733
X24	.715
X23	.715

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.^a
 a. Rotation converged in 5 iterations.

Source: author's calculation, using SPSS

- Variable group 1 (Component 3) comprises: X41, X32, X42, X31, X44, X43, X34, X33. These variables are now renamed F1 (*the mechanism of capital mobilization activities and the transparency of the financial expenses*).

- Variablegroup 2 (Component 2) comprises: X12, X11, X13, X14. These variables are now renamed F2 (*the propaganda and persuasion campaign of the NNRD program*).

- Variable group 3 (Component 1) comprises: X21, X22, X24, X23. These variables are now renamed F3 (*the management system of the NNRD program*).

The variable groups F1, F2, and F3 are estimated using the score cards of every individual questions in the component.

3.3.3. The regression equation

The regression equation demonstrating the factors affecting the willingness of people to contribute financially to NNRD program has the following form:

$Y = f(F1, F2, F3)$. Where: Y is the dependent variable, and F1, F2, and F3 are independent variables.

The model's regression results using SPSSsoftware are summarized in Tables 08 and 09.

Table 08. The regression results of the model

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.725 ^a	.526	.521	.3661

a. Predictors: (Constant), F3, F2, F1

Source: author's calculation, using SPSS

Table 09. The value of the coefficients of the regression model

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.426	.020		72.348	.000		
	F1	.327	.020	.618	16.563	.000	1.000	1.000
	F2	.166	.020	.313	8.389	.000	1.000	1.000
	F3	.114	.020	.215	5.761	.000	1.000	1.000

a. Dependent Variable: Y

Source: author's calculation, using SPSS software

Table 08 shows that the model has adjusted $R^2 = 0.521$. This value means that there are 52.1% of the variables explaining the willingness of the people to contribute financially for the NNRD program are explained by the variable F1, F2, and F3.

Table 09 indicates that the regression model should has the following form:

$$Y = 0.327 * F1 + 0.166 * F2 + 0.114 * F3 + 1.426$$

- Variables F1, F2, and F3 have test with 95% confident level, satisfying at 5% significant level.

- Variance inflation factor is smaller than 2; therefore, the independent variable has no multicollinearity problem.

- Variable F1 has partial correlation

coefficient equals 0.327; therefore, when the variables *The Mechanism of Capital Mobility Activities and the Transparency in Using Financial Budget* increases by 1 score, then the Willingness to Contribute Financially for the NNRD Program will increase by 0.327 score.

- Variables F2 has partial correlation coefficient equals 0.166; thus, when the variables *The Propaganda and Persuasion campaign of NNRD Program* increases by 1 score, then the Willingness to Contribute

Financially for NNRD Program will increase by 0.166 score.

- Variables F3 has partial correlation coefficient equals 0.114; thus, when the variables *The Management system of NNRD Program* increases by 1 score, then the Willingness to Contribute Financially for NNRD Program will increase by 0.114 score.

The standardized correlation coefficient in Table 10 illustrates the significance of the dependent variables in the investigated model.

Table 10. The contribution of the variables to the regression model

No.	Variables	Absolute value	Percentage (%)
1	F1 (<i>The Mechanism of Capital Mobility Activities and the Transparency of Using Financial Budget</i>).	0.327	53.87
2	F2 (<i>The Propaganda and Persuasion campaign of the NNRD Program</i>)	0.166	23.35
3	F3 (<i>The Management system of the NNRD Program</i>)	0.114	22.78
	Sum	0.607	100

Source: author's calculation, using SPSS software

From the result in Table 10, we can list out the variables affecting the willingness of the local people to contribute financially to the NNRD program as follow:

- F1: *The Mechanism of the Capital Mobility Activities and the Transparency of Financial Budget* expense has the test statistic value of 53.87%;

- F2: *The Propaganda and Persuasion campaign of the NNRD Program* has the test statistic value of 23.35%;

- F3 *The Management system of the NNRD Program* has the test statistic value of 22.78%;

3.4. Possible solutions to improve the outcome of capital mobility activities for the NNRD program

The analysis above points out that the NNRD program in the Northern midland and mountainous regions needs to target its activities on the following:

- The mechanism of the capital mobility activities should always be built based on the local environmental conditions, the culture of each minority groups as well as the custom of certain community.

- The transparency of the financial expense is important. It is necessary to keep transparency at all the activities, from the discussion and planning activities to the implementation and check and acceptance process.

- The persuasion campaign should reach to every body in the community. The activities of the campaign should be relevant, flexible, diverse and practical for each group of community. People may enthusiastically participate in the NNRD program if they understand the content- and the meaning of all the activities of the NNRD program.

- There is a need to improve the capacity for the management board, especially for the management board of the commune and hamlets. The management board need to persuade the local political and social organizations to participate in the NNRD program enthusiastically and effectively.

IV. CONCLUSION

The NNRD program has been systematically carried out and thus gained some important achievement, helping the rural

region to industrialize and modernize its social economic into a new face.

The NNRD program has mobilized a large volume of money from various sources, of which the financial contribution from the local community take a large part and plays an important role to secure financial budget for the NNRD program.

The volume of financial contribution from the local community is often influenced by many different factor, in which the financial mobility mechanism, the transparency in using the budget, the persuasion campaign, and the capacity of the managementboard are the most important elements. These findings are important for the NNRD program to search for a more suitable and practical solution to effectively mobilize capital from the local

community in the future.

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CÁC NHÂN TỐ ẢNH HƯỞNG ĐẾN KẾT QUẢ HUY ĐỘNG NGUỒN LỰC TÀI CHÍNH TỪ CỘNG ĐỒNG CHO THỰC HIỆN CHƯƠNG TRÌNH XÂY DỰNG NÔNG THÔN MỚI TẠI CÁC TỈNH TRUNG DU VÀ MIỀN NÚI PHÍA BẮC

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TÓM TẮT

Thực tiễn quá trình xây dựng nông thôn mới ở các địa phương cả nước nói chung và vùng Trung du, Miền núi phía Bắc nói riêng cho thấy khó khăn lớn nhất là vấn đề huy động và sử dụng hợp lý nguồn lực tài chính. Nguồn lực tài chính cho xây dựng nông thôn mới được huy động chủ yếu từ các nguồn: Ngân sách Nhà nước các cấp và huy động từ cộng đồng địa phương. Nghiên cứu này được thực hiện trên cơ sở phân tích kết quả khảo sát 345 cá nhân trên địa bàn 3 tỉnh đại diện là Sơn La, Phú Thọ, Lạng Sơn, áp dụng phương pháp phân tích nhân tố khám phá (EFA) để chỉ ra các nhân tố chủ yếu và mức độ ảnh hưởng của các yếu tố này đến kết quả huy động nguồn lực tài chính từ cộng đồng cho quá trình triển khai thực hiện chương trình xây dựng nông thôn mới tại các địa phương này.

Từ khóa: Nguồn lực tài chính, trung du miền núi phía Bắc, xây dựng nông thôn mới.

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