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The State of Food and Agriculture

Social protection and agriculture: breaking the cycle of rural poverty





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Foreword

In recent decades we have made considerable progress in fighting global hunger and poverty. A majority - 72 out of 129 - of the countries monitored by FAO have achieved the Millennium Development Goal target of halving the prevalence of undernourishment by 2015, with developing regions as a whole missing the target by a small margin. In addition, 29 countries have met the more ambitious goal laid out at the World Food Summit in 1996, when governments committed to halving the absolute number of undernourished people by 2015. Meanwhile the share of people in developing countries living in extreme poverty has fallen from 43 percent in 1990 to 17 percent this year (World Bank, 2015a).

But progress has been uneven among countries and regions. The prevalence of hunger and poverty has fallen substantially in some regions, especially in East Asia and the Pacific as well as Southeast Asia. But in South Asia and sub-Saharan Africa, progress has been slow overall, despite some country success stories.

Some 795 million people continue to suffer from hunger according to *The State of Food Insecurity in the World 2015* (FAO, IFAD and WFP, 2015a), and almost one billion people live in extreme poverty (World Bank, 2015a). Most of these people live in rural areas and rely on agriculture for much of their incomes.

This is why it is urgent that we act to support the most vulnerable people in order to free the world of hunger. Economic growth, especially in agriculture, has been essential to driving down hunger and poverty rates. Thus, investment in agriculture remains the single most effective way to provide opportunities to generate income and improve nutrition, especially for women and youth in rural areas.

However, even with economic growth, the struggle to escape from hunger and poverty is often slow, as growth may not be inclusive. For some groups, such as children and the elderly, economic growth may bring little relief, or come too late to prevent deprivation and lasting disadvantage.

To eradicate hunger and poverty, we need a combination of sustained private and public investments and social protection measures. Eradicating world hunger sustainably by 2030 will require an estimated additional US\$267 billion per year on average for investments in rural and urban areas and in social protection, so poor people have access to food and can improve their livelihoods. This is more or less equivalent to 0.3 percent of the global GDP and would average US\$160 annually for each person living in extreme poverty over the fifteen-year period (FAO, IFAD and WFP, 2015b).

Surely this is a relatively small price to pay to end hunger in our lifetimes!

In addition to the investments in the agriculture sector and in rural development, investments in social protection programmes are needed.

Many countries in the developing world increasingly recognize that social protection measures are needed to reduce and/or prevent poverty and hunger immediately. As a result, social protection programmes have expanded rapidly in recent years, although there is great diversity in the nature of programmes, even within the same country.

Numerous studies have shown social protection programmes have been successful in reducing hunger and poverty. In 2013, social protection helped lift up to 150 million people out of extreme poverty.

Social protection allows households to increase and diversify their food consumption, often through increased own production. Positive impacts on child and maternal welfare are enhanced when programmes are gender-sensitive or targeted at women. This is especially important because maternal and child malnutrition perpetuate poverty from generation to generation.

Social protection programmes not only protect consumption. The evidence shows that social protection fosters more investment in the education and health of children, and reduces child labour, with implications for future productivity and employability.

When well implemented, and transfers are regular and predictable, social protection also facilitates increased investment in onfarm production activities, including inputs, tools and livestock, as well as in non-farm enterprises. Even relatively small transfers help the poor overcome liquidity and credit constraints, and provide insurance against some risks that deter them from pursuing higher-return activities.

Finally, social protection has positive impacts on local communities and economies. Public works programmes can provide important infrastructure and community assets and directly contribute to the local economy when designed and implemented well. School-feeding programmes can help combat malnutrition and act as an incentive to ensure children get an education. Additional income provided by social protection programmes increases demand for locally produced goods and services, contributing to a virtuous circle of local economic growth.

Notwithstanding its proven effectiveness, social protection alone cannot sustainably move people out of hunger and poverty. But linking agriculture with social protection can create virtuous circles of local development. Proven "win-win" solutions that support family farming through social protection include 'institutional purchases' from local farmers for school meals and other government programmes, including social protection programmes enabling greater consumption of locally produced food.

It is possible to cite financing constraints to implementing such programmes, but these are closely linked to the political will needed to make the necessary expenditure choices. Pilot programmes as well as careful monitoring and evaluation can help start the policy dialogue to build national support for financing such social assistance measures. At least part of this financing must be generated domestically to provide a sustainable basis for social protection programmes.

Country experiences over the last couple of decades prove that ending hunger, food insecurity and malnutrition is possible. They also show that there is a lot of work ahead to transform that vision into reality. Political commitment, partnerships, adequate funding and comprehensive actions are key elements in this effort.

We are committed to supporting national and other efforts to make hunger and malnutrition history. The 2012 General Assembly resolution on a Social Protection Floor, the Zero Hunger Challenge, the 2014 Rome Declaration on Nutrition, the 2015 Addis Ababa Action Agenda and the post-2015 Sustainable Development Goals are some of the recent manifestations of the international community's support. This edition of The State of Food and Agriculture focusing on social protection elaborates on our unequivocal support to strengthen national capacities and capabilities to successfully develop and deliver needed programmes.

> José Graziano da Silva FAO Director-General

J.f. Comofe

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Abbreviations and acronyms

Bolsa Família Conditional cash transfer programme, Brazil.

BRAC Bangladesh Rural Advancement Committee

CadÚnico Single Registry for the Federal Government Social Programmes

CCT conditional cash transfer

CFPR-TUP Challenging the Frontiers of Poverty Reduction – Targeting the Ultra Poor

programme, Bangladesh

CGP Child Grant Programme, Lesotho

CIT conditional in-kind transfer

CSG Child Support Grant, South Africa

CT-OVC Cash Transfer Programme for Orphans and Vulnerable Children, Kenya

DAP Declaração de Aptidão ao Pronaf (Pronaf eligibility declaration), Brazil

FFA Food for Asset Creation programme, Bangladesh

FISP Farm Inputs Subsidy Programme, Malawi

FSVGD Food Security Vulnerable Group Development programme, Bangladesh

G20 Group of Twenty Finance Ministers and Central Bank Governors

GDP gross domestic product

HABP Household Asset Building Programme, Ethiopia

HGSF Home-Grown School Feeding

HIV/AIDS human immunodeficiency virus and acquired immunodeficiency syndrome

HSCT Harmonized Social Cash Transfer, Zimbabwe

HSNP Hunger Safety Net Programme, Kenya

ICN2 International Conference on Nutrition

IGVGD Income Generating Vulnerable Group Development programme, Bangladesh

ILO International Labour Organization

IPC-IG International Policy Centre for Inclusive Growth (UNDP)

IPP institutional procurement programme

LEAP Livelihood Empowerment against Poverty programme, Ghana

LEWIE Local Economy-wide Impact Evaluation

MDG Millennium Development Goal

MGNREGA Mahatma Ghandhi National Rural Employment Guarantee Act, India

NGO non-governmental organization

OFSP Other Food Security Programme, Ethiopa

Oportunidades see PROGRESA

P4P Purchase for Progress programme (WFP)

PAA Programa de Aquisição de Alimentos (Food Acquisition Programme), Brazil

PAA Africa Purchase from Africans for Africa Programme

PNAE Programa Nacional de Alimentação Escolar

PPP purchasing power parity

PROGRESA Programa de Educación, Salud y Alimentación, a conditional cash transfer

programme in Mexico, renamed (and slightly modified) Oportunidades in

2003 and Prospera in 2014

Pronaf Programa Nacional de Fortalecimento da Agricultura Familiar (National

Programme for Strengthening Family Farming), Brazil

Prospera see PROGRESA

PSNP Productive Safety Net Programme, Ethiopia

PtoP From Protection to Production project (FAO and UNICEF)

RMP Rural Maintenance Programme

SCT Social Cash Transfer, Malawi

SCTPP Social Cash Transfer Pilot Programme, Ethiopia

SDG Sustainable Development Goal

SPF Social Protection Floor

TPDS Targeted Public Distribution System, India

UNDP United Nations Development Programme

VGD Vulnerable Group Development programme, Bangladesh

VUP Vision 2020 Umurenge Programme, Rwanda

WFP World Food Programme

WHO World Health Organization



Executive summary

The Millennium Development Goals (MDGs) on reducing poverty have been met by many countries, yet many others lag behind and the post-2015 challenge will be the full eradication of poverty and hunger. Many developing countries increasingly recognize that social protection measures are needed to relieve the immediate deprivation of people living in poverty and to prevent others from falling into poverty when a crisis strikes. Social protection can also help recipients become more productive by enabling them to manage risks, build assets and undertake more rewarding activities. These benefits spread beyond the immediate recipients to their communities and the broader economy as recipients purchase food, agricultural inputs and other rural goods and services. But social protection can only offer a sustainable pathway out of poverty if there is inclusive growth in the economy. In most low- and middle-income countries, agriculture remains the largest employer of the poor and is a major source of livelihoods through wage labour and own production for household consumption and the market. Poverty and its corollaries - malnutrition, illness and lack of education - limit agricultural productivity. Hence, providing social protection and pursuing agricultural development in an integrated way offers synergies that can increase the effectiveness of both.

Trends in poverty

Although the shares of people living in poverty and extreme poverty have declined over the past three decades, the numbers remain high, with almost one billion people considered extremely poor and another billion poor. Extreme poverty has fallen substantially in many regions, especially in East Asia and the Pacific as well as in South Asia. In sub-Saharan Africa, little progress has been made and almost half the population is extremely poor.

Extreme poverty is disproportionately concentrated in rural areas, and the rural poor are more likely to rely on agriculture

than other rural households, especially in sub-Saharan Africa. It is the poor's reliance on agriculture for their livelihoods and the high share of their expenditure on food that makes agriculture key to poverty and hunger alleviation interventions.

Why is poverty so persistent?

Poverty often begins with poor nutrition and health, especially in early childhood: the poor become trapped in vicious circles of hunger, poor nutrition, ill health, low productivity and poverty. Economic growth, especially agricultural development, has been essential for driving down poverty rates. However, even with economic growth, the struggle to escape from poverty is often slow as growth may not be inclusive. For some groups, such as children and the elderly, economic growth may bring little relief or come too late to prevent deprivation and lasting disadvantage.

The pathway out of poverty is difficult. In addition, many non-poor households are vulnerable to poverty when faced with shocks of one kind or another. These shocks cause many households to fall below the poverty line because they suffer large income losses and do not have sufficient savings to buffer the shocks. Such shocks typically have long-lasting negative impacts on the poor.

What is social protection?

Social protection encompasses initiatives that provide cash or in-kind transfers to the poor, protect the vulnerable against risks and enhance the social status and rights of the marginalized – all with the overall goal of reducing poverty and economic and social vulnerability. Social protection includes three broad components: social assistance, social insurance and labour market protection. Social assistance programmes are publicly provided conditional or unconditional cash or in-kind transfers or public works programmes. Social insurance programmes are contributory programmes that provide

cover for designated contingencies affecting household welfare or income. Labour market programmes provide unemployment benefits, build skills and enhance workers' productivity and employability.

Social protection programmes have expanded rapidly over the past two decades. Throughout the developing world, about 2.1 billion people, or one-third of the population, receive some form of social protection. There is wide variation among regions, with coverage lowest in the regions where poverty incidence is highest. This report focuses on social assistance, by far the most common form of social protection in the developing world.

Is social protection affordable?

Most countries, even the poorest, can afford social protection programmes that could be of significance in the fight against poverty. Spending on such programmes has been low relative to GDP. For more comprehensive programmes, financing may require difficult expenditure choices. Donor support will be essential in the short-to-medium term for maintaining programmes in some countries. Yet, mobilizing domestic fiscal resources from the outset are important in principle and to establish a politically and financially sustainable basis for social assistance programmes. Pilot programmes and careful monitoring and evaluation can help start the policy dialogue needed to build a national consensus on the nature, scale and financing of social assistance within a country.

Social protection can help reduce poverty and food insecurity

Social protection programmes are effective in reducing poverty and hunger. In 2013, social protection helped lift up to 150 million people out of extreme poverty, that is, those living on less than \$1.25 a day. Social protection allows households to increase and diversify their food consumption, often through increased own production. Positive impacts on child and maternal welfare are enhanced when programmes are gendersensitive or targeted at women. This is especially important because maternal and

child malnutrition perpetuate poverty from generation to generation.

Increased food consumption and greater dietary diversity do not automatically lead to improved nutrition outcomes. Nutritional status depends on a number of additional factors, including access to clean water, sanitation and health care, as well as appropriate child feeding and adult dietary choices. Thus, for social assistance programmes to improve nutrition outcomes, they must be combined with complementary interventions. Numerous agricultural interventions, such as home gardening and small livestock breeding, can also contribute to improving nutrition.

The potential impact of social protection on investment and growth

The livelihoods of most poor rural households in the developing world are still based on agriculture, particularly subsistence agriculture. Many of these farmers live in places where markets – for agricultural inputs and outputs, labour, and other goods and services such as credit and insurance – are lacking or do not function well. The uncertainties of weather, particularly with accelerating climate change and the lack of affordable insurance, are at the heart of the vulnerabilities of households dependent on agricultural livelihoods.

The time horizon of vulnerable agricultural households is reduced because they focus on survival. As a result, they are especially prone to adopt low-risk, low-return agricultural and other income-generating strategies, and may seek to obtain liquidity or diversify income sources in casual labour markets. For similar reasons, households may underinvest in the education and health of their children, as well as adopt negative risk-coping strategies such as distress sales of assets, reducing the quantity and quality of food consumption, begging or taking children out of school, and exploiting natural resources in an unsustainable manner.

Social protection can positively influence the investment decisions of poor households. It helps households manage risk. Social protection provided at regular and predictable intervals can increase





predictability and security for agricultural households, partially substituting for insurance and providing a crucial source of liquidity. A growing body of evidence shows that social assistance programmes not only prevent households from falling into deeper poverty and hunger when exposed to a shock but, by helping the poor overcome liquidity and credit constraints and manage risks more effectively, it also allows them to invest in productive activities and build assets.

The evidence shows that social protection fosters more investment in the education and health of children, and reduces child labour, with positive implications for future productivity and employability. When well implemented, social protection can also facilitate increased investment in farm production activities, including inputs, tools and livestock, as well as in non-farm enterprises. Even relatively small transfers help the poor overcome liquidity and credit constraints and provide insurance against some risks that deter them from pursuing higher-return activities. The evidence is clear that transfers also foster greater inclusion by facilitating poor households' participation in, and contribution to, social networks, which help households cope with risk and play a supportive role in the social fabric of communities.

Social protection does not reduce work effort. But it does give beneficiaries greater choice, and many shift time previously dedicated to casual agricultural wage employment of last resort to own-farm work or non-farm employment. Taken together with the increase in farm and non-farm production activities, social protection strengthens livelihoods rather than fostering dependency.

Social protection has positive impacts on local communities and economies. Public works programmes can provide important infrastructure and community assets and, when designed and implemented properly, contribute directly to the local economy. Cash transfers increase the purchasing power of the poor, who demand goods and services largely produced in the local economy. Moreover, such additional income contributes to a virtuous circle of local economic growth. Complementary programmes may be necessary to reduce supply-side constraints, thus preventing

significant price rises and increasing the real-income and production impacts of the programme.

Understanding what works: implications for programme design and implementation

Not all programmes are equally effective, and their impacts can vary greatly, both in size and in nature. Even among programmes that appear quite similar, for example cash transfers for the poor, differences in programme design and implementation can lead to very different outcomes. For example, targeting households with fewer adults of working age will have implications for labour impacts on livelihoods.

Targeting can help achieve programme objectives at lower costs

Social protection programmes generally have objectives that define the intended beneficiaries. How well programmes can achieve their objectives will depend, among other things, on how well they reach their target group. Social protection programmes use a combination of targeting methods to deliver larger and better transfers to selected individuals or households. While targeting can be an effective instrument for reducing poverty and inequality, efficient implementation is key and depends largely on institutional capacity.

Level, timing and predictability of transfers matter

Most social assistance transfers are designed to cover the cost of a minimum basket of food consumption; so, if additional impacts are sought, then transfer levels should be increased accordingly. The available data show a wide variety of transfer levels, with many countries providing average social protection transfers to beneficiaries several times greater than the poverty gap (at \$1.25 a day), while in many of the poorest countries transfers are well below what it would take to close the gap.

Just as important, perhaps, are the timing and predictability of transfers. Beneficiary households will spend irregular lump sum transfers differently than they would predictable and regular transfers. If transfers are not regular and reliable, it is difficult

for households to plan and smoothen consumption over time, and thus move towards sustained change in the quantity and quality of diets. Moreover, regularity and reliability increase the time horizon of beneficiary households, allowing them to manage risks and shocks more effectively and thus avoid "negative" coping strategies and risk-averse production strategies and, instead, increase risk-taking in more profitable crops and/or activities. Regular and reliable payments increase confidence and creditworthiness, while reducing pressure on informal insurance mechanisms.

Household-level factors and gender influence programme impacts

Targeting criteria have strong implications for the demographic characteristics of beneficiary households, such as age of adults and children, which condition the impact of the programme. Households with more available labour, for example, are in a better position to take advantage of the cash for productive investments, in both the short and longer run.

Women and men use transfers differently. Many social protection programmes target women because research shows that giving women greater control over household spending leads to greater expenditures on food, health, education, children's clothing and nutrition. In addition, studies show that the impacts of transfer programmes vary with gender. For example, women and men may not invest in the same type of livestock: women generally focus on small animals while men focus on larger livestock. Transfers also impact men and women, and boys and girls, differently in terms of labour allocation and time use.

Markets matter too

The nature of the local economy also shapes the type and extent of the prospective productive impacts of cash transfer programmes. In some rural areas, low population density, illiquid markets, low levels of public investment and inadequate public infrastructure can pose particularly binding constraints and make in-kind transfers more effective. Where markets are more developed, the effects of cash transfers on livelihood strategies tend to be stronger. The importance of market conditions varies with available factors of production.

Social protection and agricultural development

Notwithstanding its proven effectiveness, social protection alone cannot sustainably move people out of poverty and hunger. Agriculture and social protection are fundamentally linked in the context of rural livelihoods. Poor and food-insecure families depend primarily on agriculture for their livelihoods, and make up a large proportion of the beneficiaries of social protection programmes. Stronger coherence between agriculture and social protection interventions can help protect the welfare of poor, small-scale agriculturalists, helping them manage risks more effectively and improve agricultural productivity, leading to more sustainable livelihoods and progress out of poverty and hunger.

However, relatively few agricultural interventions are coordinated or integrated with social protection programmes. Developing synergies is an opportunity, but also a necessity, because of the difficult public expenditure trade-offs implied by constrained government budgets. It is not only imperative to help the poorest meet basic consumption needs, especially when they are unable to work, but such help is itself a foundation for gradual improvement of the livelihoods of the poor. Leveraging public expenditures on agriculture and social protection programmes in support of each other not only furthers this transformation, but also strengthens agricultural and rural development.

Options for combining agricultural policies with social protection

A continuum of options exists for bringing together and better coordinating social protection and agricultural interventions and policy. These options range from standalone, sector-specific social protection or agricultural programmes, which are designed to bring the two together in integrated results in both sectors, to joint programmes in which formal interventions of both types are brought to bear on specific target populations, and to sectoral interventions that are aligned to maximize complementarities and reduce contradictions. Approaches can be combined or sequenced in a variety of ways.





Social protection and agricultural input subsidies

Input subsidies, in particular fertilizer subsidies, have regained widespread popularity in Africa, Asia, and Latin America and the Caribbean, especially following the sharp increases in food prices and fertilizer costs in 2007–08. Insofar as input subsidy programmes contribute to greater food security through greater availability and lower prices of staple goods, they also benefit the poor, and are aligned with and contribute to the objectives of social protection policies and programmes. But, in general, such programmes neither target nor reach the poor.

Fertilizer subsidy programmes absorb a large part of government agricultural budgets in many countries. Linkages of these single "stand-alone" input programmes with social protection could include improving the reach of input subsidies to the poorest households by, for instance, improving targeting and/or adjusting the size and type of input packages to the specific needs of the poorest small family farmers. Targeting the poorest is best achieved through input packages designed to meet their actual needs. Another option is to combine these programmes with social cash transfer programmes that provide the poorest beneficiaries with the additional liquidity needed to pay for the "unsubsidized" part of the input.

Credit to agriculture

Credit constraints are a major barrier to agricultural investment. Relatively little credit is allocated to agriculture and many agricultural producers are credit-constrained. In many countries, addressing credit market failures – through special programmes, credit guarantee schemes and specialized banks – is a priority. Nearly all Asian, Latin American and Caribbean countries, and a majority of African countries, are taking measures to facilitate the provision of credit to the agriculture sector.

Directly targeting the poorest with (micro) credit has proven difficult. There is increasing evidence that, on its own, microcredit is not sufficient to help poor households exit poverty or to improve their welfare as measured by consumption, health, education and women's empowerment.

Institutional procurement programmes

Lack of adequate markets is an important limiting factor on agricultural growth and rural development. So-called institutional procurement programmes (IPPs) promote rural development by creating a market for small family farm produce. Interventions that link social assistance with institutional demand also typically focus on supporting poorer small family farmers who are constrained in their access to resources.

Brazil was the first country to develop an institutional food procurement programme by connecting development of guaranteed demand for small family farm produce with a food security strategy. The Brazilian experience is being adapted to the African context through the Purchase from Africans for Africa programme. Home-grown school-feeding programmes, sometimes building on the Purchase for Progress (P4P) programme of the World Food Programme (WFP), are an example of IPPs that are popular in many countries.

Bringing the sectors together: the critical issue of targeting

A fundamental operational issue to be addressed in bringing the sectors together is targeting interventions. The experience of several countries shows that single or unified registries or unified targeting systems are particularly useful if several programmes have overlapping objectives and target populations.

While the effectiveness of specific programmes is served by better targeting, this need not contradict the universal provision of some form of social protection to all vulnerable people when they need it to avoid long-lasting harm from external shocks.

Key messages of the report

 Social protection programmes reduce poverty and food insecurity. Effective targeting and adequate transfers are important determinants of success.
 Social protection contributes to higher incomes and food security not only by ensuring increases in consumption, but by enhancing a household's ability to produce food and augment income.

- Programmes targeted at women have stronger food security and nutrition impacts. Programmes that are gendersensitive, reduce women's time constraints and strengthen their control over income enhance maternal and child welfare. This is especially important because maternal and child malnutrition perpetuate poverty from generation to generation.
- Social protection stimulates investment in agricultural production and other economic activities. Social protection enhances nutrition, health and education, with implications for future productivity, employability, incomes and well-being. Social protection programmes that provide regular and predictable transfers promote savings and investment in both farm and non-farm activities, and encourage households to engage in more ambitious activities offering higher returns.
- Social protection does not reduce work effort. But it does give beneficiaries greater choice, and many shift time previously dedicated to casual agricultural wage employment of last resort to own-farm work or nonagricultural employment. Taken together with the increase in farm and non-farm production activities, social protection strengthens livelihoods instead of fostering dependency.
- Social protection has virtuous impacts on local communities and economies. Public works programmes can provide important infrastructure and community assets and, when designed and implemented properly, contribute directly to the local economy. Cash transfers increase the purchasing power of beneficiary households, who demand goods and services, many of which are produced or provided in the local economy by non-beneficiary households. Complementary programmes may be necessary to reduce production constraints to prevent inflation and maximize the real-income and production impacts of the programme.
- Social protection, by itself, is not enough to move people out of poverty. As poor households typically face multiple constraints and risks, joint, coordinated

- and/or aligned social protection and agricultural programmes are likely to be more effective in helping poor households move out of poverty in a sustainable manner.
- There are clear opportunities to leverage social protection and agriculture programmes to further rural development. Developing synergies is an opportunity and also a necessity because of constrained government budgets. It is imperative to help the poorest meet basic consumption needs, especially when they are unable to work. Such help can itself become a foundation for gradual improvement of the livelihoods of the poor. Given that the majority of the rural poor depend largely on agriculture, agricultural interventions are needed to overcome structural supply-side bottlenecks holding back growth. Leveraging public expenditures on agriculture and social protection programmes in support of each other not only furthers this transformation, but also serves to strengthen agricultural and rural development.
- A national vision is needed of how agriculture and social protection can gradually move people out of poverty and hunger. National vision and commitment, supported by permanent domestic resource mobilization, must support coordinated action at the national and subnational levels. Policy and planning frameworks for rural development, poverty reduction, food security and nutrition need to articulate the role of agriculture and social protection in moving people out of poverty and hunger, together with a broader set of interventions. The type of agricultural interventions combined with social assistance depends on the context and constraints, but must also consider issues such as local implementation capacities and available resources. In all cases, interventions must be designed to address a range of constraints to allow the poorest to transform their livelihood strategies to escape and remain out of poverty.

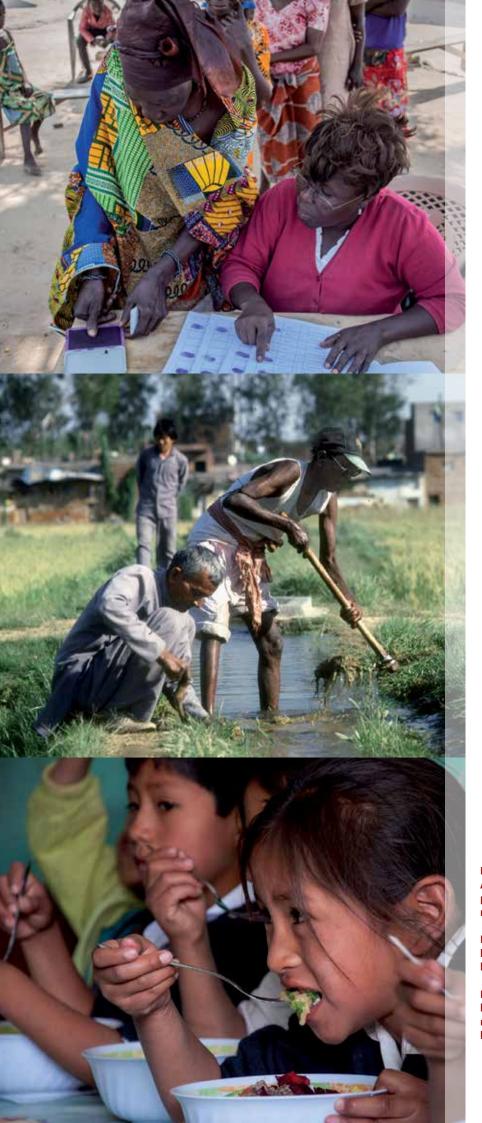




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Cash transfers have helped this project beneficiary take care of four children left orphaned by HIV/AIDS in Ghana (© FAO/I.Grifi).



Beneficiaries of the Livelihood Empowerment Against Poverty programme queue at a pay point in Ghana's Ga South Municipal District to receive grants (© FAO/I.Grifi).

Farmers in a leper colony in India clearing a local irrigation system with assistance provided by an FAO project (© FAO/G. Bizzarri).

Primary school students get a healthy breakfast in a rural school in Peru, part of a national school feeding programme supported by FAO (© FAO/I. Camblor).

Social protection and agriculture to break the cycle of rural poverty

Hundreds of millions of rural families are trapped in a cycle of hunger, poverty and low productivity that causes unnecessary suffering and impedes agricultural development and broader economic growth. Breaking this cycle requires actions in two complementary domains: social protection and growth in the productive sectors of the economy. As agriculture remains the most important productive sector for rural people in many developing countries, linking social protection with agricultural development is a potentially powerful means of breaking the cycle of rural poverty.

Many developing countries increasingly recognize that social protection measures are needed to relieve the immediate deprivation of people living in poverty and to prevent others from falling into poverty when a crisis strikes. Social protection can also help recipients become more productive by enabling them to manage risks, build assets and undertake more remunerative activities. These benefits spread beyond the immediate recipients to their communities and the broader economy as recipients purchase food, agricultural inputs and other rural goods and services. Social protection measures can also ease the economic and social dislocations that accompany economic growth and agricultural transformation, reducing social and economic inequalities, promoting decent work and fostering

inclusive and sustainable growth. But social protection can only offer a sustainable pathway out of poverty if there is growth in the economy. In most low- and middle-income countries, agriculture remains the largest employer of the poor and is a major source of livelihoods through wage labour and own production for household consumption and the market. Poverty and its corollaries – malnutrition, illness and lack of education – limit agricultural productivity. Hence, addressing social protection and agricultural development in an integrated way offers synergies that can increase the effectiveness of both.

This edition of The State of Food and Agriculture makes the case that social protection measures will help break the cycle of rural poverty and vulnerability, when combined with broader agricultural and rural development measures. This introductory chapter provides a conceptual framework that highlights the linkages among social protection, rural household consumption and production, and poverty alleviation. It focuses on rural poverty and emphasizes the importance of agriculture and agricultural development as the primary pathways out of poverty for millions of family farms. It briefly introduces concepts related to social protection and summarizes related recent trends in low- and middleincome countries.

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Subsequent chapters review evidence regarding social protection and agriculture. Although few studies have directly examined the linkages between social protection and agriculture, many rigorous impact evaluations have been conducted on social protection programmes in rural contexts (Box 1). These provide a robust body of evidence on three key issues: (i) the effectiveness of social protection measures in alleviating deprivation and food insecurity among the poor, (ii) the extent to which social protection enhances the productive potential of poor agricultural households, and (iii) the extent to which the benefits received by programme participants generates incomes that can "spill over" into the local economy and community. The report evaluates the factors that contribute to the heterogeneity of programme impacts and discusses what they imply for programme design and how agricultural policies can be tied in with social protection programmes more directly. It concludes with a discussion of policy and governance recommendations.

Linking poverty, social protection and agriculture

Figure 1 illustrates the conceptual linkages among rural poverty, social protection and agriculture. It begins with a stylized rural household at the centre that makes decisions about what to produce and consume based on the initial quantity and quality of livelihood resources the household controls or has access to and the expected revenue from multiple economic activities, as well as private and public transfers. Household livelihood resources are often described as comprising five types of assets/resources: physical, human, social, financial and natural. Physical assets for a typical rural household engaged in agriculture may include land, machinery and livestock. Human resources include the health, nutrition and education status of all family members, which together determine the family's ability to work and earn incomes. For many poor households, human resources are their main source of income. Social resources refer to networks such as reciprocal friendship and kinship ties, funeral and savings associations, producer

groups and other community groups – that enable the household to manage risk and engage with the wider community. Financial assets include household savings and access to formal and informal sources of credit. Natural resources relate to the quality and stability of the natural environment, such as soil, water and climate conditions.

For most rural households, especially small family farms, production and consumption decisions are closely intertwined, with the family providing most of the labour used on the farm, and consuming part of the output for its own needs. These household production and consumption decisions determine the levels of household income, savings and investment. These, in turn, link households to markets through the sales and purchases of food, inputs, labour and other goods and services. These household and market activities, in turn, influence the stock of physical and financial household assets, allowing them to accumulate in good times or requiring them to liquidate assets to survive.

Social protection programmes and agricultural interventions influence household decision-making processes at several different points. Social protection measures, such as cash or in-kind transfers, can directly enhance the human resources and productivity of recipients by enabling them, for example, to consume healthier diets, access appropriate medical care and take advantage of educational opportunities. By relaxing credit and liquidity constraints, social protection transfers can enable households to invest in new and more productive activities and to build assets and enhance resources. When transfers are regular and predictable, they can enable recipients to undertake investments that may otherwise be too risky. Formal social protection measures can relieve pressure on informal insurance mechanisms and social reciprocal networks under stress.

As social protection measures change the production, consumption and entrepreneurial activities of recipient households, these activities will have spillover effects on the local economy by stimulating demand for local goods and services. At the same time, agricultural interventions can promote productivity growth by addressing constraints that limit poor households' access to land and water resources, inputs, financial

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BOX 1 Impact evaluation and social protection

Impact evaluation of government social protection policies and programmes aims to measure success in achieving their stated objectives, as well as unintended effects and outcomes. By allowing for a more systematic evaluation, impact evaluations contribute to the wider policy debate and help articulate social protection as part of rural/agricultural development strategies. Findings from impact evaluations also provide insights regarding the cost-effectiveness of different programmes and the efficacy of targeting methods, as well as problems that may arise in implementation.

Impact evaluations generally use mixed methods, comprising both qualitative and quantitative assessments. Quantitative impact evaluations are motivated by the question of how beneficiaries would fare in the absence of the programme. As it is not possible to observe beneficiaries with and without the programme simultaneously, a key element of impact evaluation is to identify a "counterfactual". In practice, a counterfactual typically comprises a group of individuals and households similar to those benefiting from the social protection programme who do not themselves benefit from the programme. Comparing the behaviour of the two groups over time helps establish the causal effects of the programme with statistical validity. Qualitative methods, such as focus group and key informant discussions, are also an integral part of well-designed impact evaluations. Qualitative methods explore perceptions and experiences of beneficiaries and nonbeneficiaries, as well as other stakeholders, and are used to explore issues that cannot be addressed with quantitative instruments.

Social protection programmes, and in particular cash transfers, have been more consistently and systematically evaluated, using rigorous impact evaluation techniques, than almost any other government programme in the developing world. First in Latin America and the Caribbean, and more recently in sub-Saharan Africa, both conditional and unconditional cash transfer programmes have been evaluated, using

random control trials or quasi-experimental designs combined with qualitative methods (Davis et al., 2012; Handa and Davis, 2006). Recently, the From Protection to Production project, a joint effort of FAO and the United Nations Children's Fund (UNICEF), introduced the use of village general equilibrium models in mixed-method impact evaluations of seven government-run cash transfer programmes in sub-Saharan Africa in order to calculate the income multipliers generated by these programmes.

These impact evaluations have had a clear impact on programme and policy design, as well on as the larger national, regional and global policy debates on social protection. Results from the impact evaluations have had concrete and immediate implications for programme implementation in terms of targeting, types/size and timing of transfers and messaging accompanying the transfers. In sub-Saharan Africa, the impact evaluations changed the national policy narrative on cash transfer programmes, providing credibility to cash transfers and the larger social protection agenda. The results secured broader acceptance of cash transfers, particularly by ministries of finance. Social protection is now recognized as developmental instead of simply as assistance, with little evidence for concerns about dependency (Davis et al., forthcoming). In Mexico, results from the pioneering impact evaluation of PROGRESA/Oportunidades/Prospera² played an important role in improving programme implementation and in ensuring the shortterm sustainability and expansion of the programme (Behrman, 2007).

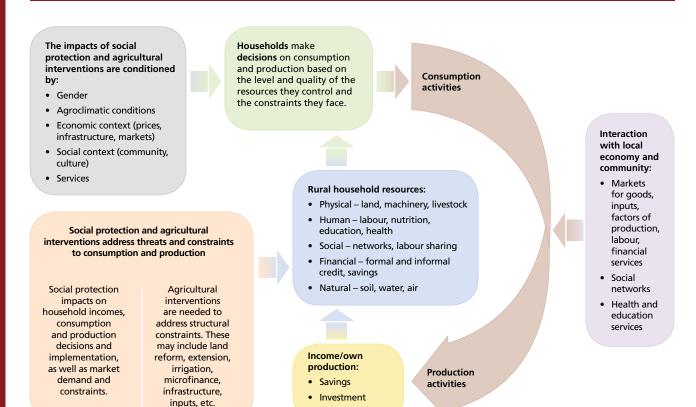
Source: From Protection to Production team, FAO.

¹ The "From Protection to Production" project is a multi-country impact evaluation of cash transfers in sub-Saharan Africa. The project is a collaborative effort between FAO, UNICEF Eastern and Southern Africa Regional Office, and the Governments of Ethiopia, Ghana, Kenya, Lesotho, Malawi, Zambia and Zimbabwe.

² Mexico's Programa de Educación, Salud y Alimentación (PROGRESA) was introduced in 1997, and renamed (and slightly modified) Oportunidades in 2003 and Prospera in 2014.

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FIGURE 1
Social protection linkages to household consumption and production activities and the local economy



Consumption

Source: FAO.

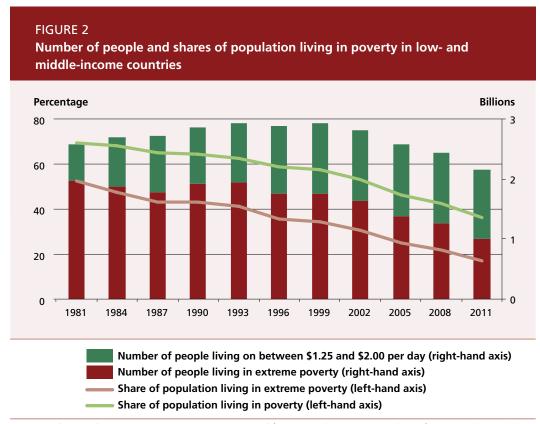
services, advisory services and markets. Such interventions to ease supply-side constraints are also needed to help transform increased local demand due to social protection into local economic growth, rather than inflation. In this sense, agricultural interventions and social protection are complementary, meeting people's basic needs and enabling them to take advantage of opportunities to become more productive, while also facilitating market-based activities, thus creating a virtuous circle of human well-being, agricultural growth and economic security.

Poverty, rural poverty and agriculture

The Millennium Development Goal (MDG) poverty target has been met by many countries; yet, many others lag behind. Poverty remains so deeply entrenched

in the rural areas of many low-income countries that it slows economic and social progress. The post-2015 challenge will be to eradicate poverty. In South Asia and sub-Saharan Africa, where the majority of men and women depend on agriculture for their livelihoods (FAO, 2011), average family farms are small and getting smaller (FAO, 2014a), capital investment per farm worker has been flat or declining for three decades (FAO, 2012), and agricultural extension advisory and support services for production and diversification are inadequate (FAO, 2014a). This section provides a brief profile of rural poverty to illustrate both the importance of agriculture to the livelihood strategies of the rural poor and the inability of agricultural or other productive-sector interventions alone to reach the poorest family farms. Analysing vulnerability and understanding poverty are critical for social protection.

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Note: The figure refers to the international poverty lines of \$1.25 a day (extreme poverty) and \$2.00 a day (poverty) as measured in constant 2005 PPP dollars.

Source: Authors' compilation using World Bank (2015a). See Annex table A1.

Trends in poverty

More than one-third of all people in low- and middle-income countries are poor, defined as living on less than \$2.00 a day.¹ One in six is extremely poor, living on less than \$1.25 a day (Figure 2 and Annex table A1) (World Bank, 2015a) and about 780 million people are suffering from chronic hunger (FAO, IFAD and WFP, 2015a). Although the shares of people living in poverty and extreme poverty have declined substantially over the past three decades, the numbers remain high, with almost one billion people considered extremely poor and another billion poor, as defined by the World Bank (2015a).

Extreme poverty has fallen substantially in many regions, especially in East Asia and the Pacific as well as in South Asia. In sub-Saharan Africa, little progress has been made and almost half the population is extremely poor (Figure 3 and Annex table A1). Sub-Saharan Africa accounts for about half the world's

extreme poor and about two-thirds of the world's ultra-poor, with the latter referring to those living on less than half the \$1.25 a day extreme poverty line (Barrett, 2011).

Patterns of rural poverty

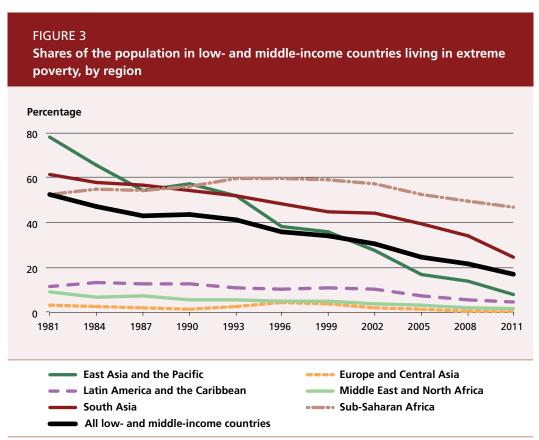
Extreme poverty is disproportionately concentrated in rural areas. The World Bank estimates that, by 2010, 78 percent of the extreme poor were living in rural areas (World Bank, 2015b). This pattern of mainly rural deprivation is common across regions despite differences in overall poverty rates (Figure 4). The relative deprivation in rural areas is reflected in a wide range of socioeconomic welfare indicators. For example, child malnutrition, as measured by the prevalence of underweight in children under five years of age, is worse in rural areas in virtually every country for which data are available (Annex table A1).

Agriculture and poverty

Agriculture and rural poverty are closely related and often reflect the gendered nature of economic and social relations. Agriculture

¹ \$1.25 and \$2.00 a day refer to international poverty lines, with dollars measured in constant 2005 PPP dollars (denoted by the symbol \$ throughout this report).

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Note: The figure refers to the international (extreme) poverty line of \$1.25 a day as measured in constant 2005 PPP dollars. Source: Authors' compilation using World Bank (2015a). See Annex table A1.

generates about 10 percent of gross domestic product (GDP) in low- and middle-income countries, and employs about 45 percent of the total labour force (paid and unpaid workers in formal and informal employment, including on-farm family labour). These figures mean that the value of output per worker is much lower in agriculture than in other sectors, implying low incomes for people who depend on agriculture for their livelihoods. The shares of agriculture in the economy and in employment are typically high in lower-income countries of Central America, South Asia, sub-Saharan Africa and other regions where poverty rates remain high.

Women supply 43 percent of all agricultural labour in low- and middle-income countries. This share reaches at least half in many countries of sub-Saharan Africa and elsewhere, especially where poverty is particularly entrenched and women have few other employment opportunities. But women farmers face a number of constraints in accessing agricultural inputs, services and markets that make it particularly hard for them to rely on

agricultural production as a pathway out of poverty (Quisumbing *et al.*, 2014).

Rural people in most developing countries, but especially in sub-Saharan Africa, rely on agriculture for an important share of their incomes, although they may engage in many income-generating activities (World Bank, 2007). And for poor agricultural households, income from on-farm activities is relatively more important than it is for other agricultural households (Figure 5, p. 10). In Ghana, for example, food producers make up 43 percent of the population, but account for 69 percent of the headcount poor (Al-Hassan and Poulton, 2009). In sub-Saharan Africa, almost three-quarters of the economically active rural population are small family farmers who produce a significant share of their own food consumption: many of them are poor or extremely poor (Barrett, 2011).

Family farms are the backbone of agriculture in low- and middle-income countries, but many family farms are small and poor. Almost 75 percent of farms in low- and middle-income countries are smaller than one hectare (Annex table A2). This

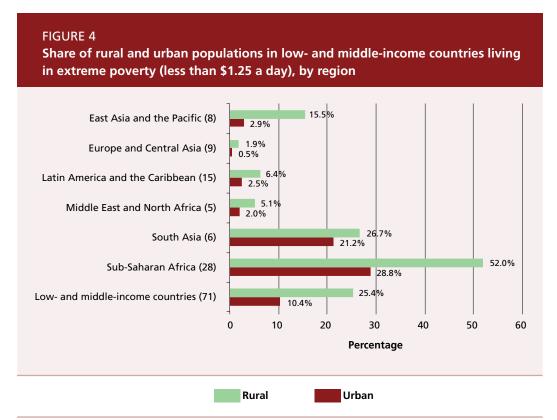
means that more than 375 million family farms in the developing world have less than one hectare of land (FAO, 2014a).

Figure 6 (p. 11) clearly shows that agricultural households have a diverse array of income sources, and that dependence on own production varies inversely with farm size. That is, the smallest farms depend on own production for a smaller share of total income than do larger farms. Of course, this does not mean that agricultural production is unimportant to them. On the contrary, crop and livestock production contributes 40 percent or more of total household income for the smallest farm size category in most countries for which data are available. Own production also contributes a large share of the food consumption of households in this category, and could contribute even more if they were better able to invest and diversify. Figure 6 also shows the importance of non-farm income and transfers and remittances for all farm size categories.

The poorest farming households are net food buyers, and food makes up a large share of the household budgets of the poor, whether or not they farm. In particular, the ultra-poor spend about 65–80 percent of total household expenditure on food (Ahmed et al., 2007). Food price increases therefore have a dramatic effect on the poor and poorest, especially because most are net food buyers (Zezza et al., 2008; World Bank, 2007). It is the poor's reliance on agriculture for their livelihoods and the high share of their expenditure on food that makes agriculture key to poverty and hunger alleviation interventions.

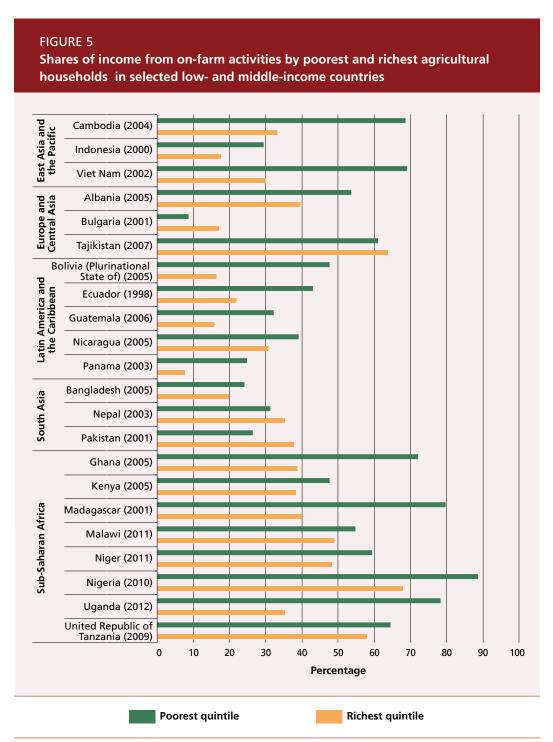
Why is poverty so persistent?

As discussed above, despite progress in many regions, poverty rates remain stubbornly high in many countries, especially in rural areas. Economic growth, especially



Notes: Rural and urban poverty rates, using international poverty lines, are not available for most countries. Here, they are estimated using available poverty data and following methods described in IFAD (2010) for all countries except China, India and Indonesia. That is, at the country level, the incidence of rural poverty, using international poverty lines, is estimated using (a) national poverty headcount rates based on international poverty lines and (b) rural and urban poverty headcount ratios using national poverty lines. For China, India and Indonesia, rural and urban poverty rates that use international poverty lines are available, and were therefore used for the regional estimates. In all cases, the most recent poverty information available for the period 2005 –12 was used.

Sources: Authors' calculations using World Bank (2015a) and World Bank (2015c).



Note: On-farm activities include crop and livestock production but not agricultural wages, following Davis, Di Giuseppe and Zezza (2014). Agricultural households are those households holding a positive amount of agricultural land. Sources: Authors' calculations using household survey data. For a list of all surveys consulted, see Household Survey references at the end of the report (p. 127).

agricultural development, has been essential for driving down poverty rates; strong economic growth helped reduce the global poverty rate from 46 to 27 percent between 1990 and 2005 (UN, 2011a). In China, for example, poverty and hunger have fallen

dramatically as a result of strong, broadbased growth that started in agriculture. Elsewhere, notably in countries where agriculture represents a large share of GDP and employment, growth originating in agriculture has been particularly effective in

FIGURE 6 Average share of income earned by agricultural households, by source and farm size quartile 1st quartile Cambodia 2nd quartile 2004 3rd quartile 4th quartile 1st quartile 2nd quartile Albania Europe and Central Asia 3rd quartile 2005 4th quartile 1st quartile Tajikistan 2nd quartile 2007 3rd quartile 4th quartile Bolivia 1st quartile Latin America and the Caribbean (Plurinational 2nd quartile State of) 3rd quartile 2005 4th quartile 1st quartile Nicaragua 2nd quartile 2005 3rd quartile 4th quartile 1st quartile Bangladesh 2nd quartile 2005 3rd quartile 4th quartile South Asia 1st quartile Nepal 2nd quartile 2003 3rd quartile 4th quartile 1st quartile Pakistan 2nd quartile 2001 3rd quartile 4th quartile 1st quartile 2nd quartile Ethiopia 2012 3rd quartile 4th quartile 1st quartile Sub-Saharan Africa Kenya 2nd quartile 2005 3rd quartile 4th quartile 1st quartile 2nd quartile Niger 2011 3rd quartile 4th quartile 1st quartile Uganda 2nd quartile 2012 3rd quartile 4th quartile 10 20 30 40 50 60 70 80 90 100 0 Percentage Crop and livestock production **Agricultural** wages Non-farm income Transfers, remittances and other non-labour income

Notes: Agricultural households are those households operating a positive amount of agricultural land. The first quartile is the smallest farm size category and the fourth quartile is the largest.

Sources: Authors' calculations using household survey data. For a list of all surveys consulted, see Household Survey references at the end of the report (p. 127).

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raising the incomes of the poor (World Bank, 2007; Christiaensen, Demery and Kuhl, 2011).

Lifting the incomes of the rural poor above the extreme poverty line of \$1.25 a day would require average increases of at least 60 percent in sub-Saharan Africa and at least 30 percent in Asia (particularly in China and India) from the average incomes of the poor estimated in 2010 (World Bank, 2015b). For the poorest, these income gaps are even larger. On an annual basis, implied per capita income growth would be 3 percent per year to raise average incomes by 60 percent between 2015 and 2030, and by 4.4 percent per year to double the incomes of the poorest (Yoshida, Uematsu and Sobrado, 2014). These per capita income growth rates are higher than those achieved in most low-income countries over the past decades, and many of the poorest have seen even less income growth (Vakis, Rigolini and Lucchetti, 2015).

Growth in agriculture is part of a wider process of economic development accompanied by dramatic changes in agriculture. Where economic growth and urbanization have occurred, they are mirrored by the reduction in the number of people engaged in agriculture and the rising productivity of labour in agricultural production. For example, in China, urbanization rose from 28 percent in 1990 to 53 percent in 2012, while the value of agricultural output per economically active person in agriculture rose from 416 to 1 024 dollars over the same time period (FAO, 2015a).² Apart from the massive changes in employment, the agriculture sector also has to respond to changes in demand that accompany rising incomes and changing lifestyles. These responses are embodied in changing technologies; greater commercialization is also reflected in changes to retailing, storage and marketing, and reorganization of farming to exploit more effectively the emerging economies of scale (Collier and Dercon, 2009). These changes take a long time and although highly beneficial from an economic point of view, they also cause dislocation and hardship for many.

Where growth has been slower, this structural transformation of agriculture has stalled, leaving many in poverty. However, even with economic growth, the struggle to escape poverty is often slow. In many countries, such as India, households build physical and financial assets very slowly (Naschold, 2012). In part, this is because households adopt livelihood strategies that leave them less exposed to risk, but that earn lower returns (Dercon and Christiaensen, 2011). For example, Carter (1997) found that households were willing to give up 20 percent of their income to ensure food availability. This tradeoff between food security and higher incomes is greater for poorer households (Alderman and Paxson, 1992; Rosenzweig and Binswanger, 1993). Natural and humaninduced shocks push households into poverty, or more deeply into poverty, often forcing them to liquidate assets.

Moreover, growth may not be inclusive. For some groups, such as children and the elderly, economic growth may bring little relief or come too late to prevent deprivation and lasting disadvantage. Other people, with limited access to economic opportunities, risk being trapped in chronic poverty. Several factors conspire to create "poverty traps" that keep the poorest poor. For example, they may be too poor to consume the basic amount of nutrients needed for productive work, or to invest in education, or to accumulate the resources needed for entrepreneurship. Their farms may be too small to qualify for formal credit and insurance. Such constraints may leave many households below critical thresholds in terms of assets and resources, incomes or expenditures that they are unable to

The pathway out of poverty is also not smooth. In addition to the poor, many non-poor households are vulnerable³ to poverty when faced with shocks of one kind

² The value of agricultural output is measured in constant international dollars net of seed and feed use.

³ Although poverty and vulnerability are related they are not the same. Poverty is determined by net incomes, often reflecting current assets or capabilities, while vulnerability is a broader and more dynamic concept concerned with the factors that determine possible income changes and future poverty status (UNICEF, 2012). The *World Development Report 2000/01* on "Attacking Poverty" also includes an extensive discussion of the concepts and possible indicators (World Bank, 2001).

BOX 2 Vulnerability of fisherfolk is pronounced

Around 58.3 million people are estimated to be engaged in the fishery sector (capture fisheries and aquaculture) (FAO, 2014b), 90 percent of whom are engaged in small-scale activities (Mills et al., 2011). These include self-employed fishers (who own their own boat and/ or fishing gear) and boat crew members (contracted by boat owners to operate or work on their boats), as well as households who engage in fishing as part of a larger portfolio of (often on-farm) livelihood activities. The large majority live and operate in low- and middleincome countries (FAO, 2014b). About three times as many people work in fish processing and trading (World Bank/FAO/ WorldFish, 2012). Overall, small-scale fisheries and related activities are an important, but underestimated, source of employment, food security and income.

Poverty among those employed in fisheries remains widespread globally. But the link between fisheries and income poverty is complex (Jentoft and Eide, 2011). In many instances, fishing communities may be as well off as neighbouring (farming) communities, leading some to raise the question of whether fishers are especially poor, or vulnerable to poverty (see Béné, 2009).

Their poverty is often related to the severe degree of geographical and/or political isolation that characterizes many full-time fishing or mixed fishing–farming communities. As their incomes depend largely on their catch – which is usually highly variable – fishers' incomes are generally variable and unpredictable.

The exposure and sensitivity of fisheriesdependent communities to risks are relatively high in comparison with other socio-economic groups, while their ability to cope with or recover from external shocks is relatively low. Fisherfolk may be exposed to greater physical risks, depending on the nature of the fishery resources, their catch methods, the socioeconomic context, climate-change-induced risks (rising sea levels, impacts of flood or tropical storms), fluctuations in fish stocks, health risks (bilharzia, malaria), market risks (currency devaluations, fuel prices), and political and security risks (theft, interethnic or intercountry conflict), among others.

Source: Béné, Devereux and Roelen, 2014.

or another (see also Box 2). These shocks cause many households to fall below the poverty line because they incur large income losses and do not have sufficient savings to buffer the shock. For example, as a result of the fuel, food and financial crises, some 64 million more people around the world were expected to be living on less than \$1.25 a day by the end of 2010 than would have been the case without the crisis (World Bank, 2010).

In some countries and regions, such as the Sahel, rainfall variability, land degradation and desertification contribute to vulnerability and poverty. Climate change is set to worsen these stresses over the coming decades, making poverty reduction even more of a challenge.

There is evidence of considerable mobility into and out of poverty as households suffer the effects of shocks and then recover (Van Campenhout and Dercon, 2012). For data from Punjab, Sind and North-West Frontier Province in Pakistan, Baulch and McCullough (1998) find that between 1986/87 and 1990/91, 21 and 29 percent of households, respectively, had incomes below the poverty line, but 46–51 percent of poor households exited poverty from one year to the next while only 3 percent of households were poor during all five years of the period.⁴

⁴ Krishna (2004), Krishna *et al.* (2004) and Krishna *et al.* (2006) document considerable mobility in and out of poverty in villages in northern India, western Kenya and central and western Uganda, respectively.

However, recovery from shocks is often slow. For example, after the 1984–85 famine in Ethiopia, rural households took ten years, on average, to rebuild livestock holdings to the levels existing before the famine (Dercon, 2008); evidence from rural China shows that the speed of recovery from an income shock is slower for the poor than for the non-poor (Jalan and Ravallion, 2001).

Poverty often begins with poor nutrition and health, especially in early childhood: the poor are caught in vicious circles of hunger, poor nutrition, ill health, low productivity and poverty. Poor maternal and infant nutrition and health result in low birth weight and stunting as well as impaired cognitive development and lower school attainment (Alderman, 2010; Hoddinott et al., 2013). Empirical evidence clearly shows that childhood stunting reduces adult productivity and, hence, wages (Strauss and Thomas, 1998; Hunt, 2005). More insidiously, stunted girls grow up to become stunted mothers; maternal stunting is one of the strongest predictors of giving birth to a low-birth-weight infant. Maternal and child malnutrition thus perpetuate the cycle of poverty. These poor initial conditions are difficult to overcome, and leave households vulnerable to shocks that have significant and persistent effects, but cannot be fully insured against (Barrett and McPeak, 2006).

Households adopt a wide variety of livelihood strategies to manage and cope with risk. They also use burial and funeral societies and informal credit and savings schemes to avoid consumption fluctuations. But there is extensive evidence showing that such informal arrangements are more effective for idiosyncratic shocks, such as illness, that affect individual households than covariate shocks, such as drought or flooding, that affect entire communities; at any rate, they offer only partial insurance to the poor (Devereux, 1999; Dercon, 2011). For example, Dercon, Hoddinott and Woldehanna (2005) found that poverty in Ethiopia in 2004 was about 50 percent higher than it would have been in the absence of shocks. And in the United Republic of Tanzania, Beegle, Dehejia and Gatti (2006) found that household income shocks increased the level of child labour, as school enrolment suffered.

As noted above, most of the poorest live in rural areas, derive large shares of their incomes from agricultural activities and produce significant shares of their own food. Invariably, the poor also spend large proportions of their incomes on food. For these reasons, social protection interventions in rural areas with a focus on food and agriculture are particularly relevant in the fight against poverty and hunger. Recent research has also shown potentially important synergies between agriculture and social protection, but, until recently, these links have received relatively little attention from development practitioners and policymakers (Tirivayi, Knowles and Davis, 2013).

Weather-related risks, in particular, often fundamentally determine rural livelihoods and explain why poor households remain poor (Alderman and Haque, 2007). Among the poorest quintile of farmers in semi-arid parts of India, for example, a one standard deviation reduction in weather-related risk would raise average profits by up to 35 percent (Rosenzweig and Binswanger, 1993). Similarly, farmers in Shinyanga, a semiarid district in the western part of the United Republic of Tanzania, with limited options to maintain adequate consumption after a shock, were found to choose lower-return, but safer, crops such as sweet potatoes, foregoing up to 20 percent of potential income as a kind of implicit insurance premium (Dercon, 1996). In Ethiopia (Elbers, Gunning and Pan, 2009) and Zimbabwe (Elbers, Gunning and Kinsey, 2007), the capital stock accumulated by farmers was estimated to be only 36 and 46 percent, respectively, of the level achievable in the absence of risk.

Shocks can have long-lasting impacts on the poor. For example, households affected by drought in Ethiopia and the United Republic of Tanzania had lower incomes than unaffected households even ten years later (Beegle, De Weerdt and Dercon, 2008; Dercon, 2008). In the absence of insurance, rural households that experience shocks may reduce consumption or sell assets. But reducing consumption to preserve productive assets in the short run can irreversibly harm long-term physical and cognitive development of the youngest and most vulnerable members of a household. Dercon and Porter (2010), for example, found that

children in the particularly vulnerable age range of 12–36 months at the height of the 1984 Ethiopian famine were about 3 cm shorter due to the famine.

What is social protection?

Without public assistance, many of the poor and vulnerable will suffer unnecessary hardship and lasting deprivation, perpetuating poverty for future generations. In developing countries, successful experiences with large-scale programmes that help the poor and vulnerable, for example in Brazil, Ethiopia, India and Mexico, have given impetus to a reassessment of the value and role of such programmes in combating poverty and hunger, as well as social, economic and political inequality. There has been a rapid expansion of social protection programmes in the last two decades (see Chapter 2).

The concept of social protection emerged in response to the "social safety nets"5 discourse and agenda of the 1980s and 1990s (HLPE, 2012). Initially seen as a response to shocks, over time, and also in response to the inadequacy of formal social security systems, especially following structural adjustment policies and fiscal crises in many developing countries in the 1980s and 1990s, the notion has broadened to also address chronic poverty. Some approaches are strongly normative, based on the concept of social protection as a right, as stipulated in many United Nations documents, while others focus more on the role of social protection in protecting the vulnerable, reducing poverty and promoting economic growth. Some approaches to social protection emphasize its role in helping poor people escape poverty, while others emphasize its role in promoting social inclusion and social justice, as well as ensuring income security, quality education and health care for all.

There is no single definition of social protection, but a broadly representative definition is "all public and private initiatives

that provide income or consumption transfers to the poor, protect the vulnerable against livelihood risks, and enhance the social status and rights of the marginalised; with the overall objective of reducing the economic and social vulnerability of poor, vulnerable and marginalised groups" (Devereux and Sabates-Wheeler, 2004, p. 9).⁶ In line with this definition, social protection instruments are frequently interpreted as being preventive, protective, promotive and transformative.

Social protection can play a protective role in providing means (cash or in-kind) to access food and mitigate the impact of shocks. It can have a preventive function in averting deeper deprivation by strengthening resilience against shocks and preventing loss of incomes and assets. It can support the accumulation of resources to sustain livelihoods (e.g. through asset transfers and public works). Social protection can also play a promotive function by directly supporting investments in human resources (nutrition, health, education and skills development) and by reducing liquidity constraints and income insecurity to induce investments in farm and non-farm activities. It can also have a transformative function in the lives of the poor through reorienting their focus beyond day-to-day survival towards investments for future, by shifting power relations within households (as social protection can empower women) and by strengthening the capabilities and capacities of the poor to empower themselves.

Although there is still debate in some circles over the nature of the concept, it is generally agreed that social protection includes three broad components: social assistance, social insurance and labour market protection (Barrientos, 2014; World Bank, 2014, UN, 2011b). This categorization is used in this report.

Social assistance programmes are taxfinanced, i.e. publicly provided, transfers that serve a "social assistance" function, reducing the incidence or depth of chronic

⁵ Some organizations and agencies, for example UNICEF, use the term "social safety nets" to refer to temporary or short-term programmes and "social transfers" for the broader set of transfers that are only one component of social protection.

⁶ A similar definition was adopted by the *European Report* on *Development* (EUI, 2010). Most definitions are broad, but governments, donors and other actors often have particular viewpoints and objectives: UNICEF, for example, has a child-focused approach (Gentilini and Omamo, 2009).

poverty. If transfers are guaranteed and predictable (Devereux, 2002), they perform a "social insurance" function, by smoothening consumption and preventing destitution following a temporary shock (Devereux, 2001; Lichand, 2010). The most common programmes are: (1) unconditional transfers, i.e. programmes that distribute cash or vouchers, or are in-kind (such as food), without anything required of the recipient; (2) conditional transfers, which may otherwise be identical to unconditional transfers except in that they require recipients to meet some specified conditions, typically to improve the human resources of their children; (3) public works programmes, also referred to as cash- or food-for-work, or guaranteed employment programmes, which require beneficiaries to work to create or maintain household or community assets.

Social assistance entitlements are generally based on citizenship and the socio-economic status of participating individuals or households. Programmes may also be designed to target selected groups within populations that are considered vulnerable, often children and older people. Available evidence shows that social assistance programmes generally focus on the poor and vulnerable (Fiszbein, Kanbur and Yemtsov, 2014).

There is a practical distinction between social assistance and emergency assistance. Emergency or humanitarian assistance is provided in the event of natural or humaninduced disasters, and typically involves short-term assistance, often provided regardless of the socio-economic status of beneficiaries. In low-income countries, emergency and humanitarian assistance is commonly financed by foreign aid and implemented by national or international non-governmental organizations (NGOs). Emergency assistance and social assistance have very different rationales, objectives, target groups and sources of financing. In this report, we focus only on social assistance.

Social insurance programmes are typically financed by contributions from employees, employers and the state, and are based on the insurance principle, as individuals or households protect themselves against risk by pooling resources with a larger number of similarly exposed individuals or households. They address life-cycle, employment and

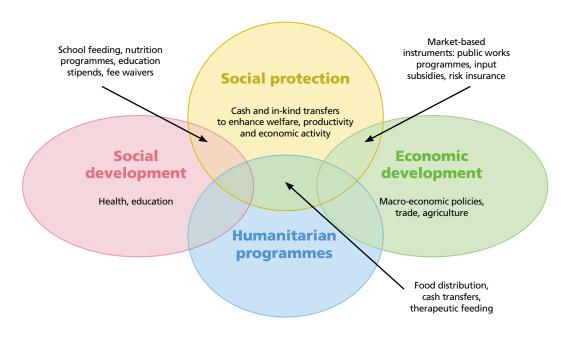
health contingencies. Social insurance institutions provide cover for designated contingencies affecting household welfare or income. Entitlements are mostly based on workers' contribution records, and transfers are normally financed out of social insurance funds. Innovative approaches to insurance in rural areas include weather-indexed insurance schemes, which are being piloted in a number of countries (Hazell *et al.*, 2010). However, the availability and uptake of agricultural insurance in low-income countries are still modest (Mahul and Stutley, 2010).

Labour market programmes provide unemployment benefits, build skills and enhance workers' productivity and employability. It has become commonplace to distinguish "passive" labour market policies from "active" ones, with passive interventions aimed at securing basic rights through, for example, legal frameworks aimed at ensuring minimum standards for employment and work, safeguarding workers' rights in the workplace and active interventions enhancing employability. The available evidence shows that social insurance and labour market programmes tend to benefit higher-income groups (Fiszbein, Kanbur and Yemtsov, 2014).

Social protection is a subset of social policy, which also includes the provision of basic services – in the main, education and health care, but also water and sanitation in low-income countries. Social protection may facilitate access to social services by the poor; for example, school feeding and fee waivers are social protection measures that facilitate access to education. Some schemes, such as pensions, may involve either contributory (social insurance) or non-contributory (social assistance) elements (Figure 7).

Over the past few years, the approach to social protection has evolved by learning from cross-country experiences, from stand-alone interventions to building social protection systems that combine elements of the different social protection components (Banerji and Gentilini, 2013). International and multilateral organizations, such as the International Labour Organization (ILO), FAO, the Organisation for Economic Co-operation and Development (OECD), the World Bank and UNICEF, now emphasize the need for a systematic approach to social





Source: Slater et al., 2010.

protection, aimed at building inclusive and sustainable social protection systems that are closely coordinated with other social and economic policies (ILO, 2014). Notably, the UN Social Protection Floor, developed under ILO and World Health Organization (WHO) leadership, has been described as the first systematic attempt to operationalize a rights-based approach to social protection as a universal policy objective (HLPE, 2012).

The root causes of deprivation and vulnerability lie in the broader economic, social, political, cultural, natural and physical environments. Addressing poverty and vulnerability therefore requires integrated and system-wide action in agriculture and the food system in general, and in public health and education, as well as in broader policy domains.

Global and regional trends in social protection coverage

Social protection programmes have expanded rapidly over the past two decades. In 2014, at least 145 countries provided one or more forms of social assistance: 63

countries were operating conditional cash transfer programmes; 130 countries were offering unconditional cash transfers (in 37 countries, these were in the form of noncontributory pensions); and 94 countries were operating public works programmes. School feeding was the most popular type of programme: 131 countries had some form of school feeding (Box 3) (World Bank, 2015d).

In each country, there may be a different set of social protection programmes with different targets at work in different situations and periods. There is great diversity in models, even within the same country. Often, both universal and targeted programmes can be found in the same country. A recent trend is to make such programmes interact as a complementary set of programmes, in order to achieve better and long-lasting results using the same vision.

Beneficiary coverage

Throughout the developing world, about 2.1 billion people, or about a third of the population, receive some form of social protection (Figure 8). There is wide variation among regions, with coverage lowest in regions where poverty incidence is highest.

BOX 3 School-feeding programmes

At least 368 million children receive food at school each day (WFP, 2013). Many governments operate publicly funded school-feeding programmes, such as Brazil's national school-feeding programme, *Programa Nacional de Alimentacão Escolar* (PNAE), which covered 47.2 million children in 2013 (Del Grossi and Marques, 2015). The World Food Programme (WFP) itself provides school meals for more than 20 million children each year.

The design and implementation models of school-feeding programmes vary greatly from country to country. However, the two main models are: (1) school meals, where children are fed at school; and (2) take-home rations, where children receive food parcels when they attend school. In the case of school meals, children need to attend school every day, while takehome rations only require students to attend school for a specified number of days. Some school-feeding programmes combine school meals and take-home rations to promote food security in the family and provide stronger incentives to attend school. In many cases, meals and snacks are planned by dieticians or fortified so as to deliver micronutrients often missing from children's diets.

Geographical targeting is the most common criterion in school-feeding programmes (WFP, 2013). This type of targeting is the least expensive and complex as it does not require means testing or monitoring mechanisms to ensure that the benefits reach particular children or to find changes in circumstances that affect eligibility. In low-income countries, governments

usually devise poverty and food security maps that also integrate educational needs. In many cases, school-feeding programmes target take-home rations to especially vulnerable groups such as girls, HIV-positive children and specific ethnic groups.

Targeting the poorest areas of a country can ensure that most benefits from school-feeding programmes go to the poor. However, as programmes expand, they are likely to include a higher proportion of non-poor children. This is especially relevant to upper-middleincome countries, which have more extensive school-feeding programmes. In most cases, these countries combine geographical and individual targeting. In Chile, for example, schools are selected on the basis of a school vulnerability index based on household socio-economic data. A school committee that includes parents and teachers is responsible for identifying vulnerable children in each class. The rest of the children receive a meal, but at a cost. With this targeting model, 80 percent of the expenditure on school feeding benefited the poorest students (Kain, Uauy and Taibo, 2002).

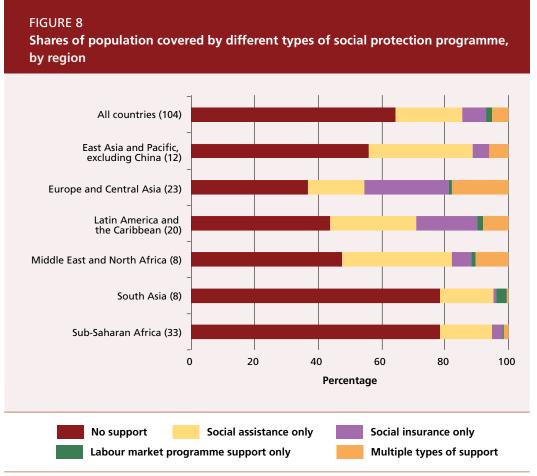
Many school-feeding programmes are combined with programmes to purchase food from local farmers, with the aim of promoting rural development as well as social protection. These combined programmes are discussed in greater detail in Chapter 5.

Source: Based in part on Cirillo, Gyori and Soares (2014).

Only about 22 percent of the population of South Asia and sub-Saharan Africa are covered by social protection measures of any kind; these are the regions with the highest incidence of extreme poverty. In regions where poverty incidence is lowest (see Figure 3, p. 8), social protection coverage is more extensive, with about 60 percent

of the population receiving some form of social protection.

In South Asia and sub-Saharan Africa, social assistance transfers have the broadest coverage among the different types of social protection, reaching, on average, about 17 and 16 percent of the populations, respectively. These levels are lower than



Note: Number of countries in parentheses.

Source: Authors' compilation and calculations using World Bank (2015e).

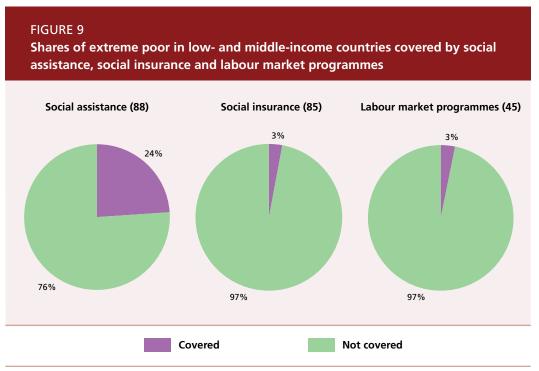
the social assistance coverage levels in most other regions, for example an average of 27 percent in Latin America and the Caribbean and 34 percent in the Middle East and North Africa. Social assistance programmes reach more of the extreme poor than do other types of social protection. Global estimates indicate that at least 24 percent of the extreme poor were reached by social assistance programmes in recent years, while only about 3 percent were covered by social insurance programmes and 3 percent by labour market programmes (Figure 9). Such estimates are conservative: in most middle-income countries, programmes providing direct transfers in cash and/ or in kind to families in poverty reach a majority of households in poverty, with a handful reaching a significant portion of the population.

A conservative estimate indicates that over 1.5 billion people in developing countries are covered by at least one social assistance programme. While this is close to the number of people living in extreme poverty, only one-fourth of the extreme poor are reached. This lack of coverage of the extreme poor may be partly explained by lack of sufficient resources, poor targeting, or the fact that social assistance programmes are not targeted at the poor, but may have other objectives such as improving nutrition and protecting orphans. Often, the aim is to build resilience among the vulnerable and to protect both the poor and non-poor against shocks.

Does social assistance benefit the rural poor?

In most regions, rural households are more likely than urban households to receive social assistance and, within rural areas, poorer households are more likely to receive social assistance than higher-income households (Figures 10 and 11). Coverage is much lower in the poorest regions of the world: in the

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Note: Number of countries in parentheses. Source: Authors' calculations using World Bank (2015e).

rural areas of South Asia and sub-Saharan Africa, the share of the poorest quintile receiving some sort of social assistance is only about 30 and 20 percent, respectively, compared with about 70 percent in Latin America and the Caribbean. The poorest income quintiles are more likely to receive social assistance, but significant shares of other income quintiles, including the richest, also receive social assistance. Across all regions, about 15–35 percent of the richest quintile in rural areas receive social assistance.

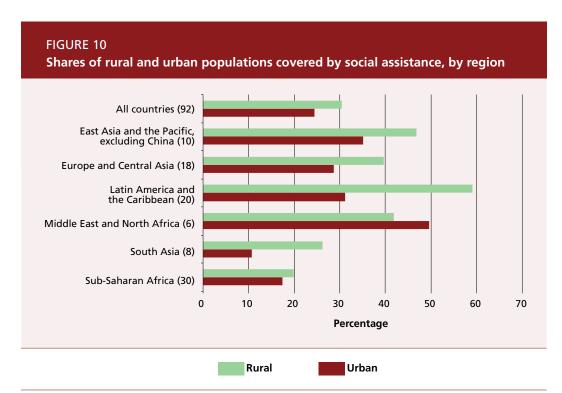
Although poorer and rural households are more likely to receive social assistance, they receive slightly smaller amounts of assistance per capita than their better-off and urban counterparts (see Annex table A4).

How can social protection and agriculture help eradicate poverty?

Social protection can alleviate unnecessary and persistent deprivation suffered by the poor. Better nutrition also promotes the economic productivity of the poor and vulnerable by improving their physical, cognitive and learning development. For example, in the United Republic of Tanzania,

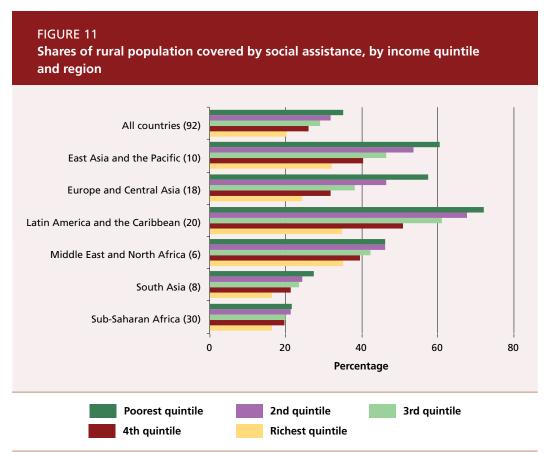
children who become maternal orphans before the age of 15 are disadvantaged as adults according to several indicators of well-being; they are more likely to be shorter, and have less schooling and lower incomes (Beegle, De Weerdt and Dercon, 2008). The cost of doing nothing to protect the poor and vulnerable is thus very high: the global losses in economic productivity due to undernourishment and micronutrient deficiencies have been estimated at more than 10 percent of lifetime earnings for households and 2–3 percent of global GDP (World Bank, 2006).

Social protection can therefore help promote overall social and economic development, breaking the cycle of poverty by protecting maternal nutrition and health, which is fundamental for healthy children and adults. To do this effectively, social protection must guarantee incomes and consumption as well as protect and build resilience (see Chapter 3 for more on resilience) against the high degree of risk and vulnerability prevalent in rural areas, particularly in agriculture. Social protection can also protect against risks, such as natural disasters, livestock diseases, climate change, financial crises, global food price hikes, conflict, economic collapse and devastating



Note: Number of countries in parentheses.

Source: Authors' calculations using World Bank (2015e).



Note: Number of countries in parentheses.

Source: Authors' calculations using World Bank (2015e).

epidemics such as HIV/AIDS, which are major threats to the welfare of rural households (Dorward *et al.*, 2006; Dercon, 2005).

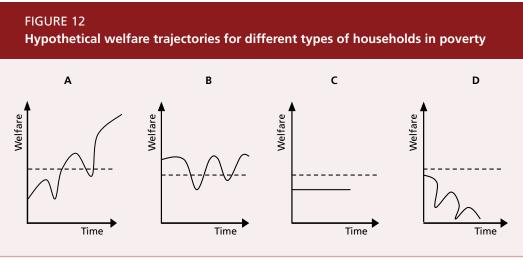
Given this complexity, social protection programmes need to be effectively designed for different contexts. Figure 12 provides a stylized view of welfare in four different types of households. The solid line traces welfare over time, while the broken line denotes a poverty threshold. Household A has an upward trajectory in welfare, but one punctuated by shocks that lower welfare. Smoothening these shocks for household A would strengthen the welfare trend and lead to a permanent escape from poverty. Household B's welfare, on the other hand, moves above and below the poverty threshold alternating spells of poverty with spells of non-poverty. Smoothening the shocks for household B would lead to a constant welfare level at or just above the poverty threshold. Household C's welfare is not affected by shocks and, instead, shows a constant level of welfare below the poverty line. In this case, no smoothening of welfare would, by itself, lift this household above the poverty line. Household D's welfare is affected by shocks, in a downward spiral of worsening welfare. In this case, smoothening welfare, protecting the household from shocks, is unlikely to be sufficient to enable it to escape poverty permanently.

An approach that would smoothen out the variation in welfare over time caused by shocks could help households A and B escape from poverty, but is unlikely to be effective for households C and D. Without a sustained transfer of assets and resources for consumption, households C and D are unlikely to exit poverty.

Rural areas and agricultural households' livelihoods are especially exposed to certain risks (Barrett, 2010). In an uninsured rural population, exposure to idiosyncratic shocks – such as illness, job loss, family deaths, births, migration, marriages and accidents – can cause or deepen poverty. The most serious risks borne by the rural poor vary markedly across space and time, even among seemingly homogeneous populations (Doss, McPeak and Barrett, 2008).

There is substantial evidence (reviewed in subsequent chapters) showing that social protection programmes, when appropriately designed, do help alleviate poverty by increasing the food consumption of the rural poor and vulnerable. Often, these programmes also allow households to diversify their food consumption and – when designed in a gender-sensitive manner and accompanied by complementary interventions in health, sanitation, home gardens and nutrition education – improve nutrition, health and education outcomes in the longer term.

Moreover, within rural/agricultural settings, social protection may also be particularly well suited to promoting economic activity and helping households out of poverty. That is because most rural social protection beneficiaries live where markets for financial services (such as credit and insurance), labour, goods and inputs are poor, difficult



Source: Barrientos, 2014.

to access or do not function well. Social protection reduces important constraints to economic activity, such as credit and liquidity constraints, and, if transfers are regular and reliable, provides certainty in the face of risk. As a consequence, poor households invest in productive assets, often reflected in increased own-farm production. They are also often able to engage in activities characterized by higher risk and higher returns. Because poor households typically face a range of constraints, programmes that are multifaceted and include cash and/or assets as well as support to address specific constraints – for example, financial services, nutrition knowledge and business skills training - are more effective in transforming livelihoods.

Greater beneficiary household incomes increase demand for local goods and services. However, local supply constraints may lead to inflationary pressures, which can be relaxed by agricultural and infrastructural interventions. In this sense, social protection programmes and agricultural interventions are complementary and can generate a positive cycle of human well-being, agricultural growth and economic security.

Within the longer-term context of the structural transformation of agriculture, social protection can play a key role by making the process more inclusive and less painful by mitigating the costs farmers face in adjusting to changes. Social protection can also help avoid migration born out of desperation and that simply replaces rural poverty with urban poverty. It can provide greater choice and allow migration in response to economic opportunities, thus facilitating the transformation.

This report reviews the role of social protection, particularly social assistance, in alleviating deprivation, enhancing human resources and productivity, and encouraging investment and diversification for poor households in rural areas. It discusses how social protection affects individual and household behaviour; whether or not it can sustainably lift households out of poverty by itself; and how it can be linked with agricultural policies and programmes, and vice versa, thus making social protection part of a more comprehensive rural development strategy. The well-documented role of

agriculture in development and poverty reduction makes it a natural ally of, and complement to, social protection. When combined, the two approaches can serve both immediate and long-term livelihood needs.

la a

Is social protection affordable?

Social protection is affordable; moreover, given the evidence provided in this report, it should be seen as an investment, not just a cost (see also Box 4). Overall, US\$329 billion was spent globally on social protection between 2010 and 2014, twice the amount needed to close the poverty gap for those living on less than \$1.25 a day (World Bank, 2015d). On average, spending on social assistance - including cash and in-kind, conditional and unconditional programmes, as well as public works (but excluding subsidies) - constitutes 1.6 percent of GDP for middle-income countries and 1.5 percent for low-income countries (World Bank, 2015d). However, spending varies among countries; some of the countries with the highest poverty rates spend the least. Moreover, not all programmes are well targeted, leaving many of the poor not covered.

Can social assistance programmes be scaled-up in poor countries? While the cost of eliminating the poverty gap over the period 2016–30 is, on average, less than 0.1 percent of GDP each year in East Asia, Latin America and the Caribbean, and the Middle East and North Africa, and 1.6 percent in South Asia, it would reach approximately 5.3 percent of GDP in sub-Saharan Africa, and in 14 countries of the region would exceed 10 percent of GDP (FAO, IFAD and WFP, 2015b).

Such relative spending levels could be reached progressively over time. In lower-income countries, social assistance may, initially, be targeted more narrowly at the poorest of the poor. Bringing the poorest 20 percent of the population to a daily consumption level of \$1.00 would cost less, between 0.1 and 2 percent of GDP for most countries in sub-Saharan Africa. For five countries the cost would be higher, ranging from 2.3 to 4.5 percent of GDP (Plavgo, de Milliano and Handa, 2013).

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BOX 4 Achieving Zero Hunger

In a number of regional and international fora, the international community has pledged to eliminate poverty and hunger by 2030, if not earlier. The Post-2015 Sustainable Development Agenda and the Financing for Development Addis Ababa Action Accord are prominent examples. This global commitment is reflected in the Sustainable Development Goals (SDGs), namely SDG 1 to eliminate poverty by 2030 and the proposed SDG 2 to eliminate hunger and malnutrition by the same year.

Despite substantial progress in reducing hunger and near achievement of the Millennium Development Goal target of halving the proportion of hungry people by 2015, the latest estimates suggest that, globally, about 795 million people still suffer from chronic (dietary energy) undernourishment (FAO, IFAD and WFP, 2015a). FAO's business-as-usual scenario forecast suggests that, in 2030, more than 650 million people will still be undernourished. This suggests that relying on anticipated economic growth alone will not be sufficient to eliminate hunger

and improve nutrition. Purposeful action is needed if the pledge to eradicate hunger is to become reality.

A recent FAO study estimates that over the next 15 years an additional gross annual investment of US\$267 billion -0.3 percent of gross world product – is required to immediately overcome poverty, hunger and undernutrition (FAO, IFAD and WFP, 2015b). A key component of this amount is social protection: up to US\$116 billion. Welldesigned social protection not only meets consumption needs but, when combined with appropriate public investments and enabling environments, can break the cycle of poverty, hunger and low productivity. In rural areas, such investments will raise opportunities for the poor to earn incomes from productive activities. Gradually, earned incomes can be expected to replace income supplements provided by social protection. The additional investment is estimated at US\$105 billion in rural areas and US\$46 billion in urban areas.

In many countries, financing such programmes will require difficult expenditure choices. Donor support will be essential in the short-to-medium term for maintaining programmes in some countries. Yet, mobilizing domestic fiscal resources will be important for establishing a politically and financially sustainable basis for social assistance programmes. This progression from donor-funded pilots to domestically financed and managed social protection systems is already taking place in Kenya, Lesotho and Zambia, among other countries. Pilot programmes and careful monitoring and evaluation can help start the policy dialogue needed to build a national consensus on the nature, scale and financing of social assistance within a country (Davis et al., forthcoming).

Structure of the report

Chapter 2 reviews the effectiveness of social protection interventions in reducing poverty, raising food consumption, relieving household food insecurity and hunger, and promoting longer-term improvements in nutrition. Chapter 3 reviews evidence of the effectiveness of social protection in promoting long-term improvements in nutrition and in stimulating investment and promoting local development. Chapter 4 examines factors driving different impacts of programmes and draws lessons for programme design. Chapter 5 discusses how social protection and agricultural policies can be interwoven to maximize programme and developmental impacts. Chapter 6 summarizes the report's main conclusions.

Social protection for rural poverty reduction and increased food security

Eradicating poverty and food insecurity are key targets of the post-2015 development agenda. Raising incomes and employment is essential for achieving these goals, and there are many ways this can be accomplished, such as by raising small family farm productivity, increasing education levels and assisting households to enter new and higher-return activities. These are longer-term aspirations for the poor, while poverty and hunger are daily realities with lasting consequences. The poor and hungry need more immediate help. In this chapter, we review the effectiveness of social protection interventions in reducing poverty, raising food consumption and diversifying diets. We review a broad range of social protection measures, with the main focus on social assistance interventions targeted at poor households, rather than other social protection measures.

Social protection can help reduce poverty

A broad range of social protection measures (including social assistance, social insurance and labour market programmes) currently prevent about 150 million people worldwide from falling into extreme poverty (Fiszbein, Kanbur and Yemtsov, 2014). The majority of these people are in Eastern Europe and Central Asia, where social protection coverage is widespread. Far fewer people are protected in sub-Saharan Africa, where coverage is lower and less than 1 percent of the population moves out of poverty each year as a result of social protection transfers.

Social protection comes in many forms, some of which have had more success in reducing poverty than others. Here, we review several social assistance programmes for which evaluations have been undertaken with a view to assessing their impact

and identifying which features ensure successful outcomes. Fiszbein et al. (2009) reviewed a number of conditional cash transfer programmes and concluded that many such programmes reduce poverty, at least in the short run (Box 5). For example, Mexico's Programa de Educación, Salud y Alimentación (PROGRESA), introduced in 1997, renamed (and slightly modified) Oportunidades in 2003 and Prospera in 2014, reached 21 percent of the population in 2013 (see also Box 5) (World Bank, 2015d).7 Skoufias (2005) calculates that this programme reduced the poverty headcount among beneficiaries by about 10 percent and the poverty gap⁸ by about 30 percent over two years. The programme's success was, in part, due to the fact that it replaced other poorly targeted subsidies, suggesting that good targeting is important for reducing poverty. Furthermore, the Mexican experience highlights the importance of rigorous independent monitoring and impact evaluation, which gave the programme legitimacy and enabled it to be scaled up and improved on the basis of lessons learned regarding design and implementation.

Brazil's Bolsa Família reached just over 14 million families in 2015 (World Bank, 2015d) corresponding to about 24.5 percent of the country's population (see also Box 5). The programme has been credited with a reduction in poverty and extreme poverty by 1.9 and 1.6 percentage points, respectively, between 2003 and 2009. That corresponds to 13 percent of poverty and 32 percent of extreme poverty. The programme had a

⁷ Prospera continues Oportunidades but seeks to enhance linkages from conditional cash transfers to productive and financial inclusion through beneficiaries' increased access to savings, microcredit and insurance.

⁸ The term "poverty gap" refers to the average shortfall from the poverty line times the poverty incidence.

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BOX 5 Conditional cash transfer programmes and conditional in-kind transfer programmes

Conditional cash transfer programmes (CCTs) are programmes that transfer cash in return for beneficiaries meeting some obligation. Typical conditions relate to children's school attendance, visits to health facilities, or attendance at skills, nutrition or other training (school stipend programmes are considered as CCTs). The number of countries with CCTs rose from 27 in 2008 to 63 in 2014. The programmes are most widespread in Latin America and the Caribbean (22 countries with CCT programmes) and sub-Saharan Africa (18 countries). The largest CCTs in terms of individuals covered are India's Janani Suraksha Yojana (78 million), Bolsa Família in Brazil (49 million) and Prospera in Mexico (26 million).

Conditional in-kind transfers (CITs) are similar to CCTs in that they impose conditions aimed at changing beneficiary behaviour, but the transfers provided are in kind. School-feeding programmes are examples of CITs. School feeding is most common in Africa (45 countries), Latin America and the Caribbean (28 countries), Eastern Europe and Central Asia (23 countries). The largest programmes are India's school-feeding programme and the *Programa Nacional de Alimentação Escolar* in Brazil, which cover 105 and 47 million children, respectively.

Source: World Bank, 2015d.

stronger impact on the poverty gap, which fell by 18 percent during the same time period (Soares, 2012).

Bolsa Família is also a good example of the value of a comprehensive network of complementary policies. For example, following the 2008 global financial crisis, the Government of Brazil was able to react quickly at low cost by scaling up programmes. This had a significant impact, reaching over 1.6 million of the most vulnerable people and, in turn, contributed to domestic demand growth: despite a decrease in GDP in 2009 of 0.6 percent, private consumption remained stable and resumed growing in the second half of 2009 (Berg and Tobin, 2011).

Unconditional cash transfer programmes, often targeted at specific categories of vulnerable demographic groups, such as orphans or the elderly, have also reduced poverty (see also Box 6). For example, Kenya's Cash Transfer Programme for Orphans and Vulnerable Children (CT-OVC) of covered more than 245 000 children, about 40 percent of the total number of the orphans and vulnerable

children living in extreme poverty in 2011. The programme resulted in a 13 percentage point reduction in poverty levels (living on less than \$1 a day) in beneficiary households between 2007 and 2009 (Ward *et al.*, 2010).

The Child Support Grant (CSG) in South Africa is the largest social protection programme in sub-Saharan Africa. It entails a cash transfer to the primary caregiver of a child who is under the age of 18 and living in a household earning below a defined income threshold. In 2014, the programme reached over 11 million poor children between the ages of 0 and 18 (SASSA, 2015) and led to a 9 percent drop in child poverty in 2007 (SASSA, 2011, cited in Tiberti et al., 2013). In addition, the South African social (non-contributory) pension scheme was estimated to have reduced the poverty headcount by about 2.8 percentage points in 2002 in Cape Town and Eastern Cape (Barrientos, 2003). Moreover, it reduced the country's overall poverty gap by 21 percent and by 54 percent for households with older people (Omilola and Kaniki, 2014). The analysis by Barrientos (2003) also indicates that the social pension reduces the likelihood of falling into poverty by 12.5 percent. Leibbrandt et al. (2010) estimate that, overall, the key South African government grants - i.e. State Old-Age Pension, the Disability Grant, the Child Support Grant and the

⁹ The CT-OVC targets ultra-poor households with an OVC, defined as household residents up to 17 years old with at least one deceased parent, or a parent who is chronically ill, or whose main caregiver is chronically ill.

BOX 6 Unconditional cash transfer programmes and unconditional in-kind transfer programmes

Unconditional cash (UCT) or in-kind (UIT) transfer programmes foresee transfers without any particular obligations on the part of beneficiaries. In place of conditions, some programmes include specific messaging recommending how transfers should be spent. For example, the Lesotho Child Grant Programme (CGP) had especially strong messaging on expenditures on children's clothes, shoes and related expenses, which is claimed to have resulted in particularly large impacts on these expenditures (Pellerano et al., 2014). Often, these types of transfer are targeted at vulnerable demographic groups, such as the elderly (social pensions), orphaned children or schoolchildren.

There are about 130 UCTs, 37 of which are social pension programmes. These programmes are most common in Africa (41 countries), Eastern Europe and Central Asia (29 countries), and Latin America and the Caribbean (28 countries). There are 92 countries with UITs, most of which are in Africa (42) and Latin America and the Caribbean (24). The largest UCT is China's *Di-Bao* (75 million beneficiaries), followed by India's Indira Gandhi National Old-Age Pension Scheme (21 million). The largest UITs are Turkey's *Gida Yardimi* (9 million) and Mexico's milk grant benefit (6 million).

Source: World Bank, 2015d.

Foster Care Grant – lowered poverty by six percentage points in 2008.

Targeted or untargeted food price subsidies are also a form of unconditional transfers. India's Targeted Public Distribution System (TPDS) is an example of a food price subsidy that reached about 45 percent of the population in 2010-11 (Himanshu and Sen, 2013) and was expected to reach about two-thirds of the population (75 percent of the rural and half the urban population) from 2013.10 The TPDS provides grain to state governments according to a targeted system that has three retail price tiers: the Antyodaya price (the largest subsidy) for extremely poor households; the BPL (Below Poverty Line) price for households designated as poor; and the APL (Above Poverty Line) price for all remaining households with ration cards. The third entails a much lower level of subsidy. The TPDS has had a strong poverty-reducing impact: the poverty headcount rate in 2009-10 would have been 4.6 percentage points higher in the absence of the TPDS and the mid-day school meal (Himanshu and Sen, 2013).11 Similar results

Similarly, some public works programmes have effectively reduced poverty in certain settings. In Liberia, the Cash for Work Temporary Employment Project was implemented as a response to the 2007–08 food price crises. By 2010, the project created temporary employment for 17 000 vulnerable households and provided public services to Liberian communities, including rehabilitating public agricultural land in rural areas and other work in urban and rural areas. Andrews et al. (2011) showed that the project reduced the number of participants living in poverty by 5 percent and reduced the poverty gap among programme participants by 21 percent.

India is home to the Mahatma Ghandhi National Rural Employment Guarantee Act (MGNREGA), the world's largest anti-poverty public employment programme (see also Box 7). The positive experience with the Maharashtra Employment Guarantee Scheme (MEGS) in the 1970s provided support for the

were found by Drèze and Khera (2013), who reported that, in 2009–10, the TPDS reduced rural poverty at the national level by about 11 percent and the poverty gap by 18 percent. The impact has been particularly large in states with a well-functioning TPDS, while it has had little impact in a number of states with a poorly functioning TPDS.

¹⁰ The TPDS replaced the untargeted Public Distribution System (PDS) in 1997.

¹¹ Most of the impact is due to the TPDS. The Mid-Day Meal is the universal school-feeding programme (see also Box 5).

introduction of MGNREGA. Introduced after a severe drought, the MEGS had a strong poverty-alleviating impact while at the same time improving the state's irrigation infrastructure and rural roads network (Subbarao et al., 2013). Independent studies show that, despite shortcomings, the MGNREGA programme contributes to reducing poverty and increasing social inclusion, but the available evidence also indicates that MGNREGA's performance varies significantly across states (UNDP, 2013). For example, Dutta et al. (2014) found that the MGNREGA programme in Bihar could potentially reduce poverty in the state by 14 percentage points but that its actual impact was closer to one percentage point. They concluded that most of this shortfall was

due to the scheme failing to provide the promised "guaranteed" employment.

The Ethiopian Productive Safety Net Programme (PSNP), for example, is a public works programme that also includes cash transfers to poor, labour-constrained households. The PSNP, which covers about 7.5 million individuals and is the largest safety-net programme in sub-Saharan Africa outside of South Africa, is credited with having reduced the national poverty rate by two percentage points. The programme's design and implementation also helps households cope better with seasonal hunger, a perennial issue in many countries (see Box 8). Berhane et al. (2014) calculate that the programme has helped reduce seasonal hunger among beneficiaries by a third.

BOX 7 India's Mahatma Ghandhi National Rural Employment Guarantee Act

The MGNREGA is a historic piece of legislation aiming at two interlinked goals. Its rights-based approach views employment as a right of the citizen to be delivered by the state. The first goal is to ensure livelihood security to rural residents by providing at least a hundred days of guaranteed wage employment in a fiscal year to every household with an adult member willing to do unskilled manual work for a minimum wage. The second goal is to mobilize existing surplus labour in the countryside, unleash productive forces and generate more economic growth in rural areas.

The Act came into force on 2 February 2006 and was implemented in phases to cover all rural districts within three years. At its peak in 2010/11, it covered more than 55 million rural households, about a third of all rural households, generating 2.6 billion days of employment in that year. It is a relatively inexpensive programme: even at its peak, total spending came to less than 1.0 percent of GDP, and it currently accounts for less than 0.5 percent of GDP. The programme is large, but has been unevenly implemented across states. The peak years of MGNREGA performance, in terms of both financial and employment indicators, were 2009/10 and 2010/11;

there has been a general decline in most states since then (Ghosh, 2014).

The programme is designed to work as follows (MORD, 2013). Adult members of all rural households willing to do unskilled manual work register with the local Gram Panchayat (the lowest-level elected body). Each household is entitled to 100 days of employment per year, although the programme has only provided 40-50 days of employment per household each year so far. The registered household is issued a job card. A written application for work is the basis for a guarantee of providing employment within 15 days. If this is not provided, the state is supposed to pay an unemployment allowance (of half the wage rate) to the beneficiary. At least a third of the beneficiaries of the scheme must be women. In practice, women have accounted for around half of total beneficiaries. Facilities – such as crèches for children, drinking water and shade for rest - are supposed to be provided. The cost of projects, excluding wages for beneficiaries, cannot be more than 40 percent of total costs. Contractors and use of labourdisplacing machinery are prohibited.

Source: Ghosh, 2014.

BOX 8 Social protection and seasonality

Seasonality is a major contributor to hunger and undernutrition (Vaitla, Devereux and Swan, 2009). This is particularly true in areas dependent on rain-fed cultivation, especially in sub-Saharan Africa and parts of Asia. In Madagascar, for example, Dostie, Haggblade and Randriamamonjy (2002) report that a million more people fell into poverty during the lean season.

In Ethiopia, Dercon and Krishnan (2000) found that poverty and consumption fluctuated substantially between preand post-harvest periods, resulting in significant fluctuations in nutritional status. In Malawi and the Niger, Cornia, Deotti and Sassi (2012) found that strong seasonal food-price variations were a major determinant of child malnutrition,

and these fluctuations occurred even with relatively abundant harvests because of limited investment in storage at the community and household levels, limited credit availability and inadequate strategic food reserves.

Social protection programmes, if sensitively designed and timed to take account of location-specific price variations and labour demands, can help mitigate the adverse impacts of seasonality. For example, the Bangladesh Employment Generation Programme for the Poorest (Food for Work) programme creates wage employment in exchange for food during the slack season and is cited as a good example of a seasonal programme (Subbarao et al., 2013).

However, public works programmes can also impose high burdens on participants in terms of direct and opportunity costs. For example, employment in public works can replace other employment activities, reducing the net impact on earnings from the returns to the activities individuals would otherwise have been engaged in. When wage employment opportunities are minimal and agricultural activities are highly seasonal, this type of substitution is likely to be relatively small. The low wage offered is expected to induce self-targeting by the most food-insecure households, but this may not always be the case. For example, in rural Ethiopia, higher-income households were more likely to participate in food-for-work schemes because they had surplus labour, whereas poorer households were labourconstrained, and so could not afford to participate (Barrett and Clay, 2003).

In conclusion, there is substantial evidence that many social assistance programmes reduce poverty, at least in the short term. Monitoring and impact evaluation can help build a strong base for scaling-up and allow improvements to programmes. The experience of Brazil shows the value of being able to scale up programmes in response to negative shocks. Programme design is

also important. In designing public works programmes, care should be taken not to replace other economic opportunities, and household opportunity costs must also be considered. The experience with India's TPDS shows that programme implementation is of central importance. In programmes in sub-Saharan Africa, local committees have played a significant role in programme implementation; hence, building capacity at this level will enhance programme outcomes (Barca et al., 2015).

Finally, while not all programmes may actually reduce poverty, they may be important in preventing people from falling into poverty. Indeed, as noted by Fiszbein, Kanbur and Yemtsov (2014), social protection programmes are often designed not to target the actual poor, but rather to protect the non-poor from becoming poor or to help the vulnerable improve their resilience.

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Social protection and food security

Food insecurity is closely related to poverty. It is therefore not surprising that many social assistance programmes have had a positive impact on food security by increasing access to more diverse and higher-quality food.

Some programmes have also improved food security via increases in home production.

Hidrobo, Hoddinott, Kumar and Olivier (2014a) present the most recent and comprehensive review of studies that assess the impact of social assistance on household food security. Their meta-analysis, covering 48 studies of 39 social protection programmes, found average programme impacts (relative to the baseline) of 13 percent for caloric intake and 17 percent for food consumption/expenditure. They also found evidence that some programmes improved dietary diversity, especially with regard to consumption of animal products. The following presents more details of selected programmes.

Between November 1997 and November 1999, PROGRESA (now Prospera), a conditional cash transfer programme in Mexico, raised median food expenditures of beneficiary households by 13 percent. This increase was largely driven by higher expenditures on fruit, vegetables, meats and animal products. By November 1999, median caloric intake had risen by nearly 11 percent (Hoddinott, Skoufias and Washburn, 2000). For the same programme, Angelucci and Attanasio (2009) found that consumption (per adult equivalent) in rural areas had increased by 8, 14, and 17 percent about 6, 12, and 18 months, respectively, after the beginning of the programme. Also for the same programme, Angelucci and De Giorgi (2009) found that transfers to eligible households indirectly increased consumption of ineligible households living in the same villages by about 20 percent.

In Paraguay, beneficiary households of the *Tekoporã* conditional cash transfer programme reached per capita consumption levels 9 to 15 percent above those of the control group (Soares, Ribas and Hirata, 2008). For a programme in Ecuador, Hidrobo, Hoddinott, Peterman *et al.* (2014)

reported that the value of per capita food consumption, per capita caloric intake and dietary diversity all increased, regardless of whether the programme transferred cash, vouchers or food. They did not find differences in the shares of the transfers used on food and non-food consumption, but found that food transfers had a greater impact on caloric intake while vouchers had a greater impact on improving dietary diversity. In the case of food transfers, the increased food consumption largely came from the food items making up the food transfer - which, if sufficiently diverse, could increase dietary diversity – while, for vouchers, the increased food consumption was derived from a greater variety of food items, including vegetables, eggs, and milk and dairy products.

Unconditional programmes have also had positive impacts on food consumption. For Bangladesh, Ahmed, Quisumbing et al. (2009) compared three different unconditional transfer programmes targeting the ultrapoor (their comparison also included a public works programme, the Rural Maintenance Programme, discussed below). Two are components of the Vulnerable Group Development (VGD) programme: the Income Generating VGD (IGVGD) and the Food Security VGD (FSVGD). Both target poor women, the former with a food ration over 24 months and the latter with food and cash; the Food for Asset Creation (FFA) component of the Integrated Food Security programme distributed a combination of food and cash as wage payments to workers (at least 70 percent of whom must be women) in labour-intensive public works programmes. They found that participation in all three programmes significantly increased expenditures on food consumption, translating into statistically significant increases in caloric intake of 164, 247 and 194 kilocalories per person per day for participants in the IGVGD, FSVGD and FFA programmes, respectively.

Unconditional programmes from sub-Saharan Africa have also shown positive results. The Child Grant model of the Zambia Social Cash Transfer (SCT) programme and the Malawi SCT programme significantly raised the average consumption level of beneficiary households and improved dietary diversity (American Institutes for Research, 2013; Boone

¹² Study selection criteria were the following: (1) evaluations should be based on samples of 300 households or more, given that impact evaluations based on very small samples are not very informative and may not detect impacts because of the sample size; and (2) studies should include a rigorous impact evaluation based on a randomized control trial, quasi-experimental techniques, difference-indifference, or instrumental variables. For a more detailed discussion of the methodology, see Hidrobo, Hoddinott, Kumar and Olivier (2014a).

et al., 2013). For Kenya, Asfaw et al. (2014) found that the impact, after two years, of the CT-OVC programme, which transferred a fixed amount, varied by household size. While the programme had no effect on spending for most food consumption categories for larger households, the programme had large, positive and significant effects for dairy, eggs, meat, fish and fruit for households with fewer members and for female-headed households, in part from higher own production. Romeo et al. (2015) found that after four years, and the erosion of the value of the transfer due to inflation, the CT-OVC no longer had a significant impact on food consumption. However, the behavioural change associated with the consumption of more diverse and better-quality food persisted.

Pension programmes can also contribute to food security. In the Plurinational State of Bolivia, for example, Martínez (2004) found that the social (non-contributory) pension provided by the BONOSOL (*Bono Solidario*) programme was spent almost entirely on raising food consumption, which rose by 6.3 percent. Most of the increase, which was achieved in part by greater home production, was for meat, animal products, vegetables and fruit.

Public works programmes have also been found to be effective in reducing hunger. Gilligan and Hoddinott (2007) studied the Employment Generation scheme and the "Gratuitous Food" (Free Food Distribution) scheme in Ethiopia, and found that beneficiaries were able to increase their food consumption in the 18 months following the 2002 drought. In India, Deininger and Liu (2013) found that participants in the National Rural Employment Scheme in Andhra Pradesh significantly increased intake of protein and energy in the short run, while Ahmed, Quisumbing et al. (2009) found that the Rural Maintenance Programme (RMP) in Bangladesh, which targeted women with cash wages for maintaining rural roads, led to significantly higher expenditures on food and a statistically significant increase in average caloric intake of 271 kilocalories per person per day.

The most widespread form of social protection is school feeding (see also Chapter 1, Box 3). There is evidence that many school-feeding programmes increase the food consumption of schoolchildren.

A school snack programme in the Philippines increased the calorie consumption of primary-school-age children by about 300 kilocalories per child per day (Jacoby, 2002), while parents did not reduce the amount of food served to children at home. This finding is also echoed in evidence from other countries, such as Bangladesh (Ahmed, 2004) and Burkina Faso (Kazianga, de Walque and Alderman, 2014).

Many social assistance programmes, regardless of type, have sizeable impacts on food security and dietary diversity, particularly the consumption of animal products.¹³ However, some programmes seem not to have such impacts. The lack of impact of the Lesotho CGP, which provided a cash transfer every three months, was attributed to the long gap between payments, exacerbated by difficulties in making regular payments. This hampered the ability of households to smoothen consumption over the whole period between payments. Qualitative field work found that improvements in food consumption and dietary diversity were mainly concentrated around payment dates, thus making it difficult for the randomized control trial to capture increases in consumption (Pellerano et al., 2014). Nevertheless, the impact evaluation did detect a significant improvement in reported food security indicators (Pellerano et al., 2014). Similarly in Ghana, the irregular payments of the Livelihood Empowerment against Poverty (LEAP) programme, which reached over 71 000 poor households, made consumption smoothening difficult (Handa et al., 2013).

Gender-sensitive social protection is critical for food security

The impact of social protection on food security and poverty reduction can be enhanced by focusing on the role of women

¹³ Policy-makers may be concerned that poor households use some of the cash transfers to buy alcohol, tobacco or other "temptation goods". In this regard, a review by Evans and Popova (2014) of the impact of cash transfers on 'temptation goods' across 44 estimates from 19 studies (for both unconditional and conditional cash transfers) finds, almost without exception, no significant impact, and, in some cases, even a significant negative impact, of transfers on expenditures on alcohol and tobacco.

in targeting and programme design. Gender inequalities in decision-making and control over household income is persistent across many countries, yet evidence from Africa, Asia and Latin America consistently shows that families benefit when women have greater status and power within the household. For example, some studies found that when women have more influence over economic decisions, families allocate more income to food, health, education, children's clothing and children's nutrition (van den Bold, Quisumbing and Gillespie, 2013; Holmes and Jones, 2013).

In many countries, the majority of cash transfer programme beneficiaries are poor and vulnerable women. Many programmes disproportionately serve female-headed households because they are overrepresented among populations of extremely poor, labour-constrained households. Also, the vast majority of programmes target women in male-headed households as direct beneficiaries.14 As a result, it is often claimed that such programmes have an empowering effect on women based on the assumption that, as the main recipients of the transfers, women gain greater control over financial resources. Nevertheless, available evidence on empowerment outcomes is far from conclusive (de la O Campos, 2015). This is, in part, because outcomes are shaped not only by women's roles within the household and society, but also by existing gender inequalities in knowledge, skills, influence and ownership and control of resources.

In Kenya, for example, women who received cash transfers spent first on children's nutrition and education, and only then on investments in productive activities (FAO, 2013b). Similar results were seen in Ethiopia, where female- and male-headed households who were beneficiaries of the PSNP had markedly different spending patterns following the transfers. Femaleheaded households prioritized education, paying school registration fees and keeping their children in school as long as possible,

while male-headed households tended to invest in extending agricultural activities and accumulating physical assets (Slater *et al.*, 2006). Men tend to have more access to productive assets than women, which probably explains why they invest more in them.

While targeting women can increase expenditures in areas that they control, it does not, for the most part, change general household-spending patterns, which tend to remain highly gendered and dependent on custom and on cultural and historical circumstances. While this may, in part, be due to individual preferences – with women preferring to spend on short-term consumption for their children, and men preferring to make longer-term investments - expenditure patterns not only reflect the dominant social norms, but also the property rights situation and access to resources, which often disadvantage women (Doss, 2011). Where women have limited legal rights to land and other assets, prioritizing consumption over investment may be the best option open to them (Holmes et al., 2014).

The evidence suggests that prevailing patriarchal gender norms continue to limit women's financial decision-making, even when programmes have attempted to factor this into their design. In India, for example, the MGNREGA programme includes a provision to avoid paying the earnings of female family members to male heads of household. Despite this, Reddy et al. (2011) found that women were often unable to control how the money was spent, even when they had collected their own wages. In Bihar, for example, 50 percent of husbands controlled their wife's MGNREGA income. However, the impacts vary with context. In Brazil, female recipients are, by law, designated to control the transferred cash and this has had significant positive effects on women's bargaining power (de Brauw et al., 2014).

Kenya's Hunger Safety Net Programme (HSNP) and CT-OVC, Zimbabwe's Harmonized Social Cash Transfer (HSCT) and Ghana's LEAP programme have experienced similar problems, possibly because they do not designate women as "official" cash recipients, or have not introduced other measures, such as individual bank accounts or gender sensitization, to help women control

¹⁴ For example, in sub-Saharan Africa, in Ghana's LEAP, Zambia's Child Grant, Zimbabwe's HSCT and Lesotho's CGP, 81, 98, 64 and 67 percent of recipients, respectively, were women. In Ethiopia's PSNP, Kenya's CT-OVC and Malawi's SCT, 73, 65 and 83 percent of recipients were femaleheaded households. Information based on PtoP data (see also Tirivayi, Knowles and Davis (2013).

the cash. Nor do these programmes aim to alter gender relations (OPM, 2013b; Jennings et al., 2013).

Empowerment outcomes from social protection measures are influenced by programme objectives (e.g. to empower women) and programme design (e.g. when females are transfer recipients, or where the programme includes spouse sensitization on gender issues) as well as the extent of women's decision-making power before the programme begins. Educational level is critical, as is the degree to which a woman's educational level matches or exceeds that of her spouse (de Brauw et al., 2014). Developing women's skills and enabling their access to resources and employment need greater attention. In addition, social protection programmes need to be continued over sufficient time to ensure sustainable economic empowerment impacts (de la O Campos, 2015).

The design of social protection programmes also needs to take into account women's special role in household food security in much of the world. Traditionally, women bear responsibility for preparing meals and caring for children and other family members. They are also typically responsible for collecting firewood, fuel and water. At the same time, they are farmers and/or contribute labour to the household farm or participate in the labour market. These different responsibilities typically impose heavy burdens on women's time, and often imply trade-offs in how time is allocated, inter alia, for child care. Early public works programmes were heavily criticized for adding to women's burdens, but more recent programmes have been designed to foster women's inclusion.

The Indian MGNREGA programme, for example, was designed to include provision of crèche facilities at rural work sites if more than five children below the age of six were brought along by working mothers; it also suggests that a woman should be employed to look after children. Similarly, in Ethiopia, the PSNP was designed to take into account women's work-related time constraints (Berhane et al., 2013). In theory, women are allowed to work fewer hours each day, arriving late and leaving early if they need to provide care for children at home. Furthermore, the programme calls

for provision of day care centres at public works sites, and allows pregnant and nursing women to receive direct support with no work requirement.

Unfortunately, the care that has gone into programme design has not always ensured corresponding implementation. Programmes have therefore not been very successful in overcoming women's time constraints. In India, for example, there is limited awareness of the MGNREGA crèche provision and, according to several sources, actual provision of a crèche at work sites is very rare (Holmes et al., 2014). A survey in four northern Indian states (Pankaj and Tankha, 2010) found that only 28 percent of women with children under the age of five brought them to the work site, whereas 62 percent left their children at home with older siblings or other relatives, and 10 percent left them without proper care. In many cases, this was due to respondents being unaware of the crèche provision. But the women may also have preferred to leave their children with family or neighbours in their community rather than with strangers at public works sites. This has also been found in other public works programmes, which highlights the need to provide day care at the community level when wage employment is introduced in this way.

Ethiopia's PSNP has also struggled to implement its gender-sensitive design. Public works officials in eight of ten woredas (districts) reported that no steps had been taken to enable women's participation (Berhane et al., 2013). Day care centres had been successfully introduced in only three regions: Amhara, Tigray, and Southern Nations, Nationalities and Peoples' Region. Implementation problems have been attributed to several factors, including insufficient funds, implementers' lack of awareness (or deprioritization) of the programme's crèche provision and limited demand from women participants, some of whom may have been concerned about leaving their children with strangers (Holmes and Jones, 2013).

There is room for improvement, and it is the purpose of monitoring and evaluation to facilitate this. For example, the emerging consensus is that in order to maximize programme impacts, it is vital to consider, complement and strengthen the different strands of support that address the multiple constraints and disadvantages women face, particularly in rural areas. There are myriad ways to accomplish this task, ranging from ensuring that infrastructure improvements meet women's needs, to addressing gender gaps in access to education, financial services and productive resources, to improving access to relevant social services, including prenatal and postnatal maternity care and child care.

BRAC's CFPR-TUP (Challenging the Frontiers of Poverty Reduction – Targeting the Ultra Poor) programme in Bangladesh is based on a better understanding of the gendered dimensions of poverty and vulnerability, and explicitly attempts to address them. 15 An example of good practice, the programme targets ultra-poor rural households and provides women in those households with productive assets, primarily livestock.¹⁶ The programme also provides additional benefits in a sequenced manner. For example, consumption support in the initial stages, for 12-18 months, is considered key to the success of the programme, as assets do not immediately generate income (Sabates-Wheeler and Devereux, 2011). Households are also provided with savings services, weekly home visits and training (on how to use their assets, health and hygiene matters, basic skills and literacy), as well as general support and counselling (including how to handle gender violence, early marriage and dowry pressures). Households are also provided with health care support and assistance in social integration. The programme holds lessons, not only for gender-sensitive social protection programming, but also, more generally, when programmes seek to sustainably "graduate" households out of poverty. We return to these lessons in Chapters 4 and 5.

Key messages

- Social protection programmes, regardless of type, can effectively reduce poverty, especially the depth of poverty.
- Social protection programmes, regardless of type, can effectively reduce food insecurity. Programmes help raise consumption levels and result in greater dietary diversity at the household level.
- Women are often the main beneficiaries of social protection programmes, and play a key role in household food security and nutrition. Programmes that target women, consider their time constraints and enhance their control over income have stronger food security and nutrition impacts, especially for children.

¹⁵ BRAC, formerly the Bangladesh Rural Advancement Committee, is a NGO that today operates in Bangladesh and several other countries.

¹⁶ The programme started in 2002 and had reached 100 000 ultra-poor households by 2006. It is intended to provide support to 770 300 households by 2016. Ultra-poor households are those that suffer from chronic hunger and malnutrition, have inadequate shelter, and are highly prone to many types of disease, deprived of education and particularly vulnerable to recurring natural disasters.

3. The potential impacts of social protection on investment and growth

Social assistance can be an effective tool for raising the level of consumption of the poor and reducing their food insecurity, as shown in the previous chapter. But social protection does more than fill income and consumption shortfalls; it also facilitates productive investment (Barrientos, 2010) and, thus, can increase income-generating capacity. Such investment is essential for sustainable poverty reduction because those who possess the means to invest are generally better able and more willing to access credit and complementary resources and services to undertake investments in new production assets and technologies and new marketing relations, as well as in education and health care for children. This chapter explains why social protection is relevant for household productive investment, and reviews the substantial body of evidence accumulated on the effectiveness of social protection in stimulating investment.

Why and how would social protection stimulate investment?

There is a sound theoretical basis for expecting social protection to have productive impacts on agriculture. Many poor households' livelihoods are still based on agriculture, many on subsistence agriculture. This is particularly true in sub-Saharan Africa, now and for the foreseeable future. Many of these farmers live in places where markets – for agricultural inputs and outputs, labour, and other goods and services such as credit and insurance – are lacking or do not function well (Tirivayi, Knowles and Davis, 2013). Moreover, the

uncertainties of weather, particularly in the context of climate change, and lack of affordable insurance are at the heart of the vulnerabilities of households dependent on agricultural livelihoods. In circumstances such as market failure or a risky environment, and where the household is largely responsible for generating its own livelihood, interventions meant to influence household consumption will also affect household production decisions, and vice versa – the decisions cannot be separated. This can be clearly seen when looking at the choice between a high-risk, high-profit cash crop, and a low-risk, low-yield subsistence crop when facing food insecurity, or tradeoffs between investing in nutritious foods, children's education or livestock.

Without access to credit markets, and with poor alternative risk-coping mechanisms, the time horizon of agricultural households shortens when their very survival is threatened. As a result, they often adopt low-risk, low-return agricultural and other income-generating strategies, and may sell more labour off-farm in casual labour markets to obtain liquidity or more secure income (Dercon, 2002). For similar reasons, households may underinvest in the education and health of their children, or adopt negative risk-coping strategies such as distress sales of assets, reducing the quantity and quality of food consumption, taking children out of school, or even begging.

In this context, social protection can affect investment decisions via three pathways: managing risks; relaxing liquidity, credit and savings constraints; and spillover effects into the community and local economy (Alderman and Yemtsov, 2014; Tirivayi, Knowles and Davis, 2013).

First, social protection can help households manage risk. Social protection instruments provided at regular and predictable intervals

¹⁷ For a review, see Tirivayi, Knowles and Davis (2013). A substantial body of evidence on these linkages has come out of the "From Protection to Production" (PtoP) project.

can increase certainty and security for agricultural households, partially substituting for insurance and providing a crucial source of liquidity. Poor rural households actively manage risks using tools at their disposal, such as mutual support and informal risksharing mechanisms as well as self-insurance (see Box 9). Extensive research suggests, however, that these risk management strategies offer only partial insurance to the poor and typically do not offer sufficient protection against economic downturns, climate shocks and serious health shocks (Dercon, 2011). Regular and predictable social protection instruments can encourage households to make investments and take advantage of economic opportunities they would otherwise consider too risky. Social protection can also reduce reliance on negative risk-coping strategies in the face of shocks.

Second, social protection programmes that provide cash can facilitate household saving and alleviate credit and liquidity constraints, and if payments are regular and predictable, they can improve access to credit by serving as collateral (Barrientos, 2012). These constraints are key factors leading poor

agricultural households to less-than-optimal use of types and quantities of inputs. Poor households, and particularly women, often find it difficult to borrow money due to lack of collateral or the relatively high expense of small loans. Relaxing these constraints frees up households to use the assets they have at their disposal more effectively.

Third, the impact of social protection programmes is also felt in the communities and local economy in which these programmes are implemented. Social protection allows households to renew or strengthen their participation in informal social networks for risk-sharing and reciprocal exchange; while limited in its effectiveness, social protection often serves as the initial source of help in the face of shocks. Social protection interventions can also influence the behaviour of non-beneficiary households, such as by encouraging more regular school attendance and more frequent health checks (Fiszbein et al., 2009). Properly conducted public works programmes can provide important public infrastructure and assets to facilitate household investment and economic activity (Alderman and Yemtsov, 2014).

BOX 9 Social risk management

Risk is a central part of agricultural household decision-making. Alderman and Paxson (1992), for example, described two main ways that households deal with risk: risk management and risk-coping. Risk management is when households, in the absence of perfect insurance markets, employ strategies to reduce income variability. These may include crop and field diversification, choosing activities that are less remunerative, but also less risky, and migration by family members. Risk-coping involves smoothening consumption in the event of shocks through savings, risk-sharing with others or adverse coping strategies such as taking children out of school.

The World Bank's first Social Protection and Labour Strategy, published in 2001, established Social Risk Management (SRM) (based on Holzmann and Jørgensen, 2000) as a conceptual framework that identified risk and vulnerability as major drivers of poverty (World Bank, 2012). Strategies to deal with risk are classified as: (1) risk reduction, i.e. ex-ante actions to raise income or reduce income variability; (2) risk mitigation, i.e. ex-ante actions to reduce income variability if and when a shock occurs; and (3) risk-coping, i.e. expost actions to alleviate the impacts of shocks after they occur.

Although SRM continues to be relevant to agriculture-based livelihoods and provides a coherent set of policy options for addressing risks that farmers, pastoralists, agricultural labourers and other rural people face, it has been criticized for its almost exclusively economic focus, and for ignoring social risks and the structural causes of poverty and food insecurity (HLPE, 2012).

Moreover, the increased incomes of beneficiary households can lead to multiplier effects for the local economy. The extra disposable income is spent on goods such as livestock products and simple agricultural and household goods and services, which may be produced and provided locally, often by non-beneficiary households. Many of these goods are only traded within a small area, either because they are perishable or because of transportation costs. When social protection programmes generate additional income that creates demand for locally produced goods and services, they contribute to virtuous circles where agricultural and rural non-farm income growth reinforce each other. The degree of the impact will depend on the availability of local resources, including labour, that can supply the goods and services needed to meet additional demand without significant price increases.

Social protection has the potential to have a broad range of impacts related to household income-generating activities. These impacts range from improvements in human resources, increased levels of savings and access to credit, increased farm and non-farm investment and production, more flexibility in allocation of household labour, strengthened social networks, and income multipliers in the local economy. Social protection measures can help households maintain consumption levels and retain assets when confronted by shocks, reduce negative risk-coping strategies and enable them to take on higher-risk but higher-return livelihood strategies. Moreover, taken together, these potential impacts reduce household vulnerability and strengthen resilience (see Box 10). Below, we present evidence of the impacts that social assistance can have on household investment, labour supply and choice of economic activities.

BOX 10 Contribution of social protection to resilience

In relation to agriculture, food security and nutrition, resilience is essentially about the inherent capacities (abilities) of individuals, groups, communities and institutions to withstand, cope, recover, adapt and transform in the face of specific shocks.

Efforts to strengthen resilience should primarily target the food-insecure or those at risk of becoming so. In most cases, this means individuals and groups in rural areas living in extreme poverty or close to the poverty line, as well as those living where conflicts, natural disasters or other major shocks can disrupt food systems or impede access to adequate and nutritious food for at least part of the population. The type of population group, its livelihood strategies and asset bases, the institutional environment, and the type of shock or stressor, all inform the practical definition of "resilience" in each context.

Resilience-building options must be country- and context-specific, with different entry points used in various situations. Any approach to enhancing resilience should integrate disaster risk reduction/management, prevention, mitigation, disaster preparedness and response in a comprehensive way.
Prevention is critical to avoid damage,
protect development gains, maintain
poor people's incomes and assets on
which livelihoods are based, and reduce
the frequency and impact of shocks.
Vulnerability is reduced through physical
and socio-economic measures, better landuse planning, equitable access to resources
and weather-risk transfer mechanisms.

Social protection – by ameliorating market constraints and helping households manage risk, contributes to enhancing human resources, promoting household livelihoods and revitalizing community social networks and the local economy – has the potential to strengthen the different dimensions of resilience among both individuals and communities.

Social protection aimed specifically at increasing resilience against climate change, for example, by mobilizing labour for public works to produce environmentally friendly and beneficial assets, and sensitizing communities on land use management, is referred to as adaptive social protection (Devereux, 2015).

Social protection can stimulate investment in human resources and productive activities

The most important resource that poor households have is their own labour; we therefore turn first to the evidence on the impact of social protection on the quality of labour, as reflected in improved nutrition, education and health outcomes. Subsequent sections review the evidence linking social protection to investment in household farm assets and resources, to savings and to entrepreneurial activity, before moving to the wider community and economic impacts of social protection.

Enhancing human resources: nutrition, education and health

The empirical evidence presented in Chapter 2 shows that social assistance programmes, regardless of type, tend to have a sizeable impact on food security and dietary diversity, in particular with regard to the consumption of animal products. But how well do social protection programmes improve the different dimensions of human resources such as health, education and nutrition?

Reviews by Manley, Gitter and Slavchevska (2013) and Ruel and Alderman (2013) find that conditional and unconditional cash transfers often have positive impacts on consumption levels and diversity but, in general, they have little impact on nutritional outcomes. They argue that social protection programmes are more likely to have nutrition impacts when targeted at the poorest and most vulnerable and accompanied by other interventions that target health, sanitation and maternal education. They find that unconditional transfers can also be effective and that conditionality appears to be much less important than other issues, such as the age and sex of children in the household and access to health care. Finally, better quality of service delivery, in addition to better targeting, would improve the nutritional outcomes of cash transfer programmes.

One example of a social protection intervention that did have a nutrition impact is the Mexican PROGRESA/Oportunidades/ Prospera programme, which provides regular cash transfers and nutritional

supplements¹⁸ upon completion of health clinic visits, nutrition interventions and school attendance. The programme's positive impact on nutrition is reflected in improved child physical, cognitive and language development (Fernald, Gertler and Neufeld, 2008). More specifically, the programme has resulted in higher mean growth for children aged 12-36 months and lower probability of stunting. The improved child growth associated with PROGRESA/Oportunidades/ *Prospera* is conservatively estimated to increase lifetime earnings by 2.9 percent. The effect is likely to be higher when the impacts of improved nutritional status on cognitive development, increased schooling, and lowered age of completing given levels of schooling are considered (Behrman and Hoddinott, 2005; Fernald, Gertler and Neufeld, 2008). The positive impact of the programme is, in part, attributed to the fact that it not only targeted women as recipients of the cash transfers, but also raised their knowledge and awareness of health and nutrition. For children under five years of age in the programme localities, health visits increased by 18 percent, reducing illnesses by 12 percent. Furthermore, higher and more diverse food consumption (see Chapter 2) was accompanied by a range of complementary interventions such as nutritional supplements and health care that also contributed to the success of the programme (Ruel and Alderman, 2013; Skoufias, 2005).

School feeding is a common intervention that helps children learn, and can also contribute to improved nutritional status for disadvantaged children. For example, evidence from randomized controlled trials in China, Jamaica and Kenya, found that, over a 19-month period, children fed at school gained an average of 0.39 kg more than those who did not receive supplementary feeding (Kristjansson et al., 2006). There is also evidence showing that iron-rich school meals can improve iron nutrition, especially for adolescent girls (Ruel and Alderman, 2013). In Uganda, according to Adelman et al. (2008), girls aged 10-13 benefiting from school feeding experienced significant declines in mild anaemia prevalence relative

¹⁸ For children between the ages of four months and two years as well as for pregnant and breastfeeding women.

to a control group. Including certain types of foods has also enhanced the effectiveness of school-feeding programmes. For example, including biofortified orange-fleshed sweet potato, which is high in betacarotene, into a South African school-feeding programme raised levels of vitamin A intake (van Jaarsveld et al., 2005). In a controlled primaryschool-feeding study in Kenya, children receiving milk and/or meat supplements with mid-morning snacks had higher intakes of several nutrients, including vitamins A and B₁₂, calcium, iron and zinc, as well as dietary energy (Murphy et al. 2003; Neumann et al. 2003). Fortifying rice served in school lunches in India led to statistically significant declines in iron-deficiency anaemia, from 30 to 15 percent for the treatment group, while anaemia remained essentially unchanged for the control group (Moretti et al., 2006).

Both conditional and unconditional cash transfers have been shown to improve school enrolment and attendance, as well as health outcomes. Mexico's PROGRESA/ Oportunidades/Prospera conditional cash transfer programme increased secondary school enrolment by six percentage points for boys and nine percentage points for girls. In Bangladesh, a small programme targeting the hardest-to-reach children increased primary school enrolment by nine percentage points. And in Nicaragua, the (now discontinued) Red de Protección social protection programme increased overall enrolment by 13 percentage points, enrolment of children from the very poorest households by 25 percentage points and regular primary school attendance by 20 percentage points. Conditional cash transfer programmes have also had significant impacts on health. For example, in Colombia and Ecuador, social protection programmes bolstered health centre visits for children by 33 and 20 percent, respectively. In Honduras, parents increased the use of health services for young children by 15-21 percentage points, although no effects on children's illness rates were found, as in Brazil (Adato and Hoddinott, 2007).

Unconditional cash transfers in sub-Saharan Africa have had a strong and consistent impact on school enrolment, particularly among boys and girls of secondary school age (12–17 years), who face the largest financial barriers to schooling. For example, Ghana's LEAP programme, Kenya's CT-OVC, Lesotho's CGP and Zambia's Child Grant model raised enrolment among secondary-school-aged children by 7, 8, 6 and 9 percentage points, respectively. Similar impacts were found for other cash transfer programmes (Handa and de Milliano, 2015). Although these programmes are unconditional, their impacts are similar in magnitude to those of the influential PROGRESA/Oportunidades/Prospera programme in Mexico, which conditioned transfers on school attendance. In the sub-Saharan African context, key factors that raise the impact on children are the transfer amount, with a threshold of 20 percent of pre-transfer income being especially critical, and the degree of "messaging" about the purpose of the transfer. For example, several programmes, such as Kenya's CT-OVC and Lesotho's CGP, include strong messaging that the transfers are intended to support children's welfare, which has been found to be effective.

Unconditional cash transfer programmes in sub-Saharan Africa have also had a consistently significant impact in reducing morbidity, and a positive if less consistent impact on the use of health care.

Programmes in Kenya, Lesotho, Malawi, South Africa, the United Republic of Tanzania and Zambia all reduced morbidity in children by reducing the incidence of diarrhoea (for young children) or other illnesses, with impacts ranging from 15 percentage points in Lesotho to 5 percentage points in both South Africa and Zambia. In both Ghana and Kenya, the programmes led to increased use of preventive care.

Baird et al. (2013) found that programmes with stronger conditionality requirements, monitoring and/or penalization for noncompliance tended to have larger impacts on school enrolment and attendance than programmes with less or no enforcement or emphasis. However, such programme features are costly and challenging to implement. In sub-Saharan Africa, conditioning cash payments on school enrolment has not been widely implemented because of supply-side constraints and difficulties in monitoring conditions. But there are opportunities to leverage cash transfers to enhance impacts on schooling without imposing conditions, for example

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by providing complementary services such as textbooks, uniforms or peer-support networks that are linked to schooling and that provide additional support for families to invest in human resources (Handa and de Milliano, 2015).

Strengthening women's role in enhancing human resources through social protection

The important role of women in household food security and nutrition as well as in the education and health of their children in much of the world has already been emphasized in Chapter 2. Social protection programmes have played an important part in strengthening this role. This has occurred by involving women in decision-making at the programme design, implementation and institutional levels (such as communitylevel committees such as the kebele (neighbourhood) appeal committees in Ethiopia). In addition, programmes have also aimed to reduce gender inequalities as an explicit part of programme objectives, thus obliging programmes to adopt measures to increase women's control and decisionmaking over financial resources (as with Brazil's Bolsa Família); design effective ways to increase women's income (Kenya's HSNP and Bangladesh's IGVD); and establish women's support groups (BRAC).

Examples exist of social protection programming initiatives aimed at improving women's voice by including them in programme governance. In Peru, women are well represented in the project selection committees of the Rural Roads Project (Okola, 2011). In Pakistan, the flagship **CCT Benazir Income Support Programme** (BISP) is seeking to actively involve women beneficiaries through a social mobilization pilot (ACT International, 2013). The pilot aims to develop women's committees at different administrative levels (village, union council and tehsil [a subdistrict, consisting of several villages and towns]), train women to know their rights, enable women's leaders to participate in monthly meetings, liaise with BISP local offices and other government agencies, and become involved in participatory monitoring activities (Nagvi, 2013). Similar efforts are underway in Bangladesh, where BRAC's CFPR-TUP programme enables women beneficiaries

to participate in weekly meetings (at which the cash stipend is disbursed) and discuss problems related to their small businesses, health and social care (Holmes *et al.*, 2010).

However, implementing social protection programme goals in relation to women's participation is still a challenge. In India, for example, the MGNREGA programme provides for the inclusion of women representatives in the gram sabha, 19 social audit fora, and state- and central-level councils. It also suggests that social audit for ashould be scheduled to maximize the involvement of women and marginalized communities (Holmes et al., 2014). However, several studies confirm the low rate of women's participation in decision-making structures. In Himachal Pradesh and in Rajasthan, for instance, Khera and Nayak (2009) found that women reported not attending village meetings because they found them of little interest, or were unaware of when they were taking place, or believed that, even if they attended and voiced their concerns, nobody would pay attention. In addition to cultural norms that define gender roles, women's low levels of literacy, especially among the more marginalized castes and tribal communities (Scheduled Castes and Scheduled Tribes), also determined their non-participation.

This contrasts, however, with evidence from Rwanda's Vision 2020 Umurenge Programme (VUP) (Pavanello, Pozarny and de la O Campos, 2015), where the public works programme was unexpectedly found to be promoting women's involvement. Women who accessed VUP public works employment found that it had positive repercussions on their engagement in public life, due to enhanced feelings of confidence and selfworth. Male non-beneficiaries interviewed expressed similar perceptions. Despite these perceptions and examples, this research did not find evidence of women assuming leadership roles in politics and public life as a result of VUP public works participation.

¹⁹ The *gram sabha* includes all the adult citizens of the village. It is empowered to elect the *gram panchayat*. The *sabha* can influence decisions taken by the *panchayat* and can modify weak decisions. The *panchayat* can be established for a village with a population of 1 000–25 000. Several small villages can be grouped into one *gram sabha*. There are various committees, e.g. Agriculture, Animal Husbandry, Public Works, Social Welfare, and Health and Sanitation, within each *gram sabha*.

Ethiopia's PSNP also had only limited success in fostering women's inclusion in decision-making fora. It actively promotes women's participation at all levels and requires that women should represent half of all members in kebele (neighbourhood) appeal committees as well as other committees and task forces. However, women's representation in these structures remained relatively low (Seyoum, 2012). Although there was at least one woman on the Kebele Food Security Task Force (the main body tasked with food security planning) in almost all surveyed kebeles, women did not account for half the committee members. Appropriate design is important, but so is effective implementation.

Social protection can increase household savings and access to credit

In rural areas, the poor and vulnerable are often locked in a vicious circle where they must borrow money in the lean season to buy food at higher prices but have to repay after harvesting their crops, when prices are lower. This is an example of how social protection, by facilitating consumption smoothening and through alleviating liquidity constraints and helping households build savings, can reduce uncertainty and influence household spending and risk-taking behaviour. Indeed, savings significantly increase productive investments by the poor, in particular by women (Dupas and Robinson, 2009).

In Bangladesh, Ahmed, Quisumbing et al. (2009) found that savings increased considerably for households benefiting from the IGVGD, FSVGD, FFA and especially, RMP programmes.²⁰ In part, this is because all these programmes have mandatory savings requirements, which are particularly high for RMP participants. Evans et al. (2014) report that, in the United Republic of Tanzania, beneficiaries of the Community **Based Conditional Cash Transfers Programme** slightly increased their savings. Overall, only 12 percent of households had nonbank savings initially, while participation in the programme led to an increase of three percentage points. Also, Zambia's Child Grant model had a positive impact on beneficiary households' savings (Daidone, Davis, Dewbre, González-Flores et al., 2014). In Paraguay, Soares, Ribas and Hirata (2008) found that households benefiting from the *Tekoparã* programme saved 20 percent more, with the impact being stronger among the extreme poor. Similarly, in Ghana, Handa et al. (2013) reported that beneficiaries of the LEAP programme were 11 percentage points more likely to save money than non-beneficiaries.

Gahamanyi, Hartwig and Kettlewell (2014) found that fewer than 7 percent of the beneficiaries of Rwanda's VUP used their money to invest in other income-generating activities but 33 percent of households reported saving part of their transfers. This programme provided financial education, and credit and bank accounts were opened for depositing wages and to promote savings. Such financial inclusion, in the form of opening savings accounts, has a strong effect on savings behaviour (Bynner and Paxton, 2001).

Households in poor rural communities frequently save through informal associations, such as the *iddirs* in Ethiopia.²¹ Social protection programmes can have a significant role in promoting beneficiary participation in social networks of this kind, as discussed later in this chapter.

The available evidence also points to social protection programmes facilitating access to credit. Barca et al. (2015) found evidence that six cash transfer programmes in sub-Saharan Africa allowed households to be seen as more financially trustworthy, increased their creditworthiness and reduced their debt levels. Greater creditworthiness can help households obtain bridging credit from traders, participate in groups or associations that require regular contributions and improve access to institutions (Barca et al., 2015; OPM, 2014). In many cases, however, households remain risk-averse and reluctant to take advantage of their greater access to credit. Handa et al. (2013) and Daidone, Davis, Dewbre, González-Flores et al. (2014) found that cash transfer

²¹ The *iddir* is the most inclusive and widespread social

network in Ethiopia. Its original function was to provide funeral services and to support bereaved family members morally and financially, but its scope is now much wider

⁽Abay, Kahsay and Berhane, 2014).

 $^{^{\}mbox{\scriptsize 20}}$ See Chapter 2 for more details on these programmes.

programmes in Ghana and Zambia led to households reducing their borrowing and paying off existing debt, while increasing their savings. In Lesotho, the cash transfer had no impact on credit, borrowing or debt (Daidone, Davis, Dewbre and Covarrubias, 2014). Also, Paraguay's Tekoparã programme had a positive impact on access to credit, but only for the moderately poor, not the extremely poor. Beneficiary households had, on average, 7 percent higher access to credit than non-beneficiary households. In rural areas, the impact was slightly larger between 8 and 10 percent, but again only the moderately poor benefited in this way, with no such impact on the extremely poor (Soares, Ribas and Hirata, 2008).

Social protection can increase on-farm investment and farm production

Social assistance can have a positive impact on family farm production, as with the Mexican PROCAMPO (now renamed PROAGRO Productivo) and PROGRESA (now Prospera) programmes (Ruiz et al., 2002), likewise with the impacts of the significant expansion from 1991 of retirement benefits (social pensions) on the rural population of Brazil (Delgado and Cardoso, 2004). Growing evidence confirms that social protection programmes do induce such investments. The most recent and comprehensive review of studies assessing the impact of social protection, specifically social assistance, on household assets (Hidrobo, Hoddinott, Kumar and Olivier, 2014b) found that social protection programmes led, on average, to a 14 percent increase in the number of households owning livestock, an 18 percent increase in the total value of livestock held, a 41 percent increase in the proportion of households owning productive farm assets and a significant increase in productive farm assets owned. However, there was wide variation in the outcomes, as evidenced by the more detailed results below.

In Ethiopia, the PSNP increased livestock holdings, with stronger impacts for households that participated longer (Berhane et al., 2011; Berhane et al., 2014). This impact was dramatically higher for PSNP beneficiaries who also participated in the Other Food Security Programme (OFSP) and later the Household Asset Building Programme (HABP), which included access to credit;

assistance in obtaining livestock, bees, tools and seeds; and assistance with irrigation or water-harvesting schemes, soil conservation and improvements in pastureland. Households benefiting from both the PSNP and the OFSP/HABP were 21 percentage points more likely to use fertilizers than households benefiting from neither. Among households participating in the PSNP, access to the OFSP/HABP raised the likelihood of fertilizer use by 19 percentage points and the probability of investing in stone terracing by 13 percentage points (Berhane et al., 2011). The Ethiopian experience shows that it is possible to implement a large-scale programme that builds assets even when infrastructure and resources are limited (Berhane et al., 2014).

For Bangladesh, three different unconditional cash transfer programmes that targeted the ultra-poor were compared (Ahmed, Quisumbing et al., 2009): the IGVGD, the FSVGD and the FFA, as well as one public works programme, the RMP (see also Chapter 2). The average value of livestock holdings for IGVGD and RMP participants increased by 96 and 108 percent, respectively, compared with the control group; on the other hand, there was no statistically significant increase in the case of FSVGD and FFA participants. Households that received training in and undertook income-generating activities did particularly well. The success of the IGVGD programme and the RMP is explained by their ability to help households overcome the high cost of acquiring livestock - the former by giving participants access to loans through NGOs and the latter by making relatively large and lumpy transfers. Only the beneficiaries of the IGVGD programme significantly increased renting or leasing of land for cultivation. The reason, the authors speculated, may be that the IGVGD is the only programme that included a mechanism for accessing credit.

The Zambia Child Grant model of the SCT programme, which made relatively large unconditional transfers of nearly 30 percent of per capita income, allowed beneficiary households – 20 000 ultra-poor households with children under five years of age – to increase the area of land worked by 18 percentage points (American Institutes for Research, 2013). The programme also increased ownership of a wide variety

of animals, both in terms of share of households with livestock (a 21 percentage point increase overall, from 49 percent at the baseline) and in the total number of different types of poultry. There was also a significant positive impact on the ownership of tools, while the share of households with any expenditure on inputs (seeds, fertilizer and hired labour) increased by 18 points from a baseline share of 23 percent. These investments led to a 50 percent increase in the overall value of agricultural commodities produced, which are primarily sold rather than consumed on-farm. The programme produced a household-level multiplier, with the increase in per capita consumption 25 percent greater than the transfer itself (Daidone, Davis, Dewbre, González-Flores et al., 2014).

Lesotho's CGP led to an increase in crop input use and expenditures, with the share of households using pesticides increasing from 12 to 20 percent. The increase in input use led to an increase in maize production and, for labour-constrained households, in sorghum production, as well as in the frequency of garden plot harvest (Daidone, Davis, Dewbre and Covarrubias, 2014). In Kenya, there were large and significant increases in the share of smaller households (15.4 percentage points) and female-headed households (6.0 percentage points) owning small animals. Beneficiary households, and especially smaller households (which often included those headed by women), consumed significantly more cereals, animal products (meat and dairy) and other food from own production compared with the control group households (Asfaw et al., 2014).

The Mchinji pilot of Malawi's unconditional Social Cash Transfer programme increased goat and chicken ownership by 52 and 59 percent, respectively (Covarrubias, Davis and Winters, 2012). Increases in cattle ownership were significant, but of much smaller magnitude. For the same programme, beneficiary households invested more in agricultural implements such as hoes, sickles and axes. Ultimately, these households were able to achieve a substantial increase in agricultural production on their own farms, resulting in higher consumption from own production. The significant impact was also a result of the size of the transfers, which, at almost 30 percent of household

expenditures, was relatively large (Boone et al., 2013).

The Plurinational State of Bolivia's BONOSOL social (non-contributory) pension programme led beneficiary households to increase agricultural investments for crop production. In particular, female-headed beneficiary households were 8.8 percentage points more likely to purchase pesticides and 7.5 percentage points more likely to rent a plough (Martínez, 2004).

In Mexico, PROGRESA/Oportunidades (now Prospera) had large impacts on agricultural assets from participation in the conditional cash transfer programme. For example, beneficiary households owning no agricultural assets increased their use of land for agricultural purposes by 15.3 percent. Beneficiary households, in general, were 17.1 percent more likely to own draught animals and 5.1 percent more likely to own production animals compared with the control households, with the effect stronger for households owning no agricultural assets before participation (Gertler, Martínez and Rubio-Codina, 2012).

Finally, beneficiaries of Paraguay's *Tekoporã* conditional cash transfer programme invested 45–50 percent more in agricultural production and were 6 percent more likely to acquire small livestock, such as poultry and pigs, while there was no effect for acquisition of larger animals such as cattle (Soares, Ribas and Hirata, 2008).

These examples demonstrate that many social protection programmes, regardless of type, had positive impacts on the agricultural investment decisions of family farmers, with the magnitude of the impact varying for a number of reasons related to programme design as well as gender and socio-cultural context (see also Box 11) (Tirivayi, Knowles and Davis, 2013). However, not all studies of social protection programmes found positive impacts on investment and asset accumulation. Maluccio (2010), for example, found no impact on livestock and land ownership from the (now discontinued) Red de Protección Social programme in Nicaragua; nor did Handa et al. (2013) for Ghana. Qualitative data indicate that unconditional cash transfers in Ghana (LEAP) and Kenya (CT-OVC) stimulated asset acquisitions for the better off, but not for the poorest households (OPM, 2013a and

BOX 11 Gender plays an important role in investment decisions and productivity

Social protection programmes need to pay particular attention to women farmers. Despite the range of evidence that gender equality and women's empowerment can increase agricultural productivity and improve broader social outcomes, the reality is that gaps remain between men and women when it comes to productivity and engagement in the rural labour market (FAO, 2011; Croppenstedt, Goldstein and Rosas, 2013). Women face discrimination in the labour market; have less access to productive assets, inputs, resources and services, which limits their agricultural productivity; and also face other challenges including limited control over assets and resources (including labour), lower levels of education, far greater domestic care responsibilities, and limited social ties facilitating wage employment. For example, in Malawi, yields achieved on plots managed by women are 25 percent lower than on those plots managed by males. Eighty percent of this gap is explained by the lower levels of agricultural input use on women's plots, including fertilizer and extension services (World Bank and ONE, 2014).

In Brazil, recognition of gender inequalities in rural areas has led to implementation of affirmative action policies since 2003, including mandatory joint ownership of land and, from 2004, access to loans for investment regardless of the amount of loans held by the family. Because many women had no official

documents and were typically excluded by public policies, from 2004, the National Women Rural Workers Documentation Programme (PNDTR - Programa Nacional de Documentação da Trabalhadora Rural) ensured free access for women to a range of documents, including birth certificates, identity cards, labour cards, Individual Taxpayer Registry, registration for social security, fishing registry, Pronaf¹ eligibility declaration (DAP – Declaração de Aptidão ao Pronaf) and registration in the Single Registry for the Federal Government Social Programmes (CadÚnico – Cadastro Único para Programas Sociais). More than 1.2 million women have been assisted, and 2.5 million documents have been issued (Del Grossi and Marques, 2015). These measures are supported by efforts to increase the participation of women in consultative and decision-making bodies. Other measures include the "Actions to Fight Violence Suffered by Farming and Forest Working Women", and the Rural Women's Productive Organization Programme (POPMR – Programa de Organização Produtiva das Mulheres Rurais), which encourage women's economic organization and provide support on matters such as management, production, commercialization and training.

2013b). In Chapter 4, we return to this issue and consider which factors may explain the success and failures of some programmes.

Social protection can also stimulate nonfarm activities

Rural households, including farm households, rely significantly on economic activities and sources of income other than agriculture (Davis, Di Giuseppe and Zezza, 2014) (see also Chapter 1). It is therefore relevant that available evidence shows that social protection can encourage non-farm investments by rural households. In Bangladesh, for example, about 37 percent of RMP participants started small business enterprises (Ahmed, Quisumbing et al., 2009). In Kenya, CT-OVC transfers enhanced participation in non-farm enterprises by seven percentage points for female-headed households, while the effect was negative for male-headed households (Asfaw et al., 2014). In Zambia, the Child Grant model increased the share of beneficiary households operating

¹ Pronaf (Programa Nacional de Fortalecimento da Agricultura Familiar) is the National Programme for Strengthening Family Farming, discussed in more detail in Chapter 5.

a non-farm enterprise by 17 percentage points; moreover, the programme doubled the average number of months in operation (of the non-farm enterprise), the value of total monthly revenue and profit, and the share of households owning business assets (American Institutes for Research, 2013). In South Africa, social pension beneficiaries started new microenterprises or strengthened existing ones (Du Toit and Neves, 2006), while in Ethiopia, beneficiaries of both the PSNP and the HABP were more likely to own and run their own non-farm enterprises (Gilligan et al., 2009).

Latin American evidence points to the positive effects of social protection programmes on off-farm investments. The Mexican PROGRESA/Oportunidades/Prospera programme increased the probability of households operating a non-farm microenterprise (Gertler, Martínez and Rubio-Codina, 2012; Todd, Winters and Hertz, 2010), while beneficiaries were 25 percent more likely to become entrepreneurs (Bianchi and Bobba, 2013). However, Brazil's Bolsa Família programme was only positively associated with entrepreneurial investments in urban areas, while no impact was observed in rural areas (Lichand, 2010).

As with on-farm investment, not all social assistance programmes have enhanced off-farm enterprise activity by recipient households. In Nicaragua, for example, participation in the (now discontinued) *Red de Protección Social* programme actually decreased involvement in informal enterprise (Maluccio, 2010), while there were no impacts of cash transfer programmes in Ghana and Lesotho (Handa et al., 2013; Daidone, Davis, Dewbre and Covarrubias, 2014).

Social protection influences household labour allocation

Social protection also has important implications for the allocation of household labour. The income effect produced by the provision of social protection can lead individuals to work less – indeed, this may be the objective for elderly-headed households or for child labour. Individuals may also appear to work less, but instead substitute labour for domestic chores or child care. Further, social protection may facilitate

reallocation of labour away from casual agricultural wage labour due to the lack of other alternatives (Fink, Jack and Masiye, 2014). Social protection programmes may require households to supply labour (e.g. in the case of public works programmes) and/ or children to attend school, which may also imply labour reallocation within households. With increased investment in on-farm and non-farm production, social protection can lead to reallocation of labour to family production activities. Overall, the evidence suggests that social protection programmes have had minor impacts on the overall labour supply, but can lead to significant shifts in labour reallocation within households. Ultimately, the size and direction of the impact depends on a variety of factors, including household size, demographic composition, the nature of the programme, household economic activities and local labour markets.

Evidence from conditional cash transfer programmes in Latin America suggests that the impact on labour supply is a modest disincentive at most, while some programmes reduce child labour (Fiszbein et al., 2009). Many studies do not find a significant impact on participation in wage employment by males and females, but some find evidence of a reallocation of household labour between agriculture and non-agricultural sectors. For example, Nicaragua's (now discontinued) Red de Protección Social did not have an impact on labour market participation, but slightly reduced the time spent working by males (Maluccio and Flores, 2005). The programme also led to a reallocation of labour from agriculture to higher-return non-agricultural employment (Maluccio, 2010).

The Bolsa Família programme in Brazil either had no effect on total hours worked or, at most, created a slight disincentive to work (de Brauw et al., 2015; Teixeira, 2010). The disincentive effect was greater for informal and unpaid workers, with irregular or no sources of income as well as for women, and was more pronounced when beneficiaries received more. Some women substituted housework for wage employment, perhaps because of low wages and the relatively high time requirements of meeting programme conditionalities (Ribas and Soares, 2011; de Brauw et al., 2015).

Bolsa Família has also led households to move labour from formal-sector employment to the informal sector (de Brauw et al., 2015), perhaps due to households trying to "hide" income by working in the informal sector to remain eligible for the programme.

In Paraguay, the *Tekoporã* programme had a negative impact on male labour supply, possibly due to an increased reservation wage²² for poor men, who reduced their participation in casual labour (Soares, Ribas and Hirata, 2008). In Mexico, however, PROGRESA/Oportunidades/Prospera did not affect the adult labour supply, nor does the Programa Apoyo Alimentario food aid programme (targeting areas not covered by Oportunidades), which provides either cash or in-kind transfers. However, transfers by both programmes have led to a significant switch by males (but not females) out of agriculture and into higher-return nonagricultural activities (Skoufias, Unar and González-Cossío, 2008; Alzúa, Cruces and Ripani, 2012).

Evidence from unconditional cash transfers in sub-Saharan Africa also reveals a mixed picture. Old-age pension schemes had varied impacts in South Africa, although they appear to have led to an overall reduction in participation by the elderly. Several studies found either no or a negative effect on labour supply (see, for example, Ranchhod, 2006). On the other hand, after accounting for migration, such transfers increased labour market participation for some households, as pensions helped support migrants until they became self-sufficient, while older pensioners could care for small children, thus freeing younger adults to look for work elsewhere (Ardington, Case and Hosegood, 2009).

In Malawi and Zambia and, to a lesser extent, in Kenya, cash transfer programmes led to a shift from agricultural wage labour to on-farm activities for adults. In Zambia, the Child Grant transfer led family members to reduce their participation in, and the intensity of, agricultural wage labour. The impact was particularly strong for women, amounting to a 17 percentage point reduction in participation and 12 fewer days a year. Both men and women increased the time they spent on family

When social protection programmes particularly public works programmes – are large enough, they can tighten urban and rural labour markets, pushing up unskilled labour wages. In some contexts, this can reduce worker exploitation by raising the reservation wage. For example, the Meket Livelihoods Development Project, a cashfor-work transfer programme in Ethiopia, enabled poor households to renegotiate contractual sharecropping and livestock arrangements with richer households (Adams and Kebede, 2005). By setting the wage above the local casual labour rate, the MGNREGA public works programme in India encouraged people to withdraw from exploitative casual labour such as bonded labour (McCord, 2012). In addition, by paying men and women equal wages, the programme narrowed the gender wage gap; wages for female casual labourers increased by 8 percent in participating districts compared with non-participating districts (Azam, 2012).

However, public works programmes can also distort local labour markets if the wages paid are higher than the prevailing rates, thereby creating labour deficits in other

agricultural and non-agricultural businesses (Daidone, Davis, Dewbre, González-Flores et al., 2014). In Malawi, the SCT programme led to a substantial drop in participation (by 61 percent, according to the second follow-up survey) in low-skilled agricultural wage labour, as recipients switched from ganyu²³ labour due to the lack of other alternatives to own-farm agricultural production (Covarrubias, Davis and Winters, 2012). In Kenya (Asfaw et al., 2014) and Lesotho (Daidone, Davis, Dewbre and Covarrubias, 2014), this shift varied by age and gender, while in Ghana (Handa et al., 2013), the LEAP programme also increased on-farm activities. This shift was consistently reported in qualitative field work in Ghana, Kenya, Lesotho, Malawi and Zimbabwe (Barca et al., 2015). In Ethiopia, there was no negative labour supply effect for households with access to both the PSNP and a complementary package of agricultural services and inputs (Gilligan, Hoddinott and Taffesse, 2008).

²² The reservation wage is the minimum wage at which a labourer will accept employment.

 $^{^{23}}$ Ganyu labour is a type of low-wage casual labour performed in Malawi.

productive sectors (Creti, 2010; McCord, 2012). The MGNREGA programme has actually eased seasonal fluctuations in labour demand and thus stabilized wage rates (Shariff, 2009; Creti, 2010). Yet, setting the wages in public works programmes at the prevailing local rates in the very poor low-wage environments in most sub-Saharan African countries could undermine the programmes' food security objective as it might draw off agricultural wage labour (Barrett, Holden and Clay, 2005).

Social protection tends to reduce child labour

Most, but not all evidence shows that social protection programmes can reduce child labour. In Latin America, two major systematic reviews found that most conditional cash transfer programmes significantly lowered child labour (IEG, 2011; Fiszbein et al., 2009). In Paraguay, the *Tekoporã* programme had no significant impact on child labour, while it improved school attendance (Soares, Ribas and Hirata, 2008). On the other hand, the former Nicaraguan Red de Protección Social programme reduced child work by three to five percentage points among children aged 7–13 years (Maluccio and Flores, 2005). Frequently, impacts on child labour have been mainly among older children. The Mexican PROGRESA/Oportunidades/Prospera programme, for example, reduced child work among children aged 12-17 years, especially among boys, and increased school enrolment at the junior high school level (Skoufias and Parker, 2001). Similar findings have been reported in studies evaluating two conditional cash transfer programmes in Cambodia and Pakistan, two school-feeding programmes in Bangladesh and Burkina Faso, one unconditional cash transfer programme in Ecuador and two education fee waiver/ scholarship programmes in Colombia and Indonesia (IEG, 2011).

In sub-Saharan Africa, many unconditional cash transfer programmes have been associated with large reductions in child labour. In South Africa, children residing in households with a resident eligible for an old-age pension reduced their total hours of work by 33 percent (Edmonds, 2006; IEG, 2011). In Kenya, the CT-OVC programme substantially reduced child labour on family

farms, especially for boys (Asfaw et al., 2014; OPM, 2013b), while in Lesotho the CGP programme also reduced child labour on farms (Daidone, Davis, Dewbre and Covarrubias, 2014). Other studies reported similar findings from the LEAP programme in Ghana (OPM 2013a). In Malawi, however, the SCT programme reduced child wage labour outside the household while it rose inside the household, as younger children replaced adults in performing chores, caring for other household members and working on the farm; nevertheless, this was combined with a substantial rise in school attendance (Covarrubias, Davis and Winters, 2012). The Zambia Child Grant model had no clear impacts on child labour (Daidone, Davis, Dewbre, González-Flores et al., 2014). In Ethiopia, the PSNP public works scheme had mixed impacts in rural areas: increasing the amount of time children worked for pay and the time that girls spent studying, but reducing the total hours spent on all types of work (including household chores) by children (Woldehanna, 2009).

Social protection facilitates participation in social networks

Social protection interventions have consequences beyond the household as they spill over into the local community and economy. These spillover effects may be facilitated by social networks, which help overcome credit and liquidity constraints, and through which poor households can manage risk through informal exchanges or transfers among extended families, friends and neighbours.24 In Ethiopia, for example, membership in informal savings associations (iddir) - whose main function is to help members during bereavements or at other difficult times – improves household access to land, labour and credit markets by between 7 and 11 percentage points (Abay, Kahsay and Berhane, 2014). In Mexico (Angelucci et al., 2009), households belonging to an extended family network shared resources and were more able to smoothen consumption over time than their neighbours who had no close relatives in the village; they were also

²⁴ The spillover effects that social networks help facilitate are not only economic but also social in nature.

more able to undertake lumpy investments, such as for education for their children. As a consequence, better connected households accumulated more resources over time than their isolated, but otherwise similar, neighbours.

Empirical evidence is emerging on the links between social protection interventions and increased participation in social networks. The *Tekoporã* programme in Paraguay increased participation in trade unions, cooperatives or producer organizations, as well as religious groups, by between six and ten percentage points. Social participation by the extremely poor increased by seven to nine percentage points, whereas participation by the moderately poor did not change significantly (Soares, Ribas and Hirata, 2008).

Unconditional cash transfer programmes appeared to enable re-entry into existing social networks, as beneficiaries were viewed more favourably and felt to be more trustworthy by other community members, which, for some, has boosted income-generating activities and overall economic opportunities, social status and self-esteem, as well as connectedness with other community members. These aspects have both direct and indirect impacts on household resilience and sustainable livelihoods. For six cash transfer programmes in sub-Saharan Africa (Barca et al., 2015),25 predictably regular payments often improved beneficiaries' access to social networks, but active participation in decision-making was particularly difficult for elderly, immobile or illiterate beneficiaries.

The Lesotho CGP significantly strengthened reciprocity arrangements around foodsharing while reducing remittances received from family members living outside the community (Daidone, Davis, Dewbre and Covarrubias, 2014). In Malawi, private transfers to cash transfer beneficiaries decreased by 32 percent, mostly due to a decline in cash and in-kind gifts from friends and family, rather than from remittances (Covarrubias, Davis and Winters, 2012).

In Ethiopia (Berhane et al., 2011), there was no evidence that the PSNP reduced or replaced private transfers. However, an earlier study (Gilligan et al., 2009) found that the programme sometimes replaced private transfers when payments were regular, and reduced private transfers when payments were irregular. On the other hand, there is no evidence that food aid and food-forwork crowded out private transfers among pastoralists in Ethiopia and Kenya (Lentz and Barrett, 2005). In South Africa, old-age pensioners experienced a 25-30 percent decline in private transfers from their children once they began to receive their pensions (Jensen 2003; IEG 2011).

Latin America offers further evidence of the impact of social protection programmes on private transfers. Thus, the (now discontinued) Red de Protección Social programme in Nicaragua did not replace private transfers such as gifts and loans (Maluccio and Flores, 2005). In Mexico, the PROGRESA/Oportunidades/Prospera programme's impacts on private transfers have varied with programme duration. After six months, the programme crowded out private transfers to beneficiary households (Albarran and Attanasio, 2002), while other evidence shows that after 19 months the programme did not have this effect (Teruel and Davis, 2000). The programme increased the flow of private transfers to non-beneficiary households in target communities by 33 percent, compared with non-beneficiary households in control communities (Angelucci and De Giorgi, 2009; IEG, 2011).

Social protection programmes can also create tensions in local communities. In Ghana, Kenya, Lesotho, the United Republic of Tanzania and Zimbabwe, unconditional cash transfer programmes led to jealousies and tensions between beneficiaries and non-beneficiaries (OPM, 2013a; OPM, 2013b; Barca et al., 2015; Pellerano et al., 2014; Evans et al., 2014). For Mexico's former PROGRESA, there have been reports of tensions between beneficiaries and nonbeneficiaries. Often, non-beneficiaries did not understand why they had been excluded and this resentment came to the fore especially around the time when beneficiaries collected their payment

²⁵ The synthesis report covers the following cash transfer programmes: Ethiopia's Social Cash Transfer Pilot Programme (SCTPP), Ghana's (LEAP), Kenya's (CT-OVC), Lesotho's (CGP), Malawi's (SCT) and Zimbabwe's (HSCT).

(Adato, 2000). These tensions are largely attributed to actual or perceived targeting errors, lack of transparency in the selection process and poor communication.

Public works provide local infrastructure and other community assets

Public works programmes are designed to alleviate poverty and hardship by offering or guaranteeing employment for the provision of community-level assets, in particular, infrastructure, land management and social services (Subbarao et al., 2013). Supply of public goods is generally a secondary, but nevertheless key, objective; when properly implemented, these programmes can crucially complement household investment (Alderman and Yemtsov, 2014). The Ethiopian PSNP, for instance, facilitated the rehabilitation of over 167 000 hectares of land and 275 000 kilometres of stone and soil embankments, and planted more than 900 million seedlings (World Bank, 2012). Local irrigation projects under the PSNP increased the amount of water available for agriculture (Subbarao et al., 2013). In Bangladesh, road improvement projects led to a 27 percent increase in agricultural wages, an 11 percent increase in per capita consumption and a rise in school enrolment for girls and boys (Khandker, Bakht, and Koolwal, 2006).

Public works programmes can provide important opportunities to improve genderresponsive community infrastructure and assets. Some social protection programmes explicitly recognize the linkages between infrastructure and women's empowerment and support the development of broader gender-responsive community assets that improve women's access to resources such as water and fuel, in addition to saving time and increasing safety. The PSNP in Ethiopia prioritizes projects that produce community assets that reduce women's work burden (Berhane et al., 2013). Examples include the construction of community water points and fuelwood sources, and the use of public works labour to cultivate the land of labourconstrained female-headed households (Holmes and Jones, 2013). Such prioritization is having an impact: the construction of water supply, sanitation and hygiene facilities, for example, has reduced women's work burden (USAID, 2012).

Other countries have also prioritized "women's" community assets. Peru's rural roads project, aimed at remote indigenous populations, has helped women improve footpaths, facilitating their access to social services and markets, and girls' access to schools (World Bank, 2009; Okola, 2011). Similarly, Zambia's Food for Work programme, almost entirely taken up by women (as men typically refused to work for non-cash payments), built pit latrines in rural communities. The latrines have reduced the distance that women have to walk and thus their vulnerability to sexual violence (Kabeer, 2008).

One of the main challenges facing asset creation programmes is the issue of choice, i.e. who chooses and how (see also the section on "Strengthening women's role in enhancing human resources through social protection" on pages 40-41). Women and men tend to prioritize different types of infrastructure. Even where both sexes give priority to the same type of asset, for example roads, there can be critical differences in the types of road they want. In Peru, for example, women walk everywhere and thus wanted footpaths, rather than roads suitable for motor vehicles. Similarly, in India, where the MGNREGA programme has been criticized for emphasizing job creation over infrastructure development (Mahaptra et al., 2008), women beneficiaries have tended to favour health care, child care and sanitation projects. Nevertheless, as women have limited access to decision-making, public works projects have tended to give priority to roads, water management and tree planting.

However, public works programmes have also come in for their share of criticism. For example, many poor households are labour-constrained and therefore, depending on the context, public works programmes may not be the appropriate instrument to help them. Moreover, the assets created by public works programmes do not always meet basic technical standards (Devereux and Guenther, 2009).

Overall, social protection can have substantial positive local economy impacts

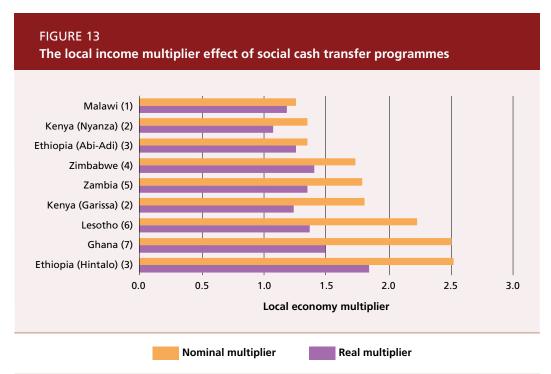
Most social protection beneficiaries live in places where markets for financial services – such as credit and insurance, labour, goods and inputs – are lacking, difficult to access or do not function well. Cash transfers, when provided regularly and predictably, help households overcome the obstacles that limit their access to credit or cash (Tirivayi, Knowles and Davis, 2013). This, in turn, can increase spending on productive assets and other income-generating activities, influence the role of the beneficiaries in social networks, increase market access and inject resources into local economies.

When beneficiaries receive cash transfers, the immediate impact is to raise the purchasing power of beneficiary households. They generally spend the cash, although some of the transfers may increase savings. As the cash is spent, the impact of the transfers spreads from beneficiary households to others. Income multipliers in programme villages are set in motion by doorstep trade, purchases in village stores and periodic markets.

The local income multiplier, which measures the resulting changes in overall

local income per unit transferred (Taylor, 2013), has traditionally been estimated using models such as social accounting matrices or computable general equilibrium (CGE) models. Using a CGE model combined with micro-agricultural household models, Taylor, Dyer and Yúnez-Naude (2005) estimated that eliminating the PROGRESA/Oportunidades/ Prospera programme in West-Central Mexico would reduce the incomes of landless households by more than 7 percent, and for households with small landholdings by more than 4 percent. Eliminating the programme would have minimal impact on commercial maize production, but would reduce demand and subsistence maize production by between 1.3 and 2.1 percent. Similarly, in Brazil, an estimated 10 percent increase in Bolsa Família transfers increased municipal GDP by 0.6 percent (Landim, 2009).

The Local Economy-wide Impact Evaluation (LEWIE) model captures income multiplier effects of social protection programmes and other interventions by assessing the impact on local economic activity (Taylor and Filipski, 2012). The LEWIE methodology is designed to fully assess and understand the effects of cash transfers on local economies; including on the production activities of both beneficiary and non-beneficiary



Source: (1) Thome et al., 2015; (2) Taylor et al., 2013; (3) Kagin et al., 2014; (4) Taylor et al., 2014; (5) American Institutes for Research, 2013; (6) Taylor, Thome, and Filipski, 2013; (7) Thorne et al., 2014.

BOX 12 The impact of social protection programmes on prices

When a rise in income increases demand for goods and services not accompanied by increases in supply, much of the additional income can be offset by price rises. The strength of the supply response is therefore important in determining the impact on the local economy.

The effect of food aid on local prices depends very much on the local context, sometimes pushing prices up or down (Barrett, 2002). In sub-Saharan Africa, the size and duration of the programme, the level and scale of benefits, and local market conditions all influence how social protection affects local prices. In northern Uganda, for example, an emergency cash transfer programme caused temporary local price inflation (Creti, 2010). In the Niger, a short-term cash transfer programme with wide coverage and payments of significant size produced temporary inflation in the prices of edible oil and milk in a market with high transaction costs and poor market information (Save the Children, 2009). In Kenya, the HSNP (Merttens et al., 2013) and in Zambia the Child Grant model (American Institutes for Research, 2013) were not inflationary.

In particular, large social protection schemes can lead to short-term price effects. For example, the cash transfer component of the PSNP in Ethiopia was followed by price rises in the short run (Devereux et al., 2006), but this did not persist and, eventually, prices in PSNP and non-PSNP districts converged (Creti, 2010). The PSNP and relief food aid did not have an impact on grain prices, but some cash transfers exerted upward pressure on prices, especially for teff (Assefa Arega and Shively, 2014). Cash transfer programmes in six sub-Saharan African countries produced little evidence of price effects (Barca et al., 2015).

The Programa de Apoyo Alimentario (PAL) in Mexico, which included both cash and in-kind transfers, had relatively large price effects (Cunha, De Giorgi and Jayachandran, 2011). In villages where transfers were in cash, prices rose, while in villages where transfers were in kind, prices fell. There were no differences in food prices between programme and control communities due to the PROGRESA (now Prospera) programme (Hoddinot and Skoufias, 2004; Angelucci and De Giorgi, 2009).

groups, why these effects happen; and how they may change when programmes are scaled up to larger regions. All these aspects are important for designing projects and explaining their likely impacts to governments and other partners.²⁶

The LEWIE model has been used to estimate local income multipliers for a number of programmes and countries (Figure 13). The estimates range from 1.25 in Malawi to 2.52 in Hintalo-Wajirat Tabias in Ethiopia. That is, every Ethiopian birr transferred by the Ethiopia Social Cash Transfer Pilot Programme (SCTPP) in Hintalo-Wajirat, generates an

additional 1.52 birr, for a total of 2.52 birr in income generated in the local economy.

Differences among countries, and among areas within countries, are determined by the openness and structure of the local economy, the degree to which goods and services bought are locally produced, and the flexibility of local supply. When the local supply response is constrained, the increased demand, brought about by the cash transfer programme, can raise prices and consequently lower the income multiplier in real terms (Box 12). In each LEWIE study, the authors included in the model a variety of constraints, such as credit and capital constraints. In the presence of supply constraints the real income multiplier could be significantly lower than the nominal multiplier, although still greater than one in all cases (Figure 13).

For example Zambia's Child Grant model could potentially raise income by 1.79 kwacha

²⁶ FAO's From Protection to Production (PtoP) project applied the LEWIE model to assess the impact of cash transfer programmes in Africa. As a result, there now exists a valuable body of evidence documenting the economywide impacts of cash transfers, their magnitude, their pathways and the substantial benefits to non-beneficiaries.

for every kwacha transferred; however, in the presence of supply constraints and inflation, the actual multiplier might only be 1.34 (American Institutes for Research, 2013). In Ghana, supply-side constraints could reduce the multiplier from 2.5 to 1.5 (Thorne et al., 2014).

An informative example is the Ethiopian SCTPP, introduced in 2011. This programme covers two woredas²⁷ in the Tigray region, one rural (Hintalo-Wajirat) and one urban (Abi-Adi) (Kagin et al., 2014). Each birr distributed in rural Hintalo-Wajirat generated an extra 1.52 birr in the local economy, for a total localincome multiplier of 2.52. By comparison, each birr distributed in urban Abi-Adi generated only an extra 0.35 birr, for a total localincome multiplier of 1.35. Thus, the initial transfers of 5.58 million birr in Hintalo-Wajirat and 1.62 million birr in Abi-Adi potentially generated 14.06 million birr and 2.19 million birr, respectively, of additional income in the local economies. The difference in impact was because, unlike Hintalo-Wajirat, Abi-Adi only has a retail sector. The impact on the retail sector is large, but many goods bought are not locally produced, coming from outside the area. The multiplier effects are therefore spread more widely beyond the local economy than in rural Hintalo-Wajirat.

In Hintalo-Wajirat, the non-beneficiaries, who did not receive the transfer, benefited indirectly from their economic interactions with beneficiary households; virtually all the spillover effects accrued to non-beneficiary households, who could take advantage of higher demand because they owned productive assets. Supply-side constraints lowered the multiplier effect to an estimated 1.84 for Hintalo-Wajirat (Kagin et al., 2014). Agricultural and infrastructure interventions that help relax supply constraints are therefore an important complement to social protection interventions.

Key messages

- Social protection can enhance nutrition, health and education, with implications for future productivity and employability.
- When social protection programmes are regular and predictable they promote
- ²⁷ A *woreda* is the third-level administrative division in Ethiopia.

- savings and investment in both farming and non-farm activities and reduce the risk households face, thus encouraging them to engage in riskier activities offering higher returns.
- Social protection does not reduce work effort. But it does give beneficiaries greater choice, and many shift time previously dedicated to casual agricultural wage employment of last resort to own-farm work or non-agricultural employment. Some programmes have facilitated female participation in the labour force. Taken together with the increase in farm and non-farm production activities, social protection strengthens livelihoods, instead of fostering dependency.
- Social protection programmes can strengthen workers' bargaining power. In particular, public works/employment programmes, can push up wages for unskilled labour when large enough; however, care must be taken in programme design to avoid negative impacts on agricultural production.
- By increasing income and providing clear messages, social protection programmes tend to reduce child labour and increase school attendance.
- Social protection can strengthen social networks such as informal savings associations and reciprocity mechanisms that serve as informal community risk management mechanisms. These networks facilitate spillover effects from transfer beneficiaries to non-beneficiaries and hence to the wider local economy.
- Public works programmes can provide important infrastructure and community assets and, when designed and implemented properly, directly contribute to the local economy.
- Social protection programmes have substantial local-economy benefits by stimulating demand for local goods and services. Non-beneficiaries, especially, stand to gain from this. Complementary programmes that reduce local production constraints, such as access to investment credit or extension services, facilitate the ability of local producers to respond to increases in demand brought about by social protection and help prevent inflation.

4. Understanding what works: implications for programme design and implementation

The evidence presented so far shows that social assistance programmes can effectively reduce poverty, improve food security and nutrition, and promote savings, investment and growth in the local economy. But not all programmes are equally effective, and their impacts can vary a great deal, both in size and in nature. Because social protection programmes are very diverse, comparing their impacts is complicated. Even among programmes that appear quite similar, such as cash transfers for the poor, differences in programme design and implementation can lead to very different outcomes. In this chapter, we review which design and implementation features drive programme impacts, keeping in mind that some impacts are directly related to the objectives of the programme, while others may be unintended consequences.

Targeting may help achieve programme objectives at lower costs

Social protection programmes generally have objectives that define the intended beneficiaries. For example, in general, when cash transfer programmes are meant to reduce poverty, they should target the poor. Further to this general objective, some programmes, especially in sub-Saharan Africa, have more specific objectives such as supporting vulnerable groups, for example orphaned children, HIV-affected populations, the elderly or schoolchildren. How well programmes can achieve their objectives will depend, among other things, on how well they reach their target group.

Not all programmes use a specific targeting approach. For a number of reasons, such as historical or political imperatives, ease of implementation and commitments to

universal rights, some provide benefits to the entire population. For example, in Egypt, until recently food subsidies cost about 1-2 percent of GDP, with around 60 percent of the cost completely untargeted.28 The remainder consisted of subsidized ration cards that allowed 80 percent of Egyptian households to buy rationed amounts of certain goods, such as bread and sugar. The poor benefited considerably from these subsidies, even though some are untargeted. The elimination of food subsidies in Egypt would raise the poverty rate by nine percentage points, from 25.2 to 34.0 percent (Breisinger et al., 2013). Despite the food subsidy programme, however, chronic malnutrition has been rising since 2003: around one-third of all Egyptian children are stunted, 35 percent of the population have poor dietary diversity, while 48 percent of women over the age of 15 are obese. Better-targeted subsidies could transfer more resources to those in need and promote greater dietary diversity.

The previous example shows that, given limited government budgets, targeting can deliver larger and better transfers to selected individuals or households. Not surprisingly, targeting is used in the majority of social programmes in developing countries. The most common methods used are outlined in Box 13. Most social protection programmes combine geographical targeting, proxy means testing and community participation. This is true for most conditional cash transfer programmes in Latin America and the Caribbean and most unconditional cash transfer programmes in sub-Saharan Africa (see Table 1).

Targeting entails administrative, political, private, social and incentive costs (Coady,

²⁸ We note that the Egyptian food subsidy system is undergoing reform, including a move towards greater targeting.

BOX 13

Targeting methods for social protection programmes

Geographical targeting. This method entails targeting individuals or households living in certain areas. The rationale for using this method is based on differences among areas, usually caused by the unequal distribution of natural resources and infrastructure, and differences in agroclimatic conditions (Hentschel *et al.*, 2000). This method works when there is a high and quite homogenous concentration of poor and vulnerable groups in certain areas, such as urban slums or remote rural areas.

Community-based targeting. This method of targeting selects eligible households based on assessment of a selected group of community members and leaders. This mechanism is based on the assumption that local members of the community can identify individuals in need of social programmes better than methods relying on decisions made by others who do not have experience of the mundane realities of local communities. Community-based targeting is an effective way of identifying poor people when their status is not easily identifiable by other methods.

Categorical targeting. This method involves selecting individuals belonging to certain categories of people such as orphaned and vulnerable children, the elderly, the disabled and female-headed households. The characteristics of these categories are more easily observed and monitored. The advantages of categorical targeting include relatively low administrative and political costs, and the general social empathy for the most vulnerable.

Self-targeting. This method is based on voluntary self-selection for programmes designed so that only poor people will apply for the benefits. One example of self-targeting is public works programmes, which offer low wages expected to incentivize only poor people to apply. The administrative costs associated with self-targeting are low, even if other challenges arise.

Means testing. A test that determines selection based on individuals/households meeting some objective criteria such as income levels. When data on income are verifiable, and there is good administrative capacity, means testing can be an accurate method of targeting. In many developing countries, data are lacking, and administrative capacity may be weak, making means testing difficult to implement.

Proxy means testing. In the absence of reliable data on income, a proxy means test is sometimes used. This method consists of using observable characteristics as proxies for a given measure of wellbeing, such as income. Examples of observable characteristics for proxy means testing have usually included demographic characteristics, the education level of household members, the quality of housing, durable goods possessed and productive assets owned (AusAID, 2011; Slater and Farrington, 2009).

Note: For additional detail, particularly on the pros and cons of each method, see Coady, Grosh and Hoddinott (2004) and Cirillo, Gyori and Soares (2014).

Source: Cirillo, Giory and Soares, 2014.

Grosh and Hoddinott, 2004). Administrative costs are those related to data gathering and analysis for targeting design and implementation. Administrative targeting costs are not easy to calculate because of the lack of reliable data, but also because targeting is a continuous process. After initial identification of eligible groups, constant monitoring for possible fraud or changes

in households' social and economic status is needed, even if frequent retargeting is not desirable because of the uncertainty caused, which could, in turn, affect beneficiaries' risk-taking decisions (Farrington, Sharp and Sjoblom, 2007). Lastly, some targeting methods involve high administrative costs, which also need to be taken into consideration (Coady, Grosh and Hoddinott, 2004).

Targeting also involves political costs.
While universal programmes may generate broad or popular support, targeting a given group may reduce political support for, and hence the sustainability of, a programme.
Targeting can also be manipulated to benefit politically favoured groups. The relative sizes

of beneficiary and non-beneficiary groups could eventually play a role in political elections or further political decision-making about targeting.

Social programme beneficiaries can also incur costs, for example those directly related to eligibility such as (re)certification

TABLE 1
Targeting methods employed by selected social assistance programmes

| | MEANS TESTING | PROXY MEANS TESTING | GEOGRAPHICAL TARGETING | COMMUNITY- BASED TARGETING* | CATEGORICAL TARGETING | SELF-TARGETING |
|--|------------------|---------------------------|---------------------------|-----------------------------------|--------------------------|----------------|
| East Asia and the Pacific | | | • | | | |
| China: Di Bao | Х | | | | | |
| Indonesia: Program Keluarga Harapan | | Х | | Х | Х | |
| Philippines: Pantawid Pamilya | | Х | Х | Х | | |
| Latin America and the Caribbean | | | | | | |
| Brazil: Bolsa Família | Х | | | | | |
| Chile: Solidario | | Х | | | | |
| Ecuador: Bono de Desarrollo Humano | | Х | | | Х | |
| El Salvador: Comunidades Solidarias Rurales (formerly Red Solidaria) | | | Х | | Х | |
| Mexico: PROGRESA/Oportunidades/Prospera** | | Х | Х | | | |
| Peru: Juntos*** | | Х | Х | Х | | |
| South Asia | | | | | | |
| Bangladesh: Food for Education | | | Х | Х | Х | |
| India: Indira Gandhi National Old-Age Pension Scheme | | Х | | | Х | |
| India: Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) | | | | | | Х |
| Sub-Saharan Africa | | | | | | |
| Ethiopia: Productive Safety Net Programme (PSNP) | | | Х | Х | | |
| Ethiopia: Social Cash Transfer Pilot Programme (SCTPP) | | | Х | Х | Х | |
| Ghana: Livelihood Empowerment Against Poverty (LEAP) | | Х | Х | Х | | |
| Kenya: Cash Transfer for Orphans and Vulnerable Children (CT-OVC) | | Х | Х | Х | Х | |
| Kenya: Hunger Safety Net Programme (HSNP) | | | Х | Х | Х | |
| Lesotho: Child Grants Programme (CGP) | | Х | | Х | | |
| Malawi: Social Cash Transfer Scheme (SCT) | | | Х | Х | Х | |
| Mozambique: <i>Programa Subsídio de Alimentos</i> (PSA) | | | | Х | х | Х |
| South Africa: Child Grant Programme | Х | | | | Х | |
| Zambia: Multiple Category Cash Transfer (MCP) | | | Х | | Х | |

Notes:

^{**}In general, community-based targeting in the Latin America and the Caribbean region is used to validate the list of beneficiaries determined by other targeting instruments such as means testing or proxy means testing. This is in contrast to sub-Saharan Africa, where community-based targeting is a key component of most programmes.

^{**}In rural areas, community-based targeting was used for ex-post community validation of beneficiaries as determined by proxy means testing. In urban areas, no community-based targeting was used, but the programme employed self-targeting, i.e. households that considered themselves eligible have to apply.

eligible have to apply.

***In Peru, community-based targeting was used for ex-post community validation of the list of beneficiaries determined by proxy means testing.

Source: Cirillo, Gyori and Soares, 2014.

(e.g. paying fees for documents required for participation in a programme) and the opportunity costs of the hours of work foregone to apply. Such costs could affect beneficiaries' decisions to participate. Households could develop an incentive to not remain eligible for a programme (e.g. the disincentive to offer their labour with the availability of unemployment subsidies) or may change their behaviour positively (e.g. by enrolling their children in school because of the enforcement of conditionality).

Social costs could involve, for example, social stigma experienced by households eligible for programmes targeted at poor and/or vulnerable categories of individuals (e.g. people with disabilities or living with HIV/AIDS), or community divisions between beneficiaries and non-beneficiaries. When community members are involved in selecting beneficiaries, negative repercussions could be worse. In an extreme example, in one Ethiopian woreda, the grain store of a member of the food security task force was burned down by former beneficiaries of the PSNP after they had been excluded from it (Devereux et al., 2008).

Evaluating the performance of targeting is crucial to determine whether the targeting mechanism supports its objectives costeffectively. Several tools exist for assessing the efficacy of targeting mechanisms.²⁹ One frequently used measure involves the analysis of leakage (inclusion error) and undercoverage (exclusion error). An inclusion error occurs when individuals not eligible for the programme are included as beneficiaries, while an exclusion error occurs when eligible individuals are excluded by the programme. Errors may arise during the design phase as well as the implementation phase (Sabates-Wheeler, Hurrell and Devereux, 2014). During the design phase, errors arise for two main reasons: budget constraints that compel governments to set a quota of beneficiaries (this implies planned undercoverage rather than an actual error),30 and selected measures

Another popular measure of targeting performance, the CGH index, developed by and named after Coady, Grosh and Hoddinott (2004), compares the actual targeting outcome of an intervention with a common reference outcome such as that obtained due to random or universal allocation of benefits. The index is constructed by dividing the share of benefits accruing to the poorest percentiles, by the share of the population belonging to these percentiles. The CGH index was applied to 122 social programmes in 48 countries for the largest targeting analysis of programmes conducted so far. The authors found that the median programme was able to transfer 25 percent more resources to the poor compared with a hypothetical random allocation. They also found that certain methods, such as means testing and proxy means testing, performed better on average, but noted that better scoring methods also had higher variation in scores. They concluded that no single targeting method is universally superior, and that the same method may perform differently, depending on the programme and country.

In practice, using a combination of targeting methods produces better results, but effective implementation is key and depends on implementation capacity, accountability and the degree of inequality, as greater inequality makes it easier to identify the poor and vulnerable, with targeting outcomes generally better (Coady, Grosh and Hoddinott, 2004).

While the preferred targeting methods depend on the factors mentioned above, certain tools are associated with improved targeting. For example, Brazil's Bolsa Família is one of the best targeted programmes in Latin America; due to the use of a unified household registry (CadÚnico) (Box 14) (Lindert et al., 2007). Established in 2001, this registry is used for all interventions except the Social Security Programme, and covers over 23 million families (Del Grossi

for identifying poor people. Implementation errors can arise because of misrepresentation of the beneficiary's economic or social status, the lack of required documents from the potential beneficiaries and inefficient implementation of targeting. Administrative capacity is also important: in Brazil, municipalities with higher management levels had higher *Bolsa Família* coverage (Portela Souza *et al.*, 2013).

²⁹ For an in-depth discussion of the pros and cons of these tools, see Cirillo, Gyori and Soares (2014).

³⁰ In Brazil, on the other hand, targeting for *Bolsa Familia* followed a more inclusive approach in order not to exclude needy families from the programme. As a result, in 2010, the inclusion error for this programme was greater than the exclusion error, with the former mainly due to the inclusion of families just above the poverty line (Cirillo, Gyori and Soares, 2014).

and Marques, 2015; World Bank, 2014). The greater efficiency and cost reduction achieved by using a unified household registry has attracted much interest from other countries, and about 23 countries now have a social registry, or are developing one, with another ten countries planning to establish one (World Bank, 2014).

Unified registries allow countries to combine programmes more effectively. In Brazil, the CadÚnico combines ten different programmes. In Peru, Juntos, a rural conditional cash transfer programme, selects its beneficiaries using data provided by the unified household registry (Padrón General de Hogares) and the targeting system Sistema de Focalización de Hogares. The same data and targeting system are also used for other social programmes, such as the nutrition programmes, Vaso de Leche, Comedores Populares, Programa Integral de Nutrición, as well as the free health insurance scheme, Seguro Integral de Salud. In addition, unified registries allow governments to develop synergies between policy areas such as social protection and agriculture, an issue we return to in Chapter 5.

The use of targeting indicators is an instrument for reducing poverty. Yet, better targeting will always come at a cost, which implies that fewer resources will be available for distribution to the population. A well-targeted programme might therefore have a lower poverty impact than a programme with a poorer targeting. As a consequence, evaluations should always focus on a programme's poverty impact, not on its targeting performance per se (Ravallion, 2009).

Level, timing and predictability of transfers matter

Social assistance reduces poverty and hunger, and has an impact on production if transfers are able to remove cash and credit constraints, improving households' ability to manage risks. Programmes that do so effectively are those that not only transfer adequate amounts, but are also able to implement transfers on a regular and reliable basis (IEG, 2011; Barca et al., 2015; Tirivayi, Knowles and Davis, 2013; Daidone et al., 2015).

In Bangladesh, for example, the RMP and the FFA programme had larger impacts on women's empowerment and well-being because they transferred larger amounts (almost twice as much) compared with the IGVGD and FSVGD programmes (Ahmed, Quisumbing et al., 2009) (also see Chapters 2 and 3 for more on these programmes). Similarly, the Malawi SCT had a large impact because the transfers, averaging about 30 percent of beneficiary household expenditure (before the transfer), were relatively large (Boone et al., 2013). On the other hand, transfers from Lesotho's CGP were mainly used for food purchases and children's education, and had little impact on livelihood strategies due to the small size of the transfers (Pellerano et al., 2014). Evidence from Ethiopia shows that programme length is also important: the PSNP led to significant improvements in food security for those who had participated in the programme for five years compared with one year (Berhane et al., 2011).

BOX 14 Cadastro Único

Created in 2001, the Cadastro Único (CadÚnico) is the main registry of Brazil's most poor and vulnerable. It is used by the Bolsa Família programme and the Brasil Sem Misera plan (Brazil without Extreme Poverty Plan) to reach about 14 million families each month (World Bank, 2015d). It consolidates different cash transfer programmes and reduces the burden of data collection (Mostafa and Sátyro, 2014). The unified registry is operated by Caixa, a national public bank, which has experience

with large databases and the capacity to make timely monthly transfers.

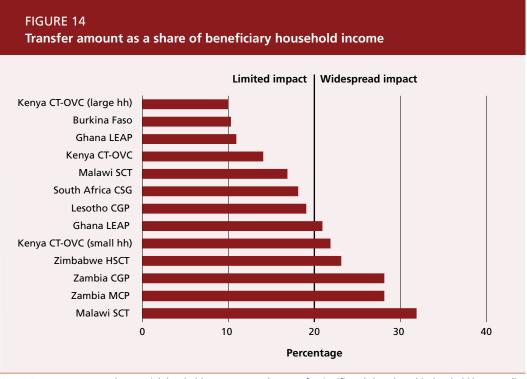
The new database, which targets beneficiaries using unverified means testing (screening unverified household incomes), aligns each member with a social identification number, significantly reducing administrative costs (de la Brière and Lindert, 2005). The registry has become a national reference containing comprehensive data on the poor and needy.

There is a great deal of variation among programmes in the value of transfers as shares of beneficiary households' per capita consumption. Estimates based on ASPIRE (the World Bank's Atlas of Social Protection Indicators of Resilience and Equity) data show that, when expressed as a percentage of the income/consumption of beneficiaries, transfers vary from 53 percent in Eastern Europe and Central Asia, to 27 percent in Latin America, to under 10 percent in sub-Saharan Africa and developing Asia (Fiszbein, Kanbur and Yemtsov, 2013). In Latin America, the transfers, especially of the larger programmes, appear to have been calibrated to cover the average "poverty gap". However, Barrientos and Hinojosa-Valencia (2009) conclude that the transfers focus on supporting schooling and access to health care, rather than on closing the poverty gap.

In sub-Saharan Africa, programmes typically relate the transfer amount to some stated programme objective. For example, Zambia's Child Grant model aimed to provide at least one meal per person daily in the household, with the amount set accordingly. Other programmes focus on eliminating the

poverty gap, closing the food poverty gap, or providing a percentage of the food poverty line income. Since most national programmes in sub-Saharan Africa have food security as a key objective, the food poverty line or cost of a typical meal is the most common point of reference used to set the transfer amount (Davis and Handa, 2015). For 13 programmes in sub-Saharan Africa, transfer levels have been between 10 and 32 percent of the per capita income of the poor, with 8 in the 15-28 percent range (Figure 14). In Zambia, the relative value of the Child Grant model transfer reached almost 30 percent of per capita income, compared with less than 10 percent for Ghana's LEAP programme in its early days (Figure 14). Programmes that provide larger transfers have greater impact, and the crucial threshold appears to be around 20 percent of per capita income.

For countries using a flat rate, per capita value then varies with household size. While the Kenyan transfer represented 14 percent of per capita consumption for average sized households, the share ranged from 10 percent for large households to 22 percent for small households (Daidone et



Notes: Twenty percent marks a crucial threshold: programmes that transfer significantly less than this threshold have small and selective impacts on households, while those that transfer significantly more than this threshold show widespread impacts. hh = households.

Source: Davis and Knowles, 2015.

al., 2015). Kenyan (CT-OVC and HSNP) and Zambian (Child Grant model) transfers are not adjusted for the number of children per household; as a consequence, impacts were stronger for smaller households. Transfer values may also decline over time if not adjusted for inflation: in Kenya (CT-OVC), the real value of the transfer fell by almost 60 percent because of inflation between 2007 and 2011.

Most social assistance transfers are designed to cover a minimum basket of food consumption, and if additional impacts are sought transfer levels should be increased accordingly. The available data show a wide range of transfer levels, but in many of the poorest countries transfers are well below what it would take to close the gap (Fiszbein, Kanbur and Yemtsov, 2014).

Perhaps just as important is the timing and predictability of transfers. Beneficiary households will spend irregular lump sum transfers differently than they would regular and predictable transfers. Late and unreliable payments undermined the positive impacts of a number of cash transfer programmes in sub-Saharan Africa (Barca et al., 2015; Daidone et al., 2015). If transfers are not regular and reliable, it is difficult for households to plan and smoothen consumption over time, and thus sustainably change the quantity and quality of diets. This likely contributed to the lack of impact of cash transfer programmes in Ghana and Lesotho (Handa et al., 2013; Pellerano et al., 2014). Lumpy payments will be either saved or spent on purchases of more expensive items (Haushofer and Shapiro, 2013; Handa et al., 2013). Moreover, regularity and reliability increase the time horizon of beneficiary households, allowing households to manage risks and shocks more effectively and thus avoid "negative" coping strategies such as distress sales of livestock and withdrawing children from school. At the same time, households can avoid risk-averse production strategies and, instead, increase risk-taking in more profitable crops and/ or activities. Regular and reliable payments increase confidence, creditworthiness and ability to plan, while reducing pressure on informal insurance mechanisms. They also help households participate in social networks (Barca et al., 2015).

Household-level factors influence programme impacts

Targeting criteria have strong implications for the demographic characteristics – such as adults of working age – of beneficiary households across programmes. These, in turn, explain some differences in impact across programmes (Winters and Davis, 2009; Daidone et al., 2015). For example, Ghana's LEAP programme targets the vulnerable as well as the poor, and beneficiary households include a relatively high proportion of elderly people and older children, but relatively few adults of working age. Kenya's CT-OVC and Lesotho's CGP focus on child poverty, and beneficiary households often include orphans and vulnerable children. Zambia's Child Grant model, on the other hand, targets households with children aged 0-5 years who live in households with relatively young children, and so contain relatively more adults of working age.

These demographic differences are also reflected in household-level impacts. Households with more available labour, for example, are in a better position to take advantage of the cash for productive investments, in both the short and longer run. The higher transfers in Zambia than in the other three programmes help explain why labour supply and allocation responses are much more pronounced in Zambia than for the other programmes (Table 2). Furthermore, beneficiaries in Zambia had much stronger responses in terms of investment in agricultural inputs, tools, livestock ownership and non-farm enterprises (Daidone et al., 2015). Other factors, discussed below, also play a role, and it is impossible to clearly identify the impact of each factor. Hence, Table 2 is only indicative.

Access to assets and resources besides labour also facilitates the productive use of cash transfers. Households with access to more land, tools and/or education seem to be in a better position to use the cash for productive purposes, and hence likely to make more progress. In general, cash transfers are more effective in generating a production response when the main constraint is working capital rather than land availability. When land is scarce, basic needs are often the main priority, and investment in agricultural inputs is often not feasible (Barca et al., 2015).

TABLE 2
Programme impacts across households

| | | COUNTRY/PROGRAMME | | | |
|----------------------------------|------------|-------------------|-------------|------------|--|
| | ZAMBIA CG | KENYA CT-OVC | LESOTHO CGP | GHANA LEAP | |
| Household labour impacts | • | | | | |
| Agricultural wage employment | 11 | 1 | ↓↓ | _ | |
| Non-agricultural wage employment | 1 | _ | ↓↓ | _ | |
| Family farming employment | ↑ ↑ | 1 | ↑ | 1 | |
| Non-farm business employment | ↑ ↑ | | _ | | |
| Household production impacts | | | | | |
| Agricultural inputs | ↑ ↑ | 1 | 11 | 1 | |
| Agricultural tools | ↑ ↑ | _ | _ | _ | |
| Agricultural production | 1 | _ | 1 | _ | |
| Home production of food | _ | 1 | | _ | |
| Livestock ownership | ↑ ↑ | 1 | 1 | _ | |
| Non-farm enterprises | ↑ ↑ | 1 | _ | _ | |

Notes: $\uparrow \uparrow =$ positive and significant for many indicators; $\uparrow =$ positive and significant for one or a few indicators or for specific subgroups; — = not significant; $\downarrow =$ negative and significant for one or a few indicators or for specific subgroups; $\downarrow \downarrow =$ negative and significant for many indicators; blank cells indicate absence of indicators. CG = Child grant model.

Source: Daidone et al., 2015.

Impacts are gender-differentiated

Impact differences are also due to women and men using transfers differently.³¹ First, many social protection programmes target women because a substantial body of research shows that giving women greater control over household spending raises expenditures on food, health, education, children's clothing and nutrition, and improves human resources (Holmes *et al.*, 2014; FAO, 2011; Yoong, Rabinovich and Diepeveen, 2012). Impacts can also vary with the gender of children (Yoong, Rabinovich and Diepeveen, 2012; Duflo, 2003).

In addition, many studies show that transfer programmes also have unexpected impacts that vary with gender. For example, men and women may not invest in the same type of livestock: women generally seem to prefer small livestock, such as goats, sheep, pigs and poultry, while men prefer larger livestock, such as cattle, horses and camels (Martínez, 2004; FAO, 2009; Tirivayi, Knowles and Davis, 2013). Such differences are then reflected in how assets are used in response to shocks. For example, in Bangladesh, women's assets were disposed of more quickly to respond to family

illnesses, whereas men's assets were typically used to cover marriage expenses and dowries (Quisumbing, Kumar and Behrman, 2011). Malawi's SCT had a bigger impact on livestock ownership among female-headed households, as these households started with much less (Covarrubias, Davis and Winters, 2012). In all regions, women in general owned significantly fewer animals than men (FAO, 2009).

Finally, labour supply decisions can differ with gender. For example, in Kenya's CT-OVC programme, transfers made it easier for women to participate in the labour force, especially for those who lived further away (Asfaw *et al.*, 2014). Given women's role in care-giving and food preparation, additional incomes may also lead to women shifting labour to domestic care and work, rather than work outside the household.

Programme design matters

Different programmes also achieve different impacts because they involve different instruments. For example, conditional programmes have stronger impacts on behaviour compared with unconditional programmes. In Bangladesh, the RMP generates the highest savings rate (compared

³¹ Tirivayi, Knowles and Davis (2013) conclude that gender is the most common source of variation in impact findings.

with the FFA, IGVGD and FSGVD programmes) because increased saving is a condition of the programme (Ahmed, Quisumbing *et al.*, 2009). In Burkina Faso, schemes requiring parents to ensure that their children under the age of five participate in quarterly child-growth monitoring at local health clinics found that conditional cash transfers significantly increased the number of preventive health care visits, while unconditional cash transfers did not have such an impact (Akresh, de Walque and Kazianga, 2012).

However, evidence from unconditional programmes in sub-Saharan Africa indicates that, at least with regard to schooling, the impacts achieved compared favourably with those from conditional cash transfer programmes around the world (Kenya CT-OVC Evaluation Team, 2012; Baird et al., 2013). In many sub-Saharan African programmes, messaging partially replaces explicit conditions, and has also been found to have a strong impact (see Box 6, p. 27). Conditions involving health and education are not helpful when health clinics or schools are difficult to reach or not available (Grosh et al., 2008; Handa and Davis, 2006).

Markets matter too

The nature of the local economy also shapes the type and extent of the productive impacts of cash transfer programmes. In rural areas, market constraints can be particularly binding due to low population density, low levels of public investment and inadequate public infrastructure.

Where markets are more developed, the effects of cash transfers on livelihood strategies tend to be stronger (Barca et al., 2015). The importance of market conditions has generally been framed in relation to the availability of factors of production. For example, household agricultural economic investment in Kenya was more prevalent in the Owendo district compared with the Kangundo district, due to the wider availability of land, livestock and labour, and the prevalence of sugar-cane cash cropping. In Kangundo, where economic opportunities within the agricultural economy were more constrained, cash transfers were primarily used as a safety net mechanism. In Ghana and Kenya, the ability to hire-in labour to work on farms is a crucial enabler for beneficiaries to engage in new types of economic activities. And in Malawi, cash transfer beneficiaries in areas better connected to markets often invested in small businesses, while those in remote areas did not (OPM, 2014).

At the same time, social protection programmes have an impact on local markets. This effect is more pronounced around payment days, but the transfers are not usually large enough to create new markets (Barca et al., 2015). The impacts may depend on the size of the beneficiary community relative to the size of the market.

Key messages

- Accurate targeting is a critical determinant of the effectiveness of social transfers in achieving their objectives. But the costs of targeting must be weighed against the amounts transferred. Each targeting method has costs and benefits, and no single method is universally preferred. Implementation is key, regardless of method. Most programmes choose multiple methods to combine the strengths of each individual method.
- The level, timing and predictability of income transfers are central to success. The size of the transfer must be large enough to enable beneficiaries to increase consumption in line with programme objectives and spending on other necessities. Furthermore, to effectively address credit and liquidity constraints, and to help households manage risk, transfers must be regular and reliable.
- Household characteristics, particularly labour availability and the gender of the recipient, influence programme impacts. Gender dynamics influence both how income transfers are spent or invested and how assets and resources are managed.
- When to use conditionalities or simple messaging in programme design depends on the local context, but both are effective in influencing beneficiary behaviour. In some contexts, unconditional programmes, with or without messaging, have similar impacts on beneficiary behaviour as do conditional programmes.

5. Social protection and agricultural development

Evidence presented in the previous chapters makes a strong case for providing social protection measures, particularly income transfers, to rural households, who comprise the vast majority of the world's poor and rely on agriculture for substantial parts of their incomes. While recipients of social protection transfers can become more productive, their purchases of food and other local goods and services can also stimulate the local economy more broadly. But social protection, as essential as it is for the poor and vulnerable, will not transform local economies by itself: it can only play a supporting role. Social protection cannot address all the structural constraints as well as market and infrastructural weaknesses that rural farm households face. To address poverty and food insecurity in the context of rural development and agricultural transformation, both social protection and agricultural policies and interventions are needed.

This chapter explores a continuum of options to bring together and better coordinate social protection and agricultural interventions. The options range from standalone, sector-specific, social protection or agricultural programmes, which, by virtue of their design, reflect bringing together the two in integrated interventions that combine both social protection and agriculture, to sectoral interventions that are aligned in order to maximize complementarities and reduce contradictions (Gavrilovic et al., 2015). These categorizations are flexible, with approaches combined or sequenced in a variety of ways.

Single, sector-specific, stand-alone programmes can bring together social protection and agriculture. Social protection interventions can be designed to enhance the agricultural livelihoods of its beneficiaries. Kenya's HSNP, for instance, allows beneficiaries to collect their cash transfer when and where they want, in order to

accommodate their semi-nomadic pastoralist livelihoods. As discussed in Chapter 4, even altering the design and implementation of social protection interventions, such as the size, timing and regularity of cash transfers, can strengthen their impacts on agriculture. From the perspective of agriculture, input subsidies can be designed to reach vulnerable small family farmers to facilitate their access to farm inputs.

Social protection and agriculture can be linked together in joint programmes, where both types of intervention are brought to bear on specific target populations. Social protection programmes can be bundled with complementary agricultural packages, as in the case of the public works PSNP and OFSP/ HABP in Ethiopia, or by linking Lesotho's CGP cash transfers with home garden programmes. Social protection programmes can also be combined with financial inclusion measures to assist households in building savings and assets, as in the case of Rwanda's VUP. Social protection and agriculture can also be joined together in integrated programmes, such as Bangladesh's BRAC graduation model, which combines a package of one-time productive assets, cash or food support, savings, training, health care and social integration. Interventions can also be sequenced or layered; as households gradually improve their well-being, they can receive a broader menu of complementary agricultural interventions to assist farmers in expanding their agricultural production and income generation.

Better alignment of programmes can also exploit synergies between social protection and agricultural development. Since linkages between agriculture and social protection occur at different levels (i.e. household and local community/regional economy), there are significant opportunities to exploit interactions among instruments, even when they are not delivered in the same locations or target the same beneficiaries.

For instance, agricultural interventions, such as institutional procurement programmes (IPPs), can be directed at small family farmers with production potential in the same geographical areas in which social protection programmes such as school feeding, are being implemented. Where individual programmes exist, the challenge is to improve their harmonization and coverage. For example, a well-coordinated range of social protection and agricultural interventions can be aligned to cater for distinct groups of the poor.

The remaining part of this chapter focuses in more detail on a number of the more common approaches, issues and evidence relevant to obtain coherence between social protection and agriculture. This includes a review of a number of examples of joint programmes, a discussion of two major agricultural policies (input subsidies and credit) and issues related to improving their coherence with social protection, and a review of IPPs. The final section discusses one of the main operational issues faced in obtaining better coherence between social protection and agriculture, namely targeting.

Combining interventions into joint programmes

A growing body of evidence on the impacts of joint programmes confirms the benefits of combining interventions. In Ethiopia, households that benefited from PSNP transfers alone did not purchase agricultural inputs and only undertook limited agricultural investments (Hoddinott et al., 2012). However, households with access to both the PSNP as well as complementary packages of agricultural support (OFSP/HABP) were more likely to be food-secure, borrow for productive purposes, use improved agricultural technologies and operate their own non-farm business activities (Gilligan, Hoddinott and Taffesse, 2008; Berhane et al., 2014). This complementarity can go both ways, as attempts to improve yields through the OFSP/HABP were sometimes more effective when coupled with PSNP transfers (Hoddinott et al., 2012).

Comparison of four social assistance programmes in Bangladesh (IGVGD, FSGVD, FFA and RMP, see also Chapters 2 and 3)

showed that complementary interventions, in addition to food and cash transfers, had positive impacts. For example, the IGVGD had a built-in provision for microcredit that had a large impact, relative to other programmes, on livestock and poultry assets. All four programmes also provided training in income-generating activities, life skills, basic literacy and numeracy, and increasing awareness of social, legal, health and nutrition issues. Training in incomegenerating activities has been quite effective, as the majority of programme participants reported subsequently starting such activities (Ahmed, Quisumbing et al., 2009).

In Bangladesh, BRAC's CFPR-TUP programme is another example of multiple interventions involving a social protection programme that ultimately aims to graduate the poorest out of poverty and to increase their participation in microcredit programmes. First- and second-phase impact evaluations of the programme found increased agricultural asset ownership, selfemployment, savings, access to land, food security, income and poverty reduction (Rabbani, Prakash and Sulaiman, 2006; Das and Shams, 2011). The impact of individual CPFR-TUP interventions are difficult to isolate, but available evidence indicates that programmes that are multifaceted i.e. integrate a number of interventions, including conditional or unconditional cash transfers, asset grants for income generation, skills training, community investments, social development and local elite mobilization, and health and nutrition support - can effectively promote the more ambitious objective of sustainably improving welfare (Ahmed, Rabbani et al., 2009; Sabates-Wheeler and Devereux, 2014).32 Important factors in the programme's success were the initial subsistence allowance (to mitigate the fact that assets do not immediately generate incomes), linking asset

³² About 92 percent of participants in BRAC's CFPR-TUP were able to emerge from, and stay out of, ultra-poverty (Pahlowan and Samaranyake, 2014). Programmes modelled on the programme were piloted in several countries by the Ford Foundation and the Consultative Group to Assist the Poor (CGAP). Subsequent evaluation of these programmes in Ethiopia, Ghana, Honduras, India, Pakistan and Peru found that they substantially improved the food consumption of the poor, even a year after the programme had ended (Banerjee *et al.*, 2015).

transfers to selected income-generating enterprises, and skills training (Sabates-Wheeler and Devereux, 2011).

In Peru, beneficiaries of the social cash transfer programme Juntos also received support from the rural development programme Haku Wiñay, aimed at strengthening the productive and incomegenerating capacities of extremely poor farmers through complementary support aimed at improving production systems, improving sanitary conditions, supporting rural businesses and providing financial education. To encourage households to adopt simple and low-cost technologies such as sprinkler irrigation systems, outdoor in-field horticulture, plots with cultivated mixed pastures, agroforestry, production of organic fertilizers, and guinea pig and hen breeding, Haku Wiñay provides Juntos beneficiaries with productive assets, technical assistance and training.33 Preliminary findings from an impact evaluation show that, after two years, income sources related to crop and livestock production and agricultural processing grew faster for beneficiary than non-beneficiary households (Escobal and Ponce, 2015).

Complementary interventions are essential to address malnutrition effectively

The immediate causes of better nutrition outcomes are complex and multidimensional. They include the adequate availability of and access to safe, diverse, nutritious food; access to clean water, sanitation and health care; and appropriate child-feeding and adult dietary choices. The root causes of better nutrition outcomes are even more complex and encompass the broader economic, social, political, cultural and physical environment. Social assistance is an important instrument for improving nutrition outcomes among the poor but it cannot sustainably eliminate poverty and malnutrition by itself: additional, integrated action and complementary interventions are needed in agriculture and the food system in general, in public health and education,

as well as in broader policy domains (Box 15) (OPM, 2013a).

Increasing micronutrient availability is a particular challenge. Small-scale homegardening projects to boost household fruit and vegetable consumption represent one approach suitable for poor households that can accompany social assistance programmes. Home gardening is already widely practised, can be effective on a small scale and is feasible in most locations, although water and labour constraints may pose challenges and should be carefully considered in project design (FAO, 2013a). One home production intervention that was successfully scaled up is the Homestead Food Production project, introduced in Bangladesh by Helen Keller International nearly two decades ago. Initially focused on promoting home gardens to improve micronutrient intake, the project's scope subsequently widened to also include small animal husbandry and nutrition education (Iannotti, Cunningham and Ruel, 2009). In Lesotho, a pilot kitchen garden intervention was combined with the government's CGP cash transfer programme. The combination of the two interventions led to greater foodsecurity impacts, for labour-constrained households, than the keyhole garden by itself (Dewbre et al., 2015).34

In some communities, micronutrient intakes can be more effectively enhanced by strengthening animal husbandry. In Ethiopia, for example, the FARM-Africa Dairy Goat Development Project built on the important role of goats in mixed-farming systems of some communities, and was successful in raising the nutritional status and family welfare of project participants (Ayele and Peacock, 2003). Also in Ethiopia, the Milk Matters project, by Save the Children, enhanced animal husbandry and livestock production among pastoralists while improving the nutritional status of children (Sadler et al., 2012).

Sumberg and Lankoandé (2013) reviewed several "heifer-in-trust" (also referred to as

³³ Haku Wiñay is not exclusive to Juntos beneficiaries.

³⁴ The basic keyhole garden is a small (about 1 metre high and 2 metres in diameter), circular, raised bed made up of layers of soil, ash, manure and other organic material. The raised structure also makes access easier for the chronically ill or elderly.

BOX 15

Designing nutrition-enhancing social protection policies and programmes

The Second International Conference on Nutrition (ICN2), organized jointly by the FAO and WHO, identified social protection as a key sector for improving nutrition. The outcome documents of the Conference – the Rome Declaration on Nutrition and its companion Framework for Action – urge governments and policy-makers to explore complementarities between nutrition and social protection to effectively tackle malnutrition in all its forms.

Research leading to ICN2 concluded that the wide reach and focus of social protection programmes should be used to improve nutrition outcomes (Alderman and Mustafa, 2013). However, implementing these programmes can be challenging, as nutrition is often only one of many development objectives that social protection seeks to address. Evidence gathered thus far points to a

few operational requisites that can be adopted to maximize the impact of social protection policies and programmes on nutrition.

Incorporating explicit nutrition objectives and indicators in the monitoring and evaluation systems of social protection programmes can greatly enhance their nutrition sensitivity. Targeting the nutritionally vulnerable is also an invitation to consider the nutrition vulnerability of individuals within households, in addition to household-level socio-economic situations. Furthermore, programme designs that incorporate nutrition education and promotion, strengthen linkages with health services, and focus on women are likely to improve nutrition indicators.

Source: FAO, 2015b.

"livestock-in-kind credit") projects.35 They concluded that, although the term social protection is not used in these projects, the objectives of asset building, improved nutrition and increased income as well as the stated target groups, have strong affinities with social-protection programmes. However, they cautioned that the project outcomes depend on a wide array of circumstances, and the poorest are also least likely to be able to handle the demands and risks associated with livestock assets. A recent evaluation of the impact of Heifer International's dairy cow and meat goat donation programme in Rwanda found that it substantially increased dairy and meat consumption among Rwandan households

who had been given a dairy cow or a meat goat, respectively (Rawlins *et al.*, 2014). The authors also noted that the programme did not include the poorest (or the richest), although beneficiary selection did include a needs assessment.

Many factors determine the effectiveness of household food-production strategies and their effects on nutrition (Girard et al., 2012). When infectious disease is common, the impact of production strategies will be limited in the absence of additional interventions. Overall, the scarce existing evidence suggests that production strategies can improve intakes of micronutrientrich foods when they have clear nutrition objectives and integrate nutrition education and gender considerations.

Including nutrition education is important and can enhance the impact of social assistance programmes, home garden projects and other farm interventions on nutrition outcomes. Nutrition education is often defined broadly as holistic programmes that include a number of information-related interventions aimed at increasing consumer knowledge of what constitutes good nutrition. The ultimate goal is a change in

³⁵ "Heifer-in-trust" projects aim primarily to build up the productive asset base of poor people. These projects are typically rotating, in-kind loan schemes based on in-kind repayment. A project will transfer one or more female animals to beneficiaries on the understanding that, over time, a specified number of female offspring will be returned to the project so that they can be passed on to other beneficiaries. Until the repayments are complete, the original animals are "owned" by the project "in trust" for the beneficiaries, but after repayment, they become the property of the beneficiaries (Sumberg and Lankoandé, 2013).

behaviour, with individuals choosing more nutritious diets and healthier lifestyles. Such programmes may include elements of nutrition training, public information campaigns and regulation of advertising and labelling. Education, in conjunction with other interventions to improve access to diverse, nutritious foods, can be particularly effective. Nutrition education, including both general education and nutrition-specific education, is effective in improving nutrition (FAO, 2013a).

In the following sections, we discuss two major agricultural policies – input subsidies and credit – and issues related to improving coherence with social protection.

Social protection and agricultural input subsidies

Input subsidies were integral to the food security agenda in the 1960s and 1970s, but were widely discontinued in favour of market-oriented solutions to rural poverty and food insecurity. However, following a period of heightened food insecurity, input subsidies, in particular fertilizer subsidies, have regained widespread popularity in Africa, Asia and Latin America and the Caribbean, especially following the sharp increase in food prices and fertilizer costs after 2006. They are now the most popular production support measure used, although they are typically small-scale and ad hoc in the Latin America and the Caribbean region (Table 3) (Demeke et al., 2014).

Input subsidies are usually implemented by ministries of agriculture, but are often considered as part of both social protection policy and agricultural policy because they are targeted at low-income small family farmers and/or because they aim to improve household food security and reduce hunger.

In sub-Saharan Africa, this policy has gained momentum following the first African Fertilizer Summit, held in Abuja, Nigeria, in 2006, which called upon African Union member states to improve farmers' access to fertilizer by granting targeted subsidies, with special attention to poor farmers (Druilhe and Barreiro-Hurlé, 2012). Fertilizer subsidies are also attractive because they can raise food production within a relatively short time, and because fertilizer use per hectare is very low in sub-Saharan Africa compared with other regions. For example, the mean rates of fertilizer application were 150 kg/ha in Asia compared with 7 kg/ha in sub-Saharan Africa (Druilhe and Barreiro-Hurlé, 2012).

One of the most studied programmes is the Farm Inputs Subsidy Programme (FISP) in Malawi. Launched in the 2005/06 season, following a severe drought in 2004/05, and a prolonged food shortage, FISP aims to strengthen household food security by boosting production and by lowering or stabilizing food prices. The programme covers more than 1.7 million households, more than half of all households and more than 60 percent of all small family farmers, providing subsidized maize seeds and

TABLE 3
Input subsidy schemes implemented by selected countries, by scale and region, 2007–12

| REGION | SMALL-SCALE OR AD-HOC PROGRAMMES | LARGE-SCALE PROGRAMMES |
|---------------------------------|---|---|
| East Asia and the Pacific | Cambodia, Lao People's Democratic Republic, Thailand, Viet Nam | China, Indonesia, Philippines |
| Europe and Central Asia | Tajikistan | Azerbaijan, Kazakhstan |
| Latin America and the Caribbean | Argentina, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Costa Rica, Cuba, Haiti, Nicaragua, Panama, Peru, Uruguay | Ecuador, El Salvador, Guatemala, Honduras, Mexico, Paraguay, Venezuela (Bolivarian Republic of) |
| Middle East and North Africa | Algeria, Tunisia | Egypt, Iran, Iraq, Lebanon, Syrian Arab Republic, Yemen |
| South Asia | Bhutan, Nepal | Bangladesh, India, Sri Lanka |
| Sub-Saharan Africa | Chad, Lesotho, Mauritania, Mozambique, Sierra Leone, Zimbabwe | Burkina Faso, Ghana, Kenya, Malawi, Mali, Morocco, Nigeria, Rwanda, Senegal, Togo, United Republic of Tanzania, Zambia |

Notes: Inputs considered include fertilizer and seeds. Subsidies may have been implemented for all or part of the period covered. Source: Demeke et al., 2014.

BOX 16 Fertilizer subsidies need complementary interventions to effectively promote pro-poor growth

Fertilizer subsidies are considered to have been successful in the experience of Asian countries. India, Bangladesh, Indonesia and Pakistan spent large amounts of public funds subsidizing fertilizer, and these subsidies are credited with contributing to the rapid growth in food production known as the Green Revolution, at least in the early stages (Djurfeldt et al., 2005). But input subsidies were only one factor, and were accompanied by large-scale expenditures on research and development, extension services, irrigation, rural roads and development of fertilizer markets (Rashid et al., 2013). Fertilizer subsidies should

not, therefore, be seen as a panacea for sustained agricultural growth: they should be part of a package of investments to be effective. Studies of the impact of public expenditure on growth and poverty reduction show that roads, agricultural research and development, education and irrigation had the strongest impacts, much more so than fertilizer subsidies (FAO, 2012). Although subsidy expenditures are frequently advocated on the basis of equity and poverty considerations, available evidence shows that investment in public goods is clearly more effective in this regard.

fertilizer at a cost of about 3 percent of GDP in 2011/12 (Chirwa and Dorward, 2013).

Significant impacts were found at the level of households, markets and the economy (Box 16). Strong positive effects were found in terms of the improved availability of maize and lower maize prices in rural markets, as well as higher wage rates for agricultural labour (ganyu). Maize production in the country rose from 1.2 million tonnes in 2004 to 3.6 million tonnes in 2013, and exceeded national requirements every year, starting in 2005 (FAO, 2015a).36 The combination of increased production, cheaper maize and higher returns to ganyu reduced hunger in food-insecure rural households. Households that received FISP coupons were 22 percent more likely to report "adequate" maize production. Two-thirds of households reported that food security had improved at the household and community levels as a result of the subsidy programme (Chirwa and Dorward, 2013). The programme's success in raising production led to other sub-Saharan

In so far as input subsidy programmes contribute to greater food security through greater availability and lower prices of staple goods, they also benefit the poor and can be considered to be aligned with and contributing to the objectives of social protection policies and programmes. But, in general, such programmes neither target nor reach the poor (Table 4). For example, in Zambia, 73 percent of small family farms cultivate less than two hectares and make up 78 percent of small family farms in extreme poverty. Yet, 55 percent of the input subsidy went to the 23 percent of households that cultivated more than two hectares (Mason, Jayne and Mofya-Mukuka, 2013). Also, the Malawi programme targeted poor farmers who had some land and the ability to work the plots, not necessarily the poorest (Kilic, Whitney and Winters, 2015).

Fertilizer subsidy programmes absorb a large part of government agricultural budgets: for example, Burkina Faso, Ethiopia, Ghana, Kenya, Malawi, Mali, Nigeria, Senegal, the United Republic of

countries introducing similar schemes. In general, these have been successful in raising yields and agricultural production, although the impact on household food security is often not clear, due to lack of impact evaluations (Druilhe and Barreiro-Hurlé, 2012).

³⁶ We note the controversy on the size of the impacts. Chirwa and Dorward (2013) note the discrepancy between high levels of maize availability and concurrently high levels of food insecurity and child malnutrition. Lunduka, Ricker-Gilber and Fisher (2013) found that while national production estimates suggest dramatic maize production increases in Malawi, farm-level studies show only modest rises in maize yields and production.

TABLE 4
Shares of rural households receiving social assistance and/or agricultural input subsidies, by type of assistance received

| | SOCIAL ASSISTANCE ONLY* | AGRICULTURAL INPUT SUBSIDIES ONLY** | вотн | NEITHER | |
|------------------------------------|----------------------------|-------------------------------------|------|---------|--|
| | Percent | | | | |
| Ethiopia (2012) | 9.8 | 22.2 | 3.2 | 64.8 | |
| Kenya (2005) | 13.7 | 2.2 | 0.1 | 84.0 | |
| Malawi (2011) | 2.6 | 48.1 | 2.9 | 46.4 | |
| Niger (2011) | 2.5 | 2.7 | 0.3 | 94.5 | |
| United Republic of Tanzania (2009) | 2.8 | 1.9 | 0.1 | 95.3 | |

Notes: *Social assistance includes all types of transfers (conditional or unconditional, and cash or in-kind), with the exception of scholarships and school feeding. **Agricultural input subsidies include seed and fertilizer subsidies. Sources: Authors' calculations using household survey data. For a list of all surveys consulted, see Household Survey references at the end of the report (p. 127).

Tanzania and Zambia spent US\$1 billion, or 28.6 percent of their public expenditures, on agriculture in 2011 (Jayne and Rashid, 2013).37 The linkages of these single, stand-alone, input programmes with social protection could include improving the reach of input subsidies to the poorest households by, for instance, improving targeting and/or adjusting the size and type of input packages to the specific needs of small family farmers. Targeting the poorest is best achieved through input packages designed for their needs. For example, in Zambia, the Food Security Pack Programme is aimed at households cultivating less than 0.5 hectare, and consists of input packs for 0.25 hectare of cereal, 0.25 hectare of cassava and 0.25 hectare of legumes. It is free for the first two years, after which farmers are to repay half of the value in kind. The programme is relatively small scale, receiving only 5 percent of the value allocated to the FISP (Burke, Jayne and Sitko, 2012). Another option is to combine these with social cash transfer programmes that provide the poorest beneficiaries with the

additional liquidity needed for paying for the "unsubsidized" part of the input.

Credit to agriculture

Credit constraints are a major barrier to agricultural investment. Relatively little credit is allocated to agriculture and many agricultural producers are credit-constrained. Rural households have little access to formal credit. In parts of East and West Africa, for example, Adesina (2010) found that only about 3 percent of commercial credit went to agriculture, even though the sector accounted for 50 to 70 percent of GDP. Similarly, in Honduras, Nicaragua and Peru, 40 percent of all agricultural producers were creditconstrained (World Bank, 2007). Zezza et al. (2007) found that across ten countries in sub-Saharan Africa, Asia and Latin America, less than 40 percent of agricultural households use credit (including loans from family members and relatives), and in most countries no more than about one in ten agricultural households use credit. In part, this is also because informal credit is often very expensive (Banerjee and Duflo, 2007). In many countries, addressing credit market failures, through special programmes, credit guarantee schemes and specialized banks, is a priority. Nearly all Asian, Latin American and Caribbean countries, and a majority of African countries, are taking measures to facilitate the provision of agricultural credit (Table 5).

In Brazil, the support and promotion of family farming has been a government

³⁷ Fertilizer input subsidies have been criticized for a number of reasons. The impacts of fertilizer subsidy programmes in sub-Saharan Africa are not well documented and therefore contested (Druilhe and Barreiro-Hurlé, 2012). Monitoring and evaluation are basic requirements for improving programmes and making good policy decisions. For more detail on the pros and cons of fertilizer subsidy programmes and how to improve them, see, for example, Chirwa and Dorward (2013); Rashid *et al.* (2013), and; Jayne and Rashid (2013).

priority in recent years. For this purpose, the National Programme for Strengthening Family Farming (Pronaf – Programa Nacional de Fortalecimento da Agricultura Familiar) was created in 2003. It includes, among several activities, credit provision for productive rural activities. In recent years, Pronaf financed about two million loans, especially in regions where rural poverty is concentrated, worth about US\$10 billion. Credit is now provided at a subsidized annual interest rate of 2 percent to support family farms and covered by insurance (Box 17) (Del Grossi and Marques, 2015).

Pronaf also provides microcredit for poorer farmers with an annual gross income up to 20 000 reais (about US\$8 800). Microcredit is more extensive in the northeast of Brazil, where the Bank of the Northeast of Brazil offers a line of credit called Agroamigo that provides farmers with direct monitoring services by a consultant, who also helps them draw up investment plans. In 2013, Agroamigo microcredit loans accounted for more than 20 percent of all Pronaf loans.

However, directly targeting the poorest with (micro) credit has proven difficult. In reality, the majority of the world's estimated 150 million microcredit clients are thought to live just below and, more often, just above the poverty line (Hashemi and de Montesquiou, 2011). In other words, they are not the poorest. This is because the poorest households often lack the assets and skills to take advantage of credit, and may find it difficult to repay even small loans. Furthermore, although microcredit has been

shown to improve household welfare in Bangladesh (Khandker and Samad, 2014), this is not always the case. Recent evidence from six studies found that microcredit had a mixed impact on food consumption (mostly no effect). Moreover, these studies found no clear evidence that microcredit reduces poverty or improves living standards as measured by total household income (Banerjee, Karlan and Zinman, 2015).

However, evidence from cash transfer programmes also shows that even when credit was available many beneficiaries preferred to reduce their debt rather than take on more credit (Barca et al., 2015). There is increasing evidence that, on its own, microcredit is not sufficient to help poor households exit poverty or to improve their welfare as measured by consumption, health, education, and women's empowerment (Banerjee, Karlan and Zinman, 2015). For the poorest, microcredit must be part of a package of interventions, or of a joint programme that includes social assistance (Barrientos, 2012). For example, in Bangladesh, BRAC's CFPR-TUP involves multiple interventions, including access to credit and cash transfers, and aims to ultimately graduate the poorest out of poverty by joining microcredit programmes (see also Chapter 2, p. 34).

Institutional procurement programmes

Lack of adequate markets is an important limitation on agricultural growth and rural development. An innovative approach to this

Major credit instruments adopted by select countries, by type and region, 2007-12

| REGION | CREDIT EXPANSION | INTEREST RATE SUBSIDY | вотн |
|------------------------------------|---|---|--|
| East Asia and the Pacific | Cambodia, China, Thailand | Indonesia, Viet Nam | Lao People's Democratic Republic, Philippines |
| Latin America and the Caribbean | Cuba | Argentina, Chile, Costa Rica, Dominican Republic, Guatemala, Mexico, Nicaragua, Paraguay, Panama | Bolivia (Plurinational State of), Brazil, Colombia, Ecuador, El Salvador, Peru, Venezuela |
| Middle East and North Africa | | Iran, Iraq, Syrian Arab Republic | Algeria, Egypt, Morocco |
| South Asia | Bangladesh | Nepal | India, Pakistan, Sri Lanka |
| Sub-Saharan Africa | Lesotho, Malawi, Mauritania, Rwanda, Zambia | Kenya, Tunisia, Uganda, Zimbabwe | Ghana, Mozambique, Nigeria, South Africa, United Republic of Tanzania |

Notes: Instruments may have been adopted for all or part of the periods covered.

Source: Demeke et al., 2014.

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BOX 17 Agricultural insurance

Rural credit can help promote rural development, but can also lead to indebtedness for rural producers. Tying credit to insurance can therefore help credit markets work. In Brazil, the government introduced the Family Farming Insurance (SEAF) programme in 2004 to support loans made by the National Programme for Strengthening Family Farming (Pronaf), in case of losses due to natural disasters, pests and diseases that affect crops. Currently, SEAF covers costs and agricultural investment contracts, where there are relevant agronomic studies available. In case of losses, the beneficiary farmer has 100 percent coverage for credit repayment for that year, and receives up to 7 000 reais (about US\$3 100) in compensation for any shortfall in revenues.

Another important innovation, introduced in 2006/07, is the Family Farming Price Guarantee Programme (PGPAF – Programa de Garantia de Preços para a Agricultura Familiar), which provides a discount on Pronaf loans whenever the market price of the financed product is below the guaranteed price. Guarantee prices are fixed at the beginning of the crop cycle, using production costs as reference. As this price guarantee was designed to benefit poorer farmers, the bonuses are currently limited to 5 000 reais (about US\$2 200) for funding contracts, and up to 2 000 reais (about US\$900) for investment contracts.

In general, agricultural insurance, unless free or subsidized, is not affordable to the poor. In Brazil, the SEAF programme provides crop insurance to family farmers, and the government pays a 75 percent premium subsidy. Furthermore, agricultural insurance schemes are not widespread due to the myriad of associated information problems. Index-based insurance schemes can help overcome some of these problems. Most common are weather index-based schemes, where the contracts are based on deviations from some weatherrelated index, such as rainfall over time. All policy holders within a defined area receive payouts based on the same contract and measurement at the same station, eliminating the need for in-field assessment (IFAD and WFP, 2011).

India introduced the National Agricultural Insurance Scheme in 1999. Today, it insures about 15 percent of all farmers (Demeke et al., 2014). The scheme is based on a yield index approach with payouts triggered when crop yields in a defined area fall below historical yields. In sub-Saharan Africa insurance is rare, but there are some examples of weather index-based insurance schemes. For example, in Ethiopia, Nyala Insurance, a private insurance company, offers weather index-based insurance to farmer members of a cooperative, thus achieving some economies of scale. The company insures all farmers in the cooperative, and the cooperative is responsible for paying the premium and for distributing potential payouts (Meherette, 2009). A limitation of weather index-based insurance is that 30 years of historical daily rainfall data are needed to make such a scheme operational.

constraint has been the effort to align social protection programmes with agricultural objectives by using social protection programmes to create markets for small family farmers. So-called institutional procurement programmes (IPPs) purchase food locally, either directly from farmers or from traders, for use in social assistance programmes such as school

feeding, food reserves, hospitals or distribution through charitable organizations.³⁸

³⁸ Institutional buyers are public- or private-sector entities, such as schools, food reserve authorities, the military, prisons, hospitals, food aid organizations and relief or development agencies, that purchase large quantities/volumes of produce from farmers or traders in the domestic market.

Institutional demand policies promote rural development by creating a market for small family farm produce. However, interventions that link social assistance with institutional demand also typically focus on supporting poorer farmers who are constrained in their access to resources. Ultimately, the aim is to increase agricultural production by small family farmers; improve farmers' and extension workers' skills and knowledge of food production and marketing, and link small producer organizations with local markets in general.

Home-grown school-feeding programmes

One approach to IPP is to purchase locally for school feeding, often referred to as homegrown school-feeding (HGSF) programmes.³⁹ They aim to provide food to children and improve school enrolment, but may also include health programmes, such as deworming, vaccination and dental hygiene. Some programmes integrate other initiatives such as teacher training, community gardens and nutrition information for parents. One of the main goals is to promote community participation through committees, parent associations and school boards.

In some middle-income countries, HGSF is considered a strategy to promote rural development as well as to provide a social safety net. HGSF, by delivering food to poor and food-insecure individuals, helps to alleviate hunger and reduce malnutrition. Moreover, it also helps families to avoid adopting damaging coping strategies, such as selling productive assets or sending their children to work to raise money for food. Also, non-beneficiary farmers benefit when they supply food to HGSF programmes. Appropriately designed programmes can also contribute to closing the gender gap in education, especially in rural areas with large gender disparities in access to education (Gelli, Neeser and Drake, 2010). In Indonesia, during the financial crises, the government

HGSF programmes are included in the Comprehensive Africa Agriculture Development Programme (CAADP) and New Partnership for Africa's Development (NEPAD) as part of the effort to decrease food insecurity and link vulnerable people to opportunities for agricultural growth. Today, HGSF programmes are being implemented in at least 20 African countries, sometimes building on WFP's Purchase for Progress (P4P) programme (see below).

The World Food Programme's Purchase for Progress programme

The WFP is a major purchaser of food: in 2013, the organization bought US\$1.16 billion worth of staple foods, 80 percent of which was supplied by traders in developing countries. In an effort to leverage this, local and regional procurement for building the capacity of small family farmers, WFP introduced the P4P programme. Starting in 2008, a five-year programme was implemented in 20 countries in Africa, Asia and Central America.⁴⁰ Under the pilot, WFP tested different ways of procuring staple foods from small family farmers, aiming to identify models that could sustainably promote small family farm development through enhanced access to formal markets. The P4P approach entails consistent demand for quality food; targeted capacity-strengthening of small family farmers, typically through producer organizations; and coordination and linkage support for providers of key supply chain services (see also Box 19).

implemented an HGSF programme which purchased cassava, banana and rice from local producers, generating benefits to poor communities (see also Box 18) (Studdert et al., 2004). In particular, the programme is credited with providing income benefits, not only to families with schoolchildren but also to the farmers who provide the food and to the women who prepare the food. Children's education and nutrition also benefited, with implications for longer-term human resource development.

³⁹ Procurement modalities vary by programme and the amount of food purchased from local farmers also varies. When school-feeding programmes are implemented in areas with high chronic food insecurity, food production capacity is low and local procurement is more difficult (Devereux, Sabates-Wheeler and Pascual Martínez, 2010).

⁴⁰ See https://www.wfp.org/purchase-progress. A series of recent P4P case studies is also available at http://www.fao. org/ag/ags/ivc/institutional-procurement/en/.

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Over the five-year pilot period, WFP succeeded in procuring 367 000 tonnes of food from small family farmers, putting more than US\$148 million more directly into the hands of the farmers and their families (US\$30 million per year, on average). Further, producer organizations not previously selling collectively sold another US\$60 million worth of quality food to buyers beyond WFP. Across the pilot, WFP entered into over 500

partnerships, well over half of which were formalized through agreements. Beyond government ministries and agencies, WFP's partners included international and local NGOs, umbrella producer organizations, United Nations agencies, input suppliers, output aggregators, processors, financial service providers, research institutions, bilateral development partners and regional entities (WFP, 2014).

BOX 18 Home-grown school feeding in the Plurinational State of Bolivia and Honduras

School feeding covers 87 percent of schools in the Plurinational State of Bolivia. The reformed public procurement law establishes that food procured for schoolfeeding programmes and other food security initiatives must come from national producers. Farmers were able to supply a wide range of produce such as rice, maize and quinoa, as well as processed foods such as biscuits and dairy products. In the municipalities of Villa Alcalá, Tomina, Yamparaéz and Zudanez, local governments have procured organic produce from small-scale farmers to strengthen their participation in organic food markets (FAO, 2013b). The government has also promoted small-scale organic production by incorporating organic bananas in the school meals. This experience has generated several positive outcomes for small family farmers (Bioversity International, 2012). Farmers have more than doubled the area devoted to bananas to respond to demand and have adopted more efficient harvest and post-harvest practices. Over 85 percent of producers reported higher incomes and increased consumption, including milk and meat.

In Honduras, the government funded and implemented the *Vaso de Leche* programme to complement school meals. In 2012, it covered over 638 000 children in 143 different, mainly rural, municipalities. The main goal of the programme is to improve the nutritional status of children at preschool and primary levels by increasing their protein and calcium intakes. Additionally, the programme

aims to promote rural development by making direct purchases from small-scale dairy producers. It offers producers fixed prices throughout the year, guaranteeing steady incomes. The main requirement to participate in the programme is to be certified by the National Agricultural Health and Safety Service. In many cases, producers formed groups to create processing and storage centres that facilitate direct purchases of milk by the programme. The Agriculture and Livestock Secretariat has implemented a series of projects to provide technical assistance, infrastructure and finance to producers involved in the programme, considered one of the best cases of institutional demand for small family farmers in Central America (FAO, 2013b).

The success of the linkages between small family farm agriculture and school-feeding programmes is largely attributed to the favourable legislative framework for public procurement. Both countries' laws aimed at creating markets for national producers and increasing the participation of small- and medium-scale enterprises. They allowed local governments to purchase directly from producer organizations and family farmers, reducing burdensome tendering requirements. In addition, governments in the Plurinational State of Bolivia and in Honduras prioritized public procurement of food from national producers in their public policies, facilitating the implementation of HGSF programmes.

Source: Nehring, Miranda and Howe, 2014.

BOX 19 Producer organizations play a key role

For small family farmers, being competitive in supplying larger private or public buyers is a major challenge that requires meeting strict standards and achieving scale in delivery, for which effective producer organizations are essential. Producer organizations can play an important role in overcoming constraints and obstacles that individual farmers may face. They enable the pooling of resources, such as credit, information, labour and transport, thus creating economies of scale to reduce transaction costs and generate some market power. Producer organizations can help build farmers' skills; provide information and knowledge; help them tackle legal issues, certification and registration; and give them some voice in national and sometimes international fora. Governments can support producer organizations by providing enabling conditions and a supporting policy and legal framework as well as economic incentives (FAO, 2012). Among the betterknown producer organizations is the Indian Dairy Cooperatives Network. In 2005, the Indian dairy cooperatives, with 12.3 million members, accounted for 22 percent of the milk produced in India. Sixty percent of cooperative members are landless, very small farmers and/or women.

For example, in Ethiopia, within the context of the Maize Alliance – a partnership designed and coordinated by the Agricultural Transformation Agency, drawing on a range of actors from federal and regional governments, the United Nations, NGOs, and the private sector – WFP targeted 50 000 farmers to purchase from for school feeding in the 2009–13

period. In addition, the Alliance provided 31 cooperative unions, representing over 1 million small family farmers, with enhanced access to farm inputs, alongside training and capacity building in production practices, post-harvest handling, efficient aggregation and commercialization services. The pooled investments led to cooperative unions' sales of quality food to WFP valued at over US\$25 million. Within this collaboration, WFP, the Agricultural Transformation Agency and the Commercial Bank of Ethiopia signed a Tripartite Agreement to support the provision of output financing through loans advanced using WFP contracts as collateral. Cooperative unions with P4P contracts were perceived by financial institutions as good risks, allowing them to build new storage structures, buy on time, pay on time, and meet WFP's stringent contractual requirements.

The P4P approach faces many challenges, some country-specific, others more general. For example, price discovery in remote locations is complex; providing credit for small family farmers, reaching women farmers, and finding and supporting supply-side partners who can help provide technical expertise and build capacity, are also major challenges. One issue common to all IPPs is the need to monitor and evaluate programmes effectively to better inform policy and establish innovative procurement modalities (see Box 20).

The Brazilian experience: linking family farming and markets for institutional purposes

Brazil was the first country to develop an institutional food procurement programme by connecting the development of guaranteed demand for small producers with a food security strategy. The food procurement programme, the *Programa de Aquisição de Alimentos* (PAA) and the national school-feeding programme, the *Programa Nacional de Alimentação Escolar* (PNAE) are the two most important IPPs in

BOX 20 Creating appropriate legal frameworks

The benefits of institutional demand to small family farmers greatly depend on the procurement model used by governments. Buying food directly from associations and cooperatives reduces the role of private intermediaries, ensuring more favourable prices for producers. In addition, producer organizations can help reduce transactions costs, enabling small-scale producers to engage more fully in formal markets. Outside of cooperatives, certain IPP modalities allow farmers to deliver a specific amount of produce at a fixed price. This arrangement offers several advantages as it provides a market and guaranteed incomes, reducing risks and uncertainties.

Nonetheless, procurement from producer organizations can be riskier and costlier than procurement from private traders. Splitting tenders into smaller bids leads to supply fragmentation, which entails processing more bids, assessing and monitoring the quality of several different lots and organizing transportation. There are also the costs of providing training programmes to cooperatives and the higher default rates among farmer groups, as they are more vulnerable to risks. However, these costs can be reduced with appropriate investments in capacity building targeted at producer organizations.

The rules that shape tendering are central to achieving rural development outcomes as they can encourage or hamper small-scale producer participation (Sumberg and Sabates-Wheeler, 2010). Bureaucratic systems and burdensome requirements make it difficult for small producers to participate without effective targeting. However, the greater scale of demand is more likely to stimulate production and generate backward and forward linkages. In addition, food can be transferred from surplus areas to food-insecure areas.

An appropriate legal framework is key to successful procurement policies to

purchase food from small family farmers. Several types of legislation provide such a framework including contract law, health and safety regulations and rules relating to cooperatives and producer organizations.

Public procurement processes are usually heavily regulated to minimize corruption and waste. However, this can pose severe obstacles to public purchases from small farms and producers. In many cases, they have deterred small family farmer participation in school-feeding programmes despite their capacity to respond to the demand. In addition, legislation for producer organizations often requires bureaucratic procedures and complex accountability mechanisms. This may result in producer organizations being unable to obtain formal status and cannot carry out certain financial transactions. To address these challenges, governments can implement policies that favour small family farmers in public procurement processes. Some examples:

- Allocate specific percentages or quotas of the total amount of public purchases to small family farmers.
- Promote tender processes specifically designed for small family farmers.
- Subdivide large purchases so that small-scale producers can respond.

Source: Nehring, Miranda and Howe, 2014.

Brazil.⁴¹ The PAA operates through several modalities, including support for building stocks, the incentive for the production and consumption of milk (PAA Milk), and institutional purchases.

The PAA was launched in 2003 as part of the Zero Hunger Programme and aimed to support family farmers to produce and access markets, distribute food to people to ensure food security and nutrition, and build up strategic stocks. Both the PAA and the PNAE have limits to their purchases from individual or farmer groups, although PNAE sets higher limits as scale is needed to supply schools. To ensure that the poorest benefit from the PAA, priority access is given to family farmers registered with *CadÚnico* who benefit from Bolsa Família. The programme expanded rapidly from US\$50.2 million for 41 500 family farmers in 2003 to US\$410.3 million for 185 500 farmers in 2012 (Del Grossi and Marques, 2015). After ten years in operation, the PAA had purchased more than 3 million tonnes of food from over 200 000 family farms. Nevertheless, it constitutes only 0.0004 percent of Brazil's GDP (IPC-IG and WFP, 2013).

To take part in the PAA, farmers must have a valid *Pronaf* eligibility declaration (DAP), ensuring exclusive participation by family farmers (Box 21). Through the DAP, farmers are classified by poverty and vulnerability, to determine the poorest and most vulnerable. It is established by law that they are to receive preference as potential participants in the PAA.

There was concern at the start of the PAA programme that family farms would not be able to respond to government stimuli.

For this reason, a host of programmes – including those facilitating access to rural credit, insurance, technical assistance and extension, gender-affirmative actions and a programme for investment in transport, energy and sanitation – supported family farmers to achieve greater commercialization (see also Box 22) (Del Grossi and Marques, 2015). A second challenge, the system of bidding for public purchases, was addressed by the introduction of appropriate laws.

There has been no nationwide impact evaluation of the Brazilian IPPs. Evaluations to date have used qualitative case studies and small-scale surveys of one to five municipalities (IPC-IG and WFP, 2013). These studies identify diversification and increase in family farm production; increased income and strengthening and development of collective organizations as some of the most common impacts of the PAA.

Doretto and Michellon (2007) surveyed PAA beneficiaries and non-beneficiaries to study the impact of procurement on family farm incomes in three municipalities in the state of Paraná. Their survey showed an income increase of 25.2 percent among programme participants who had accessed family farm credit and a 43 percent increase in income for those who had not received credit (Doretto and Michellon, 2007). Also, one-third of PAA beneficiaries in the sample had increased their cultivated areas while two-thirds had improved their crop production technology. The improved income, planted area and technology level helped create a better division of labour within the household, allowing family members to work outside agriculture and diversify their income sources. One-third of participating families in two of the sampled municipalities reported incomes from sources other than agriculture.

The PAA provided incentives to diversify production, which led to expanded commercialization opportunities for farmers (Vogt and Souza, 2009). The case study of the Celeiro region in the state of Rio Grande do Sul, focusing on two municipalities, noted the PAA's ability to add a social dimension and structure to local markets and commercialization channels for farmers who were otherwise resource-poor. By guaranteeing market access and prices, the

⁴¹ The PNAE has existed since the 1950s, but was only linked with family farming policies in 2009. Now, state, municipality and federal schools must purchase at least 30 percent of food for school meals directly from family farmers. The PNAE has expanded rapidly and, in 2014, had a budget of 3.5 billion reais (about US\$1.54 billion), benefiting 47.2 million students. Of this amount, approximately US\$460 million (1.05 billion reais) was reserved for direct purchases of family farm products (Del Grossi and Marques, 2015). However, only 45 percent of implementing agencies comply with the legally mandated minimum requirement of 30 percent purchase from family farmers (Swensson, 2015). Lessons from the Brazilian experience are also strengthening school nutrition programmes in other countries in Latin America and the Caribbean (see http://www.fao.org/in-action/program-brazilfao/projects/school-feeding/en/).

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BOX 21 The Family Farm Register

The Pronaf DAP (Declaração de Aptidão ao Pronaf) eligibility declaration is a document certifying that the producer or formal organization complies with all the requirements established by law and can be classified as a "family farmer" or "rural family entrepreneur". This signifies that: (i) the rural property does not exceed four fiscal modules;1 (ii) the labour used in rural activities is predominantly family-based; (iii) a minimum percentage of family income is generated by activities using the rural property or enterprise and; (iv) the establishment is directly managed by the family. A DAP is issued for free by authorized institutions, such as the official entities of technical aid and rural extension or agriculture federations and confederations. It is issued for a

family unit or a formal organization (DAP-legal person) and has become an essential document for participating in all Brazilian public programmes related to family farming, including institutional procurement programmes. An individual DAP has a regular duration of six years while the DAP-legal person (issued to formal groups that have at least 70 percent of their members with a DAP) lasts for only one year. In August 2014, there were 5 073 215 active DAPs for private individuals, and 2 900 for legal entities.

Sources: Swensson, 2015 and Del Grossi and Marques, 2015.

PAA was key to expanding production for participating families (Vogt and Souza, 2009).

Purchases through the PAA have created new relations among family farms, intermediaries, local officials and consumers that have altered the viability of local food systems. The incomes of PAA participants in the northeast of Brazil were three times greater than for non-participants (Sparovek, et al., 2007). This is not only because participants have more income from sales to the PAA, but also because non-participants tended to be subsistence producers. The new Brazil without Poverty strategy aims to expand DAP registration to incorporate around 200 000 family farmers living below the poverty line. The vast majority of these farmers live in Brazil's northeast region, which has the highest incidence of poverty in the country.

In Campina do Monte Alegre in São Paulo, the prices offered through the PAA were 45.9 percent higher than the average price offered by other intermediaries (Agapto *et al.*, 2012). Lucena and Luiz (2009) found that for a sample of seven PAA participants in the state of Rio Grande do Norte, higher prices increased incomes by 43 percent, on average.

The reference prices provide incentives for farmers to produce higher-value vegetables and other food crops (Agapto *et al.*, 2012).

Purchase from Africans for Africa

The Purchase from Africans for Africa Programme (PAA Africa) adapted the Brazilian experience of PAA food purchases from family farmers for implementation in five African countries: Ethiopia, Malawi, Mozambique, the Niger and Senegal.⁴² It has combined productive inclusion for family farmers with food assistance and social protection for vulnerable populations. PAA Africa began in 2012 and, over the course of two years, supported over 5 000 family farmers, mostly organized in producer organizations, and benefited over 128 000 schoolchildren with locally procured school meals. In the Niger, as part of the 3N initiative, PAA Africa also used local food purchases to support crisis prevention and management by supplying national security stocks. Farmers received agricultural inputs and training, resulting in substantial

¹ A fiscal module is a unit of measure for rural property that can vary by municipality.

⁴² For more detail, see PAA Africa (2015).

productivity increases. For example, in Ethiopia, participating farmers supplying haricot red beans increased their productivity by 50 percent, while, in Senegal, rice farmers raised their productivity by over 300 percent (PAA Africa, 2014). On average, 37 percent of the food produced by participating farmers was purchased by the programme.

Bringing the sectors together: the critical issue of targeting

A fundamental operational issue to be addressed in bringing the sectors together is the targeting of interventions. In some countries, the tendency has been to avoid targeting the same households with social protection and agricultural input subsidy programmes on the grounds of equity; in others, the focus has been on potential synergies among the different programmes. Whether or not the objective is to allow programme overlap, an important challenge in implementing multiple programmes is the identification of target households (see also Box 23). The experiences of several countries show that single or unified registries (such

as the CadÚnico in Brazil and the Padrón General de Hogares in Peru) or unified targeting systems (such as the Ficha de Protección Social in Chile, or the Sistema de Focalización de Hogares in Peru), are particularly useful if several programmes have overlapping objectives and target populations.

The case of Peru is a clear example of a conscious effort to create synergies within and between policy areas. Juntos, a conditional cash transfer programme in rural Peru, selects its beneficiaries using data provided by the unified household registry (Padrón General de Hogares) and the targeting system Sistema de Focalización de Hogares. The same data and targeting system are also used for other social programmes (such as the nutrition programmes Vaso de Leche, Comedores Populares and Programa Integral de Nutrición, as well as the free health insurance scheme Seguro Integral de Salud). Moreover, the Government of Peru has also tried to achieve targeting synergies between social protection and agricultural interventions, thereby strengthening the linkage between policy areas. In particular,

BOX 22 The Brazilian Water Cistern Programme

The Water Cistern Programme was created in 2003 and extended in 2011 as the National Programme for Universal Access and Use of Water (Water for All). It promotes universal access to water in rural areas – for human consumption and agriculture, including raising animals – with the aim of enhancing the food and nutrition security of socially vulnerable families. It is targeted at populations living in extreme poverty and implemented by means of the construction of cisterns, collective water supply systems and small dams.

The programme is organized into three initiatives:

 Water for human consumption ("first water") consists of building cisterns to collect and store rainwater for human consumption, aimed at rural families who lack access to drinking water. Priority beneficiaries are the eligible families registered in *CadÚnico*.

- Water for production ("second water") is for families who have already been provided with a cistern for human consumption. The second water introduces social technologies to capture and store of rainwater for agriculture, especially for vegetable gardens and small livestock.
- Cisterns in schools consists of building cisterns to capture and store rainwater for human consumption or for vegetable garden production in municipal schools in the rural areas of the Brazilian semi-arid region.

Source: Del Grossi and Marques (2015).

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BOX 23

Targeting methods for agricultural interventions

Agricultural interventions use a variety of targeting methods such as those described in Box 13 (p. 54). Frequently geographical targeting is used to select an area for intervention, and is then often combined with other criteria such as poverty, risk of drought, vulnerability to climate change, cultivation of certain crops, steepness of land, or degree of urbanization.

Geographical targeting. In agricultural interventions aimed at reducing rural poverty, geographical targeting often follows the same logic as in social protection programmes and intervention areas selected by poverty incidence criteria. Unlike in social protection, geographical targeting is based not only on poverty maps or povertyrelated criteria, but also on the type of agricultural intervention, such as irrigation, rural development, natural resource management or land reform. For example, the Adapting to Markets and Climate Change Project (NICADAPTA), which promotes adaptation to climate change among small coffee and cocoa farmers in Nicaragua, uses geographical

targeting combined with poverty and other criteria. Intervention areas have to be suitable for coffee and cocoa production and be characterized by vulnerability to climate change. The selection of intervention communities and districts in these areas is based on the prevalence of poverty, as well as the number of indigenous and Afro-Caribbean families able to benefit from it (Cirillo, Gyori and Soares, 2014).

Community-based targeting.

Community-based targeting draws on local knowledge, as opposed to centralized coordination, in order to identify programme beneficiaries. One example is the United Republic of Tanzania's input voucher programme. While the allocation of input vouchers among districts and villages is based on geographical criteria, allocation within villages is organized by "Village Voucher Committees". These committees compile a list of beneficiaries, based on the programme's targeting criteria and upon approval of the list by the village assembly, input vouchers are distributed to the beneficiaries.

the rural development programme Haku Wiñay, which aims at strengthening the productive and income-generating capacities of extremely poor farmers, targets villages based on the percentage of inhabitants who are beneficiaries of Juntos. The Peruvian case shows that, when agricultural programmes aim to reach the poor, the targets of these interventions could overlap with social protection programme targets (Ministerio de Desarrollo e Inclusión Social, Gobierno del Perú, 2012). The synergies created by the targeting system in Peru allow for implementation of a more cost-effective targeting strategy and also for improved monitoring of the coverage of social protection and agricultural programmes (Cirillo, Gyorgi and Soares, 2014).

Key messages

- A large variety of options exist to coordinate social protection and agricultural interventions more effectively. The options range from stand-alone, sector-specific, social protection or agricultural programmes, to integrated interventions that combine social protection and agriculture, to sectoral interventions that are aligned to maximize complementarities.
- Combining social protection with agricultural interventions is more effective in addressing the multiple constraints faced by small family farmers.

Categorical targeting. In certain circumstances, categorical targeting can be cost-effective for selecting programme beneficiaries based on easily observable characteristics. For example, the Colombian land reform, Ley de Restitución de Tierras, aims at compensating citizens who lost their land during Colombia's armed conflict. The targeting is categorical in the sense that all citizens belonging to the category "victims of the armed conflict who lost their land" are eligible, irrespective of their socio-economic status, geographical location or other characteristics.

Self-targeting. Self-targeting is less common, but is gaining popularity for agricultural interventions. One approach is to draw on self-selection. An example for this method is the *Projet d'irrigation et de gestion de l'eau à petite echelle* (PIGEPE) project in Burkina Faso, which provides micro-irrigation kits only attractive to farmers with small landholdings. Only farmers who are part of the target group will acquire these kits.

Means testing. A means test can be an effective and transparent measure for selecting beneficiaries if the target group

can be described by economic criteria and if data on these criteria are readily available. For example, participation in the programmes of the Chilean public Instituto de Desarrollo Agropecuario (INDAP) is open only to small family farmers who fulfil the following economic criteria: their agricultural assets may not exceed a value of approximately US\$140 000, the area under their cultivation must be below a location-specific limit, and agriculture must be the households' main source of income. In order to apply for participation in the INDAP programmes, farmers have to provide a number of standardized official documents that can prove their eligibility, and INDAP may schedule farm visits to verify the correctness of the documents provided.

Source: Cirillo, Gyori and Soares, 2014.

- Social protection can complement agricultural policies, such as input subsidies and credit, to benefit poor small family farm households more directly and to contribute to a more coherent rural development strategy. Other types of intervention may also be needed for households to take advantage of agricultural inputs and credit.
- Institutional procurement programmes represent an innovative approach to aligning social protection programmes with agricultural development objectives, by using the demand created by these programmes to create markets for family farms.

 Targeting beneficiaries can improve coherence between social protection and agriculture. Appropriate targeting instruments and design are needed to accurately identify beneficiaries of multiple programmes with different objectives.

6 Conclusions: building on synergies between social protection and agricultural policies to break the cycle of rural poverty

Poverty and malnutrition remain unconscionably high in many parts of the world, and rural people who depend on agriculture for their livelihoods find it particularly hard to break the cycle of poverty. Social protection measures combined with agricultural policies that target the rural poor can be transformative. While social protection programmes have increased in recent years, and some of them have made special efforts to reach agricultural households with complementary interventions, much more needs to be done.

The majority of the poor live in rural areas and depend on agriculture for substantial parts of their income and food security, whether directly or indirectly. Over the long term, economic growth is essential for the poor to develop sustainable livelihoods that take them permanently out of poverty. Growth originating in agriculture is particularly powerful in reducing poverty in countries that are predominantly agricultural.

But this is a longer-term scenario. The poor need immediate help to avoid poverty and hunger, which in themselves undermine the ability of individuals and households to be productive both now and in the future. Social protection can also play an important role in the longer-term context of the structural transformation of agriculture by making the process more inclusive, and less painful, through mitigating the costs farmers face in adjusting to changes and by enabling households to diversify out of agriculture. These basic principles were, and remain, key drivers of several large-scale and high-profile social protection programmes in developing countries, notably in Brazil, Ethiopia, India, Mexico and South Africa, which have given impetus to a reassessment of the value and

role of such programmes in combating poverty and hunger, as well as social, economic and political inequality.

Evidence of such renewed interest was provided by the Social Protection Floor (SPF) initiative (Box 24), launched by the United Nations system Chief Executive Board for Coordination in 2009 and endorsed by the United Nations General Assembly during its MDG Summit of September 2010.⁴³

Perhaps the strongest endorsement of social protection programmes is the rapid increase in the number of programmes in developing country that aim to reduce poverty and hunger. In 2014, at least 145 countries provided one or more forms of social assistance, the type of social protection generally most focused on the poorest and most vulnerable. In developing countries, such programmes cover at least partially about 1.5 billion poor and vulnerable people, a third of whom are extremely poor. However, many of the poorest are not reached, largely because the coverage of social assistance programmes is still limited in many poor countries.

This is, in part, because financing such programmes will often require difficult expenditure choices. Donor support will be essential in the short-to-medium term in some countries, but the use of domestic resources is important if social assistance programmes are to be politically and financially sustainable in the longer term. Generating domestic revenue requires a policy dialogue aimed at building a national consensus on the nature, scale and financing of social assistance within a country.

⁴³ The concept of social protection, as envisaged by the SPF, covers a wide array of objectives and instruments, considerably broader than those discussed in this report.

Social protection programmes are effective in reducing poverty and hunger

There is now substantial evidence showing that social protection programmes are effective in reducing poverty and hunger. In 2013, social protection brought up to 150 million people out of extreme poverty. Social protection allows households to increase and diversify their food consumption, often through increased own production. Positive impacts on child and maternal welfare are enhanced when programmes are gender-sensitive or targeted at women. This is especially important

because maternal and child malnutrition perpetuate poverty from generation to generation.

Increased food consumption and greater dietary diversity do not automatically improve nutrition outcomes. Nutritional status depends on a number of additional factors, including access to clean water, sanitation and health care, as well as appropriate child-feeding and adult dietary choices. Thus, for social assistance programmes to improve nutrition outcomes, they must be combined with complementary interventions. Numerous agricultural interventions, such as home gardening and small livestock breeding, can also contribute to improving nutrition.

BOX 24 The Social Protection Floor

The Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights define a set of essential goods and services, notably the right to an adequate standard of living (including the right to adequate food), the right to health, the right to water, the right to education, the right to housing and the right to social security.

The Social Protection Floor (SPF) initiative, developed under ILO and WHO leadership, is an initiative intended to ensure the realization of these rights. The SPF comprises a basic set of social guarantees for all and the gradual implementation of higher standards as an integrated set of social policies designed to guarantee income security and access to essential social services for all, paying particular attention to vulnerable groups and protecting and empowering people across the life cycle (ILO, 2011).

The "rights-based" SPF is based on the normative belief that social protection should reflect a social contract between governments and citizens, in contrast with "instrumentalist" views that see social protection primarily as a set of tools for achieving poverty reduction and economic growth (HLPE, 2012). Building on the minimum standards for social security established by the ILO, the SPF has two

main components: access to "essential services" (such as water and sanitation, nutrition, health and education), and "essential social transfers" (in cash or kind, to provide basic income security) (ILO and WHO, 2009).

The Social Protection Floors
Recommendation adopted by the 2012
International Labour Conference states
that social protection floors should
include, as a minimum, the following
basic social security guarantees: essential
healthcare and basic income security for
children, older persons, and adults who
are disabled, unemployed or otherwise
unable to earn sufficient income.

The SPF initiative was supported at the 2011 and 2012 G20 Summits. In 2012, G20 leaders also agreed to assist low-income countries in capacity building for implementing national SPFs through policy coherence, coordination, cooperation and knowledge sharing. The "Recommendation Concerning National Floors of Social Protection", which provides guidance on the progressive implementation of social protection floors as a fundamental element of inclusive national social security systems, was adopted at the 2012 International Labour Conference (EU, 2012).

BOX 25

Strengthening the enabling environment for coherent agricultural and social protection interventions

Coherent agricultural and social protection policies and programmes imply coordinated efforts across different government agencies; however, government institutions are not typically organized to readily allow for cross-sectoral collaboration. Political, institutional and operational factors often pose barriers to effective joint action across ministries of agriculture and social protection. Political commitment, an integrated policy framework, institutional coordination arrangements, financing arrangements and capacity for coherence are five critical elements of an enabling environment to strengthen collaboration and coordination across these two spheres.

Technical and operational solutions are necessary to establish coherence, but insufficient for achieving it. Highlevel political commitment is critical in generating consensus among different stakeholders about the importance and benefits of coherence and the development of a shared vision. The opportunity to establish political commitment for coherence is influenced by political context and political economy factors, including actors' motivations, interests and values with regard to small family farm development and social protection.

An integrated policy framework provides an opportunity for translating political commitments for coherence into a long-term vision and formal strategies for action. The process of developing an integrated policy framework can bring together diverse stakeholders – including the government, development partners and civil society organizations – to discuss issues; establish consolidated policy narratives; define common goals, sectoral objectives, priorities, roles and responsibilities; and create a plan of action in order to move towards coherent policy and programming.

Institutional arrangements for coordination are critical for coherence,

as they facilitate collaboration across different agencies, ensuring that policy and programme formulation is properly harmonized and aligned, and interventions are well implemented. These coordination mechanisms are particularly important when agricultural and social protection interventions targeting small family farmers are implemented by different ministries, and when various actors from the government, civil society and development partners influence processes related to these interventions.

Appropriately designed funding arrangements can facilitate coordination between the ministries of agriculture and social protection. Collaboration can be undermined by potential competition for resources. Resource allocation and financing arrangements can be used strategically to mediate these challenges and promote cross-sectoral collaboration.

Stakeholders need adequate capacity to effectively pursue and manage coherence between agriculture and social protection. Achieving complementarities and sequencing by running parallel instruments is a challenge in many lowincome countries with limited institutional capacities and scarce resources. A broad set of technical and functional capacities across line ministries and decentralized government bodies is necessary to build political commitment to coherence, set up institutional frameworks, and drive the agenda forward through efficient policy and programme implementation.

Source: Gavrilovic et al., 2015.

Social protection can promote investment in productive activities

The livelihoods of most poor rural households in the developing world are still based on agriculture, and particularly on subsistence agriculture. Many of these farmers live in places where markets – for agricultural inputs and outputs, labour, and other goods and services such as credit and insurance – are lacking or do not function well. The uncertainties of weather, particularly with accelerating climate change, and the lack of affordable insurance are at the heart of the vulnerabilities of households dependent on agricultural livelihoods.

The time horizon of vulnerable agricultural households is reduced because they focus on survival. As a result, they often adopt low risk, low-return, agricultural and other income-generating strategies, and may seek to obtain liquidity or diversify income sources in casual labour markets. For similar reasons, households may underinvest in the education and health of their children, as well as adopt negative risk-coping strategies such as distress sales of assets, reducing the quantity and quality of food consumption, begging or taking children out of school.

This report argues that social protection can positively impact the investment decisions of poor households. Social protection helps households manage risk. When provided at regular and predictable intervals, it can increase predictability and security for agricultural households, partially substituting for insurance and providing a crucial source of liquidity. Social protection allows households to renew or strengthen their participation in informal social networks for risk-sharing and reciprocal exchange. While limited in effectiveness, such social protection often provides initial help in the face of shocks. Social protection thus helps relax liquidity, credit and/or savings constraints.

A growing body of evidence described in this report shows that social assistance programmes not only prevent households from falling into deeper poverty and hunger when exposed to a shock; by helping the poor overcome liquidity and credit constraints and manage risks more effectively, they also allow poor households to invest in productive activities and build assets and

resources. The evidence shows that social protection fosters more investment in the education and health of children, and reduces child labour, with implications for future productivity and employability. When well implemented, social protection can also facilitate increased investment in farm production activities as well as in non-farm enterprises. Even relatively small transfers help the poor overcome liquidity and credit constraints and provide insurance against some risks that deter them from pursuing higher-return activities. The evidence is clear that transfers also foster greater inclusiveness by facilitating poor households' participation in, and contribution to, social networks, which help households cope with risk and play an important role in the social fabric of communities.

Social protection does not reduce work effort

Despite concerns that social protection measures might reduce incentives for recipients to work, the evidence shows this is not the case. Rather, many beneficiaries shift time previously dedicated to casual agricultural wage employment of last resort to own-farm or non-agricultural employment. Taken together with the increase in farm and non-farm production activities, social protection strengthens livelihoods, instead of fostering dependency.

Social protection has positive impacts on local communities and economies

Public works programmes can provide important infrastructure and community assets and, when designed and implemented properly, directly contribute to the local economy. Moreover, additional income provided by social protection programmes creates demand for locally produced goods and services, contributing to a virtuous circle of local economic growth. Complementary programmes may be necessary to reduce supply-side constraints, thus preventing price rises and increasing the real-income and production impacts of the programme.

Programme design and implementation, and household characteristics determine programme impacts

While targeting can be an effective instrument for reducing poverty and inequality, implementation is key and depends largely on institutional capacity. Unified registries have improved targeting, reduced costs and facilitated coordination across multiple programmes. The level, timing and predictability of income transfers are central to success: transfers must be adequate for the programme objectives, as well as regular and reliable. Gender, household characteristics and the nature of the local economy also account for differences in programme impacts. Effective monitoring and evaluation are required to help governments and donors design more effective programmes and promote greater accountability and public support.

Social protection and agriculture must work together in combating poverty and hunger

Notwithstanding its proven effectiveness, social protection alone cannot sustainably move people out of poverty and hunger, and will not transform local economies by itself. Agriculture and social protection are fundamentally linked in the context of rural livelihoods. Poor and food-insecure families depend primarily on agriculture for their livelihoods, and make up a large proportion of beneficiaries of social protection programmes. Stronger coherence between agriculture and social protection interventions can assist in protecting the welfare of poor, small-scale agriculturalists, helping them manage risks more effectively and achieve improved agricultural productivity, leading to more sustainable livelihoods, and gradually move out of poverty and hunger.

However, relatively few agricultural interventions are coordinated or integrated with social protection programmes. Agricultural and social protection policies originate from different disciplines, and are still viewed as parallel policies implemented by different authorities competing for financial resources. Developing synergies is an opportunity, but is also a necessity, because

of the difficult public expenditure trade-offs implied by constrained government budgets. This report argues not only that it is imperative to help the poorest meet basic consumption needs, especially when they are unable to work, but such help is itself a foundation for gradually improving the livelihoods of the poor. Leveraging public expenditures on agriculture and social protection programmes in support of each other not only furthers this transformation, but also serves to strengthen agricultural and rural development.

A national vision is needed

Countries need a shared national vision of how agriculture and social protection can work together to gradually move people out of poverty and hunger if they are to adopt the necessary institutional and operational measures. Policy and planning frameworks for rural development, poverty reduction, food security and nutrition need to articulate the roles of agriculture and social protection in achieving these results, together with a broader set of interventions.

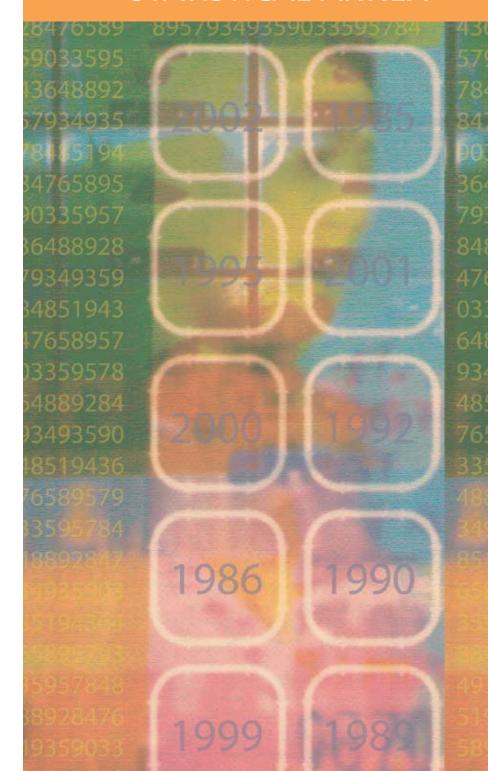
The type of complementary interventions to be coordinated or bundled with social assistance must depend on the context and the key constraints, but must also consider issues such as implementation capacities and available resources. In all cases, interventions must be designed to address a range of constraints to allow the poorest to transform their livelihood strategies to escape and remain out of poverty. For instance, human capacity development through investment in education and training in rural areas can provide farmers with the abilities and skills needed to participate in more commercially oriented activities. Participating in commercial activities also requires secure tenure rights, savings and access to financial services. Cross-sectoral coordination mechanisms at national and subnational levels for food security and nutrition and rural development need to engage relevant actors in the agricultural and social protection domains in joint programming. Single registries can also play a key role in coordinating interventions across different sectors and in providing households with the complementary support needed to gradually move themselves out of poverty and hunger.

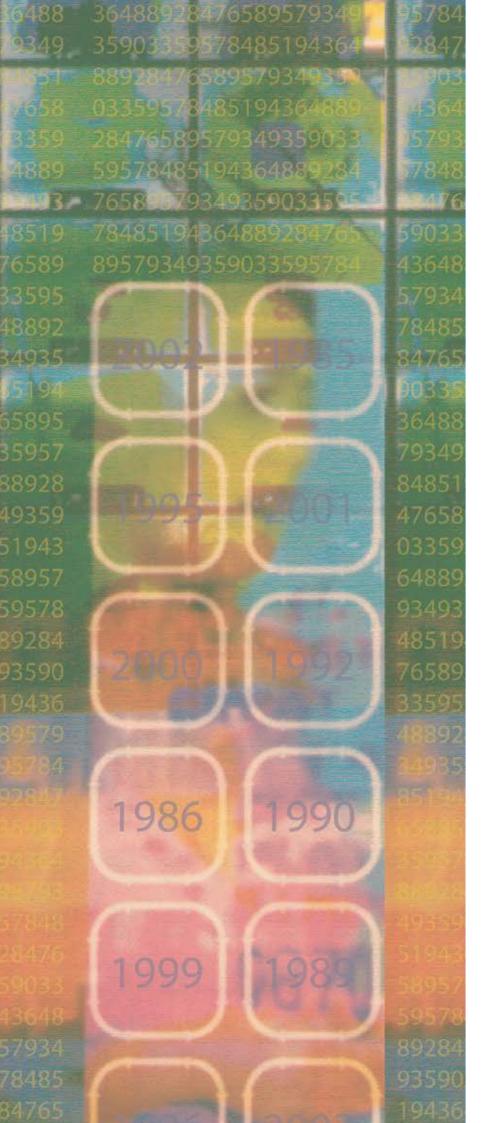
Key messages of the report

- Social protection programmes reduce poverty and food insecurity. Effective targeting and adequate transfers are important determinants of success.
 Social protection contributes to higher incomes and food security not only by ensuring increases in consumption, but by enhancing a household's ability to produce food and augment income.
- Programmes targeted at women have stronger food security and nutrition impacts. Programmes that are gendersensitive, reduce women's time constraints and strengthen their control over income enhance maternal and child welfare. This is especially important because maternal and child malnutrition perpetuate poverty from generation to generation.
- Social protection stimulates investment in agricultural production and other economic activities. Social protection enhances nutrition, health and education, with implications for future productivity, employability, incomes and well-being. Social protection programmes that provide regular and predictable transfers promote savings and investment in both farm and off-farm activities, and encourage households to engage in more ambitious activities offering higher returns.
- Social protection does not reduce work effort. But it does give beneficiaries greater choice, and many shift time previously dedicated to casual agricultural wage employment of last resort to own-farm work or non-agricultural employment. Taken together with the increase in farm and non-farm production activities, social protection strengthens livelihoods instead of fostering dependency.
- Social protection has virtuous impacts on local communities and economies. Public works programmes can provide important infrastructure and community assets and, when designed and implemented properly, contribute directly to the local economy. Cash transfers increase the purchasing power of beneficiary households, who demand goods and services, many of which are produced or provided in the local economy by non-beneficiary households. Complementary programmes may be necessary to reduce

- production constraints to prevent inflation and maximize the real-income and production impacts of the programme.
- Social protection, by itself, is not enough to move people out of poverty. As poor households typically face multiple constraints and risks, joint, coordinated and/ or aligned social protection and agricultural programmes are likely to be more effective in helping poor households move out of poverty in a sustainable manner.
- There are clear opportunities to leverage social protection and agriculture programmes to further rural development. Developing synergies is an opportunity and also a necessity because of constrained government budgets. It is imperative to help the poorest meet basic consumption needs, especially when they are unable to work. Such help can itself become a foundation for gradual improvement of the livelihoods of the poor. Given that the majority of the rural poor depend largely on agriculture, agricultural interventions are needed to overcome structural supply-side bottlenecks holding back growth. Leveraging public expenditures on agriculture and social protection programmes in support of each other not only furthers this transformation, but also serves to strengthen agricultural and rural development.
- · A national vision is needed of how agriculture and social protection can gradually move people out of poverty and hunger. National vision and commitment, supported by permanent domestic resource mobilization, must support coordinated action at the national and subnational levels. Policy and planning frameworks for rural development, poverty reduction, food security and nutrition need to articulate the role of agriculture and social protection in moving people out of poverty and hunger, together with a broader set of interventions. The type of agricultural interventions combined with social assistance depends on the context and constraints, but must also consider issues such as local implementation capacities and available resources. In all cases, interventions must be designed to address a range of constraints to allow the poorest to transform their livelihood strategies to escape and remain out of poverty.

STATISTICAL ANNEX





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Notes on the annex tables



The following conventions are used in the tables:

.. = data not available0 or 0.0 = nil or negligibleblank cell = not applicable

Numbers presented in the tables may differ from the original data sources because of rounding or data processing. To separate decimals from whole numbers a full point (.) is used.

Technical notes

Table A1. Poverty headcount ratios and underweight prevalence among children

Source: World Bank, 2015a (columns 1 and 2); UNICEF, 2014 (columns 3–6). Note: Estimates of poverty rates for Argentina and the Federated States of Micronesia are based on urban data only.

Share of population living on less than \$1.25 a day

Percentage of the population living on less than \$1.25 a day measured in constant 2005 PPP dollars. This is sometimes referred to as extreme poverty.

Share of population living on less than \$2.00 a day

Percentage of the population living on less than \$2.00 a day measured in constant 2005 PPP dollars.

Share of children underweight

Percentage of children aged 0–59 months who are below minus two standard deviations from the median weight-for-age according to the WHO Child Growth Standards.

Table A2. Agriculture's importance in the economy and labour force, fertilizer use intensity, farm size and women's involvement in agriculture

Sources: World Bank, 2015c (column 1); FAO, 2015a (columns 2, 3, 8 and 9); FAO, 2001 and FAO, 2013a (columns 4–7).

Share of value added from agriculture

Net output of the agriculture sector in 2012, after adding up all outputs and subtracting intermediate inputs expressed as a percentage of GDP. The agriculture sector includes forestry, hunting and fishing, as well as cultivation of crops and livestock production.

Share of total labour force in agriculture

Share of the labour force in 2014 who were engaged in or seeking work in agriculture, hunting, fishing or forestry. The labour force is another term for the economically active population, which includes employed and unemployed people (including those seeking work for the first time). The term covers employers; self-employed workers; salaried employees; wage earners; unpaid workers assisting in a family, farm or business operation; members of producer cooperatives and members of the armed forces.

Fertilizer use intensity

Average kilograms of fertilizer nutrients (considering nitrogen, phosphate and potash fertilizers) per hectare of arable and permanent cropland for the period 2010–12. Fertilizer use intensity is reported for the former Sudan (see Country notes), and the data refer to fertilizer use and land area in Sudan (former) for the year 2010 only.

Share of holdings by farm size class

The share of agricultural holdings are shown for each land size class; these are the authors' compilation using the most recent data from the FAO Programme for the World Census of Agriculture 1990 or 2000 round, as shown in FAO (2001) and FAO (2013a). The agricultural holdings reported by agricultural censuses include crop and livestock production only; holdings engaged in forestry or fisheries are only included if they also are engaged in crop and livestock production. An agricultural holding is an economic unit of agricultural production under single management comprising all livestock kept and all land used wholly or partly for agricultural production purposes, without regard to title, legal form, or size. Single management may be exercised by an individual or a household, jointly by two or more individuals or households, by a clan or tribe, or by a juridical person such as a corporation or a government agency. The holding's land may consist of one or more parcels, located in one or more separate areas or in one or more territorial or administrative divisions, provided the parcels share the same production means utilized by the holding, such as labour, farm building, machinery or draught animals.

Share of agricultural labour force that is female

The share of the economically active population in agriculture in 2014 who were women.

Share of female labour force in agriculture

The share of the economically active women in 2014 who were active in agriculture.

Table A3. Social assistance coverage, by population group *Source:* World Bank, 2015e.

Share of population covered by social assistance

The share of individuals in a population living in a household in which at least one member of the household receives benefits from a social assistance programme. Social assistance may include the following types of programme: conditional and unconditional cash transfers, family/child allowances, in-kind transfers, public works or cash-for-work programmes, school feeding, social pensions and other types of social

assistance. Cross-country comparability is limited as the availability of information on programmes varies from country to country.

Table A4. Social assistance transfer amounts, by population group, and benefit incidence

Source: World Bank, 2015e.

Average daily transfer of social assistance per beneficiary

Refers to the total social assistance transfers received on a daily basis by households divided by average household size and measured in 2005 PPP dollars. Social assistance is defined in Table A3. However, comparability between Tables A3 and A4 is limited. For some countries, information was available on coverage and is reported in Table A3, but no information was provided on transfer amounts and so no estimates are provided in Table A4. Furthermore, for many countries, the types and number of programmes included in the coverage (Table A3) are different from the types and number of programmes reporting transfer amounts (Table A4).

Regional and income groupings and aggregates

Countries are listed in alphabetical order according to the income and regional groupings established by the World Bank country classification system; see World Bank (2015c) for a description. All regional and other averages are weighted averages; they are presented whenever available data allow such calculations to be made.

Country notes

Data for China, mainland, do not include data for Hong Kong Special Administrative Region of China and Macao Special Administrative Region of China. Data for Sudan and South Sudan are presented where available; otherwise, estimates are shown for Sudan (former).

TABLE A1
Poverty headcount ratios and underweight prevalence among children

| | | oopulation g on: | Share of children underweight | | | | | |
|---------------------------------------|-------------------------|-------------------------|-------------------------------|---------|-------------------|---------|--|--|
| | less than \$1.25/day | less than \$2.00/day | By re | sidence | By househ quir | | | |
| | | | Rural | Urban | Poorest | Richest | | |
| | (Perce | ntage) | (Perce | entage) | (Perce | ntage) | | |
| LOW- AND MIDDLE-INCOME COUNTRIES | 17.0 | 36.2 | | | | | | |
| East Asia and the Pacific | 7.9 | 22.7 | | | | | | |
| American Samoa | | | | | | | | |
| Cambodia | 10.1 | 41.3 | 30.6 | 19.8 | 35.4 | 15.9 | | |
| China, mainland | 6.3 | 18.6 | 4.4 | 1.3 | | | | |
| Democratic People's Republic of Korea | | | 26.7 | 13.2 | | | | |
| Fiji | 3.3 | 16.4 | 5.4 | 5.0 | | | | |
| Indonesia | 16.2 | 43.3 | 23.0 | 16.9 | 27.8 | 13.9 | | |
| Kiribati | | | •• | | 17.6 | 7.9 | | |
| Lao People's Democratic Republic | 31.2 | 63.2 | 28.9 | 16.3 | 36.5 | 12.1 | | |
| Malaysia | | 0.8 | | | | | | |
| Marshall Islands | | | | | | | | |
| Micronesia (Federated States of) | 17.5 | 26.7 | | | | | | |
| Mongolia | | | 7.3 | 2.8 | 5.0 | 0.9 | | |
| Myanmar | | | 24.2 | 18.7 | 33.1 | 13.5 | | |
| Palau | | | | | | | | |
| Papua New Guinea | 7.3 | 22.0 | 29.0 | 19.9 | | | | |
| Philippines | 18.6 | 41.4 | 23.7 | 16.4 | | | | |
| Samoa | | | | | | | | |
| Solomon Islands | | | 12.2 | 8.2 | 13.7 | 9.8 | | |
| Thailand | 0.3 | 3.3 | 10.4 | 7.1 | 13.5 | 3.7 | | |
| Timor-Leste | 33.2 | 69.6 | 48.0 | 35.4 | 49.4 | 35.3 | | |
| Tonga - · | | | | | | | | |
| Tuvalu | | | 3.0 | 3.6 | 0.7 | 0.0 | | |
| Vanuatu | | | 11.6 | 12.0 | 12.2 | 10.3 | | |
| Viet Nam | 5.0 | 22.4 | 15.3 | 6.6 | 20.6 | 3.1 | | |
| Europe and Central Asia | 0.5 | 2.2 | | | | | | |
| Albania | 0.3 | 2.0 | 7.1 | 5.0 | 7.9 | 3.6 | | |
| Armenia | 2.5 | 17.6 | 8.0 | 3.3 | 7.9 | 1.5 | | |
| Azerbaijan | 0.3 | 1.9 | 12.0 | 4.7 | 15.4 | 2.2 | | |
| Belarus | | | 1.7 | 1.1 | 2.4 | 0.4 | | |
| Bosnia and Herzegovina | 0.0 | 0.1 | 1.4 | 1.9 | 0.9 | 3.9 | | |
| Bulgaria | 1.9 | 3.9 | 1.1 | 1.8 | | | | |
| Georgia | 16.1 | 33.5 | 1.4 | 0.9 | 3.0 | 1.0 | | |
| Kazakhstan | 0.0 | 0.5 | 3.3 | 4.0 | 4.1 | 3.5 | | |
| Kyrgyzstan | 5.1 | 21.1 | 3.7 | 3.7 | 4.5 | 3.3 | | |
| Latvia | 1.1 | 2.0 | | | | | | |

TABLE A1 (cont.)

| | | oopulation g on: | Share of children underweight | | | | | |
|---|-------------------------|-------------------------|-------------------------------|---------|---------|---------------------|--|--|
| | less than \$1.25/day | less than \$2.00/day | By res | sidence | | old income ntile | | |
| | | | Rural | Urban | Poorest | Richest | | |
| | (Perce | ntage) | (Perce | entage) | (Perce | ntage) | | |
| | | | | | | | | |
| Lithuania | 0.8 | 1.2 | | | | | | |
| Montenegro | 0.2 | 0.7 | 1.9 | 2.4 | 3.8 | 0.9 | | |
| Republic of Moldova | 0.2 | 2.8 | 3.8 | 1.9 | 5.5 | 0.7 | | |
| Romania | 0.0 | 1.6 | 4.0 | 3.0 | | | | |
| Russian Federation | 0.0 | 0.2 | | | | | | |
| Serbia | 0.1 | 0.4 | 1.3 | 1.8 | 3.0 | 2.1 | | |
| Tajikistan | 6.0 | 25.1 | 13.7 | 12.1 | 15.8 | 9.3 | | |
| The former Yugoslav Republic of Macedonia | 0.2 | 3.6 | 1.8 | 0.8 | 1.9 | 0.0 | | |
| Turkey | 0.1 | 2.6 | 2.7 | 1.3 | 4.2 | 0.5 | | |
| Turkmenistan | 5.7 | 21.3 | | | •• | | | |
| Ukraine | | •• | 5.4 | 3.5 | | | | |
| Uzbekistan | | | 4.3 | 4.7 | 4.5 | 3.1 | | |
| Latin America and the Caribbean | 4.6 | 9.3 | | | | | | |
| Antigua and Barbuda | | | | | | | | |
| Argentina | 1.4 | 2.9 | | | | | | |
| Belize | 11.3 | 20.0 | 6.6 | 5.4 | 8.8 | 3.0 | | |
| Bolivia (Plurinational State of) | 7.0 | 12.0 | 6.4 | 2.8 | 7.5 | 2.0 | | |
| Brazil | 4.5 | 8.2 | 2.0 | 2.2 | 2.2 | 1.8 | | |
| Chile | 0.8 | 1.9 | | | | | | |
| Colombia | 5.0 | 11.3 | 4.6 | 2.9 | 5.6 | 1.8 | | |
| Costa Rica | 1.4 | 3.2 | 2.0 | 1.2 | | | | |
| Cuba | | | | | | | | |
| Dominica | | | | | | | | |
| Dominican Republic | 2.5 | 8.5 | 3.8 | 3.2 | 5.3 | 1.2 | | |
| Ecuador | 4.0 | 9.0 | 8.2 | 4.7 | | | | |
| El Salvador | 2.8 | 10.3 | 8.5 | 4.4 | 11.6 | 0.9 | | |
| Grenada | | | | | | | | |
| Guatemala | 13.7 | 29.8 | 15.7 | 8.3 | 20.8 | 3.2 | | |
| Guyana | 5.3 | 11.9 | 12.2 | 7.5 | 15.7 | 4.1 | | |
| Haiti | 51.6 | 69.5 | 13.1 | 8.6 | 17.8 | 3.8 | | |
| Honduras | 16.5 | 29.2 | 9.0 | 4.7 | 12.8 | 3.1 | | |
| Jamaica | 0.0 | 1.9 | 2.5 | 5.1 | | | | |
| Mexico | 1.1 | 4.5 | 4.6 | 2.2 | | | | |
| Nicaragua | 6.8 | 16.0 | 6.9 | 4.2 | 8.6 | 1.3 | | |
| Panama | 3.6 | 8.4 | 3.2 | 2.4 | | | | |
| Paraguay | 4.4 | 11.0 | | | | | | |
| Peru | 3.0 | 8.7 | 5.9 | 2.1 | 7.3 | 0.6 | | |
| Saint Lucia | 11.8 | 25.8 | 3.0 | 1.8 | | | | |
| Saint Vincent and the Grenadines | | | | | | | | |

TABLE A1 (cont.)

| TABLE A1 (cont.) | | | | | | |
|------------------------------------|-------------------------|-------------------------|--------|------------------|--------------------|---------|
| | | oopulation g on: | : | Share of childre | en underweigh | t |
| | less than \$1.25/day | less than \$2.00/day | By res | idence | By househo quir | |
| | | | Rural | Urban | Poorest | Richest |
| | (Perce | ntage) | (Perce | ntage) | (Percei | ntage) |
| | | 40.0 | | | | |
| Suriname | 10.5 | 19.8 | 6.1 | 5.6 | 6.2 | 4.2 |
| Uruguay | 0.3 | 1.2 | | | | |
| Venezuela (Bolivarian Republic of) | 5.6 | 10.7 | | | •• | |
| Middle East and North Africa | 1.7 | 11.6 | | | | |
| Algeria | 1.2 | 8.2 | 4.3 | 3.2 | 4.5 | 1.8 |
| Djibouti | 10.2 | 27.8 | 39.6 | 26.0 | | |
| Egypt | 1.7 | 15.3 | 6.7 | 6.9 | 7.5 | 5.4 |
| Iran (Islamic Republic of) | 0.8 | 4.6 | | | | |
| Iraq | 3.7 | 20.9 | 8.5 | 8.4 | 9.1 | 8.2 |
| Jordan | 0.1 | 1.0 | 2.1 | 3.2 | 5.2 | 0.4 |
| Lebanon | | | | | | |
| Libya | | | | | | |
| Morocco | 1.8 | 11.0 | 4.3 | 1.7 | 6.7 | 1.1 |
| Occupied Palestinian Territory | 0.1 | 0.5 | 3.9 | 3.7 | 4.6 | 2.9 |
| Syrian Arab Republic | 0.4 | 8.3 | 10.7 | 9.6 | 10.0 | 6.9 |
| Tunisia | 0.7 | 4.3 | 2.4 | 2.3 | 3.2 | 2.2 |
| Yemen | 4.8 | 25.7 | 38.2 | 27.9 | | |
| South Asia | 24.5 | 60.2 | | | | |
| Afghanistan | | | | | | |
| Bangladesh | 39.6 | 73.9 | 39.2 | 28.3 | 50.3 | 20.9 |
| Bhutan | 3.0 | 17.1 | 13.8 | 10.4 | 16.1 | 7.3 |
| India | 24.7 | 60.6 | 46.6 | 33.9 | 56.6 | 19.7 |
| Maldives | 0.0 | 2.3 | 20.1 | 12.1 | 24.3 | 10.5 |
| Nepal | 25.4 | 58.0 | 30.3 | 16.8 | 40.3 | 10.0 |
| Pakistan | 12.7 | 50.7 | 34.6 | 24.7 | 47.8 | 15.6 |
| Sri Lanka | 2.8 | 19.9 | 27.1 | 18.0 | 33.4 | 17.9 |
| Sub Sahayan Africa | 46.0 | 60.0 | | | | |
| Sub-Saharan Africa | 46.9 43.0 | 68.8 67.0 | 18.0 | 14.1 | | |
| Angola Benin | 51.6 | 74.3 | 22.4 | 15.9 | 25.0 | 10.0 |
| Botswana | 10.0 | 23.2 | 11.3 | 10.1 | 15.7 | 3.9 |
| Burkina Faso | 40.8 | 69.3 | 27.7 | 19.1 | 31.7 | 15.5 |
| Burundi | 79.8 | 92.9 | 30.1 | 18.7 | 40.7 | 17.0 |
| Cabo Verde | 11.9 | 31.9 | | | | |
| Cameroon | 24.9 | 50.1 | 20.8 | 7.5 | 29.8 | 3.9 |
| Central African Republic | 56.7 | 75.5 | 23.6 | 23.2 | 26.0 | 19.0 |
| Chad | 36.5 | 60.6 | 32.9 | 21.7 | 33.2 | 21.1 |
| | 50.5 | 00.0 | 32.3 | 21.7 | JJ.2 | 21.1 |

TABLE A1 (cont.)

| | | oopulation g on: | Share of children underweight | | | | | |
|------------------------------------|-------------------------|-------------------------|-------------------------------|--------------|--------------|---------------------|--|--|
| | less than \$1.25/day | less than \$2.00/day | By res | sidence | | old income ntile | | |
| | | | Rural | Urban | Poorest | Richest | | |
| | (Perce | ntage) | (Perce | entage) | (Perce | ntage) | | |
| _ | | | | | | | | |
| Comoros | 48.2 | 66.9 | 18.1 | 13.7 | 19.8 | 9.3 | | |
| Congo Côte d'Ivoire | 32.8 37.3 | 57.3 | 15.8 | 9.1 | 17.6 20.7 | 10.0 | | |
| Democratic Republic of the Congo | 84.0 | 61.6 93.5 | 17.7 26.8 | 12.3 16.9 | 28.8 | 12.3 | | |
| Eritrea | | | | | | | | |
| Ethiopia | 36.8 | 72.2 | 30.9 | 16.9 | 35.6 | 15.1 | | |
| Gabon | 5.4 | 19.4 | 9.0 | 6.0 | 10.4 | 1.9 | | |
| Gambia | 34.0 | 56.4 | 21.4 | 11.9 | 23.5 | 9.5 | | |
| Ghana | 18.0 | 37.3 | 15.5 | 10.5 | 20.0 | 6.3 | | |
| Guinea | 41.3 | 71.9 | 21.5 | 10.6 | 19.8 | 4.8 | | |
| Guinea-Bissau | 48.7 | 77.8 | 20.7 | 13.2 | 22.1 | 10.6 | | |
| Kenya | 38.0 | 62.0 | 17.6 | 10.9 | 24.9 | 8.8 | | |
| Lesotho | 45.7 | 63.7 | 13.6 | 13.1 | 17.8 | 9.2 | | |
| Liberia | 70.2 | | 21.3 | 18.3 | 21.0 | 13.0 | | |
| Madagascar | 87.8 | 95.2 | 38.1 | 31.1 | 40.4 | 24.0 | | |
| Malawi | 71.6 | | 14.3 | 11.1 | 16.5 | 12.8 | | |
| Mali | 50.8 | 78.9 | 30.7 | 20.6 | 31.0 | 17.0 | | |
| Mauritania | 23.5 | 47.8 | 29.7 | 16.4 | 36.4 | 9.7 | | |
| Mauritius | 0.4 | 1.8 | | | | | | |
| Mozambique | 55.8 | 79.2 | 17.5 | 10.5 | 23.0 | 6.4 | | |
| Namibia | 22.0 | 41.6 | 19.8 | 12.8 | 21.5 | 6.9 | | |
| Niger | 40.8 | 76.1 | 39.7 | 25.4 | 14.3 | 26.2 | | |
| Nigeria | 60.1 | 80.9 | 34.5 | 24.7 | 41.9 | 15.6 | | |
| Rwanda | 63.0 | 82.3 | 12.4 | 6.2 | 15.5 | 5.2 | | |
| Sao Tome and Principe | 42.2 | 72.0 | 15.4 | 13.7 | 17.8 | 6.8 | | |
| Senegal | 34.1 | 60.3 | 19.1 | 12.2 | 20.8 | 9.6 | | |
| Seychelles | 0.2 | 1.3 | | | | | | |
| Sierra Leone | 56.6 | 82.5 | 21.8 | 19.3 | 21.5 | 14.9 | | |
| Somalia | | | 39.5 | 21.1 | 42.0 | 13.9 | | |
| South Africa | 9.4 | 26.2 | 11.4 | 11.7 | | | | |
| South Sudan | | •• | 29.1 | 22.8 | 32.1 | 20.5 | | |
| Sudan former | 17.3 | | 35.4 | 32.7 | 40.0 | 16.5 | | |
| Sudan, former | 17.2 | 40.2 | | | | | | |
| Swaziland | 39.8 | 59.6 | 6.2 | 4.2 | 8.4 | 3.6 | | |
| Togo | 52.5 37.0 | 72.8 63.1 | 19.4 | 10.3 | 21.0 | 8.8 | | |
| Uganda United Republic of Tanzania | 37.0 43.5 | 63.1 73.0 | 15.2 14.6 | 6.9 9.2 | 18.1 21.5 | 8.4 9.3 | | |
| Zambia | 73.2 | | 15.7 | 13.0 | 15.7 | 10.7 | | |
| | 1.1.4 | •• | 1 1.7 | 13.0 | | IV./ | | |

TABLE A2
Agriculture's importance in the economy and labour force, fertilizer use intensity, farm size and women's involvement in agriculture

| | Share of value | Share of total labour | Fertilizer use | | | holdings size class | | Share of agricultural | Share of female labour |
|--|------------------------|-----------------------|-------------------|-------|--------|------------------------|-------|--------------------------------|------------------------|
| | added from agriculture | force in agriculture | intensity | <1 ha | 1–2 ha | 2–5 ha | >5 ha | labour force that is female | force in agriculture |
| | (Perce | ntage) | (kg/ha) | | (Perce | ntage) | | (Perce | ntage) |
| | | | | | | | | | |
| WORLD | 3.6 | 38.3 | 124.0 | 72.0 | 12.4 | 9.6 | 6.1 | 39.3 | 40.2 |
| | | | | | | | | | |
| LOW- AND MIDDLE- INCOME COUNTRIES | 10.1 | 45.2 | 126.0 | 73.8 | 12.1 | 9.3 | 4.7 | 40.5 | 48.1 |
| | | | | | | | | | |
| East Asia and the Pacific | 10.8 | 54.4 | 321.5 | 87.0 | 7.4 | 4.4 | 1.3 | 46.7 | 57.0 |
| American Samoa | | 26.1 | | 57.3 | 26.3 | 13.1 | 3.3 | 33.3 | 22.2 |
| Cambodia | 35.6 | 64.2 | 14.0 | | | | | 51.0 | 67.9 |
| China, mainland | 10.1 | 58.7 | 520.9 | 93.0 | 4.9 | 1.7 | 0.4 | 45.5 | 61.7 |
| Democratic People's Republic of Korea | | 20.9 | | | | | | 46.5 | 21.0 |
| Fiji | 12.0 | 34.7 | 23.5 | 43.3 | 11.8 | 19.6 | 25.3 | 21.9 | 23.1 |
| Indonesia | 14.5 | 38.7 | 99.6 | 70.8 | 16.8 | 11.0 | 1.4 | 39.4 | 41.7 |
| Kiribati | | 21.2 | | | | | | 27.3 | 13.6 |
| Lao People's Democratic Republic | 28.1 | 74.2 | | 38.3 | 35.2 | 26.5 | | 52.0 | 77.1 |
| Malaysia | 10.0 | 10.7 | 253.7 | | | | | 20.6 | 5.7 |
| Marshall Islands | | 23.1 | 0.0 | | | | | 16.7 | 9.1 |
| Micronesia (Federated States of) | | 21.2 | | | | | | 27.3 | 13.6 |
| Mongolia | 16.3 | 15.7 | 22.0 | | | | | 48.3 | 15.1 |
| Myanmar | | 65.7 | 11.0 | 33.7 | 23.3 | 29.9 | 13.2 | 48.6 | 68.4 |
| Palau | 5.2 | 18.2 | | | | | | 50.0 | 25.0 |
| Papua New Guinea | | 66.8 | 29.9 | | | | | 55.8 | 76.4 |
| Philippines | 11.8 | 31.4 | 66.6 | 40.1 | 28.0 | 23.5 | 8.4 | 24.3 | 19.2 |
| Samoa | | 24.7 | 0.4 | 19.0 | 31.9 | 30.0 | 19.2 | 33.3 | 24.0 |
| Solomon Islands | •• | 66.5 | | | | | | 47.8 | 80.2 |
| Thailand | 12.3 | 45.4 | 123.5 | 19.7 | 22.5 | 37.2 | 20.5 | 44.6 | 43.4 |
| Timor-Leste | 18.4 | 78.8 | | | | | | 45.2 | 86.8 |
| Tonga | 19.2 | 25.6 | 142.8 | | | | | 36.4 | 21.1 |
| Tuvalu | 25.4 | 25.0 | | | | | | 0.0 | 0.0 |
| Vanuatu | 28.0 | 27.9 | | | | | | 46.2 | 27.3 |
| Viet Nam | 19.7 | 61.4 | 196.7 | 84.9 | 9.9 | 4.7 | 0.5 | 48.8 | 62.0 |
| | | | | | | | | | |
| Europe and Central Asia | 6.6 | 12.9 | 39.8 | 44.3 | 17.0 | 22.6 | 16.1 | 39.2 | 57.0 |
| Albania | 21.8 | 39.2 | 80.3 | 59.9 | 30.1 | 10.0 | | 41.7 | 38.7 |
| Armenia | 21.6 | 9.0 | 25.3 | | | | | 12.1 | 2.4 |
| Azerbaijan | 5.5 | 21.2 | 12.9 | | | | | 52.5 | 23.8 |
| Belarus | 9.8 | 7.6 | 274.7 | | | | | 16.4 | 2.5 |
| Bosnia and Herzegovina | 7.7 | 1.7 | 85.0 | | | | | 59.4 | 2.1 |

| TADIE | . ^ 2 | (cont.) |
|-------|--------|----------|
| IADLE | . AZ I | (COIIC.) |

| | Share of value | Share of total labour | Fertilizer use | | | holdings size class | | Share of agricultural | Share of female labour |
|--|------------------------|-----------------------|-------------------|-------|--------|------------------------|-------|-----------------------------|------------------------|
| | added from agriculture | force in agriculture | intensity | <1 ha | 1–2 ha | 2–5 ha | >5 ha | labour force that is female | force in agriculture |
| | (Perce | ntage) | (kg/ha) | | (Perce | ntage) | | (Perce | ntage) |
| | | | | | | | | | |
| Bulgaria | 5.4 | 2.9 | 111.9 | 77.0 | | 19.8 | 3.2 | 27.2 | 1.7 |
| Georgia | 8.6 | 13.5 | 23.6 | 70.2 | 23.0 | 5.2 | 1.6 | 34.4 | 10.0 |
| Kazakhstan | 4.7 | 12.8 | 1.7 | | | | | 22.2 | 5.8 |
| Kyrgyzstan | 19.2 | 19.0 | 20.6 | 85.3 | 6.9 | 5.0 | 2.8 | 28.3 | 12.7 |
| Latvia | | 8.3 | 83.2 | 0.0 | 6.1 | 19.8 | 74.1 | 23.2 | 3.9 |
| Lithuania | | 6.7 | 89.7 | 0.2 | 7.8 | 47.1 | 44.9 | 21.4 | 2.8 |
| Montenegro | 8.8 | 10.6 | 12.0 | | | | | 37.5 | 8.8 |
| Republic of Moldova | 13.4 | 12.6 | 12.4 | | | | | 27.4 | 6.5 |
| Romania | 6.0 | 7.5 | 49.7 | 49.5 | 20.0 | 22.9 | 7.5 | 40.9 | 6.7 |
| Russian Federation | 3.9 | 7.3 | 16.0 | | | | | 22.7 | 3.3 |
| Serbia | 9.0 | 10.7 | 127.9 | 27.5 | 18.7 | 31.3 | 22.4 | 36.5 | 8.6 |
| Tajikistan | 26.6 | 25.0 | 49.7 | | | | | 52.1 | 28.5 |
| The former Yugoslav Republic of Macedonia | 10.4 | 6.0 | 57.7 | | | | | 29.8 | 4.6 |
| Turkey | 9.0 | 29.6 | 89.1 | 17.0 | 17.5 | 30.9 | 34.6 | 55.2 | 62.3 |
| Turkmenistan | 14.5 | 28.3 | •• | | | | | 53.5 | 32.0 |
| Ukraine | 9.3 | 9.1 | 36.6 | | | | | 25.1 | 4.6 |
| Uzbekistan | 18.9 | 19.2 | 173.9 | | | | | 42.5 | 17.8 |
| | | | | | | | | | |
| Latin America and the Caribbean | 5.2 | 13.5 | 110.9 | 17.2 | 9.0 | 25.3 | 48.5 | 21.1 | 6.7 |
| Antigua and Barbuda | 2.2 | 20.0 | 2.9 | | | | | 25.0 | 11.8 |
| Argentina | 6.9 | 6.9 | 40.7 | | | 15.1 | 84.9 | 10.8 | 1.8 |
| Belize | 15.0 | 23.0 | 8.6 | | | | | 2.9 | 1.8 |
| Bolivia (Plurinational State of) | 13.0 | 40.0 | 158.2 | | | | | 41.7 | 36.4 |
| Brazil | 5.3 | 9.4 | 71.6 | 10.6 | 9.7 | 16.5 | 63.2 | 24.4 | 5.1 |
| Chile | 3.4 | 12.4 | 318.5 | 14.6 | 10.2 | 17.7 | 57.5 | 15.1 | 4.9 |
| Colombia | 6.3 | 13.2 | 332.1 | 18.1 | 13.5 | 21.2 | 47.2 | 25.2 | 7.1 |
| Costa Rica | 6.1 | 13.7 | 264.8 | | | | | 13.8 | 5.3 |
| Cuba | | 10.3 | 34.7 | | | | | 19.3 | 5.0 |
| Dominica | 16.9 | 18.8 | 17.0 | 53.2 | 21.3 | 18.3 | 7.2 | 33.3 | 15.4 |
| Dominican Republic | 6.3 | 9.0 | 59.1 | | | | | 35.0 | 7.0 |
| Ecuador | 9.1 | 16.6 | 117.9 | 29.5 | 14.0 | 20.1 | 36.5 | 26.1 | 10.5 |
| El Salvador | 11.9 | 20.9 | 135.4 | | | | | 9.7 | 4.9 |
| Grenada | 5.6 | 19.1 | | 85.0 | 7.5 | 5.4 | 2.2 | 22.2 | 10.5 |
| Guatemala | 11.2 | 36.8 | 97.8 | 78.5 | 10.4 | 6.0 | 5.1 | 9.6 | 9.1 |
| Guyana | 21.5 | 13.5 | 28.9 | | | | | 7.8 | 2.9 |
| Haiti | | 56.6 | | | | | | 23.8 | 41.4 |
| Honduras | 14.8 | 21.2 | 58.2 | | | 54.7 | 45.3 | 21.2 | 14.3 |
| Jamaica | | 16.2 | 39.7 | 69.4 | 15.2 | 11.9 | 3.5 | 27.7 | 10.2 |

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TABLE A2 (cont.)

| | Share of value | Share of total labour | Fertilizer use | | | holdings size class | | Share of agricultural | Share of female labou |
|---------------------------------------|------------------------|-----------------------|-------------------|-------|--------|------------------------|-------|-----------------------------|-----------------------|
| | added from agriculture | force in agriculture | intensity | <1 ha | 1–2 ha | 2–5 ha | >5 ha | labour force that is female | force in agriculture |
| | (Perce | ntage) | (kg/ha) | | (Perce | ntage) | | (Perce | entage) |
| | | | | | | | | | |
| Mexico | 3.5 | 14.3 | 73.2 | | | | | 12.7 | 4.7 |
| Nicaragua | 18.3 | 12.6 | 39.0 | 12.4 | 9.2 | 18.6 | 59.7 | 7.7 | 3.0 |
| Panama | 3.5 | 14.0 | 50.0 | 52.7 | 10.3 | 11.6 | 25.4 | 3.2 | 1.2 |
| Paraguay | 18.1 | 23.5 | 86.0 | 9.7 | 10.1 | 20.1 | 60.0 | 7.2 | 3.7 |
| Peru | | 22.6 | 74.0 | | | 69.6 | 30.4 | 31.9 | 16.1 |
| Saint Lucia | 2.9 | 20.0 | 42.6 | 62.8 | 18.0 | 14.8 | 4.5 | 22.2 | 10.8 |
| Saint Vincent and the Grenadines | 7.2 | 20.0 | | 72.8 | 14.9 | 9.6 | 2.6 | 27.3 | 13.0 |
| Suriname | 7.1 | 16.1 | 138.2 | | •• | •• | •• | 24.2 | 10.5 |
| Uruguay | 10.2 | 10.8 | 177.6 | | | 11.0 | 89.0 | 14.8 | 3.5 |
| Venezuela (Bolivarian Republic of) | | 4.5 | 134.6 | 8.5 | 14.1 | 25.7 | 51.6 | 6.4 | 0.7 |
| Middle East and | 11.2 | 19.5 | 58.5 | 59.0 | 11.4 | 13.8 | 15.8 | 47.6 | 33.0 |
| North Africa | | | | | | | | | |
| Algeria | 9.3 | 19.7 | 17.4 | 21.8 | 12.6 | 23.4 | 42.2 | 52.5 | 28.6 |
| Djibouti | ** | 72.3 | ** | •• | | | •• | 46.3 | 76.9 |
| Egypt | 14.5 | 22.6 | 454.9 | 87.1 | 8.0 | 3.8 | 1.1 | 40.8 | 35.3 |
| Iran (Islamic Republic of) | | 20.0 | 31.7 | 47.5 | 12.1 | 18.4 | 22.1 | 50.2 | 31.6 |
| Iraq | | 4.4 | 43.8 | | | | | 52.9 | 12.7 |
| Jordan | 3.1 | 5.4 | 632.2 | 53.7 | 32.5 | 7.4 | 6.4 | 65.3 | 19.4 |
| Lebanon | 6.1 | 1.4 | 174.8 | 72.7 | 14.1 | 10.0 | 3.2 | 30.8 | 1.7 |
| Libya | | 2.4 | 24.6 | 14.4 | 10.1 | 25.0 | 50.6 | 74.1 | 6.5 |
| Morocco Occupied Palestinian | 14.4 | 22.8 | 32.6 | 25.4 | 18.2 | 27.5 | 28.9 | 49.7 | 46.2 |
| Territory | 5.3 | 6.7 | | | | | | 74.8 | 19.3 |
| Syrian Arab Republic | •• | 18.4 | 30.8 | | | •• | | 63.8 | 53.3 |
| Tunisia | 9.2 | 19.3 | 26.7 | | | | | 32.4 | 21.8 |
| Yemen | | 34.7 | 11.3 | 73.4 | 10.5 | 9.1 | 7.0 | 40.6 | 54.7 |
| South Asia | 18.1 | 50.5 | 157.9 | 61.8 | 19.0 | 14.4 | 4.7 | 35.0 | 58.8 |
| Afghanistan | 24.6 | 58.4 | 5.0 | | | | | 34.3 | 81.4 |
| Bangladesh | 17.1 | 41.6 | 229.6 | | | | | 52.7 | 53.8 |
| Bhutan | 17.0 | 92.7 | 11.3 | | | | | 34.4 | 98.3 |
| India | 17.5 | 52.5 | 161.3 | 62.9 | 18.9 | 13.9 | 4.3 | 32.5 | 59.0 |
| Maldives | 4.2 | 12.5 | 63.9 | | | | | 40.9 | 11.8 |
| Nepal | 36.5 | 92.9 | 27.2 | 74.9 | 17.5 | 6.8 | 0.8 | 50.1 | 97.7 |
| Pakistan | 24.5 | 37.1 | 175.9 | 36.1 | 21.5 | 28.1 | 14.3 | 31.9 | 53.5 |
| Sri Lanka | 11.0 | 41.3 | 128.1 | | | | | 37.9 | 39.8 |
| Sub-Saharan Africa | 15.7 | 56.5 | 14.9 | 61.8 | 21.5 | 12.7 | 4.1 | 48.9 | 60.1 |
| Angola | 7.2 | 68.2 | 8.3 | | | | | 55.6 | 79.4 |

| TARI | F A2 | (cont.) |
|------|------|---------|
| | _ ^_ | (|

| | Share of value | Share of total labour | Fertilizer use | | | holdings size class | | Share of agricultural | Share of female labour |
|----------------------------------|------------------------|-----------------------|-------------------|-------|--------|------------------------|-------|-----------------------------|------------------------|
| | added from agriculture | force in agriculture | intensity | <1 ha | 1–2 ha | 2–5 ha | >5 ha | labour force that is female | force in agriculture |
| | (Percei | | (kg/ha) | | (Perce | ntage) | | (Perce | ntage) |
| | | | | | | | | | |
| Benin | 36.0 | 40.5 | 9.9 | | | | | 40.1 | 38.6 |
| Botswana | 2.9 | 41.3 | 53.2 | | | | | 57.5 | 55.0 |
| Burkina Faso | 35.3 | 92.0 | 10.2 | 12.9 | 19.5 | 41.2 | 26.4 | 48.2 | 93.2 |
| Burundi | 40.6 | 88.5 | 3.7 | | | | | 55.8 | 97.2 |
| Cabo Verde | 8.1 | 15.0 | | | | | | 40.0 | 14.3 |
| Cameroon | 23.2 | 42.6 | 8.1 | | | | | 46.6 | 47.0 |
| Central African Republic | 54.3 | 59.1 | | | | | | 49.6 | 65.7 |
| Chad | 55.8 | 61.0 | | | | | | 57.6 | 71.8 |
| Comoros | 38.2 | 67.7 | | | | | | 52.2 | 80.4 |
| Congo | 3.9 | 28.9 | 4.9 | | | | | 55.2 | 39.5 |
| Côte d'Ivoire | 22.5 | 33.8 | 10.1 | 42.1 | 14.2 | 19.3 | 24.4 | 35.6 | 39.4 |
| Democratic Republic of the Congo | 21.8 | 55.3 | 1.1 | 86.7 | 10.4 | 2.9 | | 49.0 | 70.7 |
| Eritrea | | 72.3 | 0.9 | | | | | 42.9 | 77.1 |
| Ethiopia | 48.0 | 75.1 | 20.6 | 62.9 | 24.3 | 11.9 | 1.0 | 45.0 | 70.3 |
| Gabon | 4.0 | 23.8 | 6.7 | | | | | 49.0 | 26.7 |
| Gambia | | 74.6 | 7.9 | | | | | 54.4 | 85.5 |
| Ghana | 23.0 | 53.4 | 14.2 | | | | | 45.2 | 48.2 |
| Guinea | 20.5 | 78.0 | 2.3 | 34.1 | 31.0 | 28.0 | 6.8 | 50.3 | 82.2 |
| Guinea-Bissau | 48.3 | 77.9 | | 70.2 | 17.6 | 10.1 | 2.1 | 45.9 | 94.0 |
| Kenya | 29.2 | 68.5 | 36.5 | | | | | 48.5 | 71.1 |
| Lesotho | 8.3 | 37.7 | | 46.8 | 29.2 | 20.4 | 3.5 | 64.8 | 48.7 |
| Liberia | 38.8 | 59.6 | | | | | | 43.7 | 64.9 |
| Madagascar | 28.2 | 68.0 | 2.2 | | | | | 53.3 | 73.3 |
| Malawi | 28.7 | 77.2 | 33.8 | 77.7 | 17.3 | 5.0 | | 59.7 | 93.6 |
| Mali | 42.3 | 72.2 | 22.1 | | | | | 36.1 | 69.3 |
| Mauritania | 15.7 | 49.4 | | | | | | 56.0 | 62.6 |
| Mauritius | 3.5 | 7.1 | 199.5 | | | | | 25.0 | 4.7 |
| Mozambique | 28.9 | 79.5 | 6.8 | 53.8 | 30.4 | 14.0 | 1.8 | 65.2 | 93.5 |
| Namibia | 8.7 | 30.7 | 5.7 | 14.4 | 24.5 | 48.9 | 12.2 | 43.5 | 28.1 |
| Niger | 39.4 | 81.6 | 0.8 | | | | | 36.8 | 97.0 |
| Nigeria | 22.1 | 22.0 | 4.3 | | | | | 41.2 | 23.9 |
| Rwanda | 33.4 | 88.7 | 1.2 | | | | | 56.8 | 95.8 |
| Sao Tome and Principe | | 54.9 | | | | | •• | 51.3 | 66.7 |
| Senegal | 16.7 | 68.9 | 7.8 | 20.9 | 16.5 | 32.5 | 30.0 | 48.5 | 75.0 |
| Seychelles | 2.1 | 71.1 | 21.1 | | | | | 50.0 | 76.2 |
| Sierra Leone | 56.7 | 57.6 | | | | | | 61.8 | 70.7 |
| Somalia | | 63.6 | | | | | | 45.9 | 74.0 |
| South Africa | 2.5 | 5.6 | 56.7 | | | | | 29.5 | 3.5 |
| South Sudan | | 47.6 | | | | | | 40.9 | 60.2 |

TABLE A2 (cont.)

| | Share of value | Share of total labour | Fertilizer use | | | holdings size class | | Share of agricultural | Share of female labour |
|--------------------------------|------------------------|-----------------------|-------------------|-------|--------|------------------------|-------|-----------------------------|------------------------|
| | added from agriculture | force in agriculture | intensity | <1 ha | 1–2 ha | 2–5 ha | >5 ha | labour force that is female | force in agriculture |
| | (Perce | ntage) | (kg/ha) | | (Perce | ntage) | | (Perce | ntage) |
| | | | | | | | | | |
| Sudan | | 47.6 | | | | | | 40.8 | 60.2 |
| Sudan (former) | 28.7 | •• | 3.6 | | | | | | |
| Swaziland | | 26.2 | | | | | | 51.8 | 27.8 |
| Togo | | 50.9 | 7.4 | | | | | 42.4 | 56.3 |
| Uganda | 25.9 | 72.4 | 1.3 | 49.2 | 24.2 | 17.4 | 9.2 | 49.3 | 74.6 |
| United Republic of Tanzania | 28.7 | 73.8 | 5.4 | | | | | 55.1 | 82.2 |
| Zambia | 10.3 | 60.7 | 30.6 | | | | | 46.2 | 64.3 |
| Zimbabwe | 13.2 | 53.7 | 30.1 | •• | | | ** | 51.9 | 65.1 |
| HIGH-INCOME | | | | | | | | | |
| COUNTRIES | 1.4 | 2.7 | 117.6 | 32.6 | 17.5 | 16.0 | 33.9 | 34.4 | 2.1 |
| Andorra | | 5.3 | | | | | | 50.0 | 6.3 |
| Aruba | | 20.0 | | | | | | 22.2 | 10.5 |
| Australia | 2.4 | 3.7 | 45.0 | | | | | 47.9 | 3.8 |
| Austria | 1.5 | 2.8 | 100.2 | | 14.6 | 21.8 | 63.6 | 45.2 | 2.7 |
| Bahamas | 2.3 | 1.9 | | 36.3 | 24.8 | 20.5 | 18.4 | 0.0 | 0.0 |
| Bahrain | | 0.5 | 424.4 | | | | | 0.0 | 0.0 |
| Barbados | 1.5 | 2.3 | 124.0 | 95.0 | 2.8 | 1.1 | 1.1 | 50.0 | 2.5 |
| Belgium | 0.8 | 1.1 | 278.7 | | 17.2 | 13.6 | 69.2 | 32.1 | 0.8 |
| Bermuda | 0.8 | 0.0 | | | | | | | 0.0 |
| Brunei Darussalam | 0.7 | 0.0 | 101.8 | | | | | | 0.0 |
| Canada | | 1.5 | 66.5 | | 2.5 | 3.3 | 94.2 | 56.6 | 1.8 |
| Cayman Islands | | 19.2 | | | | | | 20.0 | 9.1 |
| China, Hong Kong SAR | 0.1 | 0.2 | 682.8 | | | | | 49.3 | 0.1 |
| China, Macao SAR | 0.0 | 0.0 | | | | | | 47.9 | 0.0 |
| Croatia | 4.5 | 3.3 | 282.9 | 50.6 | 16.0 | 19.1 | 14.3 | 27.4 | 2.0 |
| Cyprus | | 4.4 | 137.8 | 54.8 | 16.7 | 16.0 | 12.5 | 38.5 | 3.8 |
| Czech Republic | 2.6 | 5.5 | 98.4 | 29.0 | 15.4 | 17.2 | 38.4 | 21.1 | 2.6 |
| Denmark | 1.8 | 2.2 | 112.8 | | 1.7 | 1.8 | 96.5 | 24.6 | 1.1 |
| Equatorial Guinea | | 62.2 | | | | | | 42.9 | 85.4 |
| Estonia | 4.1 | 8.1 | 72.8 | 19.5 | 20.4 | 24.0 | 36.0 | 24.1 | 3.9 |
| Faroe Islands | | 3.8 | •• | | | | | 0.0 | 0.0 |
| Finland | 2.6 | 3.0 | 154.2 | | 3.4 | 7.1 | 89.5 | 35.4 | 2.2 |
| France | 1.9 | 1.7 | 133.7 | | 16.8 | 12.3 | 70.9 | 33.1 | 1.2 |
| French Polynesia | | 24.0 | 28.2 | 77.0 | 11.8 | 6.2 | 5.0 | 36.7 | 22.4 |
| Germany | 0.9 | 1.3 | 195.2 | | 8.0 | 16.9 | 75.1 | 35.4 | 1.0 |
| Greece | 3.7 | 10.4 | 79.2 | | 49.0 | 27.7 | 23.2 | 53.6 | 13.3 |
| Greenland | | 0.0 | | | | | | | 0.0 |
| Guam | | 21.4 | | 30.1 | 15.7 | 27.5 | 26.8 | 27.8 | 14.3 |
| Hungary | 4.5 | 6.5 | 87.9 | 27.0 | 13.3 | 19.2 | 40.6 | 20.9 | 3.0 |

TABLE A2 (cont.)

| | Share of value | Share of total labour | Fertilizer use | | | holdings size class | | Share of agricultural | Share of female labour |
|---------------------------------|------------------------|-----------------------|-------------------|-------|--------|------------------------|-------|-----------------------------|-------------------------|
| | added from agriculture | force in agriculture | intensity | <1 ha | 1–2 ha | 2–5 ha | >5 ha | labour force that is female | force in agriculture |
| | (Percei | ntage) | (kg/ha) | | (Perce | ntage) | | (Perce | ntage) |
| | | | | | | | | | |
| Iceland | 7.7 | 5.6 | 161.4 | | | | | 9.1 | 1.1 |
| Ireland | 1.5 | 5.6 | 424.1 | | 2.2 | 6.1 | 91.8 | 7.4 | 0.9 |
| Israel | | 1.4 | 238.1 | | | | | 21.7 | 0.7 |
| Italy | 2.2 | 2.7 | 99.9 | 38.1 | 19.2 | 20.6 | 22.2 | 47.0 | 2.9 |
| Japan | 1.2 | 1.7 | 244.8 | 68.5 | 20.0 | 9.1 | 2.4 | 39.6 | 1.6 |
| Kuwait | 0.4 | 1.0 | 462.2 | | | | | 0.0 | 0.0 |
| Liechtenstein | | 0.0 | | | | | | | 0.0 |
| Luxembourg | 0.4 | 1.2 | 301.3 | | 12.5 | 10.0 | 77.6 | 33.3 | 0.9 |
| Malta | | 1.1 | 89.5 | 76.0 | 14.7 | 8.0 | 1.4 | 0.0 | 0.0 |
| Monaco | | 0.0 | | | | | | | 0.0 |
| Netherlands | 1.8 | 2.2 | 273.7 | | 15.9 | 15.4 | 68.7 | 37.7 | 1.8 |
| New Caledonia | | 27.7 | 110.8 | | | | | 38.7 | 28.6 |
| New Zealand | | 7.6 | 1 323.8 | | | 16.8 | 83.2 | 36.7 | 5.9 |
| Northern Mariana Islands | | 22.2 | | 26.2 | 27.6 | 27.6 | 18.7 | 16.7 | 9.1 |
| Norway | 1.2 | 3.0 | 182.5 | 1.6 | 3.5 | 15.4 | 79.5 | 41.5 | 2.6 |
| Oman | 1.2 | 27.0 | 274.2 | | | | | 5.6 | 9.1 |
| Poland | 3.2 | 15.4 | 181.4 | 33.3 | 17.6 | 21.5 | 27.6 | 34.1 | 11.5 |
| Portugal | 2.2 | 8.5 | 92.1 | 26.9 | 27.7 | 24.2 | 21.2 | 68.3 | 12.3 |
| Puerto Rico | 0.8 | 0.9 | | | | 52.7 | 47.3 | 7.7 | 0.2 |
| Qatar | 0.1 | 0.5 | 8 043.2 | 68.8 | 5.3 | 6.0 | 19.9 | 0.0 | 0.0 |
| Republic of Korea | 2.5 | 4.0 | 337.7 | 59.5 | 30.7 | 9.8 | | 43.0 | 4.2 |
| San Marino | | 6.7 | | | | | | 0.0 | 0.0 |
| Saudi Arabia | 1.8 | 3.9 | 185.4 | | | | | 4.8 | 1.2 |
| Singapore | 0.0 | 0.0 | 3 129.5 | | | | | 0.0 | 0.0 |
| Slovakia | 3.6 | 6.4 | 93.0 | 70.1 | 11.5 | 10.2 | 8.1 | 19.7 | 2.8 |
| Slovenia | 2.2 | 0.5 | 239.4 | 28.4 | 12.8 | 23.2 | 35.6 | 40.0 | 0.4 |
| Spain | 2.4 | 3.6 | 91.9 | 25.8 | 14.9 | 21.6 | 37.7 | 38.4 | 3.2 |
| Sweden | 1.5 | 2.0 | 74.1 | | 3.4 | 8.6 | 88.0 | 37.9 | 1.6 |
| Switzerland | 0.7 | 3.0 | 201.4 | 19.7 | 7.1 | 11.1 | 62.1 | 46.3 | 3.0 |
| Trinidad and Tobago | 0.6 | 6.1 | 252.7 | 35.5 | 18.0 | 33.7 | 12.8 | 15.9 | 2.2 |
| Turks and Caicos Islands | | 20.0 | | | | | | 33.3 | 16.7 |
| United Arab Emirates | 0.7 | 2.6 | 354.8 | | | | | 0.0 | 0.0 |
| United Kingdom | 0.7 | 1.4 | 238.2 | | 13.9 | 9.2 | 76.9 | 25.8 | 0.8 |
| United States of America | 1.3 | 1.4 | 125.4 | | | 10.7 | 89.3 | 26.9 | 0.8 |
| United States Virgin Islands | | 18.8 | | | 49.7 | 22.5 | 27.7 | 33.3 | 12.0 |

TABLE A3
Social assistance coverage, by population group

| | | Share | of population | n covered by | social assista | ance | |
|--|------------------|--------|---------------|-------------------|-----------------|------------------|---------|
| | Total population | by res | idence | rural, by quir | income ntile | urban, b quir | |
| | | rural | urban | poorest | richest | poorest | richest |
| | (Percentage) | (Perce | ntage) | (Perce | ntage) | (Percentage) | |
| | | | | | | | |
| LOW- AND MIDDLE-INCOME COUNTRIES | 25.7 | 30.5 | 24.5 | 35.1 | 20.3 | 39.6 | 11.8 |
| | | | | | | | |
| East Asia and the Pacific, excluding China | 39.8 | 46.8 | 35.1 | 60.6 | 32.1 | 61.9 | 16.4 |
| American Samoa | | | | | | | |
| Cambodia | 0.5 | 0.4 | 1.0 | 0.2 | 0.2 | 0.0 | 3.1 |
| China, mainland | | | | | | | |
| Democratic People's Republic of Korea | | | | | | | |
| Fiji | 9.6 | | | | | | |
| Indonesia | 41.1 | 50.7 | 30.9 | 64.1 | 30.1 | 64.6 | 3.8 |
| Kiribati | 4.6 | 5.9 | 3.0 | 7.9 | 5.3 | 0.0 | 2.8 |
| Lao People's Democratic Republic | | | | | | | |
| Malaysia | 82.8 | 93.0 | 77.7 | 97.1 | 87.8 | 87.6 | 68.1 |
| Marshall Islands | | | | | | | |
| Micronesia (Federated States of) | 6.3 | | | | | | |
| Mongolia | 83.2 | 84.5 | 82.2 | 92.1 | 72.1 | 91.1 | 69.0 |
| Myanmar | | | | | | | |
| Palau | | | | | | | |
| Papua New Guinea | 3.4 | 3.3 | 4.2 | 1.6 | 6.3 | 2.9 | 4.7 |
| Philippines | 27.4 | | | | | | |
| Samoa | | | | | | | |
| Solomon Islands | 1.6 | 1.5 | 2.0 | 1.3 | 4.1 | 0.5 | 1.4 |
| Thailand | 70.4 | 74.6 | 61.0 | 87.6 | 63.7 | 75.1 | 52.9 |
| Timor-Leste | 26.3 | 23.9 | 32.8 | 25.4 | 24.5 | 28.0 | 34.3 |
| Tonga | | •• | •• | •• | •• | ** | |
| Tuvalu | | | | | | | |
| Vanuatu | | | | | •• | | |
| Viet Nam | 20.9 | 23.9 | 12.5 | 45.5 | 12.8 | 25.7 | 6.9 |
| | | | | | | | |
| Europe and Central Asia | 32.4 | 39.6 | 28.7 | 57.4 | 24.3 | 44.7 | 18.4 |
| Albania | 33.2 | 39.3 | 26.8 | 49.5 | 25.7 | 39.2 | 17.3 |
| Armenia | 23.0 | 27.3 | 20.7 | 37.0 | 17.4 | 32.7 | 16.1 |
| Azerbaijan | 87.5 | 79.1 | 95.1 | 79.4 | 80.6 | 95.5 | 92.9 |
| Belarus | 58.3 | 56.6 | 58.9 | 65.6 | 45.4 | 69.8 | 46.7 |
| Bosnia and Herzegovina | 20.5 | 21.5 | 18.9 | 22.5 | 20.7 | 20.5 | 16.2 |
| Bulgaria | 39.5 | 44.1 | 37.6 | 64.4 | 27.9 | 54.2 | 22.8 |
| Georgia | 31.3 | 38.8 | 23.9 | 53.2 | 26.5 | 46.2 | 14.5 |
| Kazakhstan | 29.1 | 31.7 | 27.2 | 50.9 | 18.0 | 35.0 | 22.1 |
| Kyrgyzstan | 8.5 | 11.7 | 4.3 | 20.3 | 2.7 | 5.9 | 2.2 |

TABLE A3 (cont.)

| | | Shar | e of population | on covered by | social assista | ance | |
|---|------------------|--------|-----------------|---------------|-----------------|--------------|-------------------|
| | Total population | by re | sidence | | income ntile | | y income ntile |
| | | rural | urban | poorest | richest | poorest | richest |
| | (Percentage) | (Perce | entage) | (Perce | ntage) | (Percentage) | |
| | | | | | | | |
| Latvia | 40.2 | 40.5 | 40.1 | 46.1 | 41.9 | 36.0 | 40.2 |
| Lithuania | 58.7 | 65.5 | 55.3 | 72.1 | 57.4 | 65.6 | 42.8 |
| Republic of Moldova | 33.8 | 35.5 | 31.4 | 43.0 | 30.1 | 37.3 | 20.3 |
| Romania | 55.4 | 56.1 | 54.8 | 79.8 | 32.8 | 79.0 | 32.8 |
| Russian Federation | 28.2 | 39.4 | 24.1 | 58.7 | 20.1 | 38.2 | 14.8 |
| Serbia | 11.9 | 13.2 | 10.8 | 20.1 | 7.1 | 24.5 | 4.7 |
| Tajikistan | 9.7 | 11.5 | 4.5 | 16.6 | 8.1 | 2.0 | 3.5 |
| The former Yugoslav Republic of Macedonia | | | | | | | |
| Turkey | 21.2 | 33.3 | 15.6 | 69.2 | 9.1 | 44.1 | 2.2 |
| Turkmenistan | | | | | | | |
| Ukraine | 47.4 | 52.6 | 44.9 | 54.4 | 48.3 | 51.8 | 33.3 |
| Uzbekistan | | | | | | | |
| | | | | | | | |
| Latin America and the Caribbean | 34.4 | 59.1 | 31.2 | 72.1 | 34.9 | 56.4 | 11.0 |
| Antigua and Barbuda | | | | | | | |
| Argentina | 9.4 | | | | | | |
| Belize | 16.3 | 14.9 | 17.6 | 17.6 | 9.9 | 20.0 | 11.4 |
| Bolivia (Plurinational State of) | 54.4 | 66.2 | 48.2 | 74.8 | 54.0 | 63.2 | 31.0 |
| Brazil | 21.1 | 39.7 | 17.6 | 71.3 | 8.0 | 46.1 | 2.6 |
| Chile | 83.2 | 88.7 | 82.3 | 95.7 | 71.7 | 95.6 | 53.6 |
| Colombia | 41.7 | 55.0 | 38.1 | 66.1 | 35.7 | 60.5 | 14.0 |
| Costa Rica | 44.6 | 36.5 | 55.9 | 60.4 | 8.4 | 76.3 | 26.9 |
| Cuba | | | | | | | |
| Dominica | 8.0 | 5.7 | 9.3 | 5.9 | 2.5 | 13.5 | 4.2 |
| Dominican Republic | 23.7 | 29.4 | 21.0 | 41.0 | 14.3 | 33.9 | 4.0 |
| Ecuador | 64.7 | 85.1 | 54.2 | 91.7 | 68.3 | 77.7 | 18.6 |
| El Salvador | 42.6 | 63.9 | 30.2 | 76.7 | 42.9 | 51.0 | 6.9 |
| Grenada | | | | | | | |
| Guatemala | 48.3 | 59.5 | 36.2 | 62.3 | 47.2 | 56.0 | 8.0 |
| Guyana | | | | | | | |
| Haiti | 0.8 | 0.7 | 0.8 | 0.9 | 0.6 | 1.2 | 1.9 |
| Honduras | 49.3 | 61.4 | 34.6 | 65.9 | 47.4 | 48.7 | 19.0 |
| Jamaica | 67.3 | 74.5 | 61.7 | 85.6 | 53.8 | 85.9 | 40.1 |
| Mexico | 48.9 | 77.8 | 40.5 | 87.3 | 52.2 | 63.5 | 13.8 |
| Nicaragua | 47.2 | 36.0 | 61.5 | 55.1 | 16.9 | 70.2 | 50.0 |
| Panama | 52.0 | 70.2 | 41.9 | 80.9 | 47.7 | 68.3 | 12.0 |
| Paraguay | 40.1 | 51.8 | 31.9 | 62.0 | 30.7 | 49.3 | 13.1 |
| Peru | 57.0 | 78.0 | 45.1 | 87.3 | 56.7 | 72.0 | 12.2 |

TABLE A3 (cont.)

| | | Share | of population | n covered by | social assista | ince | |
|------------------------------------|------------------|----------|---------------|--------------|-------------------|------------------|-------------------|
| | Total population | by res | sidence | - | r income ntile | urban, b quii | y income ntile |
| | | rural | urban | poorest | richest | poorest | richest |
| | (Percentage) | (Perce | entage) | (Perce | ntage) | (Perce | ntage) |
| | | | | | | | |
| Saint Lucia | | | | | | | |
| Saint Vincent and the Grenadines | | | | | | | |
| Suriname | | | | | | | |
| Uruguay | 42.2 | 53.2 | 41.3 | 84.8 | 19.3 | 84.6 | 3.9 |
| Venezuela (Bolivarian Republic of) | 4.7 | | | | | | |
| Middle East and North Africa | 46.3 | 41.8 | 49.6 | 46.2 | 35.1 | 60.2 | 35.1 |
| Algeria | 40.3 | | | | | | |
| Djibouti | 10.8 | 45.8 | 4.1 | 55.3 | 30.9 | 6.1 | 2.7 |
| Egypt | 44.9 | 48.1 | 40.5 | 51.4 | 50.4 | 64.0 | 20.3 |
| Iran (Islamic Republic of) | 77.3 | | | | | | |
| Iraq | 80.0 | 81.5 | 79.4 | 87.0 | 72.6 | 86.2 | 66.3 |
| Jordan | 65.7 | 86.8 | 61.2 | 94.0 | 71.1 | 79.9 | 27.7 |
| Lebanon | 05.7 | | | | | | |
| Libya | | | | | | | •• |
| Morocco | 36.8 | 44.9 | 30.9 | 50.6 | 34.7 | 44.3 | 14.7 |
| Occupied Palestinian Territory | 11.5 | 18.6 | 7.4 | 19.3 | 13.2 | 14.5 | 1.9 |
| Syrian Arab Republic | 5 | | | | | | |
| Tunisia | | | | | | | |
| Yemen | 13.4 | 14.6 | 10.0 | 17.2 | 12.8 | 14.7 | 7.6 |
| | | | | | | | |
| South Asia | 17.1 | 26.1 | 10.7 | 27.3 | 16.4 | 18.4 | 3.8 |
| Afghanistan | 15.3 | 18.4 | 3.5 | 24.0 | 12.0 | 4.8 | 1.7 |
| Bangladesh | 14.6 | 17.8 | 5.3 | 25.9 | 9.7 | 11.9 | 2.0 |
| Bhutan | 1.0 | 1.2 | 0.4 | 1.9 | 0.9 | 0.3 | 0.7 |
| India | 17.2 | 28.4 | 11.1 | 28.0 | 17.9 | 19.8 | 2.9 |
| Maldives | 3.8 | 1.5 | 3.1 | 1.4 | 0.8 | 3.6 | 2.0 |
| Nepal | 38.7 | 41.5 | 27.0 | 51.2 | 29.9 | 31.8 | 25.5 |
| Pakistan | 12.6 | 13.2 | 11.2 | 11.6 | 10.7 | 15.3 | 9.1 |
| Sri Lanka | 29.7 | 33.2 | 16.0 | 59.3 | 8.4 | 22.8 | 3.5 |
| | | | | | | | |
| Sub-Saharan Africa | 18.9 | 19.9 | 17.4 | 21.6 | 16.4 | 21.5 | 10.1 |
| Angola | | | | | | | |
| Benin | | | | | | | |
| Botswana | 70.3 | 73.3 | 68.1 | 89.5 | 45.4 | 91.2 | 37.5 |
| Burkina Faso | 34.3 | 29.9 | 53.9 | 29.5 | 30.3 | 62.6 | 45.5 |
| Burundi | | | | | | | |
| Cabo Verde | 21.9 | 25.2 | 19.3 | 26.6 | 18.6 | 17.2 | 22.9 |
| Cameroon | 1.4 | 0.5 | 2.4 | 0.2 | 0.7 | 1.1 | 2.6 |

TABLE A3 (cont.)

| | | Share of population covered by social assistance | | | | | | | |
|----------------------------------|------------------|--|---------|---------|-------------------|---------|-------------------|--|--|
| | Total population | by res | idence | | / income ntile | | y income ntile | | |
| | | rural | urban | poorest | richest | poorest | richest | | |
| | (Percentage) | (Perce | entage) | (Perce | ntage) | (Perce | ntage) | | |
| Central African Republic | | | | | | | | | |
| Chad | | | | | | | | | |
| Comoros | | | | | | | | | |
| Congo | 0.9 | 5.1 | 6.3 | 0.7 | 0.0 | 2.2 | 1.7 | | |
| Côte d'Ivoire | 5.8 | 0.4 | 1.3 | 2.4 | 2.7 | 4.3 | 13.0 | | |
| Democratic Republic of the Congo | 5.5 | 3.8 | 8.4 | 3.8 | 4.6 | 7.3 | 5.1 | | |
| Eritrea | | | | | | | | | |
| Ethiopia | 13.2 | 15.0 | 4.4 | 17.7 | 10.9 | 6.8 | 2.3 | | |
| Gabon | 44.8 | 35.2 | 47.2 | 36.9 | 25.4 | 56.6 | 28.5 | | |
| Gambia | 2.9 | 2.1 | 3.8 | 0.7 | 3.5 | 3.6 | 4.1 | | |
| Ghana | 6.1 | 5.8 | 6.5 | 6.5 | 4.8 | 6.3 | 4.6 | | |
| Guinea | | | | | | | | | |
| Guinea-Bissau | | | | | | | | | |
| Kenya | 20.0 | 22.6 | 9.8 | 35.0 | 13.6 | 14.2 | 8.5 | | |
| Lesotho | 51.6 | 58.5 | 32.8 | 65.5 | 46.9 | 55.4 | 16.0 | | |
| Liberia | 61.2 | 68.7 | 44.1 | 67.2 | 73.7 | 41.3 | 39.9 | | |
| Madagascar | 0.9 | 0.9 | 1.1 | 2.3 | 0.5 | 1.3 | 0.8 | | |
| Malawi | 20.2 | 19.5 | 23.8 | 20.0 | 17.5 | 23.8 | 11.5 | | |
| Mali | 20.2 | | | | | | | | |
| Mauritania | 33.5 | 34.4 | 32.5 | 28.5 | 38.5 | 30.9 | 30.5 | | |
| Mauritius | 40.6 | | | | | | | | |
| Mozambique | 5.4 | 6.4 | 3.1 | 9.2 | 4.2 | 4.4 | 2.2 | | |
| Namibia | 9.8 | 12.6 | 4.6 | 21.6 | 6.5 | 10.0 | 3.7 | | |
| | 2.7 | | 2.0 | 2.8 | | 2.2 | | | |
| Niger | | 2.9 | 1.5 | | 2.5 | 2.2 | 0.5 | | |
| Nigeria | 1.7 | 1.7 | | 1.0 | | | | | |
| Rwanda San Tama and Principa | 1.4 | 1.6 | 0.3 | 0.5 | 2.9 | 0.3 | 1.0 | | |
| Sao Tome and Principe | 10.3 | | 15.0 | | | | | | |
| Senegal | 10.3 | 6.8 | 15.0 | 6.8 | 4.6 | 12.2 | 12.8 | | |
| Seychelles | 20.2 | | | | | | | | |
| Sierra Leone | 30.2 | 29.2 | 31.8 | 35.2 | 26.0 | 35.6 | 27.3 | | |
| Somalia | | | | | | | | | |
| South Africa | 58.5 | 75.7 | 47.7 | 84.5 | 49.6 | 74.6 | 17.3 | | |
| Sudan | | | | | | | | | |
| Swaziland _ | 51.6 | 61.5 | 20.7 | 72.7 | 41.2 | 29.6 | 10.2 | | |
| Togo | | | | | | | | | |
| Uganda | 66.8 | 72.6 | 45.9 | 77.6 | 59.9 | 60.7 | 23.1 | | |
| United Republic of Tanzania | 77.4 | 77.4 | 77.5 | 78.5 | 74.6 | 82.8 | 69.5 | | |
| Zambia | 0.6 | 0.7 | 0.4 | 1.2 | 0.4 | 0.4 | 0.2 | | |
| Zimbabwe | | | | | | | | | |

TABLE A4

Social assistance transfer amounts, by population group, and benefit incidence

| | Averag | ge daily tr | ansfer of s | ocial assist | tance per | beneficiar | У | Share of total |
|---|-------------------|-------------|-------------|--------------|--------------------|----------------|-------------------|----------------------------------|
| | All beneficiaries | By res | idence | | ıl, by quintile | Urba income | n, by quintile | by the poorest quintile (benefit |
| | | Rural | Urban | Poorest | Richest | Poorest | Richest | incidence) |
| | | | (2005 1 | PPP dollars) | | | | (Percentage) |
| | | | | • | | | | 3, |
| LOW- AND MIDDLE-INCOME COUNTRIES | 0.32 | 0.20 | 0.42 | 0.14 | 0.37 | 0.30 | 0.92 | 21.5 |
| East Asia and the Pacific, excluding China | 0.15 | 0.11 | 0.19 | 0.04 | 0.25 | 0.08 | 0.33 | 21.5 |
| American Samoa | | | | | | | | |
| Cambodia | 0.34 | 0.09 | 0.81 | 0.01 | 0.12 | | 1.23 | 0.2 |
| China, mainland | | | •• | | | •• | | |
| Democratic People's Republic of Korea | | | | | | | | |
| Fiji | 0.65 | | | | | | | 13.7 |
| Indonesia | | | | | | | | |
| Kiribati | 0.32 | 0.30 | 0.37 | 0.15 | 0.63 | | 0.02 | 8.8 |
| Lao People's Democratic Republic | | | | | | | •• | |
| Malaysia | 0.21 | 0.23 | 0.20 | 0.21 | 0.25 | 0.15 | 0.33 | 20.8 |
| Marshall Islands | | | •• | | | | •• | |
| Micronesia (Federated States of) | 1.02 | | | | | | | 3.6 |
| Mongolia | 0.28 | 0.29 | 0.27 | 0.28 | 0.29 | 0.27 | 0.27 | 22.6 |
| Myanmar | | | | | | | | |
| Palau | | | | | | | | |
| Papua New Guinea | 0.10 | 0.03 | 0.46 | 0.01 | 0.05 | 0.06 | 1.70 | 2.3 |
| Philippines | 0.18 | | | | | | | 45.2 |
| Samoa | | | | •• | | •• | | |
| Solomon Islands | 0.59 | 0.40 | 1.35 | 0.17 | 0.55 | 0.16 | 2.62 | 4.0 |
| Thailand | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.02 | 7.4 |
| Timor-Leste | 0.18 | 0.10 | 0.35 | 0.01 | 0.20 | 0.12 | 0.67 | 0.9 |
| Tonga | | | | | | | | |
| Tuvalu | •• | | •• | | •• | | | |
| Vanuatu | | | | | | | | |
| Viet Nam | 0.19 | 0.18 | 0.25 | 0.05 | 0.46 | 0.07 | 0.53 | 13.8 |
| Europe and Central Asia | 0.60 | 0.56 | 0.64 | 0.51 | 0.72 | 0.58 | 1.02 | 29.3 |
| Albania | 0.34 | 0.34 | 0.35 | 0.17 | 1.62 | 0.18 | 0.70 | 14.3 |
| Armenia | 0.39 | 0.40 | 0.38 | 0.48 | 0.28 | 0.39 | 0.32 | 32.4 |
| Azerbaijan | 2.20 | 1.83 | 2.47 | 1.70 | 2.20 | 2.25 | 2.87 | 18.0 |
| Belarus | 1.06 | 0.97 | 1.09 | 1.34 | 0.74 | 1.40 | 0.96 | 29.2 |
| Bosnia and Herzegovina | 2.73 | 2.50 | 3.14 | 1.52 | 3.87 | 1.84 | 5.00 | 13.2 |
| Bulgaria | 0.74 | 0.81 | 0.70 | 0.53 | 1.24 | 0.63 | 0.87 | 24.5 |
| Georgia | 0.40 | 0.35 | 0.48 | 0.41 | 0.26 | 0.49 | 0.72 | 37.0 |
| Kazakhstan | 0.19 | 0.16 | 0.20 | 0.13 | 0.26 | 0.17 | 0.25 | 22.4 |

TABLE A4 (cont.)

| | Averag | ge daily tra | ansfer of s | ocial assist | tance per | beneficiar | y | Share of total |
|---|-------------------|--------------|-------------|--------------|--------------------|----------------|-------------------|----------------------------------|
| | All beneficiaries | By res | idence | | al, by quintile | Urba income | n, by quintile | by the poorest quintile (benefit |
| | | Rural | Urban | Poorest | Richest | Poorest | Richest | incidence) |
| | | | (2005 F | PPP dollars) | | | | (Percentage) |
| | | | | | | | | |
| Kyrgyzstan | 0.56 | 0.51 | 0.72 | 0.57 | 0.78 | 0.60 | 0.93 | 36.2 |
| Latvia | 1.29 | 1.12 | 1.36 | 0.96 | 1.07 | 1.29 | 1.81 | 17.0 |
| Lithuania | 0.87 | 0.93 | 0.84 | 0.93 | 1.29 | 0.88 | 1.12 | 24.6 |
| Republic of Moldova | 0.50 | 0.51 | 0.48 | 0.56 | 0.47 | 0.44 | 0.68 | 26.8 |
| Romania | 0.51 | 0.52 | 0.50 | 0.60 | 0.58 | 0.54 | 0.62 | 31.7 |
| Russian Federation | | | | | | | | |
| Serbia | 1.00 | 0.90 | 1.09 | 0.84 | 1.55 | 0.82 | 2.89 | 30.7 |
| Tajikistan | 0.14 | 0.10 | 0.44 | 0.03 | 0.10 | 0.06 | 1.93 | 7.6 |
| The former Yugoslav Republic of Macedonia | | | | | | | | |
| Turkey | 0.35 | 0.32 | 0.39 | 0.21 | 0.49 | 0.72 | 0.78 | 38.4 |
| Turkmenistan | | | | | | | | |
| Ukraine | 0.65 | 0.55 | 0.71 | 0.63 | 0.50 | 0.72 | 0.78 | 23.3 |
| Uzbekistan | | | | | | | | |
| | | | | | | | | |
| Latin America and the Caribbean | 0.48 | 0.45 | 0.49 | 0.34 | 0.88 | 0.35 | 0.93 | 31.5 |
| Antigua and Barbuda | | | | | | •• | | |
| Argentina Belize | 0.08 | 0.06 | 0.09 | 0.12 | 0.02 | 0.02 | 0.25 | 40.0 18.7 |
| Bolivia (Plurinational State of) | 0.16 | 0.19 | 0.14 | 0.02 | 0.02 | 0.04 | 0.25 | 9.3 |
| Brazil | 0.68 | 0.57 | 0.73 | 0.41 | 1.84 | 0.47 | 1.33 | 33.2 |
| Chile | 0.46 | 0.79 | 0.41 | 0.61 | 0.64 | 0.45 | 0.20 | 24.1 |
| Colombia | 0.29 | 0.25 | 0.31 | 0.25 | 0.28 | 0.19 | 1.09 | 21.3 |
| Costa Rica | 0.16 | 0.16 | 0.17 | 0.15 | 0.04 | 0.15 | 0.15 | 27.5 |
| Cuba | | | | | | | | |
| Dominica | 0.97 | 0.92 | 0.99 | 0.03 | 3.19 | 0.10 | 6.00 | 2.4 |
| Dominican Republic | 0.24 | 0.27 | 0.22 | 0.21 | 0.40 | 0.20 | 0.27 | 25.7 |
| Ecuador | 0.19 | 0.28 | 0.12 | 0.22 | 0.29 | 0.15 | 0.05 | 27.9 |
| El Salvador | 0.03 | 0.03 | 0.01 | 0.05 | 0.03 | 0.01 | 0.04 | 43.9 |
| Grenada | | | | | | | | |
| Guatemala | 0.23 | 0.23 | 0.22 | 0.17 | 0.28 | 0.17 | 0.41 | 19.5 |
| Guyana | | | | | | | | |
| Haiti | 0.01 | 0.01 | 0.02 | 0.00 | 0.05 | 0.00 | 0.02 | 5.7 |
| Honduras | 0.08 | 0.08 | 0.06 | 0.05 | 0.09 | 0.03 | 0.26 | 17.3 |
| Jamaica | 0.08 | 0.12 | 0.03 | 0.19 | 0.06 | 0.06 | 0.01 | 44.1 |
| Mexico | 0.64 | 0.95 | 0.47 | 0.73 | 1.42 | 0.44 | 0.94 | 29.6 |
| Nicaragua | | | | | | | | 48.7 |
| Panama | 0.04 | 0.07 | 0.01 | 0.04 | 0.02 | 0.00 | 0.07 | 48.7 |
| Paraguay | 0.03 | 0.05 | 0.01 | 0.04 | 0.08 | 0.00 | 0.09 | 39.7 |
| Peru | 0.05 | 0.10 | 0.00 | 0.11 | 0.05 | 0.01 | 0.00 | 56.4 |

TABLE A4 (cont.)

| | Avera | ge daily tr | ansfer of s | ocial assist | ance per | beneficiar | y | Share of total |
|------------------------------------|-------------------|-------------|-------------|--------------|--------------------|------------|-------------------|----------------------------------|
| | All beneficiaries | By res | idence | | ıl, by quintile | | n, by quintile | by the poorest quintile (benefit |
| | | Rural | Urban | Poorest | Richest | Poorest | Richest | incidence) |
| | | | (2005 1 | PPP dollars) | | | | (Percentage) |
| | | | | | | | | |
| Saint Lucia | | | | | | | | |
| Saint Vincent and the Grenadines | | | | | | | | |
| Suriname | | | | | | | | |
| Uruguay | 0.33 | 0.32 | 0.33 | 0.33 | 0.31 | 0.34 | 0.38 | 41.5 |
| Venezuela (Bolivarian Republic of) | | | | •• | •• | •• | •• | |
| Middle East and North Africa | 0.10 | 0.09 | 0.10 | 0.08 | 0.13 | 0.09 | 0.17 | 21.9 |
| Algeria | | | | | | | | |
| Djibouti | 0.15 | 0.17 | 0.10 | 0.09 | 0.29 | | | 53.8 |
| Egypt | 0.10 | 0.10 | 0.11 | 0.07 | 0.14 | 0.07 | 0.24 | 17.6 |
| Iran (Islamic Republic of) | | | | •• | | | | |
| Iraq | 0.09 | 0.09 | 0.09 | 0.07 | 0.10 | 0.08 | 0.11 | 18.2 |
| Jordan | 0.22 | 0.25 | 0.22 | 0.26 | 0.42 | 0.19 | 0.54 | 22.7 |
| Lebanon | | •• | | •• | | •• | | |
| Libya | | | | •• | | •• | | |
| Morocco | | | | | | | | |
| Occupied Palestinian Territory | 0.05 | 0.07 | 0.04 | 0.04 | 0.10 | 0.03 | 0.01 | 38.5 |
| Syrian Arab Republic | | •• | | •• | | •• | | |
| Tunisia | | | | •• | | •• | | |
| Yemen | 0.07 | 0.08 | 0.07 | 0.07 | 0.13 | 0.06 | 0.10 | 22.9 |
| South Asia | 0.15 | 0.14 | 0.22 | 0.08 | 0.23 | 0.12 | 0.50 | 18.3 |
| Afghanistan | 0.05 | 0.03 | 0.54 | 0.01 | 0.09 | 0.19 | 1.31 | 6.7 |
| Bangladesh | 0.08 | 0.08 | 0.06 | 0.06 | 0.10 | 0.05 | 0.07 | 24.7 |
| Bhutan | 0.08 | 0.05 | 0.26 | 0.03 | 0.09 | 0.02 | 0.46 | 15.3 |
| India | | | | | | | | |
| Maldives | 0.35 | | | | | | | 25.7 |
| Nepal | 0.05 | 0.04 | 0.08 | 0.03 | 0.06 | 0.04 | 0.13 | 15.7 |
| Pakistan | 0.28 | 0.25 | 0.35 | 0.13 | 0.49 | 0.18 | 0.86 | 11.6 |
| Sri Lanka | 0.10 | 0.10 | 0.08 | 0.09 | 0.20 | 0.08 | 0.15 | 32.5 |
| | | | | | | | | |
| Sub-Saharan Africa | 0.21 | 0.12 | 0.37 | 0.06 | 0.27 | 0.20 | 1.36 | 9.4 |
| Angola | | | •• | | | | •• | |
| Benin | | | | | | | | |
| Botswana | 0.33 | 0.28 | 0.36 | 0.20 | 0.44 | 0.20 | 0.83 | 16.6 |
| Burkina Faso | 0.13 | 0.05 | 0.35 | 0.01 | 0.09 | 0.13 | 0.83 | 2.5 |
| Burundi | | | | | | | | |
| Cabo Verde | 0.29 | 0.26 | 0.32 | 0.17 | 0.42 | 0.18 | 0.37 | 14.8 |
| Cameroon | 0.72 | 0.63 | 0.73 | 0.02 | 1.09 | 0.37 | 1.37 | 0.8 |
| Central African Republic | | | | | | | | |

TABLE A4 (cont.)

| | Avera | Share of total | | | | | | |
|----------------------------------|-------------------|----------------|---------|----------------|---------|----------------|-------------------|-------------------------------------|
| | All beneficiaries | By res | idence | Rura income | | Urba income | n, by quintile | by the poorest quintile (benefit |
| | | Rural | Urban | Poorest | Richest | Poorest | Richest | incidence) |
| | | | (2005 I | PPP dollars) | | | | (Percentage) |
| | | | | | | | | |
| Chad | | | | | | | | |
| Comoros | | | | | | | | |
| Congo | 1.44 | 0.43 | 1.65 | 0.73 | 0.36 | 0.61 | 4.33 | 10.5 |
| Côte d'Ivoire | | | | | | | | |
| Democratic Republic of the Congo | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 | 4.5 |
| Eritrea | | | | | | | | |
| Ethiopia | | | | | | | | |
| Gabon | 0.03 | 0.03 | 0.03 | 0.02 | 0.06 | 0.01 | 0.13 | 5.8 |
| Gambia | 0.07 | 0.02 | 0.10 | 0.03 | 0.04 | 0.05 | 0.16 | 2.1 |
| Ghana | 0.01 | 0.02 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 11.7 |
| Guinea | | | | | | | •• | |
| Guinea-Bissau | | | | | | | | |
| Kenya | 0.07 | 0.05 | 0.33 | 0.02 | 0.13 | 0.03 | 1.45 | 7.9 |
| Lesotho | 0.19 | 0.19 | 0.20 | 0.14 | 0.32 | 0.12 | 0.54 | 17.3 |
| Liberia | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 |
| Madagascar | 0.17 | 0.21 | 0.04 | 0.04 | 1.75 | 0.01 | 0.04 | 8.9 |
| Malawi | 0.01 | 0.01 | 0.02 | 0.00 | 0.01 | 0.00 | 0.15 | 10.8 |
| Mali | | | | | | | | |
| Mauritania | 1.58 | 1.26 | 2.01 | 0.48 | 2.82 | 0.89 | 4.31 | 7.2 |
| Mauritius | 1.96 | | | | | | | 14.2 |
| Mozambique | | | | | | | | |
| Namibia | | | | | | | | |
| Niger | | | | | | | •• | |
| Nigeria | 0.04 | 0.02 | 0.08 | 0.00 | 0.02 | 0.05 | 0.11 | 11.1 |
| Rwanda | 0.06 | 0.04 | 0.42 | 0.01 | 0.07 | 0.02 | 0.69 | 0.9 |
| Sao Tome and Principe | | | | | | | | |
| Senegal | 0.15 | 0.04 | 0.22 | 0.06 | 0.06 | 0.04 | 0.55 | 3.6 |
| Seychelles | | | | | | | | |
| Sierra Leone | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 15.1 |
| Somalia | | | | | | | | |
| South Africa | 1.16 | 1.07 | 1.29 | 0.76 | 1.54 | 0.82 | 5.99 | 20.8 |
| Sudan | | | | | | | | |
| Swaziland | 0.18 | 0.14 | 0.56 | 0.09 | 0.37 | 0.12 | 1.15 | 13.7 |
| Togo | | | | | | | | |
| Uganda | | | | | | | | |
| United Republic of Tanzania | 0.01 | 0.01 | 0.01 | 0.00 | 0.03 | 0.00 | 0.04 | 4.1 |
| Zambia | | | | | | | | |
| Zimbabwe | | | | | | | | |

| References Special chapters of The State of Food and Agriculture |
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References

- Abay, K.A., Kahsay, G.A. & Berhane, G. 2014. Social networks and factor markets: panel data evidence from Ethiopia. ESSP Working Paper 68. Addis Ababa, Ethiopian Development Research Institute and Washington, DC, IFPRI.
- ACT International. 2013. Social Mobilisation National Cash Transfer Programme (BISP). Project completion report. 28 February. Pakistan, ACT International.
- Adams, L. & Kebede, E. 2005. Breaking the poverty cycle. A case study of cash interventions in Ethiopia. The Humanitarian Policy Group (HPG). London, Overseas Development Institute.
- Adato, M. 2000. The impact of PROGRESA on community social relationships. Final report. Washington, DC, IFPRI.
- Adato, M. & Hoddinott, J. 2007. Conditional cash transfer programs: a "magic bullet" for reducing poverty? 2020 Focus Brief on the World's Poor and Hungry People. Washington, DC, IFPRI.
- Adelman, S., Alderman, H., Gilligan, D.O. &
 Lehrer, K. 2008. The impact of alternative food for
 education programs on learning achievement and
 cognitive development in Northern Uganda. IFPRI
 Working Paper. Washington, DC, IFPRI.
- Adesina, A.A. 2010. Conditioning trends shaping the agricultural and rural landscape in Africa. *Agricultural Economics*, 41(51): 73–82.
- Agapto, J.P., Borsatto, R.S., Esquerdo, V.F. de S. & Bergamasco, S.M.P.P. 2012. Avaliação do Programa de Aquisição de Alimentos (PAA) em Campina do Monte Alegre, Estado de São Paulo, a partir da percepção dos agricultores. *Informações Econômicas*, 42(2): 13–21.
- Ahmed, A. 2004. Impact of feeding children in school: evidence from Bangladesh.
 Washington, DC, IFPRI.
- Ahmed A.U., Rabbani, M., Sulaiman, M. & Das, N.C. 2009. The impact of asset transfer on livelihoods of the ultra poor in Bangladesh. IFPRI Research Monograph No. 39. Washington, DC, IFPRI and Dhaka, BRAC.
- Ahmed, A.U., Quisumbing, A.R, Nasreen, M., Hoddinott, J.F. & Bryan, E. 2009. Comparing food and cash transfers to the ultra poor in Bangladesh. IFPRI Research Monograph 163. Washington, DC, IFPRI.
- Ahmed, A.U., Hill, R.V., Smith, L.C., Wiesmann, D.M., Frankenberger, T., Gulati, K., Quabili, W. & Yohannes, Y. 2007. *The world's most deprived:*

- characteristics and causes of extreme poverty and hunger. 2020 Discussion Paper 43. Washington, DC, IFPRI.
- Akresh, R., de Walque, D. & Kazianga, H. 2012.

 Alternative cash transfer delivery mechanisms:
 impacts on routine preventative health clinic visits
 in Burkina Faso. IZA Discussion Paper No. 6321.
 Bonn, Germany, Institute for the Study of Labor.
- Albarran, P. & Attanasio, O.P. 2002. Do public transfers crowd out private transfers? Evidence from a randomized experiment in Mexico. UNU/WIDER Discussion Paper No. 2002/6. Helsinki, United Nations University World Institute for Development Economics Research.
- Al-Hassan, R. & Poulton, C. 2009. Agriculture and social protection in Ghana. FAC Working Paper 09. Brighton, UK, Future Agricultures Consortium.
- Alderman, H. 2010. The economic cost of a poor start to life. *Journal of Developmental Origins of Health and Disease*, 1(1): 19–25.
- Alderman, H. & Haque, T. 2007. Insurance against covariate shocks: the role of index-based insurance in social protection in low-income countries of Africa. World Bank Working Paper No. 95. Africa Human Development Series. Washington, DC, World Bank.
- Alderman, H. & Mustafa, M. 2013. What are the policy lessons learned and what are the success factors. Panel 3: Social protection and nutrition. Document of the preparatory technical meeting for the International Conference on Nutrition (ICN2). Rome, 13–15 November 2013.
- Alderman, H. & Paxson, C.H. 1992. Do the poor insure? A synthesis of the literature on risk and consumption in developing countries. Policy Research Working Paper No.1008. Washington, DC, World Bank.
- Alderman, H. & Yemtsov, R. 2014. How can safety nets contribute to economic Growth? *World Bank Economic Review*, 28(1): 1–20.
- Alzúa, M.L., Cruces, G. & Ripani, L. 2012. Welfare programs and labor supply in developing countries: experimental evidence from Latin America. IZA Discussion Paper No. 6959. Bonn, Germany, Institute for the Study of Labor
- American Institutes for Research. 2013. Zambia's Child Grant Program: 24-month impact report. Washington, DC.
- Andrews, C., Backiny-Yetna, P., Garin, E., Weedon, E., Wodon, Q. & Zampaglione, G. 2011. *Liberia's*

- cash for work temporary employment project responding to crisis in low income, fragile countries. Social Protection Discussion Paper No. 1114. Washington, DC, World Bank.
- Angelucci, M. & Attanasio, O. 2009. Oportunidades: program effect on consumption, low participation, and methodological issues. IZA Discussion Paper No. 4475. Bonn, Germany, Institute for the Study of Labor.
- Angelucci, M. & De Giorgi, G. 2009. Indirect effects of an aid programme: how do cash transfers affect ineligibles' consumption? *American Economic Review*, 99(1): 486–508.
- Angelucci, M., De Giorgi, G., Rangel, M.A. & Rasul, I. 2009. Insurance and investment within family networks. BREAD Working Paper No. 260. Bureau for Research and Economic Analysis of Development.
- Ardington, C., Case, A. & Hosegood, V. 2009. Labor supply responses to large social transfers: longitudinal evidence from South Africa. *American Economic Journal: Applied Economics*, 1(1): 22–48.
- Asfaw, S., Davis, B., Dewbre, J., Handa, S. & Winters, P. 2014. Cash transfer programme, productive activities and labour supply: evidence from a randomised experiment in Kenya. *The Journal of Development Studies*, 50(8): 1172–1196.
- Assefa Arega, M. & Shively, G. 2014. Food aid, cash transfers and producer prices in Ethiopia. Unpublished working paper.
- AusAID (Australian Agency for International Development). 2011. Targeting the poorest: an assessment of the proxy means test methodology. Canberra.
- Ayele, Z. & Peacock, C. 2003. Improving access to and consumption of animal source foods in rural households: the experience of a womenfocused goat development program in the highlands of Ethiopia. *Journal of Nutrition*, 133(11 Suppl. 2): 39815–3986S.
- Azam, M. 2012. The impact of the Indian Job Guarantee Scheme on labor market outcomes: evidence from a natural experiment. IZA Discussion Paper No. 6548. Bonn, Germany, Institute for the Study of Labor.
- Baird, S., Ferreira, F.H.G., Özler, B. & Woolcock, M. 2013. Relative effectiveness of conditional and unconditional cash transfers for schooling in developing countries: a systematic review. Campbell Systematic Reviews, 2013: 8.
- **Banerjee, A. & Duflo, E.** 2007. The economic lives of the poor. *Journal of Economic Perspectives,* 21(1): 141–167.

- Banerjee, A., Karlan, D. & Zinman, J. 2015.
 Six randomized evaluations of microcredit: introduction and further steps. *American Economic Journal: Applied Economics*, 7(1): 1–21.
- Banerjee, A., Duflo, E., Goldberg, N., Karlan, D.,
 Osei, R., Parienté, W., Shapiro, J., Thuysbaert, B.
 & Udry, C. 2015. A multifaceted program causes lasting progress for the poor: Evidence from six countries. *Science*, 348(6236): 1260799–1260799.
- Banerji, A. & Gentilini, U. 2013. Social safety nets: lessons from global evidence and practice. Paper prepared as part of the World Bank's participation at the Bank of Namibia's Annual Symposium on Social Safety Nets in Namibia: Assessing Current Programs and Future Options (26 September 2013, Windhoek). Washington, DC, World Bank.
- Barca, V., Brook, S., Holland, J., Otulana, M. & Pozarny, P. 2015. Qualitative research and analyses of the economic impacts of cash transfer programmes in sub-Saharan Africa. Synthesis report. Rome, FAO.
- **Barrett, C.B.** 2002. Food security and food assistance programs. *In* B.L. Gardner & G.C. Rausser, eds. *Handbook of Agricultural Economics*. Vol. 2B (2103–2190). Amsterdam, Elsevier.
- Barrett, C.B. 2010. Food systems and the escape from poverty and ill-health traps in sub-Saharan Africa. *In P. Pinstrup-Andersen, ed. The African food system and its interaction with human health and nutrition.* Ithaca, New York, USA, Cornell University Press.
- Barrett, C.B. 2011. Assisting the escape from persistent ultra-poverty in rural Africa. Paper prepared for Stanford University's Global Food Policy and Food Security Symposium Series. Center on Food Security and the Environment. Stanford, CA, USA, University of Stanford.
- Barrett, C.B. & Clay, D.C. 2003. Self-targeting accuracy in the presence of imperfect factor markets: evidence from Food-for-Work in Ethiopia. *Journal of Development Studies*, 39(5): 152–180.
- Barrett, C.B. & McPeak, J.G. 2006. Poverty traps and safety nets. In A. de Janvry & R. Kanbur, eds. Poverty, inequality and development: essays in honor of Erik Thorbecke. Volume 1. Berlin, Springer.
- Barrett, C.B., Holden, S. & Clay, D. 2005. Can foodfor-work programs reduce vulnerability? *In*S. Dercon, ed. *Insurance against poverty*. Oxford, UK, Oxford University Press.
- Barrientos, A. 2003. What is the impact of noncontributory pensions on poverty? Estimates from Brazil and South Africa. CPRC Working Paper No. 33. University of Manchester, Chronic Poverty Research Centre.

- Barrientos, A. 2010. Social protection and poverty. Poverty Reduction and Policy Regimes Thematic Paper. Social Policy and Development Programme Paper No. 42. Geneva, Switzerland, United Nations Research Institute for Social Development (UNRISD).
- **Barrientos, A.** 2012. Social transfers and growth: what do we know? What do we need to find out? *World Development*, 40(1): 11–20.
- Barrientos, A. 2014. Antipoverty transfers and agriculture: theory and context. Background paper prepared for *The State of Food and Agriculture 2015. Social protection and agriculture: breaking the cycle of rural poverty.* Manchester, UK, Brooks World Poverty Institute, University of Manchester. Unpublished.
- Barrientos, A. & Hinojosa-Valencia, L. 2009. A review of social protection in Latin America.

 Prepared as part of a Social Protection Scoping Study funded by the Ford Foundation. Brighton, UK, Institute for Development Studies.
- Baulch, B. & McCulloch, N. 1998. Being poor and becoming poor: poverty status and poverty transitions in rural Pakistan. IDS Working Paper 79. Brighton, UK, Institute of Development Studies.
- Beegle, K., De Weerdt, J. & Dercon, S. 2008. Adult mortality and consumption growth in Tanzania. *Economic Development and Cultural Change*, 56(2): 299–326.
- Beegle, K., Dehejia, R.H. & Gatti, R. 2006. Child labor and agricultural shocks. *Journal of Development Economics*, 81: 80–96.
- Behrman, J.R. 2007. Policy-Oriented Research Impact Assessment (PORIA) case study on the International Food Policy Research Institute (IFPRI) and the Mexican PROGRESA anti-poverty and human resource investment conditional cash transfer program. IFPRI Impact Assessment Discussion Paper No. 27. Washington, DC, IFPRI.
- Behrman, J.R. & Hoddinott, J. 2005. Programme evaluation with unobserved heterogeneity and selective implementation: the Mexican PROGRESA impact on child nutrition.

 Oxford Bulletin of Economics and Statistics, 67(4): 547–569.
- **Béné, C.** 2009. Are fishers poor or vulnerable? Assessing economic vulnerability in small-scale fishing communities. *Journal of Development Studies*, 45(6): 911–933.
- Béné, C., Devereux, S. & Roelen, K. 2014.

 Social protection and sustainable natural resource management: good practices and recommendations from small-scale fisheries.

 Report prepared for the Food and Agriculture

- Organization of the United Nations. Brighton, UK, Centre for Social Protection, Institute of Development Studies.
- Berg, J. & Tobin, S. 2011. Income-led growth as a crisis response: lessons from Brazil. Paper prepared for the Research Conference on Key Lessons from the Crisis and Way Forward, 16–17 February 2011. Geneva, Switzerland, International Labour Organization.
- Berhane, G., Hoddinott, J., Kumar, N. & Taffesse, A.S. 2011. The impact of Ethiopia's Productive Safety Nets and Household Asset Building Programme: 2006–2010. Washington, DC, IFPRI.
- Berhane, G., Gilligan, D.O., Hoddinott, J., Kumar, N. & Taffesse, A.S. 2014. Can social protection work in Africa? The impact of Ethiopia's Productive Safety Net Programme. *Economic Development and Cultural Change*, 63(1): 1–26.
- Berhane, G., Hoddinott, J., Kumar, N., Taffesse, A.S., Diressie, M.T., Yohannes, Y., Sabates-Wheeler, R., Handion, M., Lind, J., Tefera, M. & Sima, F. 2013. Evaluation of Ethiopia's Food Security Program: documenting progress in the implementation of the Productive Safety Nets Programme and the Household Asset Building Programme. Washington, DC, IFPRI.
- **Bianchi, M. & M. Bobba.** 2013. Liquidity, risk, and occupational choices. *Review of Economic Studies*, 80(2): 491–511.
- **Bioversity International.** 2012. The impact of organic bananas in Alto Beni, Bolivia. Impact Assessment Brief No. 7. Rome.
- Boone, R., Covarrubias, K., Davis, B. & Winters, P. 2013. Cash transfer programmes and agricultural production: the case of Malawi. *Agricultural Economics*, 44(3): 365–378.
- Breisinger, C., Al-Riffai, P., Ecker, O., Abuismail, R., Waite, J., Abdelwahab, N., Zohery, A., El-Laithy, H. & Armanious, D. 2013. Tackling Egypt's rising food insecurity in a time of transition. Joint IFPRI-WFP Country Policy Note, May 2013. Washington, DC, IFPRI and Rome, WFP.
- Burke, W.J., Jayne, T.S. & Sitko, N.J. 2012. Can the FISP more effectively achieve food production and poverty reduction goals? Food Security Research Project Zambia. Policy Synthesis No. 51. Ministry of Agriculture & Cooperatives, Agricultural Consultative Forum, Michigan State University, Lusaka.
- Bynner, J.B. & Paxton, W. 2001. *The asset effect*. London, Institute for Public Policy Research.
- Carter, M.R. 1997. Environment, technology, and the social articulation of risk in West African agriculture. *Economic Development and Cultural Change*, 45(3): 557–590.

- Chirwa, E. & Dorward, A. 2013. Agricultural input subsidies. The recent Malawi experience. Oxford, UK, Oxford University Press.
- Christiaensen, L., Demery, L. & Kuhl, J. 2011. The (evolving) role of agriculture in poverty reduction: an empirical perspective. *Journal of Development Economics*, 96(2): 239–254.
- Cirillo, C., Gyori, M. & Soares, F.V. 2014. The role of targeting in social protection programmes and agriculture interventions: what have we learned so far? Background paper prepared for *The State of Food and Agriculture 2015. Social protection and agriculture: breaking the cycle of rural poverty.* International Policy Centre for Inclusive Growth–United Nations Development Programme. Unpublished.
- Coady, D., Grosh, M. & Hoddinott, J. 2004. Targeting of transfers in developing countries: review of lessons and experience. Washington, DC, World Bank.
- Collier, P. & Dercon, S. 2009. African agriculture in 50 Years: Smallholders in a rapidly changing world? Paper presented at the Expert Meeting on How to Feed the World in 2050, 24–26 June 2009. Rome, FAO.
- Cornia, G.A., Deottti, L. & Sassi, M. 2012. Food price volatility over the last decade in Niger and Malawi: extent, sources and impact on child malnutrition. Working Paper No. 2012–002. United Nations Development Programme, Regional Bureau for Africa.
- Covarrubias, K., Davis, B. & Winters, P. 2012. From protection to production: productive impacts of the Malawi social cash transfer scheme. *Journal of Development Effectiveness*, 4(1): 50–77.
- Creti, P. 2010. The impact of cash transfers on local markets: a case study of unstructured markets in Northern Uganda. Oxford, UK, CALP (Cash Learning Partnership of Oxfam GB, Save the Children UK, the British Red Cross, Action Contre la Faim International and the Norwegian Refugee Council).
- Croppenstedt, A., Goldstein, M. & Rosas, N. 2013. Gender and agriculture: inefficiencies, segregation, and low productivity traps. *World Bank Research Observer*, 28(1): 79–109.
- Cunha, J.M, De Giorgi, G. & Jayachandran, S. 2011.

 The price effects of cash versus in-kind transfers.

 Working Paper No. 17456. Cambridge, MA, USA,
 National Bureau of Economic Research.
- Daidone, S., Davis, B., Dewbre, J. & Covarrubias, K. 2014. Lesotho's Child Grant Programme: 24-month impact report on productive activities and labour allocation. Lesotho country case study report. PtoP (From Protection to Production) project report. Rome, FAO.

- Daidone, S., Pellerano, L., Handa, S. & Davis, B. 2015. Is graduation from social safety nets possible? Evidence from sub-Saharan Africa. In S. Devereux & R. Sabates-Wheeler, eds. Graduating from Social Protection? IDS Bulletin, 46(2): 93–102.
- Daidone, S., Davis, B., Dewbre, J., González-Flores, M., Handa, S., Seidenfeld, D. & Tembo, G. 2014. Zambia's Child Grant Programme: 24-month impact report on productive activities and labour allocation. PtoP (From Protection to Production) project report. Rome, FAO.
- Das, N.C. & Shams, R. 2011. Asset transfer programme for the ultra-poor: a randomized control trial evaluation, challenging the frontier of poverty reduction. CFPR Working Paper No. 22. Dhaka, BRAC.
- Davis, B. & Handa, S. 2015. How much do programmes pay? Transfer size in selected national cash transfer programmes in sub-Saharan Africa. The Transfer Project. Research Brief No. 2015–09. Chapel Hill, NC, USA, Carolina Population Center, University of North Carolina.
- Davis, B. & Knowles, M. 2015. From protection to production: the role of social cash transfers in fostering broad-based economic development. From Protection to Production Project and the Transfer Project. Presentation made to Department for International Development, London. Rome, FAO.
- Davis, B., Di Giuseppe, S. & Zezza, A. 2014. Income diversification patterns in rural sub-Saharan Africa: reassessing the evidence. Policy Research Working Paper No. 7108. Washington, DC, World Bank
- Davis, B., Gaarder, M., Handa, S. & Yablonski, J. 2012. Evaluating the impact of cash transfer programmes in sub-Saharan Africa: an introduction to the special issue. *Journal of Development Effectiveness*, 4(1): 1–8.
- Davis, B., Handa, S., Hypher, N., Winder Rossi, N., Winters, P. & Yablonski, J., eds (forthcoming). From evidence to action: the story of cash transfers and impact evaluation in sub Saharan Africa. Oxford, UK, Oxford University Press.
- de Brauw, A., Gilligan, D.O., Hoddinott, J. & Roy, S. 2014. The impact of *Bolsa Família* on women's decision-making power. *World Development*, 59: 487–504.
- de Brauw, A., Gilligan, D.O., Hoddinott, J. & Roy, S. 2015. Bolsa Família and household labor supply. Economic Development and Cultural Change, 63(3): 423–457.
- de la Brière, B. & Lindert, K. 2005. Reforming Brazil's *Cadastro Único* to improve the targeting

- of the *Bolsa Família* Program. Social Protection Discussion Paper Series No. 0527. Washington, DC, World Bank.
- de la O Campos, A.P. 2015. Do cash transfers empower women? Impacts on economic advancement, decision-making and agency. PtoP (From Protection to Production) policy brief. Rome, FAO.
- Deininger, K. & Liu, Y. 2013. Welfare and poverty impacts of India's national rural employment guarantee scheme: evidence from Andhra Pradesh. IFPRI Discussion Paper 01289.

 Washington, DC, IFPRI.
- Del Grossi, M.E. & Marques, V.P.M. de A. 2015. An in-depth review of the evolution of integrated public policies to strength family farms in Brazil. ESA Working Paper 15-01. Rome, FAO.
- Delgado, G.C. & Cardoso, J.C. 2004. O idoso e a previdência rural no Brasil: a experiência recente da universalização. *In* Ch. 9. Camarano, A.A., ed. *Os novos idosos brasileiros: muito além dos 60?*Brasilia, Instituto de Pesquisa Econômica Aplicada.
- Demeke, M., Spinelli, A., Croce, S., Pernechele, V., Stefanelli, E., Jafari, A., Pangrazio, G., Carrasco, G., Lanos, B. & Roux, C. 2014. Food and agriculture policy decisions: trends, emerging issues and policy alignments since the 2007/08 food security crisis. Rome, FAO.
- **Dercon, S.** 1996. Risk, crop choice, and savings: evidence from Tanzania. *Economic Development and Cultural Change*, 44(3): 485–513.
- Dercon, S. 2002. Income risk, coping strategies and safety nets. UNU/WIDER Discussion Paper No. 2002/22. Helsinki, United Nations University World Institute for Development Economics Research.
- **Dercon, S.** 2005. Risk, poverty and vulnerability in Africa. *Journal of African Economies* 14(4): 483–488.
- **Dercon, S.** 2008. Fate and fear: risk and its consequences in Africa. *Journal of African Economies*, 17(AERC Suppl. 2): ii97–ii127.
- **Dercon, S.** 2011. *Social protection, efficiency and growth*. CSAE Working Paper 2011–17. Oxford, UK, Centre for the Study of African Economies, Oxford University.
- **Dercon, S. & Christiaensen, L.** 2011. Consumption risk, technology adoption and poverty traps: evidence from Ethiopia. *Journal of Development Economics*, 96(2): 159–173.
- Dercon, S. & Krishnan, P. 2000. Vulnerability, seasonality and poverty in Ethiopia. *Journal of Development Studies*, 36(6): 25–53.
- Dercon, S. & Porter, C. 2010. Live aid revisited: longterm impacts of the 1984 Ethiopian famine on children. CSAE Working Paper 2010–39. Oxford,

- UK, Centre for the Study of African Economies, Oxford University.
- Dercon, S., Hoddinott, J. & Woldehanna, T. 2005. Shocks and consumption in 15 Ethiopian villages, 1999–2004. *Journal of African Economies*, 14(4): 559–585.
- **Devereux, S.** 1999. *Making less last longer: informal safety nets in Malawi.* IDS Discussion Paper No 373. Brighton, UK, Institute of Development Studies.
- **Devereux, S.** 2001. Livelihood insecurity and social protection: a re-emerging issue in rural development. *Development Policy Review,* 19 (4): 507–519.
- **Devereux, S.** 2002. Can social safety nets reduce chronic poverty? *Development Policy Review*, 20(5): 657–675.
- **Devereux, S.** 2015. Social protection for rural poverty reduction. Background paper commissioned by the FAO. Rome. Unpublished.
- **Devereux, S. & Guenther, B.** 2009. *Agriculture* and social protection in Ethiopia. FAC Research Paper No. 008. Brighton, UK, Future Agricultures Consortium.
- Devereux, S. & Sabates-Wheeler, R. 2004.

 Transformative social protection. IDS Working
 Paper No. 232. Brighton, UK, Institute of
 Development Studies.
- Devereux, S., Sabates-Wheeler, R. & Pascual Martínez, A. 2010. Home-grown school feeding and social protection. HGSF Working Paper Series No. 5. London, The Partnership for Child Development.
- Devereux, S., Sabates-Wheeler, R., Tefera, M. & Taye, H. 2006. Ethiopia's productive safety net programme: trends in PSNP transfers within targeted households. Final report. Brighton, UK, Institute of Development Studies and Addis Ababa, Indak International.
- Devereux, S., Sabates-Wheeler, R., Slater, R., Tefera, M., Brown, T. & Teshome, A. 2008. *Ethiopia's PSNP: 2008 assessment report*. Brighton, Institute of Development Studies.
- Dewbre, J., Daidone, S., Davis, B., Miguélez, B., Niang, O. & Pellerano, L. 2015. Lesotho Child Grant Programme and Linking Food Security to Social Protection Programme. PtoP (From Protection to Production) project report, FAO, Rome.
- Djurfeldt, G., Holmén, H., Jirström, M. & Larsson, R., eds. 2005. The African food crisis: lessons from the Asian green revolution. Wallingford, UK, CAB International Publishing.
- **Doretto, M. & Michellon, E.** 2007. Avaliação dos impactos econômicos, sociais e culturais do

- Programa de Aquisição de Alimentos no Paraná. In F.B.B. Filho & de A.D. Carvalho, eds. Avaliação de políticas de aquisição de alimentos. 7(27): 107–138. Brasilia, Universidade de Brasília/ Centro de Estudos Avançados Multidisciplinares/Núcleo de Estudos Ruraris, 2007.
- Dorward, A., Sabates-Wheeler, R., MacAuslan, I., Buckley, C.P., Kydd, J. & Chirwa, E. 2006. Promoting agriculture for social protection or social protection for agriculture: policy and research issues. FAC Discussion Paper No. 002. Brighton, UK, Future Agricultures Consortium.
- **Doss, C.** 2011. Intrahousehold bargaining and resource allocation in developing countries.

 Background paper for the World Development Report 2012: Gender Equality and Development. Washington, DC, World Bank.
- Doss, C., McPeak, J. & Barrett, C.B. 2008. Interpersonal, intertemporal and spatial variation in risk perceptions: evidence from East Africa. *World Development*, 36(8): 1453–1468.
- **Dostie, B., Haggblade, S. & Randriamamonjy, J.** 2002. Seasonal poverty in Madagascar: magnitude and solutions. *Food Policy*, 27(5–6): 493–518.
- Drèze, J. & Khera, R. 2013. Rural poverty and the Public Distribution System. Centre for Development Economics Working Paper No. 235.
 New Delhi, Department of Economics, Delhi School of Economics.
- **Druilhe, Z. & Barreiro-Hurlé, J.** 2012. Fertilizer subsidies in sub-Saharan Africa. ESA Working paper No. 12–04. Rome, FAO.
- Du Toit, A. & Neves, D. 2006. Vulnerability and social protection at the margins of the formal economy. Case studies from Khayelitsha and the Eastern Cape. Cape Town, Programme for Land and Agrarian Studies (PLAAS), Belville, University of the Western Cape.
- **Duflo, E.** 2003. Grandmothers and granddaughters: old-age pensions and intrahousehold allocation in South Africa. *World Bank Economic Review*, 17(1–25).
- Dupas, P. & Robinson, J. 2009. Savings constraints and microenterprise development: evidence from a field experiment in Kenya. NBER Working Paper No. 14693. Cambridge, MA, USA, National Bureau of Economic Research.
- Dutta, P., Rinku, M., Ravallion, M. & van deWalle, D. 2014. Right to work? Assessing India's Employment Guarantee Scheme in Bihar.Washington, DC, World Bank.
- **Edmonds, E.** 2006. Child labor and schooling responses to anticipated income in South Africa. *Journal of Development Economics*, 81(2): 386–414.

- Elbers, C., Gunning, J.W. & Kinsey, B. 2007. Growth and risk: methodology and micro evidence.

 World Bank Economic Review, 21(1): 1–20.
- Elbers, C., Gunning, J.W. & Pan, L. 2009. Growing out of poverty under risk: evidence from rural Ethiopia. Paper presented at the CSAE Conference 2009 on Economic Development in Africa, 2–24 March 2009, St Catherine's College, Oxford. UK.
- Escobal, J. & Ponce, C. 2015. Combining social protection with economic opportunities in rural Peru: Wiñay. Policy in Focus 11, No. 2. International Policy Centre for Inclusive Growth, Brasilia.
- EU (European Union). 2012. Communication from the Commission to the European Parliament, The Council, The European Economic and Social Committee and the Committee of the Regions. Social Protection in European Union Development Cooperation. COM(2012) 446 final. Brussels.
- EUI (European University Institute). European Report on Development 2010. Social protection for inclusive development. San Domenico di Fiesole, Italy, Robert Schuman Centre for Advanced Studies, European University Institute.
- Evans, D.K. & Popova, A. 2014. Cash transfers and temptation goods: a review of global evidence.
 World Bank Policy Research Working Paper
 No. 6886. Washington, DC, World Bank.
- Evans, D.K., Hausladen, S., Kosec, K. & Reese, N. 2014. Community-based conditional cash transfers in Tanzania: results from a randomized trial. Washington, DC, World Bank.
- **FAO.** 2001. Supplement to the report on the 1990 World Census of Agriculture. FAO Statistical Development Series 9a. Rome.
- **FAO.** 2009. The State of Food and Agriculture 2009. Livestock in the balance. Rome.
- **FAO.** 2011. The State of Food and Agriculture 2010–11. Women in agriculture: closing the gender gap for development. Rome.
- **FAO.** 2012. The State of Food and Agriculture 2012. Investing in agriculture for a better future. Rome.
- **FAO.** 2013a. The State of Food and Agriculture 2013. Food systems for better nutrition. Rome.
- **FAO.** 2013b. Alimentación escolar y las posibilidades de compra directa de la agricultura familiar.

 Estudios de caso en ocho países. Santiago de Chile.
- **FAO.** 2014a. The State of Food and Agriculture 2014. Innovation in family farming. Rome.
- **FAO.** 2014b. The State of World Fisheries and Aquaculture 2014. Opportunity and challenge. Rome.
- **FAO**. 2015a. FAOSTAT. Online statistical database (available at http://faostat.fao.org).

- FAO. 2015b. Nutrition and social protection. Rome. FAO, IFAD & WFP. 2015a. The State of Food Insecurity in the World 2015. Meeting the 2015 international hunger targets: taking stock of uneven progress. Rome, FAO.
- **FAO, IFAD & WFP.** 2015b. Achieving Zero Hunger. The critical role of investments in social protection and agriculture. Rome, FAO.
- Farrington, J., Sharp K. & Sjoblom D. 2007. Targeting approaches to cash transfers: comparisons across Cambodia, India and Ethiopia. ODI Social Protection Series. London, Overseas Development Institute
- Fernald, L.C.H, Gertler, P.J. & Neufeld, L.M. 2008. The importance of cash in conditional cash transfer programs for child health, growth and development: an analysis of Mexico's *Oportunidades. Lancet*, 371(9615): 828–837.
- Fink, G., Jack, B.K. & Masiye, F. 2014. Seasonal credit constraints and agricultural labor supply: evidence from Zambia. NBER Working Paper No. 20218. Cambridge MA, USA, National Bureau of Economic Research.
- Fiszbein, A., Kanbur, R. & Yemtsov, R. 2013. Social protection, poverty and the post-2015 agenda. World Bank Policy Research Working Paper No. 6469. Washington DC, World Bank.
- **Fiszbein, A., Kanbur, R. & Yemtsov, R.** 2014. Social protection and poverty reduction: global patterns and some targets. *World Development*, 61: 167–177.
- Fiszbein, A., Schady, N., Ferreira, F.H.G., Grosh, M., Keleher, N., Olinto, P. & Skoufias, E. 2009. Conditional cash transfers: reducing present and future poverty. Washington, DC, World Bank.
- Gahamanyi, V., Hartwig, R. & Kettlewell, A.
 2014. Evaluating graduation: insights from the
 Vision 2020 Umurenge Programme in Rwanda.
 Presentation made at the IDS Graduation and
 Social Protection Conference on 6–8 May, 2014.
 Kigali.
- Gavrilovic, M., Knowles, M., Davis, B., Pozarny P. & Calganini, G. 2015. Strengthening links between agriculture and social protection to combat poverty, hunger and malnutrition in Africa: framework for analysis and action. In preparation. Rome, FAO.
- Gelli, A., Neeser, K. & Drake, L. 2010. Home grown school feeding: linking small holder agriculture to school food provision. HGSF Working Paper Series No. 1. London, The Partnership for Child Development.
- **Gentilini, U. & Omamo, S.W.** 2009. *Unveiling social safety nets*.WFP Occasional Paper No. 20. Rome, WFP.

- Gertler, P.J., Martínez, S.W. & Rubio-Codina, M. 2012. investing cash transfers to raise long-term living standards. *American Economic Journal: Applied Economics*, 4(1): 1–32.
- **Ghosh, J.** 2014. Social protection programmes in India: An overview of recent experience with different types of schemes. Paper prepared for the Food and Agriculture Organization of the United Nations. Rome, FAO. Unpublished.
- Gilligan, D.O. & Hoddinott, J. 2007. Is there persistence in the impact of emergency food aid? Evidence on consumption, food security, and assets in rural Ethiopia. *American Journal of Agricultural Economics*, 89(2): 225–242.
- Gilligan, D.O., Hoddinott, J. & Taffesse, A.S. 2008. The impact of Ethiopia's Productive Safety Net Programme and its linkages. IFPRI Discussion Paper 839. Washington, DC, IFPRI.
- Gilligan, D.O., Hoddinott, J., Kumar, N. & Taffesse, A.S. 2009. An impact evaluation of Ethiopia's Productive Safety Nets programme. Washington, DC, IFPRI.
- Girard, A.W., Self, J.L., McAuliffe, C. & Olude, O. 2012. The effects of household food production strategies on the health and nutrition outcomes of women and young children: a systematic review. *Paediatric and Perinatal Epidemiology*, 26(Suppl. 1): 205–222.
- Grosh, M., del Ninno, C., Tesliuc, E. & Ouerghi, A. 2008. For protection and promotion. The design and implementation of effective safety nets. Washington, DC, World Bank.
- Handa, S. & Davis, B. 2006. The experience of conditional cash transfers in Latin America and the Caribbean. *Development Policy Review*, (24)5: 513–536.
- Handa, S. & de Milliano, M. 2015. The impact of social cash transfers on schooling in Africa: an update from the Transfer Project. The Transfer Project. Research Brief No. 2015–01. Chapel Hill, NC, USA, Carolina Population Center, University of North Carolina.
- Handa, S., Park, M., Darko, R., Osei-Akoto, I.,
 Davis, B. & Daidone. S. 2013. Livelihood
 empowerment against poverty impact
 evaluation. Chapel Hill, NC, USA, Carolina
 Population Center, University of North Carolina.
- Hashemi, S.M. & de Montesquiou, A. 2011.

 Reaching the poorest: lessons from the graduation model. CGAP Focus Note No. 69.

 Washington, DC, World Bank.
- Haushofer, J. & Shapiro, J. 2013. Household response to income changes: evidence from an unconditional cash transfer program in Kenya. Unpublished.

- Hazell, P., Anderson, J., Balzer, N., Hastrup Clemmensen, A., Hess, U. & Rispoli, F. 2010. The potential for scale and sustainability in weather index insurance for agriculture and rural livelihoods. Rome, IFAD.
- Hentschel, J., Lanjouw, J.O., Lanjouw, P. & Poggi, J. 2000. Combining census and survey data to study spatial dimensions of poverty: a case study of Ecuador. In D. Bigman and H. Fofack, eds. Geographical targeting for poverty alleviation, Washington, DC, World Bank.
- Hidrobo, M., Hoddinott, J., Kumar, N. & Olivier, M. 2014a. Social protection and food security. Background paper prepared for *The State of Food and Agriculture 2015: Social protection and agriculture: breaking the cycle of rural poverty*. Washington, DC, IFPRI. Unpublished.
- Hidrobo, M., Hoddinott, J., Kumar, N. & Olivier, M. 2014b. Social protection and asset accumulation. Background paper prepared for The State of Food and Agriculture 2015: Social protection and agriculture: breaking the cycle of rural poverty. Washington DC, IFPRI. Unpublished.
- Hidrobo, M., Hoddinott, J., Peterman, A., Margolies, A. & Moreira, V. 2014. Cash, food, or vouchers? Evidence from a randomized experiment in northern Ecuador. *Journal of Development Economics*, 107: 144–156.
- Himanshu & Sen, A. 2013. In-kind food transfers I: Impact on poverty reduction and nutrition. *Economic and Political Weekly,* Nov 16, Vol XLVIII, No. 45–46.
- HLPE (High Level Panel of Experts on Food Security). 2012. Social protection for food security. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security. Rome, FAO.
- Hoddinott, J. & Skoufias, E. 2004. The impact of PROGRESA on food consumption.

 Economic Development and Cultural Change, 53(1): 37–61.
- Hoddinott, J., Skoufias, E. & Washburn, R. 2000.

 The impact of PROGRESA on consumption: a final report. Washington, DC, IFPRI.
- Hoddinott, J., Alderman, H., Behrman, J.R., Haddad, L. & Horton, S. 2013. The economic rationale for investing in stunting reduction. *Maternal and Child Nutrition*, 9(Suppl. 2): 69–82.
- Hoddinott, J., Berhane, G., Gilligan, D.O., Kumar, N. & Taffesse, A.S. 2012. The impact of Ethiopia's productive safety net programme and related transfers on agricultural productivity. Journal of African Economies, 21(5): 761–786.

- Holmes, R. & Jones, N. 2013. Gender and social protection in the developing world: beyond mothers and safety nets. London, Zed Books.
- Holmes, R., Jones, N., Presler-Marshall, E. & Stavropoulou, M. 2014. The linkages between social protection, gender and agricultural growth. Background paper prepared for *The State of Food and Agriculture 2015: Social protection and agriculture: breaking the cycle of rural poverty.* London, Overseas Development Institute. Unpublished.
- Holmes, R., Mannan, F., Dhali, H.H. & Parveen, S. 2010. Gendered risks, poverty and vulnerability in Bangladesh. Case study of the challenging the frontiers of poverty reduction programme (CFPR), Specially Targeted Ultra Poor II (STUP II). London, Overseas Development Institute.
- Holzmann, R. & Jørgensen, S. 2000. Social risk management: a new conceptual framework for social protection and beyond. Social Protection Discussion Paper Series, No. 0006. Human Development Network. Washington, DC, World Bank.
- **Hunt, J.M.** 2005. The potential impact of reducing global malnutrition on poverty reduction and economic development. *Asia Pacific Journal of Clinical Nutrition*, 14(Suppl.): 10–38.
- Iannotti, L., Cunningham, K. & Ruel, M. 2009.

 Improving diet quality and micronutrient
 nutrition: homestead food production in
 Bangladesh. IFPRI Discussion Paper No. 00928.

 Washington, DC, IFPRI.
- **IEG (Independent Evaluation Group).** 2011. *Evidence and lessons from impact evaluations on social safety nets.* Washington, DC, World Bank.
- IFAD (International Fund for Agricultural Development). 2010. Rural Poverty Report 2011. New realities, new challenges: new opportunities for tomorrow's generation. Rome.
- **IFAD & WFP.** 2011. Weather index-based insurance in agricultural development. A technical guide. Rome, IFAD.
- ILO (International Labour Organization). 2011.

 Social Protection Floor for a fair and inclusive globalization. Report of the Advisory Group chaired by Michelle Bachelet. Convened by the ILO with the collaboration of the WHO. Geneva, Switzerland.
- **ILO.** 2014. World Social Protection Report 2014/15.

 Building economic recovery, inclusive development and social justice. Geneva, Switzerland.
- ILO & WHO. 2009. The Social Protection Floor. A joint crisis initiative of the UN Chief Executives Board for co-ordination on the Social Protection Floor. Geneva, Switzerland.

- IPC-IG & WFP (International Policy Centre for Inclusive Growth and World Food Programme).
 2013. Structured demand and smallholder farmers in Brazil: the case of PAA and PNAE. Brasilia, International Policy Centre for Inclusive Growth.
- **Jacoby, H.** 2002. Is there an intrahousehold 'flypaper effect'? Evidence from a school feeding programme. *Economic Journal*, 112: 196–221.
- Jalan, J. & Ravallion, M. 2001. Household income dynamics in rural China. *In* S. Dercon, ed. *Insurance against poverty*. Oxford, UK, Oxford University Press.
- Jayne, T.S. & Rashid, S. 2013. Input subsidy programs in sub-Saharan Africa: a synthesis of recent evidence. *Agricultural Economics*, 44(6): 547–562.
- Jennings, M., Kayondo, A., Kagoro, J., Nicholson, K., Blight, N. & Gayfer, J. 2013. Impact evaluation of the Protracted Relief Programme II, Zimbabwe. Final report. Sheffield, UK, International Organisation Development Ltd.
- Jensen, R.T. 2003. Do private transfers 'displace' the benefits of public transfers? Evidence from South Africa. *Journal of Public Economics*, 88(1–2): 89–112.
- Jentoft, S. & Eide A., eds. 2011. Poverty mosaics: realities and prospects in small-scale fisheries.

 Dordrecht, Netherlands, Springer.
- **Kabeer, N.** 2008. *Mainstreaming gender in social protection for the informal economy*. London, Commonwealth Secretariat.
- Kagin, J., Taylor, J.E., Alfani, F. & Davis, B. 2014.
 Local Economy-wide Impact Evaluation (LEWIE) of Ethiopia's social cash transfer pilot programme.
 PtoP (From Protection to Production) project report. Rome, FAO.
- Kain, J., Uauy, R. & Taibo, M. 2002. Chile's school feeding programme: targeting experience. *Nutrition Research*, 22: 599–608.
- Kazianga, H., de Walque, D. & Alderman, H. 2014. School feeding programs, intrahousehold allocation and the nutrition of siblings: evidence from a randomized trial in rural Burkina Faso. Journal of Development Economics, 106: 15–34.
- Kenya CT-OVC Evaluation Team. 2012. The impact of Kenya's cash transfer for orphans and vulnerable children on human capital. *Journal of Development Effectiveness*, 4(1): 38–49.
- Khandker, S.R. & Samad, H.A. 2014. *Dynamic* effects of microcredit in Bangladesh. World Bank Policy Research Working Paper No. 6821. Washington, DC, World Bank.
- Khandker, S., Bakht, Z. & Koolwal, G. 2006. The poverty impact of rural roads: evidence from Bangladesh. Policy Research Working Paper No. 3875. Washington, DC, World Bank.

- Khera, R. & Nayak, N. 2009. Women workers and perceptions of the National Rural Employment Guarantee Act. *Economic and Political Weekly*, 44(43): 49–57.
- Kilic, T., Whitney, E. & Winters, P. 2015. Decentralised beneficiary targeting in large-scale development programmes: insights from the Malawi Farm Input Subsidy Programme. *Journal of African Economies*, 24(1): 26–56.
- **Krishna, A.** 2004. Escaping poverty and becoming poor: who gains, who loses, and why? *World Development*, 32(1): 121–136.
- Krishna, A., Kristjanson, P., Radeny, M. & Nindo, W. 2004. Escaping poverty and becoming poor in twenty Kenyan villages. *Journal of Human Development*, 5: 211–26.
- Krishna, A., Lumonya, D., Markiewicz, M., Mugumya, F., Kafuko, A. & Wegoye, J. 2006. Escaping poverty and becoming poor in 36 village of Central and Western Uganda. *Journal of Development Studies*, 42(2): 346–370.
- Kristjansson, E.A., Robinson, V., Petticrew, M., MacDonald, B., Krasevec, J., Janzen, L., Greenhalgh, T., Wells, G., MacGowan, J., Farmer, A., Shea, B.J., Mayhew, A. & Tugwell, P. 2006. School feeding for improving the physical and psychosocial health of disadvantaged students. *Campbell Systematic Reviews*, 2006: 14.
- Landim, P. 2009. Os efeitos do Programa Bolsa Família sobre a economia dos municípios Brasileiros. São Paulo, Brazil, Instituto de Ensino e Pesquisa.
- Leibbrandt, M., Woolard, I., Finn, A. & Argentet, J. 2010. Trends in South African Income distribution and poverty since the fall of Apartheid. OECD Social, Employment and Migration Working Paper No. 101. Paris, OECD Publishing.
- Lentz, E. & Barrett, C. 2005. Food aid targeting, shocks and private transfers among East African pastoralists. Cornell University Working Paper. Ithaca, Cornell University.
- **Lichand, G.** 2010. *Decomposing the effects of CCTs on entrepreneurship*. World Bank Policy Research Working Paper No. 5457. Washington, DC, World Bank.
- Lindert, K., Linder, A., Hobbs, J. & de la Brière, B. 2007. The nuts and bolts of Brazil's Bolsa Família Program: implementing conditional cash transfers in a decentralized context. World Bank Social Protection Discussion Paper No. 0709. Washington, DC, World Bank.
- Lucena, E.K. & Luiz, J.M. 2009. Uma Avaliação da Importância do Programa de Aquisição de Alimentos. Paper presented at the Sociedade Brasileira de Economia, Administração e

- Sociologia Rural, Porto Alegre, RS, Brazil, 26–30 July, 2009.
- Lunduka, R., Ricker-Gilbert, J. & Fisher, M. 2013. What are the farm-level impacts of Malawi's farm input subsidy program? A critical review. *Agricultural Economics*, 44(6): 563–579.
- Mahaptra, R., Sakhuja, V., Das, S. & Singh, S. 2008.

 The National Rural Employment Guarantee Act:
 opportunities and challenges. New Delhi, Natural
 Resource Management and Livelihood Unit,
 Centre for Science and Environment.
- Mahul, O. & Stutley, C.J. 2010. Government support to agricultural insurance. Challenges and options for developing countries. Washington, DC, World Bank.
- Maluccio, J.A. 2010. The impact of conditional cash transfers on consumption and investment in Nicaragua. *Journal of Development Studies*, 46(1): 14–38.
- Maluccio, J. & Flores, R. 2005. Impact evaluation of a conditional cash transfer programme: The Nicaraguan Red de Protección Social. IFPRI Research Report 141. Washington, DC, IFPRI.
- Manley, J., Gitter, S. & Slavchevska, V. 2013. How effective are cash transfers at improving nutritional status. *World Development*, 48: 133–155.
- Martínez, S. 2004. Pensions, poverty and household investments in Bolivia. Doctoral dissertation.

 Berkeley, USA, University of California.
- Mason, N.M., Jayne, T.S. & Mofya-Mukuka, R. 2013. Zambia's input subsidy programs. *Agricultural Economics*, 44(6): 613–628.
- McCord, A. 2012. Public works and social protection in sub-Saharan Africa. Do public works work for the poor? Cape Town, South Africa, Juta Press.
- Meherette, E. 2009. Innovations in insuring the poor: providing weather index and indemnity insurance in Ethiopia. 2020 Vision for Food, Agriculture and the Environment, Focus 17, Brief 8, December 2009. Washington, DC, IFPRI.
- Merttens, F., Hurrell, A., Marzi, M., Attah, R., Farhat, M., Kardan, A. & MacAuslan, I. 2013. Kenya Hunger Safety Net Programme Monitoring and Evaluation Component. Impact evaluation final report: 2009 to 2012. Oxford, UK, Oxford Policy Management.
- Mills, D.J., Westlund, L., de Graaf, G., Willmann, R., Kura, Y. & Kelleher, K. 2011. Under-reported and undervalued: small-scale fisheries in the developing world. In N.L. Andrew & R. Pomeroy, eds. Small-scale fisheries management: frameworks and approaches for the developing world. Wallingford, UK, CAB International Publishing.

- Ministerio de Desarrollo e Inclusión Social, Gobierno del Perú. 2012. Lineamiento para la focalización de intervenciones para el desarrollo productivo y la generación y diversificación de ingresos de la población en proceso de inclusión. Perú, Directiva No. 006-2012 MIDIS.
- MORD (Ministry of Rural Development,
 Government of India). 2013. Mahatma Gandhi
 National Rural Employment Guarantee Act, 2005.
 Report to the People. New Delhi, Ministry of Rural
 Development, Government of India.
- Moretti, D., Zimmermann, M.B., Muthayya, S., Thankachan, P., Lee, T.C., Kurpad, A.V. & Hurrell, R.F. 2006. Extruded rice fortified with micronized ground ferric pyrophosphate reduces iron deficiency in Indian schoolchildren: a doubleblind randomized controlled trial. *The American Journal of Clinical Nutrition*, 84(4): 822–829.
- Mostafa, J. & Sátyro, N.G.D. 2014. Cadastro Único: a registry supported by a national public bank. IPC-IG-UNDP Working Paper No. 126. Brasilia, International Policy Centre for Inclusive Growth– United Nations Development Programme.
- Murphy, S.P., Gewa, C., Liang, L.J., Grillenberger, M., Bwibo, N.O. & Neumann, C.G. 2003. School snacks containing animal source foods improve dietary quality for children in rural Kenya. *The Journal of Nutrition*, 133(11 Suppl. 2): 3950S–3956S.
- Naqvi, F. 2013. Pakistan National Cash Transfer Programme. DFID support to the Benazir Income Support Programme (2012–2020). Presentation made at the Transforming Cash Transfers Symposium, 16–17 October. London, Overseas Development Institute.
- Naschold, F. 2012. "The poor stay poor". Household asset poverty traps in rural semi-arid India. *World Development*, 40(10): 2033–2043.
- Nehring, R., Miranda, A.C. & Howe, A. 2014. A case for institutional demand. Support for smallholders through procurement and food assistance programmes. Background paper prepared for *The State of Food and Agriculture 2015: Social protection and agriculture: breaking the cycle of rural poverty.* International Policy Centre for Inclusive Growth. Unpublished.
- Neumann, C.G., Bwibo, N.O., Murphy, S.P.,
 Sigman, M., Whaley, S., Allen, L.H., Guthrie, D.,
 Weiss, R.E. & Demment, M.W. 2003. Animal source
 foods improve dietary quality, micronutrient
 status, growth and cognitive function in Kenyan
 school children: background, study design and
 baseline findings. *The Journal of Nutrition*,
 133(11 Suppl. 2): 39415–39495.
- **Okola, A.** 2011. Mainstreaming gender in rural roads programs: the experience of Peru and

- its applicability for Africa. PowerPoint slide presentation.
- Omilola, B. & Kaniki, S. 2014. Social protection in Africa: A review of potential contribution and impact on poverty reduction. UNDP Study Report. New York, USA, United Nations Development Programme.
- OPM (Oxford Policy Management). 2013a.

 Qualitative research and analyses of the
 economic impact of cash transfer programmes in
 sub-Saharan Africa. Ghana Country Case Study
 Report. Paper prepared for the From Protection
 to Production project. Rome, FAO.
- **OPM.** 2013b. *Qualitative research and analyses* of the economic impact of cash transfer programmes in sub-Saharan Africa. Kenya Country Case Study Report. Paper prepared for the From Protection to Production project. Rome, FAO.
- **OPM.** 2014. Qualitative research and analyses of the economic impacts of cash transfer programmes in sub-Saharan Africa. Malawi Country Case Study Report. Oxford, Oxford Policy Management.
- PAA (Purchase from Africans for Africa). 2014.

 Purchase from Africans for Africa. Phase I
 learning and results report (available at http://paa-africa.org/wp-content/uploads/2015/02/
 Report-Phase-I_low.pdf).
- Pahlowan, W.I. & Samaranayake, S. 2014. An end in sight for ultra-poverty: scaling up BRAC's graduation model for the poorest. Presentation made at the IDS Graduation and Social Protection Conference on 6–8 May, 2014. Kigali.
- Pankaj, A. & Tankha, R. 2010. Empowerment effects of the NREGS on women workers: a study in four states. *Economic and Political Weekly*, 45(30): 45–55.
- Pavanello, S., Pozarny, P. & de la O Campos, A.P. 2015. Research on rural women's economic empowerment and social protection. Rwanda Vision 2020 Umurenge Public Works. Qualitative report. Unpublished.
- Pellerano, L., Moratti, M., Jakobsen, M., Bajgar, M. & Barca, V. 2014. Child Grants Programme impact evaluation. Follow-up report. Oxford, UK, Oxford Policy Management.
- Plavgo, I., de Milliano, M. & Handa, S. 2013. The cost of social cash transfer programs in sub-Saharan Africa. The Transfer Project Research Brief. Chapel Hill, NC, USA, Carolina Population Center, University of North Carolina.
- Portela Souza, A., Duarte, J., de Anchieta Semedo Neves, J., Portela de Oliveira, P. & de Brito Gadelha, S. 2013. *Uma Investigação sobre a* focalização do Programa Bolsa Família e seus determinantes imediatos. Center for Applied

- Microeconomics Working Paper. São Paulo, Brazil, São Paulo School of Economics.
- Quisumbing, A.R., Kumar, N. & Behrman, J. 2011.

 Do shocks affect men's and women's assets
 differently? A review of literature and new
 evidence from Bangladesh and Uganda. IFPRI
 Discussion Paper No. 01113. Washington, DC,
 IFPRI.
- Quisumbing, A.R., Meinzen-Dick, R., Raney, T.L., Croppenstedt, A., Behrman, J.A. & Peterman, A., eds. 2014. *Gender in agriculture: closing the* knowledge gap. Dordrecht, Netherlands, FAO and Springer.
- Rabbani, M., Prakash, V.A. & Sulaiman, M. 2006. Impact assessment of CFPR/TUP: A descriptive analysis based on 2002–2005 panel data. CFPR/ TUP Working Paper No. 12. Dhaka, BRAC, and Ottawa, Aga Khan Foundation Canada.
- Ranchhod, V. 2006. The effect of the South African old age pension on labour supply of the elderly. South African Journal of Economics, 74(4): 725–744.
- Rashid, S., Dorosh, P.A., Malek, M. & Lemma, S. 2013. Modern input promotion in sub-Saharan Africa: insights from Asian green revolution. *Agricultural Economics*, 44(6): 705–721.
- Ravallion, M. 2009. How relevant is targeting to the success of an antipoverty program? World Bank Research Observer, 24(2): 205–231.
- Rawlins, R., Pimkina, S., Barrett, C.B., Pedersen, S. & Wydick, B. 2014. Got milk? The impact of Heifer International's livestock donation programs in Rwanda on nutritional outcomes. *Food Policy*, 44: 202–213.
- Reddy, D.N., Upendranadh, C., Tankha, R. & Sharma, A.N. 2011. Institutions and innovations in the implementation process of the Mahatma Gandhi National Rural Employment Guarantee Scheme in India. Centre for Social Protection Research Report 09. Brighton, UK, Institute of Development Studies.
- Ribas, R.P. & Soares, F.V. 2011. Is the effect of conditional transfers on labor supply negligible everywhere? Paper presented at the 6th IZA/ World Bank Conference on Employment and Development, June 2011, Mexico City.
- Romeo, A., Dewbre, J., Davis, B. & Handa, S. 2015.

 The long term impacts of cash transfers in the context of inflation. The case of the CT-OVC programme in Kenya. PtoP (From Protection to Production) project report. Rome, FAO.
- **Rosenzweig, M. & Binswanger, H.** 1993. Wealth, weather, risk and the composition and profitability of agricultural investment. *Economic Journal*, 103(416): 56–78.

- Ruel, M. & Alderman, H. 2013. Nutrition-sensitive interventions and programs: how can they help accelerate progress in improving maternal and child nutrition? *The Lancet*, 382(9891): 536–551.
- Ruiz-Arranz, M., Davis, B., Stampini, M.,
 Winters, P. & Handa, S. 2002. More
 calories or more diversity? An econometric
 evaluation of the impact of the PROGRESA
 and PROCAMPO transfer programs on food
 security in rural Mexico. ESA Working Paper
 No. 09-02. Rome, FAO.
- Sabates-Wheeler, R. & Devereux, S. 2011.

 Transforming livelihoods for resilient futures:
 how to facilitate graduation in social protection
 programmes. FAC Working Paper No. 023.

 Brighton, UK, Future Agricultures Consortium.
- Sabates-Wheeler, R. & Devereux, S. 2014.

 Sustainable graduation: building resilient lives and resilient systems. Paper presented at the conference Graduation and Social Protection, Kigali, 6–8 May 2014.
- Sabates-Wheeler R., Hurrell A. & Devereux S.
 2014. Targeting social transfer programmes:
 Comparing design and implementation errors
 across alternative mechanisms. WIDER Working
 Paper 2014/040. Helsinki, World Institute for
 Development Economics Research.
- Sadler, K., Mitchard, E., Abdi, A., Shiferaw, Y., Bekele, G. & Catley, A. 2012. Milk matters: the impact of dry season livestock support on milk supply and child nutrition in Somali Region, Ethiopia. Somerville, MA, USA, Feinstein International Center, Tufts University, and Addis Ababa, Save the Children.
- SASSA (South African Social Security Agency). 2011. Third quarter indicator report. October to December 2011. Pretoria.
- **SASSA.** 2015. A statistical summary of social grants in South Africa. Fact sheet. Issue No. 5 of 2015 31 May 2015. Pretoria.
- Save the Children. 2009. How cash transfers can improve the nutrition of the poorest children: evaluation of a safety net project in southern Niger. London, Save the Children.
- Seyoum, Z. 2012. National experience on gender responsive program contribution for empowerment of rural women in Ethiopia: the case of Productive Safety Net Programme (PSNP). Federal Democratic Republic of Ethiopia Ministry of Agriculture, Women's Affairs Directorate. Presentation prepared for the Expert Group Meeting on Gender Responsive Social Protection in South-East Asia, Bangkok, Thailand, 13–14 November 2012.

- Shariff A. 2009. Putting people to work: what can we learn from India's mass employment scheme? New Delhi, IFPRI.
- **Skoufias, E.** 2005. *PROGRESA and its impacts on the welfare of rural households in Mexico.* IFPRI Research Report 139. Washington, DC, IFPRI.
- Skoufias, E. & Parker, S.W. 2001. Conditional cash transfers and their impact on child work and schooling: evidence from the PROGRESA program in Mexico. *Economia*, 2(1): 45–86.
- Skoufias, E., Unar, M. & González-Cossío, T. 2008. The impacts of cash and in-kind transfers on consumption and labor supply: Experimental evidence from rural Mexico. World Bank Policy Research Working Paper No. 4778. Washington, DC, World Bank.
- **Slater R. & Farrington J.** 2009. *Targeting of social transfers: a review for DFID*. London, Overseas Development Institute.
- Slater, R., Ashley, S., Tefera, M., Buta, M. & Esubalwe, D. 2006. Ethiopia Productive Safety Net Programme (PSNP): study on policy, programme and institutional linkages. Final Report. London, Overseas Development Institute, IDL group and Indak International.
- Slater, R., Holmes, R., Farrington, J., McCord, A. & Hagen-Zanker, J. 2010. Linking agriculture and social protection toolbox. A2: Concepts and framework. London, ODI.
- **Soares, S.** 2012. *Bolsa Família: A summary of its impacts*. International Policy Centre for Inclusive Growth One pager No. 137. Brasilia, IPC-IG.
- Soares, F.V., Ribas, R.P. & Hirata, G.I. 2008.

 Achievements and shortfalls of conditional cash transfers: impact evaluation of Paraguay's Tekopora Programme. IPC Evaluation Note No. 3. Brasilia, IPC-UNDP.
- Sparovek, G., Plata, L.A.E., Maule, R.F., Maule, F.E., Klug, F.S.F., Klug, I.L.F., Goldszmidt, R., Fernandes, R.L., de Camargo, R.A. & Martins, S.P. 2007. Estudo comparativo das diferentes modalidades do PAA Região Nordeste. Revista Cadernos de Estudos -Desenvolvimento Social em Debate nº 5. Brasilia, Ministério do Desenvolvimento Social e Combate à Fome.
- Strauss, J. & Thomas, D. 1998. Health, nutrition and economic development. *Journal of Economic Literature*, 36(2): 766–817.
- Studdert, L.J., Soekirman, Rasmussen, K.M. & Habicht, J.-P. 2004. Community-based school feeding during Indonesia's economic crisis: implementation, benefits, and sustainability. Food and Nutrition Bulletin, 25(2): 156–165.

- Subbarao, K., del Ninno, C., Andrews, C. & Rodríguez-Alas, C. 2013. Public works as a safety net. Design, evidence, and implementation.
 Washington, DC, World Bank.
- Sumberg, J. & Lankoandé, G.D. 2013. Heiferin-trust, social protection and graduation: conceptual issues and empirical questions. Development Policy Review, 31(3): 255–271.
- Sumberg, J. & Sabates-Wheeler, R. 2010. Linking agricultural development to school feeding.

 HGSF Working Paper Series No. 2. London, The Partnership for Child Development.
- **Swensson, L.F.J.** 2015. Institutional procurement of food from smallholder farmers: the case of Brazil. Rome, FAO.
- **Taylor, J.E.** 2013. A methodology for local economywide impact evaluation (LEWIE) of cash transfers. Methodological guidelines for the From Protection to Production Project. Rome, FAO.
- **Taylor, J.E. & Filipski, M.J.** 2012. Beyond experiments: simulation methods for impact evaluation. In preparation.
- **Taylor, J.E., Dyer, G.A. & Yúnez-Naude, D.** 2005. Disaggregated rural economy-wide models for policy analysis. *World Development*, 33(10): 1671–1688.
- **Taylor, J.E., Thome, K. & Filipski, M.** 2013. *Evaluating local general equilibrium impacts of Lesotho's Child Grants Programme*. PtoP (From Protection to Production) project report. Rome, FAO.
- Taylor, J.E., Kagin, J., Filipski, M. & Thome., K. 2013. Evaluating general equilibrium impacts of Kenya's cash transfer program for orphans and vulnerable children (CT-OVC). PtoP (From Protection to Production) project report. Rome, FAO.
- Taylor, J.E., Thome, K., Davis, B., Seidenfeld, D. & Handa, S. 2014. Evaluating local general equilibrium impacts of Zimbabwe's Harmonized Social Cash Transfer Programme (HSCT). PtoP (From Protection to Production) project report. Rome, FAO.
- Teixeira, C.G. 2010. A heterogeneity analysis of the Bolsa Família programme effect on men and women's work supply. IPC-IG-UNDP Working Paper No. 61. Brasilia, International Policy Centre for Inclusive Growth United Nations Development Programme.
- **Teruel, G. & Davis, B.** 2000. An evaluation of the impact of PROGRESA cash payments on private inter-household transfers. Final report. Washington, DC, IFPRI.
- Thome, K., Taylor, J.E., Tsoka, M., Mvula, P., Davis, B. & Handa, S. 2015. Local Economy-wide Impact Evaluation (LEWIE) of Malawi's Social Cash

- *Transfer (SCT) Programme*. PtoP (From Protection to Production) project report. Rome, FAO.
- Thorne, K., Taylor, J.E., Kagin, J., Davis, B., Darko Osei, R. & Osei-Akoto, I. 2014. Local Economywide Impact Evaluation (LEWIE) of Ghana's Livelihood Empowerment Against Poverty (LEAP) programme. PtoP (From Protection to Production) project report. Rome, FAO.
- Tiberti, L., Maisonnave, H., Chitiga, M., Mabugu, R., Robichaud, V. & Ngandu, S. 2013. The economywide impacts of the South African Child Support Grant: a micro-simulation-computable general equilibrium analysis. Centre Interuniversitaire sur le Risque, les Politiques Économiques et l'Emploi. Cahier de recherche/Working Paper No. 13-03. Montreal, Université Laval, CIRPÉE.
- **Tirivayi, N., Knowles, M. & Davis, B.** 2013. *The interaction between social protection and agriculture: a review of evidence.* PtoP (From Protection to Production) report. Rome, FAO.
- **Todd, J.E., Winters, P.C. & Hertz, T.** 2010. Conditional cash transfers and agricultural production. Lessons from the *Oportunidades* experience in Mexico. *Journal of Development Studies*, 46(1): 39–67.
- **UN (United Nations).** 2011a. The Millennium Development Goals Report 2011. New York, USA.
- UN. 2011b. Emerging issues: social protection.
 Note by the Secretariat. Economic and Social Council. Commission for Social Development, Forty-ninth session, 9–18 February 2011, Item 3 (c) of the provisional agenda, Follow-up to the World Summit for Social Development and the twenty-fourth special session of the General Assembly, E/CN.5/2011/1. New York, USA.
- UNDP (United Nations Development Programme).
 2013. Social protection, growth and
 employment. Evidence from India, Kenya,
 Malawi, Mexico and Tajikistan. New York, USA.
- UNICEF (United Nations Children's Fund). 2012.

 Integrated social protection systems: enhancing equity for children. UNICEF Social Protection Strategic Framework. New York, USA.
- UNICEF. 2014. Underweight disparities by residence and wealth quintile. Data set (available at http:// data.unicef.org/nutrition/malnutrition). Last accessed: July 2015.
- USAID. 2012. Real impact: Ethiopia, Productive Safety Net Program Plus (available at www.usaid. gov/sites/default/files/documents/1865/PSNP_ Plus_Real_Impact_Case_Example_030614_508. pdf). Last accessed: July 2015.
- Vaitla, B., Devereux, S. & Swan, S.H. 2009. Seasonal hunger: a neglected problem with proven solutions. *PLoS Medicine*, 6(6): e1000101.

- Vakis, R., Rigolini, J. & Lucchetti, L. 2015. Left behind: chronic poverty in Latin America and the Caribbean. Washington, DC, World Bank.
- Van Campenhout, B. & Dercon, S. 2012. Nonlinear dynamics of livestock assets: evidence from Ethiopia. IFPRI Discussion Paper 01215, Washington, DC, IFPRI.
- Van den Bold, M., Quisumbing, A.R. & Gillespie, S. 2013. Women's empowerment and nutrition. An evidence review. IFPRI Discussion Paper 01294. Washington, DC, IFPRI.
- Van Jaarsveld, P.J., Faber, M., Tanumihardjo, S.A., Nestel, P., Lombard, C.J. & Benadé, A.J.S. 2005. B-carotene-rich orange-fleshed sweet potato improves the vitamin A status of primary school children assessed with the modified-relative doseresponse test. *The American Journal of Clinical Nutrition*, 81(5): 1080–1087.
- Vogt, S.P.C. & de Souza, R.S. 2009. Mercados institucionais locais como instrumento de fortalecimento da agricultura familiar: uma análise do Programa de Aquisição de Alimentos na Região Celeiro, RS. Paper presented at the Sociedade Brasileira de Economia, Administração e Sociologia Rural, Porto Alegre, RS, Brazil, 26–30 July, 2009.
- Ward, P., Hurrell, A., Visram, A., Riemenschneider, N., Pellerano, L., O'Brien, C., MacAuslan, I. & Willis, J. 2010. Cash Transfer Programme for Orphans and for Vulnerable Children (CT OVC) operational and impact evaluation 2007–2009. Final report. Oxford, UK, Oxford Policy Management.
- **WFP (World Food Programme).** 2013. *State of School Feeding Worldwide 2013.* Rome.
- **WFP.** 2014. Purchase for Progress (P4P) final consolidated procurement report (September 2008–December 2013). Rome.
- Winters, P. & Davis, B. 2009. Designing a programme to support smallholder agriculture in Mexico.

 Lessons from PROCAMPO and Oportunidades.

 Development Policy Review, 27(5): 617–642.
- Woldehanna, T. 2009. Productive safety net programme and children's time use between work and schooling in Ethiopia. Working Paper No. 40. Oxford, UK, Young Lives, Department of International Development, University of Oxford.
- World Bank. 2001. World Development Report 2000/2001. Attacking poverty. New York, USA, Oxford University Press.
- **World Bank.** 2006. *Repositioning nutrition as central* to development: a strategy for large scale action. Directions in Development. Washington, DC.
- **World Bank.** 2007. *World Development Report 2008. Agriculture for development*. Washington, DC.

- **World Bank.** 2009. *Gender in agriculture*. Washington, DC.
- **World Bank.** 2010. *Global Economic Prospects 2010. Crisis, finance, and growth.* Washington, DC.
- World Bank. 2012. Managing risk, promoting growth. Developing systems for social protection in Africa. The World Bank's Africa social protection strategy 2012–2022. Washington, DC.
- **World Bank.** 2014. *The State of Social Safety Nets* 2014. Washington, DC.
- World Bank. 2015a. Povcalnet. Online analysis tool for global poverty monitoring (available at: http://iresearch.worldbank.org/PovcalNet/index.htm.) Last accessed July 2015.
- World Bank. 2015b. Ending poverty and hunger by 2030. An agenda for the global food system. Washington, DC.
- **World Bank.** 2015c. *World Development Indicators database* (available at http://datacatalog.worldbank. org/). Last accessed: July 2015.
- **World Bank.** 2015d. *The State of Social Safety Nets 2015.* Washington, DC.
- World Bank. 2015e. ASPIRE: The Atlas of Social Protection Indicators of Resilience and Equity. Online database (available at http://datatopics. worldbank.org/aspire/). Last accessed: July 2015.
- World Bank & ONE. 2014. Levelling the field. improving opportunities for women farmers in Africa. Washington, DC, World Bank.
- World Bank, FAO & WorldFish. 2012. Hidden harvest. The global contribution of capture fisheries. World Bank, Report No. 66469-GLB, Washington, DC, World Bank.
- Yoong, J., Rabinovich, L. & Diepeveen, S. 2012. The impact of economic resource transfers to women versus men: a systematic review. Technical report. London, EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.
- Yoshida, N., Uematsu, H. & Sobrado, C. 2014. Is extreme poverty going to end? An analytical framework to evaluate progress in ending extreme poverty. Policy Research Working Paper No. 6740. Washington, DC, World Bank.
- Zezza, A., Davis, B., Azzarri, C., Covarrubias, K., Tasciotti, L. & Anríquez, G. 2008. The impact of rising food prices on the poor. ESA Working Paper 08–07. Rome, FAO.
- Zezza, A., Winters, P., Davis, B., Carletto, G., Covarrubias, K., Quiñones, E., Stamoulis, K. & DiGiuseppe, S. 2007. Rural household access to assets and agrarian institutions: a cross country comparison. Paper prepared for presentation at the 106th seminar of the EAAE Pro-poor development in low income countries: Food, agriculture, trade, and environment, 25–27 October 2007, Montpellier, France.

Household Survey references

Some of the survey data used in Figures 5 and 6, and Table 4 are provided by the Rural Income Generating Activities (RIGA) project. This is a FAO project that has created an internationally comparable database of rural household income sources from existing household living standards surveys for about 25 countries. Most of the surveys used by the RIGA project were developed by national statistical offices in conjunction the World Bank as part of its Living Standards Measurement Study (LSMS). The data are accessible to the public; for more details, see http://www.fao.org/economic/riga/rural-incomegenerating-activities/en/. Survey data not provided by the RIGA are the original household data provided by the LSMS, available at http://microdata.worldbank. org/index.php/catalog/lsms.

- Government of Albania. 2005. Living Standards Measurement Survey LSMS 2005. Tirana, Institute of Statistics.
- Government of Bangladesh. 2005. Household Income and Expenditure Survey 2005. Dhaka, Bangladesh Bureau of Statistics.
- Government of the Purinational State of Bolivia. 2005. Encuesta de Hogares 2005. Sucre, Instituto Nacional de Estadística.
- **Government of Bulgaria.** 2001. *Integrated Household Survey.* Sofia, BBSS Gallup International.
- **Government of Cambodia.** 2004. *Household Socio-Economic Survey 2003–04*. Phnom Penh, Ministry of Planning-National Institute of Statistics.
- Government of Ecuador. 1998. Estudio sobre las Condiciones de Vida. Quito, Instituto Nacional de Estadísticay Censos (INEC).
- Government of Ethiopia. 2012. Ethiopian Rural Socioeconomic Survey 2011/2012. Addis Ababa, Central Statistical Agency.
- **Government of Ghana.** 2005. *Ghana Living Standards Survey 5*. Accra, Statistical Service.
- Government of Guatemala. 2006. Encuesta Nacional de Condiciones de Vida (ENCOVI) 2006. Guatemala, Instituto Nacional de Estadística, INE.
- Government of Indonesia. 2000. Indonesia Family Life Survey Wave 3. Jakarta, RAND Corporation and Lembaga Demografi of the University of Indonesia.
- Government of Kenya. 2005. Kenya Integrated Household Budget Survey (KIHBS) 2004/05. Nairobi, Central Bureau of Statistics, Ministry of Planning and National Development.
- Government of Madagascar. 2001. Enquête

 Permanente Auprès Des Ménages, Madagascar

 2001. Antananarivo, Ministère de l'Economie et
 de la Planification

- Government of Malawi. 2011. Third Integrated Household Survey. Lilongwe, National Statistical Office.
- **Government of Nepal.** 2003. *Nepal Living Standards Survey II 2002/03*. Katmandu, Central Bureau of Statistics.
- Government of Nicaragua. 2005. Encuesta Nacional de Hogares Sobre Medicion de Nivel de Vida (EMNV) 2005. Managua, Instituto Nacional de Estadísticas y Censos INEC.
- Government of Niger. 2011. National Survey on Household Living Conditions and Agriculture, 2011. Niamey, Ministry of the Economy and Finances and National Institute of Statistics.
- Government of Nigeria. 2010. General Household Survey – Living Standards Survey. Abuja, Federal Republic of Nigeria Federal Office of Statistics.
- Government of Pakistan. 2001. Pakistan Integrated Household Survey (PIHS) 2001. Islamabad, Federal Bureau of Statistics.
- **Government of Panama.** 2003. *Encuesta de Niveles de Vida 2003*. Panama, Programa de Las Naciones Unidas para el Desarrollo.
- **Government of Tajikistan.** 2007. *Tajikistan Living Standards Measurement Survey 2007*. Dushanbe, State Statistical Agency.
- **Government of Uganda**. 2012. *The Uganda National Panel Survey 2011/12*. Kampala, Uganda Bureau

 of Statistics.
- Government of the United Republic of Tanzania. 2009. *National Panel Survey 2009*. Dar Es-Salaam, United Republic of Tanzania National Bureau of Statistics.
- Government of Viet Nam. 2002. Viet Nam Household Living Standard Survey 2002. Hanoi, General Statistics Office.

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HELP ELIMINATE HUNGER, FOOD INSECURITY AND MALNUTRITION

We contribute to the eradication of hunger by facilitating policies and political commitments to support food security and by making sure that up-to-date information about hunger and nutrition challenges and solutions is available and accessible.

${\bf MAKE\ AGRICULTURE,\ FORESTRY\ AND\ FISHERIES\ MORE\ PRODUCTIVE\ AND\ SUSTAINABLE}$

We promote evidence-based policies and practices to support highly productive agricultural sectors (crops, livestock, forestry and fisheries), while ensuring that the natural resource base does not suffer in the process.

REDUCE RURAL POVERTY

We help the rural poor gain access to the resources and services they need – including rural employment and social protection – to forge a path out of poverty.

ENABLE INCLUSIVE AND EFFICIENT AGRICULTURAL AND FOOD SYSTEMS

We help to build safe and efficient food systems that support smallholder agriculture and reduce poverty and hunger in rural areas.

INCREASE THE RESILIENCE OF LIVELIHOODS TO THREATS AND CRISES

We help countries to prepare for natural and human-caused disasters by reducing their risk and enhancing the resilience of their food and agricultural systems.

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The State of Food and Agriculture

Social protection and agriculture: breaking the cycle of rural poverty

Despite significant progress in meeting the Millennium Development Goals on poverty and hunger, almost a billion people still live in extreme poverty (less than \$1.25 per person per day) and 795 million still suffer from chronic hunger. Much more will have to be done to achieve the new Sustainable Development Goals on eradicating poverty and hunger by 2030. Most of the extreme poor live in rural areas of developing countries and depend on agriculture for their livelihoods. They are so poor and malnourished that their families live in a cycle of poverty that passes from generation to generation.

Many developing countries are adopting a successful new strategy for breaking the cycle of rural poverty – combining social protection and agricultural development. Social protection measures such as cash benefits for widows and orphans and guaranteed public works employment for the poor can protect vulnerable people from the worst deprivation. It can allow households to increase and diversify their diets. It can also help them save and invest on their own farms and or start new businesses. Agricultural development programmes that support small family farms in accessing markets and managing risks can create employment opportunities that make these families more self-reliant and resilient. Social protection and agricultural development, working together, can break the cycle of rural poverty.



