Helpdesk Research Report: Monitoring Poverty and Vulnerability
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Query: What significant differences are there in the methodologies used for ‘poverty monitoring’ and ‘vulnerability monitoring’? What are the strengths and weaknesses of these methodologies?

Enquirer: DFID Poverty Response Team

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1. Overview

What is poverty monitoring?

Poverty monitoring (PM) is defined by the World Bank as “tracking progress over time in achieving results in terms of reduction in poverty and is an essential component of any poverty reduction strategy.” It incorporates selecting indicators, setting targets, setting up poverty monitoring systems and running statistical systems to collect, analyse and deliver data. JICA define PM as “measuring whether national efforts taken by a developing country under its poverty reduction strategy or a long term development plan are contributing to an improvement of the situation of the poor”. Some analysts and agencies treat PM as synonymous with poverty reduction strategy monitoring (PRSM), whereas others view it as a subset of PRSM. Still others use the term more loosely, to refer to various forms of poverty assessment and evaluation.

There is therefore not a single, coherent, defined approach to poverty monitoring, but multifarious approaches and methodologies, depending on the country context. Many authors emphasise that PM or PRSM systems should be built on existing data collection and monitoring mechanisms present in a country, emphasising that there is no blueprint or single methodology. For this reason the section on PM below includes a selection of resources, case studies and webpages which articulate different approaches to PM and PRSM.

Common weaknesses of poverty monitoring

In terms of identifying strengths and weaknesses of PM methodologies and systems, it is impossible to comment on all the different methodologies used. However, the following weaknesses with how PM is carried out are repeatedly identified in the literature:
- Poor timeliness of data
- Poor accuracy of data
- Weak links with policy
- Weak links with the budget process
- Reluctance to share data between agencies
- Low ownership and weak incentives for PM
- Low participation
- Weak monitoring capacity at a local level
- Inadequate coordination of different monitoring systems
- Practical problems with the data, including gaps
- Lack of short term indicators that are able to show change on an annual basis
- Inappropriate selection of indicators

Unfortunately, strengths were not as well articulated in the literature. Several authors note that the above weaknesses should not necessarily be viewed as ‘technical’ problems requiring a simple administrative solution. Instead, issues like sharing of data between agencies or improving incentives for PM are actually political problems that can often not be solved within the PM sphere alone.

What is ‘vulnerability monitoring’?

‘Vulnerability monitoring’ (VM) is a much less common term than PM, and as such it has been harder to find relevant material. It is not a widely-used term, or a coherent approach in itself. The monitoring of vulnerability, and vulnerable groups, however, does go on under a variety of different guises in multiple different fields, for example climate change, early warning, conflict, environmental vulnerability, food insecurity, economic vulnerability, disaster risk etc. Vulnerability is monitored in very different ways across each of these themes, with very different methodologies, ranging from satellite imaging to household surveys. To make this report a more manageable size, the resources below relating to vulnerability assessment and monitoring focus primarily on food insecurity. However, they show that even within the monitoring of food insecurity there are multiple different early warning systems, each using different methodologies and approaches; for example World Food Programme’s Vulnerability Analysis and Mapping (VAM), FAO’s Food Insecurity and Vulnerability Information Mapping System (FIVIMS), the Global Information and Early Warning System (GIEW) and USAID’s Famine Early Warning Network (FEW NET). In fact, the resources on each of these systems show that even within one particular organisation these monitoring systems are implemented according to different methodologies, depending on the country context. For example, the way VAM is carried out in one country by WFP may be very different to the way it is carried out in another country as methodologies are shaped by the available data and the dynamics of poverty or food insecurity within that particular country.

Comparing poverty monitoring and vulnerability monitoring

It is therefore very difficult to compare the specific tools and methodologies used for poverty monitoring with those used for vulnerability monitoring, as they are so diverse. No resources were found that explicitly compared PM and VM. However, from the resources below it is possible to make some general observations in relation to similarities and differences between the 2 broad approaches:

- In essence, the 2 approaches are monitoring different concepts. Poverty can be seen as a defined state. In contrast, vulnerability is often viewed as a dynamic process which is commonly defined as vulnerability = exposure to risk + inability to cope. Vulnerability monitoring is therefore likely to entail the use of different, and probably a broader range of, indicators than poverty monitoring.
Poverty is measured historically, whereas vulnerability is an assessment of the likelihood of poverty (or food insecurity, flooding etc.) at some stage in the near future. The former is therefore backward looking, whilst the latter is forward-looking.

PM primarily uses quantitative research methods, whereas some researchers argue that VM is more suited to incorporating qualitative methods.

Poverty monitoring occurs within the defined framework of a PRSP, or equivalent. Vulnerability monitoring does not.

Combining poverty monitoring and vulnerability monitoring

Despite these differences, there are similarities between PM and VM, and some experts do advocate for the approaches to be more combined. A few of the resources below give details of attempts to incorporate vulnerability analysis into poverty monitoring, or they advocate a joining of the two approaches. They suggest that PM could be improved by ‘taking a vulnerability approach’ and, rather than having a static, historical perspective on poverty, aim to incorporate indicators that show the dynamic processes and relational aspects of poverty. Several one-off assessments appear to have been done in various countries that measure both poverty and vulnerability and are entitled ‘Poverty and Vulnerability Assessments’. These are readily available online and have not been included in this query response as they are not strictly part of on-going monitoring mechanisms. They may however provide interesting methodological differences in measuring poverty and vulnerability.

This query has been a very difficult topic to research in a short timescale. There is a vast amount of complex material available online that is relevant and this report can only provide a small selection of the available resources on monitoring poverty and vulnerability. This report should therefore not be seen as providing a comprehensive response, but more of an introduction to the main issues.

2. Poverty monitoring


This chapter outlines the World Bank’s proposed methodology for poverty monitoring and includes a section on ‘Setting up a Poverty Monitoring System’ which covers the selection and disaggregation of indicators, setting goals and targets, determining data requirements and determining the frequency of monitoring. On page 115 there is a subsection on common weaknesses in poverty monitoring systems which are identified as:

- Data is not timely.
- Difficulty in relating input data to outputs so it is hard to estimate the cost of providing services.
- Disaggregated spending data is unavailable or inaccurate which makes it difficult to assess whether public funds reach the intended service or agency.
- It takes a long time to process data from household surveys and make them available for analysis.

On this last point, the authors refer to the need for ‘quick’ monitoring tools that gather information on an annual, or more frequent, basis. Box 3.3 on the Core Welfare Indicators Questionnaire (see Box 3.3), citizen scorecards in India, Ugandan user surveys and expenditure tracking surveys are all cited as quick monitoring tools. The chapter also emphasises the importance of building on existing monitoring systems which inevitably changes the methodology used in each country.
This JICA study has a section (3.4) on Poverty Monitoring. The authors argue that PM can be viewed as “measuring whether national efforts taken by a developing country under its poverty reduction strategy or a long term development plan are contributing to improvement of the situation of the poor”, or it can be defined more narrowly as simply monitoring of the PRSP. The study states that although the terms ‘poverty monitoring’ and ‘PRS monitoring’ are sometimes considered to be synonymous, poverty monitoring is better thought of as a subset of PRS monitoring that sits alongside other subsets like sector monitoring reviews or financial monitoring. The report gives a basic introduction to PM, including aims and objectives, ownership and indicators, and presents case study material from Tanzania and Uganda. Ultimately, PM aims to ‘evaluate the nationwide state of welfare’ via ‘outcome and impact’ level indicators, rather than ‘process or engagement’ indicators which instead measure the effectiveness of administrative or financial reform. Other key findings include:

- As the main responsibility for PRS development lies with the country government, so the main ownership of PM should be by the relevant country and its citizens.
- PM therefore has to be accountable to donors and their taxpayers, but also to country governments and their citizens.
- Participatory methods are increasingly being used in PM.
- There is currently a poor link between PM and policy making, and PM findings are often not presented or delivered in a way that is useful to policy makers.
- There is a role for decentralised government in facilitating local level PM.


This paper looks more broadly at PRS monitoring and suggests different monitoring approaches for different contexts. The authors make the following key observations:

- Incentives for monitoring are an issue and it is still generally undertaken to meet donor requirements rather than because of indigenous support for it as an activity.
- It is important to gain the ‘buy-in’ of key players. The likelihood of this can be improved by creating a high level committee to raise the profile of monitoring activities.
- Civil Society Organisations and parliament should be engaged in a meaningful way.
- Lack of capacity at a local level impedes the ability to pursue a decentralised approach to monitoring.
- Monitoring needs to be more closely linked to budget and policy processes.
- The sharing of data across ministries and agencies needs improvement.
- Comparative and ranking indicators should be developed to help aid policy makers understanding of data and engage them.
http://www.gsdrc.org/go/display&type=Document&id=2307

This study of PRS monitoring states that there has been limited progress to date in the establishment of effective PRS monitoring systems. The authors emphasise the importance of building on existing systems already operational in the country and taking a long-term, flexible approach. Key weaknesses identified are:

- Fragmentation and lack of coordination between systems and institutions involved in monitoring. This is identified as not just a technical problem but also a political one where there is territoriality between agencies and lack of incentives to participate.
- Practical problems with data collection.
- A lack of operational detail and poor selection of indicators.
- Weaknesses in public expenditure management systems making expenditure tracking difficult.
- A deficit in analysis and evaluation.
- Weak link with policy processes and a lack of interest amongst policy makers.

Most PRS monitoring systems are still too young to allow for full assessment. Steps are being taken to improve the inclusion of civil society organisations and improve transparency of budget and policy processes.

The report gives guidance on structuring PRS monitoring systems and highlights the following institutional variables as important:

- Strong political leadership
- Coordination of actors
- Links with line ministries
- Involvement with national statistics agencies
- Involvement of local governments.

The study reviews experience in 12 countries. Part I and III give details of the case studies whilst Part II provides a diagnostic tool.

http://www.gsdrc.org/go/display&type=Document&id=348

This report states that the development of PRSPs has led to a major increase in final poverty-outcome measurement with an emphasis on household surveys and often on participatory poverty assessments. However, they argue that this has not been matched with an increase of interest in the 'missing middle' – the intermediate processes that are necessary to produce the desired final outcomes. The authors argue that this is a major problem. Because PRSPs are reviewed annually, donors require short-term indicators that can quickly demonstrate progress or change. The 'missing middle' problem has led to a lack of suitable 'middle' indicators to demonstrate meaningful progress. Other areas of weakness are:

- The poor quality of administrative reporting systems
- Input monitoring as a component of PRSP monitoring
- Plans for participatory processes and inclusion of stakeholders
- Selection of indicators.

Part II of the paper aims to address these weaknesses and advises on how to set up and develop strong monitoring systems.
http://www.gsdrc.org/go/display&type=Document&id=2634

This case study specifically focuses on analysing what works, and what does not work, in PRS monitoring system design. The authors emphasise 3 themes that need to be improved: country commitment and accountability, results-orientation of systems and principles of partnership. They note that “monitoring arrangements can serve best to promote country commitment to, and accountability for, poverty-reduction policies where they are closely related to a politically supported and maturing budget process”. However, they also note “developing a PMS is a process, in which it will never be possible to achieve everything that is desirable in one go, and in which there will be temporary setbacks and advances”. Strengths of the Ugandan monitoring system are identified as its foundation lying on existing systems, high political commitment to it and its close relation to the budget process. The paper also identifies several weaknesses of the current system. Firstly the difficulty of mainstreaming donor supported components of the system (for example the Poverty Monitoring and Analysis Unit). Secondly, the difficulty of generating incentives for developing strong monitoring systems and for coordinating national systems and sharing data. The authors emphasise the importance of having a political economy understanding of these issues and not just viewing them as technical or administrative problems that have a straight-forward technocratic solution. Finally they emphasise the importance of designing monitoring systems that are more focused on producing information that meets the needs of policy makers.


This short brief is a case study of the development of a rural subnational poverty monitoring system in Dayao county in China. The authors argue that subnational PRS monitoring systems “can provide an effective way to implement urgent poverty reduction policies” and are critical in large countries like China where poverty dynamics are changing dramatically. They criticise the previous monitoring system for poor sharing of poverty data across departments, unclear and inconsistent definitions of data that do not match up to international categories of data and infrequency of surveys resulting in lack of timely data. After community consultation a new system was designed (details of the indicators selected are included in the text) and rolled out in conjunction with a households census in 2007.

World Bank, webpage on ‘Poverty Monitoring Systems’: 

This page states that weaknesses with Poverty Monitoring Systems include:

- Poor accuracy of data.
- Difficulty in coordinating all the different monitoring systems operating in a given country.
- Poor use of the findings of PM by policy makers.
The page emphasises the importance of the following variables in designing PRS monitoring systems:

- Strong political actors.
- Good coordination of actors.
- Links with line ministries.
- Involvement of national statistical agencies.
- Local government involvement.

The authors emphasise that there is no specific blueprint, or pattern, for the design of monitoring systems. Instead, systems should build on existing mechanisms and be highly context specific.

There are links to various country assessments as well as analytical reports.

**Government of Tanzania, website on Poverty Monitoring**
http://www.povertymonitoring.go.tz/Research_reports.asp

The Government of Tanzania has made significant progress in poverty monitoring and has collected various useful reports together on their poverty monitoring website.

### 3. Combining vulnerability and poverty monitoring


This short concept note discusses Tanzania’s attempts to include vulnerability analysis in its poverty monitoring as part of the first round of the Participatory Poverty Assessment (PPA) of the PRSP. Vulnerability is defined as correlated with, but distinct from, poverty. Not all poor people are equally vulnerable, and not all vulnerable people are poor. The note outlines thinking on vulnerability as expressed in the PRSP, for example where vulnerable groups are mentioned or the importance of safety nets is discussed. The PRSP notes that there is a knowledge gap on vulnerability across Tanzania. Section 3 gives a conceptual framework for vulnerability.

http://www.repoa.or.tz/documents_storage/Research_and_Analysis/PPA_Evaluation.pdf

A Participatory Poverty Assessment (PPA) was carried out in Tanzania in 2002/3 as part of the government’s Poverty Monitoring System. It aimed to use qualitative research methodologies to gain a comprehensive description of livelihoods in diverse contexts in Tanzania. “The methodology focused on describing categories of people (‘vulnerable groups’ and events and phenomena (‘impoverishing shocks and stresses’). It therefore provided descriptive, rather than explanatory, knowledge about poverty in Tanzania and this has limited its potential to guide policy making.” The report evaluates the PPA and provides lessons learnt for future PPAs. The authors outline the following strengths of the PPA:

- Increased awareness and understanding of vulnerability.
- Increased capacity in Tanzania for participatory research.
- Indirect but significant policy influence.
Constraints and limitations are identified as:

- Limited analysis of vulnerability due to a static focus on set categories of vulnerable people and impovishing factors, instead of investigating the relationships and processes that help to explain social change.
- Prioritisation of data collection over capacity building.
- Problematic formal dissemination and advocacy strategy.

The authors note the advantages of using a complementary mix of methodologies for poverty related research and poverty monitoring, and envisage a role for participatory approaches to be employed at different levels of research and monitoring.


This paper provides some historical analysis of the development of processes for collecting information on vulnerability in Southern Africa since the early 1990s. It outlines the development of a Regional Vulnerability Assessment Committee (RVAC), overseeing several National Vulnerability Assessment Committees (NVACs). Section 6 of the paper (p.33 onwards) notes emerging interest in broadening out food insecurity monitoring via the NVACs to also include other types of non-food vulnerabilities, such as livelihoods, health, education, water and sanitation. Marsland particularly notes international interest in tying food insecurity monitoring via NVACs in with ongoing PRS monitoring or other poverty monitoring systems. For this to happen effectively, there is a need to rethink:

- the institutional location of NVACs, probably moving them outside agriculture ministries to a more central government department.
- the institutional location of the RVAC.
- the personnel of each NVAC, preferably to include more livelihoods advisers.
- the methodological basis of vulnerability assessments, which have previously been based on the Household Economy Assessment.

In conclusion the paper suggests that NVACs should link more closely with poverty monitoring initiatives under PRSPs. However, the author notes that sober assessment must first take place as to what value they would add.


This paper straddles the concepts of poverty monitoring and vulnerability monitoring. The author argues that Community Based Poverty Monitoring (CBPM) works best when it takes a ‘vulnerability approach’ and incorporates qualitative research into monitoring systems. Whilst PM has moved forward by beginning to incorporate subnational and even community level data to overcome shortages in national level data, there is still a need to “identify new indicators that – rather than merely pointing to an increase or decrease of poverty within a given community, region or country – are able to uncover the underlying factors and processes that drive people into poverty, keep them in poverty, or help them to move out of
poverty. These factors and processes may operate at different levels i.e. individual, household, community, regions, country and world system. Though they are not necessarily amenable to measurement in quantitative, statistical terms, they can often be observed in real life situations at the community level, using qualitative research methods. The paper analyses empirical qualitative evidence from CBPM studies in 2 rural locations in Sri Lanka. The author highlights how this approach improves poverty monitoring by focusing more strongly on social, cultural and political dimensions of poverty at the community level, bringing issues of social vulnerability and social integration to the forefront of poverty analysis. The relational aspects of poverty are also emphasised as being critically important. Qualitative research methodologies are more flexible and adaptable than quantitative methods and are able to reflect a number of factors that influence poverty dynamics. “It is the particular combination of these inter-dependent factors... that result in a household being either more or less vulnerable, which in turn results in a household being in a state of either chronic poverty or in a transient phase of poverty.”

4. Vulnerability monitoring

**Riely, F., 2000, ‘A Comparison of Vulnerability Analysis Methods and Rationale for their Use in Different Contexts’, FIVIMS Synthesis Document, FIVIMS:**

This paper provides a basic introduction to vulnerability analysis, defining it as a subset of food security analysis that is less static, incorporates elements of risk and coping strategies and is more forward-looking and dynamic. The author states that there is no best way to conduct vulnerability analysis (VA), and provides an inventory of VA methods. These different methodologies have arisen because of differing goals in different locations, the availability of data and the personal preference of the analysts designing the system. Uses of VA are given and advice on selecting tools. The paper concludes by encouraging the development of VA and monitoring systems to start with an assessment of information needs, rather than available data. Policy-makers should be approached first to find what information they require and information should be prioritised accordingly.


This study reviews systems for monitoring food insecurity and assessing vulnerability and early warning capacity in Angola. It provides information on the different monitoring activities currently operating in Angola and identifies the following general weaknesses:

- Poor coordination between different systems
- Reluctance to share information
- Low standardisation and systematisation of data
- Gaps in geographic coverage
- Overlapping information systems
- Poor technology skills amongst workforce
- Inaccuracy of data
- Weak capacity and empowerment of local government.

The authors suggest these weaknesses could be overcome by strengthening the Vulnerability Assessment Committee (VAC), setting up provincial level VACs, improving sectoral information systems and improving the resources of the Cabinet of Food Security.
This paper analyses perceptions and understandings of vulnerability in Mozambique. The author argues that vulnerability has been understood as referring to certain vulnerable groups, for example widows, orphans, disabled people, flood victims etc. Instead, the paper asserts that a framework for analysing vulnerability must be developed that includes many different elements, including food insecurity, HIV/AIDS, natural disasters, climate change and the feminisation of chronic rural poverty. The following 3 dimensions of vulnerability are identified:

- Lack of internal defences
- Exposure to external shocks and risks
- Social exclusion.

5. Examples of food insecurity monitoring systems

World Food Programme (WFP)
The World Food Programme's food insecurity monitoring is carried out under the name 'Vulnerability Analysis and Mapping' (VAM). Unfortunately, the current VAM website (http://vam.wfp.org/) was offline during the period in which this Helpdesk Research Report was compiled. An older, archived version of the site provided this information on WFP vulnerability monitoring:
http://one.wfp.org/operations/vam/vam_in_action/monitoring_activities0209.asp?section=5&sub_section=4

This short document outlines key components of WFPs VAM strategy and includes sections on ‘How to Undertake a VAM’, ‘Data Collection and Review’ and ‘Analysis and Map Productions’. It shows that VAMs in various locations will adopt different methodologies depending on the context, on available data and resources. General guidelines are given for developing a methodology, strategy and dissemination. VAMs are ongoingly monitored and updated, although the document is not explicit about how often. However, there is a reference on page 8 to monthly updating of data and maps.


This handbook gives in-depth advice on how to use the CFSVA, a tool which aims to understand and describe the profiles of food-insecure and vulnerable households. It is also designed to identify the root causes of hunger and analyse the risks and emerging vulnerabilities among crisis-prone populations.
This paper analyses the strengths and weaknesses of VAM in Bangladesh, noting that the country has been regarded as leading VAM practice. Part II includes a SWOT analysis (strengths, weaknesses, opportunities, threats) which includes the following observations:

- VAM provides technologies for making the most vulnerable visible.
- It generates a change in philosophy within WFP.
- It is a static process that is not at present able to adequately track the most vulnerable through space and time.
- Data comes solely from the state rather than from the vulnerable.
- There is low country ownership.

The paper also emphasises the difficulty in mapping vulnerability precisely because of the ‘invisibility’ of vulnerable groups, such as ultra-poor mothers. Such groups are generally excluded from society and so often are not reflected in any state generated indicators as they do not access services or participate in the formal economy.

**Food and Agriculture Organisation (FAO)**

The FAO has developed the FIVIMS Initiative: Food Insecurity and Vulnerability Information and Mapping Systems. FIVIMS aims to support countries in analysis and monitoring of food insecurity. More information can be found on their website: [http://www.fivims.org/index.php?option=com_content&task=view&id=6&Itemid=28](http://www.fivims.org/index.php?option=com_content&task=view&id=6&Itemid=28)

FIVIMS has been working with the EU to develop The Global Information and Early Warning and Information System (GIEWS). This system aims to improve the timeliness of information on food security to the international community: [http://www.fivims.org/index.php?option=com_content&task=view&id=33&Itemid=40](http://www.fivims.org/index.php?option=com_content&task=view&id=33&Itemid=40)

**FAO, 2000, ‘Handbook for Defining and Setting up a Food Security Information and Early Warning System’, United Nations:**


This detailed handbook gives in-depth advice on how to set up a FSIEW system. It includes in Part I a discussion of the principles and concepts of monitoring food security and analyses different types of existing food security monitoring systems. Part II gives detailed descriptions of how to develop a system and Part III discusses sustainability.

**USAID**

USAID funds FEWS NET: The Famine Early Warning Systems Network. This initiative aims to provide decision makers with monthly food security updates for 25 developing countries, as well as more in-depth analytical studies. FEWS NET also aims to build capacity in the area of early warning and food security: [http://www.fews.net/ml/en/info/Pages/default.aspx?l=en](http://www.fews.net/ml/en/info/Pages/default.aspx?l=en)
**Additional information**

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**Websites visited:**
GSDRC, Chronic Poverty Research Centre, ELDIS, FAO, FEW NET, FIVIMS, WFP, Google, Google Scholar, MandE.org, World Bank, Oxford Policy Management, Overseas Development Institute, Christian Michelsen Institute, Stockholm Environment Institute, World Food Programme, Queen Elizabeth House at Oxford University, UNICEF Innocenti Research Centre.

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