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ENABLING PRO-POOR GROWTH THROUGH AGRICULTURE

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This report was discussed at the recent POVNET meeting of 7-8 February 2006. At that meeting POVNET members supported the document and agreed that it should be forwarded to the DAC for approval pending a revision of the Executive Summary and Chapter five which contain the key policy messages. The current draft incorporates the suggestions and is now forwarded to the POVNET, and to DAC for APPROVAL under item 9 of the DAC agenda [DAC/DCD/A(2006)3]. Following approval, this report will be published in the "DAC Guidelines and Reference Series".

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TABLE OF CONTENTS

| | |
|---|----|
| EXECUTIVE SUMMARY | 5 |
| Agriculture’s Central Role in Stimulating Pro-Poor Growth..... | 5 |
| A More Challenging Context for Agriculture Growth..... | 5 |
| The Urgency of a New Agenda..... | 5 |
| Principles of the New Agenda..... | 6 |
| Adapting approaches to diverse contexts..... | 6 |
| Building institutions and empower stakeholders..... | 7 |
| Supporting pro-poor international actions | 7 |
| Fostering country-led partnerships..... | 7 |
| Priorities for Action in the New Agenda..... | 8 |
| Enhancing agricultural productivity and improved market opportunities..... | 8 |
| Promoting diversified livelihoods | 8 |
| Reducing risk and vulnerability..... | 8 |
| Managing the change process | 9 |
| CHAPTER 1 WHY WE NEED A NEW AGENDA FOR AGRICULTURE | 9 |
| 1.1 Understanding the diversity and dynamics of rural livelihoods | 10 |
| 1.2 Agriculture’s importance for pro-poor growth – the evidence..... | 12 |
| 1.3 The changing context | 13 |
| 1.4 What’s now needed for pro-poor growth in agriculture? The new agenda | 15 |
| 1.5 Implications for policy | 16 |
| 1.6 Implications for institutions..... | 17 |
| 1.7 Implications for investments | 17 |
| Spotlight on five rural worlds..... | 19 |
| Rural World 1 – large-scale commercial agricultural households and enterprises..... | 19 |
| Rural World 2 – traditional landholders and enterprises, not internationally competitive..... | 19 |
| Rural World 3 – subsistence agricultural households and micro-enterprises | 19 |
| Rural World 4 – landless labourers and micro-enterprises..... | 20 |
| Rural World 5 – chronically poor, many no longer economically active..... | 20 |
| CHAPTER 2 INCREASING PRODUCTIVITY AND IMPROVING MARKET ACCESS | 21 |
| 2.1 Framing agriculture’s contribution to pro-poor growth in the new context..... | 21 |
| 2.2 Increasing the agricultural sector’s productivity | 22 |
| 2.3 Intensifying input-based production..... | 24 |
| 2.4 Managing natural resources better..... | 24 |
| 2.5 Diversifying outputs..... | 25 |
| 2.6 Improving market access..... | 26 |
| 2.7 Extending secure property rights..... | 27 |
| 2.8 Increasing access to finance | 29 |
| 2.9 Improving infrastructure..... | 29 |
| 2.10 Improving institutions for higher productivity and greater market access | 30 |
| 2.11 Organising small producers for marketing..... | 30 |

| | | |
|---|---|----|
| 2.12 | Policy implications..... | 31 |
| 2.13 | A gender lens | 32 |
| | Spotlight on Sub-Saharan Africa..... | 33 |
| a) | Increasing sector productivity and expanding market opportunities | 33 |
| b) | Increasing productivity | 33 |
| c) | Expanding market opportunities | 34 |
| d) | Expanding trade | 35 |
| e) | Diversifying livelihoods..... | 35 |
| CHAPTER 3 PROMOTING DIVERSIFIED LIVELIHOODS | | 37 |
| 3.1 | Sources of livelihood diversification..... | 37 |
| 3.2 | The nature of diversification in rural areas..... | 39 |
| 3.3 | Why people diversify | 40 |
| 3.4 | Mobility of labour | 41 |
| 3.5 | Migration and commuting to urban areas..... | 42 |
| 3.6 | Impediments to diversification..... | 43 |
| 3.7 | Policy issues | 44 |
| | Spotlight on global value chains – shutting out smallholders? | 46 |
| | Value chains and the rural worlds | 46 |
| CHAPTER 4 REDUCING RISK AND VULNERABILITY..... | | 48 |
| 4.1 | The changing pattern of risk and vulnerability..... | 48 |
| 4.2 | Who faces what risks in the five rural worlds | 49 |
| 4.3 | Social risk management..... | 50 |
| 4.4 | Protecting and promoting livelihoods | 51 |
| 4.5 | Reducing risk..... | 52 |
| 4.6 | Mitigating the effects of shocks and stresses..... | 52 |
| 4.7 | Helping poor rural households cope..... | 53 |
| | Spotlight on higher-risk, higher-return strategies..... | 55 |
| CHAPTER 5 ADVANCING THE NEW AGENDA | | 57 |
| 5.1 | Principles of the new agenda..... | 57 |
| | Adapt approaches to diverse contexts..... | 58 |
| | Build institutions and empower stakeholders | 58 |
| | Support pro-poor international actions | 59 |
| | Foster country-led partnerships | 60 |
| 5.2 | Priorities for action in the new agenda..... | 62 |
| | Enhance agricultural productivity and market opportunities..... | 62 |
| | Promote diversified livelihoods..... | 64 |
| | Reduce risk and vulnerability | 65 |
| | Managing the change process..... | 66 |
| REFERENCES | | 68 |

Tables

| | | |
|-----------|--------------------------------------|----|
| Table 4.1 | Risks in the five rural worlds | 54 |
|-----------|--------------------------------------|----|

Figures

| | | |
|------------|--|----|
| Figure 3.2 | Total income portfolio by income profile: Tanzania | 39 |
| Figure 4.1 | Two income profiles - one low, one higher | 55 |

Boxes

| | | |
|---------|--|----|
| Box 1.1 | Cambodia: Agriculture feminised..... | 11 |
| Box 1.2 | Defining agriculture | 12 |
| Box 1.3 | What higher agricultural productivity can mean for reducing poverty? | 13 |
| Box 1.4 | What's new in the broader agenda for agriculture..... | 16 |
| Box 2.1 | Why should we care about the future of small family agriculture? | 23 |
| Box 2.2 | A new smallholder centred framework for investment in science and technology | 26 |
| Box 2.3 | Protecting women's property and land rights | 27 |
| Box 2.4 | Pro-poor land administration | 28 |
| Box 2.5 | Smart transfers | 31 |
| Box 3.1 | Chinese men to the cities, women still on the farms..... | 43 |
| Box 3.2 | Why people may prefer temporary mobility..... | 43 |
| Box 4.1 | The World Bank's social risk management framework..... | 50 |
| Box 4.2 | Weather-based insurance in Ethiopia..... | 53 |
| Box 5.1 | Policies 'for agriculture' and 'in agriculture' | 58 |
| Box 5.2 | The aid effectiveness agenda | 60 |

EXECUTIVE SUMMARY

Agriculture's Central Role in Stimulating Pro-Poor Growth

1. In most poor countries, agriculture is a major employer and source of national income and export earnings. Growth in agriculture tends to be pro-poor – it harnesses poor people's key assets of land and labour, and creates a vibrant economy in rural areas where the majority of poor people live. Agriculture connects economic growth and the rural poor, increasing their productivity and incomes. The importance of agriculture for poverty reduction, however, goes well beyond its direct impact on rural incomes. Agricultural growth, particularly through increased agricultural productivity, also reduces poverty by lowering and stabilising food prices; improving employment for poor rural people; increasing demand for consumer goods and services, and stimulating growth in the non-farm economy.

2. A positive process of economic transformation and diversification of both livelihoods and national economies is the key to sustained poverty reduction. But it is agricultural growth that enables poor countries, poor regions and ultimately poor households to take the first steps in this process.

A More Challenging Context for Agriculture Growth

3. Today, rural households face challenges much different than those faced by the "green revolution" producers who achieved sustained gains in agriculture productivity only a few decades ago. Over the past 20 years there has been a substantial decline in public sector support for agriculture and many producers have lost access to key inputs and services. While public sector provision of these services was not very efficient, it often provided the sole linkages to the markets for poor rural producers. Today, such links are tenuous and complicated by much greater integration of the global economy. Smallholder producers now compete in markets that are much more demanding in terms of quality and food safety, and more concentrated and integrated than in the past. OECD agricultural subsidies further distort many of these same markets.

4. Economic integration is accompanied by other challenges that further weaken the socio-economic position of the rural poor. In parts of the world, especially in sub Saharan Africa, rural areas are hard hit by the HIV/AIDS pandemic, which is disrupting the transfer of knowledge, destroying traditional land allocation systems, and dramatically changing the demographic composition of many rural communities. Climate change with growing population density is increasing pressure on an already fragile natural resource base that is the mainstay of rural livelihoods. Conflict conditions, many of which result from, or are provoked by poverty, are further eroding the livelihood systems and resilience of rural poor women and men.

The Urgency of a New Agenda

5. Attention to agriculture in terms of policy commitments and investment levels has declined in both international donor and developing country policies and programmes, despite the demonstrated high rates of return and the reductions in poverty that come from such investments. Yet achieving the internationally agreed poverty reduction targets will depend on establishing higher rates of economic growth, which equates to growth in agricultural sector productivity for the majority of countries where these targets are relevant. And a more robust agriculture sector will need to be framed within a new agenda that not only matches today's rural and global realities but engages and enables poor households to generate sustainable livelihoods.

Principles of the New Agenda

6. This report identifies four principles of engagement at the core of the new agenda. These principles are essential in defining how the new agriculture agenda should be promoted, and in how the investment and policy options proposed under the new agenda should be articulated. These principles are:

- Adapting approaches to diverse contexts.
- Building institutions and empower stakeholders.
- Supporting pro-poor international actions.
- Fostering country-led partnerships.

Adapting approaches to diverse contexts....

7. Current reality in rural areas is defined by a highly diverse range of stakeholders involved in agriculture – with considerable variation in their assets and access to markets and the way institutions promote or constrain their interests. To address the needs of the rural poor, policy needs to be informed by the dynamics in these processes. That, in turn, needs to be based on an understanding of the place of agriculture in the rural economy and in people’s livelihood strategies, in the productive potential of the land and labour involved in agricultural production and the opportunities for agricultural enterprises.

8. A typology of five “rural worlds” can guide policy makers in understanding the diverse rural and agricultural systems and dynamics and respond with appropriate pro-poor policies. These rural world categories are not mutually exclusive. The typology of rural worlds is used throughout this report as a guide rather than a rigid framework for differentiating rural households. By using a more differentiated analysis based on people’s livelihoods, it makes clear that poverty is located unevenly across and within rural populations, that policy in and for agriculture affects different groups in different ways and that the actions of one rural group can improve or impair the livelihoods of others.

- Rural World 1 – large-scale commercial agricultural households and enterprises;
- Rural World 2 – traditional agricultural households and enterprises, not internationally competitive;
- Rural World 3 – subsistence agricultural households and micro-enterprises;
- Rural World 4 – landless rural households and micro-enterprises;
- Rural World 5 – chronically poor households, many no longer economically active.

9. Local contexts vary in their agro-ecological potential and in the accompanying economic transformation – the contribution of agriculture gradually declines as the economy diversifies. Public policy linked to agriculture should be tailored to a country’s agro-ecological potential and the stage of transformation that it has attained. Policies need to be flexible enough to adapt to success and allow for resources to be transferred to other areas of the economy.

Building institutions and empower stakeholders...

10. Much of the failure of agriculture to achieve its potential is institutional. Support by the state has been unresponsive to the needs of the poor and inefficient in marketing producers' output, sometimes preventing the natural development of markets for producers. Public institutions need to be strengthened in their capacity to develop an appropriate blend of policies, regulatory frameworks and investments to re-launch the agricultural sector. At the same time, the role of private sector institutions needs to be strengthened to help address a range of problems including: limited access to financial services including credit and risk management instruments, to key inputs such as seed and fertiliser, and to output markets. These problems are often magnified for female farmers.

11. A strategy to strengthen institutions must also develop the skills, the capacity, and the organisation of poor rural producers to maximise their input in the policy processes and ensure accountability of policymakers. A major challenge, particularly in public extension and research services, is the capacity of the institutions themselves to deliver client-focused services for households in Rural Worlds 2 and 3. Years of under-funding and relative neglect have greatly weakened these institutions to deliver in the new agricultural environment, which requires a demand-led rather than supply-led approach.

Supporting pro-poor international actions ...

12. Three important processes can have major impacts on the successful implementation of the new agenda for agriculture. One is the global trade negotiations to reduce agricultural subsidies. A second is a major scaling up of aid in response to the challenge of meeting the Millennium Development Goals. A third is the multi-donor commitment to improve aid effectiveness, as set out by the Paris Declaration of March 2005. On agriculture specifically, G8 heads agreed to support a NEPAD-inspired, comprehensive set of actions to raise agricultural productivity, strengthen urban-rural linkages and empower the poor. The way these processes play out in the short and medium terms will have an important bearing on conditions for enabling pro-poor growth through agriculture.

Fostering country-led partnerships...

13. The Paris Declaration calls for an ambitious reform in the way aid is managed and donors should be guided by these principles in helping countries unlock agriculture's potential contribution to pro-poor growth. National poverty reduction strategies (PRSs), the main point of reference at the country level for operationalising the aid effectiveness agenda, are critical for implementing the new agenda for agriculture. But agriculture and rural development have been neglected in past PRSs, largely due to an inadequate understanding of the agricultural and rural dimensions of poverty. A key challenge is to redress the imbalance in the PRSs—to raise the profile of the productive sectors in general, and of agriculture in particular. More specifically, attention must be given to effective monitoring frameworks in supporting improved decision-making, flexible implementation, and increased accountability. Development processes are the outcome of power, knowledge and information relationships. It is therefore important to promote the participation of all PRS stakeholders, including rural producers and their organizations, in the development of policies and investments with the aim of influencing and eventually re-orienting their implementation.

Priorities for Action in the New Agenda

14. Efforts to stimulate agriculture's role in pro-poor growth should, on the basis of the principles above, be used to guide renewed attention to three priority areas. These are:

- Enhancing agricultural productivity and market opportunities
- Promoting diversified livelihoods on and off the farm
- Reducing risk and vulnerability

Enhancing agricultural productivity and improved market opportunities...

15. Improving productivity and expanding market access is at the core of a more robust agricultural economy. Productivity gains will depend upon a supportive policy environment that enables rural producers to use the resources available to them more efficiently and sustainably. Secure and equitable access to land and water resources, rangelands, fisheries and forests is a key ingredient of this policy environment. The development of rural financial services is equally important to allow for purchases of inputs and equipment in order to increase the productivity of land and labour and stimulate income-generating activities. Productivity gains will also depend upon access to information and technology developments framed by a demand-led and multidisciplinary approach. Market access will depend on improved physical access and reduced transactions costs, particularly through appropriately targeted infrastructure and better transport services. Support for producer associations will enhance capacity to engage in marketplaces dominated by increasingly large food processing and modern food retail industry such as global supermarket chains.

Promoting diversified livelihoods ...

16. The connections between the agricultural and non-agricultural rural economies are key drivers of diversified livelihoods. A thriving agriculture sector underpinned by improved productivity will expand the rural economy and influence wages and food security. Traditionally, agricultural policy has focused on increasing agricultural production, neglecting investment in post-harvest enterprises and non-agricultural assets for more diversified rural livelihoods while treating as socially undesirable those household strategies involving movement out of rural areas. To reverse this trend, governments and external partners should improve their understanding of labour markets and migration patterns and incorporate that understanding in national policies; establish functioning land markets, so that people are more able to move to new forms of economic activity; promote entrepreneurship; and tailor investments in infrastructure, education and health services to new livelihood patterns.

Reducing risk and vulnerability...

17. Poor households with livelihoods dependent on agricultural production face numerous shocks and stresses, some potentially catastrophic. The level of risk facing poor rural households has risen with increased market exposure linked to globalisation matched by the retrenchment of the state for the direct provision of services such as those provided through State marketing boards, subsidies and price controls. Domestic shocks, such as the HIV/AIDS pandemic, have further weakened the position of many poor households. Reducing levels of risk, where possible, and provision of instruments to reduce vulnerability has to be a central element of pro-poor agriculture policy. This not only provides social protection for poor people, but enables them to undertake new, viable but more risky livelihoods, increase their participation in markets and generate pro-poor economic growth.

Managing the change process

18. In the real world the transformation from a system wholly dependent on low-productivity agriculture and a weak agricultural sector to one that is diverse and dynamic and that presents broader opportunities to poor people is not entirely virtuous. The main challenge is that poverty persists in communities with poor market access, poor natural resource endowments and little political capital. Many rural households remain vulnerable to shocks of various kinds, and their livelihoods are exposed to high levels of risk. Pro-poor policies must remove and relax the barriers and constraints faced by poor households as well as provide new incentives and support for their sustainable participation in more equal, market based relations and exchanges. This does not mean that policies in and for agriculture should become social policy. But it strongly suggests that economic policy, including agricultural policy, should be consistent with social objectives and, where possible, address them directly.

19. Against this background, donors will need to find ways to work effectively with their partners to promote sustainable, country-driven and programme-based development that recognises the important contribution of agriculture to pro-poor growth. Donors can help build research and institutional capacity to underpin and inform the change processes. They can facilitate the involvement of rural stakeholders in shaping these policies, institutions and investments to ensure that they respond to livelihood needs. They can foster dialogue and support efforts to establish open, participatory monitoring frameworks. And they will need to do this in a way that responds to the partner country's long term vision for agriculture in a pro-poor growth context.

CHAPTER 1

WHY WE NEED A NEW AGENDA FOR AGRICULTURE

20. *Throughout history, increases in agricultural sector productivity have contributed greatly to economic growth and the reduction of poverty. The past 30 years have seen global successes in food production lead to an overall decline in world food prices, increased caloric intake, reductions in the percentage of undernourished people and boosted rates of return to some key investments in agriculture.*

21. *We know that economic growth is essential for reducing poverty and that agriculture has in many places connected broader economic growth and the rural poor, increasing their productivity and incomes. Those higher rural incomes increase the demand for consumer goods and services, in turn stimulating the rural economy, boosting growth and reducing poverty even further. Agricultural sector growth reduces poverty by harnessing the productive capacity of the poor's key assets of land and labour, by lowering and stabilising food prices, by providing labour-intensive employment for the poor and by stimulating growth in the rural economy.*

22. *In recent decades, however, this virtuous set of relationships has been threatened. New global trading conditions have been disadvantageous to poorer producers. Developing countries continue to give high levels of protection to their own markets. Recent policies for economic restructuring have not produced positive results. Gaps opened by the removal of public support to agriculture have not been filled by the private sector. And public investment in agriculture has declined.*

23. *At the same time, the focus on reducing poverty has sharpened. International donors and national governments are targeting poverty more explicitly, through new and more effective approaches. But these efforts have not yet given enough attention to what economic growth can do to reduce poverty or how agriculture can contribute to that growth.*

24. *This is the new context for agricultural policy, and a new agriculture agenda is needed to address it. The new agenda must promote investments in higher productivity activities and links to new market opportunities in urban centres and in regional and global markets. In tandem with improved production productivity, it must encourage the development of the broader agricultural sector and rural economy, so that the benefits from agriculture can be realised. It must also make it easier for small producers and landless agricultural workers to diversify out of agricultural production. And it must reduce risk and vulnerability across the rural world. In short, there has to be a shift from a traditional sectoral agenda for agricultural production to a broader agenda for the agricultural sector and rural livelihoods.*

1.1 Understanding the diversity and dynamics of rural livelihoods

25. Devising the right policy environment requires in-depth knowledge of the livelihood strategies of rural households and careful consideration of ways to protect and promote those strategies. It also needs to reflect the large disparities among the many categories of rural households, or 'rural worlds'. Consider five:

Rural World 1: Large-scale commercial agricultural households and enterprises.

Rural World 2: Traditional landholders and enterprises, not internationally competitive.

Rural World 3: Subsistence agricultural households and micro-enterprises.

Rural World 4: Landless rural households and micro-enterprises.

Rural World 5: Chronically poor households, many no longer economically active.

26. These categories are not mutually exclusive, and there will always be important exceptions to the general classifications here. The typology is intended as a guide rather than a rigid framework for differentiating rural households.

27. The interdependencies among these rural worlds are critical to understanding the challenges facing the rural poor and to finding solutions. They deserve close examination – and good understanding of the local rural economy. The main factors in developing this typology include the financial and physical holdings of the household; the access to labour and product markets and to a variety of services needed to sustain livelihoods, including finance, information and infrastructure; the provisions for health care, education, and training and upgrading skills (especially for women); and the social networks that enable households to benefit from their participation in economic, political and social institutions and organisations.

28. Livelihoods in rural areas are complex and diverse, affected in different ways by policies to promote agricultural growth. Policies for effective poverty reduction need to be informed not just by the evidence of agriculture's contribution to pro-poor growth but by a good understanding of the realities and dynamics of both the agricultural sector and rural livelihoods – and of how poor rural households are constrained or supported by policies and institutions. The challenge for policymakers is to base policies on good understanding of their complexity and diversity.

29. In addition, the feminisation of agricultural work requires a clear gender perspective to be integrated into policies for effective poverty reduction (see Box 1.1). Not only are women the mainstay of the agricultural food sector, labour force and food systems – they are also largely responsible for post-harvest activities (CIDA 2003).

Box 1.1 Cambodia: Agriculture feminised

In Cambodia 65% of the agricultural labour and 75% of fisheries production are in the hands of women. In all, rural women are responsible for 80% of food production. Half the women farmers are illiterate or have less than a primary school education; 78% are engaged in subsistence agriculture, compared with 29% for men. In rural areas only 4% of women and 10% of men are in wage employment.

Women-headed households are more likely than male-headed households to work in agriculture, yet they are also more likely to be landless or have significantly smaller plots of land. Policies, programmes and budgets for poverty reduction must thus address the situation of Cambodian women.

Source : Gender and Development Network and NGO Forum on Cambodia 2004

30. The rural world typology helps in beginning to understand these systems and dynamics and to develop pro-poor policies (see the spotlight at the end of this chapter). By using a more differentiated analysis based on people's livelihoods and how these livelihoods are situated in the local agricultural and broader rural economies, the typology makes it clear that poverty is located unevenly across and within rural populations, that agricultural policy affects different groups in different ways and that the actions or activities of one group of rural people can improve or impair the livelihoods of others.

31. This analysis of rural livelihoods in relation to the agricultural sector reveals the rising dependence of many people on sources of support from outside the household's agricultural production unit, from activities outside the broader agricultural sector and from urban (even regional and global) markets. It also reveals how some rural households have few or no assets for productive activity and are highly vulnerable to all sorts of shocks (See Box 1.2).

Box 1.2 Defining agriculture

Agriculture includes households engaged in farming, herding, livestock production and fishing and aquaculture. Also included are other producers and individuals employed in cultivating and harvesting food resources from salt and fresh water and cultivating trees and shrubs and harvesting non-timber forest products – as well as processors, small-scale traders, managers, extension specialists, researchers, policymakers and others engaged in the food, feed and fibre system and its relationships with natural resources. This system also includes processes and institutions, including markets, that are relevant to the agriculture sector (USAID 2000).

1.2 Agriculture's importance for pro-poor growth – the evidence

32. Agriculture contributes to the bulk of employment in developing countries and significantly to national income and export earnings. Given its dominance in the economy, it will remain a primary source of growth and means of poverty reduction for some time. And it remains the backbone of the rural economy, where the majority of the world's poor people live. The proportion of poor people remains highest in Sub-Saharan Africa, where slow economic growth has left millions at the margins of survival. In Sub-Saharan Africa alone, more than 314 million people continue to live on less than \$1 a day. And in most regions poverty remains a largely rural phenomenon.

33. The contribution of primary agricultural activities to the economy of developing countries averages about 13%, ranging from 8% in Latin America and the Caribbean to some 28% in South Asia, with much heterogeneity among countries in the different regions. In addition, 'extended agriculture', which incorporates farm and non-farm agricultural enterprise, contributes a much greater share of GDP – in Latin America, 30% of GDP. As countries develop, primary agriculture's share in national income declines. For example, the share of agriculture in India's GDP declined from about 45% in the early 1970s to 27% in 2001. Despite this decline, some 60% of India's people still depend on agriculture for their livelihood. In Sub-Saharan Africa, agriculture accounts for 20% of GDP, employs 67% of the total labour force and is the main source of livelihood for poor people. The World Bank estimates that in African countries women do at least 70% of the agricultural work (Mark Blackden, Interview, World Bank, 23 February 2005). Although the share of GDP in agriculture is declining in many countries in the region, it is increasing in others, as agricultural value added rises or non-agricultural sectors shrink (Dixon and others 2001).

34. At the macro level, growth in agriculture has consistently been shown to be more beneficial to the poor than growth in other sectors. In several South Asian countries poverty reduction through growth in agriculture was higher than that through growth in manufacturing (Warr 2001). Similarly, for every 1% of growth in agricultural GDP the positive impact on the poorest was greater than that from similar growth in manufacturing or services (Gallup and others 1997). Such impacts are usually best realised where there is an equitable distribution of assets, particularly land (De Janvry and Sadoulet 1996). Rural-urban links are also important. Growth in India's rural sector reduced poverty in both rural and urban areas, while urban growth reduced rural poverty (Datt and Ravallion 1996).

35. Variations in poverty reduction mirror the variations in per capita agricultural growth. And agricultural growth, particularly the growth of agricultural productivity, plays a significant role in poverty-reducing growth (Thirtle and others 2001). Very few economies around the world have achieved broad-based economic growth without agricultural and rural growth preceding or accompanying it (Mellor 2000; Pinstrip-Andersen and Pandya-Lorch 2001).

36. In Asia the rapid productivity gains of the Green Revolution offered a route out of poverty by increasing incomes and labour rates, lowering rural and urban food prices and generating new upstream

and downstream livelihood opportunities. The productivity growth further stimulated and sustained wider economic diversification and transformation beyond agriculture. But in much of Sub-Saharan Africa, with a different set of predetermining factors, productivity has stagnated or even fallen (Nkamleu and others 2003).

37. The multiplier effects of agriculture on the economy are estimated to be in the range of 1.35 to 4.62 (Thirtle and others 2001), though those for Sub-Saharan Africa are at the lower end, with important implications for investment decisions in agriculture there (See Box 1.3). Income from agriculture tends to be spent on a range of goods and services at the local or sub-national level, fostering opportunities for local diversification. So, while agriculture remains a primary contributor to growth, particularly in the early stages of development, it cannot function in isolation from the wider economy. It requires a supportive environment, including the removal of factors constraining its growth such as infrastructure. Nor can it drive growth alone – also needed are structural changes that support knock-on effects in local product and labour markets (Dorward and others 2004).

Box 1.3 What higher agricultural productivity can mean for reducing poverty?

A lot. Consider these numbers:

- A 10% increase in crop yields leads to a reduction of between 6% and 10% of people living on less than \$1 a day (Irz and others 2001).
- The average real income of small farmers in south India rose by 90% and that of landless labourers by 125% between 1973 and 1994 as a result of the Green Revolution (World Bank 2001).
- A 1% increase in agricultural GDP per capita led to a 1.61% gain in the per capita incomes of the lowest fifth of the population in 35 countries (Timmer 1997).
- A 1% increase in labour productivity in agriculture reduced the number of people living on less than \$1 a day by between 0.6% and 1.2% (Thirtle and others 2001).

38. A recent companion study to this report, *Pro-Poor Growth in the 1990s: Lessons and insights for 14 countries*, confirms what agricultural growth, with its strong links to non-agricultural growth, can do to reduce poverty. In the case study countries, most of the reduction in poverty was among households primarily (though not exclusively) engaged in agriculture. This was true even though non-agricultural growth was generally faster and even though agriculture contributed only 10%–30% of GDP. Agricultural growth had its greatest impact when it was driven by the crops that poor farmers cultivated most (World Bank 2005).

1.3 The changing context

39. In recent decades the context for formulating and implementing agricultural policy has changed fundamentally. Today's explicit focus on poverty reduction informs international and national policy. But public investment in support of agriculture has been withdrawn. Markets important to poor producers have deteriorated, partly a result of protectionist measures in the developed world. New health and other shocks are changing the demographics in rural areas, reducing productive capacity. And the natural resource base that agriculture depends on is succumbing to environmental pressures.

40. Some key details:

- Since the Green Revolution of the 1960s – the main benchmark historical event for understanding agriculture’s impact on poverty reduction – prices for the main commodities produced by developing countries have declined steeply. In more recent times, retail chains and their high product standards have become more influential, often leaving poor small-scale producers, especially women, unable to engage.
- Policies for more market-based development – promoted by the international financial institutions that poorer countries depend on – have not been very successful in agriculture. Indeed, they have constrained governments from providing support to producers. Many producers have in the process lost access to key inputs and services, including credit and extension.
- Many producers continue to lack financial services, are poorly linked to markets and do not have the information or knowledge to exploit beneficial technologies. The private sector has failed to fill gaps created by the withdrawal of public services because of the inherently risky nature of agriculture and because governments have failed to generate positive and stable enabling environments.
- The new context has particular impacts on women, given their prominence in farming. Their mobility is often restricted to the neighbourhood, to daytime and to interactions with familiar locals, clearly reducing their access to work, markets and transportation. The implicit lower ranking of women in society is associated with less ownership, access to and control of resources and decision making.
- The natural resource potential for agricultural development is different from that in the 1960s. The degradation of resources is more common. The opportunities for irrigating new areas are more limited. And climate change might disrupt agriculture in many areas.

41. An important dimension of the new context for agricultural policy is the record of poverty reduction in the world’s different regions. Although poverty persists in parts of South and Southeast Asia, the projections are reasonably promising. The reverse is so for Sub-Saharan Africa, where poverty is in many areas becoming deeper and solutions seem very difficult to find. The relatively poor status of Sub-Saharan Africa is highlighted in the UN’s recent assessment of the Millennium Development Goals, which indicated little or no progress being made across the main targets in Sub-Saharan Africa while greater progress was being achieved in the other regions (UN 2004). International efforts thus need to be focused predominantly (but not exclusively) on Sub-Saharan Africa. Because the conditions there are so different from those in Asia in the 1960s, this poses new challenges for agriculture. Can an African process be established to match that of Asia in the 1960s?

42. Another important dimension is that the imperatives of policy have shifted to a more explicit focus on the reduction of poverty, with increases in agricultural production seen as means to that end rather than ends in themselves. International objectives – such as the Millennium Development Goals and national poverty reduction strategies – have become major determinants of the priorities for public investment. It is now recognised that achieving internationally agreed poverty reduction targets depends on establishing higher rates of economic growth, which means growth in agriculture for the majority of countries where these targets are relevant. For most developing countries, poverty targets will not be reached without increases in agricultural output and productivity.

43. Given this new context, a new response is needed from agriculture. In the new agenda, many of the needed investments and actions will be recognisable from traditional approaches to agriculture. Some of the new agenda is about delivering on such neglected fundamentals as infrastructure and the development of new technologies. But some is about looking at the wide range of rural livelihoods and coming up with policies, institutions and investments that increase the productivity of households across that range. Some is about supporting diversified livelihoods off the farm. And some is about reducing risk and vulnerability.

1.4 What's now needed for pro-poor growth in agriculture? The new agenda

44. This report identifies three priority actions at the core of the new agenda that should guide policy formulation, institutional development and investments for and by the poor:

- Enhancing agricultural productivity (See Chapter 2).
- Promoting diversified livelihoods (See Chapter 3).
- Reducing risk and vulnerability (See Chapter 4).

45. The potential for enhanced agricultural productivity to stimulate pro-poor growth has been demonstrated most vividly in the Green Revolution, but there has been a failure to realise this potential more widely through existing policy and market arrangements. Greater harnessing of this potential has to be a central policy objective, especially in areas where the natural resources are available for sustained increases in productivity and in countries at a stage where agriculture can make a significant contribution to economic development. In these countries, small production units predominate and account for a large share of employment. A focus on enhancing the productivity of small producers is thus justified because of the greater impact on poverty and growth generated through increases in employment.

46. It has been realised for some time that rural people do not specialise in crop production, fishing, forest management or livestock-rearing to the exclusion of other sources of income. Instead, they combine a range of activities and occupations to build a diverse portfolio of activities. One reason for this diversification is the need to address the inherent risk and vulnerability of an activity that is dependent on the vagaries of nature and is thus inherently risky. Although few longitudinal studies exist, there is general agreement among researchers that the diversification of occupations and the proportion of income from sources outside the household's agricultural production unit are increasing.

47. The importance of non-production unit occupations for reducing poverty may be recognised by governments and donors, but policy has not reflected it. Why? Perhaps because it is widely believed that agricultural growth is the most important driver of the rural economy. The focus has thus remained on increasing producer incomes, with supplementary efforts to enhance skills and improve access to credit and productive assets.

48. The neglect of the largely unrecognised potential in input enterprises and post-harvest agricultural enterprises continues to hinder the development of policies and supports to encourage and expand the agricultural industries and services that add value to produce. There is substantial scope to marry improved production-unit productivity and market access with agricultural enterprise that contributes to the local and national economy through increased employment and new investments.

49. Recent research on rural livelihoods shows, however, that many diversified occupations are closely linked to urban areas. The synergy between agricultural sector growth and urban-based enterprises is a key to local economic development and, at a wider level, to pro-poor growth (Tacoli 2004). It is also becoming more apparent that many diversified occupations, especially those pursued by people in marginal

areas, are situated in urban locations – and given the poor prospects for substantial increases in household incomes in these marginal areas, those occupations are providing an important livelihood source.

50. There is also growing awareness of the problems facing those in many marginal areas – where mutually reinforcing environmental, physical, institutional, social and political factors trap them in low-productivity agricultural production and low levels of diversification, with few prospects for exiting poverty. But policies remain ill-informed about such constraints – and are ill-equipped to support multi-locational livelihoods. Indeed, governments often discourage mobility and informal activities, vital for livelihood diversification, in an effort to control urban ‘explosions’.

51. What is needed, therefore, is a broader entry point for poverty reduction, one tailored to the diversity of livelihoods, not just to increasing the incomes of production units. Better understanding is needed of the market and non-market constraints facing the poor in rural areas – and of how greater mobility and stronger rural-urban links can reduce poverty and promote regional development (See Box 1.4).

| Box 1.4 What’s new in the broader agenda for agriculture | |
|--|--|
| Views under the traditional agenda | Views under the new agenda |
| Policies, institutions and investments in agriculture | Policies, institutions and investments <i>in and for</i> agriculture |
| One rural world | Multiple rural worlds |
| National markets | National, regional and global markets |
| Production units | Livelihood units |
| Agriculture = production | Agriculture = agricultural sector (inputs + production + post-harvest + manufacturing) |
| One work location | Multiple work locations |
| Single sector approach | Multi-sectoral approaches |
| Public sector | Public and private sectors |
| Food crops | Diverse income streams |
| Growth only | Growth that minimises risk and vulnerability |
| Driven by supply | Driven by supply and demand |
| Fundamentals acknowledged | Fundamentals delivered |
| The fundamentals are science, technology, infrastructure, land policy and education, extension and training. | |

52. While strategies for diversified incomes enable both men and women to increase their income, they may also create problematic livelihood situations. Many who cannot manage on their land must migrate to cities or to other rural areas for seasonal work. The needs and realities of migrant women and men, seasonally employed in the agricultural sector, need to be addressed, and gender-sensitive services need to be adapted to their livelihood patterns.

1.5 Implications for policy

53. Economic transformation reduces the direct opportunities for poor people in primary production agriculture but also increases the opportunity for them elsewhere in the economy, including agricultural and non-agricultural industries and services. If policy is to have a much greater impact on poverty, it needs to address the needs of poor people, including those who have to move out of farming. Policy, to be genuinely *pro-poor*, should at a minimum not constrain the access of poor people to the new opportunities – and should preferably make it easier for them to participate in those opportunities, be they rural or urban based. It must also have an integrated gender perspective.

54. In the real world the transformation is not entirely virtuous from a system wholly dependent on low-productivity agricultural production to one that is diverse and dynamic and that presents broader opportunities to poor people. It is a process with serious imperfections. The main one is that poverty persists in communities with poor market access, poor natural resource endowments and little political and social capital. Many people remain vulnerable to shocks of various kinds, and their livelihoods are exposed to high levels of risk. So for policy to be pro-poor, it should take account of the needs of people left behind. Again, this does not mean that agricultural policy should become social policy. It strongly suggests, however, that policy should be consistent with economic and social objectives and, where possible, address them both directly.

55. Within agriculture, policies are needed to ensure that smallholders and the landless have a viable future. Unlike the rich countries, which can afford to subsidise their small producers, the preponderance of small production units in most developing countries requires that, net of the costs of assisting them, those units add to national economic growth, not detract from it. Needed therefore are public policies and investments that promote small producers and are tailored to the local context.

1.6 Implications for institutions

56. One of the main constraints to pro-poor growth through agriculture has been the weak link between poor rural households and public and private institutions for research, extension, marketing and finance. The most effective roles for government and the private sector are not well understood. The private sector has been slow to fill the gaps left behind when public sector support was withdrawn. In many cases, institutional arrangements limit the extent to which poor people can be engaged. Inappropriate service locations and staff capabilities, coupled with the low education levels and meagre assets of producers and landless labourers, continue to result in widespread and deeply embedded failures to address the problems of poorer households.

57. Overcoming these constraints requires a fundamental realignment of the institutions that provide agriculture-related services to poor rural households. It requires innovative institutional arrangements, including partnerships among public, private and civil society organisations. It requires appropriate services for poorer men and women and for more market-oriented producers. These new arrangements must be matched with processes that encourage staff within those organisations to work with poor households and to build their capacities to do this work. The capacities of farmers, both individual and collective, must also be built through educational and social processes that can enable them to shape the nature and quality of services they receive. Meeting this challenge of institutional reform will require substantial commitments and resources from the public sector.

1.7 Implications for investments

58. Many poor rural households suffer from 'ecological poverty', their livelihoods constrained by the impoverishment of the natural resources they depend on. Investing in natural capital can be a central part of poverty reduction strategies addressing the needs of poor rural households. These investments must be coupled with efforts to ensure that the poor obtain a fair share of the benefits generated by the natural assets they already own and manage. And greater attention must be devoted to sound stewardship of 'open access' environmental resources, often appropriated by the more economically powerful in society, to the disadvantage of poor people.

59. Aid needs to be channelled through effective mechanisms, such as those linked to the poverty reduction strategies of governments, especially where economic growth and rural poverty are being targeted. For Organisation for Economic Co-operation and Development (OECD) countries this implies substantial, long-term commitments and a more harmonised approach to aid investment. For national

DCD/DAC(2006)23

governments it implies policies, developed with the participation of the poor, that give priority to the reduction of poverty and are conducive to the promotion of pro-poor growth.

Spotlight on five rural worlds

Rural World 1 – large-scale commercial agricultural households and enterprises

60. Rural World 1 households and enterprises engaged in high-value, export-oriented agriculture, make up a very small minority of rural households and firms in the developing world. In addition to their land and other holdings, producers and firms in this category have direct access to finance, risk management instruments, information and infrastructure necessary to remain competitive in their business operations. Most have an influential voice in national policies and institutions affecting their enterprises and, perhaps even more important, close ties to buyer-driven value chains associated with global agriculture. Rural World 1 producers and firms are considered to be important sources of employment because they depend on inexpensive labour and reliable contract farming agreements to ensure a timely supply of quality produce.

61. The economic power of this group enables them to influence the political affairs of their countries. They often use this influence to shape public policies that favour their interests and to steer public expenditures to investment priorities that meet their needs. They are well positioned to meet the strict new regulations imposed by importing nations and by retail buyers expanding operations in regional and national markets.

Rural World 2 – traditional landholders and enterprises, not internationally competitive

62. Rural World 2 accounts for a substantial number of rural households and agricultural firms in the developing world. The one word that most aptly characterises them is ‘traditional’. They are frequently part of the local elite but have little influence at the national level. They have sizable landholdings often devoted to both commercial and subsistence agriculture. They previously had access to basic services, such as finance, but with the advent of liberalisation and the consequent withdrawal of the state from a direct role in agriculture, the availability of these services declined rapidly. Access to formal risk management instruments is limited.

63. Rural World 2 producers have few ties (if any) to the important agribusiness supply chains. Their traditional orientation, embedded in local networks, is becoming less appropriate as national and international interdependencies reshape rural societies throughout the developing world. Some researchers argue that with better access to improved technologies and infrastructure services, Rural World 2 producers could regain some of their competitiveness, particularly in food staples. The more entrepreneurial members of this group are learning from their Rural World 1 neighbours and becoming more commercial. They are also benefiting from investments in services directed primarily at Rural World 1, such as improved transport systems.

Rural World 3 – subsistence agricultural households and micro-enterprises

64. Rural World 3 households – fisherman, pastoralists, smallholders and associated micro-enterprises – are survivalist. Food security is their main concern, and their small production units are almost totally dedicated to home consumption. Their assets are poorly developed, and they have very limited access to services (credit) that would enable them to increase the returns to their assets. Their ability to manage risk and associated vulnerability is limited to informal means, thus severely constraining their ability to take on higher risk, higher return livelihood opportunities. Many live in fragile ecosystems or less favoured regions and depend on off-farm employment for a significant percentage of their livelihood. This group embraces many women and female-headed households, who are among the poorest and most exposed in rural areas. The social sphere of Rural World 3 rarely extends beyond local communities, and their voice is almost unheard in the broader socioeconomic and political affairs shaping

their lives. The economic fortunes of Rural Worlds 1 and 2 greatly affect Rural World 3's employment and income-earning opportunities, and sustained periods of growth give some the option of leaving subsistence production altogether.

Rural World 4 – landless labourers and micro-enterprises

65. Rural World 4 households are landless, frequently headed by women, with little access to productive resources other than their own labour. Sharecropping or working as agricultural labourers for better-off households in their communities is perhaps the most secure livelihood option for many of them. For others, migrating to economic centres on a daily, seasonal or even permanent basis is their best hope for survival. But their low education levels are a major barrier to migrating out of poverty.

66. Community ties, the glue in this group's socioeconomic sphere, can be an important asset in seeking out alternative livelihood options. But participation in more influential economic and political networks is not common. As for Rural World 3, the fortunes of Rural World 4 rely on Rural Worlds 1 and 2 for employment and income-earning opportunities.

Rural World 5 – chronically poor, many no longer economically active

67. Rural World 5 households are chronically poor. Most have sold off or been stripped of their asset holdings during periods of crisis. Remittances from relatives, community safety nets and government transfers are vital to their sustenance. As a result of the HIV/AIDS pandemic, many more households are facing this precarious situation. Entrenched gender inequalities exacerbate this problem. Social exclusion often typifies the relationship of Rural World 5 to the larger community. Cash and in-kind transfer schemes will be critical for this group for some time.

CHAPTER 2

INCREASING PRODUCTIVITY AND IMPROVING MARKET ACCESS

68. *Successful pro-poor growth strategies led by agriculture depend on increased agricultural sector productivity and improved access to domestic, regional and global markets. But there is potential for further production unit-based productivity growth, which has not been fully exploited under existing policy and market arrangements. Harnessing this potential will immediately improve conditions for poor rural households – either directly through market prices or indirectly through labour markets.*

69. *The weak human capacity of producer households and inappropriate and risky technologies can undermine efforts to achieve higher levels of productivity and diversify production into higher value products. Insecure and limited access to land, water and finance compound these weaknesses. Sustained and targeted policies that address these challenges and take account of local contexts can help realise farm households' production potential. Delivering such policies requires combined and coordinated efforts by public, private and civil society organisations.*

70. *Market access is critical for agriculture to become the main driver of pro-poor growth. Household and firms in Rural Worlds 1 and 2 rely heavily on access to markets for their farm production and on the labour from Rural Worlds 3 and 4 to produce surpluses. Reasons for poor market access include the global 'rules of the game' – restrictions, standards and subsidies of wealthy states – down to local-level factors. They also include the poor organisation and influence of producers, weak transport and communications infrastructure and limited market information. Addressing these constraints requires policy shifts at the regional and global levels – and substantial investment in the transport infrastructure to enable produce to move from farms to the marketplace. Strengthening social capital, in such forms as producer organisations, can ensure that agricultural households have the ability to negotiate in the marketplace and secure fairer prices for their products.*

71. *Agricultural households in Rural Worlds 2 and 3 can improve their incomes through enhanced engagement with the market place underpinned by an ability to increase productivity in a sustainable way. Commercial producers and firms in Rural World 1 provide employment opportunities for households in Rural Worlds 3 and 4 and their pioneering in regional and global markets open future opportunities to producers in Rural Worlds 2 and 3. These commercial agricultural businesses can be viewed as 'engines of growth' within the wider rural economy, stimulating and sustaining the labour market and opening commodity markets.*

2.1 Framing agriculture's contribution to pro-poor growth in the new context

72. *Agricultural sector productivity gains and market access lie at the core of a more robust agricultural economy and of pro-poor growth. Endeavours to increase productivity and expand market access must recognise from the outset, however, that the challenges facing today's rural households are much different from those confronted by the Green Revolution producers who recorded rapid and sustained gains only two or three decades ago. Many of today's poorest producers live in less favoured or fragile regions, whose agricultural potential is being jeopardised by degradation of the natural resource base and constrained by inadequate attention to infrastructure needs.*

73. In Sub-Saharan Africa, where many of the poorest rural households are located, there is no dominant food-production system. Instead, a wide variety of production systems serve as the livelihood foundation for agricultural communities. The demography of these and many other rural communities is also changing rapidly, as agriculture is increasingly becoming feminised through the effects of migration and the impacts of HIV/AIDS. Many producers lack access to key inputs and services, including credit and extension. Moreover, many small producers now compete in markets that are much more demanding in quality and food safety and distorted by OECD agricultural subsidies and the trade barriers of developing countries.

74. In many poor countries, especially in Africa, there still is excellent growth potential for small producers in the food staples sector (cereals, roots and tubers and traditional livestock products). For Africa as a whole, the consumption of these foods accounts for the lion's share of agricultural output and is projected to double by 2015. This will add another \$50 billion to demand (in 1996–2000 prices). Moreover, with more commercialisation and urbanisation, much of this added demand will translate into market transactions, not just additional on-farm consumption.

75. No other agricultural markets offer growth potential on this scale to reach huge numbers of Africa's rural poor. Many small producers could double or triple their incomes if they could capture a large share of this market growth. Simulations with economy-wide models at the International Food Policy Research Institute confirm this conjecture. For Ethiopia (a poor and food-deficit country) the fastest way to reduce poverty by 2015 is through productivity growth for food staples. This strategy outperforms a strategy built around increasing the production of high-value products (Hazell 2004). If small producers are to capture a fair share of this growth in food staples, particularly in Africa, they will have to become more competitive, especially against cheap food imports from abroad.

76. In many middle and higher income countries in Asia and Latin America, food staple market opportunities are more constrained, with demand growth linked more to growth in livestock feed or export opportunities than to domestic human consumption. In these cases small producers need urgently to diversify into higher value products that face much better demand prospects. A challenge for this 'new' high-value agriculture is to make it pro-poor. Left to market forces alone, the major beneficiaries of the new high-value agriculture will mostly be the larger and commercially oriented producers and producers well connected to roads and markets. The majority of small producers are likely to get left behind. Fortunately, there is great opportunity to guide the new high-value agriculture so that small producers and even many backward regions can participate.

77. Influence in society, both in official organisations and informal village associations, is distributed along gender lines. So policy needs to consider women's access to, and interaction with, informal and formal networks, marketing organisations and administrations – as well as training for women producers and entrepreneurs to learn about and adapt to new economic structures and marketing.

2.2 Increasing the agricultural sector's productivity

78. The productive potential of agriculture is highly varied and depends on the natural endowment, geographical location, links to the rest of the economy and social dimensions of the population. But the general failure in recent decades to achieve sustained rates of agricultural sector productivity and the pro-poor growth linked to it, especially in Sub-Saharan Africa, can be put down to inappropriate policies; inadequate institutions and services; failures to invest in appropriate infrastructure; and failures to invest in the development of the human, social and natural capital that agricultural households need to achieve higher productivity.

79. Governments need to make choices in allocating resources for the support of agriculture. There is a strong argument to prioritise such support to producers and enterprises of Rural Worlds 2 and 3, where the stage of economic development of a country and the availability and relative cost of labour mean that there would be a greater impact on poverty from government support (See Box 2.1). For poorer countries the attraction of small production units lies in their economic efficiency relative to larger units. They can create large amounts of productive employment, reduce rural poverty, support a more vibrant rural economy and help reduce rural-urban migration.

Box 2.1 Why should we care about the future of small family agriculture?

The efficiency of smaller production units in most developing countries is demonstrated by an impressive body of empirical studies showing an inverse relationship between unit size and land productivity (Heltberg 1998). Moreover, small producers often achieve higher land productivity with lower capital intensities than large units. These are important efficiency advantages in many poor countries where land and capital are scarce relative to labour.

The greater land productivity of small units stems from their greater abundance of family labour per hectare farmed. Family workers are typically more motivated than hired workers are, and they provide higher quality and self-supervising labour. They also tend to think in terms of whole jobs or livelihoods rather than hours worked, and are less driven by wage rates at the margin than hired workers. Small producers exploit labour-using technologies that increase yields (hence land productivity), and they use labour-intensive methods rather than capital-intensive machines. As a result, their land and capital productivities are higher and their labour productivity is typically lower than that of large farms. This is a strength in labour-surplus economies, but it becomes a weakness for the long-term viability of small farms as countries get richer and labour becomes more expensive.

In poor, labour-abundant economies, small producers are not only more efficient but they also account for large shares of the rural and total poor, so small production unit development can be win-win for growth and poverty reduction. Asia's Green Revolution showed how agricultural growth that reaches large numbers of small units could transform rural economies and raise enormous numbers of people out of poverty (Rosegrant and Hazell 2000). Recent studies show that a more egalitarian distribution of land not only leads to higher economic growth but also helps ensure that the growth achieved is more beneficial to the poor (Deininger and Squire 1998; Ravallion and Datt 2002). Small producers also contribute to greater food security, particularly in subsistence agriculture and in backward areas where locally produced foods avoid the high transport and marketing costs associated with many purchased foods.

Small producer households have more favourable expenditure patterns for promoting growth of the local rural economy, including rural towns. They spend higher shares of incremental income on rural non-tradables than large production units (Mellor 1976; Hazell and Roell 1983), thereby creating additional demand for the many labour-intensive goods and services that are produced in local villages and towns. These demand-driven growth links provide greater income-earning opportunities for small producers and landless workers.

80. The very limited capacity of the vast majority of poor rural households to access, analyse and utilise new knowledge on improved practices is a binding constraint to enhanced productivity. Research, development and information services that address this constraint have been weakened by years of under-funding and by failures of institutions to respond in relevant ways to the needs of agricultural producers, especially those in Rural Worlds 2 and 3 (IFAD 2004). As a result, producers who lack the resources to obtain it on their own have not had access to the information and technologies that would enable them to adopt improved production strategies and increase the income and well-being of their households.

81. Pro-poor strategies for agricultural research and its dissemination need to be tailored to the needs of the rural worlds and be aware of the broad range of factors affecting their adoption of new technology. Research strategies need to incorporate knowledge from local actors, and an institutional framework based on much greater participation of a wide range of stakeholders needs to be developed. Innovative approaches to the delivery of associated information services, including public, private and civil society actors, also need to be developed.

82. In identifying the constraints to productivity enhancement in the different rural worlds it is important to recognise that both land and labour productivity are central to pro poor growth. In the early stages of development, land productivity is most critical in order to create additional employment opportunities on farms. In the later stages, labour productivity increases in importance as off farm wage rates rise but demands for farm labourers remain high. In identifying the constraints to productivity enhancement in the different rural worlds it is important to recognise three broad categories of technology available to agricultural producers: intensifying input-based production, managing natural resources better and diversifying outputs in primary production or household post-harvest processing to capture more value added.

2.3 Intensifying input-based production

83. Input-based production intensification, centred on seed varieties with higher productive potential and the fertilisers and pesticides to realise these potentials, was the basis of the Green Revolution in Asia. Similar efforts, expanded to include livestock breeds and associated veterinary drugs and compound feeds, hold great potential for rural households in Rural Worlds 1, 2 or 3 in areas with good agro-ecological resources, low climatic risks, connections to input suppliers and access to markets.

84. Most of the opportunities for intensifying input-based production have already been exploited, however, and new opportunities will require much improved dissemination of existing intensification technologies, significant investments in infrastructure programmes and functioning input markets. Input-based production intensification can also degrade land, which over time limits the yield responses. Furthermore, in Africa far fewer producers have irrigation, resource endowments are often too poor, and risks are too high for input-based intensification to be relevant to more than a few producers in Rural Worlds 1 and 2.

85. Producers and processors in Rural World 1, also in some cases in Rural World 2, already benefit from advanced technologies based on the recent discoveries of molecular biology and genetic manipulation. However, much of this technology remains primarily aimed at users in developed countries and has been financed by multinational companies. For the originators of the technology, research and development geared to the needs of the rural poor in developing countries are not considered high return investments. Application of some of the principles of these advanced technologies to the needs of poorer farmers in Rural Worlds 2, 3 and 4 could nevertheless do much to raise their productivity and reduce risks. For instance, tissue culture can generate virus-free, and hence more productive, stocks of perennial crops that are important to the survival strategies of poor families.

2.4 Managing natural resources better

86. Natural resource management practices typically raise the productivity of family labour through changes in agricultural practices, such as managing soils and crop residues to augment in situ capture and retention of rainfall and raise land productivity or controlling pests and weeds by exploiting natural biological processes. Genetic improvements can play an important part in these efforts, but often do more to reduce risks by stabilising and diversifying production rather than maximising yield.

87. This category of technology is knowledge-intensive and often location-specific. With less stress on maximising yields, it seeks to lower risks and unit costs of output. It can be a first technology for many agricultural households in Rural World 3 that retain some usable land and labour but have no financial reserves, as well as for the financially vulnerable in Rural World 2. It can help women, the old and families with labour forces depleted by migration or HIV/AIDS to increase household food production on the small parcels of land they have retained. Developing the needed natural resource management technologies will

require investments in science and technology, and disseminating existing technology will require widely distributed and skilled technical support on the ground.

88. Policy must be tailored to increase the efficiency of natural resource management by incorporating knowledge from women and promoting greater participation of women stakeholders. Erosion, drought, floods, desertification and pollution mean that women find it harder to collect food, fuel and water. In addition, women often have more knowledge about the ecosystems, but are often not included in natural resource management and environmental protection.

2.5 Diversifying outputs

89. The diversification of outputs involves a change in primary production or household post-harvest processing to capture more value added. This category spans a wide range of technological options from household processing of cassava roots – to making milk products to sell to passers by – to organic farming and the production of fruits or poultry to supply global supermarket chains. Often market demands make this category of technology better suited to well resourced producers in Rural Worlds 1 and 2, who can more easily meet demands for volume, quality and timeliness of deliveries. Others in Rural World 2 as well as in Rural World 3 are likely to need finance and extensive institutional support to diversify, organise marketing and maintain technical quality.

90. Risks and financing needs for diversification will tend to be higher than those for merely upgrading production technology for existing staples. Careful prior assessments of markets and their needs, good information systems and ready rural access are other prerequisites for successful diversification. But for many small producers for whom the returns from staple crop production are no longer sufficient to earn a living, diversifying of output may be the only technical strategy that will allow them to stay on the land.

Box 2.2 A new smallholder centred framework for investment in science and technology

The new framework for future investments in science and technology has as its primary aim the alleviation of rural poverty. The framework shifts the past emphasis on technology supply by scientists to a system that responds to user demands and needs.

It links the search for new technology much more closely to efforts to resolve non technical impediments to change.

It fosters equal partnerships between scientists and rural people in the search for technologies adapted to the needs of the different Rural Worlds.

It recognizes and provides for diversity between RURAL WORDs in needs and solutions.

It is multidisciplinary in its approach to constraint identification and alleviation; it widens stakeholder participation to engage the contributions of those concerned with the many non technical constraints to poverty reduction.

It favours the emergence of knowledge based optimisation in the use of available resources.

It allows for progressive technical change or upgrading based on experiment and learning by poor people themselves.

It focuses the use of public funds on the generation and dissemination of public goods technologies, but with government agencies as facilitators rather than masters of development.

The new framework empowers rural communities by giving them access to public funds to hire those service providers best able to support participatory stakeholder efforts, and to form alliances that will draw in complementary funds from the voluntary and private sectors. The new framework has the empowerment of rural communities and specific common interest groups within communities as the centre and starting point of efforts to relieve rural poverty. Without investments to strengthen the capacity and opportunity for poor people to direct, manage and control their own circumstances, future investments in technology will be of no more value than those of the past.

Governments have a critical role in financing the support needed for smallholders or rural communities to establish their own institutions – for example, farmers' Field Schools for accessing and evaluating new agricultural technologies; village banks and rotating savings and credit associations for accessing financial services, and so building informal sector micro enterprises; water users associations to manage irrigation infrastructure; or farmer enterprise groups or associations to negotiate with market intermediaries. Empowerment needs to be central to all initiatives that seek to harness science and technology to alleviation of poverty.

2.6 Improving market access

91. Productivity gains can mean little without expanded access to markets. Market structures in many rural regions of the developing world are very weak, so the allocative efficiencies that markets achieve in fast-growing sectors of their economies do not materialise. Instead, undeveloped market demand for outputs discourages producers from raising production, while the consequent failures of incomes to rise in rural areas deters private traders and rural enterprises from entering and doing business. A vicious cycle. In the absence of functioning markets, rural areas remain trapped in a subsistence economy in which neither the narrow agricultural production sector nor the wider rural economy (both of which generate off-farm employment opportunities) can grow.

92. In the past many governments tried to address agricultural market failures in rural areas by creating state-managed organisations, such as marketing boards. Most of these interventions proved to be costly failures, often enabling widespread corruption to take hold to rural economies, and are becoming less and less common. The problems associated with weak markets remain, however, and new efforts are required if the agricultural sector is to spark sustained and rapid growth in poor countries. These efforts should focus on creating effective markets through improving the enabling conditions for wider private sector participation. Removing restrictions on the movement, sale and purchase of agricultural products is one example where changes are needed.

93. Insecure property rights, weak financial services and poor infrastructure are three of the most common barriers to more efficient rural markets, often particularly disadvantaging women. There is mounting evidence for attention to all three areas to transform stagnating rural areas.

2.7 Extending secure property rights

94. For most of the poor in developing countries, land is the primary means for generating a livelihood and a main vehicle for investing, accumulating wealth and transferring it between generations. Because land makes up such a large share of the asset portfolio of the poor, giving secure property rights to land they already possess can greatly increase the wealth of poor people who, unlike the rich, cannot afford the (official and unofficial) fees needed to deal with the formal system.

95. Unequal ownership of land is also a critical factor that creates and maintains differences between women and men, with consequences for the coming generations. In Kenya, for example, only 5% of the landowners are women, despite the fact that African women produce 60%–80% of the continent's food (Kameri-Mbote and Mubuu 2002). A World Bank policy research report, *Land Policies for Growth and Poverty Reduction*, concludes that the increased control by women over land titles could have 'a strong and immediate effect on the welfare of the next generation and on the level and pace at which human and physical capital are accumulated' (World Bank 2003: 38). Ensuring that women have secure rights to land is thus critical in many respects, including the challenges arising in the context of the HIV/AIDS epidemic, where the absence of secure land tenure for women who have lost their husband has been shown to be a key reason for costly conflict and additional hardship.

96. Secure title to land not only promotes wealth creation but can also enhance security. China illustrates that broad-based land access can provide a basic social safety net at a cost much below alternative government programmes, allowing government to spend scarce resources on productive infrastructure instead of safety nets. Having their basic subsistence ensured is likely to have allowed Chinese households to take on greater risks in non-agricultural businesses. With policies to foster lease markets for land, this also contributed significantly to a vibrant rural economy.

Box 2.3 Protecting women's property and land rights

Protecting the property and land tenure rights of women in AIDS-ravaged parts of Africa is vital to prevent rural households from slipping into a spiral of poverty. Losing land or property can unravel the whole fabric of a family, limiting access to safe, inexpensive and nutritious food and forcing children out of school and into work.

In Namibia and Uganda, where land law and property rights are made up of a complex system of overlapping official and traditional law, the rights of women to inherit, own and manage land can fall through the cracks. Widespread illiteracy and lack of access to formal court systems, lawyers and other legal resources can make matters worse. For many women in AIDS-affected households, losing a husband is the first of many losses she will face. She risks being thrown off her land, perhaps her only source of income and security, by relatives and robbed of her assets.

The Food and Agriculture Organization is working with local authorities and communities to guarantee that women's rights are protected by ensuring they have access to sources that explain their rights and the means to defend them. They found that more than 40% of widows had lost cattle and tools, seized by relatives after the male head of household died.

When women lack title to land or housing, they have to face a narrower choice of economic options. They may have to deal with homelessness, poverty and violence, contributing their impoverishment and their children's. Poverty can also encourage high-risk behaviour such as engaging in unsafe sex in exchange for money, housing, food or education.

Source : FAO Newsroom 2004

Box 2.4 Pro-poor land administration

It is now well recognised that, in many settings where land is rather abundant, full title may neither be needed nor be the most cost-effective way to secure the land rights of small producers. While a number of countries have started experimenting in this area, and interesting experience is accumulating, few models can be easily scaled up to deliver tenure security at sufficient speed and scale to be widely replicable.

Increasing the contribution of land rental markets

Even though land rental markets contribute to greater productivity in many countries, their potential to stimulate structural change has thus far been limited by the fact that most of the contracts have been short term. Various countries are now exploring measures – ranging from adjustments in the legal and regulatory framework to investment grants for long-term renters – that aim to maximise the contribution of land rental markets to enhancing structural change within the agricultural sector while contributing to the emergence of a rural non-farm sector in the affected areas (China).

Exploring new mechanisms for land reform

New approaches to land reform recognise the importance of land as one among several different assets in households' portfolios, the importance of market and non-market mechanisms for accessing land, and the fact that land reform can be sustained in the long term only if the new landowners can make productive use of their new asset. In general, all the approaches are much more decentralised, relying on incentive-compatible mechanisms to complement, rather than substitute for, the operation of land markets.

Securing the possible equity and efficiency gains from past land reforms

Many reforms have left a legacy of legislation (land ceilings and tenancy regulation) that reduce the scope for land access by poor people. At the same time, the rights given to reform beneficiaries have often remained incomplete (rewarding only usufruct rights with the landowner or the government retaining ownership rights), thus limiting investment incentives and the ability of the beneficiaries to access credit markets. Clarifying the ownership of such plots may lead to significant gains in efficiency. Programmes to facilitate this in a more systematic manner could extend benefits to those not able to muster the necessary resources on their own and could thus combine the efficiency gains with significant equity benefits.

Institutional reform of the registry

Even where the ownership distribution of land is not an issue, institutional inefficiencies, such as a large number of uncoordinated institutions, imply high cost of registering land that preclude realisation of the potential benefits from the land administration system. Best practice examples of institutional reform can be drawn on to learn lessons on this, including the use of technology as a means rather than as an end in itself.

Decentralising land administration institutions

Decentralisation of land administration services can help bring such services closer to the customers and thereby improve the ability of poor landowners to access services and thus reduce the transaction costs in dealing with the land administration system. At the same time, the rules to be followed in this process have to be clear to prevent local agents from using discretionary power to undermine the security of land rights.

Opening access to rural land by outside investors

Despite evidence on the productive efficiency of small producers, policymakers in many developing countries prefer large-scale production, often an excuse to give very generous land concessions at conditions very favourable to the awardees. There is a real issue, however, on how to provide access to the links, for marketing and processing, necessary for small producers to make the optimum use of their land and to choose a model for the organisation of production that helps to maximise economic efficiency, especially in very land-abundant settings, such as Mozambique or Cambodia. Models to do that exist but need to be developed further

Source: Deininger 2004.

2.8 Increasing access to finance

97. One of the most critical reasons that well functioning land institutions and markets improve the environment for private sector investment is that the ability to use easily transferable land titles as collateral reduces the cost of credit for entrepreneurs and increases opportunities for gainful employment. It has the added advantage of developing rural financial systems.

98. Deepening rural financial markets is a high priority in an improved incentive framework that enables the agricultural sector to serve as a key driver for pro-poor growth. For the past two decades, however, most donors have provided very little funding for rural finance, and as part of structural adjustment programmes many partner countries have ended their substantial involvement in this area of activity. That has left a vacuum in the supply of seasonal credit for small producers. While private banks may still service the needs of large commercial enterprises, small producers and firms who want the finance to purchase productivity-enhancing technologies or penetrate new markets often have to rely on self-financing or family financing, sell livestock and other assets, borrow from local moneylenders or use remittances from family members.

99. A return to the previous subsidised government credit schemes, with their artificially low interest rates and high rates of delinquency, is neither feasible nor desirable. Government involvement in the management and implementation of rural financial systems was expensive and inefficient. The programmes were plagued by a poor repayment culture and the financial instability of the lending institutions.

100. In much of the developing world today, the inability of poor rural households, particularly women members, and enterprises to access credit on competitive terms to invest in new economic opportunities means that their incomes are lower than they need be. Moreover, without adequate access to risk-reduction instruments (such as weather-based crop or insurance for commodity market prices), rural households and enterprises may even retreat from profitable projects for which they have adequate liquidity. The absence of savings instruments also leads to less productive forms of savings, further reducing the scarce liquidity of poor rural households.

101. A number of factors thwart the development of vibrant financial markets in rural areas. The high transaction costs associated with dispersed populations and poor physical infrastructure, along with the particular needs and higher risk factors inherent in agriculture, result in the under-provision of financial services (USAID 2003). It is critical that strategies for rural financial market development be put in place and that rural households have equitable access to financial services for their business and domestic needs.

102. Giving micro credits to poor women in rural areas has proved to be a strong concept. Taking into account the vulnerable livelihood situation of many women and, for the most part favourable results of, for example Grameen Bank, more micro credit facilities for women farmers should be actively promoted.

2.9 Improving infrastructure

103. Improved infrastructure – particularly rural roads – links small holders to markets and reduces their risks and transaction costs. It saves time in transporting water, crops, wood and other products rural households produce. It reduces costs for inputs they need to produce these costs. And it gives them much greater access to social services, including health and education, which can provide them with new livelihood opportunities.

104. Several recent studies highlight the link between weak infrastructure and rural poverty. Jalan and Ravallion (2002) find that road density has a significant positive effect on consumption expenditure in agricultural households in poor regions of China. Research in Viet Nam indicates that poor households

have a much greater probability of escaping poverty if they live in communities with access to paved roads (Glewwe and others 2000). Fan (2004) has also demonstrated that investments in rural infrastructure significantly contribute to agriculture growth and to poverty reduction. Improved infrastructure not only expands opportunities for growth but also ensures that growth is more diffused and equitable.

105. Despite infrastructure's recognised importance, many governments and donors have slashed their infrastructure investments in rural areas in recent years. Many developing countries, especially in Africa, still have inadequate infrastructure. Achieving pro-poor growth through agriculture will require much greater attention to this critical area of investment.

2.10 Improving institutions for higher productivity and greater market access

106. The challenge for many developing countries is to find more effective ways to pay for additional public investments, and to develop suitable institutional arrangements for their delivery. Effective public institutions require an adequate supply of trained people, including policy advisors, agricultural researchers and extension workers, business managers and financial and computer experts. Past investments in training did increase the supply of some types of key personnel, despite the fact that many did not return from overseas training. But HIV/AIDS, ageing, and low salaries and morale within public institutions have contributed to chronic staff shortages in many countries.

107. Strengthening public institutions that provide public goods and services can reduce costs while improving the quality of services. New innovations may be needed for this. Increased donor support of key public sector investments could be provided through new financing arrangements (vouchers, user fees and some co-financing mechanisms) that empower the users of public services and through appropriate institutional reforms to improve mandates and performance. And new partnerships need to be formed by the public, private and NGO sectors for the provision of public services.

108. Even though government must pay for many goods and services, it does not have to deliver them. Recent years have seen considerable success in using non-governmental and community-based organisations to deliver targeted assistance to the poor, and private firms can be contracted to build and maintain schools, health centres, roads and the like. Contracting arrangements can be very cost-effective and may offer better possibilities for involving local people and communities. The types of partnerships desired will vary by sector and function, with many more opportunities to diversify supply arrangements for education and health services than for rural roads and market regulation.

2.11 Organising small producers for marketing

109. Small producers have always been at a disadvantage in the marketplace, and in some places these disadvantages are increasing. Small producers typically trade only in small volumes, often have variable and sub-standard quality products to sell, lack market information and links with buyers in the marketing chain. These inefficiencies can all too easily offset the efficiency advantages of small farms as producers.

110. Many small producers must now also compete in ever more integrated and consumer driven markets where quality and price are everything. In the new and rapidly expanding global value chains, the private sector is emerging as a key player in linking larger-scale commercial producers with markets (contract farming and supermarkets), but they have less interest and ability in dealing with small-scale producers on an individual basis. Those small-scale producers will need to organise themselves to overcome these problems and to exploit the new opportunities that these market changes offer. Otherwise, they risk losing market access (Vorley and Fox 2004).

111. Many now believe that improved market access for small producers can best be promoted as one plank in the platforms of well structured producer federations that can defend the interests of the small producers in a range of policy and programme negotiations and to ensure that the necessary services are put into place (McKeon 2005). Unlike former state co-operatives, widely discredited because of their poor performance and high cost, the new producer organisations should be voluntary, economically viable, self-sustaining, self-governed, transparent and responsive to their members. The functions of these associations should include establishing information systems and connections to domestic and global markets, creating good governance practices, and creating the infrastructure to connect small holders to finance and input supply systems. The associations can also have a role in establishing new forms of crop insurance, hedging price ‘fluctuations’ and developing new forms of public and private partnerships.

Box 2.5 Smart transfers

Widespread and pervasive market failures, particularly in countries at the earliest stages of economic development, may provide some justification for a more direct role for the state, through using subsidies to create or build markets aimed to kick-start productivity gains. Fertiliser and irrigation subsidies had a powerful effect on development during the Green Revolution in Asia. But they can also distort markets and deliver decreasing returns as productivity and overall levels of development rise; they demand levels of state capacity and governance that may be lacking. Furthermore, subsidy systems are highly politicised and can be difficult to dismantle once set up – as current experience in India shows. Thus subsidies present governments with dilemmas when it comes to justifying their use to overcome initial perceptions of commercial risk or the high costs of working in thin and weak markets.

Subsidies or guarantees should generally be temporary measures to tackle specific barriers to private participation in markets. Persistent use may add to rather than solve underlying problems. Subsidies should not be used to provide a market for all producers or to provide general support to producers’ incomes, since this will tend to benefit disproportionately the larger and more successful producers.

2.12 Policy implications

112. Agricultural sector productivity gains – combined with increased access to domestic, regional and international markets – are key elements of a pro-poor growth strategy that can deliver sustainable improvements in the livelihoods of poor households. But policies and investments to unlock the productive potential of poor households are often ill-informed about the constraints and fail to address the range of interlinked environmental, physical, institutional, social and political factors that trap them in a stagnant growth setting. Appropriate policy responses must thus be based on sound diagnosis of rural poverty, an understanding of local realities in the different rural worlds and on the dynamics of occupational diversification and geographic mobility.

113. Enhancing agricultural sector productivity requires a stable and supportive policy and regulatory framework to remove market distortions, provide an enabling environment for market participation and entrepreneurship and stimulate innovation. Some basic requirements include reforming the property system, fostering investments in productivity-enhancing technologies, recognising female as well as male producers, better improving transport services and other infrastructure to link markets and reduce transactions costs, broadening access to information and finance, and strengthening the capacity of agricultural households to voice their needs and share knowledge.

114. New policy and legal frameworks should give a high priority to establishing poor peoples’ security of access to assets like land and water resources – for all rural producers, including those who need to diversify out of agriculture and migrate away from rural areas – developing natural resource management technologies and strengthening institutions that facilitate informal property rights. Associations dedicated to land use, water management or forest use can work with policymakers to oversee natural resource management.

115. Many countries have, in the last decade, enacted innovative pieces of land legislation and initiated institutional reforms to increase the security of land tenure and the ease of transferring it between users. Countries as diverse as Brazil, Guatemala, Honduras, India, Mexico and South Africa, have started to implement programmes to expand, complement or 'complete' past efforts of land reform. It is now recognised that, unless land inequality is attended to in an appropriate way, it can easily escalate into much bigger conflicts. In many contexts, from Afghanistan to Colombia, East Timor and Sudan, land issues are emerging as central elements to a peaceful resolution of conflicts.

116. Weak capacity of the vast majority of agricultural households to access, analyse and utilise new knowledge on improved practices hinders the extent to which productivity can be increased. Policy can strengthen links between research and extension, enable the participation of producers in setting research needs and priorities and enhance the ability of households to adopt and adapt appropriate practices that enhance productivity. A mix of public, NGO and private extension services can be exploited to respond better to the needs of rural households.

117. Support for producer organisations is also important, particularly for delivering client-focused services, improving the quality and timeliness of production and linking small producers to food processors, supermarkets and other food outlets. Reinforcing producer organisations could also be important to sustain and strengthening local development and decentralisation.

2.13 A gender lens

118. Women operate at a distinct disadvantage in increasing their productivity and improving their market access. Several studies have documented how women have poor access to the resources to respond to market signals (Quisumbing and others 1995). Secure land rights are perhaps the most important for the interventions proposed here. In addition, women generally enter labour markets on inferior terms and use their scarce time in easy-entry, low-return activities.

119. There is now a significant body of evidence that gender inequality limits economic growth directly and indirectly, particularly in Africa, and diminishes the effectiveness of poverty reduction efforts. Gelb (2001) describes this as 'Africa's missed potential'. Improving the circumstances of women producers and raising their productivity are critical to an agriculture-led, pro-poor growth strategy in Sub-Saharan Africa. Critical elements include security of land tenure and control over other productive assets and increased access to financial services, technologies, fertilisers and extension services. Concurrent investments are required in domestic labour-saving technology and infrastructural investments that enable women to participate in higher productivity activities and to access markets. All of that needs to be underpinned by continuing to focus on girls' educational achievement and investing in improved health services that meet women's needs.

120. Removing gender-based barriers to growth will make a substantial contribution to realising Africa's growth potential. Reducing gender inequalities in access to and control of key resources is a concrete means of accelerating and diversifying growth, making growth more sustainable and ensuring that the poor both contribute to, and benefit from, that growth (Blackden and Canagarajah 2003).

Spotlight on Sub-Saharan Africa

a) Increasing sector productivity and expanding market opportunities

121. For most Sub-Saharan countries, agricultural growth clearly offers the most promising avenue to pro-poor growth. The continent has abundant natural resources, and agriculture is the primary source of livelihood for 60% of the population, much higher than in Asia and in Latin America. Female producers are also more dominant in Sub-Saharan Africa than in any other continent. Sub-Saharan Africa is rapidly urbanising, and by 2020 almost half the African population will live in urban areas (Rosegrant and others 2001). This offers important new opportunities for agricultural diversification into higher value products for African producers, into agro-industry and into food wholesaling and retailing.

122. But the focus on staple food production should not be lost. Most poor Africans relying on agriculture are trapped in the low yields and high risks connected with staple food production, especially maize and cassava. To make a dent on poverty, a pro-poor growth strategy must emphasise higher land and labour productivity for such crops, while recognising the dynamics of increased production for local, national and regional markets.

123. Agricultural growth in Sub-Saharan Africa has been disappointing over the past 30 years. Since 1990 food availability per capita in Sub-Saharan Africa has declined by 3%, a stark contrast with increases of more than 30% in Asia and 20% in Latin America.

124. Several factors help explain Africa's poor performance in recent decades. Inappropriate policies, weak institutions and inadequate infrastructure are major contributors as are the spread of HIV/AIDS and worsening terms of trade. The gains that have occurred are primarily the result of an expansion of areas under cultivation rather than increasing yields, not too surprising given the very low rate of fertiliser use and the very small amount of land that is irrigated.

125. Enabling agriculture to serve as a main driver of pro-poor growth in Sub-Saharan Africa will require a major shift in current policies and practices, including a more gender-sensitive approach – and must be viewed as a long-term endeavour. Increasing productivity and expanding market opportunities will be the twin engines of this effort. Emphasis thus needs to go to technology options that can make a difference for both land and labour productivity as well as policies and programmes that improve market access and lower transaction costs.

b) Increasing productivity

126. Farming systems in Sub-Saharan Africa are particularly diverse, reflecting both the huge range of agro-ecological conditions and socio-economic diversity. In many areas, also, pressure on resources has risen sharply: with fallows, rangeland and forest recovery periods much reduced, productivity of traditional systems is declining, soil nutrients are being 'mined' unsustainably and land cover is being destroyed. Yet paradoxically, as FAO and the World Bank (2001) note, considerable areas of underexploited potential remain in Sub-Saharan Africa, with opportunities both to enhance the productivity of rainfed land and expand irrigation. For several of the major crops also – maize, cassava and rice especially – improved varieties on which to base such exploitation are already available.

127. Attempts to unlock these potentials for greater productivity must, however, above all respond to Africa's diversity. One-size-fit-all recommendations for intensification technology of the sort that spread the Green Revolution to great swaths of the rice/wheat lands of South Asia tend to find only scattered adopters in Sub-Saharan Africa – often only those, predominantly in Rural Words 1 and 2, who are well connected to markets and with ready access to finance. For many years to come the main way ahead for the

poorer farmers in Rural Worlds 2, 3 and 4, and the basis for any further technical upgrading, is more likely to start with improved management of natural resources already in hand. New forms of sustainable use need to be evolved which can replace the systems of bush fallow and transhumant grazing that sustained people in a less crowded past. Because of the diversity of systems and the wide spread of current problems and their origins, technical solutions will be far more specific to locations and clients than in other regions.

128. Government policies to initiate these forms of change need to concentrate on three main issues: security of access to resources; drawing resource users themselves into devising and spreading new production systems; and sharing with resource users the costs of transition.

129. To initiate a spiral of rising productivity and enhanced sustainability that exploits biological processes – e.g. conservation agriculture that controls erosion and builds fertility through mulching and reduced tillage, Integrated Pest Management or Integrated Soil Fertility Management – takes time. Policies must assure potential adopters of reliable access to their land, whether as private owners, longer-term tenants or under customary law.

130. Given the diversity of potential changes in practices that may be needed, it is not possible to rely solely on organizational models that use external technical expertise to drive change. Farmers themselves know most about local resources and risks, and which technical changes are, or are not, compatible with local livelihoods. Participatory methods are needed to communicate demands on the ground to those providing research and extension support. Farmers themselves should evaluate, help refine and disseminate locally adapted technologies. To support these participatory approaches new types of research and extension organizations are needed, with staff prepared through training and reformed agricultural education systems to accept as partners, members or representatives of local communities, and co-operate with them.

131. On their own, however, mere policies to secure access to resources and participatory R&D will mean little to the poor of Africa, forced into daily resource depredation to survive. To have any impact such policies will need to be linked to incentives for technology change.

c) *Expanding market opportunities*

132. New, more input-intensive agricultural technologies can succeed only when small production units produce for the accessible market. With transaction costs as high as they are in much of Sub-Saharan Africa, producing for the market can have high risks. But when markets eventually develop, transport and transaction costs usually decline substantially, which makes production for the market more attractive.

133. Market reforms in Africa aimed at reducing risk and increasing efficiency have for some time been considered necessary to stimulate agriculture-led growth. Too often however, these reforms have not generated the expected supply response. Nor have they removed many of the price distortions embedded in these markets. So, the reforms have done little to benefit small producers, especially those in more isolated and underserved areas. The yields of major staple crops fall considerably and the use of agricultural inputs declines sharply as one moves farther from markets (Stifel and others 2003). Without access to new markets, successes in increasing production frequently result in large price drops because of inelastic local demand.

134. The absence of markets reflects perhaps more than anything else the lack of infrastructure in many rural areas of Sub-Saharan Africa. The road system in Africa today, only a fraction of what India had decades ago (Spencer 1994), leaves about 70% of its producers poorly connected to markets. Many producers can neither procure fertilisers and other inputs at affordable prices nor market their own products

effectively. Poor telecommunications infrastructure also keeps producers in isolation. Similarly, low investments in such key services as health and education diminish agricultural productivity.

135. Africa's low population densities make investments in infrastructure and key services difficult to finance. Achieving realistic levels of infrastructure will require substantial increases in public investment. Such investment in rural areas has fallen in many African countries over the past few decades due to the fiscal pressures imposed through structural adjustment programmes and a decline in donor support for infrastructure investments (Fan and Rao 2003).

136. This needs to be reversed. The overzealous downsizing of the public institutions that provide essential public goods and services like agricultural research and extension will also need to be reversed. These institutions have key roles and need to be revamped and strengthened to fulfil their functions in cost-effective and demand-responsive ways.

137. In addition, the impacts of food aid practices need to be better understood. Food aid is frequently part of the international response to a national or economy-wide extreme crisis, which poses an immediate or imminent threat to lives, livelihoods, short-term stability and longer term development. But food aid often has disincentive effect on domestic agriculture in recipient countries. These effects can be caused first by the direct impacts of imports on markets, second by the possibility of food aid changing consumer preferences towards imported and away from domestically produced staples and third by a policy disincentive for governments reliant on the revenue generated by counterpart sales. In most circumstances, financial aid is the preferable option. This is almost always the most effective and efficient way of funding the direct distribution of food, as well as providing budgetary support for general development or project assistance. The problematic effects of food aid have been recognised in the context of the Doha Development Agenda, and the Hong Kong Declaration now calls for disciplines on food aid including a safe box for "genuine food aid" (which remains to be defined) [OECD 2005].

d) *Expanding trade*

138. Africa currently imports 25% of its food grains. This offers scope for better integration of domestic and intraregional food-grain markets within Africa and expanded intra-African trade. Such integration is constrained by poor regional infrastructure, institutions, market coordination and competition from low-cost and often subsidised imports from OECD countries. To take advantage of expanding trade opportunities African producers must be able to meet more stringent demands for grading and food quality and safety standards. This will require strengthening market-support services, especially financial services – and improving rural infrastructure, especially roads, information and communications technology and telecommunications. It will also require attention to strengthening institutions responsible for standards and quality control, for enforcing contracts and for providing market information – but the Green Revolution advanced without them.

e) *Diversifying livelihoods*

139. Many households in rural areas of Sub-Saharan Africa, particularly poor households, obtain a significant share of their income and devote a large part of their assets (especially labour) to other activities. The most recent studies of this phenomenon (Bryceson 1999) find an increasing dependency on other sources of income, with contribution to total income well more than 50% in some areas.

140. Agriculture sector growth, with its strong upstream and downstream linkages to the local economy, can provide many new income opportunities for households that will rely increasingly on other sources of income. But other measures can assist households in gaining higher returns from other activities. Skill development is perhaps most critical for many poorer households. Also important are access to

DCD/DAC(2006)23

finance to start a business and a regulatory environment that facilitates starting up business and doing business.

CHAPTER 3

PROMOTING DIVERSIFIED LIVELIHOODS

141. *While enhanced farm-based productivity is essential to achieve pro-poor growth through agriculture, poor rural households also depend on a range of non-farm economic activities as part of their livelihood strategies. This diversification of livelihoods by members of agricultural households augments and provides alternatives to earnings from farming – alternatives that are critical pathways to poverty reduction.*

142. *Agricultural households benefit from mobility and growth in both the agricultural and non-agricultural sectors. They benefit from rising demands for diversified and higher value foods, from income and employment opportunities in an expanding rural-based agribusiness sector, from remittance income that can be invested in better practices, from the increased skills and market awareness of returnees and from the potential for reversing farm fragmentation by renting or buying land.*

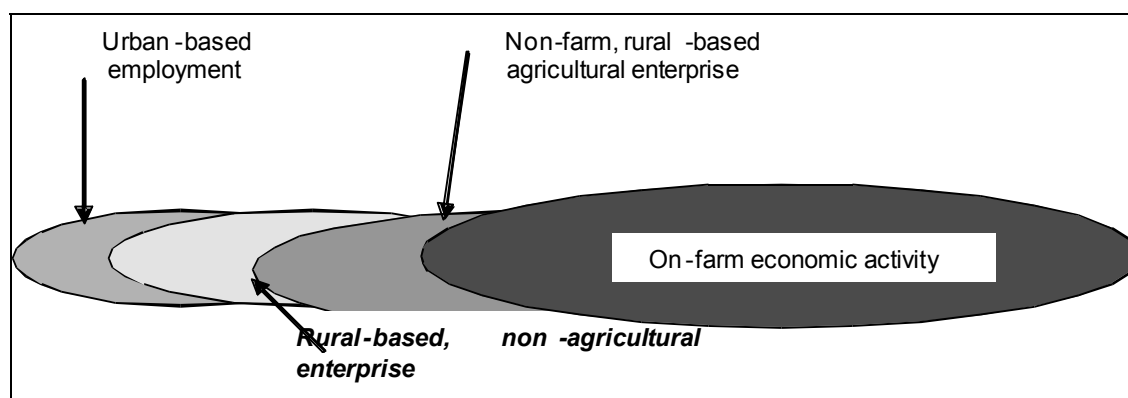
143. *Diversifying livelihoods is partly predicated on, and itself increases, human capital in the skills, experience and willingness to innovate. It generates earnings and remittances that alter the options open to the household by providing cash resources that can be flexibly deployed. It ameliorates risk and reduces the adverse consumption effects of seasonality. Diversification thus generally improves livelihoods.*

144. *While rural or urban-based ‘off-farm’ economic diversification is relevant to Rural Worlds 1–4, the main attention of this chapter is on Rural Worlds 3 and 4. Surplus labour and low stocks of assets both push and pull them towards non-farm livelihood opportunities.*

3.1 Sources of livelihood diversification

145. The core economic activity for agricultural households in developing countries takes place on the farm and can be enhanced by increasing productivity and access to markets (See Chapter 2). Off the farm three broad spheres of economic activity provide livelihood diversification opportunities for agricultural households (See Figure 3.1):

- Non-farm, rural-based agricultural enterprise.
- Rural-based, non-agricultural enterprise.
- Urban-based employment.

Figure 3.1 Three spheres of diversified livelihood opportunities for agricultural households

146. Non-farm, rural-based agricultural enterprise, generally located in rural towns, includes agricultural processing and marketing, input supply and services and related industries. It represents the backward and forward linkages with agro-industry, the services and trade sectors and the rest of the economy. And it has traditionally been undervalued when assessing agriculture's contribution to economic development, since it is measured using information about harvests and the sale of raw materials. Research in eight Latin American countries showed that official statistics, based on traditional measurements, indicated that agriculture contributed just 7% to GDP in 1997 while 'extended' agriculture (which incorporates farm and non-farm agricultural enterprise) contributed about 30% of GDP (IICA 2004). Most of these enterprises in developing countries are small and intensive in labour, providing important income and employment opportunities for rural people. In India, for instance, agro-based enterprises accounted for 22 million of the 33 million workers in the manufacturing sector in the early 1990s (Chadha and Gulati 2002).

147. Rural-based, non-agricultural enterprise is found mainly in the informal economy. It provides a degree of income through a vast number of enterprises that are adaptable and easy to enter and exit and that have low transaction costs. It is an important source of livelihoods, particularly for women (Sida 2003). Many of the activities require limited capital and skills, operate in highly localised markets and are based on self-employment. Rural-based, non-agricultural enterprise is usually the bridge between commodity-based agriculture and livelihoods earned in the modern industrial and service sectors in urban centres (Timmer 2005). Sida (2004) estimates that the rural poor in Sub-Saharan Africa and Asia acquire 30%–50% of household income from non-agricultural activities (which may be rural or urban based).

148. Urban-based employment from temporary migration and commuting has become a routine part of the livelihood strategies of the rural poor. The mobility of labour between rural and urban areas has increased with better roads and communication networks. While the majority are employed in the informal and unorganised urban sector, they can earn more than they would be able to in traditional agricultural labouring or marginal farming (Deshingkar 2004). The contribution of remittances from this form of employment varies depending on proximity to urban centres. A review of 25 cases in Africa indicated migration earnings (both within rural areas and to urban centres) were as low as 20% of the total non-farming income in villages far from major cities – while this rose to 75% in villages near major cities (Reardon 1997). Evidence from India suggests that, in unirrigated and forested villages of Madhya Pradesh, migration earnings accounted for half the annual household earnings (Deshingkar and Start 2003).

149. The connections between the agricultural and non-agricultural rural economies in rural areas should not be underestimated. A thriving agriculture underpinned by improved productivity and markets will drive and expand the non-farm rural economy and influence real wages and food security (Dorward

and others 2004). This underscores an important relationship between Rural Worlds 1 and 2 with Rural Worlds 3 and 4, whereby commercial farmers create demands and opportunities for labour. Small traders do much to connect the farm and non-farm rural economies.

150. Combining rural and urban livelihoods provides a dual advantage to the poor; agricultural labouring and marginal farming are important safety nets when urban employment is mainly in the informal sector (Deshingkar 2004).

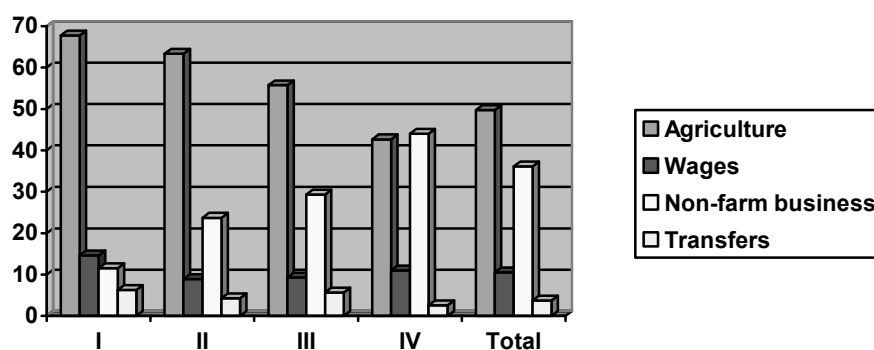
151. Empirical studies across Asia, Africa and Latin America have established that occupational diversification levels are higher and more complex than official statistics indicate. According to Ellis (2004), the contribution of non-farm income sources was, on average, roughly 60% of rural household income in South Asia, 50% in Sub-Saharan Africa and 40% in Latin America.

3.2 The nature of diversification in rural areas

152. Diversifying livelihoods is a continual adaptive process for households to add new activities and to continue existing ones or drop others, thus maintaining diverse and changing livelihood portfolios. This diversity of income sources prevails across different income classes, but the nature differs between better-off and poorer households. The better off tend to diversify in non-farm business activities (trade, transport, shop keeping, brick making) or salaried employment. The poor tend to diversify in casual wage work, especially on other farms, while remaining heavily reliant on subsistence crop production. Diversification by the poor thus tends to leave them highly reliant on agriculture; that by the better off reduces this reliance.

153. The way diversification patterns change across the income ranges is illustrated for a case-study of agricultural households in Tanzania (See Figure 3.2). The relative dependence on agriculture declines across the income ranges from 68% for the poorest quartile to 43% for the richest. Analysis within agricultural income showed that the share of livestock in the income portfolio of the top quartile is more than twice that of the bottom quartile. The share of non-farm business income quadruples from 11% to 44% of the income portfolio. This provides strong evidence that diversification in and outside farming reduces poverty for farm households.

Figure 3.2 Total income portfolio by income profile: Tanzania



Source : Ellis and Mdoe 2003.

154. It might be thought that the attention that better-off households pay to non-farm activities would result in the neglect and poor performance of their farming activities. Not so. Evidence from four Sub-Saharan African countries indicates that agricultural productivity per hectare rises steeply across the

income ranges. Compared with the lowest income quartile, net farm output per hectare for the top income quartile of households was between three and six times higher (Ellis and Freeman 2004).

155. The opportunities for poor men and women to diversify their livelihoods vary considerably across locations, religions and ethnic groups. But cultural barriers to women's participation in labour markets should not be seen as fixed and immutable – they evolve and sometimes collapse rather suddenly. In Sub-Saharan Africa women, the elderly and children tend to stay at the farm residence while men circulate for varying periods. Elsewhere, the rising demand for domestic labour long dominated migration in Latin America, as it does today in migration from Bangladesh, the Philippines and Sri Lanka to the Persian Gulf.

156. Women dominate many of the non-agricultural economic activities that grow most rapidly during structural transformation – activities such as food processing and preparation, trading and many other services. So women are key actors in the economic transition of the rural non-agricultural economy (Sida 2004).

3.3 Why people diversify

157. Diversification helps to reduce risks, especially those related to seasonality in rain-fed agriculture. It can also be part of a strategy of combining (sequentially or in parallel) activities that contribute to the accumulation of wealth at different points in the household life cycle.

158. Becoming less dependent on agriculture is part of becoming better off. The poor and the better off may diversify to the same degree, but the absolute non-farm income of the better off is several times that of the poor. Perceptions in South Asia have been rather more mixed. Some studies note that non-farm incomes are lower and less reliable than agricultural incomes, particularly in marginal areas – and that agricultural development is an important prerequisite for more remunerative kinds of rural non-farm sector employment (Deshingkar 2004).

159. Diversification overcomes risk and seasonality in natural resource-based livelihoods, but it also reflects the failure of agriculture to deliver better livelihoods in the post-liberalisation era. Poverty and vulnerability are often associated with undue reliance on agriculture rather than the converse. Farms achieving yield growth often do so thanks to cash resources generated from non-farm activities, rather than being the origin of growth in such activities, as is the conventional wisdom. Migration, mobility, flexibility and adaptability are downplayed, ignored and sometimes blocked by policy and institutions. But these are the very attributes of occupational diversification that can strengthen livelihoods – and improve rather than degrade natural resources.

160. Diversification has always played a role in overcoming the 'consumption-smoothing' problem created by the seasonality of agricultural output patterns (Morduch 1995). The degree to which it is necessary to diversify for this reason varies according to the robustness of the underlying farm basis of people's livelihoods, the degree to which they can realise cash income from market sales and their confidence in the ability of markets to provide food supplies at reasonable prices in the agricultural lean season.

161. For food-insecure households, out-migration of family members in the peak food deficit season may be essential for the survival of the resident group that stays behind, by reducing the number of people to feed (Toulmin 1992; Devereux 1993).

162. Similar considerations apply to the risk reasons for diversifying. For rural households, risks are particularly related to natural shocks (floods, droughts). For urban households, risks tend to be related to job insecurity. All households, whether rural or urban, are prone to the personal shocks of chronic illness,

accidents and death. Risks are reduced by diversifying livelihoods, and mobility is the main but not the only means for doing this.

163. Urbanisation is an important driving force in migration and commuting because urban areas can offer economic opportunities to rural people through better paid jobs, new skills and cultural changes. These may be particularly beneficial to the historically disadvantaged, such as tribal groups and lower castes (in South Asia) and women. Contrary to conventional wisdom on urbanisation and migration, high rates of migration into urbanised areas (permanent and temporary) have continued despite the fact that many migrants live in appalling conditions and work in the informal sector, which offers uncertain and underpaid work. Why? Because urban labour markets offer unmatched opportunities to switch jobs rapidly, diversify incomes and become upwardly mobile with a very low asset base and skills.

164. According to the 'de-agrarianisation' argument, agriculture cannot provide a sufficient livelihood for a substantial and growing proportion of rural dwellers, so farming becomes a part-time, residual or fall-back activity (Bryceson and Bank 2001; Bryceson 2002). Some of the factors implicated here are long-term demographic and economic trends while others are associated with economic policies:

- Decreasing farm size caused by subdivision at inheritance.
- Increasing inability of young people to access enough land to take up farming full time.
- Poor farm performance and declining yields due to declining soil fertility and degrading natural environments.
- Increased climatic variation, causing greater extremes across seasons and years.
- Declining returns to farming.
- The impact of HIV/AIDS, superimposed on the other disadvantages.

165. These widely observed rural livelihood patterns shed light on the dynamics of rural vulnerability (See Chapter 4). In Sub-Saharan Africa the poorest and most vulnerable are those most heavily reliant on agriculture and most strongly locked into subsistence within agriculture. The same category of the rural poor also tend to depend on work on other farms to cover the deficit in their household food balance. This heightens rather than diminishes their vulnerability for two reasons. First, labour on other farms can mean neglect of good cultivation practices on own farms (Alwang and Siegel 1999). Second, work on other farms proves an unreliable buffer when adverse natural events affect all farms in a geographical zone.

3.4 Mobility of labour

166. The flow of money, goods and services between rural and urban areas can create a virtuous circle of local economic development by increasing demand for local agricultural produce, stimulating the non-farm economy and absorbing surplus labour (Tacoli 2004). But this depends on access to infrastructure, on trading relations and markets and on market information.

167. The returns to infrastructure investment in poverty reduction are undisputed (Fan 2004). But for the other prerequisites it is more challenging to offer easy policy solutions because of widespread market imperfections, such as interlocked markets for credit, agricultural produce and inputs. These imperfections tend to work against the poor, especially in marginal areas, so that they buy expensively and sell cheaply. Access to market information is equally problematic, suffering from elite capture in the same way as other assets and resources essential for diversification. The poor are thus adversely incorporated in the market –

not the free, rational players that neoclassical theories would assume. The challenge for donors and governments is to ensure that markets work for the poor (See Chapter 2).

168. Patterns of mobility reveal much about the labour markets that stimulate them. In agrarian settings, a considerable proportion of economic activity is seasonal, having to do with the cultivation and harvesting peaks of different crops in different locations. This can create truly massive seasonal movements of labour, as exemplified by the travel of harvesting labour from poorer Indian states to West Bengal for the rice harvest (Rogaly and Rafique 2003).

169. But just as peak labour demand in agriculture stimulates both rural and urban workers to move to the locations of these peaks, so the agricultural slack season creates conditions for rural workers to seek temporary non-farm jobs in the urban, industrial or service economies. Circular migration of this type is well documented for many parts of the world. Examples are movements in West Africa from the interior to the coastal zones in the agricultural off-season (David 1995) and migration of poor workers with their families to Delhi's brick kilns (Gupta 2003).

170. Mobility reflects the spatial and temporal mismatch between the residential location of individuals and families and the location and dynamics of labour markets. In predominantly agrarian societies, seasonality on its own helps explain a considerable proportion of such mobility, as does risk mitigation (See Chapter 4). An emerging view marshals an overwhelming array of arguments in favour of mobility – and emphasises facilitating migration and improving the social conditions under which it occurs, rather than placing barriers in its way. This view runs counter to earlier orthodoxies in development policy that were opposed to migration, and that tend to resurface in strategic documents like Poverty Reduction Strategy Papers (PRSPs), revealing unhelpful stances for poverty reduction.

171. Secure land tenure facilitates engagement by members of agricultural households in the non-farm rural and urban economies. Without secure rights, landowners are less willing to rent out their land, something that impedes their ability and willingness to engage in non-agricultural employment or rural-urban migration (Deininger 2004).

3.5 Migration and commuting to urban areas

172. Temporary migration and commuting are now a routine part of the livelihood strategies of the rural poor across a wide range of developing country contexts. While past determinants of migration (such as drought) are still valid and important, there are new driving forces underlying the increase in population mobility. These forces are specific to location and include improved communications and roads, new economic opportunities arising from urbanisation as well as changing market contexts as economies become more globalised and liberalised (Deshingkar 2004).

173. The Global Donor Platform for Rural Development (2005) highlights the 'mixed results' from migration. In general the rural poor are driven by a stagnant agricultural and rural environment, while the productivity of the urban sector can often be characterised as low as well. This 'migration of despair' seldom reduces chronic poverty and may contribute to the rising social costs of urban poverty. If, however, migration follows industrialisation, it can be seen as an indicator of economic growth and structural transformation. Encouraging rural-urban migration may be helpful when there are meaningful urban jobs (See Box 3.1), but the costs of human misery on the periphery of major cities must be weighed against the costs of investing in better living conditions in rural areas.

174. In theory it might be useful to separate circular and temporary movements of people from those occurring permanently due to structural economic change. But neither the data nor the realities of migration correspond to such a neat dichotomy. For one thing, at the individual or family level, successive

temporary movements may lead to eventual more permanent relocation. For another, at the sector level, the establishment of rapidly growing manufacturing sub-sectors can also be dependent on circular migrant labour – for example, the textile mills of Mumbai and Shanghai (Davin 1999) or Mexico's export-processing zones.

Box 3.1 Chinese men to the cities, women still on the farms

With China's rapidly growing economy, the demand for workers has skyrocketed. And many male farmers are migrating to the urban industrial areas.

The current status of rural households makes it difficult for all family members to migrate because of the near impossibility of getting a permanent residence permit in the cities. So most male migrants become temporary labourers in cities, with agriculture a kind of insurance and retreat.

The gender division of labour in the households has shifted, from 'the men till and the women weave' to 'the women till and the men work in industry'. This new model can be described as 'men control the outside world, women the inner'. What's also new is that women's 'inner world' is extending to agriculture.

The new the gender division of labour has led to a feminisation of agriculture: about 80% of the rural labour force is female. In the poorer and more marginal south-western provinces of Guangxi, Yunnan and Guizhou, women make up more than 85% of the agricultural labour force – and in some remote mountainous areas, about 90%.

Source: Song 1999.

175. There is growing evidence of the importance of remittances in supporting the livelihoods of those who stay behind when some family members migrate. In Sub-Saharan Africa remittances account on average for 15% of rural incomes. The circular migration to the Persian Gulf from rural Sri Lanka has accounted for 25% of rural incomes (von Braun and Pandya-Lorch 1991).

176. Long-distance commuting has become characteristic of Asia's largest cities, especially by buses and trains. For many, commuting and seasonal migration offer the chance to combine the best of a rural village-based existence with urban opportunities (See Box 3.2). In these cases, better communication for migrants back to their families can sustain social capital and make temporary migration more manageable for households.

Box 3.2 Why people may prefer temporary mobility

Seasonal migration and commuting provide a route to diversification into non-farm work rarely available in smaller, more remote villages. And this helps to spread risks. But employment in the urban unorganised sector is insecure, and many prefer to keep rural options open. So agricultural labour and marginal farming remain important safety nets for the poor and vulnerable.

Supporting a family in the village is cheaper, especially if the bread-winner is earning in a town or city. In areas with good roads and transport services people can travel back home easily for peak agricultural seasons, festivals and ceremonies.

3.6 Impediments to diversification

177. Widespread failures of services and institutions – combined with low levels of human, physical, natural and social capital – create mutually reinforcing disadvantages, described as 'interlocking logjams of disadvantage' (De Haan and Lipton 1998). This seriously constrains efforts to improve agricultural incomes and promote diversification into non-farm occupations. This may also explain why the poor living in marginal areas pursue non-farm occupations in urban areas.

178. Many barriers, characterised as thresholds associated with 'poverty traps' (Barrett and Swallow 2005), prevent the poor from engaging in more remunerative labour markets. At the lowest incomes

immense efforts are required to ‘break through’ to the opportunities and returns to labour that enable a family to climb out of poverty. But at somewhat higher incomes just above the poverty line, it becomes much less difficult to achieve a virtuous spiral that can lead to higher incomes and a more secure livelihood. The key to these traps and thresholds lies in the asset status of families, and especially in human capital (education and skills) and flexible assets that can be quite quickly converted into cash or other assets (money, credit, livestock).

179. The poorer a person is, the more difficult it is to navigate the barriers that the public sector places in the path of emerging from poverty (Wood 2003). Local institutional environments can be disabling in low-income countries, and it is not clear that local government decentralisation, promoted with enthusiasm by donors over the past decade, has improved matters in this regard. The reverse may be so. Some commonly observed practices:

- *Dense thickets of local taxes.* Almost all engagement in markets results in taxation of one kind or another (transit dues, market fees, commodity taxes, movement permits, bicycle taxes), discouraging engagement in the monetary economy and reducing overall trade and exchange (Fjeldstad 2001, 2002).
- *Business licenses.* Typically all businesses, even the smallest one-person bicycle repair workshops, are subject to licenses, form filling, turn-over taxes and so on. Business registration is seen almost everywhere as a revenue-raising opportunity, not as a way of creating environments for enterprises to flourish.
- *Multiple shake-downs.* The ‘informal’ predatory relationship between public official and subject can involve numerous fees, fines and prohibitions (Freeman and others 2004).
- *Migration barriers.* Migration may be inhibited by residence permits, harassment in transit, loss of rights to services at destination locations, loss of recourse to law in the event of injustice, active discouragement by city authorities, enforced returns by slum clearances and so on.

3.7 Policy issues

180. In general, decisions about what and where to produce are best left to private actors. What governments, donors and NGOs can do is to contribute to the overall climate of facilitation that surrounds individual decisions. This means supporting and encouraging domestic policies that improve exchange, mobility, communication, information and infrastructure – and discouraging domestic policies that have the reverse effects. Policies that create a more enabling environment for private sector development for rural households include:

- Neutral or progressive local taxation designed to exclude those living at or below the poverty line from the tax net.
- Business registration designed to provide support services to start-up enterprises rather than penalise them with taxes and other costs.
- Encouragement of mobility to broaden spatial options and encourage growth processes.
- The general removal of spurious obstacles put in the way of people going about the business of making a living by those who derive their power from public office.

181. A major barrier to beneficial economic change in agriculture is often the historical and prevailing land tenure system. Tenure systems that fail to allow for a purchase or rental market in land reduce mobility, slow rural-urban transitions and rigidify uneconomic farm sizes. Equity considerations often underpin traditional and state-owned tenure systems, but in densely settled zones exhibiting extremes of farm subdivision, it is doubtful that anyone gains much from the absence of a land market – or from the lack of security of ownership or tenure. And many existing tenure systems are deeply gender biased against women in custom and in law, causing serious dysfunctions between the control, decision making and use of land as a resource.

182. The prevailing land rights of women provide an additional reason for promoting active government interventions. Even though women play a very substantial role in agriculture in most countries around the world, they are often discriminated against by the prevailing land tenure system. In many societies women are excluded from owning property (including land), or they do not enjoy the same rights as the men. In marriage and in the family, women's right to property is often subject to the authority of the husband or father. Land titling, registration and the privatisation of land under colonialism and after independence have often set women back, leaving them in a state of even greater insecurity, with poorer prospects for accessing land. The demise of the local elders and clans has made women's land tenure even less certain, leaving women with fewer possibilities of obtaining a livelihood for them and their children (Tripp 2004).

183. Agro-industrial development, which generates employment for rural households and adds value to agricultural production, also has the potential to damage the natural environment through pollution. Policies and legislation to protect the natural environment are necessary in order to enable sustainable industrial development.

184. At the macro policy level, second generation PRSPs should contain wide-ranging recognition of the importance of occupational diversification, mobility and cross-sectoral interdependencies:

- The current social sector emphasis of PRSPs requires better balance in its support to the rural economy.
- Artificial and unnecessary blockages to people's making a living should be removed wherever they occur, either in central or local government, or in private organisations.
- The antagonistic view of migration expressed in many PRSPs clearly needs to be replaced by an approach that supports personal economic mobility and choice. PRSPs need to recognise that rapid urbanisation can create dynamic growth processes that benefit both urban and rural economies.

185. A key policy issue here is to provoke a change in thinking about mobility in order to improve the political and social environment of those on the move. At the moment, migrants, in passing between jurisdictions, are generally unable to call on support from public authorities. Local governments in source areas have no interest in – and little capacity for – tracking the outward movement of their citizens. And those in receiving areas too often regard in-migrants as a blight, to be resisted or expelled.

186. Accepting the complexity of diversifying rural livelihoods, agricultural and rural economic development programmes within PRSPs need to be based on a comprehensive understanding of diversification's extent and nature nationally and sub-nationally. This will require strengthening the data gathering and analytical capacities of the public institutions delivering on agricultural and rural development policies. Only with such an understanding can supports be targeted to assist processes that sustain poverty reduction in rural areas.

Spotlight on global value chains – shutting out smallholders?

187. Small-farm agriculture, presented as a growth-equity ‘win-win’, has encouraged a resurgence of interest in agriculture in the poverty reduction debate. But the case for the efficiency of smallholder farming may be breaking down as the superior labour and land productivity of the small farm is trumped by the higher costs of dealing with global food chains with new forms of private sector governance. The associated risks are the polarisation between agribusiness and small-scale farming systems – and the reduction in benefits of liberalisation due to problems of market structure.

188. A close look at global food chains is an important part of any ‘new agenda’ for agriculture for a number of reasons. Private sector strategies in the agrifood sector – especially in global retailing – are moving fast, under the radar of public policy. If policy is to anticipate the changes, then those changes – and their implications for rural producers – must be better understood. And although developing countries have so far failed to significantly penetrate agricultural markets of rich countries, big hopes are invested in the idea of small producers ‘upgrading’ into global buyer-driven food chains to escape from the cost-price squeeze of commodity production.

189. Meanwhile, concern is growing that markets are distorted by excessive corporate concentration in trading, processing, manufacturing and retailing. Trade liberalisation will not bring the expected benefits when agricultural markets do not function competitively. And because corporate growth and consolidation is premised on expectations that larger buyers can extract more favourable terms from suppliers, there is a risk of declining shares of value for rural actors in the food chain – the workers in agriculture and processing and primary producers. This can compromise agriculture’s potential to act as an effective route for small producers to exit poverty and benefit from broader economic growth, especially when food markets are already stagnant. And the ability of buyers to set product and process standards and their demands for traceability can exclude certain classes of producers from supply chains and thus worsen inequality (Vorley and Fox 2004).

Value chains and the rural worlds

190. Global food chains reach into developing country markets, as well as stretching outwards. National and regional markets may be restructured to the extent that they are no longer a refuge for smaller farmers and processors, as markets are flooded with cheap export-grade produce from more competitive economies. 191. Rural World 1 is changing in response to the liberalisation and deregulation of agriculture. For a group that has supported and benefited from state protection and subsidies, it now comprises more free market-oriented agribusinesses with high levels of collaboration and associative relationships with downstream processors and retailers. This new minority of commercial farmers and entrepreneurs is connected to the global food economy through contracts with a rapidly consolidating agricultural handling and processing industry, and even directly with food retailers. These farmers have become a vital part of agribusiness, and the lines between Rural World 1 and agribusiness are becoming increasingly blurred.

192. Rural World 2 finds itself in the position of residual suppliers to retail, wholesale or least cost suppliers to bulk commodity markets, and often is increasingly reliant on off-farm income. It must compete with the lowest cost commodity producers, upgrade to higher value chains, experience decreasing returns and a move towards subsistence-level farming – or get out of farming.

193. Because only the most capitalised and tightly managed enterprises have been meeting the strict specifications of importing nations or processing and retail sectors, there is much attention on the

organisation, technical and institutional arrangements for small producers in Rural World 3 to build economies of scale to deal with the requirements of 'buyer-driven' chains and thereby create relationships with their downstream customers and add value with differentiated (de-commodified) products. Shifting Rural Worlds 3 and 4 out of small-scale agriculture into the role of labour for Rural World 1 has also renewed popularity, for instance in Sahelian countries, in the debate about the 'modernisation' and 'competitiveness' of agriculture in an era of globalisation of agrifood chains.

194. Outsourcing primary production rather than owning production makes economic sense for agribusiness. In fact, major processors have been engaged in vertical disintegration, outsourcing primary production and its associated costs and risks. The exception is industrial livestock production where vertical integration and ownership of agrifood chains from 'farm to fork' is quite common.

195. The 'reversal of the marketing chain' can also benefit consumers; it is no coincidence that in the United Kingdom, where supermarket power is most ascendant, consumers' aversion to genetic modification technology was translated into retailer-driven programmes to purge own-brand supply chains of genetically modified ingredients.

196. Contract farming can also bring significant benefits to producers. A farmer is assured of a buyer. Price risk is reduced. Favourable credit terms may be available. And marketing costs are lower. Producers with these agreements often get more favourable terms than neighbouring farmers growing a product of the same quality but without a contract. But in their worst form such as some poultry production contracts, contract farming deserves its reputation of turning farmers into wage labourers on their own land.

197. Farmers working outside these closed chains, such as those who do not have sufficient scale of production to be able to sell directly (the classic position of Rural World 2), can become relegated to the position of residual or top-up suppliers or suppliers to the shrinking wholesale market.

CHAPTER 4

REDUCING RISK AND VULNERABILITY

198. *Managing risks and reducing vulnerabilities are essential elements in sustainable pro-poor growth through agriculture, perhaps the riskiest sector in the economy, not only subject to the price risks facing many sectors but also highly dependent on nature, leaving it vulnerable to droughts, floods and pests. The risks vary in their nature and impact across the different rural worlds. Volatile international markets directly affect Rural World 1 producers and ultimately their need to employ workers from Rural Worlds 3 and 4. Generic risks such as weather conditions can position farm households in Rural Worlds 2 and 3 either above or below the thresholds of profit and food security.*

199. *For agricultural households to have more secure and prosperous livelihoods, they need more ability to cope with risk and address the attendant vulnerability. Poor households, particularly those relying on agriculture as a primary source of well-being, face the inherent risks of agriculture together with such domestic risks as sickness, death and loss of property. Exposure to these risks can be heightened by inadequate or non-existent infrastructure, poorly performing markets and weak institutions.*

200. *Without strengthening the capability of poor households to cope with the many risks they are exposed to, they will be reluctant to take on new risks and innovate, and they will remain trapped in low-risk and low-yielding livelihood strategies. Strengthening risk-reduction methods will enable poor households to maintain a certain level of assets despite experiencing shocks of different kinds and magnitudes. It will also promote greater acceptance of innovation and greater willingness to assume prudent risks. Strategies include reducing actual risk or exposure to risk, together with mechanisms to mitigate or cope with shocks once they occur.*

201. *The discussion here focuses on farmers in Rural Worlds 2 and 3 and the landless of Rural World 4 because they are affected through the labour markets influenced by Rural World 1 producers. The majority of people in Rural World 5 will be reached through social assistance programmes and therefore are largely outside the immediate reach and attention of agriculture-enabled economic growth policy.*

202. *In the 1970s and 1980s the risk exposure of many rural households was very different from that today. Risks were reduced by the government through marketing boards and similar institutions, which assured a price structure, input and output markets and access to improved technologies and training. Public investments in research and development resulted in higher yielding farm systems. And innovations were encouraged through public subsidies of one kind or another. In much of Asia and Latin America these innovations led many farm households to shift to more productive and higher return farming systems.*

4.1 The changing pattern of risk and vulnerability

203. Today the dynamics of the world economy, including globalisation, mean that the nature and pattern of risk and vulnerability are also changing. Many national governments have withdrawn costly and often inefficient support for their domestic agriculture on the premise that the private sector would step in. But the failure of government to invest in the infrastructure and institutions that support the private sector's engagement in agriculture has left many poor and smallholder farmers either with no market access for inputs – such as improved seeds, pesticides and fertilisers – or with limited markets, resulting in prices

vastly in excess of world market prices. Where markets are more developed prices for the products of farming and the necessary inputs are more volatile, with markets more linked in a global trading environment. The withdrawal of government means that this volatility is not absorbed through floor prices and input subsidies, leaving farmers exposed. The solution is not to revert to the general farming support systems of the past, which often produced few benefits for the poor. It is to ensure that the public investments support market development of appropriate risk management instruments – together with broad-based safety nets for risks that cannot be handled by poor people or the market.

204. For agricultural households to achieve more secure and prosperous livelihoods, they need greater ability to cope with risk and the associated vulnerability. Policies, institutions and investments that reduce actual risk, strengthen risk management options and increase the availability of safety nets will enable poor households to maintain a certain level of assets despite shocks of different kinds and magnitudes. They will also promote greater acceptance of innovation and greater willingness to assume prudent risks.

4.2 Who faces what risks in the five rural worlds

205. High levels of risk, whether in the productive or domestic spheres, and the resulting shocks and stresses compromise both economic growth and poverty reduction. Some risks are common to all rural worlds – such health risks as HIV/AIDS, malaria and tuberculosis, and such natural disasters as earthquakes, hurricanes, floods and droughts. Though the risks may be common, the impacts differ in each rural world, as does the vulnerability of households and people.

206. Rural Worlds 1, 2 and 3 all engage directly in agriculture as business entrepreneurs and farmers face the same natural risks, such as pests, droughts and floods, and to some extent the same commercial risks depending on the level of market engagement and type of farming system. But the vulnerability to shocks differ. A drought may affect farmers in Rural World 3 most profoundly, with some impact in Rural World 2 and possibly less in Rural World 1. Subsistence farmers in Rural World 3 are least likely to have irrigation systems, and farmers in Rural World 1 most likely to have advanced systems. So in a drought, Rural World 1 may benefit if some farmers in rural worlds 2 and 3 join the agricultural labour force, driving down wages. A shock with the deepest impact in Rural World 1, such as commodity price declines, may reverberate through the other rural worlds, potentially reducing agriculture labour demand and hurting the landless in Rural World 4, who rely on supplying farm labour.

207. Farming can fail over a large area, affecting all rural worlds. Farmers in Rural Worlds 1, 2 and 3 may have to sell productive assets and increase their indebtedness, reducing their ability to bounce back quickly when the shock has dissipated. This has impacts on Rural World 4, which relies on selling labour, in large part to farms, and on Rural World 5, which may depend on people in Rural Worlds 1–4 for informal transfers to help them survive in the absence of formal safety nets.

208. Households in all five rural worlds face risks. For those in Rural Worlds 3 and 4, the inability to cope even with small shocks, due to low asset holdings and lack of risk management instruments, may lead them to adopt livelihood choices with the lowest risk but also the lowest return. These livelihood choices might include informal arrangements, such as seeking the protection of a ‘patron’ who will provide credit in times of need (and thereby provide a degree of social protection). But in return the patron may demand priority access to the household’s labour, the sole right to market its output and the sole right to provide seasonal credit. This interlocking of labour, product, input and credit markets makes it extremely difficult for poor households to take up new economic opportunities of the kinds that market signals might indicate (Farrington 2004).

209. The spotlight at the end of the chapter shows the problems facing households in their livelihood strategy. The lowest income profile has the lowest variance. Potential troughs in income are more muted

than those for the upper profile. But these lower potential troughs in income come at the cost of a lower expected average income. The higher income profile yields a higher expected average income but the possible troughs are unacceptably deep for poor households that have no ability to insure against these risks either through public or privately available instruments or through their own savings. This inability to offset risks is perhaps most acute for farming households given the vagaries of climate and commodity prices and the lack of instruments to handle this type of risk in underdeveloped financial markets.

210. If poor farming households are to capitalise on their agriculture potential and escape poverty, risk management instruments are essential. But the inter-linkage between productive and domestic risks means that strategies to address risk and associated vulnerability for rural households must incorporate a portfolio of risk management instruments, addressing risk in both productive and domestic arenas.

4.3 Social risk management

211. Taking a strategic approach to risk management, both productive and domestic, requires a comprehensive assessment of the nature of risks that populations are exposed to. The World Bank has developed a social risk management framework that encompasses both livelihood protection and livelihood promotion to assess the degree of vulnerability faced by people and different sectors of the economy to different risks (See Box 4.1).

Box 4.1 The World Bank's social risk management framework

The social risk management framework can be used to analyse the sources of vulnerability. It addresses how society manages risks and the relative costs and benefits of various public interventions on household welfare. It also addresses how vulnerable individuals and households can be helped to better manage risks and become less susceptible to damaging welfare losses.

Social risk management repositions the traditional areas of social protection (labour market intervention, social insurance and social safety nets) in a framework that includes:

- Three strategies to deal with risk (prevention, mitigation, coping).
- Three levels of formality of risk management (informal, market-based, publicly mandated).
- Many actors (individuals, households, communities, NGOs, governments at various levels and international organisations) against the background of asymmetric information and different types of risk.

This expanded view of social protection emphasises the double role of risk management instruments in protecting basic livelihoods and promoting risk taking. It focuses on the poor since they are the most vulnerable to risk and typically lack appropriate risk management instruments, constraining them from riskier but also higher return activities and thus from gradually moving out of chronic poverty.

Source: Adapted from Holzmann and Jørgensen 2000.

212. A comprehensive social risk assessment enables a policymaker to make informed choices on reducing or eliminating risk and fostering mechanisms that allow people to deal with the troughs in their livelihood profiles. The elimination of all risks in agriculture is impossible, so the coping mechanisms are particularly important for poor people to be able to participate in and drive economic growth through agriculture.

213. Operationalising the social risk management framework requires careful consideration of four dimensions (Farrington 2004):

- Different categories of poor people.
- Interactions between productive agriculture sub-sectors and non-agricultural sectors (where entrepreneurial activity is focused) and between the productive and domestic spheres (since funds are fungible between the two).
- The interface between protection and promotion options within agriculture and the promotion options outside of agriculture.
- Location-specific socio-cultural and economic conditions.

214. Segmenting the poor is important in identifying the types of risk they face and how they might be vulnerable to them. The policy interventions to address the risk and vulnerability profiles of people in the different rural worlds may extend far beyond agriculture. The result should be a set of investments in infrastructure and institutions to reduce actual risk where that is optimal, combined with the development of a comprehensive social protection strategy that provides the rural poor with the security they need to adopt prudent risks for agriculture to be their route out of poverty.

4.4 Protecting and promoting livelihoods

215. Risk management instruments that enable farmers to address the risk in agriculture protect basic livelihoods and promote improved livelihoods. This has often been overlooked. Public provision of safety nets has traditionally been viewed as a drain on investment resources that could be used to foster economic growth. But good risk management instruments – together with safety nets for those who cannot or have no access these instruments – ensure that farm households do not face exposure to deep troughs in income. This enables the poor to take on prudent risk, supporting both growth and poverty reduction. Livelihood protection and promotion covers a potentially wide range of arrangements, where prevention and mitigation are strategies and coping is the response.

- *Prevention strategies* reduce the probability of an adverse shock occurring. In agriculture these can be found in both infrastructure and technology solutions. Irrigation reduces the risk from droughts, as do soil and water conservation investments. Developments in agricultural science, such as breeding livestock resistant to disease and crops resistant to pests, diseases and drought can eliminate the impact of some pests and diseases. Improving health service delivery, including public health measures, can reduce morbidity rates and reduce the spread of HIV/AIDS. Risk-reduction strategies minimise the downside variance in income profiles and increase the overall expected average income. Policies which increase land tenure security also reduce risk of loss of land.
- *Mitigation strategies* are implemented before a shock and reduce the impact once it occurs. Households diversify their livelihood strategies combining elements which are not all subject to the same type or degree of risk. Insurance instruments, such as health, commodity price, or weather insurance provide a payout for a household when the trigger point is reached. These strategies do not remove the troughs in the higher expected household income profile, but they reduce the impact on the household by providing a level of replacement income thus effectively minimising the depth of the worst shocks. Policies that increase the ability of household members to migrate are important to risk mitigation.

- *Coping strategies* relieve the impact on households of shocks that they are unable to protect themselves against, through mitigation or prevention, due to lack of assets, access to instruments or the magnitude of the shock. They include social assistance or welfare programmes as well as relief operations in response to natural disasters or civil disturbances. These measures prevent the troughs in income profiles that would reduce levels of well-being below accepted thresholds.

4.5 Reducing risk

216. Public infrastructure investments can do much to reduce the risk exposure of rural households. Rural feeder roads can do much to integrate market economies, reducing some market price volatility as well as diversifying market opportunities for the poor. Shorter transportation times can reduce the risk of deterioration in perishable crops. Improved flows of goods and services can enhance the information base of local people, along with investments in communications infrastructure. This enables households in Rural Worlds 1 and 2 to make more informed decisions on the sale of their crops and livestock. Similarly, investments in electrification also reduce the risk associated with the production of perishable crops, which are also often higher value crops. Public investment in local level grain storage banks are more effective for small-scale producers, such as those in Rural Worlds 2 and 3, who lack the economies of scale to make it worthwhile to invest at the individual level. They can be particularly important for women who often grow crops for their household food security and lack effective means to store their production without losses.

217. Private investment is also necessary to reduce risk, through such infrastructure as irrigation. But many investments in risk reduction for natural disasters need public institutional support. For example, water needs to be managed at the watershed level, which requires the cooperation of many water users, both for domestic and productive purposes. Tree planting to prevent soil erosion and landslides in the event of floods benefits the community as well as the individual farmer. But farmers will not invest in their land if they lack secure property rights. So institutional development in appropriate land tenure arrangements, and land registries is critical for investments in land – to reduce the exposure to such risks as droughts and floods. Intensified efforts are required in many countries to formalise women’s access to and control over land and other natural resources.

218. Similarly, investments in agricultural research and development are critical to maintaining yield growth, increasing agricultural productivity and maintaining performance in the face of drought, soil nutrient deficiencies and pest outbreaks. New models are needed today to foster such research. It should be farmer-driven, recognising both male and female farmers and their different needs. Many newer technologies incur considerable expense in research and development, and the investment by the public sector pales in insignificance with investments by the private sector. Effective public-private partnerships can release some new technological developments in the private sector for use by public sector research institutions for crops, livestock, forestry and fisheries that would be regarded as non-viable from a commercial perspective.

4.6 Mitigating the effects of shocks and stresses

219. Public investment in early warning systems, made more efficient by advances in data collection, management and forecasting infrastructure, can mitigate risk by enabling faster response times. For example, disease outbreaks such as measles can be arrested through intense immunisation programmes.

220. Institutional development is also critical to the mitigation of risk. Most of the rural poor in developing countries lack the sophisticated instruments available to farmers in the developed world geared to the management of price and weather risk (See Box 4.2). They even lack the basic means to self-insure through financial savings. There is considerable need to invest in financial deepening in rural areas to

enable individuals to save ‘for a rainy day’ and enable them to generate working capital to engage in entrepreneurial activities.

Box 4.2 Weather-based insurance in Ethiopia

The United Nations is seeking support for a novel financial-markets approach to alleviating famines: drought derivatives. According to the World Food Programme (WFP), such instruments – by serving as a sort of insurance policy based on rainfall measurements – would allow aid workers to speed the delivery of cash and food before widespread starvation sets in among the rural poor.

Currently, when rains fail in a developing nation, it typically can take as long as nine months for aid agencies to assess the damage, put out an appeal to donors, collect contributions and deliver them to the needy. By then, many poor farmers are beyond help or are surviving by eating their seed grain and selling their livestock.

The hope is to test-run the concept in Ethiopia, perhaps as soon as the end of this year. In the Ethiopian pilot project, the idea would be for the WFP to buy a derivative from a reinsurance or other financial-services company that would pay out perhaps \$100 million if the country’s rainfall slip below a threshold – a level historically associated with a drought of once-a-decade severity. In the past 30 years, Ethiopia has experienced such droughts in 1984, 1987 and 2002. The 1984 drought was the worst, with the cost of food aid for the 23.4 million affected people reaching \$1.65 billion in today’s prices.

The derivative differs from a normal insurance policy in that there would be no need for an adjuster to calculate the damage done by the drought. The payout would be based on rainfall, not damage. Rainfall measures are taken almost uniformly throughout the world, and Ethiopia has reasonably reliable data that would allow financial markets to assess the likelihood of another dry spell.

If a drought occurred, the WFP wouldn’t have to round up donors during the crisis, just collect from the holder of the derivative. Famines still could arise from other causes, such as war or plagues, requiring a more traditional fund-raising appeal and response.

Similar financial products already are traded on the Chicago Mercantile Exchange. Energy companies, for instance, buy weather-based derivatives to protect themselves against unseasonable weather. Most of the derivatives are sold by reinsurers, investment banks and hedge funds.

Source: Wall Street Journal, 13 May 2005.

221. In India just 13% of marginal farmers, those typical of Rural Worlds 2 and 3, had access to formal finance mechanisms – whereas 50% of larger scale farmers had access to credit and 87% had access to a savings account. Of marginal farmers 44% borrow from moneylenders, often at interest rates of 50% a year. Evidence suggests that for marginal farmers to access formal finance often requires payment of bribes, up to 20% of the loan amount, and the process can take up to 33 weeks. Institutional development, together with appropriate regulation, is one key to unlocking the development of financial services and the economic potential of many marginal farmers.

222. New and innovative health care insurance systems and pension schemes to help mitigate risk in the domestic sphere have been piloted in some areas to provide coverage to the rural poor.

4.7 Helping poor rural households cope

223. When all else fails, poor rural households need safety nets to help them cope with sudden shocks. These take the form of social transfers and emergency assistance, in cash or in kind. The specific programmes should be specific to the particular risks and attendant vulnerabilities that rural households face. While these programmes should in most cases have a permanence in the social protection portfolio, their use will generally be temporary, with households accessing them as and when the needed in line with the qualifying criteria. That fosters their livelihood promotion function, underpinning prudent risk taking and entrepreneurial activities by the rural poor. Guarantee schemes, such as public works programmes, can scale up and down based on need, and a pipeline of planned activities can be ready for implementation. Appropriate programmes should be designed for those in Rural World 5 to enable them to ‘graduate’ to their place in other rural or urban worlds.

Table 4.1 Risks in the five rural worlds

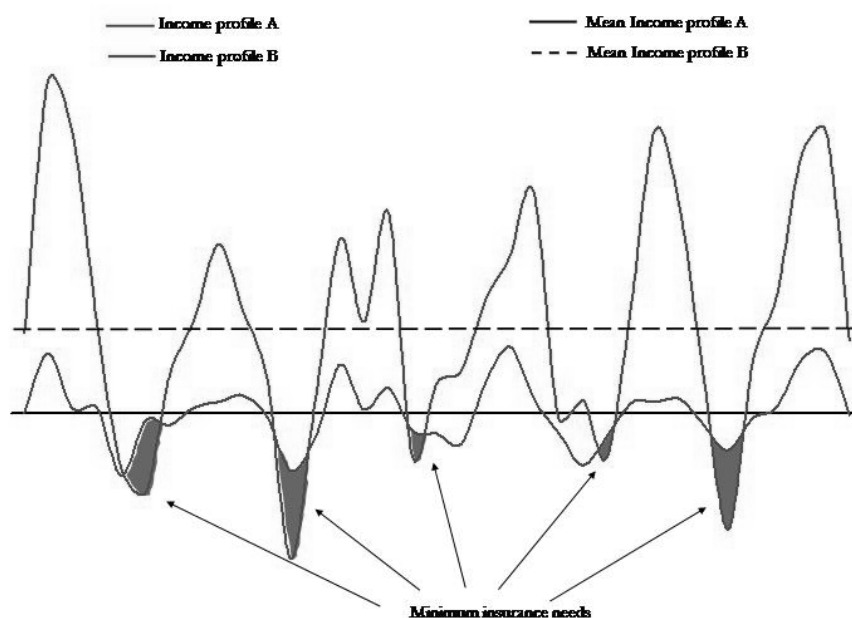
| Categories of rural households | Types of risk typically faced | Typical measures to prevent, mitigate or cope with risk |
|---|--|---|
| <p>Rural World 1. Commercial farmers, globally competitive with large-scale agriculture operations.</p> | <p>Generic risks (pests, diseases, weather); and new risks: Input/output price fluctuations, possibly associated with international market changes; stricter quality controls on products; saturation of national markets; transport and storage failures for perishables.</p> | <p>Improved technology (irrigation, agrochemicals, new varieties) to reduce generic risks (pests, diseases, weather). Improved infrastructure services, including feeder roads and electricity. New financial instruments such as weather and commodity price insurance. Standardisation of grades and standards.</p> |
| <p>Rural World 2. Farmers that produce for the market but also to meet subsistence needs.</p> | <p>Generic risks (pests, diseases, weather); possibly problems of new market links, but most likely to be problems of local or seasonal market saturation, and imbalances of market power.</p> | <p>Improved technology (irrigation, agrochemicals, new varieties) to reduce generic risks (pests, diseases, weather). Information, institutional and infrastructure development needed to improve market functioning and accessibility. Investment in local crop storage and processing facilities can help people fulfil their subsistence needs more effectively. Support for livelihood strategies that include diversification within and out of agriculture.</p> |
| <p>Rural World 3. Subsistence farmers with small landholdings.</p> | <p>Same as for Rural World 2, but also risk of landlords withdrawing land, dearth of off-farm jobs, vulnerability of farm jobs in Rural Worlds 1 and 2, tenure insecurity, non-enforceable contracts, dangerous working conditions on construction sites and so on.</p> | <p>Support for diversified livelihoods, including strengthened institutions for tenure security, contract enforcement, health and safety. Social sector investments that strengthen human capital and enable households to cope with a wide range of shocks.</p> |
| <p>Rural World 4. Agriculture labourers, mainly dependent on casual, unskilled labour.</p> | <p>Vulnerability of off-farm jobs to shocks affecting Rural Worlds 1, 2 and 3, which affect demand for labour, lack of off-farm jobs, non-enforceable contracts, dangerous working conditions on construction sites, communicable diseases and so on.</p> | <p>Economic policies that encourage investment leading to job growth. Policies that support seasonal migration, commuting and personal insurance. Investment in health care infrastructure and institutions (including public health), which reduce morbidity and inability to supply labour. Adult training programmes that support creation of alternative livelihoods including self-employment and enterprise development.</p> |
| <p>Rural World 5. Those unable to engage in regular productive activity (very elderly, sick, disabled, very young), all of whom rely on informal transfers of food, shelter, clothing.</p> | <p>Any risks adversely affecting the agricultural and related economies are likely to have secondary effects on this group through reduced informal transfers to them.</p> | <p>Measures as above to strengthen and stabilise the household economy as well as measures to provide social protection (health, social pensions, child and widows' allowances) including the care of orphans and people living with HIV/AIDS.</p> |

Spotlight on higher-risk, higher-return strategies

224. Social protection, an integral part of economic policy, should consist of a wide array of programmes accessible to all. While some economists have argued that ‘welfare’ payments to the poor are a drag on economic growth, a well designed social protection programme can be a springboard for economic growth. Many poor people’s thoughts are dominated by where their next meal will come from. As a result they often adopt low-risk, low-return strategies as opposed to higher-risk, higher-return strategies.

225. Enabling poor people to adopt the higher-risk, higher-return strategies is an important dimension of enabling them to adopt better livelihood strategies that lead to an escape from poverty. Good social protection programmes with clearly articulated, transparent, non-discriminatory eligibility and accessibility mechanisms are important in enabling the poor to adopt higher income livelihood strategies that may incur more risk.

Figure 4.1 Two income profiles - one low, one higher



Source : Brown and Gentilini 2005.

226. The figure shows two expected income profiles, A with a low mean but also a low variance, and B with a higher expected mean but a higher variance. A poor household will not adopt a livelihood strategy commensurate with profile B if it is unable to withstand the very low troughs in income that are possible.

227. A simple example may be a household with insecure land tenure living in an area prone to drought. Profile A may be represented by growing cassava, a food crop that is drought tolerant, with a fairly short maturation period and locally marketed or profile B by growing coffee, a long-gestation cash crop. The income from coffee is far higher but carries the risk of not being drought tolerant, or potentially losing the land before the coffee plants reach maturity, or the harvest occurring at a trough in the international coffee price. Any one of these events or some combination could result in the very low troughs apparent in income profile B.

228. A variety of strategies and instruments, both public and private, could address these problems and enable a household to adopt profile B.

- Weather-based or commodity risk management instruments would provide protection against drought or the coffee being sold at a time of lows in the global price thus reducing the size of the troughs in income profile B, and increasing the average expected income.
- A land registration programme that was sensitive to traditional tenure patterns, also promoting access by women, as opposed to single right privatisation would reduce the downside variance of both income profiles increasing the average expected income.
- Investments in appropriate irrigation infrastructure would reduce the downside variance in the income profiles, particularly of B, due to drought.

229. The figure is, in essence, made up of a map of higher and higher income profiles where the goal is to enable household to steadily move to a higher profile – for example, from A to B and onto to C, D, E – each having a mean income higher than the last. At some point the mean of the profile will be at the poverty line. In each part of the spectrum of income profiles some will have more inherent risk than others.

230. At the lowest income profiles the instruments that reduce the likelihood of the risk materialising – or remove the troughs from the income profile either ex ante or ex post – are much more likely to be publicly provided. They may include public health programmes, investment in roads and institutions, as well as safety net, social assistance and welfare programmes. At the very lowest levels of expected income, and in location-specific circumstances, assistance may be provided in kind, such as direct food or housing assistance. At higher levels of income the protection measure may be privately provided such as commodity price or weather insurance or a mix of public and private provision, including contributory schemes, such as unemployment insurance, health insurance and old-age pension provision.

CHAPTER 5

ADVANCING THE NEW AGENDA

231. *In recent decades the context for developing and implementing policies for agriculture has changed fundamentally. Conditions in markets important for poor producers have deteriorated, partly as a result of protectionist measures in the developed world. The policy context guiding public investment in support of agriculture has been revamped. New health shocks and other forms of shock are changing the demographics in rural areas and having major impacts on productive capacity. And the natural resources supporting agriculture are coming under pressure from processes of environmental change.*

232. *The new conditions demand a new agenda, an agenda that includes many traditional approaches to agriculture – but that extends them to support pro-poor growth in agriculture. Some of the new agenda is about delivering on such neglected fundamentals as infrastructure and new technologies and the specific needs and contributions of women farmers. Some is about looking at five rural worlds and coming up with policies, institutions and investments that increase the productivity of households in all five. Some is about supporting diversified livelihoods off the farm. And some is about reducing risk and vulnerability.*

233. *In advancing the new agenda, agricultural policymakers will need to broaden their understanding of poor people's livelihoods and work more closely with other sectors. They will need to identify and develop new institutional arrangements, using the best of both public and private sectors, to fill the gaps in markets important to the agriculture of poor people. And they will have to develop clear, ambitious visions for agriculture in their countries and ensure that they become central to national strategies. Donors can facilitate the involvement of rural stakeholders in shaping these policies, institutions and investments to ensure that they respond to livelihood needs and promote pro-poor growth processes.*

5.1 Principles of the new agenda

234. Against this background, this chapter highlights the four key principles of engagement with developing country partners. These principles are essential in defining how the new agriculture agenda should be promoted, and how the investment and policy options proposed under the new agenda should be articulated. These principles are:

- Adapt approaches to diverse contexts.
- Build institutions and empower stakeholders.
- Support pro-poor international actions.
- Foster country-led partnerships.

Adapt approaches to diverse contexts

235. Current reality in rural areas is defined by a highly diverse range of stakeholders involved in agriculture – with considerable variation in their assets and access to markets and how institutions promote or constrain their interests. To address the needs of the rural poor, policy needs to be informed by the dynamics in these processes. That, in turn, must be based on an understanding of the place of agriculture in the rural economy and in people’s livelihood strategies, the productive potential of the land and labour involved in agricultural production as well as opportunities for agricultural enterprises.

236. The typology of five “rural worlds” can guide policy makers in understanding the diverse rural and agricultural systems and dynamics and respond with appropriate pro-poor policies. These rural world categories are not mutually exclusive. By using a more differentiated analysis based on people’s livelihoods, it makes clear that poverty is located unevenly across and within rural populations, that policy in and for agriculture affects different groups in different ways and that the actions of one group of rural people can improve or impair the livelihoods of others. Indeed, the implication of such analyses is that policy should be primarily focused on facilitating, not prescribing, actions that will help people enhance their own strategies and improve their quality of life.

237. Local contexts vary in their agro-ecological potential and in the accompanying economic transformation -- the contribution from agriculture is high in the early stages and declines as the economy diversifies and other sectors become more important. Public policy linked to agriculture should be tailored to a country’s agro-ecological potential and the stage of transformation that it has attained. Policies need to be flexible enough to adapt to success and allow for resources to be transferred to other areas of the economy. Poverty will be reduced further if policy can promote productivity gains for small-scale, labour-intensive operations, recognising the gender division of labour in agriculture tasks. Other contexts could require an emphasis on generating employment from large-scale commercial operations.

Box 5.1 Policies ‘for agriculture’ and ‘in agriculture’

Agricultural policies are about the direct promotion and regulation of the agricultural sector and include research, extension, farmer education, inputs and credit, agricultural processing and markets. While these policies are at the heart of agricultural development, they are surrounded and supported by other policies that clearly affect, albeit indirectly, the agricultural sector. Such policies can be labelled as policies ‘for agriculture’ – in contrast to policies ‘in agriculture’. They include education, transport and communication infrastructure and private sector development. These policies ‘for agriculture’ can ensure that the potential released through sound policies ‘in agriculture’ are translated into effective and sustainable pro-poor growth. Without complementary and supportive policies ‘for agriculture’, policies ‘in agriculture’ will not deliver pro-poor development goals.

Build institutions and empower stakeholders

238. Much of the failure of agriculture to achieve its potential is essentially institutional. Support by the state has been widely discredited and unresponsive to the needs of farmers and the poor. It has been inefficient in marketing producers’ output, sometimes preventing the natural development of markets for producers. Public institutions need to be strengthened in their capacity to develop an appropriate blend of policy, regulatory frameworks and investments to re-launch and support the agricultural sector. At the same time, the role of private sector institutions in agriculture needs to be strengthened to help address a range of problems including limited access to financial services including credit and risk management instruments, to key inputs such as seed and fertiliser, and to output markets. These problems are often magnified for female farmers.

239. A strategy to strengthen institutions must also develop the skills, the capacity, and organisation of poor rural producers to maximise their input in the policy processes and enable them to analyse and articulate key requirements for pro-poor growth through agriculture. In this way, the focus of policymaking may shift from the claims of competing vested interests, which frequently disadvantage the poor, to a more evidence-based dialogue. A stronger voice should also increase the accountability of the state to those representing the interests of the poor. There is clearly a need to develop innovative solutions that exploit the strengths of the public and private sectors and empower the rural poor through farmers' organisations, associations and NGOs, including those that specifically represent the needs of female farmers.

240. A major challenge, particularly in public extension and research services, is the capacity of the institutions themselves to deliver client-focused services for households in Rural Worlds 2 and 3. Years of under-funding and relative neglect have greatly weakened the capacity of these institutions to deliver in the new agricultural environment, which requires a demand-led rather than supply-led approach. Farmers' associations can enhance farm household capacities, reinforcing the learning experience and promoting the dissemination of locally adapted technology.

Support pro-poor international actions

241. Three important processes can have major impacts on the successful implementation of the new agenda for agriculture. One is the *global trade negotiations* to reduce agricultural subsidies, a high priority for most developing countries. A second is the outlook, particularly since the G8 summit at Gleneagles, for a *major scaling up of aid* in response to the challenge of meeting the Millennium Development Goals. A third is the multi-donor commitment to *improve aid effectiveness*, as set out by the Paris Declaration of 2005. The way these processes play out in the short and medium terms will have an important bearing on conditions for enabling pro-poor growth through agriculture – and on the opportunities for achieving the Millennium Development Goal for reducing income poverty and hunger.

242. *The recent WTO Hong Kong ministerial achieved progress on agricultural subsidies and the provision of aid for trade* but may fall short on providing effective market access for developing countries, particularly the least developed. Ministers reached agreement to eliminate, by the end of 2013, all agricultural export subsidies and export measures with equivalent effect such as food aid and other forms of export credits and state trading practices. Export subsidies for the cotton sub-sector specifically will be dropped by the end of 2006, which may have significant benefits for poor West African producers. Domestic subsidy cuts will be deeper and faster than for other agricultural products. And the aid effort for the cotton industry will be further scaled up and better integrated under the special ongoing cotton consultation. The value and impact of these decisions for developing country agriculture however, will undoubtedly depend on a much wider range of factors, including domestic reforms and overcoming supply side capacity.

243. As noted at the G8 Gleneagles Summit, OECD members have committed to raising aid by nearly \$50 billion a year by 2010 in order to step up the fight against hunger and poverty. Aid to Africa will be doubled in that period. For agriculture, G8 heads agreed to 'support a comprehensive set of actions to raise agricultural productivity, strengthen urban-rural linkages and empower the poor, based on national initiatives and in cooperation with the AU/NEPAD Comprehensive African Agriculture Development Programme (CAADP) and other African initiatives'. Africans recognised the need to increase investments in sustainable agriculture as 'the most important economic sector for most Africans' and committed to invest 10% of their budgets in agriculture.

244. *Implementing the new agenda for agriculture is guided by and anchored in the aid effectiveness agenda agreed to by donors as good practice in the Paris Declaration* of the Second High-Level Forum on Aid Effectiveness, 28 February–2 March 2005. The Paris Declaration provides a well defined roadmap for

increasing development effectiveness. It focuses on the need for a collective effort to enhance partnership commitments, align donor support to partner countries' development strategies, institutions and procedures, harmonise donors' actions around partners' development strategies to minimise transaction costs, manage resources with a focus on development results and improve mutual accountability for development results (See Box 5.2).

Box 5.2 The aid effectiveness agenda

The aid effectiveness agenda and the commitments made in Rome and Marrakech in 2004 entail four broad areas: ownership, alignment, harmonisation and managing for results. Because these principles apply to aid management and aid delivery systems, they are as relevant for agriculture and pro-poor growth as they are for other sectors and for development cooperation more broadly.

Ownership

This refers to the degree by which partner countries exercise effective authority over their development policies, strategies and coordination. Locally owned country development strategies, according to Development Assistance Committee good practice principles, emerge from an open and collaborative dialogue by local authorities with civil society and with external partners about shared objectives and their respective contributions to the common enterprise. Each donor's programmes and activities should then operate within the framework of that locally owned strategy in ways that respect and encourage strong commitment, participation, capacity development and ownership.

Alignment

Donors agree to base their overall support on partner countries' national development strategies, institutions and procedures. Partner country strategies should be linked to multi-year expenditure frameworks and the national budget. Donor strategies, policy dialogue and cooperation should be based on partner strategies and annual progress reviews. Using a country's own institutions and systems, where these provide assurance that aid will be used for agreed purposes, increases aid effectiveness by strengthening the partner country's sustainable capacity to develop, implement and account for its policies to its citizens and parliament. Country systems and procedures typically include national arrangements and procedures for public financial management, accounting, auditing procurement, results frameworks and monitoring.

Harmonisation

Recognising that management of different donor procedures contributes to high transaction costs, donors are committed to implement, where feasible, common arrangements at the country level for planning, funding (such as joint financial arrangements), disbursement, monitoring, evaluating and reporting to government on donor activities and aid flows. One way to achieve harmonisation is to rely increasingly on sector and budget support and less on project approaches. Donors will also work towards a more pragmatic division of labour according to their comparative advantages to avoid fragmentation of aid and strengthen incentives for management and staff. These principles are particularly important in fragile states, which may draw large numbers of development actors and a proliferation of activities.

Managing for results

Managing for results focuses on strengthening performance and accountability in the use of development resources. Partner countries are to link their development strategies to realistic annual and medium-term budget processes and establish assessment frameworks. Donors are to rely as much as possible on partner country monitoring and evaluation systems. To strengthen accountability for development, partner country consultative processes and the role of parliament in approving development strategies and monitoring should be reinforced.

Foster country-led partnerships

245. The Aid Effectiveness Agenda, articulated in the Paris Declaration, calls for an ambitious reform in the way aid is managed and donors should be guided by those principles in helping countries unlock agriculture's potential contribution to pro-poor growth. National Poverty Reduction Strategies (PRSs), the main point of reference for operationalising the aid effectiveness agenda in countries, are critical in

implementing the new agenda for agriculture. But agriculture and rural development have been neglected in past PRSs, largely due to an inadequate understanding of the agricultural and rural dimensions of poverty. A key challenge is to redress the imbalance in the PRSs – to raise the profile of the productive sectors in general, and of agriculture in particular.

246. More attention must be given particularly to the role of effective monitoring frameworks in supporting improved decision-making, flexible implementation, and increased accountability of the governments to all PRS stakeholders. Development processes are the outcomes of power, knowledge and information relationships: Open monitoring frameworks can help promote the participation of all PRS stakeholders, including rural producers and their organisations, in the development of policies and investments with the aim of influencing and eventually re-orienting their implementation. In this context, donors need to find ways to work effectively with their partners to promote sustainable, country-driven and programme-based development that gives a higher profile to agriculture. More specifically, donors should:

- *Seek to identify and understand local processes relevant for agriculture*, such as PRSs, sector policy frameworks, SWAps, territorial action plans and decentralisation processes and the links among them. Integrating priority areas of the new agenda for agriculture in PRSs will require active coordination and priority-setting at a country level, based on country analysis of bottlenecks and opportunities and a national strategy for pro-poor growth.
- *Help developing countries position agricultural and diversified livelihoods within the strategies for growth and poverty reduction*. This can be done by supporting local research capacity and improving mechanisms for the collection and dissemination of sex-disaggregated data and analyses of rural poverty. Better understanding of rural livelihoods is important for mainstreaming policy responses in growth and poverty reduction strategies. Agriculture policy makers must develop a vision and strategy for action and be accountable to their stakeholders.
- *Identify and engage the stakeholders and institutions that can engender change*. Mainstreaming is possible only if the new agenda for agriculture becomes a priority, and that will happen only with more knowledge, sensitisation and empowerment. The new approach needs to strengthen the rights and influence of the poor, especially women. The private sector, farmers, producer associations and civil society must all take part in the policymaking process and share accountability for results. Engaging the private sector will promote the buy-in to broader reforms and better coordination of investments in transport, market infrastructure, services and agricultural research and extension. Engaging smallholder farmers and civil society will improve understanding of the constraints and challenges of poor women and men.
- *Foster inter-ministerial dialogue and coordination mechanisms*. Addressing the challenges of the new agenda will require comprehensive approaches involving many parts of government. Beyond agriculture, the new agenda requires reform in macroeconomic, labour, land, gender equality, trade and tax policies and in science and education. Links to the ministry of economy or finance are key, but so are those to ministries responsible for social protection – to ensure that policies foster a sustained trajectory out of poverty.
- *Support local ownership through decentralisation and the integration of line ministry functions*. Agriculture policy has traditionally been highly centralised, with sector strategy determined and implemented by the line ministry. Decentralised structures of government and service provision provide poor people with a greater say in the design and implementation of policy. These structures, more responsive to local needs, can provide a forum for investment in the infrastructure and services to support non-farm activities in rural areas.

- *Identify appropriate financing instruments that take the new agenda into account.* The agricultural sector is poorly represented in the political processes associated with budget negotiations, and the ministry of agriculture is frequently unable to ensure allocations consistent with the importance for poverty reduction. The decision on a financing modality should be pragmatic and impact-oriented, made in close consultation with the government. A variety of mechanisms are currently used to finance agricultural and rural development: SWAps, general budget support, basket or pooled funding to the sector and earmarked or project funding. In practice, none of these options is as distinct as it appears, and most agricultural and rural SWAps are financed through all these mechanisms. Once priorities have been established for financing, predictable and multi-year donor responses will contribute to effective use of aid.
- *Support local efforts to establish open, participatory monitoring frameworks* that enable the rural poor and their organisations to be active in monitoring the implementation of PRSs and SWAps. This will be critical in assessing whether interventions have been instrumental in responding to the livelihood needs of the rural population. The pattern so far with PRSs and agricultural and rural sector approaches is to give more attention to financial management systems and financial reporting than to qualitative reporting and impact monitoring.

5.2 Priorities for action in the new agenda

247. Actions to stimulate agriculture's role in pro-poor growth should, on the basis of the principles above, be used to guide renewed attention to three priority areas:

- Enhancing agricultural productivity and market opportunities.
- Promoting diversified livelihoods on and off the farm.
- Reducing risk and vulnerability.

Enhance agricultural productivity and market opportunities

248. Improving productivity and expanding market access is at the core of a more robust agricultural economy. Productivity gains will depend largely on a stable and supportive policy and regulatory framework to remove market distortions and provide an enabling environment for growth. It will depend on investments in new productivity-enhancing technologies and the dissemination of such technologies to the poor. Market access will depend on improved physical access and reduced transaction costs, particularly through appropriately targeted infrastructure and better transport services. And it will depend on improved market information through access to information and communications infrastructure and services. This may require interventions targeted towards women as they are the primary food producers and agricultural labourers in many developing countries. More specific actions that can enhance productivity and market opportunities would be to:

- *Tailor strategies to the development of expanded markets in food staples and the diversification into markets for higher value products*, according to local productive and market potential. Agriculture strategies have often been supply-driven, prescriptive and narrowly based, and so have failed to reflect local market and productive potential. Strategic support to agriculture needs to facilitate rather than prescribe pathways to growth and to be responsive to local potential, taking into account the diversity within the sector. It also needs to include strategies for both domestic and regional markets as well as for agriculture linked to international trade.

- *Develop institutions to help small-scale producers respond to changing market opportunities and participate in standard-setting processes.* The structure of domestic and international markets is changing rapidly, and small producers face more risk. On their own, they lack the market information and capacity to respond to many of the new opportunities emerging in these markets. Traditional forms of smallholder organisation have failed, and new, more effective organisational support is needed. Decentralised structures and more genuinely representative organisations will help provide stronger voice and better market access for these poorer farmers. Governments should ensure that institutions exist to facilitate the flow of information to rural producers.
- *Develop effective and sustainable financial services for agricultural producers.* Financial services for agricultural producers, particularly smallholders, have traditionally been very weak, and the lack of short-term credit has resulted in a failure to invest in such key inputs as seed and fertiliser. Realising the potential of agriculture to contribute to pro-poor growth will depend on financial services tailored to the needs of both women and men farmers. Governments and donors will need to be innovative in their use of both public and private resources to develop models that can fill this gap.
- *Improve the functioning of land markets and generate greater incentives for investment by establishing more secure access to land.* Land policy has been a relatively neglected policy area, and the reforms that have occurred have tended to favour men and neglected women's land tenure and inheritance rights. A high priority should be to establish poor peoples' security of access to assets like land and water resources. This issue is also important for those rural producers who need to diversify out of agriculture and migrate out of rural areas. This includes a focus on environmentally sustainable policies and institutions that facilitate informal property rights to water, land, forests and grazing land and good management of common natural resources.
- *Recognise the challenges posed by natural resources degradation to sustainable pro-poor growth,* especially where property rights are poorly defined and negative externalities and other market failures are frequent. New policy and legal frameworks should give a high priority to new natural resource management technologies that improve soil management and water productivity – and strengthen institutions that facilitate informal property rights. Associations dedicated to land use, water management or forest use can work with policymakers to help oversee implementation of natural resource management.
- *Improve the functioning of national innovation systems.* National research and extension systems have been ineffective in addressing the needs of farmers, especially poorer ones. They have too often had research agendas that reflected the capabilities and interests of researchers rather than the needs of farmers. And they have tended to prescribe production strategies without due consideration of farmers' productive potential or access to markets. Agricultural research that identifies low-risk and adaptable technologies for improved productivity is critical. Research and extension should always be strongly linked, with plural extension systems to fit the heterogeneous needs of poor farmers. Policy needs to stimulate a broader approach to agricultural innovation – involving universities, civil society and the private sector and emphasising the participation of farmers in research needs and priorities.
- *Strengthen the knowledge, skills and confidence of agricultural households to adopt and adapt appropriate practices that enhance productivity in a sustainable fashion.* The weak capacity of the vast majority of agricultural households to access, analyse and use new knowledge on improved practices hinders productivity increases on farms. Public, NGO and private agricultural extension services that provide information through an appropriate mix of channels can enhance

farm household capacities, while farmer organisations can reinforce the learning experiences. Broader education policy that increases literacy in rural areas has a major role in enabling farm households to use extension services. A major challenge, particularly in public extension and research services, is the capacity of the institutions themselves to deliver client-focused services for households in Rural Worlds 2 and 3. These services need to be designed to facilitate women farmers' access, meet their needs and adapt to their specific situations. Years of chronic under-funding and neglect, relative to other sectors, has a greatly weakened the capacity of these institutions to deliver in a new agricultural environment that requires a demand-led rather than supply-led approach.

- *Avoid food aid programme practices that disrupt local agricultural markets and the incentives to invest in local agriculture.* Lack of food supply resulting from economic and climatic shocks affects the poorest. Food aid programmes have been one traditional aid response by governments and the international donor community. But the way many bilateral food aid programmes are implemented, by monetising food aid in the local marketplace, can distort the incentives to invest in agriculture. That can hurt local food markets and smallholder farmers who depend on stable domestic markets. Policy should set the conditions for implementing food aid programmes to avoid these local market distortions. Carefully targeted food aid programmes, in both emergency and development settings, as well as enhanced use of local food procurement where practical, can substantially improve the effectiveness of this instrument.

Promote diversified livelihoods

249. The connections between the agricultural and non-agricultural rural economies are key drivers of diversified livelihoods. A thriving agriculture sector underpinned by improved productivity will expand the rural economy and influence wages and food security. Traditionally, agricultural policy has focused narrowly on increasing agricultural production, neglecting investment in non-agricultural assets for more diversified rural livelihoods while treating as socially undesirable those diversification strategies involving movement out of rural areas. This has skewed policy to support larger, better-off producers, in the process marginalising poorer producers whose livelihoods depend more on markets outside agriculture and rural areas. This calls for government and external partners to:

- *Improve understanding of labour markets and migration patterns and incorporate that understanding in national policies.* Public policy needs to recognise the importance of enhancing people's capacity to access new markets in a diversified economy, establishing conditions for economic development of non-farm and non-agricultural enterprise and removing the political and regulatory barriers to movement out of agriculture and rural areas. This shift in policy would benefit both the landless poor and large-scale commercial farmers who depend on labourers for their operations.
- *Establish functioning land markets, including rental markets, with secure tenure so that people are more able to move to new forms of economic activity.* Lack of properly functioning land markets has undermined agricultural growth, and insecure access to land has made it more difficult for people to move to other forms of activity. Properly functioning land markets will provide the basis for a more diversified economy and for more secure livelihoods, making it easier for people to raise funds for investment and providing a safety net in periods of economic stress. Governments need to address land tenure to facilitate diversification.
- *Remove constraints to entrepreneurship.* The climate for investment in developing countries is typically clouded by excessively burdensome taxes and business licensing procedures and various forms of harassment for individuals and companies setting up and operating businesses –

such as informal or illegal rents, fees and fines by public sector officials. The movement of people from one area or sector to another is often treated as an opportunity for officials to extract bribes. The landless rural poor who depend on selling their labour are most seriously affected by these constraints. Governments need to remove the impediments to create more equitable conditions in a growing and diversified economy with increased livelihood opportunities for the rural poor. There is evidence that technological change in agriculture frees up time for other income-generating activities and for individual and community development.

- *Tailor investments in infrastructure, education and health services to new livelihood patterns.* This means investing in transport and communication infrastructure and services to support enhanced access to markets. It also facilitates movement between rural and urban areas and makes migration easier. Migrants' needs are traditionally either ignored or even discriminated against by government, with poorly serviced urban ghettos arising as a consequence. Infrastructure planning and implementation should pay attention to the specific needs of women farmers and distributors. Policymakers should address these needs by providing services, including education and health, adapted to their livelihood patterns.

Reduce risk and vulnerability

250. Poor households with livelihoods dependent on agriculture face numerous shocks and stresses, some potentially catastrophic. The general level of risk facing poor rural households has risen in recent decades with increased market exposure linked to globalisation and governments moving away from providing support to agriculture. The onset of the HIV/AIDS epidemic has further weakened the position of poor households, leaving them more vulnerable and less able to engage in the productive economy at any level. Women's caring responsibilities for sick family members reduces the time available for food and other agricultural production.

251. Reducing these levels of risk and vulnerability has to be a central element of pro-poor agriculture policy, not least because it has important production and social protection impacts, but also because it enables poor people to engage more fully in markets. Strong synergies exist between social protection and agriculture policy, and many of the desirable public actions could increase the coherence between them.

252. Risk and vulnerability measures should be mainstreamed in broader infrastructure – fiscal and regional investment policies on the one hand, and in agriculture, migration and related policy spheres on the other. Sharing lessons of experience within and across countries could also be beneficial. Mainstreaming implies the need to:

- *Strengthen national analytical capacity to assess the wider risks and uncertainties,* identify the people most vulnerable to the resulting shocks and stresses and formulate measures to reduce, mitigate or cope with these potential shocks and stresses. Early warning systems should be made more efficient by advances in data collection, management and forecasting infrastructure to enable faster responses. New policies should also be examined through a risk and vulnerability lens to assess the trade-offs, when evident, between promoting growth and reducing risk. Policies increasing the risk of those most vulnerable should be tempered with stronger risk management instruments.
- *Identify infrastructure investments to reduce the exposure of rural households to risk* through climatic events, price volatility and high transport costs. This can include investing in improved transportation, electrification to reduce the risk associated with perishable crops, local grain storage banks to avoid losses and land and water management to prevent soil erosion and landslides.

- *Invest in agricultural research and development* and promote effective public-private sector partnerships, recognising both male and female producers and their individual needs. Agricultural technology development projects could be aimed at ensuring more predictable and more productive yields and enable poor people's access to existing technologies. Labour-intensive technologies, if competitive, can increase poor people's assets and so reduce their vulnerability to shocks and stresses.
- *Develop institutions to enable poor women and men to mitigate the effects of shocks and stresses and generate working capital to engage in entrepreneurial activities.* Together with appropriate regulation, institutions are keys to unlocking the development of financial services. There is scope to explore and innovate in the use of private market mechanisms, such as weather-based crop insurance, price hedging, and carefully managed buffer stocks. New forms of health care insurance and pension schemes have also been piloted in some areas to provide coverage to the rural poor.
- *When all else fails, develop social safety nets to help poor rural households cope with sudden shocks.* These take the form of predictable social transfers and emergency assistance, in cash or in kind, but their use should be temporary, as and when needed. Appropriate programmes should be designed specifically for Rural World 5 to enable them to 'graduate' to more productive activities in other rural or urban worlds.
- *Assess and modify at the international level the numerous instruments affecting risk and vulnerability,* including international trade conventions, exchange rate policy and the policies controlling foreign direct investment and intellectual property rights. These affect the introduction of new technologies – and the growth of supermarkets and the degree of risk affecting all categories of farmers in developing countries.

Managing the change process

253. To sum up: In the real world the transformation from a system wholly dependent on low-productivity agricultural production and a weak agricultural sector to one that is diverse and dynamic and that presents broader opportunities to poor people is not entirely virtuous. It is a process with serious imperfections. The main imperfection is that poverty persists in communities with poor market access, poor natural resource endowments and little political and social capital. Many households remain vulnerable to shocks of various kinds, and their livelihoods are exposed to high levels of risk.

254. In advancing the new agenda, agricultural policymakers will need to broaden their understanding of people's livelihoods and work more closely with other sectors. They will have to develop clear, ambitious visions for agriculture in their countries and ensure that they become central to national strategies. Pro-poor policies must remove and relax the barriers and constraints faced by poor households as well as provide new incentives and support for their sustainable participation in more equal, market based relations and exchanges. Donors can facilitate this policy process by supporting capacity building efforts for the institutions that should lead this change process and relaunching of agriculture. Capacity building efforts can support in particular:

- public institutions for agriculture and rural development in promoting selective public investments, regulating markets, and designing regulatory frameworks in areas critical for the agricultural sector such as trade policy, tax policy, and land reform.

- Institutions representative of poor rural populations, such as smallholder farmers' organisations, to analyse and articulate their key requirements for their development and promote their active participation in decision making processes.

255. So, for policy to be pro-poor, it should take account of the needs of poor households. This does not mean that policies in and for agriculture should become social policy. But it strongly suggests that economic policy, including agricultural policy, should be consistent with social objectives and, where possible, address them directly.

REFERENCES

- Alwang, J., & P. Siegel (1999), "Labor Shortages on Small Landholdings in Malawi: Implications for Poverty Reforms." *World Development* 27 (8): 1461–75.
- Barrett, C.B., & B.M. Swallow (2005), "Dynamic Poverty Traps and Rural Livelihoods." In F. Ellis and H.A. Freeman, eds., *Rural Livelihoods and Poverty Reduction Policies*. London: Routledge.
- Blackden, M.C., & S. Canagarajah (2003), "Gender and Growth in Africa: Evidence and Issues." Prepared for the UNECA Expert Meeting on Pro-Poor Growth, 23–24 June, Kampala.
- Brown, L.R., & U. Gentilini (2005), "On the Edge: The Role of Food-Based Safety Nets in Helping Vulnerable Households Manage Food Insecurity." Paper prepared for ICSSR-UNU-WIDER Joint Project on Hunger and Food Security: New Challenges and New Opportunities. Indian Council of Social Science Research and World Institute for Development Economics Research, New Delhi and Helsinki.
- Bryceson, D.F. (1999), "African Rural Labour, Income Diversification and Livelihood Approaches: A Long-Term Development Perspective." *Review of African Political Economy* 80: 171–89.
- . (2002), "The Scramble in Africa: Reorienting Rural Livelihoods." *World Development* 30 (5): 725–39.
- Bryceson, D.F., & L. Bank (2001), "End of an Era: Africa's Development Policy Parallax." *Journal of Contemporary African Studies* 19 (1): 5–23.
- Chadha, G., & A. Gulati (2002), "Performance of Agro-based Industrial Enterprises in Recent Years: The Indian Case." Paper presented at the South Asia Initiative Workshop on Agricultural Diversification in South Asia, 21–23 November, Bhutan.
- CIDA (2003), Canadian International Development Agency.
- (2003), *Promoting Sustainable Rural Development Through Agriculture: Canada Making a Difference in the World*, Quebec.
- Club du Sahel (2005), *Food Security in the Sahel and West Africa: Medium and Long-term Challenges. Agricultural Transformation and Sustainable Development in West Africa*.
- Datt, G., & M. Ravallion (1996), "How Important to India's Poor is the Sectoral Composition of Growth?" *World Bank Economic Review* 10 (1): 1–25.
- David, R (1995), *Changing Places: Women, Resource Management and Migration in the Sahel*. London: SOS Sahel.
- Davin, D (1999), *Migration in China*. Basingstoke, UK: Macmillan.

- De Haan, A., & M. Lipton (1998), "Poverty in Emerging Asia: Progress, Setbacks and Log-Jams." *Asian Development Review* 16 (2): 135–76.
- Deininger, K (2004), "Land Policies for Growth and Poverty Reduction: Key Issues and Challenges Ahead." Paper presented at the Inter-Regional Special Forum on the Building of Land Information Policies in the Americas, 26–27 October, Aguascalientes, Mexico.
- Deininger, K., & L. Squire (1998), "New Ways of Looking at Old Issues: Inequality and Growth." *Journal of Development Economics* 57 (2): 259–87.
- De Janvry, A., & E. Sadoulet (1996), "Growth, Inequality and Poverty in Latin America: A Causal Analysis 1970–94." *Working Paper 784*. University of California, Berkley, California.
- Deshingkar, P (2005), "Maximising the Benefits of Internal Migration for Development". Keynote Paper commissioned for the Regional Conference on Migration and Development in Asia.
- Deshingkar, P (2004), "Livelihood Diversification in Developing Countries." Hot Topic Paper drafted for the OECD POVNET Agriculture Task Team, Paris.
- Deshingkar, P., & D. Start (2003), "Seasonal Migration for Livelihoods, Coping, Accumulation and Exclusion." *Working Paper 220*. Overseas Development Institute, London.
- Devereux, S (1993), "Goats before Ploughs: Dilemmas of Household Response Sequencing during Food Shortages." *IDS Bulletin* 24 (4): 52–59.
- DFID (2005), *Growth and Poverty Reduction: the Role of Agriculture*. Department for International Development.
- Dixon, J., A. Gullivar & D. Gibbon (2001), *Farming Systems and Poverty Improving Farmers' Livelihoods in a Changing World*. Food and Agriculture Organization, Rome.
- Dorward, A., S. Fan, J. Kydd, H. Lofgren, J. Morrison, C. Poulton, N. Rao, L. Smith, H. Tchale, S. Thorat, I. Urey & P. Wobst (2004), "Rethinking Agricultural Policies for Pro-Poor Growth." *Natural Resource Perspectives Paper 94*. Overseas Development Institute, London.
- Ellis, F (2004), "Occupational Diversification in Developing Countries and Implications for Agricultural Policy." Hot Topic Paper drafted for the OECD POVNET Agriculture Task Team, Paris.
- Ellis, F., & H.A. Freeman (2004), "Rural Livelihoods and Poverty Reduction Strategies in Four African Countries." *The Journal of Development Studies* 40 (4): 1–30.
- Ellis, F., & N. Mdoe (2003), "Rural Livelihoods and Poverty Reduction in Tanzania." *World Development* 31 (8).
- Fan, S (2004), "Infrastructure and Pro-Poor Growth." Paper presented at the OECD POVNET Conference on Agriculture and Pro-poor Growth, 17–18 June, Helsinki.
- Fan, S., and N. Rao (2003), "Public Spending in Developing Countries: Trend, Determination and Impact." *EPTD Discussion Paper 99*. International Food Policy Research Institute, Environment, Production and Trade Division, Washington, D.C.

- FAO Newsroom (2004), "Protecting Women's Property and Land Rights to Protect Families in AIDS-Affected Communities." 8 March. [<http://www.fao.org/newsroom/en/news/2004/38247/>].
- Farrington, J (2005), "Recognising and Tackling Risk and Vulnerability Constraints to Pro-Poor Agricultural Growth". Background paper for OECD POVNET Agriculture Task Team, Paris.
- Farrington, J (2004), "Social Protection and Livelihood Promotion in Agriculture: Towards Operational Guidelines." Background paper for OECD POVNET Agriculture Task Team, Paris.
- Fjeldstad, O.-H (2001), "Donors Turn Blind Eye to Extortion in Tax Collection in Africa." *Development Today* 11 (8): 1–2.
- (2002), "Collectors, Councillors and Donors: Local Government Taxation and State-Society Relations in Tanzania." *IDS Bulletin* 33 (3): 21–29.
- Freeman, H.A., F. Ellis & E. Allison (2004), "Livelihoods and Rural Poverty Reduction in Kenya." *Development Policy Review* 22 (2): 147–73.
- Gallup, J., S. Radelet & A. Warner (1997), "Economic Growth and the Income of the Poor." CAER *Discussion Paper 36*. Harvard University, Harvard Institute for International Development, Cambridge, Mass.
- Gelb, A (2001), "Gender and Growth: Africa's Missed Potential." *Findings 197*. World Bank, Washington, D.C.
- Gender and Development Network and NGO Forum on Cambodia (2004), "Gender in Poverty Reduction." NGO Sectoral Papers and Issues on Poverty Reduction and Development in Cambodia. March edition. Phnom Penh, Cambodia.
[<http://www.ngoforum.org.kh/Documents/Sectoral%20Paper%20PRD2003/Gender.htm>].
- Glewwe and others [please list all authors] (2003).
- G8 Gleneagles Summit (2005), *Joint Declaration of the Heads of State and/or Government of Brazil, China, India, Mexico and South Africa participating in the G8 Gleneagles Summit*.
- Global Donor Platform for Rural Development (2005), *Targeting Rural Poverty to Achieve Millennium Development Goal 1*. Bonn, Germany.
- Gupta, J (2003), "Informal Labour in Brick Kilns." *Economic and Political Weekly* 38 (31): 2–8.
- Hazell, P (2004), "Smallholders and Pro-Poor Agricultural Growth." OECD POVNET Agricultural Task Team, Paris.
- Hazell, P., & A. Roell (1983), "Rural Growth Linkages: Household Expenditure Patterns in Malaysia and Nigeria." *Research Report 41*. International Food Policy Research Institute, Washington, D.C.
- Heltberg, R (1998), "Rural Market Imperfections and the Farm Size-Productivity Relationship: Evidence from Pakistan." *World Development* 26 (10): 1807–26.
- Hocombe, S (2005), "Enabling Pro-Poor Growth through Agriculture". For the OECD POVNET Agricultural Task Team, Paris.

- Holzmann, R., & S. Jørgensen (2000), "Social Risk Management: A New Conceptual Framework for Social Protection and Beyond." *Social Protection Discussion Paper 0006*. World Bank, Washington D.C.
- IFAD (International Fund for Agricultural Development) (2004), "Trade and Rural Development: Opportunities and Challenges for the Rural Poor." *IFAD Governing Council Paper [GC 27/L.10]*. Rome.
- IICA (Inter-American Institute for Cooperation on Agriculture) (2004), *More than Food on the Table: Agriculture's True Contribution to the Economy*. Coronado, Costa Rica.
- Irz, X., L. Lin., C. Thirtle & S. Wiggins (2001), "Agricultural Productivity Growth and Poverty Alleviation." *Development Policy Review* 19 (4): 449–66.
- Jalan, J., & M. Ravallion (2002), "Geographic Poverty Traps? A Micro Model of Consumption Growth in Rural China." *Journal of Applied Econometrics* 17 (4): 329–46.
- Kameri-Mbote, P., & K. Mubuu (2002), "Women and Property Rights in Kenya: A Study on Trends in Ownership, Control and Access to Land and Productive Resources in Agricultural Communities in Select Districts." Background paper for a revised Matrimonial Causes Bill, International Federation of Women Lawyers, Nairobi, Kenya.
- Kydd, J., Dorward, A., Morrison, J., & Cadisch, G (2004), "Agricultural Development and Pro-poor Economic Growth in Sub-Saharan Africa: Potential and Policy" in *Oxford Development Studies*, Vol. 32, No.1.
- Mahoney, T (2004), "The Identification of Three Rural Worlds in Pro-Poor Policy Development". Drafted for the POVNET Agriculture Task Team Consultation, September 2004.
- McKeon. 2005.
- Mellor, J (1976), *The New Economics of Growth: A Strategy for India and the Developing World*. Ithaca, NY: Cornell University Press.
- (2000), *Faster, More Equitable Growth: The Relation between Growth in Agriculture and Poverty Reduction*. Harvard University, Harvard Institute for International Development, Cambridge, Mass.
- Morduch, J (1995) "Income Smoothing and Consumption Smoothing." *Journal of Economic Perspectives* 9 (3): 103–14.
- Muelder, A (2004) "HIV/AIDS and Enabling Pro-Poor Agricultural Growth". Issues paper for the POVNET Agriculture Helsinki workshop June 17-18 2004.
- Nkamleu, G., J. Gokowski & H. Kazianger (2003), "Explaining the Failure of Agricultural Production in Sub-Saharan Africa." Paper presented at the 25th International Conference of Agricultural Economists, 16–22 August, Durban, South Africa.
- OECD (2005), *The Development Effectiveness of Food Aid: Does Tying Matter?* Paris.
- Orden, D., Torero, M., & Gulati, A (2004), "Agricultural Markets and the Rural Poor". Draft background paper for workshop of the OECD POVNET Agriculture Task Team, Paris.

- Pinstrup-Andersen, P., & R. Pandya-Lorch, eds. (2001), *The Unfinished Agenda*. Washington, D.C.: International Food Policy Research Institute.
- Quisumbing and others [please list all authors] (1995).
- Ravallion, M., & G. Datt (2002), "Why Has Economic Growth Been More Pro-Poor in Some States of India than Others?" *Journal of Development Economics* 68 (2): 381–400.
- Reardon, T (1997), "Using Evidence of Household Income Diversification to Inform Study of the Rural Nonfarm Labor Market in Africa." *World Development* 25 (5): 735–47.
- Rogaly, B., & A. Rafique (2003), "Struggling to Save Cash: Seasonal Migration and Vulnerability in West Bengal, India." *Development and Change* 34 (4): 659–81.
- Rosegrant, M., & P. Hazell (2000), *Transforming the Rural Asian Economy: The Unfinished Revolution*. Hong Kong: Oxford University Press.
- Rosegrant, M.W., M.S. Paisner, S. Meijer & J. Witcover (2001), *Global Food Projections to 2020: Emerging Trends and alternative Futures*. Washington, D.C.: International Food Policy Research Institute.
- Russo, S.L., Grayzel, J.A (2005), "Reinforcing Human Capital: Rural Diversity and Education for Pro-Poor Growth". OECD POVNET: Agricultural Task Team. Poverty Network Publication.
- Sida (2003), *Making Markets Work for the Poor*. Stockholm, Sweden.
- (2004), "Improving Income among Rural Poor." Position Paper. Department for Natural Resources and the Environment, Stockholm.
- Song, Y (1999), "Feminization of Maize Agricultural Production in Southwest China." *Biotechnology and Development Monitor* 37: 6–9.
- Spencer, D (1994), "Infrastructure and Technology Constraints to Agricultural Development in the Humid and Subhumid Tropics of Africa." *Discussion Paper 3*. International Food Policy Research Institute, Environment, Production and Trade Division, Washington, D.C.
- Stifel and others [please list all authors] (2003).
- Tacoli, C (2004), "Rural-Urban Links and Pro-Poor Agricultural Growth." Paper presented at the POVNET Conference on Agriculture and Pro-Poor Growth, 17–18 June, Helsinki.
- Thirtle, C., X. Irz, L. Lin, V. McKenzie-Hill & S. Wiggins (2001), "Relationship between Changes in Agricultural Productivity and the Incidence of Poverty in Developing Countries." Report commissioned by the Department for International Development, London.
- Timmer, P (1997), "How Well Do the Poor Connect to the Growth Process." *CAER Discussion Paper 178*. Harvard University, Harvard Institute for International Development, Cambridge, Mass.
- (2005), "Agriculture and Pro-Poor Growth: An Asian Perspective." *Working Paper 63*. Center for Global Development, Washington, D.C.

- Toulmin, C (1992), *Cattle, Women, and Wells: Managing Household Survival in the Sahel*. Oxford: Clarendon Press.
- Tripp Aili Mari (2004), “Women's Movements, Customary law and land rights in Africa: The case of Uganda”, *African Studies Quarterly* * Volume 7, Issue 4, Spring 2004.
<http://www.africa.ufl.edu/asq/v7/v7i4a1.htm>.
- UN (United Nations) (2004), “Millennium Development Goals: Status 2004.” DPI/2363-A. Department of Public Information, New York.
- Von Braun, J., & R. Pandya-Lorch, eds. (1991), “Income Sources of Malnourished People in Rural Areas: Microlevel Information and Policy Implications”. *Working Papers on Commercialization of Agriculture and Nutrition 5*. Washington, D.C.: International Food Policy Research Institute.
- Vorley, B., & T. Fox (2004), “Global Food Chains – Constraints and Opportunities for Smallholders.” Paper prepared for the OECD POVNET Agriculture Task Team Workshop 17–18 June, Helsinki.
- Warr, P (2001), “Poverty Reduction and Sectoral Growth: Results from South East Asia.” Australia National University, Canberra.
- Wood, G (2003), “Staying Secure, Staying Poor: The ‘Faustian Bargain.’” *World Development* 31 (3): 455–71.
- World Bank (2005), *Agriculture and Achieving the Millennium Development Goals*. Report No. 32729-GLB. Agriculture and Rural Development Department.
- World Bank (2001), *India: Improving Household Food and Nutrition Security: Achievements and the Challenges Ahead*. Volumes 1 and 2. Report No 20300-IN. Washington D.C.
- (2003), *Land Policies for Growth and Poverty Reduction*. Washington, D.C.
- (2005), *Pro-Poor Growth in the 1990s: Lessons and Insights for 14 Countries*. Washington, D.C.