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An Inquiry into the Causes of Poverty among Vadda Peoples: Special to Dambana Vadda Community

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Abstract

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The objective of this study is to determine the causes of poverty among Vadda peoples living in traditional Vadda villages. Dambana is selected as the study area since it is the well-known traditional Vadda hamlet. By departing from the money metric approach, in this study, poverty is identified as the deprivation of basic needs namely food security, shelter, sanitation, drinking water, health and non-discrimination. A pre-tested questionnaire was administered among randomly selected households in the study area to collect required primary data. The overall poverty index (PI) was derived using dimension-specific deprivation indices to separate poor from non-poor. In the next step, selected demographic and socioeconomic factors, which were filtered based on the literature, were tested using linear probability model (LPM) to identify the determinants of poverty. As the model specified, household size, monthly income of the household, number of livelihood means, level of education of HoH, and the extent of cultivable lands owned by households were identified as the causes of poverty among traditional Vadda peoples.
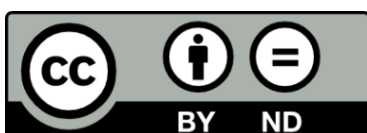
Keywords: Basic needs, Deprivation, Linear probability models, Poverty, Vadda people

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INTRODUCTION

The Vadda community in Sri Lanka is one of the primitive human groups in the world, which inherited distinct socioeconomic and cultural traits. This indigenous community inherits a long history. The present Vadda peoples are the linear descendants of prehistoric Neolithic people of Sri Lanka (Gankanda & Abayakoon, 2012). According to the historical factors, they are the first ethnic group that inhabited this country. They called themselves as 'Wanniyala-aththo", which means the forest dwellers. In ancient times, they lived in caves and hollows of trees in the forests. They dressed foliage and barks of trees. They had their own language known as 'Vadda language' and their own faith.

In the ancient times, there were different groups of Vaddas in this island. As per Seligmann and Selligmann (1911), there were three types of Vaddas namely, forest, village, and coastal. According to Spittle (1950) types of Vaddas were Rock, Village and Coast. In addition, as sources revealed, there are three regional groups of Vaddas in the country. Of them, Bintenne Veddas live in the southeast of the island, mainly in the inland in Batticaloa, Monaragala, Amapara, Badulla, and westward to the Verugal, Mahaweli, and Gal Oya rivers. The Coast Veddas or Muhudu Vaddas live along the eastern coast between Batticaloa and Trincomalee. The other group namely, Anuradhapura Veddas live in the Anuradhapura District in the North Central Province. In addition to these main Vadda groups, another group of Vaddas can be identified namely, *colonized Vaddas*. This is the group of Vaddas who were purposely settled in existed or newly established agricultural colonies under different development initiatives.

The Vadda community with distinctive cultural values, prehistoric traditions and own survival strategies, encounters extinction due to the influence of various factors. Mixing with more advanced communities as a result of internal migration, invasion of traditional habitat by modern development activities, influences of the intrinsic social transformation etc. were some of the causes for this extinction. As a result, a part of them has chosen to assimilate other cultures while the rest to stay in the forest habitat. However, this part is very small as a number. Accordingly, thousands of original Vaddas in the North Central and Uva Provinces have absorbed into Sinhala society while the costal Vaddas in the Batticaloa and Trincomalee districts into the Tamil society. After 1963 censuses, Vaddas have not been distinguished as a separate ethnic group as such since then there is no official estimates over the size of the population of this group of peoples. Therefore, different reports reveal different numbers. As per the Chief of Vaddas, Uruwarige Wanniya, *"since no one has made a separate enumeration on Vadda community, it is difficult to disclose the exact number of*

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Vaddas at present. Nevertheless, it is supposed that the number is around five hundred thousand " (Vadda Chief at the interview conducted by researcher in 29th June 2019 in Dambana). However, if Vaddas are defined as hunter gathers, there may be no any Vaddas in the country.

During the past centuries, lifestyles of Vadda communities have changed largely. They have extensively interacted with dominant societies. At present they are living in formal houses in organized villages. They are dressing properly as their village counterparts. Information communication technology is spreading throughout, and mobile phones have become a part of their lives, mainly of the youths. The Vadda language is disappearing in many settlements. Only old aged Vaddas are speaking the Vadda language. All others use Sinhala or Tamil languages. With these changes Vaddas' cultural traditions are also vanishing gradually. In the ancient times they worshiped *Yakku* (devils). But at present the majority are Buddhist. Some follow Christianity or Hinduism.

The most striking incidence relating to Vadda communities is the diversification of livelihood practices of Vaddas from hunter gathering, harvesting non-timber forest products and sometimes shifting cultivation and fishing to agriculture and related activities mostly practiced by non-Vaddas in rural villages. At ancient times they worked for themselves in order to find their sustenance. The lifestyle was simple, and they produced what they needed. The items that they could not produce such as arrows, cloths, salt were exchanged with neighboring villagers or mobile vendors. However, at present Vadda peoples have entered the formal commodity and labour markets. They buy their needs from the commodity market. Some Vadda peoples are working in the informal sector as day wage labourers. Meanwhile, some Vadda peoples are employed in private and public sector institutions for monthly salary. Their linkage with modern market system has increased with the interaction with neighboring societies and development of road network whereby increasing transport facilities. The children of Vadda families are attending the schools of the formal education system. Further, they are keen on modern politics too.

These facts clearly bring to light that many positive changes relating to the lives of Vaddas have taken place during the past several decades. These changes are largely visible among non-traditional Vadda communities mainly living in agricultural colonies. However, one of the common attributes of Vadda communities is the relative and absolute deprivation of most essential dimensions, which are crucial for a tolerable life. The most vulnerable groups in this respect are the Vaddas living in traditional Vadda hamlets.

Although discrete data over the poverty among Vadda peoples is not

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available, as sources reveal their position in terms of economic well-being is worst compared with other communities of the country. The main objective of this inquiry is to trace the causes of poverty among Vadda peoples living in traditional Vadda villages. The identification of the determinants of poverty is important in the policy formulation towards alleviating poverty and improving their living standards. The main study area is Dambana, the well-known traditional Vadda village.

LITERATURE REVIEW: POVERTY AMONG INDIGENOUS PEOPLES

As per the Department of Social and Economic Affairs of United Nations (2009: 21), poverty is disproportionally high among indigenous people in many countries. Even though the share of indigenous peoples to the global population is about 5 percent their share of world poverty is about 15 percent and about one-third to the extreme poor in rural sector (Dhir, 2015). As the World Bank (2011) indicated indigenous peoples are still among the poorest of the poor. The Human Development Report of the UNDP in 2004 has concluded that indigenous peoples are more likely to be poor than non-indigenous peoples. According to the United Nations Working Group, 'indigenous peoples worldwide continue by and large to be disadvantaged in every area of life' (Daes, 2000). As per Lund (2003), indigenous are the poorest segments of

the population. The poverty levels among indigenous peoples are largely high when compared with the non-indigenous. According to Hall & Patrinos (2016), indigenous people in every country that they studied are poorer. They are not only poor but also their poverty is more severe. It is visible through various deprivations such as insecure land and property rights, discrimination, heightened vulnerability to risk and climate change, and a wide range of health, education and other related socio-economic disparities.

Australian Institute of Health and Welfare (2014) has published a paper on Determinants of wellbeing for Indigenous Australians. The paper has made a comprehensive analysis based mainly on the secondary sources. As the paper concludes, emotional well-being among Australian indigenous people is law when compared with non-indigenous people. However, the indigenous people are satisfied with life as reported by themselves. Further, as the paper mentions there is a weak but positive linkage between income and subjective well-being among the indigenous people living in remote areas than those who live in other areas. The level of well-being is higher among those who are employed than unemployed. There is a positive association between education and well-being of this group of people. Another interesting finding is that the indigenous people are more likely to be victims of certain types of crime than

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the non-indigenous people and emotional well-being among these peoples is lower than non-victims.

The study on 'Socio- Anthropological Research Project on Veddas Community in Sri Lanka' by De Silva & Punchihewa (2011) has revealed that during the past century Vaddas livelihood means shifted from hunting and gathering to informal Chena cultivation and from there to paddy cultivation and other diversified trades seen in typical peripheral villages. However, as evidence shows, these diversified livelihood practices have not provided livelihood means adequately for the villages. De Silva & Punchihewa (2011) have revealed that the Vadda peoples migrate to other areas to find livelihoods due to the lack of employment opportunities in their settlements. The study has also revealed that some women have become victims of both the organized and the unorganized sex trade as a result of poverty. deprivation, and economic difficulties.

According to Stegeborn (1999; 2004), Vaddas community have faced severe hardship since second half of the twentieth century due to forced resettlement, assimilation for the purpose of hypothetical "development", and also alienated from their way of life by environmental conservation and industrialization processes.

Even though the lives and livelihood practices of indigenous peoples have changed considerably during the past few decades, the absolute truth is that the vast majority of indigenous people are suffering from multiple deprivations even after these changes. Many of the causes existing behind this deprivation are out of their control. As some show detachment of their traditional lands, banning access to forests and other natural resources, or the prohibition of some livelihood practices, such as shifting cultivation are the reasons behind the misery of these people. Labour market discrimination for indigenous is another reason for the poverty outcomes among indigenous peoples (Hall and Patrinos, 2010). They receive lower wages than the non-indigenous labourers mainly in the informal labor market.

RESEARCH METHOD

This study was based on the mixed-method approach. In the process of data collection, questionnaire survey method was supplemented by KIIs and direct observation method. Descriptive approach and analytical approach were used in the analysis of data.

Study Area

The geographical location of the study is Dambana Grama Niladhari division (GN), which is one of the traditional Vadda settlements located 18km away from Mahiyanganaya townand adjacent to the Maduru Oya Wildlife sanctuary. Dambana GN division

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comprises five villages namely Kotabakiniya, Dambana, Wathuyaya, Gurukumbura and Welpallewela. The total number of families living in this division is around 780 and the total population is about 3500. From among these villages, in the first four villages live only Vadda families while in Welpallewela live both Vadda families and mainstream Sinhala families as well as mixed families. From among the first four villages, Gurukumbura and Kotabakiniya were selected randomly to carry out the survey.

The Vadda community living in Dambana is known as Bintanne Vadda. Dambana is acknowledged nationally as well as internationally as the sole haven of Vadda peoples. Vadda peoples in Dambana belong to different clans. Those clans are Uru verige, Morana varige, Nabudana varige and Thala varige. As sources reveal, there had been two other clans namely Ambala varige and Unapan varige which cannot be seen at present. The Chief of Vadda at present is Uruvarige Vanniyaleththo who is the son of former Chief of Vadda, Thisahamy. His official residence is located in the Kotabakiniya. The Indigenous Information Center is sited close to this official residence. We had to have an interview with Vanniyalaththo at his official lodging. As demonstrated at the interview, he is intelligent and a sharp character with a good understanding over the changes that are taking place in the mainstream societies and the impact of these changes on the Vadda

community, particularly on the young Vaddas.

Sampling Method

From among the five villages in the Dambana GN division, two villages namely Kotabakiniya and Gurukumbura were selected randomly for the study. The total population of these two villages is around 3200, which belong to 920 families. Among them, 30 households were selected randomly using the list of households maintained by Grama Niladhari (GN) for the sample survey.

Collection of Data

The primary data were collected by administering a pre-tested questionnaire, which appropriately includes close-ended and open-ended questions. In addition to Chief of Vadda, three Key Informant Interviews (KIIs) were conducted with Grama Niladhari, Samurdhi Niyamaka, and T. M. Gunawardhana, the first Vadda community graduate. He is a teacher in the Gurukumbura primary school.

Assessing Poverty

In order to determine the causes of poverty of Vadda peoples, first, the existing level of poverty at the households' level should be identified. In this endeavor a poverty index (P-index) is to be developed. By departing from the money metric basis, in this study, poverty is identified as the deprivation of certain basic needs namely food security, shelter,

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sanitation, drinking water, health and non-discrimination. The level of achievement of each of this dimension can be assessed using different indicators as shown in table below.

Table 1: Components, indicators and measurement units of poverty index

Dimension	Indicator/s	Measurement unit	Max and Min
Food security	Food stock	One week or more = 1 No stock= 0	
	No. of meals per day	Three = 1 Less than 3 = 0	Min = 0 Max = 3
	No. of hungry season during the last 12 months	Yes = 1 0, otherwise	
Housing	Type of housing (permanent)	Yes = 1, 0, otherwise	
	Electricity (availability)	Yes = 1 0, otherwise	Min = 0
	Kitchen (permanent)	Yes = 1 0, otherwise	Max = 3
Sanitation	Improved latrine (accessibility)	Yes = 1 0, otherwise	Min = 0 Max = 1
Drinking water	Protected sources (accessibility)	Yes = 1 0, otherwise	Min = 0
	Sufficiency (accessibility)	Yes = 1 0, otherwise	Max = 2
Health	Members without chronic diseases and disabled	Yes = 1 No = 0	Min = 0 Max = 1
Non-Discrimination	No feeling discrimination	Yes = 1 0, otherwise	Min = 0 Max = 1

These dimensions have been measured in different scales. Hence, in order to calculate the overall P-index, the values of these dimensions should be converted into the same scale. In other words, dimension specific deprivation indices should be constructed. For this purpose, the methodology used by the UNDP (2014) to calculate HDI can be adapted. Accordingly, dimension specific indices for each indicator can be calculated as follows:

$$\text{Index } p_j = \frac{p_{ij} - p_{ijmin}}{p_{ijmax} - p_{ijmin}}$$

Index p_j measures the index value or deprivation count of ith dimension of jth household. p_{ij} is the actual value of ith dimension of jth household. p_{ijmin} is the minimum value of ith dimension while p_{ijmax} is the maximum value of ith dimension. The values of *Index P_{ij}'s* range from 0 to 1 indicating low to high achievements respectively. These values are free from measurement units. By aggregating these dimension indices, P-index for each household can be derived as follows:

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$$PI_{ki} = \frac{\sum_1^j p_{ik}}{n}$$

PI_k is the value of poverty index of kth household, p_{ik} is the value of ith dimension of kth household and n is the number of dimensions or sub-indices. In calculating PI, giving equal weights to all dimensions, average value of dimensions was taken. The values of PI of each household range from 1 to 0. The values 0 or close to 0 indicate the higher level of poverty while the values around 1 indicate the lower level of poverty. Based on the values of PI, households were classified as *non-poor* households and *poor* households. In this endeavor, value 0.5 of PI is considered as the moderate value. The households which earn less than 0.5 for PI (PI < 0.5) were classified as poor households while the households that earn 0.5 or higher value for PI (PI ≥ 0.5) were classified as non-poor households. Thus, PI is a binary variable which indicates whether the household is poor or non-poor.

After separating the poor from non-poor, few demographic and economic factors which were filtered based on the literature were tested to identify the determinants of poverty. These factors include Household size (HS), Income of the household measured on monthly basis (IH), Number of livelihood means practiced by each household (NL), Gender of the HoH (GE), Age of the HOH (AG), Level of education of HoH measured by years of schooling (SC), Main livelihood practice of the household (ML), and Extent of cultivable lands owned by each household (CL).

Since the dependent variable i.e., whether the household is poor or non-poor is a binary variable, Linear Probability Model (LPM) was chosen to quantify the relationship between binary dependent variable and the above independent variables. Although this model suffers certain weaknesses, it was chosen considering its simplicity and straightforwardness of interpretation. The general form of the model is,

$$PI_i = \beta_0 + \beta_1 HS_i + \beta_2 IH_i + \beta_3 NL_i$$
$$+ \beta_4 GE_i + \beta_5 AG_i + \beta_6 SC_i$$
$$+ \beta_7 M_i + \beta_8 CL_i + u_i$$

Each parameter measures the probability of a household being poor due to the improvement of each explanatory variable by one unit.

RESULTS AND DISCUSSION

Above LPM model was fitted for the sample data in order to determine the factors associated with poverty among Vadda peoples. The estimated model is as follows:

Variables	Coefficient	Std. Error	t	p-value
(Constant)	1.622	.130	12.441	.000
Household size (HS)	-.126	.024	-5.325	.000
Income of the household (IH)	-6.420E-006	.000	-2.907	.010

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Number of livelihoods means (NL)	-.130	.047	-2.759	.014
Gender of the HoH (GE)	.020	.069	.288	.777
Age of the HOH (AG)	.003	.003	1.309	.209
Years of schooling (SCH)	-.022	.008	-2.603	.019
Main livelihood (ML)	.011	.052	.208	.838
Cultivable Land (CL)	-.068	.015	-4.501	.000

As the estimated model reveals, from among the 8 explanatory variables which were tested, only 5 variables namely, Household size, Income of the household, Number of livelihood means, Level of education of HoH, and the Extent of cultivable lands entitled by households are statistically significant. Hence, these factors can be identified as the causes of poverty of Vadda community, which is subjected to investigation. Meanwhile, all these factors are negatively related with poverty. This implies that the improvement of each of this factor leads to reduce the probability that falling a household in poverty. This is obvious because all these factors contribute to improve the level of achievement of the dimensions, which we used to measure the level of poverty.

At the factor level, the highest contribution is given by the 'number of livelihood means' practiced by Vadda households. According to the parameter value, when the number of livelihood practices increases by one, the probability of lying the household in poverty decreases by 0.130. The second highest probability (0.126) is reported from the household size followed by the entitlement of cultivable lands (0.068) and level of education (0.022). Although the income of the household is identified as a significant factor, its contribution to reduce poverty is minimal.

CONCLUSION

As direct observations disclosed, the lifestyle of Vadda community has drastically changed during the past few decades. At present they are practicing more or less the livelihood means exercised by Non-Vadda villages. However, their living standard is well below when compared with their village counterpart. The households who engage in one or very few livelihood activities are poorer than the households that follow salaried jobs and practice multiple income generating activities.

The exploratory analysis revealed that poverty incidence among the traditional Vadda community is caused by household size, income of the household, number of livelihood means, level of education of head of household, and the extent of cultivable lands owned by households. Since these factors are inversely related to poverty incidence, the improvement of each factor positively affects reducing

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poverty incidence. Hence, policymakers should pay attention to introduce policy measures to improve these factors appropriately.

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