



**CONSIDERATIONS  
IN USING PROXY  
MEANS TESTS IN  
EASTERN  
CARIBBEAN STATES**  

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**A Policy Brief**

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# CONSIDERATIONS IN USING PROXY MEANS TESTS IN EASTERN CARIBBEAN STATES

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for the UN Women Multi-Country Office for the Caribbean and the UNICEF Office for the Eastern Caribbean Area

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# INTRODUCTION

The social safety net assessments conducted in Eastern Caribbean states in and around 2009 recommended that countries should develop a proxy means test (PMT) to replace the diverse approaches they were using to target poverty-related benefits. Proxy means tests were argued to be an objective and transparent alternative mechanism, especially given the unreliability of income data.

This policy brief and the paper it is based on, ‘Considerations in Using Proxy Means Tests in Eastern Caribbean States’, aim to assist countries in exploring the recommendation by explaining what PMTs are, highlighting their strengths and weaknesses and presenting opportunities and challenges.

## What is a Proxy Means Test?

Both ‘standard’ and proxy means tests aim to fulfil the same function—determining beneficiary eligibility. In contrast to standard means tests, which are based on household or individual income, PMTs are based on potential beneficiaries’ non-income characteristics, which are combined in a formula to derive a proxy for income.

The characteristics (also referred to as ‘variables’) to be used as proxies in the PMT, and the weights to be attached to each of them, are derived through statistical analysis of an existing household survey dataset. In the Eastern Caribbean states, the analysis has commonly been based on the Surveys of Living Conditions, which were conducted during the 2000s.

## Challenges in Determining the PMT Equation

In almost all cases, PMT analysis is done on expenditure (how the individual or household chooses to use their means) rather than income (what their means enables them to do). What is not much discussed in the literature is the extent to which the expenditure data may be incorrect given the tedious, complicated and sensitive nature of the relevant survey questions.

Similar to many other poverty-targeting mechanisms, most PMTs aim to predict household rather than

individual expenditure. This focus is based on an implicit assumption that the benefit of the available income, or expenditure, is spread evenly (or according to need) across all individuals in the household. This creates a challenge when a social protection measure is intended to assist particular individuals (such as the elderly or children), but social or family norms give other individuals more control over household expenditure decisions.

The independent variables chosen to model or predict expenditure (the dependent variable) need to reflect characteristics that are easily observable by an outsider, difficult to lie about and do not change rapidly. Variable choice is constrained by the questions asked in the survey on which the model is based. Typically, the variables chosen include those related to household assets, size of the household and demographics.

Incorporating variables that are related to the head of household is questionable, as differing definitions, variations in culture or even who answers the door to the interviewer may determine who is named as head. Further, the characteristics of the head of household may not adequately describe the characteristics of other household members.

PMTs may not be appropriate for programmes that deal with emergency or crisis situations, because the tests aim to use variables that do not change rapidly.

Further, the needs associated with emergency or crisis may not relate only to (or even primarily to) poverty.

The reliability of the equation on which the PMT is based depends in large part on the reliability of the underlying survey. One of the challenges in small island states such as those of the Eastern Caribbean is the small population size and the linked small sample size. There are often further challenges with the quality of some of the survey variables, including ostensibly objective characteristics such as education.

PMT equations are usually derived on the basis of household expenditure patterns that were formed while the household might have been receiving pre-existing social protection benefits. This can be a problem if the PMT is to be used to determine benefit eligibility because it could result in incorrectly specifying variables and their weights in ways that disadvantage households with the profile of existing beneficiaries.

The time lapse between collection of the underlying data and use of the PMT raises concerns as to whether the chosen characteristics and the selected weights still serve as good predictors of expenditure. The question of currency of survey data will continue to arise, as the PMT equations will need to be adjusted periodically to reflect changing conditions.

All surveys are based on a sample of households and are thus subject to a margin of error. In addition, the PMT equations give rise to exclusion ('undercoverage') and inclusion ('leakage') errors due to differences between the expenditure predicted by the equation and a household's actual expenditure. Exclusion errors (as usually defined), occur when people who should be within the government's desired target group are nonetheless excluded from receiving benefits because the PMT incorrectly predicts an expenditure that is higher than the programme cut-off. In contrast, inclusion errors occur when people who should not be within the target group are nonetheless included in a beneficiary group because the PMT incorrectly predicts an expenditure that is lower than the cut-off.

One of the classic papers on PMTs (Grosh & Baker,

1994) tested data from Jamaica, Bolivia and Peru using a poverty line set at around the 30th percentile of expenditure (a higher level than the poverty rates in Eastern Caribbean states). The paper found that their models (equations) correctly identified fewer than half of the households that should have been eligible (Grosh & Baker, 1994: 15). Similarly, Kidd & Wylde (2011: ii) found what they describe as "high in-built errors," which are especially severe when the target population for a benefit represents 20 percent of the population or less.

The choice of the cut-off point for targeting is a policy question, not a technical decision. Sabates-Wheeler et al (2014: 2) suggest that although policy makers may be inclined to focus on inclusion errors (because of the unnecessary costs incurred through such errors), exclusion errors should merit greater weight in discussion and programme design because of the "humanitarian" cost incurred when people who need assistance are excluded.

## Measuring Poverty

The most common approach used in the Eastern Caribbean states is to set an extreme poverty or indigent line at the level of expenditure needed to buy the basic minimum of calories (spread across the appropriate food groups) scientifically determined to be necessary. A household will only escape poverty at this level of expenditure if it meets two unrealistic assumptions. First, that it spends every cent in the most economical and judicious way, based on full knowledge of nutrition and prices in the market. Second, that it does not have other needs besides food.

The poverty line therefore adds to this basic food amount a further allowance for non-food items. The allowance is based on the average non-food expenditure of the bottom two quintiles of households.

Means tests—whether proxy or direct and whether based on income or expenditure—generally count only monetary amounts. These tests fail to consider the value of unpaid care work—unpaid work that is the work done mainly by women and includes caring for other household members (especially children), cooking and other housework.

'Equivalence scales' is the generic term used to describe adjustments made in calculating poverty rates to account for differences in household size and composition. In the Eastern Caribbean, instead of deriving 'per capita' household expenditure by dividing total expenditure by the number of household members, a 'per (male) adult equivalent' expenditure is derived by dividing total expenditure by the sum of the individuals, with some individuals counting as only a fraction of a full adult male. Unusual when compared with current international practice, sex differentiated equivalence scales have been used up to the present in the Eastern Caribbean. This Eastern Caribbean practice is not in line with international best practice.

## Implementing a Proxy Means Test

Some countries aim to administer the PMT to the full population or to all households in poor areas, while others test only those who apply for benefits. The disadvantage of administering the PMT to the full population is the effort and expense involved. The disadvantage of the application-based approach is that poor, eligible households may not apply because they do not know about the benefit or because the time, effort, costs and other challenges associated with applying are too great.

In general, the PMT literature does not discuss whether the beneficiary unit assessed matches the country's legal obligations in terms of support. Further, any means test that is based on the household or family unit may not be appropriate for assistance that facilitates women and children escaping from domestic violence.

When used as part of a unified targeting system for different programmes, the eligibility thresholds on the PMT for the various social programmes may differ. In addition, there will often need to be further criteria used in determining eligibility for the various programmes, as the PMT is a proxy only for income. Other eligibility criteria might, for example, include presence of an elderly person, a child or a person with disabilities.

Consideration of other criteria alongside the PMT

retains the PMT as the targeting mechanism with respect to poverty. It therefore does not address exclusion errors due to PMT equation mis-predictions that incorrectly exclude substantial numbers of those who should be eligible.

In some cases, countries do not disclose the variables and weights used in the PMT so as to reduce opportunities for manipulation. However, such non-disclosure reduces transparency and may result in reduced levels of public acceptance.

If the system is rights-based, an appeals mechanism would be a necessary component and would need to be able to override the PMT equation in cases where applicants are deemed to have been unfairly excluded.

## Recommendations

The following recommendations are put forward for those Eastern Caribbean countries that decide to use a PMT for targeting of benefits:

- Combining the PMT with other targeting methods can be considered, though doing so is unlikely to overcome all the challenges associated with PMTs;
- Approaches that take into account the income forgone by mothers and others with heavy care responsibilities should be considered;
- An alternative equivalence scale that does not differentiate on the basis of sex of household members should be used. The weighting for children should take into consideration expert opinion that this weight should be higher for middle- and higher-income countries than for poorer countries, and that childhood deprivation has long-lasting impacts on individuals, families and the country as a whole;
- A full costing of the roll-out of the PMT should be undertaken prior to its use, in order to ascertain the full financial, human resource and logistical implications; and
- Administrative justice requires that an appeals mechanism be in place for the targeting mechanism. To complement this mechanism, the responsible government agency could assess the cases of all rejected applicants on a periodic basis so as to avoid exclusion of vulnerable individuals who may not have the confidence or capacity to

initiate an appeal. The appeals mechanism should consider the applicant's objective situation in order to determine whether the exclusion was fair.

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# NOTES



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