

# The Relevance Of Livelihoods Approaches To Food Insecurity Measurement

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## Introduction

A core aim of this paper is to situate the discussion of food security and livelihoods approaches in the broader context of the evolution and application of livelihoods approaches across departments within FAO and elsewhere, and draw practical lessons for FIVIMS. This Annex provides some initial background on linkages between concepts of food security and livelihoods and issues surrounding the use of livelihoods approaches in measurement. It highlights a number of possible applications in FIVIMS and issues that need to be addressed.

### 1. Livelihoods approaches: a definition

Reflection on the usefulness of livelihoods approaches in research and development interventions grew out of a recognition of the need for a holistic and livelihoods-centred, participatory approach to addressing development concerns. These approaches have become increasingly dominant since the concept was popularised in the late 1980s by international agencies such as the World Commission on Environment and Development and prominent researchers including Robert Chambers and Gordon Conway. This process culminated in some development agencies adopting livelihoods approaches as a guiding principle to their operational work, initially in rural development, but now across all sectors (e.g. DFID, CARE, WFP, ...). Since then, a range of development agencies and development-oriented research organisations have applied livelihoods approaches to their work in analysis, assessment, design and, to some degree, in implementation and evaluation in a variety of contexts (see e.g. Carney *et al* 1999 and Hussein *et al* forthcoming).

As each organisation promoting livelihoods approaches has developed nuanced definitions of livelihoods approaches that fit their mandate and objectives, it is useful to clarify what is meant by these approaches here. By livelihoods, we mean:

*The assets (natural, physical, human, financial, social, to which we can add political), activities, and the access to these (mediated by institutions, organisations and social relations) that together determine the living gained by individuals or households (Ellis 2001:10)*

Livelihoods approaches are part of a family of approaches that have in common a commitment to: acknowledging diversity and the need for holistic analysis; basing planning and action on an understanding of people's existing assets, strategies and goals, and building on the strengths already existing in these; taking into account micro, meso and macro level factors; and developing an understanding of the ways in which the political, institutional and vulnerability context affect people's capacities to achieve their goals. Established food security assessment methods such as the Save the Children's household economy approach (HEA) and FAO and WFP vulnerability assessment or profiling are clearly part of this family.

Livelihoods approaches reflect the complex realities faced by poor people in developing countries. However, as livelihoods approaches are founded on holistic analysis and people-centred, participatory processes this has posed significant challenges for decision

makers and planners. This is especially the case regarding uses of livelihoods approaches in any exercise of measurement intended to generate information at the aggregate level relevant to decision-making. This is the central challenge that needs to be addressed if livelihoods approaches are to be relevant to FIVIMS and food insecurity measurement.

## **2. Food security and livelihoods approaches**

Much of the broader literature on food security emphasises that food security refers to secure and regular access by all people at all times to enough food for a healthy and active life. This food has to be safe, nutritious, used appropriately and meet food preferences. Food security can be achieved by ensuring sufficient availability or supply (e.g. through agricultural production or food aid) and also access (e.g. entitlements to food through market exchange, labour, or social networks).<sup>1</sup> Food insecurity is the opposite state of a lack of access to food or an adequate diet – either temporarily (transitory food insecurity) or continuously over time (chronic food insecurity). These definitions underline the temporal dimensions of food insecurity, the importance of addressing vulnerability and the centrality of secure and sustainable livelihoods to underpin food security.

Similarly, FIVIMS defines food security as a state that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active life. Food insecurity, when people lack this, is seen to be due to unavailability of food, insufficient purchasing power, inappropriate distribution, or inadequate utilisation at household level. Vulnerability is also seen to be key, referring to factors placing people at risk of becoming food insecure or reducing ability to cope.

As do other definitions, the FIVIMS definition highlights the importance of food access / entitlement and availability, and the importance of the temporal dimension, risk and vulnerability. Other key elements of livelihoods approaches are relevant to food insecurity measurement at the national and international levels (participation, user focus, complexity of livelihoods: importance of access as well as food availability; importance of agriculture as well as non-agricultural activities etc) Further, sustainable livelihoods for poor people are recognised by international agencies as vital ensure food security.

It is these factors that demonstrate the close link food security most closely to livelihoods concepts. Livelihoods approaches may also provide a practical tool to tie together the concepts of food insecurity, hunger and poverty - providing the link between a multidimensional and people-centred view of poverty with an analytical framework based on people's strategies, assets and capacities. This analytical framework might inform improved poverty and food security measurement.

## **3. Practical applications of livelihoods approaches in food insecurity measurement and FIVIMS**

FIVIMS sees itself to include any information system or network of systems that are about people who are food insecure or at risk according to the above definitions – encompassing early warning systems, nutrition, agricultural, environmental and livelihoods information systems as well as vulnerability assessment. There is a broad consensus emerging that livelihoods approaches should be central to food insecurity measurement at the subnational level due to their holistic character and fit with diverse household circumstances and regional realities.

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<sup>1</sup> See World Bank 1986.

However, there is less agreement on the relevance of livelihoods approaches at the national and international levels. Some would argue that livelihoods approaches have less precision and utility as the level of analysis move from national to international levels and are therefore less relevant to FIVIMS' work to generate global comparisons.

According to this logic, it could be argued that

- (i) at the level of national information and mapping systems, livelihoods approaches have limitations related to:
  - the costs of scaling up resource-intensive methods used by external agencies at the district level
  - the need to aggregate information (a process in which most livelihoods information becomes redundant)
  - lack of congruence with current national statistical and information systems (especially sector-specific efforts in agriculture, health and nutrition and to some extent poverty monitoring)<sup>2</sup>
- (ii) at an international level, the need for summary indicators<sup>3</sup> and national averages seems to mitigate against taking a livelihoods approach.

Others assert that livelihoods approaches have strong potential for scaling up micro or meso level analyses and assessments.

It seems evident that livelihoods approaches are relevant to food security measurement in at least two ways:

- (i) *Scaling up data emerging from district level*, regional and other subnational analyses of food insecurity to influence national and international assessments. Methodologies such as household economy and food economy approaches (see Save the Children 2000 and Hussein forthcoming) and livelihoods assessments are of particular relevance here.
- (ii) *Disaggregating national level data* according to subnational differences – for example, according to livelihoods systems.

Food insecurity measurement needs to be examined from *both* of these perspectives. The challenge remains to identify mechanisms for effectively combining the two perspectives in order to qualitatively improve food security measurement processes. Livelihoods analysis is also likely to be key to interpreting the relationship between short and long term phenomena that affect food security particularly at the national level.

One leading approach, the Household Economy Approach developed by Save the Children, has been applied across a number of countries in east and southern Africa with considerable success (Save the Children 2000). The utility of incorporating a livelihoods approach into food insecurity analysis and measurement is therefore currently being examined by FIVIMS. Drawing on issues emerging from recent innovative work in Kenya<sup>4</sup>, initial livelihoods work with FIVIMS might usefully focus on:

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<sup>2</sup> Living Standards Measurement Studies are slightly different due to the Household focus; however, the overall aim remains to produce national averages and is less useful to producing information for undertaking interventions at the district level)

<sup>3</sup> None of the Millennium Development Goal indicators specifically deal with livelihoods

<sup>4</sup> See D. Wilcock, J.Schmidt and J.Riches "Back to Office Report" on Projects GCP/INT/741 and FNPP/GLO/001/NET (FIVIMS-CCA component) – Kenya. October 2001.

- capturing a consensus on best practices at a district/regional level
- examining issues related to scaling up district/regional level and national level work that has yielded positive and cost-effective results
- exploring potential relationships between poverty and livelihoods monitoring.

Explicit linkages can be drawn between nutritional surveillance, livelihoods approaches use of information by decision-makers – see Box.

**Box: Nutrition indicator monitoring, livelihoods and FIVIMS**

Nutrition indicator monitoring and nutritional surveillance systems at the national and sub national level provide data of potential use for FIVIMS at the national and possibly global levels. However, case studies show that the existence of “good” nutritional surveillance information has not always produced an appropriate or timely decision or intervention to bolster food security. One of the key factors in poor response has been the lack of an institutional framework setting out how information should be used and acted upon at the country level. To address this it was suggested that decision-makers at country level be involved in the design of nutritional surveillance systems, ensuring that institutional linkages are established at set up stage so as to maximise the likelihood of action in response to information. Livelihoods approaches might be usefully incorporated into existing nutritional surveillance and data collection systems, for example:

- moving surveillance systems away from measuring and monitoring the impact of nutritional status to towards monitoring people’s responses to food insecurity;
- identifying the nutritional condition of specific livelihood groups;
- drawing micro-macro linkages: analysing the underlying causes of food insecurity for specific vulnerable groups and feeding this information back to decision makers; utilising household level knowledge to establish links between macro-level factors and access to food, health and care at the household level
- adopting a consultative and participatory approach to information gathering at a local level and in analysis – ensuring increased attention to the views of the food insecure in analysis of data and identification of interventions;
- strengthening demand and use of nutrition data among decision-makers.

*Source: Shoham et al 2001*

**4. Emerging issues and ways forward**

FIVIMS is exploring ways in which livelihoods approaches may complement and inform other approaches to the measurement of food insecurity and vulnerability. Pilot work is being undertaken in Kenya and Bangladesh to identify ways in which FIVIMS might help the UN in its country level assessment and planning exercises, particularly in obtaining information and focusing action on livelihoods and food security issues at the sub-national level. In 2002, FIVIMS is holding a conference on scientific issues in food security measurement. FIVIMS is analysing the degree to which SLA might be systematically incorporated in the estimation procedures to be used for determining and regularly updating the global number of those that are undernourished. FIVIMS has begun to explore how SLA can inform the sub national collection and analysis of data on food security and vulnerability. However, challenges remain in identifying ways to integrate the diverse forms of local livelihoods data that exist into aggregate level cross-country comparisons in such a way as to usefully inform policies and interventions (Hussein *et al* forthcoming).

There are a number of challenges and limitations to incorporating livelihoods approaches into food insecurity analysis at the global and national levels. These include:

- integrating local livelihoods data gathered by a range of agencies at the national level into central systems based on comparable summary indicators and national averages used for making global comparisons;
- at the level of national information and mapping systems: financing the costs of scaling up resource-intensive methods used principally at the district level; developing satisfactory methods to aggregate information while retaining relevant livelihood information; developing ways for livelihoods data to feed into current national statistical and information systems (especially sector-specific efforts in agriculture, health and nutrition and to some extent poverty monitoring).

However, incorporating a livelihoods approach to the analysis of food security would have numerous advantages. Livelihoods principles could inform efforts to improve and adapt the “undernourishment” measure. Factors behind food insecurity among diverse vulnerable groups in different contexts and incorporating a more nuanced analysis into nutritional surveillance (see preceding section). It would also highlight the importance of micro-macro linkages, drawing lessons from local level experiences to inform decision making and would strengthen the analysis of vulnerability at the subnational level. It would also move analysis and action from a narrow focus on agriculture towards a range of interventions to support diversified, non-agricultural livelihood strategies and the allocation of a range of resources that enhance food security. It would highlight the need for food security analysis to begin by understanding people’s experiences of hunger and the relationship between food insecurity and the constraints and opportunities to their existing livelihoods prior to identifying interventions. Finally, livelihoods approaches would provide a useful aid to disaggregating national level data giving rise to enable more sensitive and differentiated policies and interventions.

This discussion highlights a number of issues that need to be explored in order to identify the practical relevance and contribution of livelihoods approaches to food insecurity measurement and FIVIMS.

- Develop capacities for in-country monitoring or collation of information on what is happening to food insecurity in a particular country or to specific population groups vulnerable to food security, drawing on the monitoring systems of a variety of agencies (e.g. country level World Food programme Vulnerability Assessment and Mapping (VAM) units or NGO food security or household economy analyses surveys). This information then needed to be reconciled to existing quantitative data, providing a bridge between assessment and action (see Haddad et al 2001).
- Establish ways to operationally link diverse subnational livelihoods analyses into existing national level statistical systems and surveys (e.g. Household food economy studies, World Bank Living Standard Measurement Studies, FAO vulnerability and poverty profiles; livelihoods monitoring. Issues to consider would include, for example:
  - integrating data / perspectives from subnational population groups (drawing on qualitative assessments)
  - comparing experiences of doing this in settings where greater or lesser numbers of institutions are involved or degrees of diversity differ.
- Review links and synergies between FAO’s DFID-funded Livelihood Support Programme and FIVIMS
- Review of whether shift to livelihoods orientation requires shift in way that FAO collects food security data (cf moves to collect data on all household sources of income or to more participatory, community led data collection and analysis)
- Examine relevance of the five data collection methods discussed at the 2002 scientific symposium at a country level within a livelihoods perspective
- Analyse ways to scale up subnational level multisectoral analyses to be useful to sectorally organised national governmental statistical and decision systems and establish ways to operationally link diverse subnational livelihoods analyses into

existing state surveys. Appropriate approaches to aggregation of livelihoods data from subnational through to national and international levels need to be considered.

- Establish ways to draw in vulnerability assessment and profiling as a tool to link food security, poverty and vulnerability issues
- Examine the feasibility of integrating livelihoods/HFE type approaches into national government department resource allocation and operating procedures.

## **5. Conclusion**

Livelihoods approaches can provide an effective and practical vehicle for linking rights based approaches, measurement and action to reduce food insecurity. In particular, these approaches are relevant because they provide:

- a way into addressing the realities of subnational variation and diversified livelihoods
- a tool to improve indicators on food insecurity by drawing on contextual realities
- a framework for the analysis of food insecurity in a given context and incorporating vulnerability and policy into the analysis
- a framework that links poverty and food insecurity with issues related to social capital, empowerment and participation.

Incorporating livelihoods approaches into food security measurement is a strong complement to a rights-based approach to food security, providing an analytical framework on which to build appropriate operational interventions to eliminate hunger in diverse contexts. Building on core principles of participation and empowerment, they complement an approach centred on enabling the food insecure to demand their rights, entitlements and access to food.

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## Annex

### **Box : FIVIMS – an international instrument for food security measurement and analysis**

FIVIMS is a network of systems that assembles, analyses and disseminates information about people who are food-insecure or at risk (i.e. vulnerable to food insecurity).

FIVIMS has three core objectives:

- (a) international comparative monitoring of undernutrition and global food insecurity indicators to evaluate progress towards achieving global food insecurity targets (including, principally, halving the *number* of undernourished by 2015) and further targets included in the Millennium Development Goals;
- (b) promotion of best practice across agencies in food insecurity and vulnerability information and mapping at the country level;
- (c) facilitating the co-ordination of food insecurity measurement and response at the national level and improving performance of national food security information systems.

Although FIVIMS has a small Secretariat based at FAO and most data collection and analysis activities are undertaken by FAO technical divisions, it is an inter-agency initiative with over 25 members including multilateral, bilateral and non-governmental organisations. At the global level, FIVIMS provides estimates of undernutrition and monitors a range of global food security indicators. At the national level, it undertakes activities to improve national food security information systems.

FIVIMS capacity to influence policies and actions to reduce hunger has been undermined by debate on the validity of its measure of food insecurity – the number of “undernourished” or those suffering from undernutrition defined by lack of access to calories or micro-nutrients. This indicator is based on per capita food supply estimates drawn from national food balance sheet data. These are then adjusted for distribution using a controversial methodology based on broad assumptions of national and individual calorie intake needs and national income distribution. Further, the Millennium Goals preferred to refer to halving the *proportion* of undernourished in the world by 2015. Recent work has studied the strengths and weaknesses of the undernourishment headcount measure and the potential contribution of nutritional indicators with a view to improving reliability and policy relevance over time<sup>5</sup>.

Source: Hussein 2002

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<sup>5</sup>Results cited in the following two sections rely heavily on two papers commissioned by the ODI Food Security Technical Support Facility: Haddad *et al* 2001 and Shoham *et al* 2001. These are available from the food security pages of the ODI website: [www.odi.org.uk/RPEG](http://www.odi.org.uk/RPEG)