

Review paper

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THE IMPACT OF FOREIGN AID ON HOUSEHOLD INCOME AMONG ETHNIC MINORITY GROUPS IN VIETNAM

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Ethnic minorities in Vietnam account for only 15% of the population, but their poverty levels total more than 70% of the national poverty rate. Foreign aid has been an important financial resource supporting the socioeconomic development of ethnic minorities in Vietnam. Based on the empirical research in ethnic households conducted in nine provinces throughout the country, the effect of foreign aid on household income was estimated using the OLS regression model. The results show varying effects in the magnitude and significance among different ethnic groups. Specifically, aid has significantly improved the livelihood of the Cham and Xtieng populations, whereas the results for the Hmong population are detrimental. Consequently, it is suggested that aid and the ethnic policy should be reconsidered in order to reduce inequality among ethnic groups.

Keywords: foreign aid, ethnic minorities, household income, rural Vietnam, OLS regression

JEL Classification: D31, D63, O12, O21

INTRODUCTION

Vietnam is considered to be a multiethnic country consisting of 54 ethnic groups. The Kinh group of 78.32 million people accounts for 85.4% of the population. The remaining 53 ethnic groups account for only 14.6% of the country's population. In 2016, 9.8% of the population, i.e. about 9 million people, lived in poverty. About 6.6 million of the 9 million poor people are of ethnic minority heritage, even

though the latter account for only about 15% of the total population. Some ethnic minority groups have a poverty rate as high as 70% - 80%, including the Hmong, Kho Mu, and Xo Dang (Ngo, 2019).

Apart from government investments, foreign aid has been an important financial resource supporting the socioeconomic development of ethnic minorities in Vietnam. Due to the inflow of this support, Vietnam has become one of the fastest-growing economies in the world. The average GDP growth rate has constantly stood at approximately 7% for the last two decades. Vietnam has managed to achieve a per capita

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income of USD 2,300. Moreover, the nation completed its Millennium Development Goals (MDGs) before the deadline, with a high poverty reduction rate.

The positive effects of aid have been demonstrated in various studies (Hansen & Tarp, 2000; Dalgaard, Hansen & Tarp, 2004; Asiedu, Jin & Nandwa, 2008). However, foreign aid can jeopardize the health of an economy, because aid recipients may become dependent on this source of financial support (Moyo & Mafosu, 2017; Farah, Onder & Ayhan, 2018). P. Boone (1996) points out the two reasons for the inefficiency of foreign aid. First, poverty is not the result of financial shortages, and second, politicians alter their policies and the manner of their rule upon receipt of aid.

This paper has a goal to examine the effect of foreign aid on household income among ethnic minority groups in Vietnam. Using a unique dataset from a household survey, this study is the first to provide the empirical evidence of the impact of foreign aid at a household level. Using the OLS regression model, whether foreign aid affects ethnic household income or not is examined. The results obtained in this research study show that aid positively affects household income in general. However, further investigation reveals the varying impact of aid on household income in the different fields of investment and across different ethnic minority groups as well. The findings of this research study are in line with the previous work conducted in Vietnam, which was dedicated to the examination the effect of household characteristics on the income of ethnic households.

The study is organized as follows: the next section provides an overview of foreign aid and ethnic minorities in Vietnam. Section three outlines the data and the methodology. Section four provides the results and a discussion. Finally, Section five contains the conclusion and policy implications.

FOREIGN AID AND ETHNIC MINORITIES IN VIETNAM

Since the beginning of the ODA inflow, Vietnam received about USD 80 billion over the 1993-2019

period, thus becoming one of the largest ODA recipients in the world. Of the USD 80 billion, USD 7 billion consists of nonrefundable aid, over USD 70 billion comprises loans with the interest rates below 2%, as well as USD 1.62 billion in less preferential loans, but with the interest rates still lower than those of commercial loans. Some of the main donors are the World Bank (WB), the Asian Development Bank (ADB) and Japan, contributing about 29%, 20% and 34% of said aid, respectively. As of 2017, the Government's external debt was over USD 45.8 billion, and the foreign debt ratio was about 20.52% (Ministry of Planning and Investment, 2019).

Ethnic minorities in rural mountainous areas have been the subject of the major interest to aid donors. After five years of implementing the "Strengthening International Cooperation to Support Socioeconomic Development in Ethnic Minority Areas" Project under the Prime Ministerial Decision No. 2214 / QD-TTg as of 14th November 2013, nearly 2,000 programs and projects have been implemented through a number of ministries, government agencies and in a number of localities. Of these, nearly 200 poverty reduction and social security projects have been implemented in ethnic areas, ranging from the Northwestern Region to the Central Highlands. Further 252 projects dealt with education, vocational training and job creation for ethnic minorities. A total of 10 aid projects supported five Central Highlands provinces and included four grant projects sponsored by the Global Fund, the European Community (EC), and Global Alliance on Vaccines and Immunization (GAVI), in addition to the six aid projects financed by loans from the WB, ADB, Japan International Cooperation Agency (JICA), with a total investment and support budget for the whole region of about USD 88 million. Nine aid projects were distributed among the 16 provinces in the Northwestern Region, of which four nonrefundable projects were provided by the Global Fund and GAVI. Five projects were financed by the WB, ADB and JICA (Committee of Ethnic Affairs, 2018).

In the provinces included in the survey, the ODA is a very important financial resource. As H. M. Tran and L. T. Nguyen (2020) point out, the total ODA

invested in Vinh Phuc province by the year 2018 was approximately USD 177 million, of which the ODA capital received by the province was USD 123.7 million. In the Bac Kan province, a total of 80 programs and projects using the ODA and concessional loans from foreign donors were implemented from 1993 to 2018. Binh Phuoc is also a province which has received and managed many ODA-funded projects, including Japan International Bank (JBIC) projects, 10 in the field of the infrastructure, transportation and rural electricity, with a total investment of about USD 4.6 million. A project funded by the World Bank and the ADB for clean water supply, wastewater treatment, education, healthcare, the rural infrastructure and community development was also included, and the investment totaled about USD 51.3 million. The above-mentioned ODA funds have greatly contributed to the socioeconomic development and livelihoods of the households in the province.

Despite the essential role of aid, its implementation in ethnic minority areas showed some weaknesses from the beginning. Firstly, the capacity to absorb ODA capital is low and does not meet the requirements. Compared to the ODA capital signed for in the past 20 years for the whole country (including ethnic minority areas), the disbursement rate came to only about 67% (Ministry of Finance, 2019).

Secondly, when the nature of the locality and the ethnic group involved are taken into consideration, the foreign aid program and project design is sometimes impractical. A number of the projects implementing new models, such as microfinance, clean water management and business, and forest protection only remain active while funding is in place. Furthermore, the implementation of different models within a single area, for example in poverty reduction, led to overlapping, inefficiency and a waste of local and donor resources as well. Thirdly, the management of some aid projects was unprofessional due to the limited capability of project managers, especially at the local level. Project management personnel are often inconsistent, and in many cases work on a part-time basis. In a similar fashion, project management training was not regularly or professionally conducted. Last, but not least, a

lack of participation and collaboration by the local community in the planning and implementation processes often led to the ineffectiveness of the project and failure to uphold the model after installation.

DATA AND METHODS

Data

In the research study, the data from the 2019 Household Survey (HS) conducted by the researchers of the Institute of Anthropology, Vietnam, were used. The 2019 HS covers the ethnic households sampled from six socioeconomic regions. In each region, a province was selected as representative of the amount of aid and the number of ethnic minority households. For the three regions, i.e. the Northern Midlands and Mountains, the Central Highlands, and the Southwestern regions, two provinces were selected as representative for a wide distribution of ethnic minorities in them. Thus, nine provinces were selected for the study. In each province, a district was selected, and each district chose two communes based on the criteria of income and the number of ethnic minority households. Households in each commune were randomly chosen for the survey. A summary of the sample included in the survey is presented in Table 1.

The household data include detailed information about demography, assets, health benefits and expenditures, education, employment and income, and foreign aid. The data were merged from the nine provinces into one cross-sectional dataset providing a subsample of 2,514 rural households. The combined data allowed to the examination of the factors influencing the effectiveness of foreign aid on a larger scale.

Methods

Following T. Q. Tran (2015), the Cobb-Douglass production function was used in the form of a semi-log function commonly used to analyze the factors

affecting household welfare. Our study assumed the log of per capital household income as the function of foreign aid, and the household characteristics. A general form of this specification can be expressed as follows:

$$\ln Y_i = \beta_0 + \beta_1 X_i + \beta_2 P_i + e_i \quad (1)$$

where $\ln Y_i$ is the natural logarithm of the per capita income of the household i . X_i is the vector of the household characteristics (e.g. education, the gender, the marital status, the main job and the years of age of the household heads, the household size, the dependency ratio and household landholding). P_i is the vector of the foreign aid status as the proxy for the impact of foreign aid. e_i indicates the unobserved variables that follow the normal distribution with a zero mean. The standard assumptions were applied for the estimation by using Ordinary Least Squares (OLS) regression.

Table 1 The sample summary based on the region

| Region/ provinces | Total sample | Recipient household | Nonrecipient household |
|---------------------------------|-----------------|------------------------|---------------------------|
| Northern Midlands and Mountains | | | |
| Lao Cai | 282 | 152 | 130 |
| Bac Kan | 285 | 145 | 140 |
| Northeast | | | |
| Vinh Phuc | 274 | 156 | 118 |
| South Central Coast | | | |
| Ninh Thuan | 276 | 129 | 147 |
| Central Highlands | | | |
| Dak Lak | 279 | 138 | 141 |
| Kon Tum | 282 | 136 | 146 |
| Southeast | | | |
| Binh Phuoc | 278 | 151 | 127 |
| Southwest | | | |
| Tra Vinh | 279 | 128 | 151 |
| Soc Trang | 279 | 132 | 147 |
| | 2,514 | 1,267 | 1,247 |

Source: Authors

RESULTS AND DISCUSSION

Descriptive statistics

According to the descriptive statistics reported in Table 2, the average years of the education of the household head are 5.33, varying between 0 and 16. Most household heads are men (75%), the majority of them are married (86%), and their average age is approximately 46.68 years, ranging between 19 and 94 years of age. Each household has an average of 4.29 members, but the household size may reach as many as 10 members, given the fact that the households often include relatives from the extended family. The average dependency ratio is 36.56%, ranging between 0% and 100%. The data show that the household heads are mostly farmers (81%). The average residential land and gardens owned by a household are 530.89 m², while the average agricultural land and forestland and the other land owned by a household total 3,595.94 m², 3,384.94 m², and 168.03 m², respectively. The results obtained are in agreement with the previous studies on ethnic households in Vietnam (Baulch, Hung & Reilly, 2012; Tran & Vu, 2019).

In Table 3, various demographic, educational and landholding characteristics across the families that receive foreign aid and across those that do not are compared. The results are almost the same across the two types of households and in comparison with the whole sample. There is a slight difference in terms of landholding, while the recipient families often acquire more agricultural and the other land, but less residential, garden and forest land.

Econometric analysis

Table 4 reports the results for the effect of foreign aid on household income by using an OLS estimator. The regression model used in this paper controls for the household characteristics such as the age, gender, education and main job of the household heads. In addition to the foreign aid variable, aid was divided into the subcategories of health and medical services, education and training, and the use and management of natural resources.

Table 2 The descriptive statistics of the household characteristics

| Variables | Mean | Std Dev. | Min. | Max. |
|--|----------|-----------|------|--------|
| The education of the household heads (the years of schooling) | 5.33 | 4.13 | 0 | 16 |
| The Gender of the household head (1=male; 0=female) | 0.75 | 0.43 | 0 | 1 |
| The age of the household head (years) | 46.64 | 14.15 | 19 | 94 |
| The marital status of the household head (1=married; 0=single) | 0.86 | 0.34 | 0 | 1 |
| The household size (the total number of the family members) | 4.29 | 1.50 | 1 | 10 |
| The dependency ratio (%) | 36.56 | 24.03 | 0 | 100 |
| The main job of the household head (1=farmer; 0=other) | 0.81 | 0.40 | 0 | 1 |
| Residential land and gardens (m ²) | 530.56 | 1,450.75 | 0 | 40,000 |
| Agricultural land (m ²) | 3,587.70 | 6,251.81 | 0 | 90,000 |
| Forestland (m ²) | 3,416.15 | 12,877.70 | 0 | 99,999 |
| Other land (m ²) | 167.01 | 1,266.34 | 0 | 30,000 |

Source: Authors, based on: HS, 2019

As has been mentioned earlier, one of the main purposes of this study is to examine the relationship between foreign aid and household income. Table 4 shows the OLS estimates for the effect of foreign aid on household income. The foreign aid coefficient variable is positive and statistically significant, with

a 95% confidence interval. This result indicates the fact that a household benefiting from any aid acquires 1.14 times greater income than the one that has never received any aid at all. Thus, access to foreign aid projects partly explains the income difference between the beneficiary group and the control group.

Table 3 The descriptive statistics of the household characteristics by groups

| Variables | Recipient of Foreign Aid | | Nonrecipient of Foreign Aid | |
|---|--------------------------|-----------|-----------------------------|-----------|
| | Mean | SD | Mean | SD |
| The education of the household heads (the years of schooling) | 5.27 | 4.13 | 5.39 | 4.13 |
| The gender of the household head (1=male; 0=female) | 0.73 | 0.38 | 0.77 | 0.42 |
| The age of the household head (years) | 46.09 | 13.17 | 47.27 | 15.11 |
| The marital status of the household head | 0.87 | 0.38 | 0.86 | 0.35 |
| The dependency ratio | 35.26 | 22.97 | 37.88 | 24.99 |
| The household size (the total number of the family members) | 4.30 | 1.49 | 4.29 | 1.51 |
| The main job of the household head (1=farmer; 0=other) | 0.82 | 0.38 | 0.79 | 0.41 |
| The residential land and gardens acquired (m ²) | 486.23 | 875.50 | 576.17 | 1,865.82 |
| The agricultural land acquired (m ²) | 3,873.55 | 6,143.52 | 3,314.52 | 6,387.89 |
| The forestland acquired (m ²) | 3,144.07 | 11,578.94 | 3,629.11 | 13,951.41 |
| The other land acquired (m ²) | 234.80 | 1,359.90 | 100.35 | 1,169.77 |

Source: Authors, based on: HS, 2019

Table 4 The OLS estimates of the effect of foreign aid on household income by the subcategories of aid

| Independent variables | Dependent variable: Log MPCHI |
|-------------------------------------|-------------------------------|
| Foreign aid | 0.109** (0.047) |
| The age of the household head | 0.016*** (0.002) |
| The education of the household head | 0.033*** (0.005) |
| The gender of the household head | 0.158*** (0.050) |
| The main job of the household head | -0.264*** (0.053) |
| Subcategories of foreign aid | |
| Health and medical services | -0.107** (0.054) |
| Cultural preservation | 0.072 (0.272) |
| Education and training | -0.289** (0.120) |
| Nonfinancial educational support | -0.624*** (0.082) |
| Employment and job search | 0.101* (0.058) |
| Natural resource use and management | -0.331*** (0.063) |
| Constant | 4.335*** (0.110) |
| R-squared | 0.1941 |
| Observations | 1,754 |

Standard errors (SE) are given in parentheses.

***, **, * Statistically significant at the 0.01, 0.05 and 0.1 levels, respectively.

Source: Authors, based on: HS, 2019

The study finds a negative relationship between the log of household income and foreign aid for several subcategories, including health and medical services, education and training, and nonfinancial educational support. The results suggest that these aid subcategories do not have a direct impact on household income. The reason for this is that support

for these subcategories is still small, and the projects included in the survey mainly focus on the solutions related to livelihoods and economic development. The statistical results show that only 4% of the households believe that the expenditure for education and household training comes from foreign aid, whereas most of the costs are borne by the family (39%). On the other hand, said aid does go to the deserving poor.

Unsurprisingly, the study confirms the fact that the occupation of the household heads plays a major role in household income. The result shows that the occupation of a farmer significantly reduces household income by around 23%. This result is confirmed by the previous studies (Tran, 2015) that found that participation in nonfarm activities, such as wage-earning employment, alleviates the poverty of an ethnic household. The gender of the household heads also greatly contributes to household income. Per capita income is about 17% higher for the household whose head is male than for the female-led household. This result is corroborated by the previous studies (Buvinic & Gupta, 1997; Biyase & Zwane, 2018) that found a similar link between poverty and female-led households across developing countries. The education of the household heads also has a positive influence on household income, and an additional year of formal schooling increases per capita income by 3%, *ceteris paribus*. Finally, the age of the household heads positively affects household income. Per capita income is 1.6% higher for each additional year of age, *ceteris paribus*.

The impact of foreign aid is further decomposed by using the OLS estimators separately for each ethnic minority group. Table 5 shows the OLS estimates of the effect of foreign aid on household income by ethnic groups. The direction and significance of the foreign aid coefficient variable vary across different ethnic minority groups. While aid shows a positive effect among the San Diu, Khmer and Cham groups, it has a negative effect among the Nung, Hmong and Ede groups. However, the effect of aid is only significant for the Hmong and Cham groups.

Different subcategories of aid also show a varying impact and significance across the ethnic groups. Specifically, foreign aid for health and medical

Table 5 The OLS estimates of the effect of foreign aid on household income by ethnic groups

| | Log MPCHI | | | | | | | |
|---|----------------------|----------------------|---------------------|---------------------|----------------------|---------------------|---------------------|----------------------|
| | Nung | Hmong | San Diu | Khmer | Cham | Ede | Mnong | Xtieng |
| Foreign aid | -0.091 (0.127) | -0.230*** (0.070) | 0.003 (0.156) | 0.023 (0.107) | 0.764*** (0.124) | -0.151 (0.119) | -0.105 (0.131) | 0.338*** (0.101) |
| The age of the household head | 0.018 (0.005)*** | -0.001 (0.003) | -0.009 (0.005) | -0.003 (0.003) | -0.001 (0.004) | 0.004 (0.004) | 0.001 (0.005) | -0.003 (0.004) |
| The education of the household head | 0.053*** (0.018) | 0.008 (0.009) | 0.036* (0.019) | 0.031*** (0.011) | 0.018 (0.012) | -0.001 (0.010) | 0.018 (0.014) | 0.021 (0.016) |
| The gender of the household head | 0.448*** (0.168) | 0.116 (0.080) | 0.258 (0.158) | -0.012 (0.096) | 0.222** (0.110) | 0.131 (0.096) | -0.116 (0.120) | 0.099 (0.138) |
| The main job of the household head | -0.890*** (0.184) | -0.289** (0.145) | -0.155 (0.150) | 0.155* (0.083) | -0.04 (0.114) | -0.043 (0.206) | -0.738 (0.743) | 0.347*** (0.105) |
| Subcategories of foreign aid | | | | | | | | |
| Health and medical services | -0.605** (0.333) | 0.502 (0.318) | -0.426 (0.375) | | 0.210* (0.126) | 0.029 (0.449) | 0.365*** (0.141) | 0.315 (0.309) |
| Cultural preservation | -0.808 (0.817) | | 0.478* (0.268) | -0.228 (0.401) | | | | |
| Education and training | 0.375 (0.585) | | -1.016 (1.086) | | -0.289** (0.120) | 0.672 (0.537) | -0.186 (0.155) | -2.427*** (0.793) |
| Nonfinancial educational support | -0.244* (0.146) | 0.180 (0.275) | -0.238 (0.285) | -0.214 (0.282) | -0.624*** (0.082) | -0.256 (0.221) | 0.308** (0.133) | -0.171 (0.404) |
| Employment and job search | -0.110 (0.134) | -1.284** (0.608) | 0.359** (0.166) | -0.084 (0.114) | 0.101* (0.058) | 0.019 (0.130) | 0.123 (0.143) | 0.259 (0.798) |
| The use and management of natural resources | 0.168 (0.127) | 0.291** (0.129) | 0.147 (0.580) | -0.115 (0.109) | -0.331*** (0.063) | 0.292** (0.131) | -0.061 (0.108) | |
| Constant | 3.989*** (0.436) | 5.706*** (0.234) | 5.035*** (0.332) | 5.414*** (0.212) | 4.335*** (0.110) | 4.319*** (0.277) | 4.225*** (0.764) | 4.287*** (0.362) |
| R-squared | 0.2573 | 0.1161 | 0.1008 | 0.0453 | 0.2514 | 0.0410 | 0.1348 | 0.1269 |
| Observations | 269 | 282 | 265 | 415 | 245 | 269 | 256 | 255 |

Standard errors (SE) are given in parentheses.

***, **, * Statistically significant at the 0.01, 0.05 and 0.1 levels, respectively.

Source: Authors

services positively contributes to household income among the Hmong, Cham, Ede, Mnong and Xtieng groups, whereas it has a negative effect on household income among the Nung and San Diu groups. The effect of foreign aid on health and medical services only shows highly statistical significance among the Nung and Mnong groups.

Foreign aid for education and training is often found to negatively contribute to the household income of the ethnic minority groups. Specifically, the recipients

of aid for education and training among the Cham and Xtieng groups have, respectively, 0.75 and 0.09 times lesser household income than the nonrecipients. The results are highly significant, with a 99% confidence interval.

In a similar fashion, foreign nonfinancial aid for education is often found to negatively contribute to the household income of the ethnic groups. Specifically, nonfinancial aid for education has a negative effect on the household income of the Nung, San Diu, Khmer,

Cham, Ede and Xtieng groups, and a positive effect only for the Hmong and Mnong groups. With a 95% confidence interval, the household income level of the recipients of nonfinancial aid for education is 0.54 times lower than for nonrecipients among the Cham group, while it is 1.36 times higher among the Mnong group.

Foreign aid for employment and job searching positively contributes to the household income of the San Diu, Cham, Ede, Mnong and Xtieng groups, whereas it negatively contributes to the household income of the Nung, Hmong and Khmer groups. Statistical significance at a 95% confidence level is found only for the Hmong and San Diu groups. While the household income of the Hmong recipients of employment and job search aid is 0.28 times lower than that of the nonrecipients, the household income of the San Diu recipients of employment and job search aid is 1.43 times higher than that of the nonrecipients.

Foreign aid for the exploitation and management of natural resources increases the household income of the Nung, Hmong, San Diu and Ede groups, while it reduces the household income of the Cham and Mnong groups. Specifically, with a 95% confidence level, the Hmong and Ede recipients of aid enjoy 1.34 times greater household income than the nonrecipients do. On the other hand, with a 95% confidence level, the Cham recipients of aid earn 0.72 times lesser household income than the nonrecipients do.

Finally, the intercept coefficients show inequality in the level of household income across different ethnic groups. The Hmong and San Diu ethnic groups are among the better-off groups, with a higher level of household income, whereas the Nung ethnic group find themselves among the disadvantaged groups, with the lowest level of household income.

CONCLUSION

Vietnam is a particularly interesting case for estimating the impact of foreign aid as it is a multiethnic country. Foreign aid is considered to be

the major financial source for social development, especially in developing countries. Although there have been various studies investigating whether aid and other remittances hinder or are beneficial for growth, only a few examine the impact at the household level. Thus, our study fills the gap by investigating the consequences of foreign aid for household income.

This study provides the empirical evidence of the impact of foreign aid on ethnic household income. Using a unique dataset from a household survey, this study is the first to provide the empirical evidence of the impact of foreign aid at the household level. The results indicate the fact that foreign aid has a positive effect on household income, even after controlling for the other factors in the model. In other words, the probability that a household will achieve higher income is greater for those who are recipients of foreign aid than for those who are not. This suggests the continuation of capital inflows to eradicate poverty among ethnic households in the rural and mountainous regions of Vietnam.

In order to answer the question: What may be the potential cause of the negative effect of foreign aid on household income? the impact of different types of aid projects is further examined. The results show the areas where aid has a negative effect on household income, including:

- health and medical services,
- education and training (both financial and nonfinancial support), and
- aid projects relating to the use and management of natural resources.

The findings, however, do not indicate the ineffectiveness of aid in these areas; they rather show the indirect consequences and the absence of the benefit of these types of aid for household income. More studies should be carried out to further investigate the reasons for the negative effect of foreign aid on ethnic household income in such fields.

This study has identified a number of the other factors substantially contributing to household income.

Specifically, the occupation of household heads is found to play the major role in explaining income differentials. The household heads who are farmers earn significantly less than those in other occupations. Unfortunately, access to off-farm jobs is quite limited for ethnic households in rural mountainous areas (Nguyen, Tran & Vu, 2017). The other household characteristics, such as education and the gender and age of household heads, also play an important role in increasing household income. The results imply that the policies improving the access of rural households to better education, together with the efforts to diversify the structure of labor towards higher skilled jobs, should improve the livelihood of households in these rural areas.

This study provides the first evidence that foreign aid has varying effects on household income across ethnic minority groups. Using OLS regression for separate ethnic groups, aid is found to increase the household income of the Cham and Xtieng groups at a highly significant level. These are the groups that have received support from foreign aid projects, effective in improving their living conditions and increasing their income. The empirical evidence shows that a high proportion of the respondents from these ethnic groups reported that the foreign aid projects implemented among them were suited to the needs of the beneficiaries. In particular, a total of 92.4% of the Cham households participating in the survey and being the recipients of foreign aid indicated the fact that they had experienced a significant improvement in their living conditions and an increase in income.

The Xtieng ethnic group also noted that 90.8% of the households receiving aid had experienced an improvement in their living conditions and other benefits, such as better jobs, higher income and better access to education. These two ethnic groups have seen the greatest improvement in their living conditions. On the other hand, aid was found to have a negative impact on the household income of the Hmong ethnic group. The reason for this negative effect may be the inadequacy of the foreign aid projects implemented in the project area, resulting in the ineffectiveness of aid. Many Hmong households believed that foreign aid projects were unsuitable for

local conditions (36%) or that, although the projects were suitable, new technology was not, or the breed of livestock was not well-adapted to development in the project area (64%).

The subcategories of foreign aid also show varying effects on household income across different ethnic groups. The findings thus suggest that the approach to aid where the models show negative or insignificant results should be reconsidered. At the same time, the good implementation where aid has greatly improved people's livelihoods, as in the case of the Cham people, should be acknowledged.

Vietnam is still a developing country with a large measure of poverty and limited financial resources. Therefore, foreign aid is a critical financial resource supporting the socioeconomic development of ethnic minorities in rural and mountainous areas. However, critical conditions would have to be met in order to ensure the effectiveness of aid and reduce inequality across different ethnic groups. Firstly, donors need to closely adhere to their pro-poor growth policy by targeting the neediest and the most deserving. Simultaneously, the authorities have to ensure that aid actually reaches the poor. As suggested by D. King (2004), raising people's awareness and increasing the role of the local community through a collaborative model would also contribute to the success of projects. Finally, B. Baulch, T. T. K. Chuyen, D. Haughton and K. Haughton, (2007) suggest that the diversity in socioeconomic development experiences among different ethnic minorities indicates the need for a similar diversity in the policy interventions specifically designed for each particular group.

This study has its limitations. Due to the fact that the survey evaluating foreign aid was only conducted in 2019 and that, therefore, longitudinal or panel data were lacking, it was not possible to examine the effect of foreign aid over time. Using panel data to formulate the household income equation would reduce the bias, as this method accounts for time-invariant unobservable household characteristics. This suggests that further research is needed to address this issue, assuming the availability of said panel data.

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