

# The Impact of the Food, Financial and Fuel (3F) crises on Women and Children in Nigeria

The results of a six State study and secondary data analysis

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# Contents

	Executive summary	4
1	Introduction	14
1.1	Analytical framework	15
1.2	Methodology	21
2	National Context	24
2.1	Macroeconomic context	24
2.2	Socio-political context	26
2.3	Human development context	28
3	Impacts of the 3F Crisis	30
3.1	Macroeconomic shocks	30
3.2	Impacts on employment and income	37
3.3	Changes to consumption capacity of households	51
3.4	Social Impacts	67
4	Formal economic and social policy responses to the crisis	76
4.1	Macro policy responses	77
4.2	Food security measures	79
4.3	Labour measures	80
4.4	Social policy and social protection responses	82
5	Policy Implications	88
	References	94
	Appendix 1: Methodology	99
	Appendix 2: Technical addendum to the methodology	103
	Appendix 3: Key Informant Interviews	108
	Appendix 4: Pre-existing barriers to healthcare	109

# Figures

Figure 1: Framework to understand possible effects of the financial crisis on child well-being	16
Figure 2: Framework to understand possible effects of the food crisis on child well-being	19
Figure 3: Framework to understand possible effects of the fuel crisis on child well-being	21
Figure 4: Steadily increasing food and non food prices in Nigeria, 2003-2011	31
Figure 5: Reported food price increase by year of occurrence	31
Figure 6: Petrol and local rice prices across Nigerian states (de-trended), 2001-2010	33
Figure 7: Improvement in oil exports	34
Figure 8: Remittance inflows: slowing yet still resilient	35
Figure 9: Growth rates over the period 1995-2009	36
Figure 10: Partial regression plots by state	39
Figure 11: Intensity of child labour by age and reported year	48
Figure 12: Perceived factors related to fuel price increases	56
Figure 13: The effect of food prices increase on school dropouts across states	65
Figure 14: Stunting rates by Geographical Zone and by survey year	73
Figure 15: Causes for deterioration in school performance	74
Figure 16: Sectoral expenditures as share of government expenditure 2005-2010	83

# Boxes

40
45
50
51
53
55
69
71
79
84
85

# Abbreviations

ACPF	African Child Policy Forum
ADB	Asian Development Bank
AIDS	Acquired Immunodeficiency Syndrome
ART	Anti-Retroviral Therapy
BENSACA	Benue State Action Committee on HIV/AIDS
CACS	Commercial Agricultural Scheme
CBMS COPE	Community Based Monitoring System In Care of People Programme
CRA	Child Rights Act
EDC	Entrepreneurship Development Centre
FDI	Foreign Direct Investment
FGD	Focus Group Discussion
GDP	Gross Domestic Product
HIV	Human Immunodeficiency Virus
IDI	In-Depth Interview
ILO	International Labour Organization
IMF	International Monetary Fund
IOM	International Organization for Migration
KII	Key Informant Interview
LKHS	Lagos Kano Household Survey
MDG	Millennium Development Goal
MICS	Multiple Indicator Cluster Survey
	National Poverty Eradication Programme
NAPTIP	National Agency for the Prohibition of Traffic in Persons and Other related
NHIS	matters National Health Insurance Scheme
NGO	Non-governmental Organisation
ODA	Overseas Development Assistance
ODI	Overseas Development Institute
OECD	Organisation for Economic Co-operation and Development
OVC	Orphans and Vulnerable Children
PPP	Purchasing Power Parity
SME	Small and Medium-sized Enterprises
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV and AIDS
UN CRC	UN Convention on the Rights of the Child
UNDAF	UN Development Assistance Framework
UNDP	UN Development Program
UNFPA	UN Population Fund
UNICEF	UN Children's Fund
UNIFEM US	UN Development Fund for Women United States
VAT	Value-added Tax
WB	World Bank
WHO	World Health Organization

# **Executive summary**

# 1. Introduction

The global economic downturn of 2008/09, coupled with the food and fuel crises, has exacerbated poverty and deprivation through shrinking employment opportunities, reduced wages and remittances, declining levels of demand, and cuts in government expenditure – especially with regard to basic services. But the chief long-lasting impacts of a crisis are most likely to affect children. When children are withdrawn from school, required to work, suffer early life malnutrition or are victims of neglect or violence, this is likely to have long-term, often lifelong, and even intergenerational consequences. The extent to which an economic crisis intensifies these phenomena – as well as policy responses to crisis episodes – is thus a matter of major concern (see Harper et al., 2009).

The impacts of the 3F crisis in Nigeria remain largely under-analysed, due in part to the dearth and poor quality of existing data. This report presents the findings of a study that maps the impacts of the 3F crisis on vulnerable social groups, particularly women and children, as well as related coping strategies undertaken by households across Nigeria's six socio-economic zones, as a means of addressing gaps and contributing to existing work.

## **1.1 Analytical framework**

Understanding the links between a crisis that originates at an international level and outcomes that affect children at local levels is a complex endeavour, as the channels of impact are many, often non-linear and operate at different levels. In order to reflect the heterogeneity of the three different crises, this analysis adopts three key conceptual frameworks accommodating the multiple and often contradictory complexities and linkages of the crises. Through mapping the various possible channels of transmission of the crisis impacts from the macro through to the meso levels, the frameworks are proposed as critical tools of analysis for examining the effects of different types of crises on child wellbeing.

# 1.2 Methodology

The research methodology for this study consisted of a mixed methods approach entailing (i) a comprehensive review of secondary literature; (ii) an analysis of nationally representative household surveys, complemented by a household survey in two sites; (iii) Key Informant Interviews (KIIs) with government, donor, NGO and academic stakeholders; and (iv) Focus Group Discussions (FGDs) and (v) In-Depth Interviews (IDIs) with community members.

# 2. National Context

Nigeria has become a dominant economic force in sub-Saharan Africa with a strong economy<sup>1</sup> and booming oil and agricultural sectors. However an over-dependence on the production and export of oil, as well as food imports, has rendered the economy vulnerable to global price fluctuations. Downturns in government revenues are transmitted to states through reductions in federal transfers and expenditure cuts on employment and services, as well as reduced remittance and FDI flows (Ajakaiye and Fakiyesi, 2009).

<sup>&</sup>lt;sup>1</sup>Annual average growth rate: 6% (UNDP, 2009)

Ethnic and religious conflict among Nigeria's 154 million-strong population has become a social concern, and poverty, gender discrimination and violence against children and women have been on the increase, which is not helped by existing weak social security systems (IRBC, 2007). Today, resource distribution remains inequitable, and some 20% of the populace controls 65% of national wealth (UNDP, 2009). Extreme poverty spiked from 6.2% in 1996 to 22% in 2004, and food poverty reached 35% the same year (UNICEF, 2008a), with 64% of the population suffering from multiple deprivations (UNDP, 2010). Indicators of the existence of child poverty and deprivation are prevalent, namely: high child and infant mortality rates, low education completion rates, and high levels of child labour. Poverty also remains highly gendered, with women constituting the majority of the poor, unemployed and socially disadvantaged.

# 3. Impacts of the crisis

## 3.1 Macroeconomic shocks

## 3.1.1 Food and fuel prices

*Food shocks:* The pronounced peaks and troughs of food price fluctuations between mid-2005 and early 2008, coinciding with the rise and fall of international food staples and erratic weather conditions, have had important adverse effects on Nigeria as a net importer of food staples, with poor net food buyers and subsistence farmers facing disproportionate difficulties in managing these shocks.

*Fuel shocks:* In line with global evidence, fuel prices display a lower short-term variability than food prices in most states, confirming that food prices tend to be subject to more sudden shocks in the short-run than fuel prices. The Nigerian government has addressed the international fuel price volatility by subsidising the pump price. However, our analysis suggests that fuel subsidies may have a muted effect in cushioning the impacts of rising fuel costs on household consumption patterns across the sample states, especially among the poor whose access to petroleum products, and kerosene in particular, remains scarce and unpredictable.

## 3.1.2 Financial crisis

Changes in exports, via the reduction in both demand and price of oil, are likely to be the key channel through which macro effects of the recent global financial crisis are manifested in Nigeria. This channel has operated primarily through a reduction in government revenues due to an abrupt drop in international oil prices<sup>2</sup>, combined with declining export earnings and balance of trade, which filtered through to the exchange rate<sup>3</sup>, inflation, foreign investments, external reserves and the current account.<sup>4</sup>

Additional channels through which the financial crisis has impacted upon Nigeria:

- **FDI flows** decreased by about 14% from 2008-2009<sup>5</sup>, which in turn impacted on productive capacity and balance of payments;
- Remittance flows were identified as having declined to a point of inducing adverse effects at the household level (4% decline between 2008-2009 (IMF, Central Bank of Nigeria))
- Access to credit appears to be even more limited among poor groups as macro effects extend the credit squeeze to microfinance organisations and their clients;

<sup>&</sup>lt;sup>2</sup> Oil prices dropped dramatically from US\$147 per barrel in July 2008 to US\$47 per barrel in January 2009.

 $<sup>^3</sup>$  The All Share Index dropping 68.5% from March 2008-March 2009 and market capitalisation tumbling 63% in the same period.

 <sup>&</sup>lt;sup>4</sup> According to the IMF's World Economic Outlook figures, general government revenues suffered a 38% decline in 2009, leading to a substantial deficit of N1.09 trillion with subsequent implications for social sector allocations.
<sup>5</sup> UNCTAD

• **Economic growth and pro-poor development** are disconnected, as relatively strong GDP growth has failed to lower unemployment or poverty levels

## 3.2 Impacts on employment, income and household consumption

### 3.2.1. Employment and income outcomes

While Nigeria has already been facing an unemployment crisis in the formal labour market that predates the crises (experiencing a sharp drop in public sector employment from 15% in 1999 to 10% in 2006), our analysis reveals some specific and complex effects of crisis-related shocks on employment and income levels. Overall, we find that the **financial crisis** has exacerbated to some extent the pre-existing unemployment problems in the formal labour market (increasing unemployment from 12.3% in 2006 to 14.9% in 2008, and then up to 19.7% in 2009 and 21.1% in 2010 (NMSEGS 2010<sup>6</sup>)), and that household incomes have been squeezed for a number of reasons. A combination of global and domestic factors associated with financial shocks, such as credit rationing, drops in FDI, currency devaluation and dropping consumer demand have contributed to these outcomes. In terms of the **food and fuel crises**, poor households have been forced to take on additional work or to work significantly longer hours to offset the rise in prices. At the same time, there is an indication that the food price increases have benefited some crop producers as far as real income is concerned; however, the number of farmers in a position to take advantage of this situation appears to be limited.

#### Income

The LKHS survey data analysis shows a decline in real incomes among the poor over the 2007-2010 period, irrespective of the state and area of residence. This is corroborated by qualitative evidence that reveals a general perception of real incomes declining over the past three to four years, as prices of food, transport and other basic goods have risen. In addition to hikes in food prices, household incomes have been squeezed from a number of different directions including job loss, pay cuts, wage delays and in some cases, declining remittances. At the same time, data suggest that food price increases can benefit crop producers as far as real income is concerned, with important heterogeneity in outcomes between and within states.

#### Labour patterns

Overall, food and fuel price shocks, compounded by declining real incomes, generate pressure for people to work harder in order to earn more income to cope. While multiple jobs are already a common Nigerian coping strategy, there has been evidence in both quantitative and qualitative research of increased diversification of livelihoods in response to the crises, predominantly in the informal sectors:

- Approximately 15% of households in rural communities (vis-à-vis urban areas) increase their working hours in order to cope with food and fuel price variability.
- Nearly 10% of rural HH engaged in additional casual work to compensate for the loss from external shocks.

We also find that changing employment patterns have important implications for women and children:

- **Women** (and mothers particularly) are increasingly employed in off farm paid labour and are working longer hours to contribute additional household income (particularly among poor farming households).
- Already an important source of income, **child labour** was exacerbated during periods in which financial crises were observed, with LKHS survey revealing an increase in hours worked among children from 98 hours per month in 2008 to 106 hours per month in 2009.

<sup>6</sup> NBS 2010c

## **3.2.2 Access to credit**

While the poor faced challenges in accessing loans before the crisis, there is evidence of financial shocks further exacerbating credit access, particularly through microcredit channels. Informal lending remains important; however there are some indications of a reduction in informal sources of lending, particularly impacting upon women (NBS, 2006). At the community level, several respondents noted that communities' access to bank loans and NGO microcredit has dried up in recent months. In Edo, those few with access to lending complained of growing access constraints due to more stringent conditions put in place by the banks, and one key informant cited large-scale loan defaults.

## 3.3 Changes to the consumption capacity of households

Declines in purchasing power have led to alteration of household expenditures, including decreased access to basic services and reduction in quality and quantity of food, and these changes have important gender, age and ethnic dimensions. Respondents frequently reported that the food and financial crises have trapped families in poverty, thereby compounding preexisting levels of deprivation and further limiting agency to adopt constructive coping responses.

## 3.3.1 Food consumption

For the majority of households across sampled states, food price rises have resulted in growing food insecurity (particularly in urban areas), which has also been linked to sustained declines in food production, as well as reduced household budget allocations for food. For some, food and fuel shocks have led to modification of consumption, including the purchase of cheaper and less nutritious food staple substitutes, cutting back on meals, and in dire circumstances, scavenging and/or going hungry. Food insecurity also had strong gender and age dimensions – for instance in Benue, male heads of households (Benue IDI 1,2,3) reported that they ate first, considering it a matter of right as the breadwinner, before women were allowed to eat themselves, even during pregnancy (KII6). In Benue and Imo, there were a number of reports of children as well as adolescents going to school with little or no food (FGD 1).

## 3.3.2 Fuel consumption

Qualitative analysis suggests that despite the government fuel subsidies, fuel shortages – and kerosene in particular – continue to affect poor communities. Poor households are often relying on alternative fuel options (such as gas or kerosene) as a way of coping with the decline in budgets and limited supply of fuel on regulated markets (FGD 1-4). Other fuel options, particularly for chronically poor households, include firewood, charcoal, sawdust, processed palm fruit skins and candles. Children also seem to be directly affected by fuel shocks, with families sending them to scavenge for firewood and sawdust before or after school, which, as well as the potential for physical risk, also has negative implications on their schooling (Edo).

Furthermore, the costs of staple food items have reportedly increased due to fuel shocks, mainly via the rise of transport costs, with both food consumers and producers negatively affected. Our quantitative analysis has not found a positive relationship between fuel and food prices; however monopolistic competitive markets, including smuggling and hoarding by middlemen, may explain this discrepancy.

### 3.3.3 Effects on health and access to healthcare

High costs and subsequently low utilisation of medical services generally pre-date the crisis; however subsequent impacts have further compromised this situation, particularly with regard to maternal and child healthcare, and diminishing household purchasing power, which has in some cases led to an inability to pay for increasing drug and treatment costs. It should be highlighted that difficulties in accessing healthcare have had a particularly dire impact upon pregnant women and children. Fuel shocks also play an important role in healthcare access, with transport costs deterring some women from even attempting to reach antenatal facilities. Health problems associated with malnutrition are also reportedly on the rise.

## 3.3.4 Access to education

Although there were strong pre-existing signs of school withdrawals due to poor quality of education, rises in school dropouts<sup>7</sup> and absenteeism were also found to be the result of growing difficulties in affording school costs and transport fees, especially in rural areas. In many states, children are perceived as an essential workforce, and the opportunity costs of education among poor families are high in the context of increasing financial hardship. In contrast, states more dependent on fuel-related consumption were found to experience a less severe drop in school retention when domestic petrol prices increase, pointing to the ability of more affluent states to maintain their children's education in the face of fuel shocks. Moreover, strong gender bias was evidenced across states, with girls often withdrawn from school to ensure boys' or younger siblings' education, and quantitative evidence suggests that being a girl increases the probability of early dropout.

## **3.4 Social impacts**

## **3.4.1 Informal networks of support and community solidarity**

Community solidarity and informal networks of support, such as associations/community groups, extended kin and family, and faith-based organisations, were all cited as a key sources of support in coping with various shocks and dealing with long-term poverty. These groups often not only offer assistance in finding work and financial assistance for critical expenses such as healthcare and education, but also can provide critical social capital and psychosocial support. However in some cases this form of support has been eroding, with some community-based lending groups disbanding when members cannot afford to repay their debts; even the former support of friends was perceived to be weakening in urban Edo due to financial hardship. This deterioration has critical implications for social protection policy.

Support provided by non-state actors was considered by participants to be uneven with regard to coping with harsh economic conditions and providing communities with access to social services. NGO and FBO initiatives in urban communities in Edo and Lagos state were seen to play important roles as social safety nets. By contrast in Imo and Adamawa, NGO support in the sampled communities during the crisis was perceived as effectively absent. In the absence of effective government assistance and NGO support, communities have learned to depend mostly on self-help projects and informal forms of support.

Furthermore, the chronically poor were identified as having the least access to social networks and community support. For example, social networks had the least importance in the acutely poor SabonGari village in Adamawa, where poverty has prevented the establishment of functional community-based saving/lending groups among poor members of the community.

Finally, whilst informal community solidarity networks are critical for supporting households to deal with shocks, the insurance they provide can be limited.<sup>8</sup> Qualitative data has revealed that very poor households who lack access to informal support networks are adopting particularly harmful coping mechanisms in extreme cases in order to deal with shocks. Examples include people resorting to: illegal livelihoods; sex work; hazardous and exploitative child labour; and distress sale of assets.

# 3.4.2 Intra-household dynamics

<sup>&</sup>lt;sup>7</sup>Net public school enrolment fell from 84% in 2003 to 82% in 2009 with much variation between States (NLSS and HLSS Surveys).

<sup>&</sup>lt;sup>8</sup> This is particularly true with regard to idiosyncratic shocks, For a discussion, see Paul Gertler and Jonathan Gruber (2002) "Insurance Consumption Againts Illness" American Economic Review 92(1), pp 51-70, and Marcel Fafchamps and Susan Lund (2003) "Risk-Sharing Networks in Rural Philippines", Journal of Development Economics, 71(2), pp 261-287

There is evidence from qualitative research of financial stress re-shaping gender and intrahousehold relations, with women (and often children) having largely assumed increased responsibility for the household economy, with resultant challenges to traditionally patriarchal household decision-making. This is in line with evidence from elsewhere detailing results of crises effects (Harper et al 2009). Generally, changes are driven by an altered locus of economic power associated with women adopting the role of the main income earner, though this responsibility has not always resulted in greater autonomy within the household – instead leading to time poverty, mental health problems and domestic violence. Entrenched gender inequality not only shapes women's experiences of vulnerability, but also their ability to protect themselves from shocks and adopt constructive coping mechanisms, as women generally have less access to food, assets and social support networks than men.

## 3.4.3 Impacts of shocks on children's rights

All of the above-mentioned impacts have multiple and intersecting implications for the welfare of children. Even short-term crisis impacts can erode children's future abilities to cope with shocks, with enduring effects on their wellbeing (Harper et al., 2009b). However, the nature of these issues means that reliable quantitative data are very scarce. Other than statistics on child labour, official data concerning trends (post-crisis situation) are not available. This section therefore primarily discusses insights from our fieldwork, drawing also on pre-existing trends to highlight potential impacts.

Children's human rights have been compromised in the following ways:

- **Right to survival:** Changes in the consumption of varied and necessary amounts of food are disproportionately affecting children's nutritional and health status. Changes in provision of healthcare and consumption capacity have particularly affected maternal and child healthcare.
- **Right to development:** Shocks have compounded educational deprivations, especially among girls and rural children, with evidence of school withdrawals and increased child work. Child labour and early entry into often hazardous forms of work impacts on children's schooling and exposes them to physical and psychological risks.
- **Right to care, nurture and protection:** The quality and availability of care for children has been diminishing primarily as a result of widespread and severe poverty, broader breakdown of traditional values and systems of care, and urbanisation. In the context of the global shocks, there is an indication that unemployment and domestic instability have heavily impacted upon parents' ability to provide for and protect their children. Whilst data in this area is typically difficult to find, there are indications from qualitative research that these changes have resulted in some children being exposed to dangerous, exploitative and even life-threatening situations, and many others to ongoing abuse and neglect such as child labour and sexual abuse.

# 4. Formal economic and social policy responses

## 4.1 Macro policy responses

Several actions were adopted by the Nigerian government to counteract the economic disruptions of the crisis, increase the liquidity of the domestic economy and stimulate employment generation:

- Extension of support to the banking sector in the form of capital injections, which, to date, have had only limited impact on access to credit for the poor
- **Introduction of a fiscal stimulus package** focusing largely on private, sector-led growth

• **Expansion of fiscal space** by drawing extensively on the Excess Crude Account and Foreign Reserves in 2009 and 2010

Nevertheless heavy criticism abounds, with many noting that among other things coverage is insufficient, policies tend not to reflect a pro-poor agenda, the particular concerns of vulnerable groups and individuals are not addressed, and inadequate attention has been given to emerging child- and gender-related vulnerabilities in programme design. Declines and inadequacies in social sector spending at the federal and state levels have also raised the importance of improving public finance management and coordination (OSSAP-MDGs, 2009), as well as transparency.

## 4.2 Food security measures

In 2007-2008, as part of the efforts to address food insecurity, the Federal Government took a number of timely actions to ensure that (staple) food was available at an affordable price and food stocks were managed effectively. However, measures have been described as provisional in nature (KI8) and lacking a critical social protection focus that effectively targets nutritional needs among vulnerable groups – especially children under five, pregnant and young lactating mothers and HIV positive individuals and the chronically ill (KI2; UNICEF, 2006). Although in recent years Nigeria has made various attempts to strengthen community-based nutritional services including child growth monitoring, vitamin A and iron supplementation programmes, as well as advocacy for exclusive breast-feeding, the implementation of these remains weak, as these programmes appear to be chronically under-funded, and overall have received minimal attention from the Nigerian Government, despite widespread malnutrition across the country (and in rural areas in particular). Moreover, the fact that large-scale commercial agriculture development was prioritised in the government's responses over the needs of smallholder farmers also drew public criticism (KI4). In qualitative fieldwork, communities were openly critical of the government's failure to adequately respond to the food crises and to provide encouragement and assistance to small-scale farmers.

## 4.3 Labour measures

The following three interventions initiated by the government in April 2009 warrant noting:

- Settling outstanding wage arrears and benefits in a number of public sectors, which has important implications for the poorest wage labourers
- Design of a short-term public-works scheme, targeting able-bodied and out-of-work youth in order to provide a transitory short-term income support to the unemployed, and to reduce the existing significant deficit in physical infrastructure
- Allocation of a supplementary budget of N500 million to the National Directorate for Employment, which has supported existing projects such as the Vocational Skills Development Programme that provides training for unemployed school leavers and school drop-outs

These are positive but limited measures, and the overall response is characterised by some important gaps in terms of addressing the specific vulnerabilities of poor and excluded individuals and families. In particular, concerns have been expressed that government employment support does not resolve long-term employment issues, and does not deal with persistent deficits and long-term requirements needed to address poverty and other forms of deprivation and exclusion among women and children (Barrientos and Niňo-Zarazua, 2011a).

# 4.4 Social Policy and Social Protection responses

Analysis of the government anti-crisis response reveals that despite the generous fiscal stimulus package, new or expanded measures introduced by the government to cushion vulnerable groups against the economic and social impacts of shocks have been limited. Moreover, inadequate attention was given to emerging child- and gender-related vulnerabilities in programme design, both at the federal and state levels.

Notably, social protection and social assistance as a percentage of government spending was on a downward trend between 2007 and 2009 – the most critical period of shocks, when demands for assistance expanded. Whilst social protection has shown a threefold increase since 2009<sup>9</sup>, this is still at a much lower level than the other social sectors, despite its importance to cushion the effects of crises on the poor.

In qualitative data, for example, we have identified a number of social protection activities at federal and state levels (see boxes 9, 10 and 11): the most popular include the "In Care of People Programme" (COPE); the National Health Insurance Scheme (NHIS); and a Maternal and Child Health Programme. Most programmes however were considered to be providing too little protection and typically the government assistance was perceived as acutely lacking by communities. Respondents demonstrated little or no confidence in the government in addressing their economic and social vulnerabilities, irrespective of the crisis.

Existing social protection mechanisms are not robust enough, in terms of both coverage and design, to provide adequate support to vulnerable populations, revealing the following preexisting weaknesses:

- **Insufficient coverage** Existing social protection measures are still small-scale, relatively new and have yet to be rigorously evaluated. The COPE programme, for example, appears to have a very limited coverage less than 0.001% of the population (Holmes et al., 2011).
- **Unpredictability** As social protection programmes are increasingly financed from state and local government budgets, substantial efforts are required to garner political and institutional support and strengthen government capacity to promote the expansion of social protection instruments.
- **Institutional challenges** Limitations in capacity to formulate, deliver, and evaluate programs are a key constraint, as is the scalling up key social protection programmes to reach substantial swathes of the poor. Other challenges include: limited transparency and accountability in management of public resources at all levels of government; weak sanctions; and low capacity of the civil service to design, monitor and implement policies at the state level.

#### Weak child-sensitive social protection and child protection measures

Despite demands made by communities interviewed in the qualitative component of the study, the government has failed to prioritise nutrition in the anti-crisis response, apart from small-scale school-feeding initiatives in several states. Community-based nutritional programmes are chronically underfunded, and other social assistance initiatives that have an important child-sensitive focus (e.g. Maternal and Child Health Waiver programme and COPE) provide woefully inadequate coverage. Interviews with communities and government officials in sampled states revealed that the current child protection system is still very fragile, lacking long-term political and financial commitments.

<sup>&</sup>lt;sup>9</sup> The increase seems to come mainly from higher state-level expenditure, but it is not clear why states increased funding in 2010.

# 5. Policy Implications

#### Policies designed to boost economic growth:

- Raise revenues through taxation for example raising VAT on tobacco and alcohol and earmarking revenue for social sector budgets; raise taxation on, or renegotiate the terms of contracts with, foreign companies involved in the exploitation of natural resources such as oil.
- Reducing tax-evasion policies via the strengthening of tax collection systems.
- Shifting expenditure from other areas to social sectors: for example, there could be exploration of generalised subsidies that show large leakages to the non-poor while diminishing the tax base.

Based on the impacts summarised in previous sections, the following short/medium-term and longer-term policy recommendations are suggested:

# Alleviating food insecurity and adverse nutritional impacts caused by rising food prices by:

In the short/medium term, the government needs to expand measures to protect poor and vulnerable populations such as:

- Expand funding and strengthen the implementation of the community-based nutrition programmes focusing on children, pregnant women and lactating mothers;
- Better manage the food supply across states and adequate regulation of food markets

In the long-term:

- Institute policies to address systemic weaknesses in food production and supply and strengthen people's long-term food security by increasing support to smallholder farmers;
- Undertake more concerted efforts to address the ongoing fuel crises

# Support household incomes through social protection policies in order to reduce the risk of damaging coping strategies by:

- Scale up and improve the effectiveness of existing social protection programmes among the most vulnerable, including adolescent 'breadwinners' and out of school children, focusing on the NAPEP's conditional cash transfer program (COPE) and NHIS Maternal and Child Health Programme;
- Strengthen state government capacity to promote the expansion of social protection instruments and proceeds through the roll-out of a community-based health insurance scheme (CBHIS)

# Provide support to families to preserve their access and utilisation of basic services in times of crisis:

- Provide incentives for families to keep children in school, focusing on the most vulnerable individuals and poorest households;
- Expand primary school feeding programmes to ensure that quantity and quality of food children receive is not compromised;
- Improve quality of education and strengthen infrastructure across states, with a specific focus on rural areas;

#### Strengthen child protection systems and programmes by:

- Substantially expanding financial and human resources to implement Child Rights Act legislation and monitor budgets to assess the level and efficacy of spending;
- Strengthening capacity and awareness among officials working in child welfare areas and social workers dealing with vulnerable families and children and promoting collaboration and synergies across government agencies;

- Strengthening the capacity both technical and financial of existing local childprotection committees and the family court;
- Supporting efforts to translate the Child Rights Law into local languages for wider distribution and comprehension; encourage states to adopt legislation that prohibits the violation of women's/girls' rights (mostly importantly with regard to early marriage);
- Strengthening support to effective ongoing initiatives and actors working to sensitise the public about children's rights and child abuse; and promote the participation of children and adolescents in public fora.

# 1 Introduction

The global financial crisis, which began in the developed world in mid-2008, impacted significantly upon northern economies, causing many to sink into recession. However the Triple F crisis (food, fuel and finance), has hit developing countries particularly hard in regard to poverty levels, with the World Bank estimating an increase in the number of global poor – reaching between 53 and 64 million people in 2009 (Chen and Ravallion, 2009).

The impacts of the three crises in Nigeria remain largely under-analysed. Although the national economy was characterised by relatively strong growth in the years prior to the crises (with real GDP growth measuring 5.4% in 2005, rising to 6.2% in 2006 and 7% in 2007), real GDP dropped to 6% in 2008 (IMF, World Economic Outlook database), and an overdependence on oil exports and food imports has rendered the economy vulnerable to international fluctuations in prices. This situation – in conjunction with contractionary measures adopted by developed countries in response to the global crisis (such as cuts to aid budgets, reigned-in foreign investment and increased levels of unemployment) – could have acute implications for the Nigerian economy, with concomitant effects at the state and ultimately household level.

At the national level, responses to global crisis conditions often inevitably include reductions in social sector spending, which can have important consequences for human development at the micro level. The World Bank considers Nigerian households to be 'highly exposed' to the financial crisis, and therefore vulnerable to risks of hardship and poverty (Cord et.al, 2009). The disproportionate impact of aggregate shocks on the poorest sections of society and those least able to cope with crises has been widely acknowledged, as has the importance of government policy responses in mitigating or exacerbating such impacts.

Poor households also commonly adopt negative coping strategies in response to crises, which have a similar potential for long-term detriment. For example, withdrawal of children from school, reduction in food consumption and substitution of less nutritious food, the use of cheaper healthcare and treatment options, the pawning or sale of household assets, and intensification of both adult and child labour have all been widely identified as key social impacts of the 3F crisis (see for example, Mendoza, 2009 and 2010; Ortiz *et al*, 2010; Bakrania and Lucas, 2009; Hossain, 2009).

In relation to effects on vulnerable groups such as women and children, significant gaps exist in both baseline and current data, hindering identification of the key social impacts of the crises and the development of informed debate around appropriate government responses. Given the experience of previous crises, all countries need to consider impacts on children and their caregivers. Increases in child mortality and morbidity, child labour and exploitation and violence against children and women, as well as declines in school attendance and the quality of education, and the nurture, care and emotional wellbeing of children can all be traced to times of economic crisis (Harper et al., 2009; Hossain et al., 2009).

This report presents the findings of a study undertaken in partnership with independent national consultants, comprehensively mapping the impacts of the 3F crises on vulnerable social groups, particularly women and children, as well as related coping strategies undertaken by households across Nigeria's six socio-economic zones. The study's scope was substantial, covering a wide range of possible economic and social impacts experienced by diverse households and individuals in disparate sub-national contexts. Of particular importance was ascertaining how a fragile state context shapes the way that policy responses mediate impacts of economic shocks on women and children, and simultaneously interact (either positively or negatively) with informal coping mechanisms. A central concern of the study has also been to determine how to better understand crisis impacts in a context where data is inadequate in revealing the specificities of such experiences and vulnerabilities. Through identification of the pervasiveness of the effects of the crises on vulnerable groups, as well as the use of various formal and informal coping mechanisms, this report aims to develop a strong evidence base with which to support UNICEF and the Government of Nigeria's understanding of crisis impacts and related social protection requirements and policy response options. This will ultimately strengthen initiatives aimed at addressing the MDGs and achieving "Nigeria Vision 2020", and will contribute to UNICEF's future evidence-based strategy development. The findings also draw upon insights from ODI and its partners' recent primary and secondary analytical work on transmission channels of 3F crisis impacts. They also have an important synergy with a parallel study, "Social Protection Diagnostic and Forward Agenda for UNICEF", currently being carried out by ODI and research partners in Nigeria.

This report first outlines the analytical framework and methodology employed for the study before describing the pre-existing economic, political and social context in Nigeria. The impacts of the crisis are then discussed, with individual sections detailing the various levels and dimensions of crisis impacts, as well as the coping strategies of vulnerable populations. Finally, policy implications are considered.

# **1.1** Analytical framework

Understanding the links between a crisis that originates at an international level and outcomes that affect children at local levels is a complex endeavour, as the channels of impact are many, often non-linear and operate at different levels. Some crises, including the current financial crisis or the impact of commodity price fluctuations, fundamentally originate outside a country; others may be a combination of both internal factors and external dimensions such as the food and fuel crises. Crises have important macro-level impacts at the country level by affecting government revenue or international trade and, at a more micro level, they affect producers, consumers, communities and households. However the extent of impacts at these levels can also be shaped by government actions. How a crisis affects households, communities and governments substantially influences its impact on children. Mapping the impact pathways that trace changes from the global macroeconomic environment through country-specific policy and national and sub-national institutional frameworks to the community, household and individual levels reveals how changes at the macro-level brought about by the Triple F crisis translate into meso- and micro-level effects on women and children.

A number of the channels in the framework, in particular the macro channels, may not be applicable in all cases; but nevertheless an important number of commonalities emerge and are of relevance to contemporary debates. How households react to a contractionary environment and possible reduced access to government services as a result of crisis is mediated, not only by intra-household power and resource dynamics, but also by policy responses. The latter are likely to be shaped by local governance arrangements, relationships between national governments and international financial institutions (IFIs), as well as the relative importance and effectiveness of domestic civil society. Pre-existing basic service infrastructure and social protection systems are also key in influencing the ability of households to cope effectively with economic shocks (Harper et al., 2011).

In order to reflect the heterogeneity of the three different crises – food, fuel and financial – this analysis adopts three key conceptual frameworks. This approach aims to facilitate a more nuanced understanding of the individual and often contradictory complexities of the crises, and serves to reflect the multiple overlays and inter-linkages that frequently interact to compound effects and reinforce the intractability of resulting development deficits. Figures 1, 2 and 3 set out diagrams mapping the various possible channels of transmission of the effects of the financial, food and fuel crises respectively, from the international and macro level (top of diagram), through the meso level (middle of diagram) to the micro level (bottom of diagram). These diagrams are proposed as critical tools of analysis for examining the effects of different types of crises on child wellbeing. Accompanying each diagram is a more detailed explanation of the various layers and factors at play.

#### 1.1.1 Finance

Figure 1 illustrates the macroeconomic environmental dimensions of reduced financial flows, remittances, trade and aid with regard to the **financial crisis**, and intermediate effects including declining investment in public services, higher unemployment, diminished consumption capacity and reduced access to credit. Governmental policy responses shape the way that these then affect household functioning, which translate into children's experiences of poverty through intra-household dynamics and household composition factors. Identifying the scale and duration of these potential effects at each level is clearly important.



# Figure 1: Framework to understand possible effects of the financial crisis on child

### Macro

The macro-level channels through which the global financial crisis has been displaying its effects are more complex, as the pathways (remittances, international financial flows, trade and foreign aid) are numerous and multifaceted. The effects of the financial crisis are also tied to the fuel crisis, and a channel through which it has manifested its macro effects in Nigeria is the trade / export channel - via the reduction in both demand and price of oil. At the international level, the reduced availability of financial flows from the private sector is a key potential impact whereby direct and portfolio investment flows can reduce substantially because many investors are likely to be adversely hit by financial crisis (World Bank, 2009a),

while those less directly affected may become more cautious (Harper et al. 2010). Short-term capital flows may also dry up, which can be very problematic for countries that need to fund balance of payment deficits. At a time when aid is most needed in developing countries, reduced volumes are a real possibility if donor countries choose to cut foreign aid budgets as part of domestic economic austerity measures. Certainly this has been the case in previous financial crises such as that of Finland, Norway and Sweden in 1991, wherein cuts were made to foreign aid budgets when the crisis hit (Harper et al. 2010). Clearly the impact of such reductions is contingent upon the extent to which a country is dependent on aid flows. Remittances – a very important financial flow in many countries (often more than aid in aggregate, e.g. in Ghana) – may also be adversely affected as international migrants residing in richer countries may lose their jobs or face reduced pay or greater job insecurity. Other migrants may be required to return home (creating the additional problem of their reintegration) (Bauer and Thant, 2010).

#### Meso

Perhaps the most significant impact of macro conditions on foreign exchange earnings and aovernment revenue is the resulting increased difficulty in borrowing internationally. Not only could reduced levels of international borrowing limit the ability to import and export goods (particularly as Nigeria is a net-food importing country) but it could also restrict funding options for the government – consequently increasing the role of IFIs such as the World Bank, who frequently step up lending in crisis situations<sup>10</sup> (Harper et al., 2011). Reduced access to credit at the fiscal level is likely to have a knock-on effect on credit access, particularly in the micro finance sector, as it receives support from the Central Bank via refinancing and guarantee facilities. According to the World Bank, women are particularly vulnerable to credit crunches in the microfinance sector, where they comprise 85% of the poorest 93 million microfinance borrowers across the globe. Other intermediate effects include: declining investment in public services (the World Bank (2009b) estimates that financing shortfalls visà-vis core spending on health, education, safety nets and infrastructure amount to \$11.6 billion for the poorest countries); unemployment, with layoffs initially in export-oriented industries; cuts in working hours and a shift towards the informal sector; diminished consumption capacity; and reduced access to credit.

#### Policy

Government policy responses shape the way in which these intermediate effects impact at the household level. One key measure undertaken by a number of governments to date has been the implementation of a fiscal stimulus package, although many countries struggle to afford this and cannot protect core spending on public services or spend directly to protect jobs and vulnerable people. The range of social policy responses within such a package can include employment generation and unemployment payments, support to a range of social protection policies, and boosts to/maintenance of health and education services. These policy choices can be difficult to make at a time when the economy is contracting, although there is some evidence from past crises that doing so maintains human capital and actually speeds up recovery (Harper et al., 2009).

#### Micro

The issue then is how households react to the contractionary environment and possible reduced access to government services. An important dimension of this entails labour market responses, as some household members may need to work harder or differently in order to manage these changes. Some adults who did not work previously may be required to; others may need to work longer hours; some may be forced to migrate domestically to another location; and there may also be increases in child labour as households struggle to cope. Children may be withdrawn from school. There is evidence of some of these effects in relation to other crises in Brazil (Duryea et al., 2007), urban Latin America (Moser, 1998), Indonesia (Frankenberg et al., 1999), Tanzania (Beegle et al., 2008) and Ethiopia (Woldehanna et al., 2008), among many others. There are also often important gender dimensions to labour

<sup>&</sup>lt;sup>10</sup> See, for instance, http://www.worldbank.org/financialcrisis/bankinitiatives.htm.

market changes. It is often women who are forced to work harder, and sometimes they are forced into degrading activities (ESCAP, 2003; Harper et al., 2009; Shin, 1999). Another more desperate coping mechanism that households sometimes employ is the sale of assets. Even if they help to maintain immediate consumption, the distress sales of assets exacerbates the likelihood of long-term chronic poverty from which households may face considerable difficulty escaping.<sup>11</sup> In general, the pressures on parents to adjust to a more difficult or pressurised work environment are likely to adversely affect both the quality and the amount of time they can invest in childcare. Additionally, some forms of work that households might adopt as a coping response, such as commercial sex work, may have serious adverse impacts on the household in general, and on children in particular (Harper et al., 2009; Lee-Rife, 2007).

#### **Child outcomes**

Different effects of the crisis, and measures undertaken by governments to mitigate them, shape children's experiences of poverty through reduced household incomes and purchasing power, increased household stresses, and changing intra-household dynamics and household composition factors. Intra-household conditions have wide-ranging effects – with reduced consumption, protection and time being just three factors contributing to declining child wellbeing outcomes. Identifying the scale and duration of these potential effects at each level is clearly important. Experience from previous crises indicates a range of often interlinked potential impacts on children. These include: increases in child mortality and morbidity; child labour; child exploitation; and violence and other forms of abuse against children and women; alongside declines in school attendance and quality of education; the erosion of nurture and care for children; and negative impacts on child emotional wellbeing. Many of these impacts have long-term, life-course and sometimes intergenerational implications.

#### Food

The food and fuel crises follow similar macro- to micro-level patterns, with differences in some of the pathways, effects and policy responses. **Figure 2** illustrates the dual transmission flows characterised by the increase in **food prices** as they relate to Nigeria's particular position as a net importer of agricultural products. The resultant dimensions of both gains and losses from variable food price changes follow, including the increased cost of food at the border and the impact on food subsidies and taxes on the import side, and the decreased availability/increased cost of food production inputs on the export side.

#### Meso

As a net importer of food Nigeria is likely to experience significant negative impacts on transmission flows at the meso and micro level, correlating with international food price increases. At the meso level, price hikes may result in a decrease in the amount of food imported, thereby incurring further price increases at the community and household levels, and/or the diversion of government funding from social services to food imports, resulting in potential human development deficits. However, it is important to note that Nigeria does export some agricultural products which, while not on the same scale as its imports, nevertheless yields noteworthy potential for mediating the impacts of other crises, depending on the level of international demand. However, it should be recognised that a household's capacity to benefit from this trend is contingent upon their status as a producer/consumer. In any case, such a trend should not be taken for granted, as highlighted by the Food and Agriculture Organisation (FAO, 2009) who, citing a recent US Department of Agriculture (USDA) economic research service project, reports that lack of access to capital, poor infrastructure, limited technology, limited information, few inputs and lack of quality seeds are significant obstacles preventing local farmers from responding to the higher food prices. An implication of this finding is that the higher prices do not necessarily translate into higher incomes for farmers. For example, in Ghana subsidies for fertiliser and tractors provided by the government targeted at poor farmers were not able to induce farmers to make purchases,

<sup>&</sup>lt;sup>11</sup>Conceição et al. (2009) report evidence of many of these outcomes based on field reports of the effects of the crisis across multiple countries.

since farmers still could not afford them. There were therefore no improvements to the welfare of farming households in rural communities (Harper et al. 2010).



#### Micro

For those households that are not sellers of agricultural products, food price increases would reduce household purchasing power, resulting in the diminishment of real incomes (if the case is such that nominal incomes do not adjust). In order to adapt, households may react by adjusting their consumption bundle – for example buying poorer quality goods and reducing food consumption.<sup>12</sup> Children may be taken out of school to mitigate costs and engage in income generating activities for the family; women may be required to take on a greater workloads, which - when combined with care duties - may increase time poverty levels, or indeed, lead to undertaking risky or exploitative income generation activities.

At the same time, increases in food prices may in fact benefit households that are sellers of agricultural products - the idea being that the higher the price, the higher the household

<sup>&</sup>lt;sup>12</sup>Wodon et al. (2008a) provide empirical evidence that a 50% increase in the prices of selected food items (rice and other cereals) shows up in an average increase in the share of the population in poverty of 2.5-4.4 percentage points. The impacts are even stronger for countries that are net importers of rice and other cereals. Again, the impact on urban areas is larger than that on rural areas (1.1-1.5 percentage points higher). Wodon et al. (2008b) suggest that simulations in Ghana indicate that maize farmers benefit from price increases only if those price increases translate into higher incomes for the farmers and not higher profits for middlemen.

income's share from the sale of agricultural products. As noted above, this is not necessarily always the case, but should nevertheless be considered as a potential mediating factor. Of course, all households are consumers; however, whether a household has the potential to benefit from the impacts generated by exports depends greatly on myriad factors, including the sector in which they work (i.e. agriculture or not), geographical location, environmental/agricultural hazards such as drought or floods, cost of critical goods (such as fertiliser, seeds and equipment), level of access to land and markets, and labour/financial capacity to produce beyond subsistence levels.

The impact on children stems from central- and state-level budget changes and pressures on household budgets, as well as the opportunity costs of demand for agricultural labour – ultimately displaying some similar effects as other forms of financial crisis, including societal-level effects resulting from financial pressures.

Some policy responses are also similar to those for general financial crises, but are also nuanced in relation to specific food production and agricultural issues, as will be detailed in this report.

#### Fuel

**Figure 3** - similar to the conceptual framework for the food crisis - illustrates the dual transmission flows characterised by the increases in **fuel prices** as they relate to Nigeria's particular position as both an oil exporter and fuel importer.

This specific context is elaborated further in the macro-economic section below. In brief, fuel prices tend to be subject to fewer sudden shocks in the short-run than food prices, and fuel share in household expenditure is lesser than food share – indicating that fuel price variation is less prone to influencing households' welfare than food price variation. This variation does however have some effect at the household level depending on the immediate context. An important channel of the fuel price crisis is its effect on domestic fiscal space, with falls derived from increased expenditure on fuel imports transferred to domestic budgets and resulting in reductions in core public services, employment and credit, with the reverse also being the case when export income from crude oil is high. A fuel crisis can also have an important impact on agricultural production, as fuel price increases also cause general escalations in the costs of fertilisers, food transportation and industrial agriculture<sup>13</sup>.

<sup>&</sup>lt;sup>13</sup> The increase in investment in and exports of oil may also have an indirect effect on the competitiveness on the other (non-oil) tradable sectors, through the effects on the real exchange rate. Large increases in foreign exchange inflows due to higher oil exports (as well as higher FDI) tend to put upward pressure on the RER, which is the ratio of non- tradable over tradable prices, i.e. non tradable prices will increase relative to tradable prices (which are set internationally), thus undermining the competitiveness of the domestic tradable sector at the international level. However, looking at the macro data for Nigeria (which show important increases in non traditional exports), this effect does not seem appear to be prevalent much at work in the macro data for Nigeria (which show important increases in non-traditional exports).



# Figure 3: Framework to understand possible effects of the fuel crisis on child well-

#### 1.2 Methodology

The research methodology for this study consisted of a mixed methods approach entailing (i) a comprehensive review of secondary literature; (ii) analysis of nationally representative household surveys, complemented by a household survey in two sites; (iii) Key Informant Interviews (KIIs) with government, donor, NGO and academic stakeholders; and (iv) Focus Group Discussions (FGDs) and (v) In-Depth Interviews (IDIs) with community members.<sup>14</sup>

#### Phase 1: Literature review

The first phase of the study involved a literature review, which draws on published and grey materials exploring how the food, financial and fuel crises have affected women and children globally - particularly in West Africa and Nigeria. The overview focused on macro-level issues

<sup>&</sup>lt;sup>14</sup> The study included input from the ODI Social Protection team into qualitative and quantitative research questions in order to better understand linkages between social protection programmes (both formal and informal) and experiences of the 3F crises. The SP team also undertook some joint Key Informant Interviews.

and impacts, meso- and micro-level impacts and poverty effects, and policy responses. Outputs from this phase included a draft review of literature and rationale for site selection.

#### Phase II: Development of research instruments

The literature review assisted in the development of three qualitative research instruments:

- a. Key Informant Interview (KII) guidelines (with the aim of identifying the range of economic and social vulnerabilities that women and children are facing both nationally and sub-nationally as a result of the 3F crisis, and the formal and informal coping strategies and safety nets available to them);
- b. Focus Group Discussions (FGDs) with community members (with the aim of exploring how men and women, including adolescent girls and boys, have been differentially affected by shocks both economically and socially, and how their responses and coping mechanisms vary accordingly). These FGDs assisted in the selection of interviewees for the In-Depth Interviews.
- c. In-Depth Interviews (IDIs) with community members (with the aim of exploring in detail how different categories of the population are affected by crisis-induced shocks, and how their responses and coping strategies vary accordingly paying particular attention to the role of both formal and informal coping strategies and their adequacy in crisis situations).

These instruments were complemented by two quantitative research approaches:

- a. Secondary data analysis (using existing datasets on Nigerian households to measure the impacts of the 3F crises at the household level)
- b. Household surveys (non-probabilistic and purposive selective sampling in two states)

The following activities assisted in setting out a detailed methodology and designing / refining the aforementioned data collection instruments:

#### Stage 1: Inception workshops

Consisted of capacity building of research partners through, amongst other things, discussion of key concepts, terms and methods training. The inception workshop segued into piloting of the data collection tools.

#### Stage 2: Piloting of data collection instruments

The quantitative survey was piloted amongst a sample of households selected at random in order to provide critical information about the content of the questionnaire, the sampling strategy and logistical issues. Qualitative research was executed through 2 FGDs (1 with female-headed households and 1 with male-headed households), as well as 5 IDIs and 2 KIIs, both with varied respondents.

#### Stage 3: Research training workshop

The workshop reviewed findings from the literature review and preliminary key informant interviews, outlined areas of enquiry for quantitative and qualitative research, reviewed and refined the draft data collection instruments, and developed an interviewee recruitment strategy and informed consent procedure and methods.

#### Phase III: Data collection

#### Qualitative data collection

a. Key Informant Interviews<sup>15</sup>

Approximately 30 key informant interviews were held across the six states with NGOs, government, donors and academics working on similar issues in Nigeria – all of whom are

<sup>&</sup>lt;sup>15</sup> See Appendix A for the Key Informant Interview Instrument

active in their communities. KII respondents included members of government line departments; members of INGOs, NGOs and CBOs; and community leaders and/or representatives of women's group and/or other groups. Eight KI interviews were also conducted at the national level with government representatives and national-level NGOs and INGOs.

b. Focus Group Discussions<sup>16</sup>

Approximately 18 FGDs were carried out in the six states. Participants included adolescent boys and girls, married women and married men. Through these FGDs, certain members of each community were selected for in-depth interviews.

c. In-Depth Interviews<sup>17</sup>

Approximately 72 IDIs were conducted across the six states. Criteria for selection of respondents followed a life cycle approach, with the aim of observing males and females at three stages (adolescence, adulthood, elderly). Interviewees were engaged in varied livelihood activities, and respondents were chosen both from among the extremely poor (or those having suffered greatly from the crises) as well as those identified as being financially better off (or managing to weather the crises more effectively).

These three research instruments were also used to triangulate findings from the quantitative methods and to probe further certain issues (the whys). Some IDIs were also carried out prior to conducting the quantitative survey to confirm all key areas were covered in the survey.

#### Quantitative data collection

- a. Secondary data analysis: National and state-representative household surveys The Nigerian Living Standard Survey (2003-04) and the Household Living Standard Survey (2009) were analysed in order to test for the effects of the 3F crises on a variety of measures of households' welfare. The analysis relies heavily on the use of econometrics techniques that allow for testing of the effects of various channels at both the national and state level.
  - a. With regard to the food crisis, causal inference was tested to determine both the effects of food price variations on welfare outcomes, as well as the impacts of food price variations in relation to each state's level of dependence on food consumption and food sales. Similarly, in the cases of the fuel crisis, impacts were measured via two channels: first, through the connection between fuel price variations and changes in welfare outcomes, and second, by taking into account the state's level of dependence on fuel related consumption; and the effects of changes in oil exports according to each state's level of dependence on budgetary disbursements from the federal government, as well as on state's share of public employment in total employment. With regard to the financial crisis, the analysis focuses on two major transmission channels of the crisis, namely changes in remittances according to the state's level of dependence on the flows, and changes in credit availability according to the state's level of dependence on formal credit.
- *b. Primary analysis: Household surveys*

In order to complement the quantitative secondary data analysis, a non-probabilistic and purposive selective sampling frame was adopted to operationalise a household survey in 400 households across two states of Nigeria: Kano from the North West Zone and Lagos from the South West Zone of the country. The selection criteria aimed to capture the two states' heterogeneity, and thereby the various transmission mechanisms through which the food, fuel and financial crises have affected vulnerable groups, particularly women and children. The household questionnaire was designed to

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<sup>&</sup>lt;sup>16</sup> See Appendix B for the Focus Group Discussion Instrument

<sup>&</sup>lt;sup>17</sup> See Appendix C for the In-depth Interview Instrument

capture retrospective information on current and previous welfare outcomes, going back to 2006 as the pre-crises starting point.

#### Phase IV: Data management, entry and analysis

Quantitative data was organised and cleaned primarily by means of the statistical software STATA, which was used to generate descriptive statistics such as means, medians, range, variance, as well analyse the data. Econometric techniques were used for the analysis, which aimed to measure the effects of the crises via the various channels through which they operate. Content analysis of the qualitative data was conducted to identify themes, sub-themes and categories.

Full details of the quantitative methodology can be found in the appendix.

# 2 National Context

# 2.1 Macroeconomic context

Nigeria has become a dominant economic force in sub-Saharan Africa, possessing the largest population on the continent and enough oil to constitute it as the eighth largest exporter in the world. Between 2001 and 2008, the country achieved unprecedented macroeconomic stability, laying claim to one of the fastest growing economies in sub-Saharan Africa with an annual growth rate of 6% (UNDP, 2009). This success was largely attributable to rising oil prices, though growth was particularly strong in the agricultural sector (7.4%), which constitutes over 50% of the country's jobs and contributes about 40% of Nigeria's GDP (NBS, 2010b), as well as the retail and wholesale sector (contributing 15.3%), building and construction (13%) and services (9.8%).<sup>18</sup>

This strength, bolstered by economic reform and significant foreign reserves, led to substantial confidence in Nigeria's ability to weather the global economic crisis. However a sudden drop in oil prices<sup>19</sup> and the disruption of production due to ongoing conflict in the Niger Delta<sup>20</sup> filtered through to Nigeria's stock exchange, with the All Share Index dropping by 68.5% from March 2008-March 2009, and market capitalisation tumbling 63% in the same period. Whilst this is unlikely to have directly affected Nigerian households, it does indicate a period of instability. Despite price stabilisation and production recovery to date, Nigeria's stock market has failed to make a substantial recovery (CBN, 2009). These shocks, in addition to Nigeria's declining export earnings, also had negative impacts on the balance of trade, (which was especially harsh in Q4 of 2008 at -31.6% (NBS, 2010a), although it later recovered) the exchange rate, inflation, foreign investments, external reserves and the current account.<sup>21</sup> Exports have recovered since, due to the strong performance of non-oil exports. The agriculture sector contributed 60% out of the 80.7% total contribution of the non-oil sector to GDP in the last quarter of 2008 (Ajakaiye and Fakiyesi, 2009).

The Nigerian economy has remained overly dependent on the production and export of oil, which makes up about 95% of total exports and 80% of total revenue for the country (Africa Economic Outlook; UNDP, 2009). As most state and local governments rely almost entirely

(http://www.odi.org.uk/resources/download/3310.pdf)

 $<sup>^{18}</sup>$ However in terms of national projections, the Nigerian economy was in fact underperforming prior to the crisis in 2007, with GDP growth of 6.2 % as opposed to the 10% target for the year.

<sup>&</sup>lt;sup>19</sup>Oil prices dropped dramatically from US\$147 per barrel in July 2008 to US\$47 per barrel in January 2009.

<sup>&</sup>lt;sup>20</sup>Overall production in 2008 dropped by 4.27% over 2007 figures (from over 2.5 million barrels a day to less than 800,000).

<sup>&</sup>lt;sup>21</sup> According to the IMF's World Economic Outlook figures, general government revenues suffered a 38% decline in 2009, leading to a substantial deficit of N1.09 trillion with subsequent implications for social sector allocations.

upon federal transfers for revenue, local communities have become extremely vulnerable to fluctuations in the global oil market. The ability of sub-national governments to deliver basic social services is directly tied to export earnings, and blows to the market are dealt even more severely to states that receive a smaller share of oil profits,<sup>22</sup> leaving stark budgetary variations among Nigeria's six regional zones.<sup>23</sup>

#### Remittances

Remittance flows have been identified within the micro level data as an important transmission mechanism of the crisis. In total value, Nigeria is the leading international remittance-receiving country in Sub-Saharan Africa, accounting for 65% of all remittances in the region and 2% of global remittance flows (World Bank, 2007). According to the World Bank, the flow of officially recorded remittances into Nigeria stood at around US\$3.4billion in 2008 (World Bank, 2010c).

#### ODA

Although ODA is a relatively minor form of income in Nigeria, it remains an important source of funding within the social sectors, particularly for the lower tiers of government responsible for implementation and delivery of social services and development programmes. Therefore, as the Nigeria MDG Progress Report 2010 notes, reduction in ODA levels is likely to impact on progress towards development objectives such as the MDGs. In 2005 and 2006, Nigeria was granted a US\$18 billion debt relief package negotiated with the Paris Club, and the Government dedicated the savings from interest payments to supporting pro-poor projects and programmes (Federal Republic of Nigeria, 2010b). Net ODA dropped from 1.3% of GNI in 2007 to 0.7% in 2008 (OECD). In 2008-9, approximately 70% of bilateral ODA was allocated for the health and population sector; less than 5% for education; and approximately 15% for other social sectors (OECD)

#### FDI

Due to poor infrastructure and corruption,<sup>24</sup> FDI has historically been limited to sectors with particularly high returns – namely the oil and gas sectors (Ajakaiye and Fakiyesi, 2009). This concentration of investment has further enhanced the vulnerability of the country's economic position to changes in oil prices. The financial crisis precipitated a withdrawal of an estimated US\$15 billion from the foreign investment portfolio by January 2009 (ibid), and overall FDI decreased by about 14% from 2008-2009 (UNCTAD), which has had an impact on productive capacity and balance of payments.

#### Access to credit

Difficulty in accessing credit, especially for women and lower-income households, has been exacerbated by the Nigerian banking sector crisis, which limited private sector credit and undermined public confidence in both banking and microfinance lending.

<sup>&</sup>lt;sup>22</sup> Recent fiscal decentralisation measures allocate one-third of derivation oil payments to the states; however these payments are heavily in favour of those producing the majority of Nigeria's oil. Approximately 90% of oil derivation payments (approximately US\$2billion in 2005) are distributed to Rivers, Bayelsa, Delta, and AkwaIbom. In 2010, AkwaIbom received N14 billion and Adawama, Benue, Edo and Enugu received N2 billion each. (Nigeria Federal Ministry of Finance, 2010).

Nigeria Federal Ministry of Finance (2010). *Revenue Allocation to State Governments by Federal Account Allocation Committee for the month of June, 2010*. Retrieved from

http://www.fmf.gov.ng/ViewExternalLink.aspx?id=downloads/FAAC/CurrentFaacDetail/State goverment detail.pdf) <sup>23</sup> The southern zone (with the majority of oil producing states) has the highest GDP of N8 trillion, and the Southeast has a GDP of N542 billion.

<sup>&</sup>lt;sup>24</sup> Nigeria was ranked 125<sup>th</sup> out of 183 countries in the World Bank's *Doing Business Index* in 2010, and 134 out of 180 in Transparency International's *Corruption Perceptions Index* in 2010.

# 2.2 Socio-political context

#### Demographic

Nigeria's 154 million-strong population (Federal Republic of Nigeria, 2006) is comprised of over 250 ethnic groups, though estimates have reached as high as 619 (Mustapha, 2003). The country's three numerically and politically dominant groups are the Hausa-Fulani (in the northwest), Yoruba (southwest), and Igbo (southeast) ethnicities. Nigeria's population is split relatively evenly between Islam and Christianity, and a negligible proportion belongs to other (traditional African) religions. The north is predominantly Muslim, with a mixed Christian and Muslim southwest and south central belt, and a primarily Christian southeast and south-south. The country's population is fragmented along ethnic, cultural and religious lines, and suffers from systemic structural inequalities. Approximately half the population of Nigeria is rural, half urban (NPC, 2004).

Nearly 76 million Nigerians are under the age of 18, with 25 million under the age of 5 (UNICEF, 2009). Fertility rates have declined in recent decades from 6.6 births per woman in 1970, though remain relatively high at 5.2 today.<sup>25</sup>.

#### Traditional social institutions

Traditional rulers and indigenous institutions and administrative organisations are ubiquitous in most communities, serving as custodians of culture and grassroots development. These traditional structures, including formal and informal community-based organisations (CBOs), provide critical assistance in addressing the local needs of those disconnected from formal power structures through service provision, mobilisation of community programmes, and monitoring of government projects (Erero, 2005). Various types of local organisations (faith-based organisations, youth groups, women's groups, co-operatives, etc.) have impacted upon economic, environmental and physical development, health and infrastructure, and policy matters (Abegunde, 2009).

#### Social concerns

Internal violence has long beleaguered Nigeria's population, with ethnic and religious conflict becoming one of the country's greatest social problems. This violence has taken various forms, including political confrontation, religious rioting, and interethnic attacks.

Due to weak social security systems, poverty, and gender discrimination, violence against children and women has been on the increase, and domestic violence is reportedly high in many communities (IRBC, 2007). Yet offences against children and young people are rarely if ever reported (NBS, 2009). Child marriage is widely practiced in the north, and female genital cutting is a common social custom in some areas – particularly the urban southwest and southeast – and is practiced among as many as 60% of females within certain social groups.<sup>26</sup>

#### Political landscape

Nigeria achieved democracy in 1999 following decades of military rule, however ethno-religious nationalism among the country's estimated 250+ socio-linguistic groups and a deep rift between the mainly Muslim north and primarily Christian south have precluded democratic cohesion, leading instead to widespread political fissures (Salawuand Hassan, 2011). Nevertheless, the country has made efforts to strengthen critical government institutions in recent decades, and has sought to fight political corruption engendered by its oil wealth. Its policies of political and fiscal decentralisation have channelled oil revenues to state and local governments in order to facilitate localised service provision, though allocation is inequitable

Group Meeting on Completing the Fertility Transition, New York, 11-14 March 2002, [compiled by] United Nations. Department of Economic and Social Affairs. Population Division. New York, New York, United Nations, Department of Economic and Social Affairs, Population Division, 2004 :506-528. UNICEF (2009) At a glance: Nigeria. Retrieved from http://www.unicef.org/infobycountry/nigeria\_statistics.html

<sup>&</sup>lt;sup>25</sup> Feyisetan BJ and Bankole A. "Fertility transition in Nigeria: Trends and prospects" In: Expert

UNICEF (2009) At a glance: Nigeria. Retrieved from http://www.unicef.org/infobycountry/nigeria\_statistics.html <sup>26</sup> Namely the Yoruba population; rates among the Igbo populace are estimated at 45%. (National Population Commission, 2004)

and the 3F crises have resulted in a decline in both government capacity and funding for these services.

#### **Governance structure**

The Republic of Nigeria is structured as a federation, comprised of the federal capital territory of Abuja and 36 states, which are further divided into 774 Local Government Areas (LGAs). The government functions through separate executive, legislative and judicial branches, which are exercised at the federal, state and local level, with executive and legislative branches comprised of elected officials in all three tiers. The federal executive branch is headed by President Goodluck Jonathan and the legislative branch is comprised of a bicameral National Assembly, which governs in accordance with the 1999 Constitution. At all levels of the judiciary, statutory and common law coexist with customary and sharia law (the latter practiced primarily in the north).

#### Sub-national governance

State governments are overseen by elected governors. A unicameral State House of Assembly – comprised of representatives from LGAs within the State – performs localised functions identical to those of the National Assembly, including passing legislation and allocating public funds. LGAs are each administered by a Local Government Council (LGC), which is responsible for participating in the delivery of most local public services in conjunction with state governments.

Since independence, Nigeria has undergone rapid fiscal decentralisation to lower tiers of governance. The Constitution assigns public sector responsibilities to all three levels of government, though sub-national responsibilities have increased in this regard. LGCs oversee construction and maintenance of infrastructure, working hand-in-hand with state authorities in the provision and maintenance of primary education and health services and the development of agriculture and natural resources. In order to facilitate these services decentralisation has channelled increased funding toward independent – and often un-coordinated – decisions of individual state and local governments. This has created vast potential for improvement in service delivery, as well as complications such as project duplication or abandonment due to capacity constraints and a lack of public finance management reform at the state and local levels (Frieinkman, 2007).

Over-dependence on federal funds has also undermined local accountability, as distribution relies entirely upon the dictates of local leaders. This process is evidenced by oil producing states that receive higher shares of federal revenue transfers, which do not perform significantly better than the rest of the country in terms of service delivery, and human development indicators (ibid). The 3F crises have further complicated matters, leading to a reduction or suspension of funding commitments, cuts to essential services, and loss of government jobs.

#### Inequity

Across states rich and poor, however, federal funding and economic growth alike have consistently failed to translate into improvements for the vast majority of the population. Since gaining independence over 50 years ago, Nigeria's economy has failed to ensure equitable resource allocation that keeps pace with a rapidly expanding population. Today some 20% of the populace controls 65% of national wealth. The majority of the population are unskilled labourers heavily dependent upon subsistence farming, whereas the highly profitable oil sector employs merely 1% of the workforce (UNDP, 2009).

#### Women in politics

Nigeria made gradual strides toward achieving MDG 3 in previous years, with women having occupied political office as legislative aspirants, councillors, local government chairpersons, special advisors, deputy governors, and speakers (UNDP, 2004). The percentage of senate seats held by women rose from 2.7% in 1999 to 8.25% in 2007, with seats held in the House of Representatives increasing from 3% (1999) to 6% (2003) to 7.7% (2007) (NBS, 2009a).

However, the 2011 election outcomes have seen a decline for women, with only 6.4% and 5.27% of seats won by women in the Senate and House, respectively (EUEOMN, 2011).

# 2.3 Human development context

Nigeria's economic growth has helped to boost critical human development indicators in recent decades. The country's proportion of underweight children dropped from 35.7% in 1990 to 23% in 2008, and infant, child and maternal mortality also dropped considerably (Federal Republic of Nigeria, 2010b). However these gains are far from equitable, and economic growth has not yet translated into sufficient and equitable employment. The most recent poverty statistics were calculated in 2004, indicating that over half of Nigeria's population suffers from relative poverty – though prevalence dropped from 60% in 2000 to 54% in 2004, and is expected to have reduced still further (Federal Republic of Nigeria, 2010b). 64% of the population suffers from multiple deprivations, and an additional 16% are vulnerable to multiple deprivations (UNDP, 2010). In 2007, the Human Development Index placed the country among the 25 poorest countries in the world (UNDP, 2009).

Despite its wealth of resources, Nigeria has one of the widest rifts between rich and poor in the world, evidenced by highly unequal income distribution and disproportionate access to social infrastructure, basic services and employment. This disparity in access is manifested through geographic sector (rural populations experience lower access and higher poverty levels) as well as within sectors (urban poor versus urban non-poor, etc.). Poverty indicators are also divergent according to geographical zones: northeast Nigeria has the highest poverty index rating at 49%, followed by the northwest (44%), north central (35%), south south (27%), southeast (26%), and the southwest, with the lowest poverty incidence at 22% (ibid). Agricultural workers, who make up half the nation's workforce, experience the most expansive depth of poverty (26%) as well as severity (11%) among all occupational groups (Ajani, 2008).

Such disparity is also evident in human development indicators such as education. Nearly 90% of children are now enrolled in school; however state primary completion rates range from 2% to 99% across regions, with very low completion rates in the north in particular. Progress has also been rapid, though inequitable, in other areas. Under-five mortality has been reduced by over one-fifth in five years – from 201 deaths /1,000 live births in 2003 to 157/1,000 in 2008. The infant mortality rate fell more quickly in the same period – from 100 down to 75 deaths per 1,000 live births. Maternal mortality has also fallen from one of the highest rates in the world: from 800 deaths / 100,000 live births in 2003 to 545/100,000 in 2008. Other health achievements include a drop in the prevalence of HIV among pregnant women aged 15-24 from 5.8% in 2001 to 4.2% in 2008. There has also been significant progress toward eradicating polio and preventing malaria and tuberculosis (Federal republic of Nigeria, 2010b).

#### Child poverty

Child poverty has emerged relatively recently as a development concern, with recognition that it is often inter-generational and can be reinforced through a number of factors such as poor healthcare and education opportunities (UNDP, 2009). Children are also highly vulnerable to coping mechanisms instigated by poverty, such as child labour (including scavenging and begging), trafficking, abuse, and reductions in healthcare, education and nutritional food (Ali-Akpajiak and Pyke, 2003). Though the incidence of child poverty is difficult to calculate, indicators of its existence are prevalent, namely: high child and infant mortality rates, low education completion rates, and high levels of child labour.

#### Gender

Poverty in Nigeria is also highly gendered: women constitute the majority of the poor, unemployed and socially disadvantaged, and 52% of rural women live below the poverty line (Ajani, 2008). This phenomenon can largely be traced to traditional customs, beliefs and

attitudes particularly in regard to education, employment and confinement of women to the domestic sphere. Women also have less access to land, capital, credit, technology and training than men. Furthermore, women and girls in poor households have been found to be time-poor, spending substantially more time on domestic tasks partly due to lower access to water and electricity, which in turn reinforces low educational and employment opportunities. The 2004 National Living Standard Survey found that 16% of surveyed households in Nigeria were headed by females, who in fact experienced lower poverty levels than male-headed households in part due to smaller household size (Ajani, 2008).

#### Human development indicators

Poverty is directly linked to development indicators, with a clear correlation between high HPI and low HDI. In 2010, Nigeria's HDI value was 0.423, positioning it 142<sup>nd</sup> out of 169 countries and areas; however this statistic demonstrates a 5% increase from the 2005 value of 0.402, advancing Nigeria further beyond the average HDI for sub-Saharan Africa (0.389). Yet HDI ratings mask variations in development levels across the country, and when this value is adjusted for inequality, HDI falls to 0.246 (a loss of 42%). The south-south region has the highest HDI in Nigeria (0.573), followed by the southwest (0.523), north-central region (0.490), southeast (0.471), northwest (0.420) and the northeast, which has the nation's lowest HDI of 0.332 (UNDP, 2009). Gender empowerment measures follow a similar pattern, with the lowest scores found in Nigeria's northern regions.

#### **Child development**

Between 2000 and 2006, the Child Development Index<sup>27</sup> established Nigeria as one of the worst locations for child development: 126<sup>th</sup> out of 137 countries and areas. Nigeria is home to 10.7 million orphans and vulnerable children, with 2.5 million of these children orphaned due to HIV/AIDS (UNAIDS, 2010). Seventy per cent of children are not registered at birth (Kaalu, 2008), and more than 15 million children under 14 are working (UNICEF, 2006). Child deprivation and low development indicators are significant in many parts of the country, with educational enrolment particularly low in the northern districts (UNICEF, 2008b)

#### Education

The average net primary school attendance rate of 62%, and secondary rate of 50% are relatively equal among boys and girls. However there is great disparity between primary net attendance rates between richest households (90% attendance) and the poorest (31%), as well as among geographic zones: attendance in the northeast is a mere 31%, and rises to 47% in the northwest, 81% in the central north, and over 90% in each of the southern zones. Rural populations also suffer inordinately from a lack of education, with rural primary enrolment nearly 20% lower than urban enrolment (UNICEF, 2008a).

#### Health

Health indicators have improved in recent years, and life expectancy increased from 47.3 to 48.4 years between 2005 and 2010 (UNDP, 2010). The proportion of underweight children also fell from 30% to 23% between 2004 and 2008 (UNDP, 2009). However Nigeria's maternal, infant and child mortality ratios are some of the highest in the world. Nigeria's substantial socio-economic gap also has a severe effect on health indicators. For instance, infant mortality rates dropped from 100/1,000 in 2003 to 75/1,000 in 2008, and under-five mortality declined from 201/1,000 live births in 2003 to 157/1,000 in 2008. However this progress has been far from uniform. Infant mortality is in the northeast (109/1,000) is more than double that in the southwest (50/1,000), and under-five mortality follows the same trend: 222/1,000 in the northeast and 89/1,000 in the southwest (Federal Republic of Nigeria, 2010b).

Health indicators are further affected by low access to improved water sources (58% with access) and sanitation facilities (32% with access) (WHO/UNICEF, 2010). Nigeria has the fifth-

<sup>&</sup>lt;sup>27</sup>This index is made up of three indicators: health, nutrition and education. Nigeria's score was 40.53. (Save the Children UK, . (2008). *The Child Development Index: Holding Governments to Account for Children's Well-Being*. The Save the Children Fund: UK.)

highest HIV prevalence in sub-Saharan Africa at 3.6% of the population and is home to 2.5 million orphans due to HIV (UNAIDS, 2010).

#### Income

The 2008 Gross National Income per capita was US\$ 1,392 (US\$1,596 for males, US\$715 for females) – a significant rise from the 2005 per capita income of US\$ 762 (UN, 2011). The World Bank ranks Nigeria  $170^{th}$  out of 213 countries and areas in regard to its purchasing power parity (World Bank, 2010).

# **3** Impacts of the 3F Crisis

# **3.1** Macroeconomic shocks

#### **3.1.1. Food and fuel prices**

#### Food shocks

An analysis of Nigeria's macroeconomic indicators in the past decade provides us with a broad understanding of the extent to which the 3F crisis may have impacted upon the economy. In particular, two of the three "F" crises, both the food and the fuel crises, have been separated and fairly straightforwardly detected through econometric methods. This has been achieved via the estimation of price changes of food and fuel, while controlling for other factors concomitantly affecting the outcomes of interest. Data suggest that since 2003, food prices in Nigeria have followed a steady long-term upward trend in line with prices of other goods, characterised by a short-term variability with pronounced peaks and troughs between mid-2005 and early 2008 – corresponding with the rise and fall of international food staples. This is illustrated in Figure 4, which shows that the long-term evolutionary trend in food and non-food price inflation is similar, although in the short term, food prices experience higher variability.<sup>28</sup>

While food price fluctuations are a fact of life, they can have important adverse effects in countries that are net importers of food staples, such as Nigeria. In spite of Nigeria's enormous agricultural potential, the poor state of its agricultural sector has led the country to become a net importer of agricultural goods. To satisfy domestic demand, Nigeria imports an average of 1.8 million tonnes of rice per year (FAO, June 2010). This reliance makes the country vulnerable to international fluctuations of food prices.

Thus far, assessments indicate that Nigeria displayed considerable resilience during the 2007-2008 global food price hikes in terms of aggregate effects, and has avoided a national food crisis. The MDG Report (2010) identified a number of factors that cushion the country against food crisis, such as relatively good harvests and household dependence on their own food production, the diversity of staple crops in the country and increased government investment in the agricultural sector including Presidential initiatives and the National Food Security programme, have also contributed to raising farmers' incomes (Federal Republic of Nigeria, 2010a).

Although the food situation has not been a national crisis as such, this aggregate picture in Nigeria hides significant variations in effects within the country and across societal groups. Our

<sup>&</sup>lt;sup>28</sup> Note that price figures are not adjusted for information, as these are precisely intended to provide a comparison between the trend in food prices with that of the non-food items

analysis suggests that such short-term variability has affected certain communities' and households' welfare status, as well as their access to food, with poor net food buyers facing disproportionate difficulties in managing these shocks.



The Lagos Kano Household Survey (LKHS), which collected retrospective information on food price increases, reveals a higher incidence of short-term variability of food items in the late 2000s. This is illustrated in the scatter plot of Figure 5. The results display a higher density in the dispersion points during the late 2000s, which is in line with the observed steady long-term pattern of food price increase over the last decade, with more marked short-term, steeper raises during the late 2000s.



The rise in prices can be attributed to a variety of domestic and international causes. For example, regional factors associated with unfavourable weather conditions – including droughts in the extreme Northern regions and flooding in the coastal areas of the South (Lagos) and resultant transportation challenges – coupled with global food price variability, can be linked to these short-term increases. In turn, this had significant effect on rising food insecurity. For example, in Lagos in 2009, the mobility of food traders was constrained due to severe floods and resulting road conditions, to the point of limiting the inflow of food to markets: hence driving prices up of maize, rice and yams (USAID, 2009). As a result, nearly 40 per cent of households, predominantly in urban areas of Lagos, reported to have suffered from higher food prices during 2008 – a fact that appears to be connected to the global rise in food prices, as Lagos heavily relies on food imports.

Typically in Nigeria there is a significant regional variance regarding the food price transmission process and effects (FAO, 2009). Rise and fluctuations of food prices and food insecurity is likely to be more severe in localized areas of the country where households livelihood is constrained by the combined impacts of structural poverty, weak local economies and recurrent food deficits including areas located in the Far North (eg. Kebbi to Borno State) and in few localised zones of the South East and the South (FAO, 2009; 2010). But the effects can also vary within communities and across households. While poor consumers are likely to suffer disproportionate effects of rising food prices as they spend a very high proportion of their income on food (as much as 70-80%), food price increases can benefit some crop producers as far as real income is concerned. The evidence from our fieldwork supports these findings. We return to these issues in Section 3.2 below.

According to all major agricultural outlooks (OECD-FAO, USDA, and the World Bank) there is a consensus that high food price levels and volatility are likely to persist (UNICEF, 2011; WB, 2011). In fact, international food prices are spiking again for the second time in three years, igniting concerns about the consequences of this for the poor. This vulnerability underscores the importance of timely monitoring of the development of local food prices and appropriate policy responses.

#### Fuel shocks

Despite being Africa's biggest oil producer, Nigeria imports more than 80 per cent of its domestic fuel due to a lack of refining capacity, which makes the country vulnerable to increasing international fuel prices. A similar trend has been observed between fuel and food prices, as the former follow a long-term upward trend that appeared to stabilise around 65 Naira per gallon in 2010. In line with global evidence, fuel prices display a lower short-term variability than food prices in most states. This becomes clear when we compare the state-wise de-trended series of fuel prices with that of local rice, which is one of the major food products across Nigerian states (see Figure 6). Once the long-run trend is taken away, both prices show a fairly flat trend, confirming that their rate of growth has not changed significantly in the past decade, with the rice prices showing a more pronounced variation around the mean.

The Nigerian government has addressed the international fuel price volatility by subsidising the pump price. The government guarantees regulated fuel prices by paying importers the difference with market prices. Our analysis, however, shows a more complex picture in terms of the impact of fuel price shocks and people's access to fuel. It suggests that fuel subsidies may have a muted effect in cushioning the impacts of rising fuel and transportation costs on household consumption patterns across the sample states, especially among the poor. The supply and access to petroleum products, and kerosene in particular, remains scarce and unpredictable.

Local rather than international factors seem to affect the domestic market. The supply and

access to petroleum products is often adversely impacted by the pipeline infrastructure and storage facilities. The resulting bottlenecks affect security and cost effectiveness of the supply of refined petroleum products, also creating further rent-seeking opportunities. The barriers in access to fuel, and kerosene in particular, have been affecting poor urban communities in sampled states who depend disproportionately on kerosene use for their household functions.

Interestingly our quantitative analysis indicates that there does not appear to be co-movement of food and fuel prices; in fact, the correlation between the two de-trended series is negative, which seems to reject the assumption that fuel prices are associated with increases in food prices via transport costs. This comparison confirms that food prices tend to be subject to more sudden shocks in the short-run than fuel prices. This evidence – along with the fact that food as a share of households' expenditure<sup>29</sup> is greater than the fuel share – indicates that food price variation is more prone to influence households' welfare than fuel price variation. It also highlights the importance of policy measures that address short-term price variability and protect households from negative effects of covariate shocks. We discuss the effects of fuel price variation in more detail in Section 3.3, micro-level impacts.

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## Figure 6: Petrol and local rice prices across Nigerian states (de-trended), 2001-2010

#### **3.1.2 Financial crisis**

The channels through which the global financial crisis has been displaying its effects are more complex. We follow the broad lines of Calì et al. (2008) and Harper et al. (2009) to identify the

<sup>29</sup>Food accounts for a considerable proportion of household consumption (64% in rural areas and 62.6% in urban areas, MDGs Nigeria, 2010a)

macro channels of transmission of the financial crisis, i.e. exports, remittances, credit availability and foreign aid. There are a number of signs that the 3F crisis in Nigeria has displayed tangible effects at the aggregate level, which may vary across states, communities, households and individuals.

#### Exports

The export channel (via the reduction in both demand and price of oil) was the key channel through which the recent global financial crisis has manifested its macro effects in Nigeria. This channel has operated primarily through the reduction of government revenues due to an abrupt drop in international oil prices<sup>30</sup>, which up to 2008 represented 80% of government revenues and over 90% of total Nigerian exports (Cali et al, 2008). These shocks, in addition to Nigeria's declining export earnings and balance of trade, filtered through to the exchange rate<sup>31</sup>, inflation, foreign investments, external reserves and the current account.<sup>32</sup> For example, in early 2008 inflation rates began to climb, peaking at 15.1% in December 2008 and rising again to 15.6% in February 2010 (NBS, 2010b). The combined impacts of high oil prices and the stock market collapse led to the devaluation of the naira against the US dollar in late 2008 and early 2009, depreciating by 21% in real terms. Falling oil revenues of 38% in 2009 have also had a negative impact on Nigeria's fiscal position (Central Bank of Nigeria, 2010). The budget balance deteriorated from a surplus of 3.8% in 2008 to a deficit of 5.2% in 2009 with implications for social sector allocations. Although in 2010 oil exports bounced back again to 2008 levels, it can be argued that Nigeria has undergone a period of macroeconomic instability, resulting in diminished federal spending capacity and subsequent revision of fiscal allocation to the states by the Federation Accounts Committee (Central Bank of Nigeria, 2010).



<sup>&</sup>lt;sup>30</sup> Oil prices dropped dramatically from US\$147 per barrel in July 2008 to US\$47 per barrel in January 2009.

<sup>&</sup>lt;sup>31</sup> The All Share Index dropping 68.5% from March 2008-March 2009 and market capitalisation tumbling 63% in the same period.

<sup>&</sup>lt;sup>32</sup> According to the IMF's World Economic Outlook figures, general government revenues suffered a 38% decline in 2009, leading to a substantial deficit of N1.09 trillion with subsequent implications for social sector allocations.
### Foreign Direct Investment (FDI)

The financial crisis also had an impact on overall FDI flows, which decreased by about 14% from 2008-2009,<sup>33</sup> impacting upon productive capacity, balance of payments and employment. The latest figures from the Central Bank of Nigeria for the second quarter of 2010 (CBN, 2010d) suggest that problems in both FDI and portfolio investments are persisting. The substantial decline in FDI, given its importance for stimulating economic growth and employment, is of serious concern for Nigeria.

### Remittances

Remittance flows have also been identified as a potentially important transmission mechanism of the crisis. Owing to deficiencies in data collection, assessments of the scale of impact on remittances vary from source to source, although most show negative changes of varying degrees in 2009. According to World Bank (2011) data, international remittance inflows have increased sharply since 2003, rising more than four-fold between 2003 and 2007 (e.g. from less than 2% of GDP to over 5%: almost USD 10 billion). The global crisis seems to have reduced the rate of growth of remittances, rather than reduced the inflow. Based on this account, the World Bank argues that the relative resilience of remittances should have sheltered households from the most negative effects of a reduction in these flows.

In contrast, statistics from the IMF and Central Bank of Nigeria point to a more severe impact, suggesting a decline of 4% in remittance flows between 2008 and 2009. Moreover, according to the NLSS data for 2003/04, a period in which remittances should have represented around 2% of GDP, remittances accounted for only 0.2% of total state income on average, reaching only about 1% of each state's households. Likewise, qualitative data suggests that remittances – and international flows in particular – have been declining among certain households. Unsurprisingly, most significant changes have been recorded in Edo and Imo, which collect an above-average share of their income from remittances (NBS, 2010a). As remittances represent an important avenue for smoothing household consumption during a period of shock, especially for poor households, even a relatively small reduction in funds may impact adversely on households' welfare, as we discuss further in the employment and income section below.



<sup>33</sup>UNCTAD.*Inward and outward FDI flows, 1970-2009*. Retrieved from http://unctadstat.unctad.org/TableViewer/tableView.aspx

#### **Overseas Development Assistance (ODA)**

With regard to ODA, macro evidence suggests that the global crisis has affected aid flows, causing a drop from 1.3% of GNI in 2007 to 0.7% in 2008.<sup>34</sup> Although Nigeria does not appear to be very dependent on aid, ODA remains an important source of funding within the social sectors, particularly for the lower tiers of government responsible for delivery of social services. This means that even a small reduction in ODA levels is likely to impact on state and local government's capacity to protect vulnerable households from increasing deprivation, thus hindering progress toward development objectives such as the MDGs. A dearth of statistical data, however, rules out any conclusive assertions.

#### Economic growth and pro-poor development

These apparent effects of the global crisis, as well as of the fuel and food price crises at a macro level, find some support in data that reflect the overall economic performance of the country. Despite its rapidly deteriorating economic situation in 2009, Nigeria's relatively robust economy has largely been maintained due to strong performance in non-oil sectors – particularly agriculture. The agriculture sector contributed 60% out of the 80.7% total contribution of the non-oil sector to GDP in the first the last quarter of 2008 (ODI, 2009). Notably, the rate of GDP growth has been relatively stable and robust (until 2009 at least).

Notwithstanding the importance of this, it should be emphasized that relatively strong GDP growth in Nigeria in recent years has failed to translate into improvements in poverty, which have remained at very high levels in relation to the country's income status. Even the recent agricultural growth is likely to have benefited more those farmers who are in a position to take advantage of new arising opportunities. Government policy thus far had a strong focus on large-scale private sector commercial agriculture, rather than smallholder production where the majority of poor reside (Volker Treichel, 2010). In this context, the sustained GDP growth in 2009 and 2010 is unlikely to have been inclusive of those hardest hit by the impacts of the 3Fs crisis (see for example, MDGs Nigeria, 2010a; UNDP, 2009).



<sup>34</sup>OECD.DAC Annual Aggregates Database. Retrieved from http://stats.oecd.org/Index.aspx?DatasetCode=ODA\_RECIP Furthermore, the impact of this on the most vulnerable groups in the population is likely to be compounded by adverse changes in the availability of social sector resources at state and local government levels (Freinkman, 2007). While the federal budget has managed to maintain its performance by drawing heavily on the Excess Crude Account and foreign reserves accumulated prior to the financial crisis, its focus has been on infrastructural development and economic diversification through private sector engagement – at the expense of social sector spending, whose share of the federal budget continues to decline. Nigeria's social sector spending has been consistently low over time, but since the end of the military regime in 1999 it has been steadily growing, reaching N485 billion in 2008, which was 15.76% of total federal expenditure. The estimated expenditure in 2009, however, shows a decline both in the amount allocated to the social sectors (N466 billion) and their share of total federal expenditure (14.19%) (CBN, 2009b). Local and state governments, which deliver critical social services, have suffered budget reductions due to the decline in federal account allocations upon which they so heavily rely.<sup>35</sup> Contracting budgets have caused some states to compromise or adjust their long-term development plans (see section 4.1).

# 3.2 Impacts on employment and income

The following section presents the main findings from qualitative and quantitative research undertaken in six sampled states on the transmission effects of macroeconomic shocks on the following four areas: 1) employment and income including remittances, 2) access to credit, and 3) household consumption capacity and patterns.

# **3.2.1. Employment and income outcomes**

This section discusses the channels through which food, fuel and financial shocks have impacted upon people's access to, and intensity of employment by looking at the changes in labour markets, income, and labour patterns. Overall, our analysis reveals some specific and complex effects of crisis-related shocks on employment and income levels, with important variations between states, households and individuals. We find that financial crisis has exacerbated to some extent the pre-existing unemployment problems in the formal labour market, and that household incomes have been squeezed for a number of reasons including job loss, pay cuts, wage delays and in some groups, declining remittances. As far as the food and fuel shocks are concerned we find that in the sampled communities, poor households have been forced to take on additional work or to work significantly longer hours to offset the rise in prices. At the same time, there is an indication that the food price increases have benefited some crop producers as far as real income is concerned, however, the number of farmers in position to take advantage of this situation appears to be limited.

# Effects on formal sector employment

Unpacking the impacts of economic crisis on formal sector employment in Nigeria is difficult given acute pre-existing problems in the labour market. According to a World Bank assessment (2010) prior to the financial shocks, Nigeria has already been facing an unemployment crisis in the formal labour market, experiencing a sharp drop in public sector employment from 15% in 1999 to 10% in 2006. This resulted from retrenchment in the civil service and privatisation of state-owned enterprises, as well as an inability of the private sector to create a sufficient number of jobs to compensate for these losses. Consequently, people have been shifting into agricultural employment and out of wage employment into the informal sector, with agriculture accounting for over 70% of total employment in 2008 (WB, 2010).

In the context of the financial crisis, the general perception across sampled states was that pervasive unemployment in the formal labour market was seen as an ongoing problem over the years, rather than the result of the current crisis. However, people generally felt the risk of

<sup>&</sup>lt;sup>35</sup> Many states derive approximately 80% of their revenue from federal funding.

unemployment has been aggravated by the crisis. During the period of financial crisis, Nigeria recorded a sharp increase in the total unemployment rate, which went up to 19.7% in March 2009, compared to 14.9% in the same period in 2008 (NBS, 2010c<sup>36</sup>). These changes have important age and gender dimension: between 2007-2009 young people experienced the most dramatic jumps in unemployment rates from 25.9% to 41.6% (reaching nearly 50% in urban areas)<sup>37</sup> while unemployment among women has risen from 43.5% 48.9% between 2007 and 2009.<sup>38</sup> A combination of global and domestic factors associated with financial shocks have contributed to these outcomes, such as credit rationing, drops in FDI, currency devaluation and dropping consumer demand.

Qualitative evidence from some states (e.g. Lagos, Edo) indicates that in 2009, as a result of the financial crisis, the banking sector was unable to provide financing for microenterprises, and the lack of credit to fund working capital meant businesses just had to "close shop", with resultantly negative impacts on their families and employees. The most discernible effects were noted in Lagos within the banking sector, where several people reported lay-offs, as banks "can no longer sustain the level of income they pay" (Lagos, KII 14). Qualitative evidence indicates that despite reductions in public sector employment being an ongoing issue, the financial crisis has led to further cuts in public sector employment (e.g. in Benin City and Owerri City) (although we were unable to confirm this through statistical data). This trend was partly associated with cuts in federal government allocation to the states in 2009 and a subsequent embargo on public sector employment.

It is expected (ILO, 2010) that the labour market will continue to contract as a result of the ongoing restructuring of public enterprises, leading to the additional loss of jobs. Recent economic recovery creates an opportunity within the private sector to create new jobs and thereby reverse the losses. However, it is well documented that even the strong economic growth in Nigeria, particularly in the non-oil sectors in recent years, has failed to translate into corresponding improvements in formal employment opportunities. Indeed, most of the rise in employment during the recent period of strong growth occurred in the informal sector (WB, 2010).

This situation has serious implications for young people who face particular difficulties as a result of constraints on the labour market. Stagnating recruitment in the formal sector is a growing problem as a huge annual influx of new entrants floods into an increasingly problematic labour market: data from 1999-2005 show that only about 200,000 new wage jobs have been created annually in Nigeria, while they must cater for an estimated 4.5 million new entrants to the labour market each year (Federal Ministry of Youth Development, 2008). Due to the absence of white-collar jobs, young adults have been increasingly trapped in underemployment and/or low-paid jobs, facing weak or absent labour protection rights. High rates of unemployment and poor-quality employment in this group are alarming, as they increase the risk of children spending their crucial first few years in poverty (Harper and Jones, 2009).

#### Effects on income

Overall, there are good indications that food, fuel and financial shocks have led to important changes in income levels across sampled states, although these vary across states, households and individuals. On a national level, Ajakaiye and Fakiyesi (2009) show that financial shocks led to an increase in poverty levels and declines in household income in Nigeria over the period of August 2008 to January 2009. For example, in 2008, a 12.2% adverse oil shock deteriorated the income of Nigerian households by 0.93% on average (Ibid). A similar situation has been experienced with regard to food shocks. It is well acknowledged that food price inflation lowers the purchasing capacity of nominal incomes, as wages and earnings tend to

<sup>&</sup>lt;sup>36</sup> The source is: NBS (2010) National Manpower Stock and Employment Generation Survey. Household and Micro Enterprise (informal sector). First draft, Executive Summary. <sup>37</sup>Ibid.

<sup>&</sup>lt;sup>38</sup>ILO.(2010). *Country brief – Nigeria's response to the crisis*. The 2<sup>nd</sup> African Decent Work Symposium 2010 (06-08 October 2010). Yaounde: Cameroon.

adjust to price variations with a time lag. Indeed, inflation rates in Nigeria rose at the end of 2007 and have continued to increase at double digit levels since then, with the food price index rising steeply from October 2007, peaking at 20.9% in July 2008 and then fluctuating between 12.5% and 16% throughout the latter half of 2009 and 2010 (NBS, 2010b).

In line with these trends, the LKHS survey data analysis shows a decline in real incomes among the poor over the 2007-2010 period, irrespectively of the state and area of residence.



Qualitative data confirms these findings. The general perception in sampled communities across the states was that real incomes have declined over the past three to four years, as prices of food, transport and other basic goods have risen. In addition to hikes in food prices, household incomes have been squeezed from a number of different directions including job loss, pay cuts, wage delays and in some cases, declining remittances (see Box 1 for remittance effects).

Qualitative data also reveals variations with regard to income reductions experienced between different types of employees. Poor petty traders in Imo, Benue, Lagos and Edo, for example, had experienced the most direct consequences of rising prices and inflation, reporting that their returns from business are "getting leaner": "As a trader, I used to purchase more goods five years ago than I do now. My capital appears bigger than before, but it can only buy fewer goods due to inflation" (Edo, FGD5). Another respondent in Benin complained that reduction in customers "means [that] less money [is] being made" and this in turn creates difficulties in sustaining the business (Imo, FGD2). In the public sector (in Adamawa, Imo and Benue particularly), we heard ongoing complaints that wages and earnings among civil servants had not kept pace with the rise in food and other basic costs, with current salaries being "insufficient to secure people a decent life" (Adamawa, KIIs 1 and 3). According to a female respondent in Owerri, "civil servant families are getting less money nowadays", which comes on top of "already small and irregular salaries" (Imo, FGD2). Although the share of people

employed in the civil servant sector in Nigeria is small, perceived declines in purchasing power seem to have a knock-on effect on rural households, as there are fewer alternative employment opportunities in rural areas and, as highlighted in our primary research, many rural families depend on remitted civil servant salaries.

There is also an important gender dimension into the issue of poverty and vulnerability in the states and areas under investigation. The quantitative results presented in figure 10 above also reveal that for female-headed households living in Lagos, the probability of reporting better income levels in 2008 was on average 13% lower than in 2009, and a similar size effect (12%) was observed among female-headed households residing in urban areas, relative to male-headed households. The poor and vulnerable households living in Lagos had, on average, an annual income of US \$1,395 (approximately US \$3.8 a day) higher than the incomes reported from poor households living in Kano, which is similar to the income differentiation found between urban and rural areas (US \$1,384), but households headed by women had on average incomes significantly lower than households headed by men, and the results are significant at 1% level. International evidence seems to suggest that in crisis contexts, existing gender-related constraints limit women's ability to cope with aggregate shocks vis-à-vis maleheaded households, underscoring the importance of focusing on women when designing household level policy interventions.<sup>39</sup>

# Box 1: Reduction in remittances

The micro data provides an important insight into the current effects of the crisis on remittance and their contribution to declining household income and consumption capacity. Reductions in remittance flows appear to have had a more significant effect on states and households that enjoy an above-average percentage of income from remittances, including Edo (e.g. Benin city), Imo (e.g. Owerri) and Lagos. Here numerous reports of declines in both the frequency and size of remittance income have been reported, with important effects on household purchasing power. Most respondents confirmed that slumping or halted remittances were due to global economic recession and negative employment changes for migrants overseas. The preliminary data in broader literature offered by the Poverty and Economic Policy Research Network's Community-Based Monitoring System study finds a similar situation in Enugu state. For example, Achike and Ichoku (2010) note that, based on a sample of 4,710 households in Edem, of those households that received remittances (146 receiving international remittances and 1,560 receiving local remittances), 29% reported declines in these remittances since the financial crisis – of which 63% were due to decreases in the income of the sender, 21% due to cut in earnings and 11% due to the sender losing their job.

As remittances are mainly used by poor households for consumption of food, health and education services, a reported decline in funds has serious implications for human capital investments and poverty. The Famine Early Warning System Network estimates that in a normal year remittances (both local and international) account for between 10% and 20% of cash income for poor households (FEWS, 2009), while Olowa (2009) finds that migrant remittances are an important source of income for consumption smoothing, thus helping to minimise economic and food shocks that reduce household welfare – particularly for food crop farmers who make up a large proportion of the poor households in Nigeria. There is some indication from qualitative data in Imo and Edo that these changes have led many families to change their consumption patterns, including children being withdrawn from school since their migrant relatives stopped sending money to cover school costs (FGD2, 3). The importance of remittances on household welfare are also broadly supported in our quantitative data analysis, where increased remittance flows were generally found to reduce child employment, suggesting that the ensuing increase

<sup>39</sup> It is relevant to point out here that the LKHS was conducted in deprived locations of Lagos and Kano. After estimating the Foster-Greer-Thorbecke (FGT) family of poverty measures, the data shows that overall, 70% of the surveyed households were below the World Bank's US \$1.25 a day poverty line, using the purchasing power parity (PPP) conversion factors for 2005, whereas nearly 90% were below the US \$2.5 a day poverty line. In terms of regional differences, and focusing on the US \$1.25 a day poverty line, households living in Kano reported a higher headcount index (73%) than residents of the Lagos state (65%), although the latter reported a higher squared poverty gap than Kano (42% vis-à-vis 37%). This underlines the severity of poverty and inequality in areas of high economic affluence such as Lagos.

in income also increases educational opportunities for children. This is because increases in income reduce the necessity and incentives for people, including children, to work as hard or in harsh conditions. Given the importance of remittances in household income and welfare, it can be argued that even the relatively small decline estimated for 2009 may thus have had a negative impact on poor and vulnerable households' consumption capacity. However this requires further monitoring.

Looking more specifically at food price variability, data suggest that food price increases can benefit crop producers as far as real income is concerned, although findings demonstrate some heterogeneity in outcomes between and within states.

At the state level, econometric analysis finds that states whose income is largely derived from agriculture (e.g. net food exporters), such as Adamawa and Benue, display a more positive effect on self-employment income, which is predominantly derived from agriculture.<sup>40</sup> The results for income across states confirm the relevance of states' dependency on agricultural income in determining the effects of food price changes. This is consistent with the fact that much employment in these states is comprised of household-level agricultural enterprise, which is able to expand when agricultural prices increase – with increases often concentrated among young people and women (see Table 1). In Benue, for example, several KIIs suggested that rising food prices may have "created opportunities for net producers of food", pointing out that those food producers with close proximities to ZakiBiam food market have gained earnings from crop production. This had a positive impact on children's welfare. As a result of raised incomes, parents are able to "keep their children in school" (Benue, FGD6).

At the other end of the spectrum, Lagos and Kano, which rely marginally on agricultural income, display a much less positive impact of food price increase on real incomes both from self-employment and from wage employment, in line with their relatively low share of agriculture in income.

	All				Male				
State	Child empl	Adult emp	Self inc	Wage	Child empl	Adult emp	Self inc	Wage	Agr. Share
Adamawa	-0.27	-0.19	1.71	-1.44	-0.01	-0.05	-0.59	-0.72	42.4%
Benue	-0.42	-0.39	2.11	-1.48	-0.02	-0.06	-0.57	-0.58	63.8%
Edo	-0.16	-0.21	0.58	-1.72	-0.02	-0.10	-0.61	-0.67	22.8%
Imo	0.09	0.08	1.52	-1.05	-0.02	-0.09	-0.61	-0.68	31.9%
Kano	-0.16	0.04	-0.19	-1.68	-0.01	-0.03	-0.57	-0.67	27.9%
Lagos	4.74	-0.11	0.00	-2.82	-0.01	-0.11	-0.58	-0.66	0.7%
Nigeria	-0.09	-0.17	1.04	-1.61	-0.01	-0.07	-0.58	-0.67	39.4%

# Table 1: Coefficients measuring effects of food price changes on income and employment

Source: Authors' estimations on NLSS and HLSS data, as well as World Bank (2011)

However, the aggregate picture at the state level masks differentiation among the population within the states. Qualitative data suggest that in rural areas, even in food-dependent states, the opportunity to benefit from food price hikes is not automatic and the evidence of positive income changes appeared to be more mixed, as not all farmers are in a position to take advantage of new arising opportunities. For example, in Egbeta several male respondents noted that their livelihoods from farms have improved during the last few years and "some

<sup>40</sup> States' dependence on agriculture is measured by the share of agriculture in total income in 2003-2004. This allows us to differentiate the effects of food price changes across states on the basis of food producing capacity. The higher the dependence of a state on agriculture, the less likely a food prices increase will be harmful to the states' well-being.

[people] manage to save and invest in business, for example cocoa farms". Young people are reportedly making more money from their farms these days (Edo, FGD4), confirming the fact that food producers – depending on the level of demand – are likely to benefit from rising food prices, as discussed previously.

In contrast, in very poor rural households, farmers stressed their inability to expand the food production beyond their own subsistence needs. In Adamawa, for example, very poor farmers in rural areas have reported negative changes to farming income, and a growing need to rely on other means of earning money, such as petty trading and services, to compensate for rising living costs. This, claim female respondents, has implications for children's wellbeing, as cash received from farming is mainly spent on children's medical costs. Likewise, food producers and food traders in Imo and fish farmers in Lagos had experienced a drop in their incomes due to a dwindling demand for services and rising production costs (i.e. rising costs of fuel) (Lagod, FGD3). This finding is not surprising given that it is well acknowledged that poor and smallholder producers, often women, risk being excluded from high-value markets because they may not be able to compete in terms of costs and prices with larger producers. This is often attributed to a lack of access to credit, inputs and market knowledge, which would enable them to do so (World Bank 2007).

While local factors affecting food production in Nigeria are state-specific, our primary research has identified a range of factors that limit the profit-earning potential of small-scale farm households, including: a lack of key resources for farming (e.g. land, capital, transport links to markets), fuel scarcity, fertiliser price shocks and environmental risks (e.g. floods, droughts, natural resource exploitation and soil erosion). The four most common obstacles have been identified. First, food and fuel price rises have been perceived to have reduced general demand for food products from agricultural states, which already generally suffer from above-average poverty. In Adamawa, a decline in household purchasing power in recent years was viewed as damaging to families who sell food "because the purchasing power is typically low" (Adamawa, FGD2) and "[so] when you take something to market [things] hardly get sold because there is no money in people's pocket" (Adamawa, FGD1).

Second, smallholder households appear no to have access to inputs at a low cost to enabled them to expand production profitably. There have been numerous complaints of inputs for farming becoming more expensive with "the cost of labour and chemicals going up significantly in the past few years" (Edo, FGD3). According to one focus group respondent, farm labourers from Calabar and Ogoja in Benue were previously charging N60 – 70 Thousand Naira per farm season, but now they charge anything between N80,000 – N100,00 per season (Benue, FGD3).

Third, access to markets is often limited among poor farmers, and the lack of storage capacity leads to off-season shortages. This situation inflates the importance of middle men, who have the means of transporting and storing foodstuffs, and therefore can demand maximum prices from farmers in times of hardship. Poor infrastructure also prevents rural farmers from accessing key agricultural production centres and markets. For example, Koji community produces smoked fish, which is sold on the urban market; however high transportation costs limit the opportunity for villages to profit from rising food prices.

Fourth, the dynamics of food consumption are also changing in Nigeria, since food-producing households are increasingly suffering from food deficits, and therefore rely on purchased food for consumption. While they benefit from the sale of food during times of inflated food prices, the same sharp increases in food price in the past few years may also mean that many have suffered from worsening household-specific terms of trade. Qualitative evidence has found that even heavily agricultural states such as Benue exhibit severe food insecurity among certain groups, e.g. the poor who are unable to produce sufficient food for self-consumption and/or production. Factors reducing agricultural productivity and sales are discussed further in section 3.3.1 on food security.

#### Impacts of the 3F crisis on labour patterns

Overall, we find that food and fuel price shocks, compounded by declining real incomes, generate pressure for people to work harder in order to earn more income to cope with these shocks. While multiple jobs are a common Nigerian coping strategy, there has been evidence in both quantitative and qualitative research of increased diversification of livelihoods, predominantly in the informal sectors. We also find that changing employment patterns have important implications for women and children, as discussed below.

Econometric data analysis shows a strong relationship between food and fuel price variability and increasing employment levels, with diverse impacts across the states. In net food importer states, a negative food price shock induces people to work more, whereas the opposite is observed in agricultural states. The results also show that in food-dependent states, households increase their labour supply outside the family business to cope with the food price increase (column 9 and 10 in Table 2). This suggests that in food dependent states, households increase their labour supply outside the family apparently to cope with the food price increase. On the contrary, in agricultural states, household members increase their labour supply within the household to take advantage of income opportunities from food price increases, and this has implications for child labour, as will be discussed in the following section.

	(7)	(8)	(9)	(10)
Sample	Adult	Adult	Adult	Adult
Dep. Var.	Employed	Employed	Employed	Employed
•	0.133	0.064	0.426	0.526
			(0.066)**	
Ln price food	(0.073)*	(0.086)	*	(0.397)
•	-0.347	-0.368	-0.519	-0.560
	(0.074)**	(0.074)**	(0.058)**	(0.078)**
Ln price all	*	*	*	*
		0.310	-0.302	-1.117
Foodshr x		(0.087)**	(0.066)**	
price food		*	*	(0.644)*
p		-0.121	0.136	0.981
Agrshr x food		(0.034)**	(0.025)**	(0.261)**
price		*	*	*
Unpaid fam.				
members	no	no	yes	yes
d2009 x main	110	110	yes	yes
vars.	no	no	no	VAS
	182889	102000	182889	yes
Observations	102009	182889	102009	182889

Table 2: The effects food price variability on adult employment, 2003-09

Robust standard errors (clustered by household) in parentheses; \* significant at 10% level; \*\* significant at 5% level; \*\*\* significant at 1% level; All regressions include time and state fixed effects and a full set of controls: *urban area dummy, gender, log of age, dummies for religion (Christian and Muslim), dummies for household size (4 groups: 1 person, 2 persons, 3-6 and 7 and above), relationship to the head, log of number of children in the household, log of number of working age persons in the household, log of age of the head of the household, gender of head of the household, and dummies for marital status and for whether the person is the household head* 

Results from the quantitative household surveys confirm these findings. Households in rural communities (vis-à-vis urban areas) increase their working hours during the 'hungry season' as a coping strategy against food insecurity and other hazards emerging from food price variability. The increase in labour supply was observed in Kano and Lagos during 2008 and 2010, which might reflect how poor rural households cope with food insecurity during periods

of food inflation and aggregate vulnerabilities. The LKHS survey data shows that about 15% of rural household resort to working more hours to cope with food and fuel price variability, whereas nearly 10% engaged in additional casual works to compensate the loss from external shocks.

Similarly, as more revenue is generated from oil exports, and federal transfers flow into the economy, households seem to reduce their labour supply, and this effect is stronger for states relatively dependent on federal transfers (e.g. Adamawa and Benue), as well as for states with a higher share of public employment in relation to overall employment. Oil exports show a strong positive effect on both wages and self-employment income. The latter is stronger for states dependent on fiscal transfers. The results shows important multiplier effects of fiscal transfers that feed local demand for good and services, which is in turn satisfied by the selfemployed. This is particularly relevant for Nigeria, as a large percentage of adults workers are engaged in informal self-employed activities. Although petrol prices are positively associated with incomes from self-employment and wage employment (columns 7 and 8 in Table 3) their effect is washed away by the large negative impact of fuel price variability on real incomes, particularly in states more dependent on fuel related expenditures. In the context of reduced federal transfers, as occurred in the 2008-09 financial crisis, it can be hypothesised that a negative fuel shock has forced people to work harder in order to compensate for declines in real incomes - underscoring the importance of countercyclical measures in crisis contexts to ensure that public spending continues to support local market demand and employment.

Method Sample Dep. Var.	(4) Probit Adult employed	(5) Probit Adult employed	(6) Probit Adult employed	(7) OLS All Self inc.	(8) OLS All Wage
Ln petrol price	0.061** (0.026)	0.003 (0.019) -	0.017 (0.031)	0.853*** (0.186)	0.757*** (0.279)
Ln Oil export	-0.034 (0.027)	0.081*** (0.019)	-0.006 (0.035)	1.874*** (0.198)	2.046*** (0.293)
Fuel Shr. in expend x petrol price	- 4.746*** (0.470)	- 1.290*** (0.339)	-1.715** (0.871)	- 23.945** * (3.200)	- 24.651** * (4.385)
Gross transfer x Oil exports	- 1.597*** (0.371)	0.138 (0.271)	-3.818** (1.561)	15.418** * (3.233)	-2.417 (3.855)
Govt empl. Share x Oil exports	- 0.087*** (0.020)	- 0.176*** (0.015)	- 0.185*** (0.016)	-0.343** (0.138)	-0.257 (0.210)
Unpaid fam. members d2009 x Main	no	yes	yes		
vars. Observations	no 182889	no 182889	yes 182889	no 41209	No 12621

# Table 3: The effects of changes in fuel prices on employment and income

Robust standard errors (clustered by household) in parentheses; \* significant at 10% level; \*\* significant at 5% level; \*\*\* significant at 1% level; All regressions include time and state fixed effects and a full set of controls: *urban area dummy, gender, log of age, dummies for religion (Christian and Muslim), dummies for household size (4 groups: 1 person, 2 persons, 3-6 and 7 and above), relationship to the head, log of number of children in the household, log of number of working age persons in the household, log of age of the head of the household, gender of head of the household, and dummies for marital status and for whether the person is the household head* 

Taking on additional work, and working harder, were reported as critical coping strategies in the face of shocks in qualitative work as well. In line with findings observed elsewhere in times of crisis, a common response to declining purchasing power among the poor households interviewed was to diversify and increase sources of income, usually by starting businesses and/or taking on additional jobs, which in case of very poor households involved informal, and in some cases, illegal work (Harper et al, 2010; Gavrilovic et al, 2009). Various incomegenerating strategies adopted by households and individuals are explored in detail in Box 2.

Depending on household decisions, an increase in demand for workers and/or the need to support household income may also increase women and children's involvement in the labour market (Harper et al., 2010). There is some evidence in qualitative research that women (and mothers particularly) are being increasingly employed and are working longer hours to make up additional household income. This outcome was most widely reported in Lagos, Edo and Imo among the poor farming households. In addition to farming, women in Edo are also petty-trading to 'fend for their families' (FGD5) while in Lagos, very poor women are reportedly 'going to work in other peoples' homes out of desperation for employment' (KII 6). Econometric analysis above seems to corroborate these findings with regard to women's employment in agricultural enterprises. As discussed already, much employment in the food dependent states, which expands when agricultural price increases, is taken up by women and young people. Although these results cannot be generalised, they provide important insights into the dynamics of household and individual welfare, including time poverty and knock-on effects on childcare. We discuss this topic further in section 3.4.

# Box 2: Livelihoods strategies adopted by households to cope with declining income

A common response to declining purchasing power among households was to diversify and increase sources of income. In the poorest rural areas of Adamawa and Benue state, farming households increasingly engage in non-farm labour, including cutting wood and moulding house blocks for sale. In urban areas, female incomes were augmented by frying groundnuts, roasting fish and meat, and preparing pap, while men would engage in commercial motorcycle driving and manual construction work to earn extra money among men in communities in Benue and Edo state.

While *labour migration* is an important livelihood strategy for families across the states, our research did not find strong evidence of shocks pushing additional people to migrate, except in Adamawa and Lagos. In fact, a drop in youth emigration in the past 4-5 years was reported in Edo and Imo states. In Adamawa, youth migration has reportedly increased in recent years for financial reasons with reports of young and adult women migrating to cities in order to work as sex workers, and young men from urban areas, such as Yola and Jimeta, migrating to places like Abuja, Lagos in pursuit of better income opportunities.

In extreme cases, where additional work or migration may not have been an option, people have resorted to distressed coping strategies, particularly in Benue and Adamawa, and to a lesser extent Imo state, where households had to "manage with shocks by selling their livestock, land, gadgets and even houses". Even among the better-off social groups such as civil servants some have been forced to shift from public sector employment to self-employment in order to address the challenges of falling real wages and irregular salaries. In Benue state teachers reported now working as part-time commercial bikers to supplement their income, while in Adamawa respondents reported an emerging trend of civil sector workers diversifying their livelihoods through farming and the sale of fuel on the black market, in order to offset the rises in food prices.

While additional employment activities may help families to address covariate shocks in the short term, the low margin of most informal income generating activities means that the effectiveness of this type of strategy remains limited. Working more will also be detrimental in

the longer term, as poor labourers supplying more labour will inevitably drive earnings down. This situation would be exacerbated in contexts where workers have limited mobility. In such circumstances, working more may not necessarily be an effective way of coping with shocks.

#### Effects on child labour

Child labour, and its various forms, are often associated with poverty, household composition, social norms and labour market conditions (Grootaert and Kanbur, 1995). In environments of aggregate vulnerabilities, and where substitution effects exist between parents' and children's time use, child labour becomes an important source of income – and Nigeria is no exception. Indeed, financial, food, and fuel price shocks and growing economic hardship have been found to directly affect the incidence of child labour in sampled states. While the phenomenon of child labour pre-dates the crises, overall the national results indicate that a rise in food prices and subsequent constraints on household budgets tend to increase the share of child employment (col. 1 in table 4), although this effect is primarily driven by effects of increasing general prices (col. 2).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sample Dep. Var.	Children Employed	Children Employed	Children Employed	Children Employed	Children Employed	Adult Employed	Adult Employed	Adult Employed
Ln price food Ln price all Foodshr x price food Agrshr x food price Unpaid	0.377 (0.057)** *	0.058 (0.094) 0.438 (0.099)** *	0.340 (0.130)** * 0.526 (0.099)** * 0.127 (0.156) -0.759 (0.059)** *	1.198 (0.164)* ** 0.280 (0.130)* * -0.685 (0.193)* ** -0.956 (0.081)* **	2.018 (1.567) -4.599 (2.545)* 2.660 (0.674)* **	-0.134 (0.045)* **	0.133 (0.073)* -0.347 (0.074)* **	0.064 (0.086) -0.368 (0.074)* ** 0.310 (0.087)* ** -0.121 (0.034)* **
fam. member s	no	no	no	yes	yes	no	no	no
d2009 x main vars.	no	no	no	no	yes	No	no	no
Observa tions	117707	117707	117707	117707	117707	182889	182889	182889
Sample Dep.	(9) Adult	(10) Adult	(11) All	(12) All	(13) All	(14) All	(15) All	(16) All
Var.	Employed	Employed	Self inc.	Self inc.	Self inc.	Wage	Wage	Wage
Ln price food Ln price all Foodshr x price	0.426 (0.066)** * -0.519 (0.058)** * -0.302 (0.066)**	0.526 (0.397) -0.560 (0.078)** * -1.117 (0.644)*	-5.608 (0.271)** *	-0.752 (0.431)* -6.006 (0.406)* **	-3.248 (0.494)* ** -5.212 (0.394)* ** 0.699 (0.483)	-4.932 (0.393)* **	-0.112 (0.683) -6.137 (0.704)* **	-2.171 (0.843)* * -5.127 (0.713)* ** -0.200 (0.814)

# Table 4: The effects of changes in prices on income and employment, 2003-09

food	*							
Agrshr	0.136	0.981			3.574			2.581
x food	(0.025)**	(0.261)**			(0.225)*			(0.348)*
price Unpaid fam. member	*	*			**			**
s d2009 x main	yes	yes						
vars. Observa	no	yes	no	no	no	no	no	no
tions	182889	182889	41209	41209	41209	12621	12621	12621

Robust standard errors (clustered by household) in parentheses; \* significant at 10% level; \*\* significant at 5% level; \*\*\* significant at 1% level; All regressions include time and state fixed effects and a full set of controls: urban area dummy, gender, log of age, dummies for religion (Christian and Muslim), dummies for household size (4 groups: 1 person, 2 persons, 3-6 and 7 and above), relationship to the head, log of number of children in the household, log of number of working age persons in the household, log of age of the head of the household, gender of head of the household, and dummies for marital status and for whether the person is the household head.

The results from the LKHS survey also show that child labour was exacerbated during periods in which the financial crises were observed. In Figure 11, we plot the number of hours children worked during the 2007-2010 periods relative to their age. The scattergram shows that the incidence of child labour during 2007 and 2008 was less intensive, in terms of hours worked, than the one observed during 2009 and 2010, when the effects of the financial crisis became visible. The small hollow squares in red to the lower right-hand side of the scattergram reveal children as small as 6 years being engaged in full-time productive activities, confirming anecdotal accounts from qualitative enquiry. For example, in rural Lagos and Edo, it was commonly reported that children as young as five years old are, in farming and fishing families, increasingly involved in assisting their parents on farms and selling produce on the markets, while in Benin city children from 8 years of age help their parents by hawking on the street "anything from sachet water to bread, cooked rice wrapped in fresh leaves." (FGD2).

Nonetheless, it is important to point out that just a fraction of children of school age (about 10%), reported being engaged in labour activities, and most of those that did work, did so part-time, in a range of 30 to 50 hours per month.



The LKHS survey has also observed an increase in hours worked among children from 98 hours per month in 2008 to 106 hours per month in 2009. The higher incidence of child labour in Kano during 2009 coincides with a sharp increase in food prices following unfavourable weather conditions, which may have pushed families to resort to drastic coping mechanisms (including child labour) in an effort to ease the negative income effect from this food price increase.

# Table 5: Incidence of child labour by year

Independent	Tobit I				Tobit II			
variables	2007	2008	2009	2010	2007	2008	2009	2010
State	-102.2***	-98.20***	-106.7***	-91.44***				
	(38.58)	(34.17)	(34.12)	(26.02)				
Area					-121.4***	-116.8***	-74.55**	-30.34
					(45.28)	(40.54)	(30.14)	(20.97)
Woman	22.96	14.82	12.73	-9.929	17.65	10.06	9.048	-12.48
	(24.97)	(21.59)	(21.67)	(17.50)	(24.49)	(21.23)	(21.27)	(17.62)
Depen. ratio	0.342***	0.364***	0.438***	0.307***	0.337***	0.359***	0.447***	0.344***
	(0.105)	(0.0897)	(0.0885)	(0.0708)	(0.104)	(0.0885)	(0.0892)	(0.0737)
Age	13.60***	12.76***	12.33***	9.008***	12.68***	11.92***	11.66***	8.555***
<b>a</b>	(3.495)	(3.015)	(2.797)	(2.087)	(3.413)	(2.945)	(2.758)	(2.095)
Constant	-430.2***	-389.5***	-393.7***	-289.3***	-413.9***	-375.1***	-392.4***	-306.4***
	(78.76)	(66.02)	(60.37)	(42.46)	(76.92)	(64.53)	(60.74)	(44.86)
Observations	779	779	779	779	779	779	779	779

Dependent variable: Number of hours worked per month

Note: Robust standard errors in parentheses. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%. The 'state' variable is dummy with a value Lagos=1 and Kano=0; 'woman' is a dummy with value woman=1, man=0; 'depenratio' measures the dependency ratio; age measures the age of the household

head, and 'area' is a dummy with a value urban=1 and rural=0. Model I: Equation with state as explanatory variable. Model II: Equation with area as explanatory variable.

Qualitative data confirm these findings. There were signs – across all six states – that children's time has been used as part of the household coping strategy. In very poor households children have taken paid work, often in hazardous conditions, to support the household economy to the detriment of their schooling and health. For example, rising fuel prices being associated with child household labour in Benue and Edo where children seek to rectify household fuel scarcity by seeking out alternative fuel such as plastic bottles in garbage dumps – exposing them to a number of risks, including injury, physical abuse, and fume/food poisoning.

In line with findings on general employment levels, the positive effect of food prices on child labour, i.e. the rise in food prices raising the share of child labour, becomes significant again when we differentiate the effect between states according to their dependence on food expenditures and on agriculture in total income (col. 3). In particular the effect of the food price increase strongly reduces child labour in states more dependent on agricultural income. This suggests that food price increases provide a direct economic benefit to those states that rely more on agricultural production, allowing them to reduce the rate of child labour relative to other states. For example, relatively agricultural states such as Adamawa – and even more so Benue – display a greater reduction in child labour from food price increases (see Table 5 above). The effect of food prices on child labour becomes positive for those less agriculturally oriented states, suggesting that by reducing households' budgetary capacity, increases in food prices push households to resort to child labour as a copying strategy.

However, qualitative data also reports that children from very poor farming households – irrespective of states' dependence on agriculture – risk being employed when the opportunity costs are high. This indicates that higher food prices may provide a greater incentive for unpaid family employment in agricultural states in order to exploit buoyant agricultural markets. Even outside of agriculture, the opportunity costs of schooling are so high that parents openly spoke of school attendance declining as children are made to work on the street as hawkers to contribute to the household economy (Lagos, FGD1). According to a female respondent in Jimeta, this results from increasing "*talauchi"* (*poverty*). This stresses the importance of social protection transfers to ensure family income is preserved and children's access to schooling is safeguarded in times of shocks.

Finally, important differences in incidence of child labour appeared with regard to gender, age and the dependence ratio, as in all these cases positively correlated with the propensity of child labour: A rise in food prices increases the incident of labour more among female than male children, particularly in less agricultural states, especially as far as unpaid family members are concerned (see Table 5). Quantitative results also indicate that higher dependency ratios would impose greater liquidity requirements for households to satisfy their consumption needs, and budgetary constraints would increase incentives for parents to use older children in income generating activities. In sections 3.4.3 we discuss in more detail the type of jobs children are likely to engage in, including highly-exploitative forms of work and subsequent implications for children's wellbeing and rights.

#### 3.2.2. Access to credit

Views on the extent to which the Nigerian banking crisis has affected international and domestic credit availability have been mixed. Cali et al. (2008) argue that credit availability in Nigeria seems to have been sheltered from the credit squeeze of the international credit market. Availability has increased fairly steadily throughout the financial crisis in terms of both domestic credit provided by the banking sector as a share of GDP, as well as domestic credit

provided to the private sector as a share of GDP. At the same time, more recent reports suggest that the banking crisis has indeed impacted on banks' confidence, resulting in increased risk aversion and the drying up of international credit sources (IMF, 2009; Okogu, 2010; African Economic Outlook). Tightened banking conditions have contributed to the crowding out and stagnation of private sector credit, and state and local government access to credit (Okogu, 2010; IMF, 2009).

While poor households had significant challenges in accessing loans from banks and micro lenders long before the financial crisis began (see Box 1.3), there is some indication from qualitative research that financial shocks may have aggravated access to credit – particularly through microcredit channels – in some cases leading to reduction in informal sources of lending, although this has not been confirmed through statistical data. Nationally, microcredit accessibility has consistently improved over the last 5 years, and actually the number of organisations has increased. However, the crisis may have affected infant (and financially weak) organisations that are highly dependent on external source of funding.

For example in Imo, NGO Forward Africa explained that constraints on community access to credit in the state were traced partly to the decline in global capital flows, which had negative repercussions on microfinance institutions' access to resources – in turn restricting their capacity to expand micro-finance lending to poorest groups (Imo, KII 4). Similarly, in urban Lagos there were several indications that many microfinance institutions are closing down due to widespread defaults, partly affected by institutional weaknesses and clients' inability to honour financial commitments owing to decline in purchasing power. In Edo, those few with access to lending complained of growing access constraints due to more stringent conditions put in place by the banks, making "getting loans from bank[s] almost impossible" (Edo, FGD1). While in Benue, financial shocks from collapsed microfinance institutions were reportedly rendering the poor yet more vulnerable, with detrimental effects on their welfare. Notably, only in Makurdi did women highlight "positive changes in accessing credit services in the past few years" as a result of the "introduction of the loans from government and NGOS" (Benue, FGD4).

# Box 3: Pre-existing constraints on access to formal credit

In Adamawa, key informants explained that microfinance banks generally see themselves as commercial banks rather than social enterprises, and in Benue a lack of collateral has always been a barrier to both commercial and micro-sector borrowers. Micro-credit requirements were seen to be far too stringent for the poor, prompting one man to describe the local microfinance bank to "be [existing] just for show" (Imo, FGD1). Respondents in Nsu stressed that commercial lending and government credit programmes are heavily biased towards high-income groups and political elites. This sentiment was confirmed in Lagos, where evidence suggests a strong mistrust toward existing microcredit channels. A male respondent in an urban community said, "The [microfinance] facility comes with cut throat conditions like collateral, pay back periods, interest rates and many others" (Lagos, IDI 10). In Benue, access was said to be limited for poor and vulnerable rural dwellers who are more likely to be employed in the informal sector, with no guarantees against risks and financial shocks.

#### Access to informal credit

Over the years the general lack of access to formal mechanisms has led to the establishment of active informal credit institutions in many sampled areas. The preliminary data from the PEP survey in Edem community highlights the importance of local thrift societies in protecting people from encroachment into household assets, with 57.2% of households having borrowed money from such societies in the previous six months<sup>41</sup>. For women in particular, who have less access to formal means of credit, thrift societies are important borrowing mechanisms

<sup>41</sup>In comparison with only 5.9% borrowing from banks, this reflects both the difficulties in accessing formal credit.

when household budgets are under pressure (NBS, 2006). The significance of informal lending for household economy has been confirmed by qualitative data where we also find different types of lending schemes, with some variations across the sampled states (see Box 4). Qualitative fieldwork has also revealed important indications that growing financial hardship is impacting on some types of informal sources of lending – although it was hard to establish the scale of changes in absence of more detailed assessments.

Most negative changes were revealed in rural areas with Esusu contributions. The following account from Egbeta provides an insight into the importance of these changes:

Social networks are breaking down here. Most of us are honestly disappointed with life. The various community based Esusu groups are cracking up because people are not paying back what they borrowed. Those who stood as [guarantee] for borrowers are also getting into trouble as members are confiscating their properties to offset debts of those they guarantee. This [...] is generating bad blood here. (FGD3)

Similarly, in Egbeta, respondents relayed that some members that collected the "Ajo" thrift contributions run away without paying back other members. Respondents associated this with the financial crisis (Edo, FGD5). Although these results cannot be generalised, they demonstrate that in the context of a growing financial deprivation, the ability of community members to help each other in times of need in the poorest communities is likely to be eroded, which highlights the need for formal social safety nets. Moreover, given these changes have welfare implications for poor members in the context of a decline in real income and consumption capacity, they require further research.

# Box 4: Community-based lending strategies in Benue, Imo and Edo

In Benue, savings and financing community-based organisations are often faith-based. Membershipbased social clubs/support groups (also called "meetings") have been identified in Benue and Imo, offering financial and psychosocial support to families. Groups have descriptive names such as 'Ijujukaha' meaning 'tomorrow will be good' and 'dancing play society' (IDI 9). Members are entitled to loans and there are well-established sanction mechanisms for dealing with defaulters. These groups fill the vacuum of micro -financing for the poorest of the poor and help avoid poverty following a shock. One respondent claimed, "most times [farmers] experience poor patronage [and low income] as there are no storage facilities. So we borrow from groups or individuals or local meetings to cope" (IDI 9). Membership of such groups is optional: "I am not a member of any group; I really don't have time for it" (IDI 4) or non optional, as in the case of ushers or women in a church: "once you get married you automatically become a member of the women's fellowship" (IDI 7).

By contrast, we find that in Edo, especially in rural areas, people rely largely upon friends and relations for cash or loans, or access private loans from Esusu groups and/or thrift contributions, known locally as 'Ajo' or 'Olidara'. Esusu, for example, appears to be quite a popular form of accessing money: weekly and/or monthly cash contributions are made, which are then distributed to one or more persons as loans – often used to invest in business, buy land or build houses. Esusu assistance is used to purchase food in season to then store for periods when food is out of season; to cover school fees or social obligations, such as weddings and funerals; or provide savings towards a specific purpose<sup>42</sup>.

Source: In-depth interviews and focus group discussions in Benue, Imo and Edo states

# **3.3** Changes to consumption capacity of households

<sup>42</sup>These mechanisms are locally known as 'ije – ogo' / 'bam' / 'adase'.

Our results show that 3F shocks may have impacted on household consumption patterns and general welfare across sampled states under the combined pressures of ongoing food and fuel price fluctuations and declining incomes. The gualitative data highlights that the food and financial crisis has "added salt to injury" in terms of pre-existing high levels of deprivation and limited agency of poor households to adopt constructive coping responses, increasing the risk of vulnerable and poor families becoming more deeply entrenched in poverty (KII 2). As will be discussed in the following sections, there were signs that many households and individuals have been forced to reformulate household expenditures – often by limiting access to basic services, and in more serious situations, limiting quality and quantity of food. Although these results cannot be generalised, they provide important insights into the poverty implications in Nigeria. Given the pre-existing high levels of poverty and the rough estimate that 87% of households are vulnerable to poverty (Ajakaiye and Fakiyesi, 2009), any such declines in income and squeezing of consumption capacities is of serious concern - particularly for children and women, who often face the brunt of shocks. The following sections discuss the channels through which the 3F crises have impacted upon family consumption patterns at the local level. Where data is available, we also discuss the implications of these on impacts on key human development indicators.

# **3.3.1. Impacts on Food Consumption**

Food accounts for a considerable proportion of household consumption in Nigeria (64% in rural areas and 62.6% in urban areas) (MDGs Nigeria, 2010a); therefore rising costs of food, compounded by declining incomes, may lead to substantial challenges in regard to food security. Indeed, according to Ortiz et al. (2010), between May 2007 and May 2009 the net food consumption capacity is estimated to have declined by around 6% as a result of reduced affordability and availability of food. Our results also suggest that food price variability for the majority of households in sampled communities (poor households in particular) has resulted in growing food insecurity. This has been attributed to combined effects of a decline in purchasing power and price hikes, compounded by a sustained decline in food production. For very poor rural households where food insecurity is a pre-existing issue, the food and fuel shocks appear to have exacerbated an already serious food situation. As a result, many households have been forced to modify their food consumption patterns, with important implications for women and child welfare, as discussed further on in this section.

# Which households face the greatest risk of food insecurity?

In line with international evidence, food insecurity is determined by spatial differences and the level of household dependence on the production or consumption of food. Evidence point to the urban poor as the most likely group to be adversely affected, given that they are generally net food consumers. However the rural poor, i.e. very poor farming households in rural areas (eg. smallholders) also appear vulnerable to food price shocks, given their increasing reliance on purchased food. In urban focus group discussions in Edo, Benue, Imo and Lagos, the majority of respondents stressed that access to food has been declining over the past 4-5 years, particularly in urban communities due to their reliance on purchased food, which is becoming increasingly more expensive (FGD3). For instance, statistical analysis of the LKHS survey data finds that in Lagos, particularly in urban localities, the first-round welfare effects of food price variability may be associated with the fact that a large proportion of households are net food buyers relative to residents of Kano, and in particular rural communities, which may have the ability to produce food for self-consumption and/or production.

Qualitative data seems to confirm this as on balance rural areas (e.g. Edo, Adamawa) reported to be more food secure in contrast to urban households. Staple foods, such as garri, plantain, yams, rice and beans remain comparatively affordable, which appears to make households relatively food secure in sampled rural areas (FGD4). However, this data appears to mask emerging differentiation within the rural population and among specific groups of people, with very poor rural households bearing the brunt of rising food prices. The growing reliance on imported foods in Nigeria indicates that there is still a low limit to which rural households can depend purely on their own produce to see them through the year. In broader literature, it is noted that poorer households' reserves are depleted more quickly than other households, making them market-dependent sooner during the hunger periods of May-August in the South and July-October in the North – leading to substantial deterioration of household food security (FEWS, 2009b). This is often resulting from households' limited opportunities to diversify income and an ongoing dependence on subsistence farming, which is highly vulnerable to adverse local conditions, thereby placing people at risk of food and fuel price fluctuations.

Qualitative data confirms these trends: as a result of low agricultural yields – compounded by changes in eating preferences – farming households are increasingly reliant on purchased staples such as imported rice, beans and noodles (Benue, FGD 1,2). For example, in Koji (a rural community in Lagos), the majority of residents source their food from mainland markets (e.g. Lagos, Obalende). Even in agricultural states such as Benue, despite the high level of food production (leading Benue to be known as the "food basket" of Nigeria), certain pockets of local populations lack adequate access to food markets due to poor infrastructure and low income, and are therefore more susceptible to food poverty than some populations from other states with higher income and better transport connections. Black market or cross-border sales also appear to cause food prices to increase even in those communities in close proximity to its production.

As mentioned earlier, in addition to the global food price shocks, a continuing decline in agricultural production is perceived by the sampled communities, to be the main source of the observed persistent food price increase after 2006 (Abiodun-Elijah, 2010; FAO, 2008)<sup>43</sup>. A range of environmental, social and political factors have been identified to contribute to changing food supply dynamics and resultant food shortages, as discussed in Box 5. While some of these factors are state-specific, findings underscore the importance of government investments in agriculture sector, with a focus on supporting smallholder producers to boost their production.

#### Box 5: Factors underpinning a drop in agricultural production

Respondents cited a range of reasons when accounting for the drop in agricultural production across samples states, including environmental risks (e.g. poor soil fertility and overexploitation of natural resources) as well as political and economic reasons – all of which discouraged farmers from pursuing commercial agriculture.

#### **Environmental risks**

The pressure of economic crisis only compounds the impact of environmental shocks and poor governance in regard to agriculture. In rural areas, floods, droughts, and poor natural resource management (e.g. a diminishing stock of bush meat in forests) have impacted upon livelihoods and access to food for people in Adamawa and Kano. In rural areas of Lagos state, limited accessibility to farmland (in some cases owing to oil spillage) remains an important determinant of a supply-side response to food price variability. At the same time, any form of insurance against these risks is non-existent. In Imo, farming (which was a major occupation in the state), has been discouraged due to the production of crude oil, leading to the rapid loss of farmland and subsequently higher reliance on imported food. The processes of urbanisation and government land reforms were also perceived as having contributed to food shortage in some areas in the state, as many farmlands have already been taken over by the government and politicians in order to build public and private structures.

#### **Economic risks**

The most commonly-mentioned economic risks of agriculture included an acute lack of financial investment and ongoing shortage of fertiliser. Prices in Adamawa were seen to be influenced upwards by the exportation of food through the black market to other states and neighbouring countries (KII 7, 5). As one respondent commented, "smuggling is not only peculiar to Adamawa state and it includes

<sup>43</sup>In addition to adverse weather conditions, other factors such as a rising household and industrial demand for grains and supply-side constraints in the agriculture sector are identified as dominant determinants in the steady food price increase of the late 2000s in Nigeria.

smuggling of food too. Very few benefit from this. Everything is costlier than in other states." An additional variable emerged in Adamawa, where respondents reported that government assistance is a source of food insecurity: bans on importation of certain food items were meant to encourage local farming; however local producers were not able to produce enough food to satisfy the population, leading to scarcity and rising costs.

#### Social and governance risks

In rural areas in Edo and Adamawa, poor yields were also linked to an aging population and the fact that "[many] able- bodied youths have gone to the cities, reducing farm hands" (FGD3). Some risks are statespecific: the respondent from government agency BENSACA stressed the strong link between food insecurity and the HIV/AIDS challenge, in that AIDS-related deaths reduce agricultural productivity (KII5), while in Kano over-population was blamed for periodical food scarcity. Finally, some perceived regional political dynamics – particularly ethnic conflict in the Jos area – were identified as contributing factors to rising food prices: "When we talk about food insecurity, in the rural area, ... the ethnic clashes in Jos now has increase[d] the price of onions, an onion bulb cost 100 naira in Oju here" (FGD2). Recent effects of pre-election campaigns may have further exacerbated food security concerns for poorer households across the country.

Source: adapted from qualitative fieldwork in six states

#### How do households cope with food insecurity?

Reduced quality and diversity of food, as well as changes in food shopping habits due to restricted budgets appeared to be fairly wide-spread across the interviewed communities in Nigeria, although the extent of the deprivation this involved varied considerably across different socioeconomic groups. These changes are a common response of poor households to economic stress and have been observed in some other countries in the region (Harper et al., 2010). Across sub-Saharan Africa, for example, reduction in food consumption is commonly attendant with price increases in consumed goods such as maize; while in Malawi, FAO (2009) and Brinkman et al. (2009a; 2009b) find that households cope with high food prices by substituting expensive foods in their consumption basket for cheaper alternatives.

In the quantitative survey, we find that residents of Lagos largely resort to cheap food substitutes to cope with food price variability, followed by more drastic measures such as mothers reducing the quantity of food they consume, using liquid assets, in particular savings, and working more hours in an effort to ease the negative income effect from the food price increase. By contrast, residents of Kano seem to resort to savings and credit as primary coping mechanisms against food insecurity, followed by mothers and then children reducing their food intake.

Qualitative data confirms these findings. First there was a strong indication of poor households seeking to maintain and/or adapt to changes in household food budgets by purchasing lesser quantities of food. Eating fewer meals and eating smaller amounts was commonly reported, with many families cutting quantity of food from eating three times to two or even once a day. In Edo parents emphasised how they had to reduce their food intake by 'having one meal in the evening to allow children to have three courses', while in Adamawa adolescents from very poor rural families reported going to bed hungry as a result of increasing food poverty.

Second common response of households to reduced food budgets was to purchase cheaper food staple substitutes: relatively cheap carbohydrate food like *garri* and *fufu* often replaced protein as the core component of the diet. Interviews in Lagos and Imo state also revealed that price increases, especially of rice, have resulted in people consuming *indomie* (eg. noodles), since noodles are cheaper, "more convenient and faster to cook [than local rice] "thus saving time and fuel use. NGOs in Imo however, raised concerns about the effects of high rates of consumption of monosodium glutamate (found in *indomie*), particularly among children. As a result, some are carrying out sensitisation programmes. In order to feed

themselves extreme poor families in Adamawa 'resorted to the bush to collect wild fruits' during the height of food price shocks.

Although these results cannot be generalised to entire Nigerian population, they provide important insights into the corrosive strategies poor households adopt to cope with short-term food price variability that can have long-term consequences in terms of human capital and future prospects for poverty exit.

# Box 6: Strategies for coping with food shortages

"So you will discover that the rural woman who has been using one onion for a meal, will decide to use one onion for two to three meals, to enable the taste or the aroma to be there." (FGD2). Benue "Sometimes you see some people will prepare rice in the morning and keep it 'til in the evening before

"Sometimes you see some people will prepare rice in the morning and keep it 'til in the evening before they will eat. Some people eat whatever comes their way (urban women)" (FGD3). Benue

"We still eat 3 times a day, but I buy in smaller measures- called rubber or cups (milk cup)now;, to avoid wastage by my children and also because of costs" (FGD2).

"Anything cooked and served is gladly eaten by all. Five years ago, if the main meal cooked in the evening (that is when everybody is at home and eat together) is not what one wants to eat, you can easily prepare and eat any other thing. But these days, nobody will take this from you. You just must eat what is available on the table" (FGD6).

"I still eat three times a day, but read about people or homes that don't have enough to eat" (FGD1).

"The family main meal is in the evenings. Only children eat breakfast and lunch" (FGD3).

"We use more iced fish now than before because "lama" or beef, cow meat, bush meat, (i.e. wild animals-antelope, grass cutter, bush fowl, porcupines etc) even "kpomo"(cow skin) are now very costly" (FGD6).

Source: Qualitative research

#### Intra-household and ethnic dimensions of food insecurity

Food insecurity was also seen by some to have strong gender, age and ethnic dimensions. Focus group discussions identified children and women from poor families as bearing the brunt of rising costs of food. Evidence from other crises and regional contexts confirms that women suffer disproportionately because of their vulnerable socio-economic status and unequal balance of power in relation to decision-making, and access and control of resources within the household (Harper et al, 2010). Limited independence is relevant even when it comes to women's decisions related to their own wellbeing (e.g. food, health, education etc.). There is some indication from the qualitative work that women's access to food in times of shock has indeed been shaped by discriminatory intra-household gender dynamics and in the majority of cases women acted as "shock absorbers of household food insecurity" by reducing their own food intake. In Benue, for example, male heads of households (Benue IDI 1,2,3) reported that they ate first considering it a matter of right as the breadwinner, before women were allowed to eat themselves, even during pregnancy (KII6). In Edo and Lagos, while children are often considered first at meal times, women claimed that they will "only eat after serving her husband, and the children, and even other members of the household" (KII 4). Only in rural Adamawa was it was reported that "individuals have equal access to whatever food is available as a result of the sitting arrangement at meals where all eat from the same tray" (Adamawa, KII 10).

Food insecurity has particularly affected poor women who are not mobile (those who do not have a car), as they cannot access distant markets and are therefore reliant on local traders' high-priced foodstuffs. Widows are also highly vulnerable to food poverty, resulting from acute lack of formal government support and access to social networks. Children and adolescents from very poor households are also left unprotected from food shocks: in Benue and Imo, there were a number of reports of children as well as adolescents going to school with little or no food – with resultantly negative effects on their academic performance and health. Respondents explained that many children fall asleep or lose concentration in class, and one case was reported where a girl fainted in school due to hunger (Benue, FGD1; Imo, Owerri IDI

4). Only in Adamawa did some male interviewees considered men to "suffer most, because the onus of making [food] available is on the men, and therefore they face greater pressure" (Adamawa, FGD1).

Finally certain ethnic groups were perceived by respondents to suffer food insecurity more than others because of cultural norms and expectations. In Benue, for example, the following situation was noted: "within Tiv tribes, for example, when as a man you can't feed your family you are considered not to be a 'real man'. Unable to fulfil this function some men leave or become depressed" (Benue, KII 13). More detailed investigation of these dynamics would be useful to explore further in future – including, amongst other things, their impacts on children.

# **3.3.2. Impacts on Fuel consumption**

As discussed previously, the Nigerian government has addressed the international fuel price volatility by subsidising the pump price. However qualitative analysis suggests that government fuel subsidies had a limited effect in cushioning the impacts of rising fuel and transportation costs on household consumption patterns across the sample states, while fuel shortages, and kerosene in particular, continue to affect poor communities.

Fuel shortages appear to be arising from domestic governance and market factors. The LKHS survey show that nearly one-third of households reported pipeline vandalism as the main driver of high fuel price variability. The areas covered by the LKHS survey show that nearly one-third of the surveyed households reported pipeline vandalism as the main driver of high fuel price variability. Closely behind at 28% was the view that the financial crisis had caused the fuel price increases, whereas about a fifth of the sample reported depressed local market conditions as a big contributor to fuel price increase (see figure 12).



Qualitative data also shows that the escalating cost of kerosene is attributed to 'middlemen' and non-functional refineries. In Imo, fuel shocks were linked to hoarding by fuel dealers,

especially during festive periods, forcing families to source fuel on the black market. Evidence in Edo revealed that many households are still facing "petrol scarcity" in both rural and urban localities. In general there was a strong sense that dependence on the black market leaves households very susceptible to price increases and fluctuations. A similar situation was recorded in Kano in 2007, when food prices remained high following the rise in the cost of diesel fuel, which increased the cost of food transport. These domestic conditions resulted in the hoarding of food stocks across markets in the country, particularly in southern states, including Lagos. Whilst in Adamawa, the KI from the Ministry of Finance suggested that the government has intervened in regard to rising fuel costs and long queues for petrol by 'removing middlemen' and supplying fuel directly to stations (KII 3), communities in Edo were very critical of the government's failure to respond to fuel crises and frequent scarcity of kerosene, suggesting the need for a stronger government regulation of fuel prices and the black market economy. Likewise in Benue it was reported that whilst the government is addressing the petrol crisis, access to kerosene – which is 'more important than petrol in the lives of poor people' is 'not on the political agenda, [as] it is not considered lucrative' (KII 3).

#### How do households cope with fuel shortages?

While not everyone is suffering limited access to petrol and kerosene, qualitative data has revealed evidence of people relying on alternative fuel options as a way of coping with the decline in budgets. Poor and low-income households try to save on fuel costs by switching from petrol (e.g. diesel) or gas to cheaper kerosene, as well as buying kerosene in smaller quantities (FGD1-4). In Edo and Benue it has been highlighted that very poor households struggle to afford kerosene and are forced to use firewood, charcoal, and in some cases, sawdust for cooking. Among the extremely poor households there are examples where firewood is now becoming unaffordable, and families are forced to use processed palm fruit skins or candles to obtain light in their homes. Children also seem to be affected directly by fuel shocks: In Edo, families reported sending young children to scavenge for firewood and sawdust before or after school. In addition to facing physical risks (e.g. injuries, sexual abuse), time spent collecting fuel has negative implications on their schooling, as less time is available for study and homework or for rest and play (Edo, FGD1).

#### How are fuel and food prices linked?

Farm production costs (fertiliser, transportation, etc.) tend to be positively correlated with oil prices (WB, 2010). In most countries of Sub-Saharan Africa, a 1% increase in fuel costs increases transport costs by 0.5%, resulting in large increases in farm input costs and drops in farm output prices (Ibid). A prevailing perception among the KIs and community respondents in Nigeria was that the costs of staple food items have increased due to fuel shocks mainly via the rise of transport costs (National KII, FAO), although this seems to contradict the quantitative findings. Both net food consumers and producers seem to be negatively affected by this situation. In Owerri, for example, focus group participants reported that, "farmers who sell food on the market that could benefit from higher prices are negatively affected by rising fuel costs" (Imo, FGD1, 3). This is how one respondent in Koji explained a dynamic link between the transportation costs and poor infrastructure and food prices:

Our women go to Apapa and other area[s] to purchase foods like gari, rice, beans. This gets so cumbersome most [of the] time because of the nature of transportation we have. When they buy [food] to [then] sell [to] us, they add up the transport and the stress they went on the price of their purchase making food prices high (FGD3).

Interestingly our quantitative analysis of official statistics has not found a positive relationship between fuel and food prices. In fact the correlation between monthly fuel and local rice prices was negative, and statistically insignificant for the majority of the states between 2001 and 2010 (once we control for the general increase of prices in the long-run). However, monopolistic, competitive markets may explain this discrepancy. At the individual level, very small price increases are significant, as prices are not regulated but rather determined by individual sellers in the community. As discussed above, fuel is reportedly often sourced from the black market, especially in rural communities (e.g. Imo, Edo, Adamawa). It should be emphasised that with the government pushing for the removal of fuel subsidies, it is unclear what impact this would have on the poor and vulnerable; however social policy measures are not yet in place to counterbalance the possible negative effects of undoing the subsidies. Adoption of timely measures is thus essential to offset the impact of price liberalisation on the poor.

# **3.3.2 Effects on health and access to healthcare**

There are number of ways in which the recent 3F crises may have already affected people's access to healthcare and health status, including: increased susceptibility to illnesses due to poorer nutrition and increased workloads and exacerbated difficulties in obtaining healthcare – all of which have serious implications for women and children. In this section we review the evidence arising from our quantitative and qualitative fieldwork.

# Changes in health-seeking behaviour

Emerging evidence from other countries experiencing shocks shows that increasing pressure on non-food household budgets from the rising prices or economic recession, may lead poor households to experience catastrophic health spending<sup>44</sup>, or reduce their healthcare expenditures (Harper and Jones, 2009; NISER, 2009). Typically, households in all countries cut back on visiting health services, instead relying on self-diagnosis and treatment and traditional practitioners (Islam et al., 2007; Knowles et al., 1999).

In Nigeria, high costs and subsequent low utilisation of medical services generally pre-date the crisis; however there are indications from the sampled states that the combined effects of financial, food and fuel shocks seem to have further compromised this situation - particularly with regard to maternal and child healthcare. Achike and Ichoku's (2010b) PEP survey cautiously suggests that adaptive health may already be in evidence amongst the poorest groups: 24.4% of households reported not having sought treatment for illness in the previous six months; 99 women were unable to seek antenatal care services due partly to financial constraints; and 25 women and 30 babies were reported to have died in birth-related circumstances in the past six months (Achike and Ichoku, 2010b). In our qualitative research, diminishing household purchasing power was also widely cited as a key barrier to healthcare access with respondents reporting an inability to pay for increasing drug and treatment costs, leading people to self-diagnose their illnesses and administer self-medication (Edo, FGD2). This was a commonly reported response of poor households and those living far away from medical facilities, particularly in rural Adamawa and Lagos state. Very poor people who cannot afford the healthcare reportedly "wait until their sickness becomes an emergency before they start running around and calling for help" sometimes with catastrophic health consequences (Lagos FGD1). Others claimed that they were increasingly switching to alternative medicine, using traditional herbs and medicines when ill, partly because of costs and poor quality of drugs. This switch, in combination with reduced food consumption, can 'place people at risk of malnutrition and ill health, with long-term implications' particularly for HIV and AIDS patients (KII 7).

It should be highlighted that difficulties in accessing healthcare may have a very dire impact upon pregnant women and children. Even before the crisis, existing cost barriers in Nigeria prohibit poor women from seeking antenatal care, with both mothers and newborns reportedly facing a high risk of death from neonatal causes and infections associated with delivery. This is manifested in Nigeria's high maternal, infant and child mortality ratios, which are some of the highest in the world. The estimated maternal mortality rate (MMR) ranges between 800-1,500 per 100,000 live births, with marked variation between geo-political zones – 165 in south east

<sup>&</sup>lt;sup>44</sup> In Nigeria, a survey in Enugu and Anambra states in 2008 found that for many households, particularly amongst lower-income groups, household healthcare expenses were already at catastrophic levels (CREHS, 2010).

compared with 1,549 in the north east – and between urban and rural areas (Federal Republic of Nigeria, 1999). Sadly, 284,000 newborns die every year (Federal Republic of Nigeria, 2009).

Although statistical data is lacking, crisis shocks are likely to have aggravated these deprivation, as families reduce their healthcare expenditure. Important insights have already emerged from qualitative fieldwork. For example in Imo it has been reported that healthcare has recently dropped as a priority among some pregnant women in their quest to generate income for survival. Many pregnant women now depend on traditional birth attendants for delivery, as they cannot afford the time and money to access health institutions, with potentially disastrous outcomes for pregnant women and children:

A lot of pregnant women would rather be on their farms to earn their living than spend time attending antenatal care activities at the health institutions. The current financial crisis has worsened the situation thereby moving access to health care by many mothers much lower in their scale of preferences. (Imo KII4)

Fuel shocks also play an important role here, as access to healthcare is further exacerbated by the rise in fuel prices and related transportation costs, since these were seen to add substantially to healthcare expenditures, particularly in remote rural areas<sup>45</sup>. These problems were widely reported in Adamawa, Benue Lagos, and Imo. In Lagos, for example, poor populations in riverine communities (such as Koji village) exist within close proximity to the adjacent mainland (Apapa); however this riverine area is plaqued with abject poverty due to an inability to access the mainland without water transport, which is usually unavailable during the rainy season. Those who must travel to the mainland for healthcare face expensive and difficult transportation - as well as high costs of medical care once they arrive. In Imo and Adamawa, pregnant women were said to have to travel at least one hour's drive to get to the nearest hospital, (sometimes in the rainy season they are transported on a donkey). Owing to the cost and physical difficulties, some do not even attempt to reach antenatal facilities. As a result, children and pregnant women face a high risk of mortality before they can reach assistance. In SabonGari village, respondents reported that ten maternal and infant deaths occurred in the past three years (Adamawa, FGD1). The econometric analysis seems to suggest that for children, their morbidity rate, i.e. the likelihood of contracting preventable diseases is more adversely affected by for price increases than the rest of the population in agricultural states, denoting that in the presence of food price variability children are more prone to suffer in terms of morbidity than adults (see table 6).

#### What are the crisis impacts on health-related outcomes?

Econometric analysis shows a complex and dissimilar picture across the country in terms of the impact of the 3Fs on health related outcomes. We focus in particular on changes in morbidity rates, in consultation rate with doctors, vaccination and immunisation rates among children, teenage pregnancy, child mortality, and protective behaviour against sexually transmitted infections. The findings show that while food price increases have overall a weak effect on children's vaccination, immunisation rates and teenage pregnancy, they are significantly associated with a reduction in the incidence of preventable illness (column 1 and 2 in Table 6). Quantitative evidence also reveals that the effects of food price changes on health variables display a relatively small degree of variation between more and less food dependent states, only significant in the case of vaccination and immunisation (columns 7 and 8 in Table 6) and in the case of protective behaviour (column 11). In the first two cases the result is surprising: the effect of food price increase on vaccination and immunisation rates is less adverse in the relatively more food dependent states. On the other hand, protection behaviour is boosted by food price increases – more so in those states relatively less dependent on food consumption.

The impact of food prices on health variables is either positive or neutral for states with higher share of agriculture in total income, with the exception of protective behaviour, which tends to

<sup>&</sup>lt;sup>45</sup>The average transport cost for a maternal emergency, for example, is N1,800 (PRRIN, 2010)

be more negatively affected by food price increases for states which derive a greater share of their income from agriculture.

Method	(1) Probit	(2) Probit	(3) OLS	(4) Probit	(5) Probit	(6) Probit
Dep Var.	health1	health1	health2	health3	health4	health4
	nearth	neartin	neartiz	nearth5	nearth	nearth
Ln price food	0.066 (0.037)* 0.001	1.030 (0.579)* -0.212	0.513 (1.854) -3.082	0.307 (0.229) -0.155	0.393 (0.253) -0.397	-0.733 (3.879) -1.257
Ln price all	(0.030)	(0.061)** *		(0.199)	(0.210)*	(0.411)** *
Foodshr x price food	(0.030) 0.043 (0.040) -0.011	-0.878 (0.889) -0.534	(1.624)* 1.293 (1.990) 1.447	(0.199) -0.117 (0.249) -0.367	(0.210)* 0.316 (0.276) 0.526	3.528 (6.018) -2.084
Agrshr x food price	(0.015)	(0.304)*	(0.760)*	(0.095)** *	(0.107)** *	(2.117)
States x d2009	No	Yes	No	No	No	Yes
Observations	347,575	347,575	29,892	29,672	24,605	24,605
Method Dep Var.	(7) Probit health13	(8) Probit health14	(9) Probit health15	(10) Probit health19	(11) Probit health26	(12) Probit health30
Ln price food	-1.102 (0.135)**	-0.986 (0.323)**	-1.435 (0.622)*	-0.146	0.058	0.163
Ln price all	* -0.173	* -0.055	* 0.188	(0.153) 0.373 (0.106)**	(0.075) 0.165	(0.084)* -0.167
Foodshr x price	(0.116) 0.615 (0.148)**	(0.269) 0.930 (0.334)**	(0.379) 0.988	* 0.046	(0.065)** -0.196	(0.072)** 0.028
food	*	*	(0.875)	(0.185)	(0.079)**	(0.082)
Agrshr x food price	0.547 (0.061)** *	0.905 (0.131)** *	-0.164	0.087	-0.182 (0.030)** *	0.083
States x d2009	No	No	(0.348) No	(0.080) No	No	(0.035)** No
Observations	49,234	16,206	10,427	5,544	173,644	123,596

### Table 6: The effects of changes in food prices on health, 2003-09

#### Malnutrition and ill health

As previously discussed, a common response of poor families to food shocks was to modify their eating patterns, in both quantity and quality. As a result of hunger and poor diet, across the sampled states (except in Adamawa) there were reports of people, and children in particular, facing the risk of acute malnutrition, including fatigue and vulnerability to disease. Hunger was said to be deterring children from attending or travelling long distances to school, as well as diminishing their capacity to learn (FGD1-3). The situation in some areas has become so dire that Save the Children pointed to evidence of women and children crossing the northern border into Niger to seek treatment for severe malnutrition, due to a lack of access to nutritious food and healthcare in Nigeria. In Benue, for example, communities reported the effects on adolescent nutrition as especially severe, demonstrating this group's particularly limited capacity to cope with rising food costs and the potential impact of this upon family survival. These findings are worrisome given that Nigeria already has high, pre-existing levels of child malnutrition (according to NDHS (2008) 41% percent of children are stunted, and 14%

suffer from acute malnutrition (wasting)). Implications for child rights will be discussed in section 3.4.3.

With regard to ill health, the study has also determined a link between changes in income due to food and fuel shocks and health status. Although not representative of the entire population, the LKHS household survey shows a high incidence of ill-health in both Kano and Lagos, and rural and urban areas over the period the 3Fs crisis became manifested. But in Lagos, we notice a relative large increase in ill-health, from 81% in 2008 to 88% in 2009 and then up to 94% in 2010. The jump coincides with the food price increase associated with natural calamities; particularly severe flooding that took place in southern regions of the country. Data suggests thus that the effects of the food price increase, coupled with infection diseases arising from poor sanitation seem to have been especially harsh in deprived urban areas, as the incidence of ill-health was shockingly high. Another revealing result arises from the fact that food price variability and ill-health seems to be connected to domestic factors rather than global trends of the international commodity markets, and our results are supported by existing evidence (see Abiodun-Elijah, 2010; FAO, 2008).<sup>46</sup>

Oil exports exert a significantly positive effect on health indicators via the fiscal space. This is because budgetary allocations to the health sector seem to play a critical role in determining health outcomes via the standard of services and level of access to healthcare across states. However, evidence from econometric analysis shows that the effects on health outcomes do not differ greatly across states according to their dependence on federal transfers, nor their dependence on government employment. One exception is the length of illness, which tends to be more positively affected by oil exports in states with a higher share of federal transfer as well as in states with higher share of public sector employment (see column 3 in table 7). Also states with higher share of public sector employment enjoy a more positive effect on vaccination rates for children from oil exports (column 6), suggesting that part of the health benefits rely on transfers of resources from oil exports via public sector employment, i.e. budget allocated to employ health workers, and less importantly on federal transfers in general.

Method	(1) Probit	(2) Probit	(3) OLS	(4) Probit	(5) Probit
Dep Var.	health1	health1	health2	health3	health4
Ln petrol price	-0.004	-0.013	0.278	0.060	-0.034
	(0.011)	(0.024)	(0.458)	(0.062)	(0.068)
	0.067	0.065	-0.983	0.016	-0.031
Ln Oil export	(0.011)** *	(0,020)**	(0 442)**	(0.0(2))	(0.072)
Fuel Chr. in evenend		(0.030)**	(0.443)**	(0.062)	(0.072)
Fuel Shr. in expend	0.367 (0.196)*	0.325 (0.697)	11.710 (8.898)	0.782 (1.158)	0.348 (1.293)
x petrol price Gross transfer x Oil	-0.048	-0.782	(8.898)	0.197	(1.295)
exports	(0.143)	(0.917)	(6.518)*	(0.859)	(1.087)
Govt empl. Share x	0.008	0.368	0.845	-0.060	0.035
Oil exports	(0.009)	(0.285)	(0.445)*	(0.057)	(0.064)
	()			()	
Observations	347575	347575	29892	29672	24607
	(6)	(7)	(8)	(9)	(10)
Method	Probit	Probit	Probit	Probit	Probit

# Table 7: The effects of changes in fuel prices on health, 2003-09

<sup>46</sup> In addition to adverse weather conditions, other factors such as a rising household and industrial demand for grains and supply-side constraints in the agriculture sector are identified as dominant determinants in the steady food price increase of the late 2000s in Nigeria.

Dep Var.	health13	health14	health15	health19	health26
Ln petrol price	0.104 (0.040)**	0.163	0.057	0.031	0.064
	*	(0.079)**	(0.249)	(0.050)	(0.025)**
Ln Oil export	0.067 (0.038)*	0.109 (0.073)	0.127 (0.262)	-0.054 (0.061)	-0.026 (0.024)
Fuel Shr. in expend x petrol price	-3.749 (0.699)**	-5.220 (1.568)**	-3.538	-0.744	-1.642 (0.374)**
x petror price	*	*	(4.141)	(0.914)	*
Gross transfer x Oil	-0.012	1.317	-3.223	0.198	-1.046 (0.297)**
exports	(0.554)	(1.461)	(2.809)	(0.843)	*
Govt empl. Share x	0.181 (0.034)**	0.076	0.157	-0.048	-0.096 (0.018)**
Oil exports	*	(0.079)	(0.214)	(0.041)	*
Observations	49234	16209	10433	5780	173644

When we disaggregate the econometric results by gender and age, we find that oil exports have a more positive impact on morbidity rates among children in states more dependent on public sector employment. For the most part, the impacts of fuel prices and oil exports on health is fairly gender neutral, except for the effect of oil exports on protective behaviour, which is stronger for males than females, and the impact of oil exports on protective behaviour is stronger for teenagers than for the rest of the sexually active population in states more dependent on fiscal transfers. These results suggest that oil-related federal transfers can boost health services and help sensitise particularly the teenage population – via public health campaigns on sexually transmitted diseases.

In the context of reduced federal transfers, as occurred in the 2008-09 financial crisis, the poor access to quality health services is likely to be exacerbated for low-income Nigerians. Private hospitals and clinics are generally unaffordable for poor families, who in times of crisis tend to suffer more from malnutrition and preventable illness. And the increasing demand for health services, coupled with budgetary constraints from a reduced fiscal space, has limited the government's ability to increase health infrastructure and its accessibility. Inadequate funding at all levels hampers the performance of the Nigerian health care system. The current government budgetary allocation for health of 3.5% is still far below the target set in the Abuja Declaration of 2001. The bulk of health funding is borne by households through out-of-pocket payments for health care, which contributes up to 63% of total health expenditure. The high cost of care, particularly in the case of obstetric emergency, is one of the most important barriers to healthcare use in Nigeria. Only 58% of women receive antenatal care from a professional with coverage levels, ranging from 31% to 87%, with the lowest figures are from the North East and North West zones (UNICEF, 2010). Specific challenges in health service delivery and access include inequity of service distribution, poor infrastructure, restrictive religious and cultural norms, and general lack of health knowledge (see appendix 4 for a detailed discussion on this). Qualitative inquiry yielded largely negative reports of public healthcare including inadequate facilities, obsolete equipment, poor staff and very low standards overall. Therefore, adverse changes in federal transfers, may affect the poorer Northern regions to an even greater extent, given their dependency on federal contributions.

#### 3.3.3 Access to education

Similar to health findings, educational expenses have been found to come under increasing pressure across all sampled states. Although parents and children typically conveyed that education remains a core social value, there were signs of a rise in school dropouts and absenteeism, in sampled states as parents faced growing difficulties in affording school costs, especially in rural areas.

# Changes in schooling patterns

The education consumer price index rose by 8.8% between 2009-2010, and qualitative data reports that households are having difficulty paying school fees and transport costs, with a resultant increase in the need for additional labour support from children to make ends meet (NBS, 2009a)<sup>47</sup>. This is in line with findings elsewhere (Ablezova et al., 2004; Knowles et al., 1999): for example in Argentina, almost 72% of households reduced consumption of school supplies as a result of the 2003 economic crisis (Fiszbein et al, 2003). Among the very poor households in Nigeria, the withdrawal of children from school appeared to be a common response to shocks in sampled states. Rises in school drop-outs were widely reported also in Benue, and to a lesser degree in Adamawa, Edo and Lagos. Many parents interviewed felt that they had no other choice but to withdraw their children from school when faced with financial difficulties. In Imo, reported reductions in remittances had strong effects on household purchasing power, leading many families to change their consumption patterns, specifically with regard to education.

At the same time, state-based econometric analysis finds some degree of heterogeneity in terms of impacts of food price increases on educational outcomes across states and that relates in part to the interaction between the food dependence of states, i.e. their share of food consumption on total income, and changes in food prices. In particular, price increases show a more negative impact on educational variables in those states more food dependent. Surprisingly this is also the case for states with higher shares of agriculture revenues in total income, although the magnitude of the effect is almost ten times smaller than that of food dependent states. This result suggests that increases in food prices are not such good news for states, which are reliant on agriculture. This may be due to a critical factor: agricultural states are mainly composed of subsistence farmers, who heavily rely on labour supply from within the household, and in context of food price increases, this generates incentives for parents to withdraw their children from school to engage in agricultural production. And when we account for the differential impact according to the dependency on food consumption, the pure effect of the food price increase is statistically significant (column 3 onwards in Table 8). This implies that food price changes display a large part of their effects on the basis of the degree of households' dependency on food consumption. As we have already discussed in section 3.2.1, gualitative evidence confirms that the opportunity costs of education among poor families with limited livelihood options are high in the context of increasing financial hardship. Children are also more likely in these households to be engaged in increased farm or household labour to contribute to household economy, as well as have fewer opportunities to attend school in the first place. But as we have seen, this behaviour does not only have implications for children from farming families, but also for poor and very poor families more generally. The most dramatic situation was recorded in Imo, where the worsening economic situation has in some areas become so dire that children must scavenge rather than go to school:

Recently the high cost of education has made many children to drop out from school. If you go into the bush now, you will find many children there picking palm kernel, which they sell to help their parents. (Imo, FGD2)

Method Probit Probit probit Probit	logit	prob	
Dep. Var. Drop out Drop out Drop out Drop out	Drop out	out Ever	

# Table 8: The effects of food price changes on education, 2003-09

<sup>47</sup> The education consumer price index had risen by 8.8% year-on-year in September 2010, and data from 2007 reported education accounted for 2.44% of total household expenditures (2.04% in rural households and 3.46% in urban households) and 6.85% of non-food commodity household expenditures (6.19% in rural households and 8.16% in urban households) (NBS, 2009a).

Ln price food	0.034 (0.019)*	0.034 (0.032)	0.177 (0.028)* **	0.158 (0.037)* **	7.430 (1.179)* **	5.049 (1.432)* **	
Ln price all	(0.019)*	-0.000 (0.034)		0.025 (0.034)			
Foodshr x price food			-0.269 (0.032)* **	-0.271 (0.032)* **	-11.437 (1.247)* **	-8.676 (2.179)* **	
Agrshr x food price			-0.032 (0.015)*	-0.031 (0.015)*	-1.509 (0.657)*	-0.538	
·			*	*	*	(0.813)	0.139
Ln price food <sub>B</sub>							(0.024)* **
Foodshr x price food <sub>B</sub>							-0.258 (0.030)* **
Agrshr x price food <sub>B</sub>							-0.027 (0.014)*
Controls States x	Yes	Yes	yes	Yes	yes	yes	yes
d2009 States	No	No	no	no	no	yes	no
effects	Yes	Yes	yes	yes	yes	yes	yes
Time effects	Yes	Yes	yes	yes	yes	yes	yes
Observations	93,083	93,083	93,083	93,083	93,083	289,169	93,083

Nonetheless, and as pointed out above, we find that as far as the food price crisis is concerned, states with a higher share of food in consumption experience a larger negative effect on education from increases in food prices. This relationship is illustrated across states in Figure 13 below. Of the six states analysed in this study, only Benue is out of the downward sloping curve of the regression line between the interaction term that measures the share of food consumption in total expenditure times the increase in food prices, and the effect of a price increase. This means that the negative effect of a food price increase on education is less severe in Benue than in the average Nigerian states. This result is consistent with the relatively low share of food consumption in the state's overall expenditure (the lowest value in the case-study states). The remaining states lie on the regression line, which means that the effect of food price increases on school dropout is mainly explained by their dependence on food consumption and the extent to which food prices increased in that state more than in others.



With regard to fuel and oil price shocks, data analysis also shows a heterogeneous picture. Overall, from table 9 we notice that Imo and Lagos have relatively larger coefficients, indicating that the negative (pure) effects of petrol price increases on education are less severe in these states than in the others. The opposite is true for Adamawa, where the more adverse effects in the changes in the petrol price can be related to the relatively high instability of fuel prices throughout most of the past decade.

Oil exports, on the other hand, tend to benefit educational outcomes in Imo, Kano and Lagos less than the average state, at least in part due to the low share of federal transfer in the income of these states, which is half or less than the average for Nigerian states. At the other end of the spectrum, education in Adamawa appears instead to benefit relatively more than on average from increases in oil exports. This draw attention to the significance of federal contributions to states, and how they directly impact educational outcomes in Nigeria.

Although Adamawa statistically enjoys better outcomes for education partly due to its larger percentage in income of (oil export related) federal transfers, qualitative data indicates that school infrastructure is lacking, with some areas entirely without schools or teachers: In Sabon Gari village, for example, we have been told that distance renders primary school completely inaccessible in the rainy season due to road flooding. Benue, which also receives one of the highest shares of fiscal transfers in income, reportedly suffers similarly from widespread and acute lack of educational infrastructure. Our results also underscore the associated vulnerabilities and potential damaging effects on educational outcomes arising from systemic risks that affect the government's fiscal space. We return to these issues in Section 4.1.

# Table 9: Coefficients measuring effects of fuel price and oil export changes on education

	drop out	Ever sch.	shr_fuel	drop out	Ever sch.	Transfer as %	Shr gov empl.	Shr gov empl.
	Petrol			Oil Exp		GDP	03	09
Adamawa	-0.269	0.048	1.3%	0.01	0.102	1.9%	6.9%	3.1%
Benue	-0.166	0.195	5.3%	-0.046	-0.009	1.4%	3.8%	2.0%
Edo	-0.14	0.274	5.5%	-0.052	-0.066	0.8%	9.3%	4.8%
Imo	-0.113	0.943	2.6%	-0.073	-0.338	0.8%	6.3%	4.5%
Kano	-0.178	0.545	3.4%	-0.043	-0.367	1.0%	5.8%	3.2%
Lagos	-0.092	0.739	7.9%	-0.054	-0.276	0.4%	13.1%	8.8%
Nigeria	-0.256	0.330	3.4%	0.002	-0.125	1.9%	7.1%	5.4%

Source: Authors' estimations on NLSS and HLSS data as well as World Bank (2011) and Ministry of Finance

School attendance is also influenced by traditional views with regard to children's roles in assisting with family income, as well as expectations according to gender and age. Gender norms are critical in determining girls' access to education and their level of achievement. Strong gender bias was evidenced across the sampled states, with girls often withdrawn from school in order to ensure boys' education: in Adamawa, it was expressed that any investment in girls' education would be fruitless to the family once girls marry. Some parents also believed girls to be less intelligent than boys, and therefore presumably less likely to succeed in academics. Concerns were also expressed about girls running the risk of pregnancy if they remained in school too long.

The econometric analysis on the LKHS survey suggests that among deprived and income vulnerable households, being a girl appears to increase the probability of experiencing an early school dropout.<sup>48</sup> In 2006 and 2007, a girl living in Lagos faced, on average, a 2% higher probability of dropping out school than a boy living in the same locality. By 2008, the odds of a girl dropping out school had increased up to 10%, and the strength of the correlation was significant at 1% level. A similar pattern is also found among girls living in urban areas.

#### Quality of education

There were also strong signs of children being withdrawn from school because of the poor quality of education. This issue however, was seen as a pre-existing problem, not necessarily affected by global shocks. Nevertheless, given the scale of dissatisfaction with education services expressed by families in qualitative data, it is important to highlight some of the main findings:

Typically, public school facilities have been described to be facing serious decline and lacking the most basic of infrastructure. A respondent in Imo spoke of local schools thus: "What you will see is decay and nothing more" (Imo, FGD1). The quality of education in Benue was also said to be on the decline, with teachers suffering from unpaid salaries, resulting in incessant absenteeism. In Kano, junior secondary school is now theoretically free for girls in order to encourage attendance – however teachers have been found to charge fees as there is a dearth of school funding, and if "the girls don't bring the money they are beaten by the teachers, so they stop going to school" (Kano, KII 17). While extremely unappealing, public schools have been viewed by sample populations as unavoidable, especially among the poor who have no other choice. The better-off families that can afford private schools are abandoning public education, disturbed by its low quality; hence educational entrepreneurs in Lagos are reportedly setting up private schools to cater for this demand, although it may be inferred that the poorest families cannot afford such a switch. With a reduction in oil revenues and

<sup>&</sup>lt;sup>48</sup> The results from the LKHS survey reflect trends among deprived population subgroups in Lagos and Kano, although they findings are not representative of the overall distribution in these states.

subsequent federal transfers to states in 2009, it is plausible to argue that these challenges in the educational system are likely to be compounded, suggesting a need for educational investments to be protected.

# **3.4** Social Impacts

In this section we turn to discuss the social impacts of the 3F crises: namely community solidarity and networks and intra-household dynamics and psychosocial wellbeing, before we turn to child wellbeing and rights. Findings point to social capital as critical in mitigating and ameliorating the crisis impacts, though recent reductions in such informal social protection support have critical implications for social policy. Patriarchal family dynamics, though long an integral part of some traditional cultural and religious norms, as detailed below, are in some cases becoming a source of family contention and discord, as power balances shift in the face of increased income responsibilities for women.

# **3.4.1. Informal Networks of Support and Community Solidarity**

In the absence of formal social protection mechanisms, communities in Nigeria rely largely on informal support networks to cope with shocks and deal with poverty, and this has been confirmed in our qualitative fieldwork. Across the sample states, in the context of the 3F crises, financial assistance from relatives and extended kin networks, faith-based institutions, and local community groups appeared to play a significantly greater safety net role in the communities, particularly for poor households, compared to the federal and state government and NGOs. In Lagos there was evidence of strong community support for those in need, while residents in Edo state spoke of the importance of membership to associations such as the Cocoa buyers association (IDI 5), Nigerian Institute of Printing (and other bodies) (IDI 8), and clubs and cooperative societies among others (IDI 1,4,5,7).

Reliance on family members (spouse/siblings and extended kin) in times of crisis was pointed to as the most prominent source of support in all sampled communities, with money provided for critical expenses such as health care and education or access to work. Migrant remittances may also fall into this category of support, as many families across the communities interviewed depend on relations living in other parts of Nigeria and abroad, especially for assistance with the school fees of their children (KII 1). In contrast, reliance on neighbours for support was not seen as an important avenue to cope with shocks and was mainly viewed in regard to issues of public importance such as electricity and water supply, and community security etc., while friends are important for pooling resources (e.g. trading capital and saving funds).

Borrowing through various social network mechanisms, primarily to smooth consumption in time of shock, has been another frequent response observed across all states. Communities mostly rely on borrowing from friends and relatives and through informal cooperative societies and credit associations. The most prevalent form of informal lending in the context of crisis in rural areas across Edo and Imo was the 'Esusu' scheme, whilst in Benue and Lagos, where families reported relatively good access to microcredit, there has been 'an increase in family reliance on micro credit to meet immediate consumption needs' such as food (KIIs 4,10). Women's groups seem to provide an important coping strategy for women, particularly in relation to financial assistance but also psychosocial support. In Lagos women join "alajeseku" (cooperatives) to raise money, and in some instances loose non-formal cooperative groups are their only form of support. There was some evidence, however, that men have better access to social support networks, which may strengthen their capacity to respond to shocks more effectively than women. According to a female respondent in Benue, "the difference is that in the society where you have two sexes, you see, the access to money of men in the community is different from access to money of women in the community so, women mostly have to turn to this petty trading, but for men to make it they go into community loans" (Benue, FGD2).

Access to NGO and FBO support: Generally, those who participated in this research considered support provided by non-state actors to be uneven with regard to coping with harsh economic conditions and providing communities with access to social services. NGO support seemed to be most prominent in the urban communities in Edo and Lagos state and to a lesser degree in Benue, where initiatives from NGOs, faith-based and charitable institutions were seen to play important roles as social safety nets and more broadly in socio-economic development (e.g. water supply, HIV prevention, employment assistance etc.), if not necessarily directly related to global crises. By contrast in Imo and Adamawa, NGO support in the sampled communities during the crisis was perceived as effectively absent and in fact very few people have even heard of NGOs: "If there are NGOs, I don't know. We are not receiving any assistance from anyone" (FGD3). The few that are in operation focus on HIV prevention, the physically challenged and widows, and are very small-scale (Jimeta; Owerri IDI 4). In the absence of effective government assistance and NGO support, communities have learned to depend mostly on self-help projects and informal forms of support.

Finally, while the majority of respondents said they attend church for spiritual protection and moral guidance, churches were also identified as important safety nets in times of need. For example, respondents in Edo state reported that their church provides help with school fees for high achievers who come from poor families, as well as with business support; in some communities schools run by churches provide jobs to local girls as teachers and nannies (FGD6). In Benue, cash assistance received from FBOs enables some households to cover immediate needs and pay for health care or schooling.

#### Have there been changes in informal support as a result of the 3F crisis?

Respondents reported that the economic difficulties has forced people to join informal support networks or establish community meetings to deal with adversity and organise help for those in need. It can be argued that in this case increased community cohesion has been a beneficial side effect of the crises in Edo. Adolescents in Imo and Adamawa reported a growing importance of social networks and membership in faith-based or political youth organisations in the lives of young people, although this growth was not directly linked to impacts of crisis.

There was some evidence in qualitative data that community solidarity may have weakened somewhat as a result of growing hardship, which in some instances has been directly attributed to the food and financial shocks. For example, the scale and nature of support from friends was perceived to be weakening in urban Edo, as "more households are struggling now to make ends meet" (FGD3). Similarly, in Imo, social networks were seen by some to be "breaking down because of financial hardships [while] the scale of support was also seen as decreasing" (FGD3), although generally it was difficult to establish the extent of these changes, very similar effects have been documented in economic crisis contexts (Harper et al, 2010). Formerly close communities have also splintered due to reductions in socialising because of rising living costs (Benue) and manifestations of financial envy (Edo).

Negative changes were revealed in rural areas too with regard to some community-based lending groups. Esusu and Ajo support structures in rural sample localities in Edo have disbanded as members cannot afford to repay their group debts, and those who stood as surety for borrowers have had assets confiscated in order to offset these obligations – leading to bad blood between former neighbours and friends.

An important issue to emerge in our discussions with the NGO sector was that many state sources of support to NGOs and private donations were believed to be declining, forcing many to scale and/or close down their programs. Civil society organisations seem to have been severely affected by the financial crisis, as they saw a constrained ability to raise funds for their operations. The respondent from the Community Reach Initiative in Adamawa cited negative impacts on business activities (which provide essential income streams for the organisation's projects), necessitating retrenchment of three staff members, as well a decline in private donations (KII 5). Similarly, the KI from the Islamic Development Centre reported budget cuts that have necessitated suspension of programmes (KII 12). The respondent from

the Association of Women Living with HIV/AIDS (ASWHAN) in Abuja gave the following account of the situation affecting their organisation:

"There has been an effect [of the financial crisis] on [our ability to] rise funding. I think it's been recognised that the financial slump, that the amount of money that corporations and others were giving to organisations and others like ourselves was dropping ...I think what the economic crisis has had an impact on is that we're being asked to do more with less and that is really squeezing us, because in Nigeria operational costs are high. The thing is what we don't want to do is compromise quality as well. You're also getting a lot more pressure from the donors to have scale to do more with less and also to ensure that you are having the results on the poverty and I think that's where were finding it difficult [...]".

This is important development, since funding remains a key challenge for most organisations in introducing any specific approach to social protection as part of their operations (Ibid).

Another crucial finding from the qualitative analysis is that not all groups have a ready access to social networks and community support, chronically poor seemed to be most deprived in this regard. For example, social networks had the least importance in SabonGari village in Adamawa. It was noted that since SabonGari is an acutely poor village, this has prevented the establishment of functional community-based saving/lending groups, among the poor members in the community. The relative lack of horizontal social capital has been associated with SabonGari being a relatively young community, comprised of immigrants from various parts of Nigeria. This has meant that the help members can provide is limited – mostly food and labour.

The reported lack of access to these alternative forms of support in time of shock, is very concerning, as households may be forced to employ negative coping strategies to cope with financial hardship. For example, in Adamawa borrowing money from personal networks is reported to be harder these days, as communities are experiencing collective hardship (FGD2). In the absence of more constructive forms of lending some families in Benue were forced to seek assistance from the local moneylender, also locally known as 'baranda' (KI 11). Visits to a baranda were perceived by participants to be a last recourse for money – mainly because of the exploitative interest rates and the stigma attached to the desperation of borrowing from the middleman. While very little official data exists, there is some anecdotal evidence to suggest that very poor households, in absence of meaningful social networks of support are resorting to harmful coping mechanisms, with strong implications for poverty (see Box 7).

# Box 7: Adopting corrosive strategies to manage shocks

Qualitative data has revealed that very poor households who lack access to informal support networks are adopting particularly harmful coping mechanisms in extreme cases, in order to deal with shocks. Through our qualitative fieldwork we have identified examples of people resorting to illegal livelihoods, sex work; hazardous and exploitative child labour; and distress sale of assets.

Distressed asset sales were noted as a particularly common coping strategy in Benue and Adamawa, and to a lesser extent Imo state, where households had to "manage with shocks by selling their livestock, land, gadgets and even houses" (FGD7). In SabonGari poor farmers had to sell livestock to acquire necessary cash, although in some cases they managed to replace the animals relatively quickly and thus keep their source of livelihoods intact to some degree. Others had to both borrow money and then sell assets to cope with financial difficulties and manage their debt. Searching for more lucrative livelihoods has exposed some adolescents and young people to illegal ways of earning money. For example, in Edo and Adamawa young people were reportedly growing marijuana as a cash crop and selling black market fuel in rural areas.

These distress-induced strategies have considerable implications for the emergence of household 'poverty traps', as short-term needs are prioritised over long-term living strategies. By undermining current capacities and resources, hazardous short-term coping mechanisms have the potential to push many more vulnerable persons and households into deprivation and therefore increasing their potential

exposure to chronic poverty (CPRC, 2008). In extreme circumstances, respondents across states reported an increase in substance abuse as a coping mechanism particularly among youth, as well as a rise in crime and insecurity due to unemployment – all of which have led to growing insecurity and distrust particularly in the urban communities of Benue and Imo. In rural Adamawa, crime was said to be increasing due to unemployment and agricultural failure. However in Benue, an increase in crime has intriguingly bolstered community solidarity in some areas, as decreases in social sector spending (such as policing) have brought rise to local volunteer vigilante groups and increased community leadership.

But while informal community solidarity networks are critical for supporting households to deal with shocks, the insurance they provide can be limited.<sup>49</sup> And given that shocks often force the poor to resort to costly coping strategies, public interventions in the area of social protection are justified, as they yield a social dividend by enabling the poor to achieve better welfare outcomes and ultimately exit poverty. We return to this issue in Section 5.

# **3.4.2. Intra-household dynamics**

General literature highlights that changes in consumption and labour patterns resulting from shocks may often lead to families experiencing changes in intra-household power relations, especially, but not exclusively, gender relations (Harper et al., 2009). These can lead to positive (e.g. women's greater autonomy) or negative outcomes for individual family members (e.g. time poverty) and household welfare (e.g. intra-household tension and family violence and breakdown). Although official documentation of hard-to-measure and hard-to-research social problems, such as time poverty, intra-household conflict and domestic violence is lacking, there is anecdotal evidence from our fieldwork to suggest increased risk of all of these among certain households. These can be linked to the increasing pressure on gender relations owing to greater demands on women's time as they try to manage the effects of commodity price shocks.

#### Women's growing financial responsibility and autonomy

It is widely agreed in the literature that economic hardship generally results in greater demands on women's time as they try to manage the household budget with increasing expenditure on food and increasing time in paid employment. While evidence is still fragmented in Nigeria, there is some indication that women in sampled states (especially Edo, Imo and Lagos) are working more or longer hours to make up additional household income to deal with food and financial shocks, and this is increasing their time poverty. Women are also reported to spend more time collecting water and firewood when dealing with impacts of fuel price shocks.

In some instances women's assumed increased responsibility for the household economy and critical contribution to family finances have been perceived to lead to positive effects on women's autonomy. The elevation in women's financial contribution has been most widely recorded in Edo, and in some households it has improved women's position in the home. Those women with both an education and employment were reported to have more authority as well as increased awareness of their rights and the importance of equality. These dynamics are relatively well documented in international literature. For example, Pereznieto and Jones (2005) found that in Ethiopia, where women were relatively more involved as coffee traders and farmers, women emphasised important income effects and a greater sense of independence and familial decision-making power during food price hikes,.

However this shift in traditional roles does not always lead to positive change: the majority of respondents in Edo state reported that although women are more heavily involved in paid work, this has not translated into greater autonomy or higher position within the household,

<sup>&</sup>lt;sup>49</sup> This is particularly true with regard to idiosyncratic shocks, For a discussion, see Paul Gertler and Jonathan Gruber (2002) "Insurance Consumption Againts Illness" American Economic Review 92(1), pp 51-70, and Marcel Fafchamps and Susan Lund (2003) "Risk-Sharing Networks in Rural Philippines", Journal of Development Economics, 71(2), pp 261-287
and patterns of patriarchal decision-making appear to remain unchallenged. Some women reported that even in cases where they had become chief breadwinners, husbands retained sole entitlement to make decisions on the household budget. This is not surprising given that traditional intra-household dynamics in Nigeria are strongly governed through a highly patriarchal social structure (see Box 8).

# Box 8: Patriarchy and gender relations in Nigeria

Traditional intra-household dynamics in Nigeria are governed through a highly patriarchal social structure. According to most respondents, familial headship is generally conferred upon males who dominate household decision-making, thereby relegating females to a more subservient and passive role. Although in Imo and Edo a few respondents reported that parents sometimes made joint decisions, and in Lagos women may manage household income, respondents in Adamawa, Benue, Edo and Imo widely reported severe limitations on women's decision-making abilities in urban as well as rural areas. This went so far as to suppress decisions regarding personal wellbeing or allocation of personal or joint resources. Social pressures play a large role in the preservation of this interaction, with men in Adamawa reporting that they were publicly derided if they allowed wives to make decisions – household or otherwise:

"Men that allow their wives to exercise such roles are called MijinHajiya, which meaning the woman is actually the head of households, and it's a derogatory statement that we men do not want to be associated with. Because it means the woman rules the house, she takes decisions and the man must obey." (Adamawa, FGD1)

## Pressure on women's time and psychosocial welfare

Women's greater involvement in paid work also has important consequences for their time poverty and intensification of an already heavy domestic burden. While evidence is still fragmentary, increasing time pressures for parents, and women in particular, in some cases has manifested not only in worsening mental health and rising intra-household tensions but also changes in the amounts of child care and protection (as discussed in section 3.4.3). Respondents indicated that as a result of rising fuel costs, women in particular were experiencing increased time burden, as fuel collection has always been a time consuming activity. For example in some cases kerosene has been abandoned in favour of firewood collection. Consequently, such increases in time spent searching for fuel, leave mothers little time for critical income generation and provision of proper childcare. There is evidence of this phenomenon in Mexico during the 1995 crisis, where higher infant mortality rates were linked to increased participation of women in the labour market (Pereznieto and Jones, 2009 in Harper at al, 2010).

Increased pressures on women's time can also trigger various emotional and psychological illbeing and in extreme cases household conflict and break-up. Evidence from other crisis contexts (e.g. Indonesia and Thailand during 1997/98 financial crisis) highlights significant increases in the prevalence of psychological distress among both male and female adults after the onset of the crisis owing to unemployment and financial instability (Friedman and Thomas, 2007 in Harper et al., 2010). We find similar indication of this in our primary research. Several women across the sampled states reported suffering from a growing depression, anxiety, frustration and general psychological ill being, which in many cases has been directly linked to food and fuel price shocks. In Edo, the Director of Social Welfare suggested that a particularly dire impact on women's wellbeing is their inability to afford to feed their families in urban areas: whilst it is suggested that those in rural areas are able to grow their own food, urban women are entirely reliant upon their salary and affordable imports, and some mothers spoke of depression resulting from ongoing and growing anxiety. In Imo, a few fathers have experienced higher stress and anxiety levels, leading to high blood pressure, as a result of increasing financial pressures to feed their family. Increased stress and mental ill-health can also heighten tension within a household and lead to increased domestic violence and increased divorce rates. In Thailand, during 1997/98 (Knowles et al., 1999), domestic violence increased and was found to be a common cause of stress among women (Lotrakul, 2006). While official statistics are acutely lacking, there is some indication in our primary research that family breakdown is also on the increase in sampled states, especially among the poor families, in part due to financial difficulties and rising stress levels. According to the Ministry of Women's Affairs and Social Development increasing impoverishment has directly impacted upon general family wellbeing, as well as the ability to pay for basic necessities, nutritious food, healthcare and education. Resultant intrahousehold conflict was often cited, and the beating of one's wife was mentioned as a measure of discipline in Edo, triggered by household disputes over money and women questioning their husband's authority. Although these results cannot be generalised, they provide important insights into the social impacts of the shocks on people's welfare. International evidence (e.g. Kahn et al., 2004) suggests that these social effects can have serious negative implications for child wellbeing, and this is therefore an area that warrants further research.

# **3.4.3. Impacts of shocks on children's rights**

This section discusses observed and potential impacts on child wellbeing and rights arising from the various economic and social effects of the 3F crises we have identified so far in primary research. In particular we discuss the implications on children's rights to survival (health and nutrition); development (education); and children's right to protection (from abuse, neglect and violence). The nature of these issues means that reliable quantitative data are very scarce. Other than for the child labour, official data concerning trends (post-crisis situation) are not available. This section therefore primarily discusses insights from our fieldwork, drawing also on pre-existing trends to highlight potential impacts. Overall, it is clear that economic hardship is likely to have aggravated the pre-existing child deprivations, particularly with regard to child survival and protection. The impacts of even short-term crisis on children can erode their future abilities to cope with such crises and push them further into poverty, with enduring effects on their wellbeing (Harper et al., 2009b), underscoring the importance of child-focused policy and programming to minimise the negative impacts.

# Right to survival

Adequate nutrition is often one of the first casualties of reduced purchasing power of households during economic and food shocks. Statistical data indicating changes in children's nutritional status since the onset of the 3F crises in Nigeria is not available. However, our primary research undertaken with families across sampled localities showed strong evidence of reduced consumption in both quality and quantity of food, especially among poor urban and rural households, with disproportionate effects in food-dependent states. It is well documented that changes in food consumption lead to hunger and malnutrition as poor find themselves unable to purchase the minimum amount of calories, nutrients and proteins required for their day-to-day activities, and this is particularly damaging for children (WB, 2011).

As discussed previously, Nigeria has a high burden of pre-existing child malnutrition (41% percent of children are stunted, and 14% from acute malnutrition (wasting) NDHS, 2008), thus the risk of negative impacts of crises on child health and nutrition in Nigeria is significant. Emerging body of international evidence confirms that commodity price fluctuations result in significantly negative effects on infant and child malnutrition. For example, a study of cereal and coffee price fluctuations in Ethiopia suggests that an increase in cereal prices of 25%, which is not at all uncommon even within the time span of one year (subject to droughts, international price fluctuations etc.), could increase the prevalence of child malnutrition by 3% to 4% (Christiansen and Alderman, 2004).



Even where changes in food consumption is a short- to medium-term response to price increases, as is the case in sampled states, there is a serious risk where young children are deprived of nutrients, with long-term consequences. For example, very young children who suffer from malnutrition (up to 24 months of age) can experience irreversible effects later in life in terms of health, cognitive development, productivity and earning potential. Constant hunger weakens their immune systems and makes them more susceptible to diseases and death (Victora et al., 2008; and Black et al., 2008 in WB, 2011).

So far, there does not seem to be conclusive evidence of worsening health status among children, but econometric analysis has indicated that in the presence of food price variability children are more prone to suffer in terms of morbidity than adults. Our research has also produced evidence of some reductions in health care visits or health expenditures in response to increased food prices and reduced income. Given the pre-existing vulnerability of children to infant and under-five mortality in Nigeria, it can be hypothesised that declines in healthcare access among poor and vulnerable households may have had a negative impact on child survival rates. Further monitoring of the key health and nutrition indicators discussed here, however, would indicate whether this is the case, and whether certain groups or regions of the country are being particularly affected.

# **Right to development**

The potential effects of commodity-related and economic shocks on children's right to development in the sample states under analysis also appear to have been quite prominent. There is evidence from both quantitative and qualitative research, to suggest that rising food and fuel prices are linked to higher dropout rates, especially among the poor and girls, even though the intensity of impacts varies across the states. Poor households involved in labour-intensive agricultural and petty trading activities are particularly likely to recruit children into labour activities and this is in line with international trends (Woldehanna et al., 2005).

Our data also show evidence of some children facing a risk of their school performance being compromised because they need to take on paid activities to support household income and

this additional work is impacting on children's opportunities to study outside school hours. Statistical evidence shows that half of those children that reported a decline in school performance, and which led to school dropouts, were less concentrated, more tired, and with less time for studying (see Figure 15). The former causes can be linked to issue of food insecurity, whereas the latter, is associated intra-household decisions with regard to child labour. Household chores also affect children's education by usurping time needed to do assignments or get to school on time. There have been numerous reports of time spent collecting fuel and hawking have negative implications on schooling, as less time is available for study and homework or the opportunity to rest and play (FGD1). International research has identified 20 hours per week as the tipping point beyond which work precludes educational success (Fallon and Zafiris, 1998; Nelson, 2000). Greater demands on children's time may also mean that they have less time available for leisure and play, due to involvement in paid or unpaid work activities.

These findings are worrisome given that enrolment, completion, and progression rates at all levels of education are already low in Nigeria with serious inequities in terms of gender, geographic zones, states, local governments, and schools. School dropout for entry into work is typically not reversible with regard to human capital development. The poorest children are disproportionately likely to experience these permanent negative consequences. However, it is also worth noting that the relationship between child labour and schooling may not necessarily be negative if child labour does not act fully as a substitute for children's time in school. Studies point out that child labour often facilitates children's school progression, as it lifts household's budgetary constraints (Maharatna, 1997; Grootaert, 1998; Weiner, 1991). In this sense, in Nigeria, as in other contexts, the question is more about how intensive (in terms of time use) and harmful these forms of child labour are. This stresses the importance of the child-sensitive social protection policies and programming in safeguarding children's human capital development.

# Figure 15: Causes for deterioration in school performance

# Right to care, nurture and protection

The neglect of child welfare by families, communities and the government in Nigeria long predates the current crises. The quality and availability of care for children and their protection have been diminishing primarily as a result of widespread and severe poverty, broader breakdown of traditional values and systems of care (Holmes et al., 2011). The evidence on the effects of the crisis on children's right to care and protection is more limited and fragmented, but there is some indication of growing financial insecurity and parents' inability to provide for and protect their children having implications for children's engagement in child labour, and a heightened risk of child exploitation and parental neglect.

Even though the large incidence of child labour pre-dates the recent crisis<sup>50</sup>, evidence from our primary research indicates that in the presence of food and fuel price variability children face a heightened risk of being exposed to dangerous, exploitative and even life-threatening employment. This is typically compounded by the absence of constructive coping strategies and social protection support. Although official evidence linking the effects of price-related shocks to child exploitation is lacking, there is anecdotal indication of increased involvement of poor younger children and adolescents in potentially harmful types of work such as hawking and domestic help work. Respondents largely viewed hawking as a necessary yet hazardous exercise, linked with road accidents, and the Benue MDG Office linked it with the possibility of rape. Some children are working increased hours (such as in Benue), doing physically demanding work with inadequate rest, and are exposed to psychological and physical risks – all posing serious hazards to their health and development.

The crisis has also been perceived to exacerbate other child protection concerns such as, trafficking and transactional sex. Interviews with communities in Benue suggested that an increase in transactional sex among children has occurred in several instances, as a result of growing pressures on household budgets due to food price shocks. In Benue some girls have been pushed into commercial sex work by their parents "to make money and go to school [and even] though is not their wish to go and work the[re] but they cannot help it" (FGD5). There was also some indication (demonstrated through qualitative interviews) of increasing numbers of children and young people at risk of being trafficked, mainly for labour purposes (e.g. in Imo, Lagos, Edo). Save the Children raised the issue of high risk, cross-state child trafficking, as well as the issue of formalised begging in northern Nigeria (particularly in regard to Almajiri children), which they suggested is escalating and stems largely from the food, fuel and Niger Delta crises (however a dearth of statistical evidence makes this difficult to confirm).<sup>51</sup>

Perceptions of children as economic assets, compounded by children's lack of agency and voicelessness, have also been reflected in the risk of early marriage of girls (particularly in Imo). In Nigeria girls from poor families are often forced into early marriage as a means of alleviating household financial burdens (including that of their education) and securing a bride price. Though the crises were not seen as intensifying this phenomenon, it may be inferred that reductions in household incomes and financial hardship have compelled some families to resort to early marriage as a coping strategy. Indeed, Nigeria already has one of the highest rates of child marriage and pregnancy in the world, with estimates suggesting that 28% of girls between the ages of 15 and 19 are married, divorced or widowed (OECD Gender, Institutions and Development Database, 2009). This rate, as noted by UNICEF (2010a) is higher in rural areas than in urban areas: 52% versus 27%, respectively. In the Northern regions this rate is much higher with figures of 48% of girls married by 15, 78% by the age of 18 and a median age of marriage has serious health implications as it exposes girls to risk of HIV/STI infections, teen pregnancy and raised risk of maternal mortality.

<sup>&</sup>lt;sup>50</sup> According to the National Modular Child Labour Survey over 15 million working children aged 5-17 across Nigeria (52% boys and 48% girls).

<sup>&</sup>lt;sup>51</sup> These women and girls are often aged between 14 and 27. Forced sex work has been found to be particularly prevalent in Edo state.

While we could not link necessarily the increases in trafficking, sex work and early marriage to 3F shocks - partly owing to the nature of the problem which makes it difficult to confirm - unfavourable economic conditions are likely to exacerbate the problem. It is well documented in international contexts that economic necessity drives this behaviour so it seems likely that desperate families would increasingly subscribe to such behaviour during income strain (Espey and McKay, 2009; Jones and Harper, 2011).

A similar situation exists with regard to a lack of parental care for children. While quantitative data on changing childcare patterns in Nigeria are not available, there are some indications of diminished quality and availability of care for children. As noted already, parental time is becoming scarcer, with parents (including mothers) doing more than one job. The quantity and quality of caring time for children is therefore likely to suffer. Several reports emerged in qualitative fieldwork of the shock-induced financial strain resulting in increased workloads and less available caring time, and children's perceptions of parental neglect have strained relationships between parents and children. In Adamawa, childcare is perceived to be decreasing "because more time is devoted to looking for means of survival now" (Adamawa, FGD2). Similarly, in Benue, there have been several reports of child supervision time, has been reduced for mothers and carers, including time available to attend health care centres. This has a very important implication in the context of Benue, where the burden of care of HIV patients is already acute, and carers' increased time poverty is therefore likely to exacerbate the neglect of these children who are already suffering low-quality care. Absence of affordable public childcare and weakening of traditional informal support systems in Benue were seen to further compound these effects. These findings seem to mirror the international trends: for example, evidence from Poland indicates that, as a result of the economic shocks of transition, one in 10 seven- to nine-year-old children were left without adult care - a 'several fold increase over the beginning of the decade' (UNICEF, 1997). Finally, children's anxiety about financial hardship, as well as the growing intra-household tensions due to economic stress were viewed as undermining their psychosocial and emotional wellbeing in Benue. However, this is an area that requires further research.

# **4** Formal economic and social policy responses to the crisis

Since late 2008, the anti-crisis response in Nigeria has been largely focused on macroeconomic fiscal and monetary policy measures implemented by the federal government (Soludo, 2009). Whilst these policies have given a measure of stability and recovery to the economy, the overall approach has been criticised for its largely economic agenda and lack of pro-poor focus, thus limiting the potential of these measures to address the risk of increasing deprivation among low-income and vulnerable households (Achike and Ichoku, 2010a). Drawing on secondary data sources and our qualitative fieldwork in this section we review specific policy responses undertaken by the federal and state governments to tackle the effects of the global crises across both economic and social policy domains. We also discuss the pre-existing social protection infrastructure in place, on which the government was able to build. We look specifically at four clusters of policy interventions that have been initiated including: macro policy response; food security measures; labour measures; and social protection initiatives. In the final part we also explore community perceptions with regard to government and NGO responses.

# 4.1 Macro policy responses

Drawing on the international evidence of the importance of counter-cyclical spending for economic recovery in late 2008, the government has responded with an expansionary set of fiscal and monetary policy stimuli and support for the banking sector (UN, 2010; Okogu, 2010; Harper et al, 2010). The main objectives of the initial response of the Nigerian government were to counteract the economic disruptions of the crisis, increase the liquidity of the domestic economy and stimulate employment generation (Ibid). Several actions were adopted to achieve this.

# Support to the banking sector

This involved injecting capital to the banking sector. Since August 2009, an estimated 620 billion Naira was distributed as part of the bailout introduced by the government to respond to reduced credit accessibility. To date, these measures have had only limited impact on access to credit for the poor, as attempts to stimulate the microfinance and SME sectors have failed to overcome the credit rationing from finance institutions resulting from the banking crisis. In qualitative data it was frequently noted that access to formal sources of finance remains very restricted, especially for small entrepreneurs and particularly SMEs headed by poor individuals and women (KI2).

# The fiscal stimulus policy

Fiscal stimulus became a major strategy initiated by the government to counteract the economic disruptions of the crisis. According to Harper et al. (2010), countries affected by crisis typically adopt fiscal stimulus packages although the extent to which investments in basic services are being protected varies considerably. In sub-Saharan Africa, prudent macroeconomic policies were helpful in providing ample space for some countries to adopt policies to soften the impact of the crisis (Ibid). In 2009 a fiscal stimulus package of US\$1.6 billion was introduced representing 0.7% of Nigeria's 2009 GDP (BoF, 2010). The expansionary position was largely focused on private sector-led growth, with considerable funding allocated to physical infrastructure and boosting specific sectors such as commercial agriculture and industry. A key informant from the Budget Office of the Federation (KI 13) described that process lucidly: "the government deliberately took an expansionary fiscal stand, contrary to the way we had tried to manage the economy during the last 7 years of reforms. We made an exception, and these exceptions were in line with the laws of country. Because the fiscal responsibility Law of Nigeria allows the government, in Section 12, to go beyond the 3% fiscal deficit threshold in exceptional circumstances, with the consent and support of the national assembly. And that is what we did [...] so to that extent, the countercyclical measures and policies that the government introduced enabled the economy to be kept afloat [...]"

Notwithstanding the importance of the focus on physical infrastructure, criticism has been expressed in regard to its limited pro-poor focus and inadequate targeting of vulnerable groups. Indeed, a closer analysis of the fiscal stimulus spending reveals that only 0.12% of the 2009 fiscal stimulus package was allocated to transfers to low-income groups and only 12% of the 2010 capital expenditure budget was committed to human capacity development while social sector spending as a proportion of overall expenditure has in fact declined in 2009 and 2010 (ILO, 2010; Okogu, 2010). The strong emphasis of the fiscal stimulus on facilitating economic growth through physical infrastructure was a prominent and highly contentious issue, attracting criticisms among NGOs and officials working in social ministries who argued that not enough emphasis in the fiscal stimuli was given to ameliorating the social infrastructure that is as equally important to ensure pro-poor development (OSSAP-MDGs, 2009).

Differing views have been espoused by several KIIs across the finance and economic government units. Here large-scale improvement in physical infrastructure was generally viewed as "*vitally important for the economic development of Nigeria*" and directly contributing to the national agenda of private sector-led growth and foreign direct investment (KI5). Some

suggested that the reasons for prioritising investments in large-scale infrastructure were based on the opportunity to address the acute issue of unemployment, particularly among youth, as a large chunk of money (e.g. 500 million Naira) was earmarked for infrastructure projects implemented through public work schemes. Thus the approach was seen as critical to support those without work in the short term and a plan "*to ameliorate the impact of the crisis on household incomes*" (KI5).

Since there have been no attempts to evaluate the infrastructure and public works programmes to date, we were unable to identify whether the employment and transitory job potential of the infrastructure-led public works schemes has indeed led to improving people's livelihoods in the short term. Some states have public works programmes; however the reach of these programmes appears to be limited, benefiting only a small percentage of poor and vulnerable – primarily unskilled, unemployed youth<sup>52</sup>. For example, in Lagos state, the Agriculture Youth Empowerment *Scheme* (Agri-Yes), aiming to address youth unemployment since 2006 has only covered thus far 200 young qualified graduates (KII 3, 14).<sup>53</sup>

## Expanded fiscal space

To create necessary fiscal space (and sustain federal government spending in the context of declining government revenues), the Nigerian government had to draw extensively on the Excess Crude Account and Foreign Reserves in 2009 and 2010. It was also pointed out that thanks to the money saved between 2004 and 2008 in the Excess Oil Account "the government was able to deal with the crisis in a very providential way [and] enabled many state governments to pay salaries for civil servants" (ibid).

Concerns were raised at the time due to the available fiscal space that was shrinking due to the heavy depletion of reserves and declining commodity prices (Okogu, 2010). From 2008, the overall fiscal balance of the country shifted away from a healthy surplus of 3.8% of GDP to a deficit of 5.2% in 2009, and a projected deficit of 2.8% in 2010 (ILO, 2010), although the reserves and the government's fiscal space have since 2011 improved with crude oil prices back to pre-crisis levels<sup>54</sup>

In terms of ex-ante protective policy measures against systemic risks, on May 11 2011, the Senate passed a bill to establish the Nigeria Sovereign Investment Authority (NSIA) to manage the Sovereign Wealth Fund (SWF), which replaced the Excess Crude Oil Account (ECA) that had been criticised by political fractions for lacking clear legal rules for the distribution of withdrawals across the three tiers of government. K13 described the discontent: "We created the Excess Crude Oil Account, and we got the politicians not to be too angry with us because of what we did. They were angry with us anyway. But the money saved during the windfall of 2004, 2005, 2006, 2007 and especially 2008, helped building up the [ECA] to the level that we were able to withdraw from it when the crisis became very strong. Now we look back with great satisfaction, when we see that we created the Excess Crude Oil Account even when the politicians didn't like it at all."

Unlike ECA, the SWF is comprised of three separate funds: Future Generations Fund, Nigerian Infrastructure Fund and Stabilization Fund. The Future Generations Fund is seen as a long-term saving account kept aside for future generations. The Stabilization Fund will play the role of last-resort source of financing when covariate shocks and crude oil-related price volatility threatens the government's functioning whereas the Nigeria Infrastructure Fund will provide financing for Nigeria's badly needed infrastructure development in key areas, particularly health, education, roads, bridges, railways and housing, reflecting the government approach to

<sup>53</sup> A description of the scheme is available at http://www.lagosagricyes.gov.ng/

<sup>&</sup>lt;sup>52</sup> For example, in Lagos the Agri-Yes scheme, currently covers 200 young qualified graduates and aims to reach only 1000 young unemployed in the following 5 years. Similarly, the Rice for jobs programme (also in Lagos) reaches no more than 200 unemployed young people. These figures are very modest given the extent of youth unemployment in Nigeria.

<sup>&</sup>lt;sup>54</sup> For historical trends, see http://www.nyse.tv/crude-oil-price-history.htm

social investment: "*it is by building, by putting money in infrastructure, the way we are going to be able to secure the future*" (K13).<sup>55</sup>

# 4.2 Food security measures

In 2007-2008, as part of the efforts to address food insecurity, the Federal Government took a number of actions. These mainly involved ensuring that (staple) food is available at an affordable price and food stocks are managed effectively. Interventions also included some investment in the agribusiness sector, as part of the national long-term efforts to develop export oriented food production and promote food security.

In 2008, drawing on the National Strategic Grains Reserves, 53,610 tonnes of sorghum, maize and millet were released while N80 billion was provided to import 500,000 tonnes of rice within five months, which was then sold locally at subsidised prices (Ajakaiye and Fakiyesi, 2009). Other envisaged strategies included the completion of 25 silo projects; the construction of 60 specialised warehouses to increase storage capacity; the local production of fertilizer; the rehabilitation of irrigation infrastructure by the River Basin and Rural Development Authorities; and the setting aside of 1.68% of the Natural Resources Fund for agricultural research and development over the next four years (Ajakaiye and Fakiyesi, 2009; NISER, 2009).

As part of the plan to develop export-oriented food production, the government also set aside N200 billion for the Commercial Agricultural Credit Scheme (CACS), which mainly included disbursement of loans to large-scale commercial enterprises across 12 states<sup>56</sup>. Thus far, a total of N88.533 billion of the fund has been released for 79 projects. Measures also included establishment of several large, private rice processing plants as well as agro-processing systems for value-adding products (KII8). Finally, in order to reduce the burden of price variability on food insecurity, the federal and state governments collaborated to sell fertilizers to farmers at prices below the market rate (KI8). A number of responses were identified in qualitative data at the state level too (see box 9). Although a majority of these were not setup explicitly as responses to the global crises, they can be seen as responses to ongoing local food shocks, although their scope and coverage has been characterised as small-scale and ad hoc.

# Box 9: State-based food security initiatives

In *Benue state*, for example, Commodity Marketing Boards are being introduced in order to address the food security situation and low incomes of small-hold farmers (KII 10). In *Adamawa state*, as part of long-term investments in commercial agriculture, the state government is currently implementing a Farming Skills Acquisition Programme that aims to enhance productivity of farming per unit area through training on commercial farming techniques and provision of farming inputs, such as fertilizers and market linkage support, which targets the 'poorest of the poor'. The programme is reportedly already demonstrating results, with production levels increasing from 1-2 tons/hectare for maize to 3-7 tons/hectare while the target is 9.4 tons (KII 7). Similarly in *Kano state* it has been stated that agriculture is prioritised in order to increase employment and to enhance food security, leading to an emphasis on all-year farming and therefore relatively high investments in irrigation/dams; and considerable amounts of money is also spent on research in the agricultural sector.

<sup>&</sup>lt;sup>55</sup> The Sovereign Wealth Fund may also play a critical role in achieving Nigeria's Vision 20:2020. For a discussion, see National planning Commission (2009) Nigeria Vision 20: 2020. Economic Transformation Blueprint. Available at <a href="http://www.npc.gov.ng/home/doc.aspx?mCatID=68253">http://www.npc.gov.ng/home/doc.aspx?mCatID=68253</a>

<sup>&</sup>lt;sup>56</sup>Commercial enterprises that are eligible for applying for the credit, given at a 9% interest rate, must have agricultural assets (excluding land) of at least N100 million for integrated farms with prospects of growing the assets to N250 million in the net three years, and N50 million for non-integrated farms. in 12 states including Adamawa, Bauchi, Enugu, Gombe, Kebbi, Kogi, Kwara, Nassarawa, Niger, Ondo, Taraba and Zamfara.

According to the World Bank, the Nigerian government's response to growing food insecurity was timely, and contributed to abating the pressures of the food crisis. In qualitative data and broader literature, however, measures have been described as provisional in nature and insufficient in addressing food demands among poor and vulnerable groups (KI8). For example, across the states governmental food purchases and reserves have been considered to be insufficient to combat the high food prices and food insecurity (Federal Republic of Nigeria, 2009a). In Adamawa, for example, the KI from the Ministry of Agriculture reported that, whilst in previous periods of scarcity (for example 2011, 2004, 2005, 2008-9), the government would assist families through food buffer stock programmes, the reserve is now empty (KII 7). The government input subsidy program will cover only one-third of farming household fertiliser needs, as access is constrained by limited quantities and will be delayed.

The crisis response is also seen to be lacking a critical social protection focus which effectively targets the nutritional needs among vulnerable groups, especially children under five, pregnant and young lactating mothers and HIV positive individuals and the chronically ill. (KI2; UNICEF, 2006). Although in recent years Nigeria has made various attempts to strengthen community-based nutritional services including child growth monitoring, vitamin A and iron supplementation programs, and advocacy for exclusive breast-feeding, the implementation of these remains weak. In fact, little information is available about these services, in particular household and community-based services, and the systems that provide them. Nutrition programs seem to be chronically under-funded, and overall have received minimal attention from the Nigerian Government, despite widespread malnutrition in the entire country and in rural areas in particular. Indeed, the fact that virtually all costs for nutrition programming in Nigeria are borne by donors indicates that the NPC lacks necessary influence in this regard (Benson, 2008).

Moreover, the fact that large-scale commercial agriculture development was prioritised in government's responses over the needs of smallholder farmers also drew public criticism. There seems to be an underlying policy presumption that support to subsistence agriculture should be avoided, and commercial food production encouraged. This position was expressed by an interviewee from the Central Banjof Nigeria: "Agriculture should not just be for the sake of the family and producing the food but the primary producers themselves should have some feeling that they are in business and that they can make a profit." (KI4). Despite generating 90% of Nigeria's agricultural production, the majority of the small farmers still face substantial obstacles (e.g. acute lack of fertiliser, land, machinery, credit, etc.) in raising their agricultural output, and this has been largely ignored in the recent government's response. In qualitative fieldwork, communities were openly critical of the government's failure to adequately respond to the food crises and to encourage and help small-scale farmers. To help communities raise their agricultural production, respondents articulated the need for the following state support: (i) stronger regulation of the price of fuel that will make it more accessible to low-income farmers; (ii) support with pest control and irrigation systems, (iii) better access to fertilizer, credit and land to farm.

# 4.3 Labour measures

In April 2009, the government initiated several labour measures, aiming to tackle the immediate concerns of declining real wages in the public sector and income insecurity of population, especially among the youth population. The following three interventions warrant attention:

First, in 2009, as part of the safety net the Government has settled outstanding wage arrears and benefits in a number of public sectors. A total of N62.4 billion of the fiscal stimulus package was committed. A further N387 billion was allocated in 2010 for increases in public sector wages and arrear payments in education and health as well as for core civil servants after public strikes by both university staff and tertiary healthcare staff. Moreover, discussions have recently been concluded with regard to an increase in the national minimum wage. This will have important implications for the poorest wage labourers, although it is unclear how the measures will be implemented and enforced (ASUU, 2010; Ihekweaz, 18<sup>th</sup> August 2010).

Second, also as part of addressing rising income and employment insecurity among the population, the government has designed a short-term public-works scheme, targeting ablebodied and out-of-work youth. Labour-intensive public works schemes have been used widely as key income support initiatives in events of acute employment problems. Chile, Argentina, Peru, Bolivia and Indonesia have a relatively good track record (Blomquist et al., 2001; Mazza et al., 2009). Qualitative data has confirmed that national social protection type responses from the federal government were mainly aimed at addressing short-term unemployment through public works programmes. According to the Office of Budget Federation "in this budget [2011] for the Department of Works, Housing and Urban Development, a 50 billion Naira was set aside for the purpose of promoting job creation". This measure was perceived to have a dual objective: while on one hand it provided a transitory short-term income support to the unemployed, through public works, the government was also able to reduce the existing significant deficit in physical infrastructure.

Third, mainly in response to the acute youth employment challenge, a supplementary budget of N500 million was allocated to the National Directorate for Employment which has gone to supporting existing projects such as the Vocational Skills Development Programme that provides training for unemployed school leavers and school drop-outs, and the Entrepreneurship Development Centres which had provided training for 6,505 males and 2,993 females by March 2009 (ILO, 2010).

These are positive but limited measures, but the overall response is characterised by some important gaps in terms of addressing the specific vulnerabilities of poor and excluded individuals and families.

With regard to government's measures to address problems with incomes in the public sector, these have been important for some in maintaining service delivery, quality and staff motivation in the face of the 3Fs crisis (Chai et al., 2010). Others however, perceived the government's efforts as too slow and insufficient to abate the growing social problems resulting from employment insecurity. In qualitative data, strong concerns were raised that beyond immediate relief, the response has not been able to adequately compensate rising costs of living, especially for families in the lower wealth quintiles (Benue, FGD2). Concerns have also been expressed that government support ignored the vast majority of workers in the informal sector, who are not benefiting from any safety net measures, such as the National Health Insurance Scheme, which is still largely limited to the formal sector.

When designed well, public works schemes can reach large numbers in a short time span (for example, within a year Kazakhstan's Road Map programme created 252,277 jobs through public work (Gavrilovic et al., 2009). However, there are concerns that the public works program in Nigeria are usually small-scale and of benefit mainly to able-bodied men, since funds for job creation are channelled predominantly into physical infrastructure, which is a largely male-dominated sector. Vulnerable groups (e.g. children, the elderly, and ill) are not likely to directly benefit from Public Works programmes. Women and carers more broadly, for example, risk exclusion from the scheme, as the programme design does not address the issue of time needed for providing care. Without an adequate institutional support that could mothers and carers balance their paid work and reproductive roles they are unlikely to participate in the scheme. National Job Creation Scheme was announced in Dec 2010, aims to create thousands of new jobs through labour-intensive public works especially in sectors critical to MDGs but these are not necessarily targeted at the poor, and are often implemented at the discretion of the state rather than as part of a coordinated response to unemployment and underemployment and constraints to agricultural productivity (Holmes et al., 2011).

Finally, concerns have also been expressed that government employment support does not resolve long-term employment issues for a majority of beneficiaries, as public works jobs are seasonal and low paid. Furthermore, the short-term design features of these schemes aim at

addressing transitory unemployment and therefore, are ill-equipped to deal with persistent deficits and long-term requirements needed to address poverty, and other forms of deprivation and exclusion among women and children (Barrientos and Niňo-Zarazua, 2011a). The youth unemployment issue continues to grow, with a huge annual influx of new entrants to an increasingly problematic labour market juxtaposed against the small scale of existing government youth employment programmes, which remain woefully inadequate even with additional government resources allocated to them in 2009 and 2010.

# **4.4** Social policy and social protection responses

A third area of crisis-related interventions falls under the broad category of social policy, including investment in basic services and social protection measures. Analysis of the government anti-crisis response reveals that, despite the generous fiscal stimulus package, new or expanded measures introduced by the government to cushion the vulnerable groups against the economic and social impacts of shocks have been limited. Moreover, inadequate attention was given to emerging child- and gender-related vulnerabilities in programme design, both at the federal and state levels. We begin by briefly exploring the issue of the social sector budget allocations, before reviewing the government's response with regard to specific areas critical to child wellbeing, focusing on social protection and child protection measures.

# Investment in social policy

Global evidence seems to suggest that the extent to which investments in basic services are being protected varies considerably across countries (Harper et al., 2010). In Africa, the Middle East and Kazakhstan, public spending on infrastructure and basic needs in the crisis is increasingly threatened. In Asia and Latin America, a number of countries appear to have learned the value of maintaining expenditure on basic services from the social impacts of past crises (Ibid).

In Nigeria, the assessment of the federal government budgets reveals that the situation of the social sector has worsened since 2008, with the estimated expenditure on education and health in 2009 showing a decline both in the amount allocated to the social sectors (N466 billion) and their share of total federal expenditure (14.19%) (CBN, 2009). Social sector expenditure experienced a downward trend between 2005 and 2010, which is lower than required according to international agreements (Hagen-Zanker and McCord, 2011). Figure 16 clearly shows that education, health and agriculture expenditure shares have decreased significantly in 2009, with shares dropping to levels lower than in 2005.



Federal budget allocation to health as a percentage of total budget has reduced from 6.5% in 2007 to 3.7% in 2010; however, there has been an increase in 2011 budget to 5.6% of total budget. The National Health Bill envisages the increase in the federal allocation to health by just over 2%. According to Hagen-Zanker & McCord (2011) social protection is on average 0.6% of GDP and 2% of consolidated government spending; with social security schemes taking up a large proportion of social protection spending (e.g. in 2009 it was 50%). Notably, spending on social protection and, in particular, social assistance has been on a downward trend between 2007 and 2009, during the most critical period of shocks and when demands for assistance expanded. While social protection has shown a threefold increase since 2009<sup>57</sup>, this is still at a much lower level than the other social sectors.

Since the lower tiers of government rely heavily on these allocations from the Federation Account, particularly for the delivery of essential social services, declines in federal revenues in 2008-9 led to a contraction in the resources available for the state governments and LGAs. Data from the Central Bank of Nigeria (CBN, 2009) shows a decline in the expenditure of state and local governments by 4% and 23% respectively in 2009 (MDGs Nigeria, 2010; Eboh, 2009; Philips, 2010). Information filtering from discussion with some selected states (Adamawa and Benue) indicates that disbursements to states and local governments was at about 40% below planned budget levels for the first two months of 2009 because of scarcity of funds. In Benue, for example, it was reported that due to the Triple F crisis revenue decline, federal government allocations in 2010 decreased from 2.8 billion Naira to 2 billion Naira (KII 2), while in Edo we have been told that '*in view of the lessons drawn from the global economic crisis'* the 2009 and 2010 budgets involved proactive 'belt-tightening measures'' (e.g. scaling down new projects so as to concentrate on ongoing ones; reducing expenditure on overheads by 25 percent alongside reductions in approval for seminars and conferences) (KII 7).

Contracting budgets have caused some states to compromise or adjust their long-term development plans. Repercussions on programme implementation in the health sector were

<sup>&</sup>lt;sup>57</sup> The increase seems to come mainly from higher state-level expenditure, but it is not clear why states increased funding in 2010.

cited in Adamawa, including cancellations of immunisation campaigns and cholera prevention programmes, as well as delays to equipment purchase and promised building and renovation of social infrastructure (ibid.). Holmes et al. (2011) argue that sustainability of investments is further undermined by the weak capacity of local level governments that are responsible for the implementation of many social sector programmes. Moreover, the risk of reduced fiscal space in future, arising from the volatility in the oil exports, and its potential effects on government expenditures, may hinder the expansion of promising initiatives such as the Conditional Grants Scheme that relies on local and state level counterpart funding.

## Social protection responses

Social protection support in Nigeria is currently comprised of a combination of initiatives that can be grouped into three broad categories: social assistance, social insurance and social services (see box 10 for an overview of key federal instruments). Whilst some of these can play an important role in protecting households from poverty and vulnerability (Blomquist et al., 2001), their potential in Nigeria is hampered by their very limited scale and reach (see section below). Indeed, Nigeria is one of the countries in sub-Saharan Africa characterised for its underdeveloped social protection policies (Nino-Zarazua, M. et al., 2011).

Whilst the expansion of social protection in wake of the crisis has been identified as critical to cushion the effects of crises on poor in Nigeria, thus far it has largely been ignored in the government's anti-crisis response (ActionAid, 2009a; Achike and Ichoku, 2010a). In qualitative data, for example, we have identified a number of social protection activities at both federal and state levels (see boxes 9, 10 and 11); however, none of these was specifically set-up nor expanded to mitigate the problems of vulnerable groups related to the global crises.

# Box 10: Existing federal level social protection instruments

In recent years, the government, often with donor support, has rebuilt its social assistance and social insurance schemes and introduced a range of social welfare services, targeting both the general population and low-income groups and children. The key existing initiatives that have the potential to protect people from shocks and stresses are:

*In Care of People programme* (COPE)- funded by the MDG Debt Relief Gains and implemented through NAPEP. Contributory old-age pension scheme *Government pension scheme* (65+ ages; 8% coverage) – Nigeria has introduced a pension system based on an individual, contributory scheme that is handled by private firms. All private sector workers (in companies with over 5 employees) have been included into the pension scheme through the National Social Insurance Trust Fund (NSITF), which covers job and income loss, death and physical disability.

National Health Insurance Scheme (NHIS) - was launched in 2005, with an objective to ensure equitable access to good health care services across Nigeria; to protect families from the catastrophic health expenditure; and to ensure quality and effectiveness in health care service delivery through more effective health financing. The scheme is composed of three main social health insurance programmes, covering the formal sector, urban self-employed people and rural communities.

The Maternal and Child Health Programme of the NHIS is a child-sensitive strategy launched in October 2008 using funding from debt relief gains to provide primary care for children under five and primary and secondary care (including birth complications and caesarean sections) for pregnant women up to six weeks after childbirth. Only public health facilities can be accredited for the scheme, and health management organisations enrol participants and receive fixed capitation payments. The first phase of the scheme included six states (Sokoto, Niger, Oyo, Bayelsa, Imo and Gombe) while the second phase is covering a further six states (Katsina, Jigawa, Bauchi, Yobe, Ondo and Cross River).

### Child sensitive social services and equity measures

In recent years, attention has been focused on expanding and improving the system of social services for vulnerable children, including the establishment of a legal and policy framework to combat child trafficking, child labour and child abuse. Thus far, the Child Rights Act has been adopted by 24 out of 36 Nigerian states (Defence for Children International, 2010). The government launched several campaigns to sensitise the public to children's rights protection, and accelerated efforts to expand social welfare services including shelters for female victims of abuse, which offer counselling, basic medical care and

access to legal assistance. These are operated by the FMWA&SD often in collaboration with the NGO and civil society groups (ibid).

Source: Vision 2020, 2010, The First National Implementation Plan 2010-2013, Volume II: Sectoral Plans and Programmes; Santcross et al, 2009; Casey and Dostal, 2008; Dostal, 2010.

Notwithstanding these limitations, a number of government programmes were mentioned as important avenues for people to cope with shocks, and include child and gender-sensitive elements. For example, the "In Care of People" (COPE) conditional cash transfer programme has the potential for supporting the most vulnerable from the worst impacts of the 3Fs crisis (see Box 11). While the World Bank is currently conducting an impact evaluation, the effectiveness of the initiative is yet to be established; however the assessment of the COPE programmatic design suggests that programme is well-positioned to address both the economic and social vulnerabilities that affect children, as it combines social development objectives alongside income generation (Gavrilovic et al., 2010). Indeed, our research suggests that child protection-related risks in Nigeria are closely intertwined with the economic vulnerabilities of households.

Given that cost barriers have been identified as the single greatest challenge to healthcare access, social health insurance for mothers and children is another important measure for addressing health and nutritional vulnerabilities. The Maternal and Child Health Programme was launched in October 2008 as part of the broader National Insurance Scheme response to improve healthcare access among the poorest households (MDGs Nigeria, 2010a; CREHS, 2010) and government is currently finalizing plans for the roll out of a community-based health insurance scheme (CBHIS) by October 2011. This initiative aims to expand the social insurance coverage to poor and vulnerable Nigerian population working in the informal sector (almost 70% of the Nigerian population is in the informal sector and out of pocket expenditure on health is almost 70% of total health expenditure). One pilot scheme per state is planned for this initial phase (see Holmes et al., 2011 for further details on this scheme).

# Box 11: Adamawa's "In Care of People" Programme

The "In Care of People" programme is Nigeria's first cash transfer social assistance initiative, focusing on the 'poorest inactive' families, with an aim to protect them from slipping deeper into poverty. In Adamawa state, cash transfers are made to household heads on the conditions that i) children are enrolled in basic education and maintain an 80% attendance rate; ii) the household head attends courses such as Training for Life, vocational skills and basic health and sanitation (as available within their community); and iii) children under five in the household participate in all free government immunisation programmes. Beneficiaries are identified through community mapping involving the village head – a process that respondents insisted is 'effective and fair', although anecdotal evidence suggests the approach is susceptible to elite capture.

The cash transfer is made up of two parts in Adamawa state: the first is a monthly Basic Income Guarantee that depends upon the number of children in the household (e.g. families with 3 or less children receive 3,000 Naira every month for 1 year, with the amount increased to 5,000 Naira per month for larger families). Additional 7,500 Naira is placed in beneficiaries' accounts that can only be accessed at the end of the year, provided the conditions of the grant are met and money is invested in a small business venture that is expected to provide source of the household livelihood in the future. Senior females in households are encouraged to act as principal recipients, although it is suggested that in reality men are likely to play this role (ibid.).

The COPE programme manager reported a high level of compliance with conditions (over 80%), with non-compliance mainly resulting from causes such as natural disasters and sickness. Penalties are not incurred for non-compliance. Cash transfers are reportedly disbursed on time and used to meet basic household needs, including the purchase of salt, soap, matches and petroleum jelly, as well as payment of school fees; however the transfers are believed to be insufficient to cover families basic needs: according to the respondent '10,000 Naira and above is realistically needed', but the figures were devised based on the national minimum wage, and the state government is expected to bring in additional funds

to match this amount. However, whilst these budget allocations are made on paper, they are almost never matched by disbursements in practice. Indeed, limited budget is a key challenge faced by the programme, which has forced the NAPEP team to reduce the number of beneficiaries from the intended ten per ward<sup>58</sup> to five, and has meant both delivery and monitoring of the programme suffer from very limited resources. For example, the allowances provided to NAPEP programme officers barely cover their trip expenses.

However in spite of the limited amount received, COPE has the potential to play an important role in smoothing household consumption. Several recipient families described the scheme as enabling them to invest in the human capital development of their children and improving psycho-social wellbeing (although no evaluation studies have been undertaken thus far to explore the results systematically). According to the Programme Manager the programme also signals that the government is doing something to improve the lives of poor people, although there is a strong risk of the programme being hijacked for political and promotional purposes.

Source: Interview with KI

Overall, those who participated in this research were unable to identify government social protection programmes that were specifically setup to mitigate problems related to 3F shocks. At the same time most programmes, including popular ones, were considered to be providing too little protection and typically the government assistance was perceived as acutely lacking by the communities. Respondents demonstrated little or no confidence in the government in addressing their economic and social vulnerabilities irrespective of the crisis.

# How robust is the existing social protection infrastructure in Nigeria to protect vulnerable groups from the 3F?

As we have discussed already, since the onset of the crisis the government has given limited attention to strengthening access to basic services and expanding social protection for marginalised groups, as the focus of the government anti-crisis response was on stabilizing macro-economic landscape and developing physical infrastructure. Whilst there is some evidence of social protection slowly emerging as a policy instrument in Nigeria, in our primary research we were unable to identify new emphasis on improving and scaling-up these programmes in support of vulnerable groups in light of the current crisis (Holmes et al, 2011). In fact, states have been given responsibility to expand social protection interventions through the Conditional Grant Scheme, which requires states to match programme funding with federal expenditure, but at the same time states' budgets in 2009 were contracting. To date, only one-third of all states have committed to co-fund this (Holmes, et al., 2011). Moreover, in the context of crises, existing social protection mechanisms are not robust enough, in terms of both coverage and design, to provide adequate support to vulnerable populations. Indeed a number of pre-existing weaknesses of the social protection system have been identified in the study, drawing on available evaluation data and qualitative fieldwork, which must be addressed if the impacts of the crisis on vulnerable families and children are to be tackled effectively. We turn to briefly discuss these areas.

# Insufficient coverage

Existing social protection measures are still small-scale, relatively new and have yet to be rigorously evaluated. The NHIS, for example, appear to have a very limited coverage and is heavily biased towards formal sector workers. A total of 5.3 million beneficiaries (3.73% of the population) are said to have enrolled in NHIS after five years of operation, most of whom are formal public sector workers (Dostal, 2010). This is of concern, given the large number of poor families in Nigeria working in the informal sector. While the government is currently planning to expand the social insurance to informal sector workers through the CBHIS, this is still in very early stages. Similarly, the Maternal and Child Health Programme currently only covers a tiny fraction of the potential beneficiary population. A USAID evaluation of the scheme estimated that by the end of 2009 a total of 69,000 pregnant women and 175,000 children

<sup>&</sup>lt;sup>58</sup> A ward covers 1,000-5,000 people

had been provided with services by December 2009. This is in a context where it is estimated there were a total of 4.2 million pregnant women at any given time and a population of 25.3 million children under five (USAID, 2010).

It should be noted that in the communities where the Maternal and Child Health Programme was available, it has been generally acknowledged as a valuable intervention for poor women and children, stressing the importance of timely expansion of this programme. For example, in the urban communities of Adamawa, and Edo and Kano respondents pointed out that programme already had a positive effect on women's health outcomes, as the following account of a female respondent in Jimeta indicates:

"Years ago, women going for antenatal clinics [had to] pay for everything, things like registration card, tests of glucose in urine, i.e. is diabetes, scanning, [...] drugs. If you don't pay, nobody will give you attention, [and] you just [have to] go back home. Thanks to God, [the] government has now taken over the payment of all these things. Women use to die due to lack of proper care[...] But now, with the free antennal care and child delivery, the problems have reduced." (FGD3).

Rigorous evaluation of COPE is yet to be done, but current estimations suggest that programme has a very small coverage – less than 0.001% of the population (NAPEP website). As discussed in section 3.4.1 of the report, in the absence of well-developed social protection measures, most communities and families draw on a range of informal social protection mechanisms in the face of shocks and long-term chronic poverty. So it is not surprising that in our primary research there were no indications that sampled communities were beneficiaries of any state social protection programmes (FGD1-7), although some were aware of cash transfers that target families in hardship (FGD5). Holmes et al. (2011) argue that low values of transfers (also exacerbated by the food, fuel and financial crisis) and short programme participation (COPE beneficiaries only receive support for one year) also restricts the potential effectiveness of social protection to address poverty and vulnerability. Therefore there is significant scope to increase spending in this area to expand the coverage and impact of these social protection mechanisms. Strong expected future growth indicates the available fiscal space to enable this (see Hagen-Zanker & McCord, 2011 for further discussion on this topic).

# Unpredictability

As social protection programmes are increasingly financed from state and local government budgets, substantial efforts are required to garner political and institutional support and strengthen government capacity to promote the expansion of social protection instruments at the state and local levels. The successful scaling up of the COPE and the NHIS schemes is highly dependent on the extent to which states and LGAs are willing and able to allocate increasing amounts of funds in a context of unreliable budgets and intense competition among various priorities. In the current context, as our interviews with state officials indicate, this scenario appears to be highly unlikely. For example, the increasing difficulty of securing counterpart funding for the COPE programme has been reported in Adamawa and Benue state. Drawing on broader literature, similar issues have already emerged around this topic in Niger State - after promises of a N1.7 billion contribution to phase one did not materialise due to worsening economic conditions, according to state officials (USAID, 2010).

# Institutional challenges

There are also a number of institutional and governance weaknesses that render the existing social protection initiatives inefficient and unlikely to effectively respond to emerging demands. In particular, limitations in capacity to formulate, deliver, and evaluate programs are a key constraint, and that also explains the strong reliance on community management of social protection programs in other sub-Saharan African countries (Niño-Zarazúa et al., 2012). Scaling up key social protection programmes to reach substantial swathes of the poor is also very challenging (Harper and Jones, 2009). So far, the implementation of social protection instruments is extremely narrow, ad hoc and most often state-specific. Shortcomings in the public financial and programme management of public resources at all levels of

government, exacerbated by weak sanctions; low capacity of the civil service to design, monitor and implement policies at state levels are commonly identified in the fieldwork as major stumbling blocks to the effective operation and utilisation of public resources. In Adamawa and Benue, for example, it is suggested that the state government's ability to respond to crisis is hindered by the lack of capacity to undertake research and policy analysis, which renders it dependent upon federal government capacity to process and analyse the data they collect (whilst these data are reportedly of poor quality anyway (KII 1). On a positive note, a decline in social sector spending as a proportion of the overall federal budget raised the importance of improving public finance management and coordination in the face of declining government revenues, particularly at the state level (OSSAP-MDGs, 2009).

# Weak child-sensitive social protection and child protection measures

Preserving access to and utilization of basic services and expanding measures that safeguard human development, focusing on most vulnerable children have been widely recognized as essential in times of crisis (Marcus and Gavrilovic, 2010). For example, school feeding is a common response used as an incentive for children to attend school (Jones et al. 2009). In Kazakhstan, free hot meals provided at primary and secondary school were considered by poor families to be one of the most important forms of government support during the 2008-2009 crisis (Gavrilovic et al., 2009). Despite similar demands expressed widely by the communities interviewed in qualitative data, apart from small-scale school-feeding initiatives in several states, the government has failed to prioritise this measure in the anti-crisis response. As discussed already, community-based nutritional programmes are chronically underfunded. Similarly, other social assistance initiatives that have an important child-sensitive focus (e.g. Maternal and Child Health Waiver programme and COPE) provide a woefully inadequate coverage.

Interviews with communities and government officials in sampled states reveal that the current child protection system is still very fragile, lacking long-term political and financial commitments. A critical impediment to ensuring child protection at the state level has been a clear disparity between existing child rights legislation and the reality of its implementation. A lack of implementation of the Child Rights Act has been attributed to various factors including absence of funds, lack of commitment, inadequate understanding of the issues amongst bureaucracy and policymakers, a dearth of CSOs working on child rights, a lack of advocacy skills and technical knowledge to engage in debates, and the absence of leadership by communities themselves. While these challenges are not unique to child protection policy, they require urgent attention, given the widespread protection-related deprivations facing children in Nigeria and added risks in the contexts of shocks.

# **5** Policy Implications

Overall, this study has highlighted the complex pathways through which food, fuel and financial shocks affect families and children in Nigeria. While households are trying hard to adapt and manage the shocks, there is also ample evidence that these coping mechanisms have negatively impacted upon children's wellbeing by increasing their vulnerability to malnutrition, school withdrawals, exploitative forms of child labour, inadequate parental care and nurture and, ultimately, poverty. Our study finds that in many respects, the crisis is seen to be exacerbating previous deprivations and vulnerabilities, rather than creating new ones – underscoring the importance of timely and comprehensive social protection measures. Our review further emphasises the complexity inherent in the variations of crisis impacts suffered by different states, and highlighting the importance of adopting state-specific responses. A

number of common themes emerge across the states with regard to putting measures in place to minimise negative impacts.

In the final section we suggest several improvements that are desirable in the efforts to address the threat of food, fuel and financial shocks. Before we discuss the specific recommendations, three issues warrant special attention. Firstly, a better balance between short-term and long-term policy responses is needed to improve the effectiveness and adequacy of responses to covariate shocks. The response as a whole should entail a complementary package of expanded social protection and agricultural measures that build the capacity of households, caregivers and children to better deal with shocks – without having to resort to detrimental coping strategies. Secondly, given that children absorb crisis effects (through reduced education and health, increased work, reduced nurture and care and so on) with little ability to defend themselves, children must be prioritised when designing both short-term and long-term anti-crises responses. Thirdly, a strong commitment is required to ensure that a sustained increase in budget allocations to social sectors is achieved in order to address significant deficits in child and household welfare.

Policies designed to boost economic growth will be more effective in reducing poverty and vulnerabilities among women and children if they are accompanied by higher budget allocations to social sectors, particularly with the objectives of: 1) improving public service accessibility (health, education and water and sanitation) and 2) extending social protection programmes. Agricultural policies and child protection policies and programmes may complement these responses in addressing food insecurity and child-protection deprivations that result from financial shocks at the household level.

These actions are critical in enabling state and local governments to promptly expand their support and reduce the poverty impacts of future crises. On one hand, higher budget allocations will necessarily require finding new money, as well as improving the efficiency of current budget allocations to achieve the long-term financial sustainability of these policies. The success of this would depend on securing a political commitment from policymakers to set long-term policy targets. With regard to the issue of financing, this is a subject of debate and clearly beyond the scope of this report to recount in detail, but some policy alternatives would have desirable revenue raising implications, in particular:

- Raising revenues through taxation. Some alternatives could be considered here:
  - Raising VAT on products known to generate negative externalities such as tobacco and alcohol through excise duties or *sin taxes*), as earmarked resources to increase the social sector budgets. Raising the VAT tax rate has been under discussion in policy circles in Nigeria for some time now, and there is clearly room for introducing excise duties, as the flat VAT rate of 5% applied to alcohol and tobacco is one of the lowest rates in the sub-Saharan region. Lower middle income economies have introduced excise duties on *sin products* to improve the fiscal space. These taxes range from a rate of 15% in Lesotho, 40% on alcohol and 45% on tobacco in Senegal, to 35%-45% on alcohol and 23%-35% on tobacco in Côte d'Ivoire. Low income countries such as Madagascar have also excise duty rates on wine, beer, spirits and tobacco that range from 7% to 180%, whereas South Africa, an upper middle income country has progressively increased *sin taxes* up to a level that range from 23% on wine, 33% on beer, 43% on spirits, to 52% on tobacco products with the aim of improving its fiscal space for social sectors (see PricewaterhouseCoopers, 2009);
  - Raising taxation on, or renegotiating the terms of contracts with foreign companies involved in the exploitation of nat*ural reso*urces such as oil. In Bolivia, for instance, renegotiation of contracts with foreign companies involved in the exploitation of natural resources helped the Morales administration to finance two child-focused social protection programmes throughout the 2008-09 financial crisis: *Bono Juancito Pinto* and *Programa Nacional de Atención a Niños y Niñas Menores de Seis Años*. These programmes, together with a non-contributory social pension scheme,

*Bono Dignidad*, are the flagship anti-poverty policies in the country (see Barrientos and Niño-Zarazúa, 2011b). In Ecuador, the hydrocarbons law was introduced to renegotiate contracts with companies to increase Government revenues, whereas in Venezuela, a hydrocarbons law passed in 2001 allowed the government to renegotiate contracts with foreign companies involved in crude oil extraction, and through increased royalty rates, raise government revenues. Other countries planning to renegotiate contracts in the exploitation of natural resources include Chad, Argentina, Equatorial Guinea and Russia, although it is unclear at this point whether these contract renegotiations will advance developmental goals (see Likosky, 2009 for a discussion).

- Reducing tax-evasion policies via the strengthening of tax collection systems. In Chile, for example, after the introduction of anti tax evasion policies, the VAT evasion rate was reduced from 20% in the 1990s to less than 10% in 2009 (Velasco, 2009). This effort, in combination of one-off rise in the rate of VAT, allowed the government to finance *Chile Solidario* and *Subsidio Único Familiar*, two social transfer programmes that support low income households with children.
- Shifting expenditure from other areas to social sectors; for example, generalised subsidies that show large leakages to the non-poor while diminishing the tax base could also be explored. Mexico's *Progresa* (later renamed *Oportunidades*) was fully financed with freed resources from undoing generalised food subsidies that were highly ineffective in reaching out to the poor. The fact that *Progresa-Oportunidades* replaced food subsidies in the aftermath of the Tequila crisis, helped the government to avoid additional pressures on the federal budget (see Niño-Zarazúa, 2011b for a discussion). Shifting expenditure from generalised subsidisation to child-focused social policies would have a stronger effect on poverty and well being if carefully designed targeting policies are devised, although political economy factors may also pose a major constraint for this type of policy alternatives.

The challenge here is to find a formula for a financial mix (including some of the policies listed above) that would allow the government to increase the ratio of tax revenues to GDP, and enhance the longer-term sustainability of social expending (Barrientos and Niño-Zarazúa, 2011b). In addition, Nigeria has opened up the possibility of putting part of its national savings toward long-term investment that can be beneficial for children's human development. This can be achieved through the components of the Sovereign Wealth Fund. The physical investment arm of the Fund, the Nigerian Infrastructure Fund, will enable the government to accelerate improvements in the badly needed social sector infrastructure, particularly in those areas that can have long-term welfare impacts such as hospitals, schools and sanitation. Whether this will be balanced against the also much needed investment in growth-enhancing infrastructure such as roads, bridges and railways will depend on political economy considerations. A critical point to consider in that process is to ensure that large investment flows to physical infrastructure are accompanied by increasing budget allocations to recurrent spending, so doctors, teachers, nurses, and other social-sector workers can contribute to supply the labour needed to improve the quality of social services. And it is in that context where the policy options discussed above gain relevance.

This report has highlighted the importance of federal budget allocations to improving welfare outcomes across states. The findings also underscore the importance of the geographical distribution of funds to address the existing inequalities in the provision of, and accessibility to social services. The Stabilization Fund, which is the arm of the Sovereign Wealth Fund intended to work as insurance against systemic risks can strongly contribute to guarantee that the improved recurrent expenditure are not threatened by short-term variability in the commodity markets as happened in the aftermath of the financial crisis of 2008.

However, an improved accessibility to, and quality of social services are not a sufficient condition to ensure that children achieve their full potential. There are economic and societal factors that prevent children from e.g. attending school. The analysis presented in this report has shown that in a country where a large percentage of the population heavily relies on agricultural production, food price increases can give strong incentives for parents to resort to child labour. And children who do not have the opportunity to complete their basic education face a high probability of a lifetime of poverty. Social protection programmes become critical in that context, as they can relax households' budget constraints while encouraging human capital investment, particularly among children (Barrientos and Niño-Zarazúa, 2011a). For a country like Nigeria, with a very high dependency ratio, a focus on children makes economic and political sense, and would facilitate both political discussion and investment in social sectors - including the extension of social protection. The promotive and protective nature of social protection programmes is crucial in these efforts: they are promotive in the sense that they facilitate long term human capital investment by focusing on children, and protective in that they generate a 'double dividend' by helping the poor to protect against risk, while building assets that help them to deal with future calamities.

Based on the impacts summarised in previous sections, the following short/medium-term and longer-term policy recommendations are suggested:

# Immediate action is needed to alleviate food insecurity and adverse nutritional impacts caused by rising food prices.

In the short/medium term, the government needs to expand funding and strengthen implementation of the measures of the current community-based nutrition programmes targeting poor and vulnerable populations. Capacity of the National Committee on Food and Nutrition (NCFN) should be strengthened to enable more effective coordination of nutrition activities across the sectors, and mobilization of resources for nutrition.

In the short-to-medium term government needs to ensure a better management of food supply across states, as well as adequate regulation of food market. This entails a timely monitoring of the development of local food prices in order to enable prompt, appropriate policy responses. Specific efforts to mitigate effects of rising food prices can include zero tariffs on imported agro-chemicals and tightening of controls on illegal imports of agricultural products. In the context of 2007-08 food crisis, import tariff reductions did lead to some food price declines in Nigeria and reducing tariffs was shown to be easy to implement. While lowering import tariffs can be an attractive option when feasible, it is also important to gauge the fiscal cost of lost revenue, which can be significant (UNICEF, 2011). Ensuring effective functioning of the National Strategic Grains Reserves can also serve as an effective price buffer, provided that subsidized sales of grains reach the poor. The government should conduct an assessment to estimate crop production in order to identify food deficit areas to avoid traders' speculation and panic buying, which has been identified in our fieldwork as an important factor of rising food prices (FAO, 2009).

Long-term policies are also needed to address systemic weaknesses in food production and supply. In Nigeria agriculture has already been recognized as a critical sector in efforts to increase household incomes and employment, and reducing food and nutrition insecurity and poverty. However, in addition to boosting commercial agriculture, more comprehensive and pro-poor policy efforts are needed to assist small-scale farmers and those engaged in fishing and livestock (particularly poor, women and child-headed households) to strengthen their food production. Facilitating access to credit facilities to poorest farmers; rehabilitation of infrastructure (irrigation in particular); the provision of storage silos to households; and expansion of the input subsidy program and timely distribution of fertiliser to poorest farmers, have been highlighted in our primary research as critical support measures that will benefit smallholder farmers. In the past, government–led special initiatives, implemented with strong community involvement, have demonstrated good results. Interventions, such as the Fadama project (supported by the World Bank), and DFID's PropCom may offer important lessons with regard to supporting smallholder production. Government may also consider raising funding for

agriculture - according to the 2003 Maputo agreement, 10% government expenditure should be spent on this sector, but Nigeria spends less than half of that.

The government also needs to address the ongoing fuel scarcity, with a particular emphasis on supply of affordable kerosene, which has much importance in the lives of poor people. As has been frequently highlighted in our research this raises the need for a stronger government regulation of fuel prices and black market economy. Further, as the government's subsidy plans proceed the adoption of measures aimed at offsetting the possible negative impact of price liberalization on the poor will be of vital importance.

# Support household incomes through social protection policies to reduce the risk of damaging coping strategies affecting households and children in particular.

To protect those families who risk severe deprivation in time of shocks and thus avert irreversible loss of human capital, there is an urgent need to scale up and improve the effectiveness of existing social protection programmes - with a focus on the NAPEP's conditional cash transfer program (COPE) and The NHIS Maternal and Child Health Programme. Both schemes need to be made more robust by expanding coverage. As social protection benefits are increasingly financed from state and local government budgets, it will be crucial to garner political and institutional support and strengthen state government capacity to promote the expansion of social protection instruments. At the minimum this would require additional financial resources, as well as the strengthened implementation of monitoring and evaluation systems to ensure the money is effectively spent. It is highly recommended that the federal government assist state governments to 'step-up to the plate' with regard to committing reliable counterpart funding for the COPE programme, to ensure the scheme is expanded. Strong expected future growth indicates the available fiscal space will be available to increase spending in these areas (see Hagen-Zanker and McCord, 2011). To ensure effective targeting of at-risk groups, some of the measures may be implemented through the combination of geographical methods of identification with means-tests, proxymeans tests and community-based procedures in order to improve the accuracy and efficiency of targeting.

# Provide support to families to preserve their access and utilisation of basic services in times of crisis.

With regard to education, the state government must provide incentives for families to keep children in school during the crisis - focusing on the most vulnerable individuals and poorest households. Specific measures may include targeted income and/or in-kind social assistance for school-age children to help them with the direct and indirect costs of schooling. The government may also consider expanding primary school feeding programmes to ensure that the quantity and quality of food children receive is not compromised (given that this has already been identified by our respondents as a highly desirable form of government assistance). Finally, improving the quality of education and strengthening infrastructure across states, with a specific focus on rural areas, remains is a crucial long-term measure for boosting the demand for schooling, and of course, is an important on-going sector objective beyond the demands of economic crisis response. The government's Education Tax Fund provides an important source for financing infrastructure and resources. Equally important are measures that ensure people's access to healthcare services in times of crises. Here again, it is essential that the government proceeds with rolling-out a community-based health insurance scheme (CBHIS) to expand the social insurance coverage to Nigerian population working in the informal sector.

# Strengthen child-sensitive social protection system and programmes

Overall the extent to which policy and programme responses have addressed issues of protection and care appears to be very limited, despite indications of growing protection-related deprivations faced by children in Nigeria in the context of global crises. The current child protection system is very fragile, and social protection programmes are both small in scale and lacking long-term political and financial commitments. There is therefore a need to strengthen these to offer children effective protection against child labour, abuse and neglect,

with priority given to orphans, children from poor agricultural households, street hawkers, domestic help workers and children affected by HIV. Specific policy and programmatic efforts are needed to:

- 1. Substantially expand financial and human resources necessary to implement Child Right Act legislation as well as budget monitoring to assess the level and efficacy of spending;
- 2. Strengthen capacity and awareness among officials working in child welfare areas and social workers dealing with vulnerable families and children; in particular strengthen the mandate and capacity of the Ministry of Women's Affairs and Child Departments to design and implement child protection policies and programming. Promote collaboration and synergies across government agencies dealing with these issues;
- 3. Strengthen the capacity both technical and financial of child-protection committees, particularly at the state and local level given their role in enforcing the Child Rights Act;
- 4. Support efforts to translate the Child Rights Law into local languages for wider distribution and comprehension; encourage states to adopt legislation that prohibits the violation of women's/girls rights – most importantly early marriage, based on the recent examples of the Prohibition of Early Marriages Act adopted in Kebbi and Cross River states;
- 5. Strengthen support to ongoing initiatives and actors, working to sensitise the public to children's rights and child abuse, and which have shown positive results so far; and promote the participation of children and adolescents in public fora.
- 6. Strengthen capacities of relevant agencies (e.g. NAPTIP, The Nigerian Policy Force, etc.) and state and local governments to monitor children and adolescents, especially girls, at risk of falling into trafficking, hawking and/or commercial sex work and institute stiffer penalties for offenders breaking the laws.

Child protection measures can also be effectively integrated into existing social protection frameworks and programmes, and should be seen as a priority. Relatively low-cost protection measures include: a) the establishment and adequate resourcing of offices at local level where children and concerned adults can denounce child protection abuses; b) strengthening the knowledge and skills of public sector workers, such as teachers and community health workers to be more aware of child protection issues, particularly with regard to issues pertaining to domestic abuse and violence; c) a complementary approach can also include creating eligibility for COPE transfers with strategic links to child protection-related behaviours. Issues of relevance to the Nigerian context include promoting awareness raising on potentially harmful traditional practices such as early marriage, or risks involved with labour and migration practices, such as hawking, Almajaris, and domestic-help workers. Conditionality on benefits can also be applied to meet specific social development objectives (such as the importance of schooling and health-seeking behaviour and the protection of orphans and children affected by HIV). This approach is best implemented through an interface between social welfare workers and transfer beneficiaries (see e.g. Jones, 2009).

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# **Appendix 1: Methodology**

# Quantitative secondary data analysis

We employed nationally and state-wise representative household surveys, i.e. the Nigerian Living Standard Survey (2003-04) and the Household Living Standard Survey (2009) in order to test for the effects of the 3F crises on a variety of measures of households' welfare. The analyses relied heavily on the use of econometrics techniques that allowed testing more formally for the effects of the various channels.

## Food price crisis

The transmission mechanism of the food crisis can be captured by the change in food prices over a certain period of time. We used monthly price data for food items at the state level. Food price increases can in principle impact households in two ways: by increasing the costs of buying food in the market for net food buyers (adverse impact) and by increasing the revenues from selling food products in the market for net food sellers (positive impact). As Nigeria is a net importer of food products we would expect that the overall effect of food price increases may be negative. However it is important to distinguish between the two separate channels in the analysis.

Data limitations impose some restrictions on the way we can test these channels. In the absence of longitudinal data, we constructed a pseudo panel at the state level, exploiting the representativeness of the samples we use at the state level in two points in time. We then exploited the differences in price changes across states, as well as the relative dependence of states on food purchases and agricultural income in order to identify the effects of the two types of channels for the food price crisis on various measures of household's welfare (in terms of health, education, income and employment outcomes). To that end we ran a series of different econometric specifications, which are described in the Appendix A1. In particular we tested for three separate impacts of food prices' changes on welfare:

Pure effect, which is essentially measured as a statistical association between variations in food prices and variations in measures of welfare controlling for a series of variables likely to influence the latter.

Effects of food price variations according to the state's level of dependence on food consumption (measured by testing for the effects of an interaction variable between the state-wise share of food in total expenditures in 2003/04 and the state level change in the price of food between 2003/04 and 2009).

Effects of food price variations according to the state's level of dependence on food selling (measured by testing for the effects of an interaction variable between the state-wise share of agriculture in total income in 2003/04 and the state level change in the price of food between 2003/04 and 2009).

A priori we would expect effect a) to be negative as Nigerian households are on average net food buyers. Effect b) is also expected to be negative as the effect of an increase in food prices will be more negative the higher the shares of food expenditure in consumption. Conversely the effect c) is expected to be positive as food price increase should benefit more those states with a higher share of income from agriculture.<sup>59</sup>

Along with the national level analysis we also differentiated the (pure) effects of food price changes between by states, focussing on the six states where also the qualitative analysis was

<sup>&</sup>lt;sup>59</sup>As we saw above the food price crisis has manifested itself in Nigeria through very short-term quick changes in food prices, while the long term trend has remained fairly stable. As we do not have high frequency household data in Nigeria, we cannot test explicitly for eventual changes induced by such short-term variations. Instead we measure the long-term elasticity of changes in welfare to changes in food (and fuel) prices. This is still an important measure of households' response to changes in the external environment, which is likely to incorporate to some extent short-term responses as well.

performed (Adamawa, Benue, Edo, Imo, Kano and Lagos). As we do not have any variations within states in the share of food in consumption and the share of agriculture in total income, we cannot test explicitly for the channels b) and c) for the different states. However the results from national level analysis should useful to explain some of the patterns at the state level as well.

# Fuel price crisis

With oil accounting for around 80% of the fiscal revenues, the variation in international oil prices can have significant effects on the revenues capacity of the Nigerian government. However, if domestic fuel prices adapt to price volatility in international oil markets, this can reduce households' budgetary constraints to the extent that fuel is an important input for production and income generating capacity. In order to capture the effects of fuel price variability, we used two types of variables which should identify this double (and potentially opposing) effect: household consumption of petrol and energy as a share of total expenditures; share of states' income from federal transfers and share of states' employment from public sources.

Similarly to the food price crisis we aimed to implement empirical models relating these statelevel variables combined with changes in domestic fuel prices and oil exports with various measures of welfare. In particular we aimed to measure the following effects:

- Pure effect of domestic petrol price changes, measured as a statistical association between variations in fuel prices and variations in measures of welfare controlling for a series of variables likely to influence the latter.60
- Pure effect of oil export changes
- Effect of domestic fuel price variations according to the state's level of dependence on fuel related consumption (measured by testing for the effects of an interaction variable between the state-wise share of fuel in total expenditures in 2003/04 and the state level change in the price of petrol between 2003/04 and 2009).
- Effect of oil exports' changes according to the state's level of dependence on transfer from the federal government (most of which is funded through oil export revenues) measured by testing for the effects of an interaction variable between the state-wise share of gross federal transfers in total state income in 2003/04 and the national level change in oil exports between 2003/04 and 2009.
- Effect of oil exports' changes according to the state's level share of public employment in total employment (measured by testing for the effects of an interaction variable between the state-wise share of public employment in total employment in 2003/04 and the national level change in oil exports between 2003/04 and 2009).

Given the discussion above we would expect effects a) and c) to be negative and effects b), d) and e) to be positive.

Again, as in the case of the food price crisis, we also adapted the empirical analysis to differentiate the pure effects of both domestic fuel price changes and oil export changes across states (see the Appendix for the formal explanation of the methods).

# Financial crisis

This is likely to be the most complex crisis to identify the effects of as it works through a variety of channels and as it is the most recent one so it may still be displaying its effects and enough up to date data may not be available yet. Calì et al. (2008) as well as Harper et al. (2009) identify the main direct channels through which the crisis is expected to affect a country, i.e. a drop in exports, in remittances, in private capital flows (FDI, equity and debt

<sup>&</sup>lt;sup>60</sup> We also test this using price changes in the most important source of energy for the households, i.e. kerosene.

flows) and aid. The drop in these flows would eventually cause a slowdown in the economy with increases in unemployment and decreases in income, and these channels could affect the social indicators as well.

As seen above, the available evidence suggests that in the case of Nigeria, the effects of the crisis have been relatively soft at the macroeconomic level as far as both exports and remittances are concerned. Albeit small we can test the effects of this channel by using the household's share of income from remittances from abroad.

There is some also some evidence that private capital flows to Nigeria have reduced during the crisis (e.g. Ajakaiye and Fakiyesi, 2009) which has showed up especially on stock market capitalisation although there is no sign of reduced bank lending (in fact the opposite is true given the macro data presented above). As we don't have explicit data on the reliance of households on the capital flows, we use the share of population who is indebted with formal banking institutions in 2003-04 as the variable to identify the effects of this channel. As in the case of remittances, this variable is also available at the national level and by year. For the same reason we therefore do not include it by itself in the set of regressors.<sup>61</sup>

To sum up we aim to measure the remittances and credit related effects of the financial crisis through:

- Effect of changes in remittances according to the state's level of remittance dependence(measured by testing for the effects of an interaction variable between the state-wise share of remittances in total income in 2003/04 and the change in remittance inflows between 2003/04 and 2009).
- Effect of changing credit availability according to the state's level dependence on formal credit (measured by testing for the effects of an interaction variable between the statewise share of formal credit in total income in 2003/04 and the state level change in banking credit to the private sector as a share of GDP between 2003/04 and 2009).

Given the very little share of remittances in total income and of credit from formal sources in total income, it is hard to predict whether any important effect can be expected in Nigeria from variations in these flows. We also measure the pure effects of both changes in credit availability and in remittances across the different states using the same procedures as described above.

# The Lagos-Kano Household Survey

In order to complement the quantitative secondary data analysis, a non-probabilistic and purposive selective sampling frame was adopted to operationalise a household survey in two states of Nigeria: Kano from the North West Zone and Lagos from the South West Zone of the country. The reason for adopting a non-probability and purposive selective sampling strategy was mainly due to budgetary constraints that limited our ability to adopt probability-based survey techniques.

The Lagos-Kano household survey (LKHS) was conducted in four local government areas (LGAs) within the two selected states: Ikeja and Amuwo-Odofin in Lagos, and Sabon Gari and Ungogo in Kano state. The selection of the two states, and the corresponding LGAs was based on geographical, economic, socio-political and security criteria that aimed at capturing the level heterogeneity across these states and localities, and which could capture, to a certain degree, the various transmission mechanisms through which the food, fuel and financial crises have affected vulnerable groups, particularly women and children. So while Kano and Lagos

<sup>&</sup>lt;sup>61</sup> On the other hand aid is neither a relevant source of income in Nigeria nor has there been any recorded drop in aid to the country as a consequence of the crisis. Moreover there is no data available which allows to identify the reliance of the various states on aid, which is the main strategy we use to isolate the effect of the different channels of the 3F crises on welfare. Therefore we do not explicitly test for the effects of aid changes on welfare.

capture the North-South spatial heterogeneity, Ikeja and Sabon Gari reflect the urban context whereas Amuwo-Odofin and Ungogo, the rural environments.

The selection approach to sampling sites was designed in a way to reduce the problem of exclusion bias from the non-probability sampling process, through random selection of households at the four LGAs, our primary sampling units (PSU). This process was carried out following the following steps:

The enumerators and fieldwork supervisors had a transact walk in each of the selected LGAs before initiating the field work in order to ascertain the spread and distribution of population in those localities and redefine the boundaries of LGAs. In the case of rural communities, the team requested permission to the community leaders to carry out the survey and get a sense of the estimated number of households in each LGA.

Once the geographical boundaries were delimited, the team formed five clusters of 20 households from the cardinal directions: North, South, East, West and Centre.

The clusters were formed from a systematic sampling method involving the selection of households from an ordered sampling frame.

A random starting point was first selected before enumerators began to follow a sampling interval of every 10<sup>th</sup> household to pick up a household for interview. The survey team targeted at interviewing 100 households in each LGA to obtain an overall sample size of 400 households across the two states. In the end, 399 households were successfully interviewed, with an uneven distribution across the four locations (see Table 3). It is important to point out the fact that as most non-probabilistic sampling methods, the results obtained from the Lagos-Kano household survey must be taken with caution and cannot be used to infer general trends of the overall population in Nigeria, but rather, to describe patterns and relationships occurring in the four locations under analysis.

States and LGAs	Targeted sample	Achieved sample
Lagos	200	199
Ikeja	100	100
AmuwoOdofin	100	99
Kano	200	200
Sabongari	100	87
Ungogo	100	113
Urban	200	174
Rural	200	225
Total	400	399

# Table 3: Sample target and achievement

### The analytical approach to the LKHS

The LKHS questionnaire was designed to capture retrospective information on current and previous welfare outcomes, back to 2006 as the pre-crises starting point (see questionnaire in the Appendix). The use of retrospective data is being increasingly used in developing countries where pre-test and post-test data is often not available. Cost and administrative factors often

limit regular collection of household data, and in our case, retrospective questions will provide key information on the variability of key welfare outcomes.

The rationale of our implementation strategy is based on the knowledge that the food and fuel price variability appeared in 2007, 2008, and 2009, whereas the onset of the global financial crisis began in September 2008 and extended throughout 2009. More precisely, Nigeria was faced with food price variation beyond the observed long-term upward steady trend during 2007, 2008 and 2009, whereas the fuel price increased was perceived during 2006 and 2008. The sole effect of the food price variability may be captured in 2007, whereas the sole effect of the food price variability may be captured in 2007, whereas the sole effect of the fuel price increases, in 2006. The effects of the global financial crisis may be captured in 2008 and in 2009 with the latter also likely to reflect more recent food price variability. Retrospective information will thus allow us to measure changes in reported welfare outcomes in the years where the 3F crises became apparent, under the assumption that any observed change in outcomes is correlated with the covariate factors, and to a lesser degree with idiosyncratic events. There are two major limitations in this strategy:

First, given that data on food and fuel prices are disaggregated at the state level, we are unable to use price data for the identification of the food and fuel price variability through the econometric strategy discussed in the Appendix, and therefore, we cannot separate the effects of the food and fuel price variability from the financial crisis, particularly in those years when more than one covariate factor was observed.

Second, retrospective data generate measurement errors that can be systematically correlated with endogenous factors, particularly when the questions involved aim at measuring attitudes, behavioural outcomes or outcomes of subjective nature that are difficult to be accurately remembered. These informational constraints can generate downward bias in the estimated coefficients. Several studies have shown that recall errors arising from retrospective data seem to be systematically correlated with household size, suggesting that the inclusion of household size or any other intra-household-related variable as one of the controls in the regression equations may mitigate the biases arising from recall errors (see Gibson, 2002, Gibson and Kim, 2007, Battistin et al., 2003, Nakata et al., 2009). To reduce the severity of these estimation constraints, we included in the econometric strategy presented in the Appendix, the dependency ratio to control for the effects of household size, and which serves to mitigate the measurement errors arising from retrospective data.

# Appendix 2: Technical addendum to the methodology

We develop here a more formal treatment of the methodology described in section 2 including the actual equations used in the empirical specifications.

# A.1 Food price crisis

The transmission mechanism of the food crisis can be captured by the change in food prices over a certain period of time. We use monthly price data for food items at the state level. Food price variability can impact urban households in particular, as Nigeria is a net importer of agricultural goods. Nonetheless, in the rural areas, where more than 50 percent of the economic active population is employed, a rise in food prices may have potential positive impacts on household income.

Based on this we perform the following regression in order to explore how the food price crisis may affect welfare outcomes using the state level quasi panel:

$$w_{ist} = \alpha_s + \gamma_t + \mathbf{B}X_i + \delta p_{st}^F + \sum_{j=1}^N \beta_j \times d_j \times p_{jt}^F + \varepsilon_{it}$$
(1)

Where w is a measure of welfare (income, employment, health or education indicator), for household i, state s and time t; a is state fixed effects, y is time effects, X is a vector of control variables for the socio-demographic composition of the household,  $p_{st}^{F}$  is price of food items (F) in state s at time t,  $d_i$  is a dummy for state j (with j=1,...,N states) which takes the value of 1 when j is equal to a specific state and zero otherwise, and  $\varepsilon$  is the error term. The key coefficients to identify the effect of the food price crisis are  $\delta$  and the  $\beta_i$  coefficients. In particular the former gives us an indication of the aggregate mean effect of changes in food prices on households, while the latter coefficients measure the effects of such price variability at state j. Considering that the majority of the households are net food importing (just as the entire country is), we would expect both sets of coefficients be negative. However there is likely to be a high variation across Nigeria in the extent to which different households and states may be net importing or net exporting of food. In order to account for this we add a further interaction term in (1) which takes into account the differential impact of price changes according to the state-wise share of food expenditure relative to total consumption expenditures before the abrupt price changes, i.e. in 2003/04 (from the 2003/04 round of the NLSS). In this way we can capture the effects of the food price crisis net of the eventual changes in production and consumption patterns by the households spurred by the crisis:

$$w_{ist} = \alpha_s + \gamma_t + \mathbf{B}X_i + \delta p_{st}^F + \sum_{j=1}^N \beta_j \times d_j \times p_{jt}^F + \lambda \times p_{st}^F \times \operatorname{shr}_{s2003}^F + \varepsilon_{it}$$
(2)

where  $\operatorname{shr}_{s_{2003}}^{\mathbb{F}}$  indicates the state-wise share (for state s) of expenditures on food (net of own consumption and food sales) in total consumption expenditures in 2003/04. The coefficient of this interaction is expected to be negative, as the effect of an increase in food prices will be more negative the higher the shares of food expenditure in consumption. Importantly, the extent to which the introduction of this interaction term affects the  $\delta$  and the  $\beta_j$  coefficients will be an indication of the extent to which the food price crisis display its effects on the basis of the degree of dependence of the households on food consumption.

We could also differentiate the interaction effects between share of food in consumption and price changes by states as well through a series of state level interaction terms:

$$w_{ist} = \alpha_s + \gamma_t + \mathbf{B}X_i + \delta p_{st}^F + \sum_{j=1}^N \beta_j \times d_j \times p_{jt}^F + \sum_{j=1}^N \lambda_j \times d_j \times p_{jt}^F \times shr_{j2003}^F + \varepsilon_{it}$$
(3)

As food prices may co-move to some extent with the prices of other items, we also construct a price variable which is normalised by the prices of other non food items (i.e.  $pr_{st}^{F} = \frac{p_{st}^{F}}{p_{st}^{NF}}$ ). In this way we avoid the risk of confounding the effects of the food price crisis with those from the evolution of other prices.

### A.2 Fuel price crisis

With oil accounting for around 80% of revenues, the variation in international oil prices can have significant effects on the revenues capacity of the Nigerian government. However, if domestic fuel prices adapt to price volatility in international oil markets, this can reduce households' budgetary constraints to the extent that fuel is an important input for production and income generating capacity. In order to capture the effects of fuel price variability, we use two types variables which should identify this double (and potentially opposing) effect:

- household consumption of petrol and energy as a share of total expenditures
- Share of income and employment from public sources as percentage of total household income/employment

Similarly to the food crisis we aim to implement an empirical model relating the state-level variation in various measures of welfare on changes in prices. We use changes in fuel prices at the state level, as well as in the international price of oil, to measure the effect of fuel-related price variability on welfare outcomes:

$$w_{ist} = \alpha_s + \gamma_t + \mathbf{B}X_i + \eta p_{st}^{P} + \sum_{j=1}^{N} \varphi_j^1 \times d_j \times p_{jt}^{P} + \sum_{j=1}^{N} \varphi_j^2 \times d_j \times p_t^{O} + \varepsilon_{it}$$
(4)

Where  $p_t^{o}$  measures the international oil prices at time t. This time the direction of the overall effect of oil prices is not clear as it is the product of the two (opposing) channels described above. In order to try to disentangle them, we add two interaction terms each capturing one of the channels:

$$w_{ist} = \alpha_s + \gamma_t + \mathbf{B}X_i + \eta p_{st}^{\mathbb{P}} + \sum_{j=1}^{\mathbb{N}} \varphi_j^1 \times d_j \times p_{jt}^{\mathbb{P}} + \sum_{j=1}^{\mathbb{N}} \varphi_j^2 \times d_j \times p_t^{\mathbb{O}} + \phi_1 \times p_{st}^{\mathbb{P}} \times \mathfrak{shr}_{s2003}^{\mathbb{O}} + \phi_2 \times p_t^{\mathbb{O}} \times \mathfrak{shr}_{s2003}^{\mathbb{P}} + \varepsilon_{it}$$
(5)

Where  $\operatorname{shr}_{j_{2003}}^{\rho}$  is state-wise households' share of petrol and energy consumption as a share of total expenditures in 2003/04 and  $\operatorname{shr}_{j_{2003}}^{\rho}$  is the share of income or employment from public sources as percentage of total household income/employment. The former term captures the negative effect of a fuel price increase on welfare via household's budget whereas the latter term captures the impact of changes in international oil prices via public revenues (and therefore expenditures) . We would expect then that  $\phi_1 < 0$  and  $\phi_2 > 0$ . Eventual changes in the  $\phi^1$  and  $\phi^2$  coefficients will provide a rough indication of the extent to which the changes in fuel prices operate through the dependence of households on petrol and energy consumption and through the dependence on public support via labour markets and workfare programmes. Expression (5) could also be adapted to differentiate the interaction effects between the two types of interaction effects by states as well through a series of state level interaction terms as in (3).

# A.3 Fuel price crisis

This is likely to be the most complex crisis to identify the effects of as it works through a variety of channels and as it is the most recent one so it may still be displaying its effects and enough up to date data may not be available yet. Calì et al. (2008) identify the main direct channels through which the crisis is expected to affect a country, i.e. a drop in exports, in remittances, in private capital flows (FDI, equity and debt flows) and aid. The drop in these flows would eventually cause a slowdown in the economy with increases in unemployment and decreases in income, and these channels could affect the social indicators as well.

To sum up the discussion in the main text this is the baseline expression to capture all the effects of the financial crisis:

$$w_{ist} = \alpha_s + \gamma_t + \mathbf{B}X_i + \sum_{j=1}^N \rho_j^1 \times d_j \times R_t + \sum_{j=1}^N \rho_j^2 \times d_j \times X_t^\circ + \sum_{j=1}^N \rho_j^2 \times d_j \times C_t + \mu_1 \times R_t \times \operatorname{shr}_{s2003}^R + \mu_2 \times X_t^\circ \times \operatorname{shr}_{s2003}^P + \mu_3 \times C_t \times \operatorname{shr}_{s2003}^P + \varepsilon_{it}$$
(6)

where R is total remittances to Nigeria,  $X^{O}$  is Nigerian oil exports, C is the share of credit over GDP in the country,  $shr_{st}^{R}$  is the share of remittances in total income for state s at time t,  $shr^{D}$  is the population share with a debt with a banking institution.

### The LKHS analytical approach

In this section we discuss the methodology used for the analysis of the LKHS dataset. Overall, three econometric models were used:

### Probit model

For categorical outcomes, we estimated a probit model based on an underlying response variable  $y_i^*$  that was defined by the regression equation,  $y_i^* = X_i\beta + u_i$ , where we can only observe a categorical outcome, Y, that takes the values y = 1 if  $y_i^* > 0$  (if households report an outcome over the 2007-2010 periods, and y=0, otherwise. From the regression expression above we estimate the predicted probabilities of observing the outcome of interest y, by computing:

$$\Pr(Y=1 \mid X_i) = \int_{-\infty}^{X_i\beta} \phi(t) dt = \Phi(X_i\beta),$$

where  $\phi(\cdot)$  and  $\Phi(\cdot)$  are the density of the distribution function and the cumulative distribution function of the standard normal, respectively, and X is a vector of household characteristics that contains the following control variables: 1) a dummy variable that takes the value 1 if the household head is woman, and zero, otherwise; 2) a continuous variable that measures the age of the household head; 3) the dependency ratio used as a measure of intrahousehold composition to capture the liquidity requirements for consumption expenditure, and which also helps to mitigate the measurement errors arising from retrospective data in subsequent estimations.

We run two models: The first equation (Model I) is estimated with a dummy variable that takes the value 1 if the respondent household is resident of the Lagos, and zero if the household resides in Kano. The second equation (Model II) is estimated with a dummy variable that takes the value 1 for households living in urban areas (including Ikeja in Lagos and Sabongari in Kano), and zero for households residing in rural areas (in this case AmuwoOdofin in Lagos and Ungogo in Kano). In order to derive the marginal effects of the model, we compute the effect of one unit change in the explanatory variables on the probability of a change in the outcome variable as follows:

$$ME = \frac{\partial P(\mathbf{y}_i = 1)}{\partial X_i} = \frac{\partial \Phi(X_i \beta)}{\partial X_i}$$

where the rates of change are computed in STATA at the means of the independent variables (Long and Freese 2003). By estimating the marginal effects (or elasticities) of the Probit equation, we are able to derive the effect of one unit change in the explanatory variables contained in X, including the state and area dummies, on the probability of a change in the outcome variable over the 2007-2010 periods in which the 3Fs were observed.

### Ordered Probit model

As the LKHS also collected discrete response variables of ordered nature, we estimate an ordered probit equation, built as an extension of the latent regression equation of the Probit model that takes the form:  $y_i^* = X_i \beta + \varepsilon_i$ , were X is the same vector of household characteristics described above, and y now is observed having the following values: y = 0 if  $y_i^* \pm 0$  (if the outcome variable in year t-1 was worse than in year t); y = 1 if  $0 < y_i^* \pm m_i$  (if the outcome variable in year t-1 was similar to that in year t), and y = 2 if  $m_i < y_i^* \pm m_i$  (if the outcome variable in year t-1 was better than in year t), with  $m_s$  and  $\beta_s$  being the unknown parameters.

The latent variable can be thought as the propensity of households perceiving a change in the outcome variable as a consequence of the explanatory factors in X, over the period where the 3Fs were observed. The estimated probabilities of observing changes in the outcome variables are derived as

 $Pr(y=0|X_i) = 1 - \Phi(X_i\beta)$   $Pr(y=1|X_i) = \Phi(\mu - X_i\beta) - \Phi(-X_i\beta)$  $Pr(y=2|X_i) = 1 - \Phi(\mu - X_i\beta)$ 

With the marginal effects being

$$\frac{\partial \Pr(\mathbf{y} = \mathbf{0} | X_i)}{\partial X_i} = -\phi(X_i \beta)\beta$$
$$\frac{\partial \Pr(\mathbf{y} = \mathbf{1} | X_i)}{\partial X_i} = [-\phi(X_i \beta) - \phi(\mu - X_i \beta)]\beta$$
$$\frac{\partial \Pr(\mathbf{y} = \mathbf{2} | X_i)}{\partial X_i} = -\phi(\mu - X_i \beta)\beta$$

The estimated marginal effects of the latent variables are used to measure the effect of one unit change of the explanatory variables on the propensity of households perceiving a change in an outcome variable in the year of reference. As with the Probit equation, two ordered probitmodels (Model I and Model II) are computed to estimated the state-level and local area effects.

# Tobit model

Given that some continuous outcome variables exhibit a censored distribution, taking a maximum value and a lower threshold zero, we also adopted a Tobit model,  $Y_i^* = X_i\beta + \varepsilon_i$ , where X is the same vector of household characteristics derived above, but now  $Y_i = \max(0, Y^*)$ , i.e.  $Y_i = Y^*$  if  $Y^* > 0$  for households reporting outcomes of interest, and  $Y^* = 0$  if  $Y^* \le 0$  for households reporting no outcomes of interest, and where it is assumed that  $\varepsilon_i \mid X_i \square Normal(0, \sigma^2)$ .

By adopting a Tobit specification equation, we are able to capture a more precise measure of the determinants of censored outcomes in the periods under which the 3Fs were observed. This is because the use of OLS for the sub-sample for which  $Y^* = 0$  would have produced inconsistent estimators and downward bias results (Greene 2003). The Tobit model is based on the assumption that the probability of observing  $Y_i > 0$  and  $Y_i = 0$  are  $\phi(\cdot)$  and  $p(Y_i^* < 0) = \Phi(\cdot)$ , respectively, where  $\phi(\cdot)$  and  $\Phi(\cdot)$  denote the density function and the cumulative density function of the standard normal. The Tobit model generates three conditional mean functions.<sup>62</sup> We are particularly interested in examining the observed factors affecting the incidence of outcome variables in the 2007-2010 periods.

# **Appendix 3: Key Informant Interviews**

National-level Key Informant Interviews				
Organisation	Serial Number	Key Informant		
National Agency for the Prohibition of Traffic in Persons and other Related Matters (NAPTIP)	KI1	Mr IsmaeliAderomu, Director		
Ministry of Women's Affairs & Social Development	KI2	Mr Adamu, Director of Women's Affairs		
Budget Office of the Federation	KI3	Dr Bright E. Okugu, Director general		
Central Bank of Nigeria	KI4	Dr Ngozi E. Egbuna, Deputy Director, Fiscal Policy group		
World Bank	KI5	KhimaNthara, Senior Economist		
	KI6	Gloria Joseph Raj, Economist		
Save the Children	KI7	Susan Grant, Country Director		
Food and Agriculture Organisation (FAO)	KI8			

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<sup>&</sup>lt;sup>62</sup> For further details on the derivation of the conditional mean functions, see Greene (2003).

Association of Women Living with HIV/AIDS (ASWHAN)	KI9	Donna Fakubu, Executive Director
	KI10	Esther James, National Secretary

# Appendix 4: Pre-existing barriers to healthcare

Due to the lack of concrete baseline data needed for comparison, it is impossible to ascertain to what extent the impacts of the global financial crisis have contributed to these results, and it may be that they simply reflect the pre-existing levels of deprivation and poor healthcare access.

These barriers only exacerbate pervasive health problems including life-threatening diseases such as malaria, typhoid and HIV (particularly in Benue, Kano and Lagos) and maternal and child health complications – resulting in high morbidity and mortality indicators.

# Social factors (demand)

Religious and cultural norms have been found to have critical effects on women's access to family planning, prenatal and antenatal care and general checkups. In Adamawa, women's lack of authority and independence has had a direct impact on their ability to access such services – particularly family planning. In Benue, women are disproportionately vulnerable to barriers of healthcare access (e.g. preference for home-based deliveries), as men are key decision-makers and control household resources primarily due to "tradition and religious norms". Even in urban localities, this lack of power on the part of women extends to decisions regarding their own wellbeing, including healthcare. As a result of language and religious barriers, "some mothers [in Benue] lose their baby during birth and at times they themselves die in the process" (Benue, FGD2).

A general lack of knowledge in regard to health conditions was also pointed out as a critical barrier to essential healthcare by health administrators in Lagos, where the public lacks information on mortal health conditions such as diabetes, hypertension, cancer, etc., which can have acute impacts on health and survival for the larger population. There are also many reports of a lack of knowledge about existing health services: in Benue, youth have been found to be unaware of critical reproductive health services (which are particularly dire in areas like Benue with high rates of HIV infection and teenage pregnancy). In Edo, there is also some indication that a prevalent lack of awareness of the existing free healthcare among communities is exacerbating a weak demand for these services.

Across the sampled states, respondents complained of an acute lack of access to maternal and child healthcare, particularly in rural areas, due to travel distance and environmental risks. The distance to clinics and hospitals, as well as hazards such as flooded roads are only exacerbated by increasing transport costs, leaving children and pregnant women at high risk of mortality.

# Lack of government commitment (supply)

A lack of coherence and commitment on the part of state governments was cited as a key barrier to accessing healthcare. In rural Benue it was reported that some communities lacked access due to a lack of political representation, which was required to "fight" for the provision of services. In Imo, a lack of commitment on the part of the local government was seen as a long-standing deterrent to access of quality health:

Although political leaders identified with the needs of the electorate during the electioneering processes, this has not translated into demonstrated commitment to the development of social structures that can improve the living standards of the poor and excluded. (Imo, KII 4)

In Adamawa, transportation problems and the absence of a designated medical centre remain unresolved by the state, which according to residents is "not even aware of their situation" (Adamawa, FGD1, 2). A lack of clarity regarding administrative responsibilities is another contributing factor: In Imo, the unclear role of the District Health System in the management of health facilities has resulted in poor supervision and a lack of monitoring and evaluation of the health workforce, as well as poor distribution of health personnel. In some cases this lack of commitment has manifested itself through inequitable service provision (particularly in regard to emergency care, as in the case of Adamawa, or political bias in the citing of health facilities, as reported in Imo.

Poor infrastructure in regard to staff, services and health structures themselves is also extensive across states. In SabonGari, Adamawa, respondents reported an absence of designated medical centres. In Imo respondents pointed to inadequate facilities and obsolete equipment; a decline was illustrated in one community (Obibiezem) where the health facility became dilapidated, and was subsequently abandoned. Respondents in Lagos reported inadequate physical structures for primary, secondary and tertiary healthcare. An interviewee in Imo pointed to the impact of such poor facilities and lack of security upon women and children:

Nurses complain about government neglect and as such whenever women deliver their babies in the health centres, they are discharged immediately irrespective of their state of health due to poor facilities and the lack of security (Imo, Owerri FGD 3).

In Adamawa skilled antenatal care provision is reportedly low, and in rural areas respondents complained of an acute lack of maternal and child healthcare. Adamawa respondents reported poor government health services. In Benue, skilled antenatal care provision is already low and where such care is available, there is a dearth of skilled health personnel. In Lagos respondents pointed to "quack" medical practices, nonchalant attitudes of personnel towards the patients and generally poor standards of healthcare. Respondents in Imo reported a lack of personnel altogether, as there are instances where there are no doctors, nurses or midwives at their duty posts. In some states the quality of medicine has also been called into question, and health administrators in Lagos pointed to the prevalence of "fake" drugs in circulation.