

From Global to Local and Back Again: Researching Life in a Time of Food Price Volatility

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Abstract This article sets out the thinking behind the research methodology used in the Life in a Time of Food Price Volatility project. It sets out the key questions and aims, describes the approach, and explains why we chose the research design we did. It discusses the strengths and weaknesses of the methodology, and concludes with reflections on the (increasingly important) question of how to research social change in a globalising era.

1 Introduction: research aims and questions

The research aims to explore:

- how high and unpredictable food prices (or food price volatility) affect human wellbeing and development among people living on low or precarious incomes.

To do this we have been looking at:

- how rapid and unexpected food price changes, most commonly sudden and sustained rises, have affected the day-to-day work of keeping families fed and cared for in selected communities in low- and middle-income countries over the period 2012–15; and
- the formal and informal resources and strategies that enable people to cope with or adapt to these changes, and so shape their resilience to these changes (or capacity to manage without long-term damage).

It is important to understand and document these issues because the early twenty-first century saw a sudden and sustained rise in world food prices, and people living in poverty spend a high proportion of their earnings on food, so such changes are likely to have had a significant impact on the way they live, and how well (Hossain, King and Kelbert 2013). The global integration of the world food system means that food price volatility is expected to recur in the future.

The focus on wellbeing is vital, because it focuses our attention on not just the price of everything, but also its value and its meaning. Food prices matter because they mediate people's access to a most fundamental need for living well – or indeed, living at all. Food is not only the fuel of human bodies, but also the stuff of cultural, ethnic and religious identity, community membership, expressions of class, status and aspiration, the substance of consumption and lifestyle, and even symbols of ethics and politics. Because in a very real way we are what we eat, significant changes in how we go about securing that food involve significant changes in ourselves. This means that food price changes are likely to have significant influences on human wellbeing; how well people cope with and adapt to these – in some instances transforming their lives and livelihoods to do so in positive ways – is vital to their wellbeing.

The research aims to equip policymakers at local, national and international levels with a grounded understanding of why rapid food price changes matter to people, what effects they might have on people who spend a high proportion of their income on food, and how to tackle the range of related challenges that arise. Policymakers have access to information about price changes and purchasing power but may not be able to make sense of what these mean for human wellbeing beyond measurable matters of income and calorie intake. Channels of transmission from global to local may have many intervening and/or countervailing variables, and

large surveys and sources of big data provide a sketch of the effects on incomes and consumption of shocks or changes to the food system, but not of how people experience those shocks and changes in their everyday lives. Without the subjective dimensions of these experiences they may not contribute to understanding how people interpret their situations, nor their motivations for coping, adapting and transforming their subsistence strategies. Yet we expect these largely intangible dimensions of impact to strongly influence how people behave and how their wellbeing is affected.

The project aims to arrive at a clear and strong understanding of some of the mechanisms through which people's wellbeing is affected by food price volatility that can apply across clearly defined developing country contexts. To make this possible, the core of the research design has been a relatively large and diverse data collection exercise, combining qualitative and quantitative, longitudinal, in-depth topical and multi-sited data collection activities. The core of the research has been repeated rounds of qualitative research in 23 communities across ten countries, led by experienced researchers in each country. This has been supported by quantitative data collection and attempts at qualitative–quantitative integrated analysis. This plural approach to data collection was necessary because we needed to be confident that our explanation was strong enough to work for a range of contexts and variables, and did not merely describe the 23 sites in which the qualitative work was based.

2 Concepts and meanings

We worked with a lot of different concepts that needed to be clear but also meaningful across the wide range of social realities. By 'wellbeing' we meant:

a state of being with others, which arises when human needs are met, when one can act meaningfully to pursue one's goals, and when one enjoys a satisfactory quality of life (McGregor, Camfield and Woodcock 2009).

Specifically, we focused on how sudden and extreme food price changes were influencing work and livelihoods, family life and care, and support systems (both community institutions of mutual support and public institutions). These domains covered the subjective, material and relational dimensions of wellbeing in everyday life (White 2009), and while reasonably encompassing domains of wellbeing, each also has clear and direct first-order links to food prices. 'Wellbeing' has become sufficiently

widely used in development research as to be uncontroversial as an object of understanding. We talked about wellbeing rather than poverty or food security because one of the meta-propositions we wanted to test is that people may be able to manage the effects of food price volatility so as to avoid declines in income or food security overall or over time, but only by sacrificing wellbeing. How, and the extent to which, wellbeing is affected will depend on how people are situated in relation to food markets, and their personal and shared resources and capacities for coping or increasing their resiliency. But because wellbeing is inadequately measured and tracked, important developmental impacts on wellbeing may go unnoticed or only emerge long after they have hit.

Some of the mechanisms through which food price volatility may affect wellbeing are by encouraging people to work longer hours in tougher jobs, sometimes in more competitive conditions and with declining returns. Farmers who benefit from high farm-gate prices may suddenly earn higher incomes for a season or more, as may agricultural wage workers. But unpredictable food prices may also cause worry and uncertainty over planting decisions, and sudden drops in food prices may leave farmers with bad debt or failed investments. Household work is likely to become harder, as food sourcing and preparation becomes more difficult. People with the space, time and skill may grow more of their own food. Levels of satisfaction in families may decline and relationships become tense as income earning and unpaid care work become more burdensome, or people migrate for better opportunities. Mental health – stress and anxiety – may worsen, as may physical health and nutrition if people are eating inferior diets. Others may adapt by eating plainer but nutritionally superior food. People may have less spare time or resources for socialising, but may need to depend more on the help of those around them. Sources of support that work well when one person needs help can become overburdened when everyone faces the same problems. Competition between groups may increase, but so may reasons to cooperate or work together.

Two allied concepts which have a bearing on wellbeing outcomes are the extent to which people and communities are able to *cope with*, or *adapt to* the impacts of food price volatility. Coping refers to the capacity to absorb shocks in the short term. When people cope they find ways to get by or ride out changes in the short term, but often in a manner that is erosive to their longer-term wellbeing. It

does not take much for coping strategies to become self-defeating. Assets, once depleted, take years to recoup; working extra hours in second or third jobs leaves a legacy of exhaustion; loans taken on to finance consumption accumulate into crushing debt burdens; and meals foregone can affect children for their entire lifetimes (Green, King and Miller-Dawkins 2010). When people change their livelihood strategies or patterns of everyday life, or when the results of their coping strategies impose such changes on them, we speak about adaptation.

Coping and adaptation are central to how people live with change. When they live with and adjust to change in ways that do not leave them with lasting harm, when their levels of wellbeing remain more or less the same because they have the strategies and resources with which to adjust, we talk of people being resilient to shocks or crises or merely change. *Resilience* refers to the ability of individuals or communities to anticipate, absorb and recover from shocks with little or no external help, as well as being able to improve their wellbeing despite shocks, stresses and uncertainty over a longer time period. Resilience is not a fixed state, but is a dynamic set of conditions and processes that enable individuals, communities and nations to maintain the capacity to improve their wellbeing despite adversity.

In the literature, *food price volatility* is usually referred to as being either normal or extreme, since some degree of volatility (the movement of a price up or down over a given period of time) is essential to the functioning of markets (HLPE 2011). Objective definitions of food price volatility are based on variance, norms and time-bound price trends across commodities, locations and historical eras but the exact distinction between normal and extreme is rarely clear-cut. Variations in prices tend to become problematic:

when they are large and cannot be anticipated and, as a result, create a level of uncertainty which increases risks for producers, traders, consumers and governments and may lead to sub-optimal decisions. Variations in prices that do not reflect market fundamentals are also problematic as they can lead to incorrect decisions (FAO *et al.* 2011: 6).

In our use, food price volatility referred to these problematic situations in which food prices have changed faster and more unexpectedly over a short period of time compared to (some defined or remembered period of) the past. Food price

volatility was defined not only by 'objective' variance from price trends (although this is certainly a useful metric) but also by the perception that price changes have been unusual and social and market behaviour responds in 'unusual' ways. In our use, the situation or condition of (problematic) food price volatility could be seen as one in which at any given moment, food prices were (and/or were perceived to be): suddenly or unusually high compared to a relevant comparable period in the past; suddenly or unusually low, or unpredictable. Which situation or perception existed at any given time would have different impacts on the wellbeing of different groups. We talked about 'a Time of Food Price Volatility' because most of the period between 2007 and 2015 had been a period of unexpectedly rising and/or dropping prices, price spikes or crises, and relatively rapid price rises from the point of view of consumers on low incomes. We now recognise that the specific historical moment on which we have focused – 2012–15 – was one of adjustment in the immediate aftermath of price volatilities on a global scale. It was a quieter moment in terms of political, economic and social change than the 'perfect storm' of crises in 2008–11. Nevertheless, it was clearly a time in which the after-effects of a series of shocks were being felt. We did not necessarily think that people's perceptions and behaviours would be directly affected by food price shocks as in 2008 or 2011–12, but they were nonetheless likely to be formed within the context of social, economic and political adjustment to the pressures of an era in which food price volatility had been a pressing public and private concern.

By 'impact' we meant we aimed to provide a strong explanation of why and how food price volatilities change, or contribute to changes in, people's wellbeing, in different contexts and under different circumstances. We were aiming for a mechanism-based explanation of 'impact' which drew on and took insights from the theoretical and methodological lessons of analytical sociology and middle range theory.¹ We thought this provided a practical, rigorous approach to explaining the complex social matters in which we were interested. Development studies has recently come round to the idea that strong, complementary explanations of social change may come from a range of analytical approaches and empirical bases, so long as they are rigorously grounded in theory and explicit in their assumptions and in the causal links they seek to explain.² This approach is all about specifying assumptions in advance, carefully dissecting the elements of the process of change being described,

ensuring that each element is clearly laid out and comprehensible, and is as accurate a description of the empirical reality as possible.

The mechanism-based explanation we took involved clarifying and describing on a step-by-step basis the social mechanisms through which changes occur. This approach made us drill down from the high order global conditions of food price volatility into the highly localised individual and contextual responses it stimulated, and then helped us build our understanding of the causes of change back up into a robust, general understanding of how food price volatility affects wellbeing. By ‘mechanism-based explanations’ we meant reaching below the macro-movements of food prices, to clarify in a careful, step-by-step way, how those movements changed the micro-conditions of people’s working, family and social lives. People responded to changes, and so these responses in turn needed to be understood, as did the further changes these responses created for the conditions of their work, family and social lives. And finally, the interaction and mutual influence of people’s actions and interactions in response to food price volatility needed to be understood, for a meaningful understanding of the macro-outcomes that food price volatility triggers or contributes to.

The idea of ‘impact’ meant that we thought that sudden and unexpected rises or drops in food prices, or a generalised unpredictability around food prices, were likely to affect people’s wellbeing. There are a number of challenges in assessing impact. The many possible causal factors affecting a multidimensional state like wellbeing make it difficult to attribute or even to assess contribution with any degree of accuracy (impacts on income, by contrast, are easier to isolate and test with rigour). We faced a high risk of researcher bias: when you go out to study the effects of food price volatility, high or volatile food prices are likely to pop up everywhere as the salient explanation for all aspects of change in wellbeing (see White and Phillips 2012). There was a risk that the analysis would give too much weight to (understandable) popular complaints about strikingly high prices to explain changes in the conditions of their lives that people did not like. And it was also possible that the indirect or second-order or looped-feedback effects of food price volatility on people’s lives were not captured, so that important influences on long-term wellbeing – for instance, shortfalls in public spending to accommodate more costly food subsidies or clampdowns on popular movements or civic freedoms due to fears of food riots – were not considered. We attempted to address

these challenges by gathering evidence on the wider context within which the research participants were living, so that important trends and events would not go unnoticed, triangulating subjective and experiential data against key informant responses, market price data collection, and other secondary sources, and above all through repeat visits, which enabled us to gain some sense of what was considered ‘normal’ as opposed to distinctive events. Comparative analysis across the sites also helped us to identify ‘outliers’ or unusual events and more common patterns of conditions, behaviours or interactions.

When we started researching the effects of food price volatility on people’s wellbeing in 2012, many of the people we were meeting had already been living with this situation for several years. Their national governments and national economies had already responded in some way. Jobs and wages in the local economy had been influenced by adjustment to the price spikes of 2008 and 2011–12. People were used to thinking about the issue, and behaving and believing differently than they might have done had food prices remained as low and steady as in the preceding two decades. We were not entering a pristine baseline environment, but a situation of messy real lives complicated by – among many other things – sudden and unexpected food price changes.

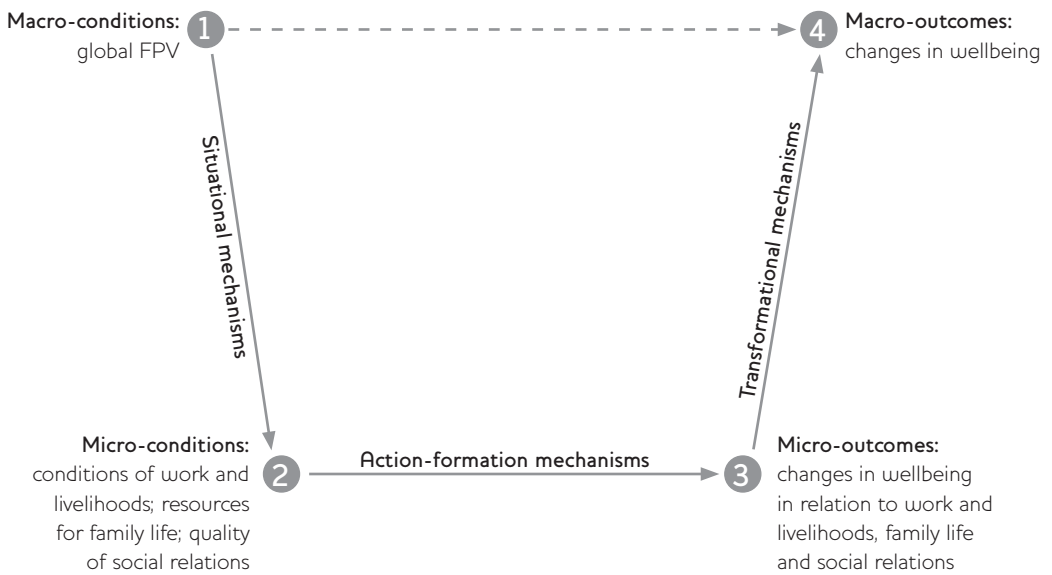
Our view was that in such a situation it made no sense to try to hold other things constant or to assume away complications, but to look at how those complications and multiple other factors may materially interact with the variables of interest – food prices and wellbeing – because this is how things work in reality (Gross 2009).

The aim became to try to identify and specify these mechanisms as clearly as possible, by identifying and explaining the micro-elements – the individual links in the causal chain – that cause changes in wellbeing to come about mainly or substantially through demonstrable links to unpredictable and suddenly high food prices. To do so, we adopted a ‘mechanism-based’ approach to explanation, by detailing a careful and clear account of the ‘nuts and bolts’ of how people’s responses to food price changes come about.

3 Methodological choices

In thinking about how to research how food price volatility affects people’s wellbeing, we had three main starting points:

Figure 1 Analytical framework



Source Author's version of 'Coleman's Boat'.

- This is a complex, high-level matter: it has to do with global markets, is transmitted globally and is influenced by policies and conditions that are global or national in nature;
- It is also a mundane, personal matter: it touches individual people directly and intimately by affecting how people nourish themselves and each other, and what they do to make that possible;
- There are many pathways through which a price spike, drop or period of uncertainty may affect conditions facing a country, local area, community or person that are relevant to wellbeing, and many possibilities as to how individuals, groups and institutions may choose to respond to them.

In our view, there was not much value in understanding how food prices have changed in different countries if we lacked a sense of how people have experienced and responded to those changes. At the same time, while describing the various ways in which people experience and respond to food price volatility would at least provide glimpses of how real lives are affected, the circumstances would be too particular and individual to give us a sense of what all those numberless experiences and responses add up to, overall. What was needed, in our view, was to find ways of building an understanding that drew the implications of global food price volatility down into the nuts and bolts of everyday life, and then

built the picture back up in an account that draws on a sufficiently wide empirical base to develop an explanation of how food price volatility affects wellbeing across contexts. This meant that the central focus of the empirical analysis was to build an understanding of the micro-foundations of what is, in effect, a global phenomenon (Raub, Buskens and Van Assen 2011).

Figure 1 summarises the core elements of the research approach. This is a version of 'Coleman's Boat', which represents a typology of social mechanisms or macro-micro links.³ Figure 1 clarifies the links between the different elements of the explanation, and specifically, the importance of going below the macro- to the micro-level,⁴ and of understanding the situational or contextual, action-formation or motivational, and transformational or aggregate and interactional mechanisms in order to capture a strong understanding of social change.

As we will see next, the core element of the research approach involved repeat rounds of qualitative research in selected communities, to gain a longitudinal perspective on how people's lives were changing over this period of global economic adjustment. Qualitative work was essential to capture the subjective and experiential dimensions of wellbeing, but not in itself enough to make sense of the situation in which people found themselves,

and the net effects of their changing behaviours and responses. The overall approach was led by the accounts from the people in these selected sites, but depended to some degree on being situated within and triangulated against the larger contexts and conditions from which they were voiced.

We treated food price volatility as among the macro-conditions. The research aimed ultimately to explain how food price volatility results in changed wellbeing (moving from point 1 to point 4 in Figure 1). Development research options generally include taking a direct route by simulating the effects of food price volatility on predefined measures of wellbeing, most typically income-consumptions of poverty or food security, going directly from the macro-conditions to the macro-outcomes (point 1 to point 4). To be able to provide a strong explanation of how food price volatility, among the other constituent macro-conditions, influences wellbeing across contexts, we felt it was necessary to get closer to the action, by identifying and examining what happens at the micro-level. There were three main steps to this process.

Step 1: From macro- to micro-conditions: the situational mechanisms

First, we wanted to identify the mechanisms through which macro-conditions created, influenced or changed micro-level conditions (point 2). These ‘situational mechanisms’ are about understanding the social structures – in this case, food price volatility – that constrain individual’s actions and the cultural environments that shape their desires and beliefs (Hedström and Ylikoski 2010; Wan 2012). We first needed to describe the macro-conditions in any of our given settings, and specifically to clarify recent trends in global and national food prices. We then needed a clear account of the conditions of life among the people in whom we are interested, focused on the cost of living, people’s assessments of how well they are living, what they are doing in terms of paid work and unpaid family care work, and on the quality and intensity of their social relations.

The analysis involved trying to explain the process by which Dot 1 becomes Dot 2: what are the ‘situational mechanisms’ that shape the opportunities, desires, beliefs and orientations of the people in whom we are interested? The aim was to keep these as clear and explicit as possible, so that they can be tested, refined or rejected as the empirical evidence and analysis builds up over the four years. We expected that global and national food price spikes would cause shortages and speculation or hoarding, pushing the prices of

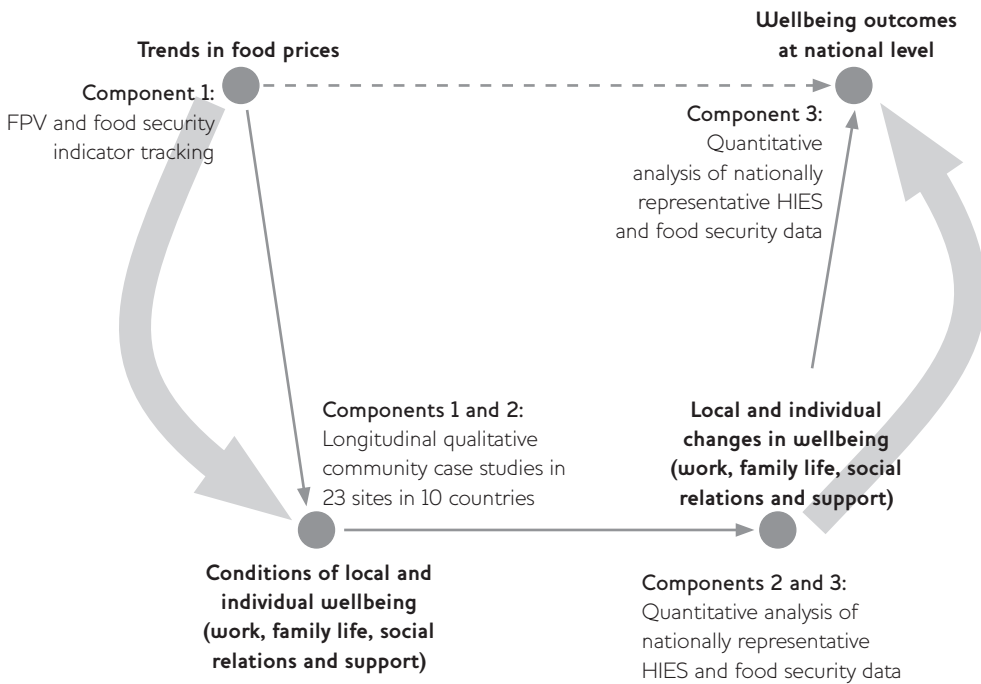
different foods up locally.⁵ If this occurred, food would absorb a higher share of household budgets, and most of the budgets of people on low incomes, earnings would be less adequate than before the price change, people will have new or stronger incentives for sourcing food beyond markets and will expect other prices to rise; and producers of the food whose price has risen (and others) will want to invest in more production. If food prices suddenly and unexpectedly drop, producers face losses or bad debt, and pressures on household budgets will decline. If either or both conditions occur within a short period of time, food producers may find it difficult to plan production, consumers to plan household budgeting and spending, and people may experience a generalised sense of uncertainty about their future progress. These assumptions help us understand the logic of the situation, by defining the alternatives available, identifying the restrictions on the choices they can reasonably make in such a situation, and suggesting how they may evaluate the possible outcomes of those choices (Wan 2012).

Step 2: From micro-conditions to micro-outcomes: action-formation mechanisms

Given the situation as generically laid out above, how might individual people act, and to what ends? Now we want to move from point 2 – the micro-conditions – to point 3 – the micro-outcomes. As already discussed, we wanted to focus on wellbeing outcomes among the people in whom we are interested, drawing on their own assessments of how well they are living, and narrowing in on their levels of satisfaction or otherwise with their work and livelihoods, family life and care, and social relations. To understand how those outcomes occurred, we needed to understand the mechanisms guiding people’s actions, or the ‘action-formation mechanisms’ that are relevant to their responses to food price volatility, within the wider contexts of their lives, and in particular in relation to the domains of work, family, community and public support.

We needed to understand how the particular combination of ‘individual desires, beliefs and action opportunities generate[s] a specific action’ or response to the constraints and opportunities presented by food price volatility (Hedström and Swedberg 1998: 23). Here we assumed, partly on the basis of what people have told us in earlier rounds of related research that a combination of psychological and social-psychological influences may result in the following. When food prices are high over a sustained period, people will adjust what they buy and how much while continuing to try to consume

Figure 2 Research components and the analytical framework



Source Author's own.

as much of what they want and need,⁶ look for ways of making less go further, through new ways of food sourcing and preparing, seek higher incomes, through wage bargaining, new jobs, diversification into new geographical areas, products or services, or through more investment in food-related activities, seek food sources beyond markets (e.g. kitchen gardening, charity or local mutual support systems, public programmes, gleaning, borrowing or stealing), and reprioritise household spending on immediate consumption away from longer-term investments (e.g. in education or enterprises). Drops in food prices when they have been high may mean people will reconsider or shift investments away from food production and related activity, return to earlier patterns of food spending or save or spend money saved from lower cost food on other items. A prolonged period of unpredictable price movements may mean people will find it difficult to plan or aspire for the future, invest in food storage and stocking up, permanently change livelihoods to cope better with uncertain cost of living prices, and/or feel a sense of social injustice and/or distrust of food market-related actors. Our task is to establish whether or not these assumptions hold, and the conditions under which different people select to act in which way.

Step 3: Aggregating the interactions: transformational mechanisms

For a meaningful sense of what difference food price volatility makes to wellbeing, we needed to be able to move from the individual or micro-perspective of hundreds of different responses to a bigger picture of what those responses amounted to on aggregate and in interaction with each other. Examples of transformational mechanisms which might feasibly occur in relation to food price volatility may include: a mass influx into the informal sector that depresses wages; small but widespread increases in time or effort spent on family care work add up to large net decreases in girls going to school or women in paid work (with implications for women's empowerment and gender equality); markets for cheap processed foods emerge or grow; small but widespread declines in nutrition add up to large net reversals in early childhood development; increased household stress over food may result in more domestic violence or marital breakdown; and perceptions of repeated injustice in relation to the food system may strengthen orientation to political action or reduced trust in systems of economic or political governance. We focused on gathering evidence and studying transformation mechanisms most closely linked to the wellbeing domains of work, family life and social relations and support.

Table 1 Country categories

| | Low-income countries | Lower-middle-income countries |
|-----------------------------|----------------------------------|--|
| 'Severe' undernourishment | Burkina Faso, Ethiopia and Kenya | Guatemala and Zambia |
| 'Moderate' undernourishment | Bangladesh | Bolivia, Indonesia, Pakistan and Vietnam |

Source Author's own.

4 Research activities

The research involved three main component activities. As has been set out previously, the aims of the research meant that it was led by qualitative data collection, as the approach best suited to capturing the subjective and experiential dimensions of wellbeing we needed to understand. But the qualitative work needed to be situated within the wider food security and food price context, and to be 'scaled' to make sense of its wider relevance.

Component 1: National food security and global and national food price data

One set of research activities involved analysing the broader context of national food price volatilities and food security more generally, collating and synthesising data about various elements of national food systems. The schema was adapted from the extended suite of indicators of the Food and Agriculture Organization (FAO) that were launched with *The State of Food Insecurity in the World* report (FAO 2012). This provides a broad food systems approach that is important, given that food security outcomes result from many complex interactions across and beyond the food system. Food security outcomes include availability of food for consumption, including amount, type and quality; the ability to access the required type, quality and quantity of food in terms of affordability, adequacy of allocation mechanisms, and meeting social and other preferences; and utilisation, or the ability to benefit from consumed food, which is dependent on the nutritional content, the social value, and the safety of available and affordable food. These three elements were considered in terms of both determinants and outcomes, with indicators chosen on the basis of the availability of relevant comparable data. In each case data availability and frequency determined the extent to which meaningful insights and comparisons could be drawn. Given that stability over time is an important determinant of food security, measures of vulnerability to food insecurity were also included, as

well as time-series data for food staples in domestic markets. The markets presented were those closest to the research communities that are included in the databases of either FAO's Global Information and Early Warning System (GIEWS) or FEWS NET.

Component 2: Community case studies

Ten countries were chosen from which to select community case studies, based on the following:

- they had significant problems of undernourishment;
- research teams were already in situ, having been involved in crisis monitoring research since 2009;
- Oxfam offices in those countries asked to be involved to improve their understanding of food price volatility impacts.

The ten countries covered a range of conditions of food security and national income levels (see Table 1). Note in 2015, Bangladesh moved into the ranks of the lower middle-income countries.

In each country, one urban or peri-urban location was selected, as was at least one rural food-producing site. Eight sites had been part of ongoing crisis impact monitoring research since 2009, and in those, exposure to the global economy was also a selection factor. Research teams were encouraged to select sites in which they had prior research and/or programme experience in order to build on existing relationships. The sites contained a mix of well-off, low-income and extremely poor people. Household case study respondents were mainly drawn from low- and very low-income households, and in all sites they encompassed some of the very poorest, as well as people who were vulnerable for other reasons, including that they are elderly, disabled, orphaned or woman-headed households.

Each community case study included background and context data collection, where possible from

documentary sources; ten or more household case studies in each site, which were built up through interviews with different household members over the four years; focus group discussions (FGDs) with four or more occupation and/or relevant social groups in each community, including, for example, agricultural wage workers, petty or large traders, young people and transport workers, to build a picture of economic change within the communities, how different occupation groups are experiencing food price volatility (FPV), and the different sources of support that are available; key informant interviews with local administrative officials, NGO staff, religious or community leaders, local business people and politicians; and local price data collection by physically visiting markets.

The community case studies were developed to fit the local contexts, capacities and traditions of the researchers undertaking the research. All, however, addressed the same research questions, and while the forms in which data were collected vary, a great deal of the data generated can be subjected to direct comparative analysis across the sites. Interviews with more than 400 household members and key informants were undertaken, in addition to around 100 FGDs and further local data collection activities. Each year, around 1,500 people participated in the research.

The qualitative data were transcribed or written up and translated in each country. This has been a major task, because the research was conducted in 15 languages across the ten countries. Data management was coordinated across the countries, with common metadata labels issued to all the teams and the lead country researchers responsible for ensuring data are transcribed, translated and labelled correctly. For the synthesis, the translated qualitative data were stored and coded in the data analysis software, NVivo 10, to enable comparative analysis and to classify respondents. Given the high costs of collecting, transcribing, translating, storing and coding qualitative data, the emphasis was on gathering small amounts of high-quality data and on maximising such alternative secondary sources that exist.

Component 3: Integrated qualitative–quantitative analysis

In order to further situate the qualitative research in each country, the specific context needed to be integrated and triangulated by analysing existing household income and expenditure and food security data from at least two points in time. The ‘Q2’, or qualitative–quantitative

analysis, was intended to enable the wealth of the qualitative data to be embedded within a complementary quantitative framework that was nationally representative, and which could test the representativeness or spread of the qualitative findings (where possible). The quantitative analysis provided a broad national picture of the impacts of volatility on food security over the research period, and a sense of the representativeness and scale of the qualitative research findings. This quantitative or integrated analysis relied on existing national survey data, such as Living Standard Measurement Surveys, among others, and was only possible in countries where suitable data are accessible for at least two points in time. While the exact nature of the Q2 process varies between countries for the above reasons, the ambition in each case was for the process to be an iterative one whereby the qualitative research informed lines of quantitative enquiry, whose findings in turn suggested issues to probe in future rounds of qualitative work. Whereas the qualitative fieldwork was conducted annually, these complementary quantitative analyses have been undertaken once throughout the project according to the frequency with which the national datasets on which they are reliant are published. Figure 2 shows how the different research components were intended to feed into the analytical process.

4.1 Strengths and limitations

The methodological approach has been helpful in guiding a process that could otherwise have been overwhelming in its scale and diversity. It has generally provided a good balance between a shared research agenda giving space for individual research teams and researchers to pursue matters of interest or importance as they emerged in specific cases or contexts. It has been particularly useful in enabling comparative analysis on particular mechanisms or behavioural responses and perceptions, so that some aspects of social change related to changing food prices emerge clearly from the analysis, supported by robust evidence from multiple contexts.

The detailed, full analysis from across the research rounds and sites has yet to be finalised, but initial analysis indicates that some of our assumptions have held up (the recent expansion of processed food markets), while others (wages being pushed down by an influx into the informal sector) have not, at least not over the medium term. The repeat rounds enable us to see the differences between coping and adaptation and to explore the complexities of wellbeing and resilience in settings of rapid wider social and economic change.

One of the challenges facing the qualitative work has included the difficulties of translating multiple concepts and terms back and forth – accountability and the right to food, and unpaid care work being among the most tricky. We aimed to enable researchers and local people to use the terms they were most comfortable with, and to transcribe discussions as far as possible in their own words. But on some matters, the point proved to be untranslatable or without sufficient local meaning to generate a good discussion. In such situations we noted that the issue could not or had not been appropriately labelled, framed or explained, and sometimes excluded data when we felt the concepts or meanings were not sufficiently similar to those being used in other sites.

A second challenge was that (unlike data collection) good practice regarding qualitative data storage and management had to be learned over the project. We concluded that from all points of view, including not only research standards but also participants' time, value-for-money and transcription and analysis effort, it was preferable to collect small quantities of high-quality data rather than much more poorly-documented material. Through trial and error, we now have a generally sound approach to the storage and management of interview and focus group transcripts and notes, photographic and pictorial data and secondary data.

Integrating qualitative and quantitative research is always a challenge, and our learning on this issue merits a piece of analysis in its own right (see Chisholm in this *IDS Bulletin* on the challenge in Kenya). One challenge was to enable the quantitative research to engage closely with the qualitative work. Disciplinary differences between qualitative and quantitative paradigms mean researchers ask fundamentally different questions from different positions, even when they share the same concerns about wellbeing, poverty, hunger and food security. We have not always been successful in using the quantitative research to 'blow up' the findings of the qualitative research. Even where the qualitative and quantitative studies were not integrated, the quantitative national assessments were of value in their own right, because they focused attention on neglected social aspects of economic and food systems change. Where we were successful, as a result of extra efforts to create bridges between the qualitative and quantitative paradigms, the research will contribute insights into variables that national living standards and similar household income and expenditure and nutrition surveys could valuably include in future.

5 Reflections on researching Life in a Time of Food Price Volatility

The final analysis from our research into the wellbeing impacts of life in an era of high and unpredictable food prices is under way and a picture is beginning to build. Some parts of the picture are ambiguous, complex or too fragmented to give a clear story. The overall impacts on care, for instance, suggest both that the quality of care declines as women take themselves out into the workforce because adult men rarely take up the slack, but also that there are countervailing impacts when women are in more control of spending on care-related matters (like food or health spending). Other parts of the story – like the message that agriculture has decreasing appeal for the contemporary globalised youth – are clear enough, but are evidently influenced by many factors unrelated – or at most correlated rather than causally related – to recent rapid changes in food prices. However, we are arriving at some firm and rigorous conclusions about how specific aspects of wellbeing such as dietary diversity, quality and preferences and the growing sense of precariousness and pressure with respect to meeting basic subsistence needs are affected by food price volatilities. In particular, we expect to soon be able to give a rich account of how wellbeing in everyday life has been shaped by global economic adjustment in the aftermath of the food price volatility of 2008 to 2012 – that is, of the broader role of changes in food systems in wellbeing and ways of life. This is the key strength of the method elaborated above.

The method took account of the fact that food prices and food security policies and programmes at the national level do not always influence local lives as directly as one might expect: at any given moment, local food markets can have a life of their own, and what is planned in the capital city takes time to reach the remotest village (if it ever does). National data provided an invaluable overall guide to the market and policy settings, and underpinned the situational mechanisms we found at the macro- to micro-stage. The household case studies then provided multiple precise instances of action-formation response, providing insight into what then became the social trends we uncovered over the period, contributing insight into overall wellbeing outcomes.

The overall methodology helped us see that we can make sense of the changes in people's lives arising from global events and processes, not only at an individual but also at more aggregated scales, and in ways that uncover how interactions between

processes of change yield uncharted and unmeasured developments that affect how well people live. Because we started with the individuals in their families and communities, we began with a sense of feeling, of how it feels to be living at this time when the world is adjusting to a major shock in its food system. We could situate that feeling not only in time but also in space: we could say something about how it felt to be a young Cochabamban or an elderly woman in Nairobi or a rice farmer in Vietnam at a time when food prices had spiked or plummeted, or could not be relied on to behave as they used to or

ideally should. It is from those subjective assessments and experiential findings that we are starting to build a larger picture of people in a myriad of settings being affected by – and in turn affecting – the process of global economic adjustment. What is innovative here is that we build those individual changes up into a picture of global change that specifies not only what and how much, but also how and why people change their behaviour – how and why they work differently, consume and care in new ways, and hope and aspire for different things than before they lived through this time of food price volatility.

Notes

- * The thinking behind this article benefited from early discussions with Daniel Phillips and Barbara Befani. Many thanks to the Life in a Time of Food Price Volatility researchers who have commented on versions and presentations of this article, and to Rajika Seth for research assistance.
- 1 This field has grown very fast in recent years, but we have relied on the following for our main insights: Machamer, Darden and Craver (2000); Gross (2009); Hedström and Bearman (2009); Hedström and Ylikoski (2010); Demeulenaere (2011) and Wan (2012).
 - 2 An excellent and clear account of this is in White and Phillips (2012). See also Stern *et al.* (2012).
 - 3 For accounts of ‘Coleman’s Boat’ analytical frameworks in the study of social mechanisms, see Hedström and Ylikoski (2010); Raub *et al.* (2011).
 - 4 Macro and micro are not necessarily used in the same sense as in macro- and microeconomics; in analytical sociology they can simply refer to larger collectivities which may be networks,

- communities, national or global institutions or processes, and lower level entities, in this instance, individuals.
- 5 Note that our research does not propose to explain how global FPV transmits to national or indeed local contexts; price transmission mechanisms are being studied by others, and we draw on their research for our understanding of this component of the causal chain. However, we include this mechanism in our analysis because it is an important reminder to check whether a food price change at any given moment is seasonal or not, i.e. whether or not it is linked to volatilities beyond local markets. Our research questions start at the point at which local people face price changes.
 - 5 This assumption raises interesting and difficult questions about the distinction between wants and needs (see McGregor *et al.* 2009). We think it is important to distinguish between wants and needs in relation to food, because preferred foods may have less nutritional value than non-preferred foods.

References

- Demeulenaere, P. (ed.) (2011) *Analytical Sociology and Social Mechanisms*, Cambridge: Cambridge University Press
- FAO (Food and Agriculture Organization) (2012) *The State of Food Insecurity in the World*, Rome: FAO, www.fao.org/docrep/016/i3027e/i3027e.pdf (accessed 21 August 2015)
- FAO, IFAD, IMF, OECD, UNCTAD, WFP, World Bank, WTO, IFPRI and UN HLTF (2011) *Price Volatility in Food and Agricultural Markets: Policy Responses*, Paris: OECD
- Green, D.; King, R. and Miller-Dawkins, M. (2010) ‘The Global Economic Crisis and Developing Countries’, *Oxfam Policy and Practice: Agriculture, Food and Land* 10.1: 67–138
- Gross, N. (2009) ‘A Pragmatist Theory of Social Mechanisms’, *American Sociological Review* 74.3: 358–79
- Hedström, P. and Bearman, P. (eds) (2009) *The Oxford Handbook of Analytical Sociology*, Oxford: Oxford University Press
- Hedström, P. and Swedberg, R. (1998) *Social Mechanisms: An Analytical Approach to Social Theory*, Cambridge: Cambridge University Press
- Hedström, P. and Ylikoski, P. (2010) ‘Causal Mechanisms in the Social Sciences’, *Annual Review of Sociology* 36: 49–67
- HLPE (2011) *Price Volatility and Food Security*, Committee on World Food Security High Level Panel of Experts on Food Security and Nutrition, Report 1, Rome: HLPE
- Hossain, N.; King, R. and Kelbert, A. (2013) *Squeezed: Life in a Time of Food Price Volatility, Year 1 Results*, Brighton and Oxford: IDS and Oxfam

- Machamer, P.; Darden, L. and Craver, C. (2000) 'Thinking about Mechanisms', *Philosophy of Science* 67.1: 1–25
- McGregor, J.A.; Camfield, L. and Woodcock, A. (2009) 'Needs, Wants and Goals: Wellbeing, Quality of Life and Public Policy', *Applied Research in Quality of Life* 4.2: 135–54
- Raub, W.; Buskens, V. and Van Assen, M.A.L.M. (2011) 'Micro-Macro Links and Microfoundations in Sociology', *Journal of Mathematical Sociology* 35.1–3: 1–25
- Stern, E.; Stame, N.; Mayne, J.; Forss, K.; Davies, R. and Befani, B. (2012) *Broadening the Range of Designs and Methods for Impact Evaluations*, DFID Working Paper 38, London: Department for International Development, <http://r4d.dfid.gov.uk/Output/189575/Default.aspx> (accessed 2 September 2015)
- Wan, P.Y. (2012) 'Analytical Sociology: A Bungean Appreciation', *Science and Education* 21: 1545–65
- White, S.C. (2009) *Bringing Wellbeing into Development Practice*, WeD Working Paper 09, Bath: University of Bath/Wellbeing in Developing Countries Research Group
- White, H. and Phillips, D. (2012) *Addressing Attribution of Cause and Effect in Small n Impact Evaluations: Towards an Integrated Framework*, International Initiative for Impact Evaluation (3ie) Working Paper 15, New Delhi: 3ie