

# Multidimensional Poverty: Approach and application in Vietnam reality

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**Abstract:** *In the previous studies on poverty, the method of evaluation and measurement of poverty was still based on income and expenditure criteria; the poverty thresholds were defined by expenditure for the basic needs of people. In reality, this unidimensional approach by income is not adequate to multidimensionality of poverty, because there are the poverty dimensions that couldn't be measured by income or expenditure. Therefore, application of multidimensional approach will overcome the weak points of the old approach, at the same time will satisfy the needs for aid of the poors and the near poors. This change from unidimensional to multidimensional approach to measuring poverty will facilitate to recognize more exactly the poors, satisfying various basic social needs. This is the important basis for making policies of durable poverty reduction, step by step reducing the insufficiencies among regions and population groups, and enhancing the efficiency of aid policies. The article refers to some concepts, approach and indexes of poverty measure by multidimensional approach.*

**Keywords:** Poverty threshold, Multidimensional poverty, Poverty measure index.

## 1. The need for changing approach to studying poverty

To eliminate hunger and reduce poverty completely and durably are permanent aim in the process of socio-economic development, one of the important tasks of the Vietnam Communist Party and State. The achievements Vietnam has gotten are a highlight success on the world scale in economic development and in

elimination of hunger and reduction of poverty. After over 40 years in peace and reunification, and over 30 years in realizing the country's innovation, Vietnam has evolved from one of the poorest country in the world to a country with middle income, from a hungry country to one of the leading countries exporting rice, foods and agricultural products. Since 1986 until now, income per capita

of Vietnam has increased nearly four times, proportion of poor households has reduced from over 50% to below 4%... Reaching the millennium goal of poverty reduction ahead of schedule, Vietnam has evolved from a poor position to countries group with middle income. The achievements of innovation are undeniable and are the very basis that help Vietnam overcome various challenges for 30 past years. However, Vietnam is essentially a poor country, and we Vietnamese can't be content and satisfied with what we have reached, especially when we see ourselves in correlation with those neighbouring countries that have similar conditions and opportunities.

In previous studies and evaluations on poverty, the popular method of evaluation and measurement of poverty was still based on income and expenditure criteria; the poverty thresholds were mainly defined by expenditure for the basic needs of people. The reality shows that, the use of income criterion to measure poverty is not sufficient, because there are many minimum needs that are not only be or couldn't be met by moneys. There are many cases that people are not poor in income but have difficulties in access to basic services of health, education, information and personal safety. Although some households are not in the list of poor ones, but they even lack services of health, safe water, etc... Therefore, if it is based only on income/expenditure criteria, it will miss out the poor subjects, leading to inequity and unstableness in effectuation of poverty reduction policies (Dang Nguyen Anh, 2015). Essentially, poverty is synonymous with being refused

basic human rights, with being pushed to the margin of society and not simply meaning low income. This unidimensional approach by income is not adequate to multidimensionality of poverty, because there are the poverty dimensions that couldn't be measured by income and expenditure.

Urbanization of Vietnam has reached higher speed since 10<sup>th</sup> decennium of XX<sup>th</sup> century, associated with the change of socio-economic structure after the Innovation day. The rapid urbanization has deployed and is developing at some big cities, manifested by incessant enlargement in surface, economic development and increase of population only in a short time. In the period of ten years between 1999 and 2009 general population censuses, urban population increased by 3.4% per year, that of rural one is only 0.4% per year. Thus, after a decennium, urban population has increased by 7.3 million people in comparison with 2.17 million in rural area. According to estimate, the speed of urban population increase "will reach 2.91% per year in period 2015-2050, and only increase by 0.13 % per year in rural area" (UNDP, 2011: F135).

This above quick urbanization caused the unidimensional approach to poverty to be not adequate, even to reveal many limitations and insufficiencies. It will be inequitable and inefficient if the poverty reduction programme uses only poverty measure by income or expenditure. The situation of poverty in Vietnam urban area is to be gravely exposed when we use the multidimensional measure, although the

proportion of unidimensional poverty by income in urban area today has much reduced. The studies of UNDP showed that the poverty ratio of Hanoi (4.6%) is higher than that of Ho Chi Minh City (2.1%) (UNDP, 2010). However, if seen in dimensions of health, education and housing, then the urban multidimensional poverty level of Ho Chi Minh City is to be higher than that of Hanoi. Instead of considering poverty by income, we might see those who haven't conditions of access to health care, going to school, access to information, all as poor people.

Multidimensional poverty viewpoint is a new approach in order not to miss out the subjects that although are not poor in income but poor in other dimensions. The poverty is associated not only with lack of income/expenditure, but also with lack of possibility to satisfy basic needs (Dang Nguyen Anh, 2015). Shifting the poverty measurement from unidimensional to multidimensional approach will facilitate the more exact recognition of poor subjects, satisfying diverse elementary social needs of people. This is important basis for building the macroscopic policies embracing the whole society, step by step reducing the shortage level of basic social services among populations, regions, and increasing the efficiency of supportive policies.

## 2. Some concepts

**Poverty:** First of all, this is a social problem, a weakness of quality of life of communities, families and persons in comparison with middle living standard of society. Poverty is often associated with inequality due to discrimination, to being

separated from community, to lack of natural resources or to vulnerability to impacts of living environment changes (Leaf, M, Ngo Van Le, Nguyen Minh Hoa, 2003). However, poverty often means having low income. But in reality, poverty means more much largely, embracing its various dimensions such as access to health care, education, safe water and good sanitary conditions. Poverty is also understood as lack of entire good chances, associated with high malnutrition, illiteracy, physical and spiritual diseases, sentimental unstableness, unhappiness, misery and despair. One of characteristics of poverty is the lack of economic, social and political participations, excluding poor persons to the margin of society (UN, 2012).

Thus, the concept of poverty can be used to denote individual persons, families, communities being in physical misery, led to weakness of life quality. There are a series of derivate social problems accompanied with poverty such as: reduction of health, unstableness of spiritual and sentimental life, low possibility of access to education, easy vulnerability, and additional various problems.

**Urban poverty:** The urban poor essentially are divided into two groups that are one group of local poor and another one of immigrants.

The local poor are the "core" group of poor that is facing many disadvantages, especially what belongs to human resources. Lacking knowledge and professional qualification, the local poor often have to work in unofficial areas, with unstable income. Agrarian property

of the poor is often insecure. In the context of urbanization, the poor lack possibility of changing livelihood; some of them must move to farther neighbouring areas to live (where there are cheap housing and living expenditure). Disadvantages of the poor are also manifested in lacking social capital, being restricted from access to public services, and living in a less comfortable and unsafe environment (Oxfarm and ActionAid, 2010: 1).

Beside the local group of poor and the “generational” poor households, there is a new group of poor associated with the shifting from countrymen to townsmen. The poor immigrants in urban areas are not considered to be as subjects of annual poverty reduction programme. They have to suffer certain specific disadvantages due to high living expenditure and lack of social assimilation in urban area. Having to save money to aid their home in the countryside, most poor immigrants expend very sparingly on essential personal needs. Due to the system of managing inhabitants with inherent policy procedures, the poor immigrants are easily hurt when encountering difficulties and shocks (Oxfarm và ActionAid, 2010: 1).

### ***Multidimensional poverty:***

Multidimensional poverty is the situation in which the elementary living needs of men are not satisfied in minimum level (Ministry of Labour - Invalids and Social Affairs, 2015: 5). Being refused the minimum elementary needs of men is the motive of multidimensional approach to poverty. Being poor means lacking

sufficient food and clothes, having no condition to go to school, no opportunity for health care, no land to cultivate or no profession to live on, and no access to credit. Being poor also means no safety, no rights and to be excluded, easily to be subject of violence, to live in risky conditions, no access to safe water and sanitary service. Being poor also means lacking minimum ability to participate effectively in social activities.

Due to the multidimensionality of poverty, the use of an unique tool in evaluation of poverty will lead to many limitations. The medium income above poverty threshold also couldn't ensure its reasonable distribution to essential needs. Instead of investment in living activities, in schooling and health care, the earned moneys were poured into personal deeds, like drink and gambling. Or when one is able to invest in education and health, but he couldn't access to these services due to various barriers. The factors like social integration, human security, social status, etc... will be difficult to measure fully and exactly if we only use the income measurer.

It can be seen that in big cities, poverty by income or expenditure is not the common phenomenon. However, the quick urbanization and migration waves from rural to urban area have raised new problems, including the limitation on access and use of social services, unsafe housing, lacking safe water and sanitary environment, pollution and limitation on social security. Together with development process, a new poverty begins to appear in urban area, not only in

income but also in many aspects of human life.

Due to the poverty measurement by income/expenditure criteria, it appears that urban poverty reduced slowly in recent time. The principal reason is that this kind of urban poverty measured by unidimensional approach has reached the poverty limit so that it couldn't reduce any more. However, if the urban poverty is measured by multidimensional criteria, it will be more grave (Oxfarm và ActionAid, 2010). Thus, the lack of multidimensional poverty criteria has made aid policies limited suitable to each specific subject group in society in general and in urban areas in particular.

### 3. Multidimensional approach and measurement of poverty

#### *Multidimensional approach to poverty*

Amartya Sen is one of the first scholars who saw poverty as a dynamic phenomenon with multidimensionality. In his opinion, beside the concept of

money, poverty can be also explained by multidimensional criteria (Amartya Sen, 1979). Poverty is measured not only by income and expenditure, but also by possibility of accessing comprehensively to foods, housing, education, health care and other basic social services. Synthesis of these indicators reflects the quality of life. Using unique measure by income/expenditure leads to miss poor subjects. There are people who are not poor by income, but they can not access to some basic needs such as health care, education, information, housing, sanitation... Therefore, multidimensional approach to poverty will overcome the insufficiencies of today poverty reduction policies, allowing people to access to basic services, leading to durable poverty reduction.

Multidimensional approach to poverty must reach three goals: Measurement of poverty (multidimensionally), control of poverty and identification of poor households as well as of proper

**Table 1: Multidimensional measurement approach to poverty in period 2016-2020 for rural and urban areas of Vietnam**

<i>Measure dimensions</i>	<i>First specific indexes of measure</i>	<i>Second specific indexes of measure</i>
<i>Income</i>	<i>Urban area</i>	<i>Rural area</i>
- Poverty threshold	900,000 VND/person/month	700,000 VND/person/month
- Near poverty threshold	1,300,000 VND/person/month	1,000,000 VND/person/month
<i>Poverty dimensions</i>		
- Health	Access to health care	Health insurance
- Education	Adult education	Schooling of children
- Housing	Quality of housing	Housing medium area per capita
- Safe water and sanitation	Safe running water	Sanitary toilet
- Information	Telecommunication service	Assets of access to information

beneficiaries of policy. In changing from unidimensional to multidimensional approach to poverty, the income/expenditure criteria are still to be used in parallel with multidimensional criteria as the basis of comparison and complementing. Although the concept of multidimensional approach to poverty was not largely used, but analyses of using this approach will help create a strategy of reducing overall poverty. Using multidimensional measurement of poverty is an adequate approach, especially to big cities like Hanoi and Ho Chi Minh City, which have the possibility of eliminating income poverty in the coming time. (UNDP, 2010: 103).

The table 1 shows that we can combine unidimensional criteria with multidimensional ones in measurement of poverty in Vietnam, paying special attention to the difference between rural and urban areas. The difference between specific measure indexes show that we can use alternatively the criteria depending on specific conditions.

#### *The index of multidimensional poverty measurement*

Multidimensional poverty measurement is a new method that is being examined and used by international organizations and some countries, so it hasn't the model and common rules yet. However, we can summarize the indexes of multidimensional poverty through international and domestic studies as follows:

It can be said there are various methods of multidimensional poverty measurement in diverse studies. Today, international organizations use the concept of

multidimensional poverty and establish various indexes to measure it. The most popular is Human Poverty Index (HPI) that was proposed by Anand and Sen in 1977. During 2000s, Alkire and Foster have put forth the multidimensional poverty index (MPI) comprising three dimensions of shortage: education, health and living standard, specified into 10 measure criteria, and poverty line is defined by a third of overall these shortages. Using this method, the researchers may analyse the poverty by population group, by dimension (criterion) of shortage, and can make comparison by time (Alkire S., Foster J. E., 2007).

The MPI is used to evaluate poverty by identifying various shortages simultaneously in many aspects. The MPI also helps define exactly how the poverty is in a country and among countries and regions, facilitating policymaking and reasonable resource distribution based on identifying clearly the poverty dimensions.

Multidimensional measurement consists of two principal elements: MPI (Multidimensional Poverty Index) = H (percentage of the poor) x A (Average intensity of poverty) (OPHI, 2010).

UNDP has calculated MPI by 8 poverty dimensions as follows: income, education, health, access to social security, quality and area of shelter, housing service, participation in community activities, social safety. Using this MPI shows the fuller picture of poverty in Hanoi and HCM City (UNDP, 2010). The results of studies even more clarified the consideration that for these two cities if

based only on economic criterion (income/expenditure), the poverty reduction activities does not satisfy and leads to not comprehensively evaluating the life of population in making the suitable policy of poverty reduction.

National report on 2011 human development of UNDP used in comparison three methods of poverty measure such as money, HPI and MPI. The MPI was established based on three measures (dimensions) like health, education and standard of living, specified into 9 indicators such as: households who have to sell assets, borrowing for health care, or who have to cease medical treatment; household members do not finish primary school; school-aged children are not attending school; use of electricity; access to safe water; access to standard toilet; stable shelter; durable assets ownership.

MPI may be distributed by geographic areas and ethnic groups, being made a tool suitable for policymaking (UNDP, 2010: 12). Beside the shortages of income and moneys, the poverty line of households is also analysed on 3 dimensions and 10 indicators such as: health (nutrition, child mortality), education (years of schooling, children enrolled) and standard of living

(safe water, toilet, cooking fuel, electricity, floor, assets). This measure was used with alternative indicators that were defined in detail to be compared with each other.

ActionAid and Oxfam have defined the poverty measure by 5 principal indicators, namely: expenses, job, social integration, access to public services, and living environment (Table 2). In the report *Participatory Monitoring of Urban Poverty* of these two organizations, these 5 indicators were used to calculate the multidimensional poverty of two poor population groups (ActionAid và Oxfam, 2010).

In a multidimensional poverty study on minority children by UNICEF, the measure method and approach to multidimensional child poverty were used in the consensus of previous study by Ministry of Labour - Invalids and Social Affairs, University of Maastricht and UNICEF. Table 3 makes a summary comparison of measure indexes between these two studies (UNICEF, 2015).

The difference between measure criteria of poverty dimensions is not significant. For some specific poverty dimensions, the study adjusted some measure indicators in order to ensure the feasibility when calculating available data. With these

**Table 2: Multidimensional poverty measurement of ActionAid and Oxfam**

<i>Local poor people</i>	<i>Immigrant poor people</i>
1. Shortage of human resource	1. High expenditure of urban life
2. Lacking possibility of changing livelihood	2. Uncertain job, pending risk
3. Lacking social capital	3. Lacking social integration, facing disadvantages in social relations
4. Lacking access to public services	4. Limitation on access to public services
5. Less comfortable and unsafe living environment	5. Less comfortable and unsafe living environment

indicators, the poverty of minority children was analysed in each dimension. The poverty indexes were calculated and distributed by basic variables like nationality, sex, residence, etc... and allow to compare.

Although the use of criteria in multidimensional poverty measure is different among international organizations, but it shows the high consensus among countries and administrators. Multidimensional poverty is seen as shortage or inability to satisfy

minimum basic human needs.

#### *Today multidimensional poverty measure*

Since the concept of multidimensional poverty became popular in Vietnam, the domestic studies on multidimensional poverty have become more familiar. During recent years, Vietnamese poverty line was measured by moneys through income or expenditure criteria of satisfying the minimum living needs. The poor or poor households are subjects who have the income lower than poverty line. However this approach revealed

**Table 3: Child poverty measure by UNICEF**

<i>Poverty dimensions</i>	<i>Ministry of Labour - Invalids and Social Affairs, University of Maastricht and UNICEF (2008)</i>	<i>UNICEF (2015)</i>
Education	- School-aged children are not attending school - Children don't finish primary school	- School-aged children are not attending school - Children don't finish primary school
Health care	- 2-4 years aged children didn't have access to health care over 12 previous months	- 2-4 years aged children didn't have access to health care over 12 previous months
Shelter	- Having not suitable shelter (solid or semi-solid house) - House having not electricity	- Having not suitable shelter (solid or semi-solid house) - House having not electricity
Safe water and sanitation	- House having not safe drinking water - House having not sanitary toilet	- House having not safe drinking water - House having not sanitary toilet
Child labour	- Having to work in the age from 6 to 15 years old	- Having to work in the age from 6 to 15 years old
Poverty in social integration	- Children from 0 to 15 years old living in family whose chief member doesn't have ability to work due to disability or agedness	- Children from 0 to 15 years old living in family whose chief member doesn't have ability to work due to disability or agedness - Proficient use of Vietnamese language in communication
Entertainment	- Having no toys - Having no books	- No available data



limitations, because there are minimum needs that couldn't be satisfied by moneys, couldn't be converted into moneys. Applying multidimensional poverty line in Vietnam is a modality for realizing the goal of durable reduction of poverty.

The 59/2015/QĐ-TTg Decision of Prime Minister, dated 19 November 2015, on promulgation of poverty line approached multidimensionally and applied for period 2016-2020, consists of 2 basic criteria that are income criterion and criterion on measuring the shortage in access to basic social services. These criteria show that poverty in money must be associated with multidimensional poverty. This is a combination of two poverty measure methods that many localities are using today (Table 4). This method both ensures minimum standard of living and satisfies

basic social services, contributing step by step to durable reduction of poverty. However, it must be paid attention to the fact that the lines of urban poverty and near poverty for period 2016-2020 are only considered and applied to those households that have permanent residence or at least long temporary residence (KT3). Therefore, those who are immigrants and not enregistered in residence management (although they lives long time in residence place) are not to be considered by reduction poverty programme.

For those localities in which unidimensional poverty has strongly reduced, current efforts must be focused on reduction of multidimensional poverty by intensifying possibility of access to basic services, increasing the coverage of social security for every people.

**Table 4: Household poverty and near poverty lines for period 2016-2020**

<i>Types of household</i>	<i>Measure indicators defining household standard of living</i>
Rural poverty	<ul style="list-style-type: none"> <li>- Monthly average income per capita lower and equal to 700,000 VND</li> <li>- Monthly average income per capita from 700,000 to 1,000,000 VND in lacking from 3 measure indicators upward</li> </ul>
Urban poverty	<ul style="list-style-type: none"> <li>- Monthly average income per capita lower and equal to 900,000 VND</li> <li>- Monthly average income per capita from 900,000 to 1,300,000 VND in lacking from 3 measure indicators upward including the indicator of shortage of access to social basic services</li> </ul>
Rural near poverty	Monthly average income per capita from 700,000 to 1,000,000 VND in lacking less than 3 measure indicators
Urban near poverty	Monthly average income per capita from 900,000 to 1,300,000 VND in lacking less than 3 measure indicators
Rural average standard of living	Monthly average income per capita from 1,000,000 to 1,500,000 VND
Urban average standard of living	Monthly average income per capita from 1,300,000 to 1,950,000 VND

Measurement and evaluation of multidimensional poverty for period 2016-2020 request the objectivity of collection, processing and calculation, synthesizing and report of poverty dimensions, in which the participation and consensus of people are important factors. After all, this is a change of thought and responsibility of each participant.

#### **4. Conclusions**

Multidimensional poverty measure is an approach being studied and further adjusted by international organizations. However today there are no pattern and common regulations yet for it, but its same aim is that multidimensional poverty approach will help define more exactly the poor subjects in society. The multidimensional poverty approach represents obvious preeminent advantages in providing multidimensional information on shortages of population in education, health, job, shelter, personal safety, access to information,... Indexes of multidimensional poverty are the sum of shortage indicators within all poverty dimensions. Applying multidimensional poverty evaluation will overcome the defects of unidimensional approach to poverty, in the same time contributing to satisfaction of real needs of the poor and the near poor that are needing to be aided.

For Vietnam, this method needs to be used adequately to specific socio-economic conditions. Using multidimensional poverty approach is an objective demand in the new development period. However, together with efforts to increase the coverage level and access to basic services, it must enhance the quality of

these services, overcoming the insufficiencies in health care, schooling and traveling today.

Seen from reality, the measure and evaluation of poverty dimensions are hard to make the exact conclusions. For example, criterion on shelter defines that the house of poverty household is the less solid or simple one, with average living area per capita being less than 8m<sup>2</sup>. In feeling and evaluating the house constructing materials, investigator is hard to distinguish between the solid and semi-solid houses, so this evaluation may be subjective. Similarly, the criteria on schooling, health and access to information depend also on subjectivity of people due to fact that we don't know whether they provide the true information on their situation. Poverty reduction activities today are to reach three goals: Measuring and controlling poverty, identifying the beneficiaries and orienting policy of durable poverty reduction.

Today the urban poor are facing many disadvantages among which the limitation on human resource (human capital) is a common shortage. This is the situation of poor households with old agedness, disability, chronic diseases, single women, having many children, low learning, lacking adequate professional qualification, limited residence status,... In the fast urbanization today, the poor with above disadvantages lack the conditions for changing livelihood, being hard to keep pace with urban changes. Social capital of the poor is limited due to the closed urban lifestyle, the complex of inferiority and exclusion. Lacking social

relations (social capital) even limits the possibility of the poor to access to basic services.

It is remarkable that poverty also is dynamic and changes over time. Those households who have quit poverty might fall into it again. Being poor now doesn't mean not being poor in the future. The proportion of poverty may be fast reduced, but the risk of poverty again is a challenge to Vietnamese people. These features must be evaluated and measured by adequate, in time and efficient criteria in the coming programme of poverty reduction □

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