

# Rural Development Report 2016

Fostering inclusive rural transformation

**OVERVIEW** 





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### Abbreviations and acronyms

ACET	African Center for Economic Transformation
AfDB	African Development Bank
AGRA	Alliance for a Green Revolution in Africa
APR	Asia and the Pacific
ASM	artisanal and small-scale mining
ATI	agricultural technological innovation
BRAC	Bangladesh Rural Advancement Committee
CIS	Commonwealth of Independent States
CKW	community knowledge worker
CNOP-G	National Confederation of Famers' Organizations of Guinea
CONEVAL	National Council for the Evaluation of Social Development Policy (Mexico)
DCA	dairy commercialization area
DFID	Department for International Development
DSM	demand-side management
EAC	East African Community
EAFF	East African Farmers' Federation
EALA	East African Legislative Assembly
ECLAC	Economic Commission for Latin America and the Caribbean
ESA	East and Southern Africa
ESCAP	Economic and Social Commission for Asia and the Pacific (United Nations)
FAO	Food and Agriculture Organization of the United Nations
FDI	foreign direct investment
GDP	gross domestic product
GMO	genetically modified organism
IHERD	Innovation, Higher Education and Research for Development
IFPRI	International Food Policy Research Institute
ILO	International Labour Organization
IOM	International Organization for Migration
IPEA	Institute of Applied Economic Research
IWRM	integrated water resource management
LAC	Latin America and the Caribbean
MERET	Managing Environmental Resources to Enable Transition to More Sustainable
	Livelihoods (Ethiopia)
MFI	microfinance institution
NAADS	National Agricultural Advisory Services (Uganda)
NBER	National Bureau of Economic Research
NBSC	National Bureau of Statistics of China
NEN	Near East, North Africa, Europe and Central Asia
NENA	Near East and North Africa (subregion of NEN)
NERICA	New Rice for Africa
ODI	Overseas Development Institute
OECD	Organisation for Economic Co-operation and Development
OPM	Oxford Policy Management
PPP	purchasing power parity
R&D	research and development

RCT	randomized controlled trial
REDD+	Reduced Emissions from Forest Degradation and Deforestation
RNFE	rural non-farm employment
RODW	rest of the developing world
ROSCAs	rotating savings and credit associations
RT	rural transformation
SATIIM	Sarstoon Temash Institute for Indigenous Management (Belize)
SDG	sustainable development goal
SMEs	small and medium-sized enterprises
SSA	sub-Saharan Africa
ST	structural transformation
TFP	total factor productivity
UNCTAD	United Nations Conference on Trade and Development
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNRISD	United Nations Research Institute for Social Development
WCA	West and Central Africa
WDI	World Development Indicators
WHO	World Health Organization
WFP	World Food Programme
WUWM	World Union of Wholesale Markets

### Foreword

In the years since IFAD's Rural Poverty Report was published in 2011, the world has undergone rapid changes that are altering the development landscape. The global economy has experienced major structural shifts, with the emergence of stronger markets in middle-income economies, rising urbanization and demand for food, and several low-income developing countries registering the world's fastest growth rates. At the same time, climate change, erratic energy prices and complex and protracted conflicts have delivered a variety of shocks. Several regions have seen large-scale population displacements within and across national borders, and the social and political upheavals linked to unemployment are deepening. Despite impressive reductions in poverty and undernourishment globally, that progress has been uneven, and economic inequality across the developed and developing world alike is increasing.

Against this backdrop, world leaders have agreed on an ambitious development agenda that seeks to end poverty and hunger by 2030. Agenda 2030 has explicitly recognized the central role that rural development plays. Smallholders still dominate agricultural systems in developing countries and they are still key to food security. However, they also face long-standing barriers to accessing resources, technology, inputs, finance, knowledge and markets. As a result, smallholders lack resilience and the capacity to take advantage of emerging opportunities.

Therefore, while global economic changes offer the possibility of accessing new markets, expanded entrepreneurship and new kinds of livelihoods in the agrifood sector and beyond, at the level of individual rural women and men the risks and barriers are often still too great. Hence a transformation of rural areas is needed to enable rural people to capitalize on changes in the world around them, rather than be further marginalized by them.

A distinguishing feature of this report is that it examines rural development in the context of the transformation of rural areas and the wider economy – i.e. rural transformation and structural transformation. By embedding rural development within rural transformation, and that within structural transformation, developments in urban and rural areas can be viewed together and seen to be interconnected.

This report defines inclusive rural transformation as a process in which rising agricultural productivity, increasing marketable surpluses, expanded off-farm employment opportunities, better access to services and infrastructure, and capacity to influence policy all lead to improved rural livelihoods and inclusive growth. Inclusive rural transformation is thus a critical component of inclusive growth as a whole, and of sustainable development in all its dimensions – social, economic and environmental. It is both a vision and a lens through which to interpret historical processes in rural areas across the world.

Thus, this report is about transformation, but not just any transformation; it is about transformation that is inclusive and that brings rural people into the economic mainstream and the benefits of the twenty-first century economy. This report is also about choices, starting with the programmatic and policy choices of governments and local, regional and global development practitioners. A key question that they must ask is, what actions can they take to stimulate and support inclusive rural transformation?

Based on extensive research, this report attempts to answer this and other questions. Among the important premises of the report is that there is no natural incentive mechanism in economic transformation processes that protects the interests of marginalized groups. Inclusive rural transformation is, therefore, far from automatic. Rather, it is a choice. It does not just happen; *it must be made to happen*.

Rural transformation can lead to numerous positive developments in the lives of people and their nations, such as growth in life expectancy, improvements in education, health, water and sanitation, increased rural and urban employment opportunities, and empowerment of women and minority and disadvantaged groups. But a range of political, social, economic and environmental imbalances and inequities may occur as well. Economic transformation may be inevitable, as the world changes, but inclusiveness is a *choice*.

Countries need to take specific actions and make specific policy choices and investments - to enable rural people to seize the opportunities and deal with the threats that come with transformation processes. IFAD's experience over nearly four decades has shown that when rural people can organize themselves and have reliable access to land and other natural resources, technologies, finance and markets, both their livelihoods and their communities can flourish. Inclusive rural transformation can be promoted through people-centred development in which "beneficiaries" become agents of their own development, participating in decision-making, implementation and the process of rural transformation itself.

Action is needed to address the threats facing smallholder farmers, rural small and medium enterprises, women, youth and indigenous peoples. This report seeks to provide a solid foundation upon which those actions can be based. While rural development strategies need to be context specific, and include policy reforms, institutional innovations and investments, clearly they need to appropriately value the role of agriculture and the rural economy, and the great potential of rural people themselves as agents of inclusive transformation.

KANAYO F. NWANZE President of IFAD



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## Development context and main messages

Since IFAD's Rural Poverty Report was published in 2011, the global economy has continued to experience persistent and major structural shifts, with "emerging market" middle-income economies and several low-income developing countries registering the world's fastest - albeit slowing - growth rates, impacting commodity and financial markets in unprecedented ways. In this period, extreme weather events have increased in frequency and severity, and complex and protracted conflicts in several regions have created fragile situations resulting in large-scale population displacement within and across borders. Social and political challenges linked to unemployment, particularly of youth, are deepening. In response to the burgeoning and diversifying demand for food, global and country-level value chains for major staples and high-value products are consolidating rapidly.

These newer dynamics are mixing with prevailing ones to present novel challenges and opportunities for rural people and rural areas across the globe. For instance, urbanization, demographic shifts, the growing integration of food supply chains and food systems, and rising domestic and foreign investment in the agrifood sector all combine to generate new risks in agrifood markets for rural women and men operating in agriculture and the broader food systems. But they also produce new opportunities for entrepreneurship and for employment upstream and downstream in the agrifood value chains - in processing, transport, input provision, and developing and servicing technology, infrastructure and equipment. Rapid diffusion of digital devices and greater internet access mean that information and knowledge about agrifood systems can be generated and shared with ever-increasing timeliness, speed and accuracy, but not necessarily equally. Climate change is leading to increased concern about the sustainability of established agricultural practices, but also

creating new opportunities for rural households and communities to generate new benefit streams through improved management of natural resources.

Recognizing that smallholder farmers dominate rural landscapes across the developing world, the 2030 Sustainable Development Agenda commits to providing smallholders with more and higher quality means to foster this transformation. Smallholders face long-standing barriers to accessing productive resources, technology, inputs, finance, knowledge and markets. Wide spatial dispersion of production, high transport costs and seasonality result in high market price risk and aggravate unequal financial bargaining power. Subsistence-oriented production and limited market access, therefore, persist. At the same time pressures on the rural natural resource base are growing, linked to population growth, unsustainable agricultural practices, urbanization, mining, land-use conversion and deforestation. Under these strains, the agricultural systems on which most rural dwellers depend face major challenges to meet the burgeoning demand for food, feed and fibre, thus compromising food security in several places.

In order to meet these emerging challenges and opportunities – and improve prospects for the achievement of several Sustainable Development Goals – rural areas must transform rapidly and inclusively. Within rural areas, households have widely differing capacities to generate income from increasingly important non-farm sources, implying sharp differences in their abilities to participate in the mainstream of rural economies.

IFAD's 2016 Rural Development Report aims to shed light on this evolving rural landscape in order to inform the programmatic and policy choices of local, regional and global development practitioners, including IFAD. The Report examines rural development through the prism of the transformation of rural areas and the wider economy, yielding the following five main messages: 1. Rural transformation does not happen in isolation, but as part of a broader process of structural transformation shaped by the interlinkages between agriculture, the rural non-farm economy, manufacturing and services. Rural transformation is essential for structural transformation.

Rural transformation occurs within a broader process of economy-wide structural transformation that countries experience. It involves rising agricultural productivity, commercialization and diversification of production patterns and livelihoods within the agricultural sector and the rural non-farm sector. Productivity growth in agriculture and the rural non-farm economy provides the food supply to meet the demands of urban growth and transformation, and releases labour to other sectors, such as manufacturing and services. The outcomes of agriculture and the rural non-farm economy reflect and determine, therefore, the pathway of structural transformation. Simultaneously, rural transformation is shaped by the growth and diversification of the demand for food and raw materials from these sectors. These interacting forces define pathways and levels of rural transformation, which, in turn, shape opportunities for, and constraints to, rural development and its sustainability and inclusiveness.

#### 2. While rural transformation may generate both positive and negative effects for rural people, inclusive rural transformation must be made to happen; it will not happen automatically.

Rural transformation alters the structure of landholdings, the technologies in use, the capabilities of rural women and men, and the distribution and dynamics of the population and labour force. Multiple benefits are generated, extending well beyond rural areas. The forces underpinning rural transformation may create conditions for many favourable social impacts – growth in life expectancy, improvements in education, nutrition, health, water and sanitation, and empowerment of women. But myriad political, social, economic, and environmental imbalances and inequities may arise as well. Traditional identities, social cohesion and the potential for collective action may be threatened, negatively affecting the prospects for inclusion. Inclusive rural transformation is, therefore, far from spontaneous. It does not just happen; *it must be made to happen*.

Inclusiveness of transformation is an empirical issue, highly specific to location, identities, and the prevalent social and economic conditions. Governments, development agencies and other stakeholders seeking to design and implement rural development strategies that promote inclusive rural transformation need answers to three questions: What are the different pathways (or patterns) of structural and rural transformation across the developing world? What are the consequences of transformation for rural poverty reduction and inclusion? What can be done to stimulate and support inclusive rural transformation?

#### 3. Rapid rural or structural transformation, while necessary, do not automatically lead to a rapid reduction in rural poverty.

In general, countries that achieved higher levels of structural transformation are also more rurally transformed or experience faster rural transformation and poverty reduction. Rapid reduction in rural poverty in the absence of rapid structural and/or rural transformation is rare. In a sample of 60 countries, only one country has managed to reduce poverty in the absence of rapid transformation. However, several fast-transforming countries have not managed to transform in an inclusive fashion - rural poverty remains despite a transforming economy. Structural and rural transformations may be necessary for rural inclusion, but they are not sufficient. The role of rural transformation is particularly powerful. Evidence suggests that where structural transformation proceeds slowly, but policies and investments lead to fast rural transformation, relatively rapid rural inclusion is possible.

In order to achieve and sustain rural inclusion, not only must countries transform quickly, they must also take specific policy and programmatic actions to enable and empower rural people to seize the opportunities and address the threats and challenges associated with the transformation processes. Where rural people are able to organize themselves to achieve reliable access to land and other natural resources, productive inputs and technologies, finance and market outlets, and participate in decision-making, they become central actors and beneficiaries in rural transformation processes. As there is no naturally dynamic incentive mechanism in structural or rural transformation processes that protects the interests of marginalized groups, threats facing smallholder farmers, rural agrifood small and medium enterprises (SMEs), women, youth and indigenous peoples need to be identified and properly addressed.

4. Inclusive rural transformation hinges on agriculture, which retains its importance as the transformation unfolds, but requires that distinct agricultural policies be adopted at different stages of rural transformation. Because of strong interactions between structural transformation and the agrifood system, the national and subnational political economy of inclusive rural transformation hinges on the role and importance assigned to agriculture as the transformation unfolds.

At relatively low levels of structural transformation, *"agriculture-boosting"* approaches to rural development are required. These aim to spur rapid and broad-based agricultural productivity growth across the board. Leaders must find ways to focus sharply and steadily on agriculture despite myriad value-destroying constraints that render the aim of spurring broad-based productivity growth extraordinarily difficult to achieve.

As structural transformation reaches higher, but still moderate levels, *"agriculturemodernizing"* approaches are required. These should be designed to facilitate the transition to greater specialization and diversification in production and trade for increasing numbers of smallholder farmers and rural SMEs. Leaders must build and sustain political momentum for expanding and deepening the agriculture-based rural economy and its diversification within and beyond agriculture. At high levels of structural transformation, "agriculture-sustaining" approaches are required for an agricultural sector that, despite its relatively small size and shrinking shares in output and employment, has a long and potent reach into several other parts of the economy and society. As leaders respond to legitimate demands for the generation of increasingly vital public goods from agrifood systems, they must also give voice and representation to rural groups still directly dependent on agriculture and agricultural value chains for their livelihoods, many of which remain meagre and vulnerable.

5. Rural development strategies for inclusive rural transformation are context-specific, but have a similar direction, with high-priority policy reforms, institutional innovations and investments dependent on the speed and inclusiveness of the transformation pathways to date.

There are many ways in which countries, and the regions within them, can transform and be inclusive. The analysis suggests four categories of transformation and inclusion into which most countries and regions fall, each with distinct objectives for rural development strategies to promote inclusive rural transformation:

(1) Relatively fast transformers/fast includers should aim to **adapt** to changing conditions so as to sustain progress and address issues inherent in rapid growth.

(2) Relatively fast transformers/slow includers should aim to **amplify** the benefits of growth by expanding the reach of benefits and opportunities to rural populations and minority groups while sustaining the speed of transformation.

(3) Relatively slow transformers/fast includers should aim to **accelerate** the pace of transformation without sacrificing its inclusiveness.

(4) Relatively slow transformers/ slow includers should aim to **amplify** the benefits of growth **and accelerate** the pace of transformation, seeking to both expand the reach and speed up the generation of benefits. Pressure points, policy reforms, institutional innovations and investments vary across categories. Thus, fostering inclusive rural transformation is about making the right strategic choices in different contexts - and this is part art, part science. The art lies in generating and sustaining political momentum for prioritizing agriculture, rural areas and evolving agrifood systems as structural transformation unfolds, deepening and expanding the socio-economic mainstream. The science lies in designing and implementing policies, institutions and investments that draw ever-increasing numbers of rural people into that mainstream. Neither is straightforward. Problems of performance and equity within agriculture, rural areas and agrifood systems are deep, recurring and widespread.

The core strategic choices revolve around ensuring that the poor and marginalized are drawn into the policies, institutions and investments that can ameliorate the distributional consequences of rapid transformation. The complexity and continuity of the strategic challenges are as potent as the context-specific and pathway-determined strategic opportunities. IFAD and its country partners have long recognized the importance of considering rural people as part of the solution, and must continue to do so, focusing on actions that facilitate their inclusion during the different stages of structural and rural transformation. The link between these findings and implications to the global rural development agenda and, more broadly, to the 2030 Agenda for Sustainable Development is clear, powerful and affirmative. Hundreds of millions of rural people will be key actors in developing sustainable development solutions.

This Report focuses on inclusive rural transformation as a central element of the global efforts to eliminate poverty and hunger, and build inclusive and sustainable societies for all. The policy and programme implications in various regions and thematic areas of intervention are based on both rigorous analysis and IFAD's 40 years of experience investing in rural people and enabling inclusive and sustainable transformation of rural areas.

## Overview and synthesis



### Rural development for growth and poverty reduction

Recent progress against poverty has been steady across the globe (figure A). But in most regions, poverty rates in rural areas still stand well above those in urban areas. These trends reflect the continuing challenges facing rural areas linked to the social, economic and political marginalization of rural people. Small family farms dominate rural landscapes across the developing world, accounting for up to 80 per cent of food produced in Asia and sub-Saharan Africa, while supporting livelihoods of up to 2.5 billion people (IFAD 2015). Yet these farmers face long-standing barriers to accessing technology, finance, knowledge and markets. At the same time, pressures on the rural natural resource base are growing, linked to

population growth, unsustainable agricultural practices, urbanization, mining, land-use conversion and deforestation. Under these strains, the agricultural systems on which most rural dwellers depend face major challenges to meet the burgeoning demand for food, feed and fibre (IFAD 2015). Rural households have widely differing capacities to generate income from increasingly important non-farm sources, implying sharp differences in their abilities to participate in the mainstream of rural economies (Haggblade et al. 2010).

Not surprisingly, when viewed as successful in overcoming these myriad challenges in rural areas, rural development is one of the most reliable and potent forces for poverty reduction and broad-based social and economic development. The evidence is strong and

#### FIGURE A Globally, extreme poverty has been significantly reduced but rural areas still lag behind

Trends in rural and urban extreme poverty by region, 1999-2011



Notes: APR = Asia and the Pacific; LAC = Latin America and the Caribbean; ESA = East and Southern Africa; WCA = West and Central Africa; NEN = Near East, North Africa, Europe and Central Asia. Source: IFAD, based on World Bank (2015c).

clear that sustained investment to enhance productivity in agriculture and the broader rural economy has a large impact on both growth and poverty reduction (Fan 2008; Fan et al. 1999, 2002). The impact pathways are both direct – through increased incomes and enhanced food and nutrition security – and indirect – through improved education, health care and other important services.

A distinguishing feature of this report is that it examines rural development in the context of the transformation of rural areas and the wider economy - rural transformation and structural transformation (figure B). By embedding rural development within rural transformation, and that within structural transformation, developments in urban and rural areas can be viewed together and be seen to be interconnected. Productivity growth in agriculture provides the food supply for urban growth and transformation, and releases labour to other sectors, such as manufacturing and services; simultaneously, rural transformation is shaped by the growth and diversification of the demand for food and raw materials from the urban economy. From the point of view of rural areas, therefore, the report takes account of both supply and demand for goods, labour, capital and technology. At issue are the implications for rural development and rural transformation of deep and rapid demand-side changes in global and national factor markets and agrifood value chains. Pathways and levels of structural and rural transformation are shown to shape both opportunities and constraints to rural development and its inclusiveness.

The economic options and supportive policies for rural development that promote inclusive rural transformation vary considerably. Simplistic narratives are inadequate to explain observed patterns of development. Countries and regions within countries have many ways to transform themselves, and a given structural trend has many variations in how it translates into social development and inclusion. But paramount is the need to expand access for rural people to the range of new opportunities available, and to protect them from threats to such enhanced access.

### Rural areas in a challenging global context

Five years ago, when IFAD published the second *Rural Poverty Report* with the theme New Realities, New Challenges: New Opportunities for Tomorrow's Generation, the world was still in the early stages of recovery from the devastating effects of the "perfect storm" of high food and fuel prices and of the financial market instability that had pummelled economies across the globe and swelled the global undernourished population by 100 million (IFAD 2011). But as countries rebounded – and many did so quite quickly – a new reality set in.

Advanced industrial economies recovered, but slowly and incompletely. Growth and employment rates in most of these countries have yet to return to pre-crisis levels. Leading the global recovery were the so-called "emerging market" middle-income countries, with many low-income countries also showing signs of having found new sources of vibrant growth. In 2015, all of the world's 20 fastest-growing countries were middle- and low-income countries in Asia, sub-Saharan Africa and Latin America. Sub-Saharan Africa alone accounted for five of the top 10 (World Bank 2015a). While many of these fast-growing countries have extremely low levels of per capita gross domestic product (GDP), derive the majority of their export value from minerals, have sparse physical infrastructure and show deep human capacity gaps, the conclusion is indisputable: the drivers of growth and change in the global economy of 2016 are fundamentally different from those of 2011.

New sources of instability have also emerged. As this document goes to print, growth in China and other emerging market economies, while still rapid compared with that in most countries, has slowed considerably, depressing commodity markets and sending unexpectedly deep and prolonged shock waves through financial markets worldwide. Other sources of instability are linked to complex and protracted conflicts in several regions, resulting in largescale population displacement within and across borders. The number of people forcibly displaced at the end of 2014 had risen to



FIGURE B Agricultural development, rural development and rural transformation are intertwined with other large processes

#### AGRICULTURAL DEVELOPMENT

Agricultural development is about improving the quality of life and economic well-being of farmers, herders and agricultural workers. It focuses on the exploitation of land-intensive natural resources such as agriculture, livestock, forestry and fisheries. It involves improving agricultural services, agricultural incentives and technologies, and the resources used in agriculture, such as land, irrigation, human capital and rural infrastructure.

#### RURAL DEVELOPMENT

Rural development is the process of improving the opportunities and well-being of rural people. It is a process of change in the characteristics of rural societies. In addition to agricultural development, it involves human development and social and environment objectives, as opposed to just economic ones. Therefore, rural development encompasses health, education and other social services. It also uses a multisector approach for promoting agriculture, extracting minerals, tourism, recreation and niche manufacturing.

#### RURAL TRANSFORMATION

Rural transformation (RT) involves rising agricultural productivity, increasing commercialization and marketable surpluses, and diversification of production patterns and livelihoods. It also involves expanded decent off-farm employment and entrepreneurial opportunities, better rural coverage and access to services and infrastructure, and greater access to, and capacity to influence, relevant policy processes. All of this leads to broad-based rural (and wider) growth, and to better managed, more sustainable rural landscapes.

#### INCLUSIVE RURAL TRANSFORMATION

With inclusive rural transformation everyone, without exception, can exercise their economic, social and political rights, develop their abilities, and take advantage of the opportunities available in their environment. This leads to a marked improvement in the economic position and quality of life for small farmers, land poor and landless workers, women and youth, marginalized ethnic and racial groups, and victims of disaster and conflict.

#### STRUCTURAL TRANSFORMATION

Structural transformation (ST) is both a cause and an effect of economic growth. It involves rising productivities in agriculture and the urban economy, a change in the composition of the economy from a preponderance of agriculture to industry and services, rising involvement in international trade, growing rural-urban migration and urbanization, and the realization of a demographic transition from high to low birth rates. It leads to profound political, cultural, social and environmental stresses, which must be managed for long-term sustainability.

Source: Authors.

59.5 million from 51.2 million in 2013 and 37.5 million in 2004, with 13.9 million displaced in 2014 alone (UNHCR 2015).

Some long-standing challenges are deepening, with unemployment, exceptionally so in both the developed and developing world, but particularly in countries with continued rapid population growth. Conditions of employment are changing fast, strongly affecting the nature and quality of associated livelihoods in rural and urban areas (ILO 2015). Urbanization is proceeding everywhere, at different speeds, but often with problematic effects on social inclusion and on the environmental footprint of urban areas.

Linked to population growth, urbanization and dietary changes, global demand for food is expected to increase by over 60 per cent by 2050, requiring rapid agricultural productivity growth and putting more stress on natural resources. Global and national value chains for major staples and for high-value products are consolidating rapidly, with far-reaching implications for access and participation of smallholder farmers and rural SMEs (Reardon and Timmer 2007; Reardon et al. 2009). The increasing complexity of food systems points to greater competition for food items from non-food uses such as biofuels, possibly leading to a tightening of demand and higher food prices over the long term. Volume and quality standards and requirements in agrifood value chains are growing in importance and coverage. Finally, climate change is generating new challenges for all sectors, but especially in weather-dependent agriculture (IPCC 2014).

Several of these challenges also represent new opportunities for rural people and the rural sector. In particular, demographic growth, urbanization, the growing integration of food supply chains and food systems, and rising domestic and foreign investment in the agrifood sector, all combine to generate new potential opportunities for rural women and men operating in agriculture. They also produce new opportunities for entrepreneurship and for employment upstream and downstream in the agrifood sector – in processing, transportation, input provision and in the development and servicing of technology, infrastructure and equipment. Increasing concern with environmental sustainability with climate change also creates new opportunities for households and communities to have stable access to or control of natural resources.

Rapid diffusion of digital devices and greater Internet access have led to an explosion of data and information around the world, creating new opportunities and challenges. Knowledge can be generated and shared with ever-increasing speed and accuracy, and the range of possible partnerships is surging. But while digital technologies are expanding global knowledge, they are not necessarily democratizing it. Many key stakeholders lack information and a voice at national and international levels, unable to access the technical capacity they require to generate the evidence they need to advocate for and help to drive through necessary policy reforms and institutional innovations. Knowledge and its ensuing benefits are disproportionately accruing to the wealthier, the better educated and the well-connected (World Bank 2016).

Concomitant with these changes is an increasingly complex landscape for development finance. As captured in the Addis Ababa Action Agenda, the role of domestic public resources in development investment is paramount. Countries at different levels of economic development have varying capacities for mobilizing and managing these resources. But all face complex challenges in generating adequate investment in the agrifood sector, in ensuring the quality of that investment and its effective targeting, and in building public sector capacity to deliver priority services. At the same time, the flow of "traditional" official development assistance is likely to decrease in relative terms, and even if nontraditional donors increase their spending, wide gaps will remain. Although agreement is growing among donors and partner countries on the importance of the quality of official development assistance and on shared principles for aid and development effectiveness, there is still insufficient international convergence on many issues surrounding climate change and

climate finance, trade, international finance, coordination for disaster risk reduction and conflict mitigation (IFAD 2015).

In short, the nature and number of challenges and opportunities facing the world of 2016 – rural areas in particular – are very different from those of 2011.

It remains true that sustainable development cannot exist without inclusive rural development. With 75 per cent of the world's hungry poor living in rural areas, cutting global hunger still means cutting rural hunger, as well as equipping smallholder farmers and other rural dwellers with the resources to play their roles in feeding the urban poor and hungry. Cutting global hunger sustainably and permanently requires empowering today's rural poor by including them in the development process to unlock their full social and economic potential.

Given that agricultural and other rural livelihoods are still responsible for over 30 per cent of employment globally and over 38 per cent in low- and middle-income countries, that the agrifood sector is a major source of jobs and that the vast majority of rural jobs are in the informal sector, fulfilling the "decent employment" agenda is impossible without improving rural livelihoods.

And with the absolute number of rural youth increasing in most regions of the world, the spectre of youth unemployment still has major rural dimensions, even if its most visible aspects appear urban (Van der Geest 2010; World Bank 2015a). This same phenomenon represents a potential major resource for rejuvenating agriculture and the agrifood sector, because youth are the more likely to drive the shift towards more environmentally sustainable, more climate-smart and more entrepreneurial agriculture.

For policymakers, practitioners and analysts concerned with sustainable development, a focus on inclusive rural transformation is therefore not only unavoidable, it is wise and strategic.

### Inclusive rural transformation under structural transformation

As articulated and championed by IFAD, the true prize for rural development strategies and policies in the coming years will be rural transformation, specifically, inclusive rural transformation that contributes to sustainable development in all its dimensions (IFAD 2015). In line with other IFAD publications, this report defines rural transformation as a process that involves rising agricultural productivity, increasing commercialization and marketable surpluses, diversification of production patterns and livelihoods, and expanded decent off-farm employment and entrepreneurial opportunities. It also involves better rural coverage and access to services and infrastructure, and greater access to, and capacity to influence, relevant policy processes. All of this leads to broad-based rural (and wider) growth and to better managed, more sustainable rural landscapes.

Rural transformation alters the structure of landholdings, the technologies in use, the capabilities of rural women and men, and the distribution and dynamics of the population and labour force, potentially generating multiple benefits that go well beyond rural areas. Rural transformation thus entails a sustainable and comprehensive level of change in rural areas that is social as well as economic and environmental.

The literature usually describes social inclusion as a complex process with social, economic and civic dimensions (World Bank 2013; UNDP 2015). There is still no single indicator that can fully capture inclusion in development.

This report is concerned with the inclusion of rural people under unfolding rural transformation. Under inclusive rural transformation, everyone, without exception, can exercise their economic, social and political rights, develop their abilities, and take advantage of the opportunities available in their environment. This leads to a marked improvement in the economic position and quality of life for small farmers, land poor and landless workers, women and youth, marginalized ethnic and racial groups, and victims of disaster and conflict. Inclusive rural transformation is both a vision and a lens through which to interpret historical processes in rural areas across the world. Agricultural development, rural development and rural transformation (inclusive or otherwise) are intertwined with other larger processes (see figure B).

As noted, the report examines rural transformation through the prism of broader structural transformation – a powerful process of change that has affected economies and societies worldwide, and whose main elements are also likely to shape the future trajectory of rural and urban economies. Structural transformation entails four interrelated processes: a declining share of agriculture in GDP and employment; rural-urban migration that stimulates the process of urbanization; the rise of a modern industrial and service economy; and a demographic transition from high to low rates of births and deaths (Johnston and Kilby 1975; Timmer 2009).

Under structural transformation, rising agricultural productivity yields food, labour and savings to the processes of urbanization and industrialization. A dynamic agricultural sector boosts labour productivity in the rural economy and cuts poverty. While structural transformation also leads to a decline in the relative importance of agriculture to the overall economy, the rural non-farm economy, agribusiness and agroindustry grow in importance. Spurred by the modernization of primary agriculture, the migration of rural workers to urban jobs and greater participation in non-farm occupations in rural areas, industrial and service sectors grow quickly (Timmer 2009). As detailed later in this chapter, this stylized model plays out in different ways in different contexts. Given the new challenges and opportunities outlined above, it is likely to show further variation in the future.

Figure C illustrates a core result of structural transformation in 86 countries with complete

#### FIGURE C Agricultural GDP rises as labour is reallocated

Share of agriculture in GDP and employment by GDP per capita, all regions (most recent year with data)



Source: IFAD, based on World Bank (2015c).

and reliable data. At low per capita incomes, the share of workers engaged in agriculture is around 75 per cent, while at high per capita incomes, it is below 10 per cent. Because labour productivity in agriculture is typically lower than in other sectors, the share of agriculture in GDP is always lower than the labour share, and declining as well. The difference between the two shares (the light blue dots) declines with rising per capita income until it is almost eliminated. Agricultural labour turns to more productive sectors in both urban and rural areas. Driven by changes in consumption patterns towards non-agricultural goods and services, these changes are inexorable. However, agricultural output normally continues to grow. This is true not only for today's agrarian economies, but also for countries at advanced stages of structural and rural transformation, where the agrifood industry grows in importance (figure D).

Globally, between 1980 and 2010, the share of agriculture in GDP declined by a little under 10 per cent, while the share of services increased by 10 per cent (figure E). But agriculture retained its importance in some regions as evidenced by the higher share of agriculture than industry in sub-Saharan Africa (SSA, combining ESA and WCA). The share of industry stayed virtually constant overall, except in Asia and the Pacific (APR), the only region where that share has increased since the 1980s.

In most Organisation for Economic Co-operation and Development (OECD) countries, even as structural transformation and fast growth reduced poverty and hunger in the aggregate and for most groups, it also led to the concentration of productive assets in production, processing and distribution. High labour productivity was achieved at the cost of severe reduction in rural employment. The remaining agricultural labour force is, for instance, only 3 per cent of the active population in France and 1.5 per cent in Germany. This trend, empirically described by Timmer (2009, 2014), includes large spatial disequilibria, environmental degradation, elimination of small-scale farms via increased scales of operation, and growing use of chemical inputs in production. Groups of people or regions are often left behind. Patterns

of transformation and the degree to which they are inclusive hinge on historical legacies, external factors such as natural resource discoveries and wars, and on policies and investments. The social and environmental impacts of structural transformation are frequently a mixed blessing, often creating problems that must then be managed.

Structural transformation is thus a cause and effect of economic growth. It leads to profound political, cultural, social and environmental upheavals that present major challenges and potent opportunities for policy and investment to promote long-term growth and sustainable development. Most important for this report, structural transformation accommodates inclusive rural transformation only if these issues are handled by policymakers in ways that promote improved capabilities and opportunities in the rural sector and for rural people.

Rural poverty generally declines as structural transformation proceeds, based on the average annual change in extreme poverty reduction (a proxy for inclusion) and average annual change in the share of non-agricultural activity

### FIGURE D Falling shares of agriculture in GDP are accompanied by increases in agro-industrial output per capita, highlighting the importance of the rural economy

Structural transformation and agrifood industry trends, all regions, 1991/2005-2006/2010



Source: IFAD, based on World Bank (2015c).

### FIGURE E Declining shares of agriculture in GDP correspond to the rise in services and relative stagnation in industry



Sectoral structure of the economy by region, 1980s-2010s

Notes: APR = Asia and the Pacific; LAC = Latin America and the Caribbean; ESA = East and Southern Africa; WCA = West and Central Africa; NEN = Near East, North Africa, Europe and Central Asia. Source: IFAD, based on World Bank (2015c).

### FIGURE F The pace of structural transformation matches extreme rural poverty reduction



Change in extreme rural poverty headcount, circa 1990s-circa 2010s

Notes: APR = Asia and the Pacific; LAC = Latin America and the Caribbean; ESA = East and Southern Africa; WCA = West and Central Africa; NEN = Near East, North Africa, Europe and Central Asia. Source: IFAD, based on World Bank (2015c). in GDP (a proxy for structural transformation) (figure F). But the depth and pace of the decline vary sharply across regions. Underneath the extraordinary aggregate achievements of the Millennium Development Goals (MDGs) era, summarized in figure A, is a decidedly uneven picture of performance among regions on poverty reduction. The task of fostering inclusive and sustainable rural and overall development is far from done.

In the fastest-transforming economies, structural and rural transformation has been associated with rapid economic growth, leading to sharp falls in overall and rural poverty, and generating better and more diversified livelihoods for the rural poor. But as will be shown in the full report, in many countries, growth, transformation and poverty reduction are lagging and many people are being left behind. At issue in this report are the pace, nature and outcomes of rural transformations, and how they can be made more inclusive.

Agriculture and the rural non-farm economy play decisive roles in the pace and quality (that is, inclusiveness) of rural transformation, as does the capacity of manufacturing to productively and quickly absorb the labour released by agriculture. The next two subsections address these dimensions, drawing implications for inclusiveness.

### The role of agriculture and the rural non-farm economy

The historical record is clear that no country has been able to sustain a rapid transition out of poverty without raising agricultural productivity. Under structural and rural transformation, the relative importance of primary agriculture to the overall economy declines. But that decline should not be interpreted as a diminution in the importance of the agricultural sector in economic development. Even in countries at advanced stages of structural and rural transformation, agriculture plays an important role through agribusiness and agro-industry, even if that role changes as structural transformation progresses.

As noted in the World Development Report 2008: Agriculture for Development, agriculture and its associated industries are essential to growth and to reducing mass poverty and food insecurity. Using agriculture as the basis for

#### BOX A From boosting agricultural productivity to reducing rural poverty in China

Fast growth in agricultural productivity, output and income contributes first to a rapid reduction in rural poverty, especially where the growing demand for food and fibres in urban areas and export markets prevents the extra supply from depressing prices. But fast agricultural growth also enables the rural sector to provide three essential ingredients for urban growth:

- The food for a growing population with higher incomes.
- The labour needed for the expansion of the industrial and service sectors.
- Where rural banking has progressed, the savings to help finance the more capital-intensive growth in industry than in agriculture.

These are the three ways that agricultural productivity growth drives structural transformation.

The ties of agricultural productivity to the contribution to urban and non-farm labour are especially close. The contribution to urban labour was very large in China, which had the highest average annual growth of agricultural labour productivity (3.5 per cent), and the highest annual increase in the urban population share (1.2 per cent). In contrast, low agricultural productivity growth in the Philippines (1.42 per cent) and Pakistan (1.23 per cent) was associated with the smallest annual change in the share of urban population (0.25 per cent in the Philippines and 0.35 per cent in Pakistan).

Productivity growth in agriculture has also enabled the transition of labour from the agricultural sector to the rural non-farm sector. In China, nearly all village labour worked in farming in the late 1970s. Now, however, more than 70 per cent of the rural labour force has off-farm employment in either rural or urban areas (NBSC, 2015). So, farming is predominantly part-time.

Savings deposits of agricultural households rose from CNY 22.5 billion (2000 prices) in 1978 to CNY 1,888.4 billion in 2000, or about 19 per cent of GDP or 126 per cent of agricultural GDP in 2000. During the same period, capital flows to farmers through lending by the financial system also increased steadily. But throughout the period, the banking system returned only a fraction of the deposits back to farmers. Net outflows from rural areas reached CNY 216.6 billion in 2000. Indeed, from 1978 to 2000, bankers moved more than CNY 1.7 trillion from farmers to industry.

Source: Huang et al. (2006)

economic growth in agriculture-based countries requires a productivity revolution in smallholder farming, which typically represents the bulk of the agricultural sector in these countries (box A). In transforming countries (many countries in sub-Saharan Africa, most of South and East Asia, the Middle East and North Africa), fast-rising urban incomes alongside continuing extreme rural poverty are major sources of social and political tension. Addressing income disparities in this category requires a comprehensive approach that pursues multiple pathways out of poverty shifting to high-value agriculture, decentralizing non-farm economic activity to rural areas and providing assistance to those seeking to move people out of agriculture. In urbanized countries (most of Latin America, and much of Europe and Central Asia), agriculture can help to reduce the remaining rural poverty if smallholders become direct suppliers to modern food markets, if good jobs are created in agriculture and agro-industry, and if markets for environmental services are introduced (World Bank 2008).

This categorization and depiction of the context-specific, but crucial, role of agriculture is affirmed here. Also recognized is the empirical regularity that, as structural and rural transformation unfolds, rural non-farm employment – which includes all economic activities in rural areas except agriculture, livestock, fishing and hunting (Lanjouw and Lanjouw 2001) – becomes increasingly important (Johnston and Kilby 1975; Haggblade et al. 2007).

Rural non-farm activities are highly diverse. They span forestry, natural resource extraction, food and non-food manufacturing, tourism and services, including retail trade. These activities involve tradable or non-tradable non-farm goods and services. Except for capital-intensive activities, such as processing sugarcane or tea, the non-farm goods and services produced are usually labour intensive and their production takes place in very small businesses, often with only one worker. Rural non-farm activities range from small-scale household and village production of simple, low-quality products that use local raw materials (such as rice milling and handloom weaving) to small, modern factories that use mechanical power, sometimes employing imported technology, and producing modern higher-quality products (such as metalworking and machinery repair shops) (Ranis and Stewart 1999). Activities in the rural non-farm sector may also include subcontracting work to farm families by urbanbased firms, non-farm activity in village and rural town enterprises, and activities that require commuting between rural residences and urban jobs (Lanjouw and Lanjouw 2001).

Throughout the developing world, incomes from rural non-farm employment have grown rapidly and in many countries account for a larger share than agricultural incomes. In the 1990s and 2000s, the share of non-farm income in total household income was 37 per cent in Africa, 47 per cent in Latin America and 51 per cent in Asia (Haggblade et al. 2007).

Access to non-farm employment opportunities by the rural poor is not guaranteed. Such access may require certain skills that the rural poor often lack (Haggblade et al. 2010; Nagler and Naude 2014). Lanjouw and Shariff (2004) show that in India access to better paying non-farm employment increases with the level of education and size of land assets held. Isgut (2004) arrives at the same conclusion for Honduras, and for India finds that the rural non-farm economy provides employment opportunities for young men with some education, but that such employment is not easily available to women. Inclusion in the rural non-farm economy thus has both gender and education dimensions.

With low levels of education and little to no land owned, the poor are likely to engage either in agricultural wage work or in unskilled, non-farm employment activities characterized by low returns, low productivity, instability and low growth potential. Evidence on the poverty impact of rural non-farm growth is therefore mixed. In some cases it may greatly improve the income of the poor, while in others it may benefit the already better off (Haggblade et al. 2007). The non-farm aspect of structural and rural transformation is therefore a potential source of both inclusion and exclusion of rural people (Nagler and Naude 2014).

#### Manufacturing and labour absorption

With urbanization, the changing manufacturing sector is the most visible aspect of structural transformation. Increased manufacturing is a goal to which most countries aspire because of the high rate of productivity it can achieve, even in countries where the other sectors lag far behind.

The rapid growth and high level of productivity of manufacturing arise because producing goods for domestic and export markets, manufacturing is subject to intense competition from other countries. With globalization, unless a country's manufacturing sector can produce as efficiently as its competitors, it will be punished in foreign markets, potentially even losing domestic markets to imports. Such prospects compel manufacturers to rise quickly to the global technology and productivity frontier. Manufacturing can therefore flourish in environments where economy-wide capabilities in terms of human capital and institutions are still very limited. The rate of convergence of industrial productivity to levels in the developed world is about 2 per cent per year, a powerful boost that benefits countries with a significant manufacturing sector (Rodrick 2012, 2013).

These advantages also apply to the modern services sector, which includes commerce, communication, transport, information technology and finance (Ghani and O'Connell 2014). Global trade in services has exploded and is now growing faster than trade in goods.

Given the rapid productivity increases in manufacturing and modern services, these two sectors are likely the most desirable destinations for rural-urban migration. Where manufacturing is labour intensive – as in China or Bangladesh – it can absorb a large number of unskilled and semi-skilled migrants, and therefore leads to a large gain in economy-wide productivity. Modern services, in contrast, such as finance, communication and information technology, are skills intensive and offer few jobs for unskilled or semi-skilled workers.

Growth of labour-intensive manufacturing over the past few decades has been concentrated in East and South-East Asia. The structural transformations of the Republic of Korea and Taiwan unfolded from the 1950s to the 1970s, by which time (along with Singapore and Hong Kong) they were called the Asian tigers. China's growth and structural transformation accelerated sharply after the fundamental economic reforms launched around 1980, to quickly surpass the Lewis turning point (1954) at which wages start to rise. Poverty rates have declined sharply in both urban and rural areas.

However, offsetting forces are at work. Over time the manufacturing sector becomes more capital and skills intensive, a trend that will continue with the automation that is progressing rapidly in industries around the world. In addition, international competition in labour-intensive manufacturing today is much higher than when the Asian countries started to industrialize. Both these forces make it much harder for latecomers to develop their industrial sectors. China and other countries may remain competitive with low-wage countries and the affected industries may not migrate. But the so-called "classic" transformation pathway - in which a country experiences rapid economic and manufacturing growth, fast expansion in urban labour demand, fast rural-urban migration, and deep reductions in poverty and hunger - may no longer be open to latecomers. They have to consider other options.

In this report, structural transformation is taken to include any movement of labour from any sector in the economy to other sectors. That entails taking a broader approach to structural transformation than just focusing on agriculture and manufacturing. Levels and movements of labour and employment are especially critical. Labour will normally move to the sectors of highest labour productivity and earnings. Where the modern manufacturing sector is growing slowly, the growing labour force will end up in informal sectors in urban and rural areas. In recent decades, however, an increasingly prominent movement of labour has occurred within rural areas, between agriculture and the rural non-farm sector, which typically has higher labour productivity and wages than agricultural production, and therefore favours poverty reduction. India has been experiencing this type of rural transformation (Binswanger 2013).

Not all movements of labour lead to productivity growth, however. In some countries (particularly in Latin America) globalization has led to the phasing out of industries that could not compete with cheaper imports. Demand for labour can also decline in high-productivity sectors. The labour released from these sectors must find employment or self-employment in lower-productivity sectors. Economy-wide labour productivity may decline as a result, pulling down wages and incomes, and making the transformation less inclusive. Rural development policies and strategies must accommodate these dynamics and their effects.

### Strategic challenges, opportunities and choices for rural development

Structural and rural transformations differ in the speeds and paths they take (Timmer 2014), both with strong implications for movements of labour and employment. Under the version of structural transformation experienced by OECD countries and some recent transformers such as China, the predominant movement of labour is to industry and modern services. Because of strong rural-urban linkages, this type of transformation is generally favourable for inclusive rural development. But when urban jobs do not grow fast enough to absorb the existing or growing labour force in industry, and when informal sectors are also not growing fast enough - as in South Africa and several other countries - workers will end up unemployed or underemployed - a highly adverse outcome of structural transformation (Timmer 2014).

The speed of structural and rural transformation depends on the overall economic rate of growth. For example, it took Europe and North America over 100 years to industrialize and change their economic structures. Before World War II, pressure on domestic employment and wages in Europe was relieved by the migration of about 60 million people from that continent to the Americas, a safety valve that is no longer open for any developing country. The pace of transformation in OECD countries became especially quick during the golden years of high economic growth rates that followed World War II and went on until the 1970s: ruralurban migration accelerated, economy-wide wages grew rapidly and poverty declined sharply.

Recent transformations have been much faster. In South-East and East Asia, transformation has been especially rapid, featuring significant manufacturing growth in countries such as China, Bangladesh and Viet Nam. With few exceptions, in the transformations of all other regions, manufacturing has played a smaller role and their transformations have not benefitted from the high-productivity growth associated with manufacturing. Employment growth has come from the services sector, the rural non-farm sector, and agriculture, and will need to continue to do so. Again, rural development policies and strategies cannot ignore these opportunities and imperatives.

Knowing the speed and nature of structural and rural transformations of a country is not enough to make policy prescriptions. These require knowledge of the country's history, the opportunities and constraints it faces, and how improved institutions could enhance its development performance. However, it is possible to provide strategic priorities for the countries that reflect their position. Countries should use both structural and rural transformations to enhance inclusive growth and rural development. Of special importance is the demand for rural goods and labour, which varies with the nature and speed of structural transformation.

The long-run answer to the technical, organizational and political challenges raised by the host of imbalances and inequities induced by structural and rural transformation therefore entails higher returns to on-farm employment alongside faster integration of farm labour into the non-farm economy, rural and urban. In the short term, policy and investment are required to draw disadvantaged groups into the mainstream while maintaining momentum for transformation (Timmer 2014).

Many favourable social impacts stem from rural transformation, including growth in life expectancy; improvements in education, health, water and sanitation; and the empowerment of women. However, they may also weaken traditional identities, social cohesion and the potential for collective action in areas such as natural resource management, which can hurt inclusion. Inclusiveness is therefore likely to be highly specific to location and prevalent social and economic conditions.

The link to the rural development agenda and more broadly to the Sustainable Development Goals (SDGs) is clear (SDG 2015). By leveraging the rural-urban nexus for development, empowering rural populations, investing in smallholder family agriculture and promoting the resilience of poor rural households, inclusive rural transformation will be both a precondition for and an outcome of achieving some of the SDGs (IFAD 2015).<sup>1</sup> Such achievements will require strategic choices that affect the pace and quality of rural transformation and broader rural development.

The core strategic choices revolve around how to ensure that the poor are drawn into both the transformation and the policies and investments designed to ameliorate the distributional consequences of rapid transformation. The complexity and continuity of the strategic challenges facing countries are as potent as the context-specific and pathwaydetermined strategic opportunities. The historical record illuminates what works and what does not in different contexts (Timmer 2014). Drawing on a wide range of evidence from across the globe, this report adds to that literature.

#### Questions and propositions

To shed light on the strategic opportunities, challenges and choices raised by inclusive rural transformation, this report addresses three questions:

1. What are the different pathways of structural and rural transformation across the developing world?

2. What are the consequences of transformation for poverty reduction and inclusion?

3. What can be done by governments, the private sector, civil society and development partners, including IFAD, to stimulate and support inclusive rural transformation?

In addressing these questions, the report's primary proposition is that historical legacies and policy and investment choices shape the pathways, speeds and results of structural and rural transformations, leading to sharply different transformation and inclusion outcomes among countries. A supplementary proposition is that rural development strategies to promote inclusive rural transformation must recognize and accommodate these outcomes, strengthening inclusion-enhancing forces and blunting exclusion-promoting ones.

### Patterns of transformation and inclusion

IFAD's regional classification scheme divides the developing world into five operational regions: Asia and the Pacific (APR); Latin America and the Caribbean (LAC); the Near East, North Africa, Europe and Central Asia (NEN); East and Southern Africa (ESA); and West and Central Africa (WCA). Looking across these regions, how have the levels and speeds of structural transformation, rural transformation and rural inclusion evolved in recent decades? Do any important similarities or differences appear across regions? Do any patterns emerge regarding relationships among structural transformation, rural transformation and rural inclusion?

To begin to answer these questions, IFAD developed a 60-country dataset covering all five regions, spanning the period 1995-2015, and comprising observations on variables that impact and reflect the pace and nature of structural transformation, rural transformation and rural inclusion. Countries were selected to ensure broad geographic coverage and diversity of socio-economic conditions and trends (table A). The next subsection employs the dataset to build understanding of levels and speeds of transformation and inclusion in the five regions. That is followed by an examination of correlations among transformation and inclusion variables, seeking to establish a basis for drawing conclusions about pathways towards inclusive rural transformation.

TABLE A Regions and countries discussed

Region	Countries	Count
Asia and the Pacific (APR)	Bangladesh, Cambodia, China, India, Indonesia, Lao People's Democratic Republic, Pakistan, Philippines, Viet Nam	9
Latin America and the Caribbean (LAC)	Brazil, Bolivia, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay	16
Near East, North Africa, Europe and Central Asia (NEN)	Armenia, Egypt, Kazakhstan, Kyrgyzstan, Morocco, Tajikistan, Turkey	7
East and Southern Africa (ESA)	Botswana, Burundi, Ethiopia, Kenya, Lesotho, Madagascar, Malawi, Mozambique, Namibia, Rwanda, South Africa, Swaziland, Tanzania, Uganda, Zambia	15
West and Central Africa (WCA)	Benin, Burkina Faso, Cameroon, Cabo Verde, Central Africa Republic, Congo, Guinea, Mali, Mauritania, Nigeria, Senegal, Sierra Leone, Togo	13
TOTAL		60

### Levels and speeds of transformation and inclusion

The selection of variables to capture the levels and speeds of structural transformation, rural transformation, and rural inclusion is driven by theory and by practical considerations.

#### Structural transformation

The *level of structural transformation* is captured by a powerful and frequently used measure – the share of non-agricultural activity in GDP. A greater value represents a higher level of structural transformation. The *speed of structural transformation* is measured as the average annual percentage change of this variable over 1990-2014. A positive value represents faster structural transformation (see the Annex for full details).

Structural transformation proceeded in all regions, but starting and ending points differed significantly (figure G). Starting levels in LAC and NEN were high and climbed further, with LAC's topping 90 per cent and NEN's well over 80 per cent by the end of the period. APR started with a lower level than ESA and WCA but surged ahead thereafter, with ESA lagging and WCA hardly changing.

Speeds also varied by region. APR's average annual rate of change of over 0.6 per cent was

six times that of WCA and almost double that of ECA. LAC's relatively slow rate of change of 0.2 per cent a year reflected its high initial level.

#### Rural transformation

The *level of rural transformation* is captured by a central driver and reflection of the transformation process as defined in this report, namely agricultural labour productivity, measured as agricultural value added per worker (in 2005 dollars).<sup>2</sup> A positive value represents more rural transformation. The *speed of rural transformation* is measured as the average annual percentage change of this variable over 1990-2014. A positive value represents faster rural transformation (see the Annex for full details).

By this measure, rural transformation surged ahead in LAC and NEN, two regions with countries that registered important gains in rural areas over the period (figure H). WCA, ESA and APR also registered steep percentage gains, but from much lower starting points than LAC and NEN. Speeds were also highest in NEN and LAC, with APR and WCA also transforming quite fast, but again, from low bases. ESA's speed was a fraction of those of other regions.  $\ensuremath{\mathsf{FIGURE}}\xspace \mathsf{G}$  Structural transformation proceeded in all regions, but starting and ending points differ significantly



(a) Levels of structural transformation by region, 1990s-2010s

<sup>(</sup>b) Speed of structural transformation by region, 1990s-2010s



Average annual change in share of non-agriculture in GDP (%) (circa 1990s - circa 2010s)

Source: IFAD, based on World Bank (2015c).

FIGURE H Rural transformation is higher in LAC and NEN, but other regions also progressed (a) Levels of rural transformation by region, 1990s-2010s



(b) Speed of rural transformation by region, 1990s-2010s



Source: IFAD, based on World Bank (2015c).

#### **Rural** inclusion

The *level of rural inclusion* is proxied by the rural poverty rate,<sup>3</sup> of which two are considered. For APR, ESA, and WCA, extreme rural poverty at US\$1.25 purchasing power parity per capita per day is used. For LAC and NEN, because rates of extreme poverty were already very low at the beginning of the 1990s and largely eradicated in recent years, rural poverty rates

based on national poverty lines are used. *Speeds of rural inclusion* are measured as average annual percentage changes of these two poverty measures over 1990-2013. Negative values represent faster rural inclusion (see the Annex for full details).

Rural poverty declined in all regions under both measures (figures I and J). APR's rate of extreme poverty reduction towered well above

FIGURE | Extreme rural poverty declined in all regions, with APR leading the way



(a) Levels of extreme rural poverty by region, 1990s-2010s

<sup>(</sup>b) Speed of extreme rural poverty reduction by region, 1990s-2010s



Average annual change in extreme rural poverty at US\$1.25 per day (%) (circa 1990s - circa 2010s)

Source: IFAD, based on World Bank (2015c).

that of other regions. LAC and NEN cut by half their rates of extreme poverty, but given their low initial levels of extreme poverty, this translated into low speeds of poverty reduction in subsequent years. For ESA and WCA, extreme poverty fell by only 10 per cent over the entire period, translating into small annual changes on average. Save for WCA, rates of poverty reduction according to national poverty lines were higher across the board, especially for NEN and LAC for the above reason.

### Transformation and inclusion: correlations and inferences, hypotheses and findings

The data summarized in figures G-J suggest that regions (and countries within them) with high levels and speeds of structural transformation appear also to have high levels and speeds of

### $\ensuremath{\mathsf{FIGURE}}\xspace \ensuremath{\mathsf{J}}\xspace$ Rural poverty reduction has also been fast across the board when measured at national lines



(a) Levels of rural poverty (at national lines) by region, 1990s-2010s

<sup>(</sup>b) Speed of rural poverty reduction (at national lines) by region, 1990s-2010s



Source: IFAD, based on World Bank (2015c).

rural transformation, but not uniformly so. Fast-transforming regions (and countries) appear to cut poverty most quickly, but, again, not uniformly so. This section explores these linkages. A complete treatment would entail multivariate regression analysis based on comprehensive data at different geographical levels, controlling for a range of factors, but lack of such data precludes such an analysis here.4 Instead, a systematic examination of correlations between levels and changes of the three variables representing structural transformation, rural transformation and rural inclusion is undertaken. While no causality can be assumed, inferences can be drawn and hypotheses put forward for further investigation.

#### Correlations and inferences

Structural transformation and rural transformation. The data reveal that the more structurally transformed countries are, the more rurally transformed, both initially and at the end of the period they are (table B). The higher the initial and final levels of structural transformation, the higher they are for rural transformation. No significant association is evident between the speed of structural transformation and either the level or speed of rural transformation.

Structural transformation and rural inclusion. The higher the initial levels of structural transformation, the lower the initial and final levels of extreme poverty (table C). As extreme poverty levels are already quite low among the more transformed regions (LAC and NEN), there is no significant correlation between the level of structural transformation and the speed of reduction of extreme poverty. However, the higher the speed of structural transformation, the faster the rural poverty reduction.

*Rural transformation and rural inclusion.* As with structural transformation, the higher the initial levels of rural transformation, the lower the initial and final levels of extreme poverty (table D). But in contrast to structural transformation, the speed of rural transformation is statistically correlated with rural poverty reduction, moving from a relatively weak correlation initially to a much stronger final one. The higher the speed of rural

transformation, the faster the rural poverty reduction.

Structural transformation, rural transformation and rural inclusion. Tables B-D suggest that both initial levels and subsequent speeds of transformation matter to levels and speeds of inclusion. These associations are examined in table E. The higher the initial and final levels of structural transformation, the stronger the correlation between rural transformation and rural poverty reduction, especially where the initial level of structural transformation is low. Where structural transformation is relatively slow, fast rural transformation coincides with fast rural poverty reduction.

Both rural transformation and rural inclusion would therefore appear to be most dynamic in the context of fast structural transformation, which, in turn, and especially where it is proceeding relatively slowly, is most vibrant alongside rapid rural transformation and rapid rural inclusion.

#### Hypotheses and findings

These correlations and inferences suggest two hypotheses:

1. No country has reduced rural poverty significantly in the absence of rapid structural and/or rural transformation. This statement should be confirmed by the data, with few exceptions.

2. Countries that have gone through a significant structural and/or rural transformation have significantly reduced rural poverty – and enhanced inclusion. This statement should be limited by the data, with some countries having transformed inclusively, but several having transformed non-inclusively.

Together, the two hypotheses suggest that structural and rural transformations are necessary but not sufficient conditions for rural inclusion. To achieve inclusion, not only must countries transform quickly, but they must also take specific steps to reduce rural poverty and enhance inclusion more broadly. There may be some exceptions to both the hypotheses, but not so many that the statements do not hold. To explore these hypotheses, a two-dimensional typology of countries was developed.
## TABLE B There is a significant positive correlation between the levels of structural transformation and the levels and changes of rural transformation

Correlations (ST and RT)	Rural transformation (RT)							
Structural transformation (ST)	Initial level	Final level	Average annual change					
Initial level	0.5985**	0.5682**	0.2581*					
Final level	0.5501**	0.4858**	0.2130+					
Average annual change	-0.1257	-0.1823	-0.1005					

Note:  $^{+}$ ,  $^{*}$ , and  $^{**}$  denote statistical significance at the 10 per cent, 5 per cent, and 1 per cent levels respectively (Pearson's correlation coefficient).

Source: IFAD, based on World Bank (2015c).

## TABLE C Higher levels of structural transformation are associated with lower levels of rural poverty – faster structural transformation is associated with faster poverty reduction

Correlations (ST and poverty)	Extreme rur	al poverty (less than	US\$1.25 a day)
Structural transformation (ST)	Initial level	Final level	Average annual change
Initial level	-0.6284**	-0.4907**	0.2371
Final level	-0.5977**	-0.5629**	0.0723
Average annual change	-0.0277	-0.0808	-0.2753*

Note: \*, and \*\* denote statistical significance at the 10 per cent, 5 per cent, and 1 per cent levels respectively (Pearson's correlation coefficient).

Source: IFAD, based on World Bank (2015c).

### TABLE D Higher levels of rural transformation are associated with lower levels of rural poverty – faster rural transformation is associated with both lower levels of poverty and faster poverty reduction

Correlations (RT and poverty)	Extreme rural poverty (less than US\$1.25 a day)							
Rural transformation (RT)	Initial level	Final level	Average annual change					
Initial level	-0.7496**	-0.6280**	0.1825					
Final level	-0.6995**	-0.5941**	0.1531					
Average annual change	-0.0167*	-0.4054**	-0.1792+					

Note: \*, \*, and \*\* denote statistical significance at the 10 per cent, 5 per cent, and 1 per cent levels respectively (Pearson's correlation coefficient).

Source: IFAD, based on World Bank (2015c).

On one axis of the typology is the speed of structural transformation and rural transformation. On the other is the speed of rural inclusion. In the first instance, countries are classified as "fast" or "slow" structural transformers, rural transformers and rural includers if the respective average annual change of the relevant variable is higher or lower than the regional average (table F). Because of regionspecific characteristics of agriculture and of broader rural economic activity, comparison is with regional, not global, averages.

Owing to the quite short length of time series data for the underlying variables, countries that had already achieved relatively advanced stages of structural and rural transformation and low rates of poverty at the start of the 1990s register fairly low rates of change in both the transformation and inclusion variables over the ensuing years. The converse is true for countries at quite early stages of transformation with fairly high rates of poverty at the start of the measurement period. The baseline level of structural or rural transformation may be high enough to render a country essentially transformed, even when its average annual change over the period of study is below the regional average.

To avoid the obvious distortions introduced, with respect to structural transformation, any country with an initial share of nonagricultural activity in GDP greater than 90 per cent is considered a "fast" transformer. Eight countries are reclassified in this way.<sup>5</sup> For rural transformation, any country that has a significantly above-average initial level of agricultural labour productivity and that registers average annual growth of at least 90 per cent of the regional average (indicating that it has sustained its high performance over the period)

Structural transformation categories	Correlation between changes and current levels of RT and rural poverty							
	Initial levels of RT x initial levels of poverty	Final levels of RT x final levels of poverty	Changes in RT x changes in poverty					
Initial level of ST								
Transformed <sup>a</sup>	-0.4181	-0.6649*	0.1259					
Not transformed	-0.7720**	-0.5593**	-0.2078					
Final level of ST								
Transformed <sup>a</sup>	-0.7361**	-0.6583**	-0.3743+					
Not transformed	-0.7642**	-0.4322**	-0.1133					
Speed of ST								
Fast <sup>b</sup>	-0.7650**	-0.5765**	-0.0668					
Slow <sup>b</sup>	-0.8160**	-0.5916**	-0.4204+					
All Countries	-0.7496**	-0.5941*	-0.1792					

TABLE E The higher the initial and final levels of structural transformation, the stronger the correlation between rural transformation and rural poverty reduction

Notes: \*, \*, and \*\* denote statistical significance at the 10 per cent, 5 per cent, and 1 per cent levels respectively (Pearson's correlation coefficient).

<sup>a</sup> Transformed countries are those with over 90 per cent share of non-agricultural activity initially.

<sup>b</sup> Countries with fast (or slow) structural transformation are those with an average annual percentage change of the share of non-agricultural activity in GDP that is greater (or smaller) than the regional average.

Source: IFAD, based on World Bank (2015c).

Process	Variable used	Speed	Classification criteria
Structural transformation	Non-agriculture share of GDP (per cent)	Fast	<ul> <li>Above regional mean of average annual changes from 1990-2014</li> <li>Level at beginning of period is &gt;90 per cent</li> </ul>
		Slow	Below regional mean of average annual changes from 1990-2014
Rural transformation			<ul> <li>Above regional mean of average annual changes from 1990-2014 OR</li> <li>Initial level is significantly above regional average and average annual growth &gt;90 per cent of the regional average annual growth</li> </ul>
		Slow	Below regional mean of average annual changes from 1990-2014
Rural inclusion	Rural poverty: APR, ESA, WCA: Global extreme poverty line	Fast	Above regional mean of average annual changes from 1990-2013
	(US\$1.25/day) LAC,NEN: National poverty lines	Slow	Below regional mean of average annual changes from 1990-2013

#### TABLE F Typology for examining linkages between transformation and inclusion

is considered a "fast" rural transformer. Two countries are reclassified in this way.<sup>6</sup>

Figure K illustrates the relationship between the speed of structural transformation and the speed of rural poverty reduction for the 60 countries by region.7 The dotted horizontal and vertical lines are regional averages for the two variables. Figure L shows the same for rural transformation and rural poverty. As expected, there is great variation across regions, and between countries within regions. Most countries fall into the top-left and bottom-right quadrants. But crucially, for both structural transformation and rural transformation, several countries are "off-diagonal" - that is, they transform quickly but include slowly (top-right quadrant), or vice versa (bottom-left quadrant). The LAC region in particular has several countries in these two "off-diagonal" quadrants.

Considering all three variables together, the typology holds up well (table F). Across the five regions (see figures K and L), only one of the 33 countries that reduced poverty quickly registered neither fast structural transformation nor fast rural transformation. The remaining 32 countries showing fast poverty reduction had either fast structural transformation or fast rural transformation or both. These results confirm the first hypothesis.

In their respective regions, 32 countries with relatively fast structural (26) or rural transformation (6) also cut rural poverty significantly, and the majority of these countries (20) also registered fast rural transformation. Notably, six countries with quite slow structural transformation but fast rural transformation reduced poverty significantly, pointing to the critical role of rural transformation for inclusion. Disappointingly, and qualifying the second hypothesis, 19 countries that transformation and six with fast rural transformation) did not cut rural poverty significantly over the period.

These results confirm a major theme of this report: rapid structural and rural transformations are not enough to induce inclusive rural transformations. Instead, inclusive transformations must be made to happen – for many reasons:

## FIGURE K Regionally, the results largely confirm the expected association between the pace of structural transformation and of rural poverty reduction



Pace of structural transformation and rural poverty reduction by region, 1990s-2010s

## FIGURE L Regionally, the results largely confirm the expected association between the pace of rural transformation and rural poverty reduction

Pace of rural transformation and rural poverty reduction by region, 1990s-2010s



1. A total of 39 countries are experiencing fast structural transformations, of which 19 are also experiencing fast rural transformation. But of these, 5 are not seeing rapid poverty reductions. Of the same 39 countries, 20 are not experiencing fast rural transformations. Of these 20, 8 are not seeing rapid poverty reduction. Clearly, these 8 countries require specific interventions for inclusion.

2. Among the 21 countries with slow structural transformations, 6 have rapid rural transformation but slow poverty reductions.

3. The 29 countries with slow rural transformation need to change rural institutions, policies and programs to accelerate productivity growth and other aspects of rural transformation.

4. The 21 countries with slow structural transformations need action on most institutional and economic fronts to accelerate transformation.

5. Some of the 33 countries with rapid poverty reductions still have poor regions and disadvantaged groups such as women, indigenous peoples and groups of people suffering severe discrimination because of sexual orientation or physical or mental challenges.

6. In all countries, the many social and political empowerment issues require a range of both broad and specific remedies.

It is important to stress that because countries' speeds of transformation and inclusion are rated as "fast" or "slow" relative to their respective regional averages, figure M represents a global summary of regional results. Cross-country comparisons should therefore be made only at the regional level. It would be inappropriate and inconsistent with the underlying analysis to undertake comparisons across regions.

It is also important to restate that the component of the regional analysis based on the country typology was rendered necessarily narrow by data limitations and the need to reduce complexity. The results should therefore not be interpreted as definitive or comprehensive in the sense of capturing all aspects of rural transformation and inclusion. The regional and thematic chapters in the full report provide more detail on additional key aspects of those processes. In APR, where growth was rapid and poverty reduction significant, findings are strongly consistent with the two hypotheses – more so than for any other region. Recent transformations of economies and rural societies in the region have cut sharply into rural poverty. The data do not reveal any country that transformed quite quickly that did not also cut poverty relatively fast. And the data confirm that countries that transformed relatively slowly made significant progress against poverty, but did so more slowly than the regional average.

As illustrated earlier, most countries in the LAC region had already reached relatively high levels of structural and rural transformation by the start of the period of analysis, with an urbanization rate of over 75 per cent. Findings are broadly consistent with those anticipated by the two hypotheses. Almost all countries that underwent rapid structural or rural transformation, or both, reduced rural poverty faster than the region as a whole, but not all countries that experienced rapid transformation cut rural poverty rapidly. Further, almost all countries with rapid rural poverty reduction also narrowed rural income inequality faster than the regional average.

In NEN, which is home to countries as historically diverse as Jordan, Kazakhstan and Tunisia, the urban-rural poverty gap emerges as a strong indicator of inclusion (the wider the gap, the lower the inclusiveness). Countries that have succeeded in narrowing the gap typically register higher agricultural value added per worker. A combination of above-average structural transformation with above-average rural transformation results in relatively fast rural poverty reduction and a narrower urban-rural poverty gap. Conversely, countries featuring a combination of below-average structural and rural transformations achieve slow rural poverty reduction and see a wider urban-rural poverty gap.

In sub-Saharan Africa, where the dominant narrative about social and economic development in Africa is of a fast-transforming continent showing mixed but generally positive performance, the picture with respect to the hypotheses is also mixed. Agriculture shows



#### FIGURE M A global view of region-specific transformation and inclusion outcomes

Source: IFAD, based on World Bank (2015c), subset of 60 countries.

healthy growth in terms of both output and productivity, but the commodity mix is not undergoing much diversification. Of the 23 countries out of 28 in the region that registered quite fast structural and/or rural transformation over the period of analysis, only 15 managed to cut poverty quickly. But 9 relatively slow transformers, i.e., with slow structural and/or rural transformations, were able to reduce poverty at quite fast rates.

The thematic chapters in the report shed light on drivers of inclusiveness and policies, institutions and investments that can enhance inclusiveness. Six core areas for policy action and investments are addressed: employment, land and natural resources, rural finance, agricultural technology innovation, markets and value chains, and collective action. Several issues are cross-cutting in nature, with important inclusion-enhancing or inclusionimpeding dimensions: food and nutrition security, resilience, fragility, gender equality, environmental sustainability, social protection and governance. Findings identify a range of inclusion-enhancing and inclusion-limiting forces in each of these areas, with clear implications for policy and investment.

Alongside these region-specific and thematic findings, policymakers with responsibility for rural development face critical strategic challenges – and opportunities – which require context-specific choices, and which must recognize and accommodate not only extant conditions in rural areas but also a range of forces that link conditions in rural areas to broader economic and social dynamics. The typology was developed and applied at country level, but as illustrated in the regional and thematic chapters in the full report, conditions sometimes vary widely across regions and rural areas within countries. Context-specific implications for rural development strategies for inclusive rural transformation thus may have relevance at subnational levels in some countries. The report's recommendations for policy reform, institutional innovation and investment are framed with these several insights in view.

## Rural development strategies for inclusive rural transformation

The regional and thematic analysis makes it clear that the type of transformation a country (or subnational region) experiences creates some path dependency for the future. This has strong implications for the opportunities and challenges before it today, and for the policies, institutions and investments on which it should focus now and in the future.

At issue in the report are rural development strategies that promote inclusive rural transformation, contributing to inclusive structural transformation and sustainable growth. The historical record and recent trends summarized in the report's regional and thematic chapters suggest two strategic choices facing countries: (1) they must pursue appropriate approaches to rural development under structural transformation, resolving fundamental political economy challenges in the process, and (2) they must set appropriate objectives for rural development in contexts of differing rates of transformation and inclusion, with important implications for required policy reforms, institutional innovations and investments.

## The political economy of inclusive rural transformation

A major conclusion of the report is that a country's approach to rural development must accommodate its overall level of structural transformation. Several chapters in the full report confirm the argument convincingly advanced by Timmer (2014) that, because of strong interactions between structural transformation and the agrifood system, the political economy of structural transformation hinges on the role and importance assigned to agriculture as the transformation unfolds. The evolution and destiny of agriculture shape and reflect structural transformation. Agriculture, rural areas and the broader agrifood system always matter. Not only do they contribute directly to livelihoods, food and nutrition security, and environmental and natural resource conservation, they also define the politics of transformation, which, in turn, frames the political economy of rural development (Timmer 2014).

Three approaches to (or stances towards) rural development are suggested, each raising distinct political economy challenges: *agriculture-boosting* where the level of structural transformation is relatively low, *agriculture-modernizing* at higher but still moderate levels of structural transformation and *agriculture-sustaining* where structural transformation is highly advanced (table G).

#### Agriculture-boosting approaches

At relatively low levels of structural transformation, primary agriculture looms large in economic activity, accounting for the bulk of employment for a populace that is still largely rural and often youthful. There is no more potent generator of employment than primary agriculture. The appropriate approach to rural development is clear: boost agriculture through rapid productivity growth. Yet the political economy of agricultureboosting rural development is not straightforward. The challenge springs from agriculture's poor initial productivity compared to other sectors like manufacturing and mining, which, while able to contribute more efficiently to aggregate GDP, have narrow employment bases. These visually prominent sectors often dominate political establishments. Leaders must find ways to resist strong but misplaced pressures to devote disproportionately large shares of scarce public resources to such sectors and choose instead to focus sharply and steadily on agriculture.

Such a focus is demanding, for agriculture is strewn with value-destroying constraints that render the aim of spurring broad-based productivity growth extraordinarily difficult to achieve. The chapter in the full report on Asia and the Pacific illustrates the returns to meeting this "first generation" political economy challenge, pursuing an agriculture-boosting approach over decades, and thereby launching countries on pathways towards inclusive rural transformation. The chapter in the full report on sub-Saharan Africa demonstrates the cost of not doing so: an agricultural sector registering relatively strong growth on aggregate but with weak fundamentals. The upshot is inadequate productivity growth and slow movement towards a structure that can deliver broad-based and sustained reduction in poverty and inequality.

#### Agriculture-modernizing approaches

As structural transformation reaches higher but still moderate levels, the evolution of the agrifood system is increasingly subject to dietary transformation (based on rising incomes, urbanization and changing consumption preferences) and to agrifood-marketing transformation (based on rapid changes in processing, procurement and distribution logistics). Consequently, the centre of gravity of economic and political interests in these systems rests increasingly within the burgeoning urban middle class. Also growing in political importance are the interests of so-called "dynamic" farmers with good access to natural resources, input and output markets, finance and information.

		Rural development approache	S		
	Agriculture-boosting	Agriculture-modernizing	Agriculture-sustaining		
Rationale	Low structural transformation. Primary agriculture looms large in GDP and dominates employment, but generates low incomes owing to low productivity	Moderate structural transformation. Primary agriculture is less important in GDP, but agriculture-related activities dominate the rural economy, especially the non-farm segment, which emerges as a key source of employment and income. Fast-expanding urban areas drive agrifood system transformation	High structural transformation. The modern agrifood industry is an important source of income and employment, but many pockets of poverty and natural resource degradation are found in rural areas, implying growing inequality and unsustainable growth. Nutrition, health and sustainability concerns become increasingly important		
Key aims	Spur broad-based productivity growth in primary agriculture, aiming to boost agriculture's capacity to serve as an engine of transformation	Modernize agriculture to sustain, widen and diversify productivity and income growth in rural areas. Strengthen linkages to the rest of the economy. Keep food prices low in fast-growing urban areas	Ensure a sustainable and well-functioning agrifood system that delivers critical public goods and that provides groups with agriculture-based livelihoods with opportunities to enter the mainstream		
Core political economy challenges	"First-generation" challenges linked to a long-term focus on agriculture, despite its huge challenges, and despite seemingly higher returns to investments in other sectors	"Second-generation" challenges linked to focusing on rural areas, even as urban areas expand and the urban middle class grows in power and influence	"Third-generation" challenges linked to balancing pressures for provision of agriculture- based public goods while sustaining support to shrinking rural populations with agriculture-based livelihoods, especially smallholder farmers and other impoverished marginalized groups		
Relevant to	<ul><li>Many low-income developing countries</li><li>Much of SSA</li></ul>	<ul> <li>Many lower middle-income countries</li> <li>Parts of SSA and much of APR</li> </ul>	<ul><li>Many higher middle-income countries</li><li>Much of LAC and NEN</li></ul>		

#### TABLE G Rural development approaches for inclusive rural transformation<sup>8</sup>

If momentum for inclusive transformation is to be sustained, the nascent impetus towards modernization must spread and deepen in rural areas. Increasing numbers of farmers – especially smallholder farmers – and rural SMEs must be supported to make the transition to greater specialization and diversification in production and trade.

Political momentum must be generated and sustained for modernizing rural areas and integrating them with the wider economy. The aim must be to expand and deepen the agriculture-based rural economy, cultivate a rural middle class built on a diverse group of productive farmers and efficient rural SMEs and agribusinesses, and thereby achieve a sustainable balance of rural and urban interests. Meeting this "second generation" political economy challenge is critical. The temptation to allow structural transformation's seemingly "natural" dynamics to marginalize rural areas must be resisted. Evidence from LAC suggests that such dynamics can sow the seeds of deeply rooted inequalities within rural areas, and between rural areas and the rest of the economy.

#### Agriculture-sustaining approaches

At high levels of structural transformation, the agrifood system is deeply intertwined with the rest of the economy, with its most dynamic segments operating at the cutting edge of technological advance. A common feature of agriculture in such economies is a three-fold segmentation into a "modern" high-productivity, mechanized, often large-scale category, a modernizing group of part-time farmers and a "traditional" segment of small family farms in marginal areas with poor market linkages. Many pockets of poverty are therefore found in rural areas, and among particular groups there, such as ethnic minorities, the elderly, and women. Meanwhile, urban populations are larger and growing more rapidly than rural populations. Consumer concerns about food safety, nutrition, health and environmental and natural resource conservation dominate public discourse about desirable features of the agrifood system.

Countries at this stage of transformation face a "third generation" challenge due to the need to build momentum for support to a sector that, despite its relatively small size, has important effects on several other parts of the economy. As leaders respond to legitimate demands for generating increasingly vital public goods from agrifood systems, they must also give voice and representation to rural groups still directly dependent on agriculture for their livelihoods. The chapters in the full report on Latin America and the Caribbean and the Near East, North Africa, Europe and Central Asia demonstrate that the needs and interests of these typically marginalized groups coincide strongly with the long-term sustainability of rural areas and broader agrifood systems.

These political economy considerations confirm that political will is a meaningful concept only insofar as it has an objective. Under structural transformation, political objectives for rural development are context specific. The nature of the approach to rural development is crucial, and that approach derives from the implications of structural transformation for agriculture. Stakeholders seeking to influence rural development strategies must seek to build political narratives and capital for outcomes that are congruent with actual political tensions and opportunities rather than academic or idealized ones. These considerations apply not only at the national level, but also at subnational levels, where trends towards the greater decentralization of decision-making place regional and local authorities on the front line of rural development strategy design and implementation.

#### Objectives, policies, institutions and investments for inclusive rural transformation

Even as countries or subnational regions confront the political imperatives of rural development under structural transformation and develop the political will to act, what exactly should they do to increase inclusive rural transformation? Which specific outcomes in rural areas should they be trying to achieve, why and through which means?

The typology suggests four categories of transformation and inclusion into which most countries or subnational regions fall: (i) fast transformers/fast includers (32 in our sample of 60 countries), (ii) fast transformers/slow includers (19), (iii) slow transformers/fast includers (1), and (iv) slow transformers/slow includers (8).

Distinct objectives for rural development strategy are implied:

- Fast transformers/fast includers should aim to adapt so as to sustain progress and address problems inherent in rapid growth.
- Fast transformers/slow includers should aim to amplify by expanding the reach of benefits accruing to rural populations while sustaining speed.
- Slow transformers/fast includers should aim to accelerate the pace of transformation without sacrificing the inclusiveness of benefits.
- Slow transformers/slow includers should aim to amplify and accelerate, seeking both to expand the reach and accelerate the generation of benefits.

The regional chapters in the full report employ the typology and other considerations to identify and explain relevant transformation and inclusion trajectories and outcomes. These and other findings in the thematic chapters and spotlights in the full report point to different pressures to be addressed in each category, implying different sets of priorities for policy reform, institutional innovation and investment to promote inclusive rural transformation (table H). The aim here is not to specify all possible measures and interventions. Rather, it is to identify those signalled by the chapters and spotlights in the full report as most central to addressing the emerging pressures and to meeting context-specific objectives for inclusive rural transformation.<sup>9</sup>

Pressure points, policy reforms, institutional innovations and investments are elaborated here for each category of countries or subnational regions. Some pressure points appear in more than one category. A few measures are therefore also relevant across categories. But the majority are category specific. Responding to requirements to adapt, amplify, and accelerate is complex. As expected, countries or subnational regions facing imperatives both to amplify and accelerate face the greatest burden of policy reform, institutional innovation, and investment needs. Several challenges and opportunities apply to all country or subnational categories, implying a rich set of cross-cutting priorities (see box B).

#### Adapters – fast transformers/fast includers Pressure points

*Declining job quality and security:* Employment relations are showing a rising trend towards informality, with temporary jobs growing rapidly. There is also a widening gap between jobs that provide social benefits and those that do not.

Inadequate and/or unsustainable social protection systems: Even with rapid inclusion, poverty and vulnerability persist and are likely concentrated in specific geographies or within particular groups. Social protection systems in some countries are inadequate in coverage and quality. Those in others are more comprehensive but face growing pressures as growth slows and public resources tighten.

Increasing skill- and technology-driven competition: Competition in agrifood value

chains is intense and global. Competitiveness is increasingly based on capacity to deliver highquality products with high levels of embedded technology, skills, and quality assurance. Whether among employees or entrepreneurs, new agricultural and non-farm sector jobs increasingly demand a minimum of skills and capital, and often, mobility and flexibility. These requirements, alongside a range of social and cultural barriers, lead to a substantial risk of exclusion of women and of landless workers.

*Exposure to new risks:* Structural and rural transformation implies increasingly complex relationships in value chains and other areas. Thus, they also entail ever more complex risks that require more sophisticated instruments to spread risk across value-chain actors. For many rural communities, informal networks and traditional institutions still play strong roles in spreading risk, but these arrangements face increasing limitations.

#### Policy reforms

Reform for better and more secure jobs in the informal sector: Policies and programmes need to work with the informal sector, not against it. This entails reducing administrative and land constraints, improving productivity and extending social protection to workers in the informal sector and to the growing number of informal workers used by firms operating in the formal sector. Informal sector entrepreneurs and workers should have assistance to function better, through legal protection against harassment, investment in skills and provision of well-sited land, electricity, water and sanitation.

Social protection reform: Impacts of social protection systems depend on how well the poor are covered, and on how appropriate the benefits are. Higher spending is typically associated with higher impacts on poverty. However, even within similar budgets, some countries do better than others at each level of spending. Targeting could be improved, and systems better coordinated. Scope for integrating social protection and agricultural programmes should be further explored. Public provision of a basic package of benefits for all, such as health, education, 

		Rural develop	ment objectives			
	Adapt	Amplify	Accelerate	Amplify and accelerate		
Transformation and inclusion speeds	Fast transformation, fast inclusion	Fast transformation, slow inclusion	Slow transformation, fast inclusion	Slow transformation, slow inclusion		
Key pressure points	<ul> <li>Declining job quality and security</li> <li>Inadequate and/ or unsustainable social protection systems</li> <li>Increasing skill- and technology-driven competition</li> <li>Exposure to new risks</li> </ul>	<ul> <li>Unequal access to productive resources</li> <li>Weak rural organizations</li> <li>Inadequate financial inclusion</li> </ul>	<ul> <li>Uneven technology uptake</li> <li>Poor incentives for private investment in rural areas</li> <li>Weak rural-urban linkages</li> <li>Inadequate financial inclusion</li> </ul>	<ul> <li>Unfavourable conditions for technology development and adoption and market expansion</li> <li>Low purchasing power and vulnerability</li> </ul>		
Priority policy reforms	<ul> <li>Reform for better and more secure jobs in the informal sector</li> <li>Social protection reform</li> </ul>	Land tenure reform for more secure access	<ul> <li>Fiscal, legal and regulatory reforms to improve the rural investment climate</li> </ul>	<ul> <li>Input and output market and pricing reform</li> <li>Land tenure reform for greater access</li> </ul>		
High-return institutional innovations	<ul> <li>Upgrading of rural financial system</li> <li>Public-private partnerships to upgrade agrifood system</li> </ul>	<ul> <li>Rural financial system expansion and deepening</li> <li>Territorial approaches</li> <li>Public-private partnerships to deepen agrifood system, focusing on major staples, livestock and horticulture</li> <li>Promotional social protection</li> </ul>	<ul> <li>Rural financial system expansion and deepening</li> <li>Territorial approaches</li> <li>Public-private partnerships to deepen agrifood system, focusing on major staples, livestock and horticulture</li> </ul>	<ul> <li>Essential rural financial system development</li> </ul>		
Critical investments	Targeted upgrading of technology, skills and capabilities to enhance employability and entrepreneurial capacity in rural areas	<ul> <li>Technical and operational upgrading of farmer organizations (FOs) and other rural collectives representing marginalized groups</li> </ul>	<ul> <li>Enhanced agricultural R&amp;D</li> <li>Improved market infrastructure</li> <li>Technical and operational upgrading of FOs and other rural collectives representing marginalized groups</li> </ul>	<ul> <li>Essential agricultural R&amp;D</li> <li>Essential rural infrastructure</li> <li>Essential capacity development of FOs and other rural collectives</li> <li>Public works and employment guarantee schemes</li> </ul>		
Cross-cutting priorities			uality; governance and a management; monitoring			

pensions and other forms of protection, should be the ultimate goal. This may be expensive, but, if effective, efficient and equitable, it is justified by its impact on efficiency, growth and equity.

#### Institutional innovations

Rural financial system upgrading: Policy adjustments and direct support are required to develop improved and commercially viable financial products that can reach smallholders and other marginal groups. They include innovations in loan terms that are better adapted to the needs of agriculture than current microfinance practices, use of "aggregators" such as credit suppliers or commodity off-takers, and further support for development and uptake micro-level insurance. Adapting insurance and other risk management techniques to the rural clientele allows risks to be spread and transferred to actors with greater risk management capacity. It also encourages prudent investment, livelihood diversification and risk sharing. Strong interest from national governments, rural populations, civil society, the private sector and donors suggests the value of continuing to invest in developing instruments and business models, while strengthening organizations.

PPPs for agrifood system upgrading: Coordination and linkage support to key supply-chain participants, including farmers, FOs and SMEs, would benefit management and transparency of supply chains, quality of final products and profitability of the value-chain actors. Coordination arrangements such as platforms, networks, high-potential clusters or development corridors can strengthen synergies, avoid duplication, minimize transaction costs and optimize resource use. Decision powers, reward systems and performance criteria need to be clear, transparent and enforced to result in positive-sum games in which all partners agree to cooperate, share profits and risks.

#### Investments

Targeted upgrading of technology, skills, and capabilities to enhance employability and entrepreneurial capacity in rural areas: With a particular emphasis on youth, women, landless workers and other groups facing substantial risk of exclusion, measures to enhance employability include targeted improvement of key technological skills, vocational training for jobs in the commercial sector and basic life skills for success in working environments. To boost entrepreneurial capacity, critical skills to be enhanced include those on starting and running businesses, marketing promotion, human resources and financial management. But better skills alone are not enough, and must be matched by expanded access to finance and financial services.

#### Amplifiers – fast transformers/slow includers

#### Pressure points

Unequal access to productive resources: Discrimination and exclusion related to economic class, gender, place of residence, sexual orientation, disability, age or ethnic identity lead to denial of access to productive assets, such as land or to financial services. Opportunities and motivations for welfare-enhancing investment are therefore blunted for too many groups of rural people. These marginalized groups enter markets and other rural arenas and forums with poorer human capabilities than others. They also receive lower returns for equal effort because of discrimination. Women farmers, in particular, despite being equally productive and entrepreneurial, often have greater difficulties in accessing land, finance and inputs, and receive lower prices for their crops than men farmers.

Weak rural organizations: Owing to technical and operational limitations, rural collective organizations representing farmers and other rural dwellers may be unable to fully seize opportunities under transformation. Thus they do not always deliver on their immense promise to expand access to markets, natural resources, infrastructure, information and policy influence for their members.

Inadequate financial inclusion: Provision of finance and financial services to poor rural households and SMEs involves many challenges, many of which stem from seasonality of agriculture, high and covariant risks, low population density and weak infrastructure in rural areas. Inadequate financial instruments and institutions, limited reach and capacity of rural financial service providers, and low levels of education and financial literacy of actual and potential clients stunt and distort rural financial markets. The demand-side is further constrained by the seasonality and risk inherent in smallholder farming, and by a preponderance of potential clients, such as women, who often require smaller loans than men and may face discrimination in the credit institutions. Many potential clients lack access to due judicial process, lack property rights or secure land tenure, and thus cannot offer the typical kinds of loan collateral. Despite the importance of SMEs for rural development, these businesses rarely have access to formal savings and payment services.

#### Policy reforms

Land tenure reform for more secure access: Reforms that strengthen security of property rights in an inclusive and equitable manner should be prioritized. Adaptation of communal rights systems and clarification of use rights can maintain or improve tenure security and equity in such systems. Where communal systems are no longer able to do so, programmes that transfer responsibility for land management from customary to statutory institutions can improve efficiency and reduce conflict. They should be able to recognize and accommodate a continuum of rights, from communal use rights to freehold title to land. In the recording of existing rights to land, their certification and/ or titling - the objective of inclusion - is served best by including all right holders and all land in a given area.

Instead, land titling on demand, often from a central authority, continues to be used, favouring the well-connected and allowing elites to acquire land at the expense of small farmers, to dispossess indigenous groups, and to increase the chances of conflict. Where area-base titling is difficult, as in countries with low population density, code of conducts and safeguards are required to prevent elite capture. Attention to gender equality during implementation and enforcement of statutory land rights is very important, as well as attention to inclusion of other disadvantaged groups.

#### Institutional innovations

Rural financial system expansion and deepening: Product innovations (such as new inventory credit systems), process innovations (automated workflow or logistical processes) and system innovations (introduction of rural banks) are required to enable marginalized rural households to use formal financial systems and access affordable finance and reliable and transparent financial services. Incentives for financial institutions to expand rural footprints and savings and lending services to farmers, FOs and rural SMEs must be improved. Bank guarantees, credit default swaps and similar measures should be developed and tested so as to expand access to finance by reducing the risks in lending to marginalized groups. Structured financial transactions, such as value-chain finance arrangements, should also be encouraged, along with Shari'a-compliant financing, where appropriate.

Territorial approaches: Approaches that embrace the diversity of actors in rural areas and build on rural-urban interdependencies and synergies should be further explored and strengthened. These approaches provide wider opportunities to smallholders, linking producers and consumers from urban and rural areas to markets and contributing to more sustainable and inclusive modalities of food production and consumption. They also foster coherence among different sectoral policies and levels of government. Through these platforms, marginalized groups can gain better access and on better terms - to the regional, national, and international markets on which their livelihoods increasingly depend as rural transformation unfolds.

Public-private partnerships for agrifood system strengthening, focusing on major staples, livestock and horticulture: Markets for major staples, livestock and horticulture offer the greatest opportunities for income growth and livelihood improvement for smallholder farmers across the globe. However, mainstream domestic value chains suffer from low profitability and are often unfair. New partnerships are required to help smallholder farmers and other disadvantaged groups identify and develop new market outlets, improve the quality and increase the value of the goods they seek to produce and trade, and finance market development, quality improvement and value enhancement. Development of business advisory and extension services covering local businesses and farmer groups can promote technical upgrading and formulation of solid investment projects, with good business plans and rates of return on investment that can attract the interest of medium and large firms. Commercially oriented measures to direct public demand for quality food (from school feeding programmes and other public institutions and programmes, such as prisons and hospitals) towards smallholders should be strengthened and expanded.

Promotional social protection: Conditional transfers (cash or in kind), combined with targeted capacity strengthening, may not only improve the income and use of essential services, such as education or preventive health care, but can also help households to diversify livelihood options and so manage future risks and promote longer-term resilience. Careful targeting and measures to promote empowerment and agency of beneficiaries are central, too. Linking public spending on agriculture and social protection programmes can lead to synergy gains, not only furthering growth linkages and transformation, but also enhancing these processes' inclusiveness. Programmes targeted at women show great benefits, particularly on key inclusion criteria such as child health and nutrition. They are especially important because maternal and child malnutrition perpetuate exclusion and poverty from generation to generation undermining the capital needed to drive rural transformation and the inclusiveness of the process. Evidence of lasting impacts of such integrated programmes is emerging, in particular for "graduation approaches" that provide grants to the poorest for user-selected productive investments along with careful, specific and sustained support to the capacity development of individual beneficiaries.

#### Investments

Technical and operational upgrading of farmer organizations and other rural collectives representing

marginalized groups: Investments must focus on addressing enduring gaps in governance, operations, financing and policy engagement. Governance investments must aim to increase transparency and legitimacy, building on existing social capital. Appropriate connections to external agents, who can channel new ideas, innovation and material support to collective organizations, are necessary. Operational investments must aim to strengthen the mechanics of collective action, focusing on structures and processes for assigning decisionmaking authority, for evaluating performance and for rewarding performance, and thus foster organizational efficiency and effectiveness. Support is required to boost financial literacy, choose relevant business models, and strengthen financial management and transparency. It should enhance understanding of the operating mechanisms of government and external funders.

#### Accelerators – slow transformers/ fast includers

#### Pressure points

*Uneven technology uptake:* Even when productivity-increasing technology appears, it is adopted and used at widely varying rates. For instance, adoption of improved seed is much higher than that of fertilizer, even though full returns to the former require application of the latter. Promising innovations – such as conservation farming – that build robustness into clusters of technologies through integrated systems are spreading but slowly.

Poor incentives for private investment in rural areas: Rural transformation requires vibrant investment from the private sector. Such investment is impeded by a rural business environment hobbled by, for example, lack of basic infrastructure, inadequate credit and insurance markets, poor tenure security, and ethnic and gender disparities.

Weak rural-urban linkages: Urban centres depend on rural areas for a range of goods and services, notably food, clean water, environmental services and raw materials. Rural areas typically depend on urban areas for access to services, employment opportunities and

#### BOX B Managing cross-cutting challenges and opportunities

The regional and thematic chapters in the full report point to several cross-cutting challenges and opportunities that are likely to face governments in all four contexts. Especially important are challenges and opportunities related to public agricultural research and development (R&D), nutrition, gender equality, governance and accountability, digital solutions, resilience, natural resource management, monitoring, evaluation and data collection. Priorities for action express themselves at different levels, affecting different groups of people. But to realize inclusive rural transformation, governments must find solutions to each of them.

#### Boosting public agricultural R&D

Productivity growth is an outcome of several interacting factors including: levels and speeds of development, release, adoption and utilization of improved technologies and practices, reliable outlets for generated surpluses, institutions and policies that mitigate risk and provide appropriate incentives, and investments that strengthen key human, physical and institutional capacities. All of these require significant levels of public funding. But few countries devote sufficient public resources to agricultural R&D. Potential synergies between public and private research are high and must be fostered. While private sector involvement in R&D is increasing, it often depends on results from public R&D and concentrates on innovations where profits are easily appropriated. The range of appropriable innovations is becoming wider through patenting. Where profits cannot be appropriated, public sector research is imperative.

#### Improving nutrition

Rapid transformation of food systems spurs rural transformation but it also raises risks of different forms of malnutrition. Both "nutrition-specific" and "nutrition-sensitive" policies and investments are required. In food production, policy tools should focus on promoting availability, affordability, diversity and quality of food, nutrition-oriented R&D, promotion of nutrition-rich foods in school and home gardens, and shifting to sustainable and nutrition enhancing production methods. In food marketing, given the increasingly vital role of food companies in shaping food systems, the focus should be on regulation and taxation to promote efficiency, safety, quality and diversity of supply chains, and also on innovation in product formulation and transport, especially with respect to reduction of waste and spoilage. In food consumption, well-targeted nutrition-focused food assistance programmes and broader safety nets, appropriate food price incentives, nutrition regulation, education that is sensitive to the roles of women, and information campaigns backed by evidence on how to promote better diets are required. These measures must be underpinned by improved access to clean water, adequate sanitation and proper hygiene in both urban and rural areas. Publicly held food reserves continue to be important components of many national food and nutrition security strategies and must be more effectively managed. The cross-sectoral ("horizontal") imperative of coherent food and nutrition policy must be recognized and appropriately accommodated through integrating platforms that span agriculture, health, commerce, education, social services, transport and public works, as well as local government.

#### Enhancing gender equality

Easing access to and control over productive resources and assets is essential for rural women to participate in and benefit from economic activities by diversifying their income base. The scale of the challenge is immense, pointing to a wide and deep range of required measures. Improving access to decent employment opportunities is crucial to reducing poverty, particularly for rural women and youth who make up a growing proportion of the rural labour force in many developing

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countries. Developing the skills and the knowledge of rural women and girls through training in literacy and numeracy or vocational training enables them to participate more in development interventions and business opportunities. Education and skills development enhance capacities and equip rural women, particularly young women, for success in agricultural and non-agricultural employment. Fostering women's participation and leadership in rural organizations and community groups and supporting women's groups are required to strengthen their voice and influence. Rural women must be supported to gain more control over the decisions that affect their lives, including in public affairs, in user groups such as farmers' organizations, and at community and household levels. Empowering women at the household level is also important for their overall well-being and that of their families.

#### Strengthening state implementation capacity and accountability

The process of inclusive rural transformation occurs across wide geographic areas, contrasting socio-economic and cultural contexts, and distinct institutional and political regimes. State and non-state institutions exert strong influences on outcomes. State capacity to design and implement policies and programmes to catalyse and sustain such transformation is fundamental. So, too, is strong participation from a broad spectrum of stakeholders, all of whom must devote resources to policy processes to ensure that their interests are adequately represented. State capacity and accountability and stakeholder voice and participation must be strengthened and sustained through innovations in institutional structures and governance arrangements. Issues of power, participation, representation, contract enforcement, negotiation and conflict resolution arise and must be addressed in participatory ways.

Mechanisms for transparent dialogue must be designed and supported, aiming to spur the emergence of new cooperative behaviour among a range of stakeholders from public, private and civil society sectors, based on trust and shared values. Collective organizations representing smallholders and other marginal groups add importantly to these multi-stakeholder platforms and consultation forums by ensuring that practical concerns facing these groups are voiced. These efforts require support.

#### **Exploiting digital solutions**

The rapidly expanding array of tools based on information and communication technologies opens up new opportunities to remedy the asymmetry of information between buyers and sellers of agricultural commodities, enhance yields, improve quality, reduce post-harvest losses, remove intermediaries and disseminate knowledge about best practices. Through websites, smartphone applications and SMS text messages, farmers are able to gather information on a wide range of topics such as plant diagnostics, planting reminders and advice, fertilizer and pesticide application assistance, weed identification, GPS-enabled field notes and yield improvement. Viable business models to take promising innovations to scale must be developed. Investments to expand basic literacy, numeracy and core rural infrastructure must be prioritized.

#### Increasing resilience

Changes in the nature of risks induced by structural and rural transformation illustrate the importance of strengthening three types of capacity. *Absorptive capacity* is the ability to absorb the negative impact of shocks and stresses, and to cope with change in the short term. *Adaptive capacity* is the ability to make proactive and informed choices about alternative strategies based on an understanding of changing conditions. *Transformative capacity* is the ability to utilize

mechanisms, such as government services, infrastructure, market systems and community networks to manage and benefit from change in the long term. All three capacities are boosted by investments and arrangements that enhance capacity to manage risk. Policies and investments that promote efficient and effective disaster preparedness and response, enhanced risk transfer and prudent risk-taking for livelihood diversification are required.

#### Promoting sustainable management of natural resources

Most natural resources are complex interdependent ecological and social systems that require integrated management approaches. Private ownership is costly and inequitable. Direct state control has high information, technical, coordination and monitoring requirements. Local community control may be skewed towards influential members and exclude the poorest members of communities. Devolved management arrangements that combine state, private and community control over natural resources can offer more efficient, equitable and sustainable management. Multiple benefit approaches that preserve biodiversity and protect soils while contributing to higher long-term sustainable agricultural productivity (such as conservation agriculture, agro-forestry, integrated pest management, landscape approaches, integrated plant nutrient management and organic agriculture) must be tailored to local circumstances.

Linkages and complementarities between local strategies and an enabling international governance agenda, where responsible investment safeguards are in place and are respected, are essential. An increased understanding and leveraging of rural-urban interdependencies with respect to the management and access to natural resources is also required. The potential of small and intermediate cities to improve flows of goods, resources and services between rural and urban people must be seized. Centres to mitigate pressures associated with flows of migration from rural areas to large cities must be examined and exploited where possible.

#### Strengthening monitoring, evaluation, and data collection

Context-specific approaches to rural development, such as those proposed in this report, require detailed information bases about levels and changes in key decision and outcome variables in rural areas. The analysis in this report would have been greatly enriched by a deeper and wider information base, but the required data were missing or patchy due to underinvestment in rigorous monitoring and evaluation of development investments and conditions in rural areas more broadly. The returns to the World Bank's strategic investment in the Living Standards Measurement Study-Integrated Surveys on Agriculture (LSMS-ISA) data are already emerging, in terms of greatly enhanced understanding of conditions and dynamics in rural areas. These and other such investments must be strongly supported and expanded, with an emphasis on capacity development at national levels.

markets. But where rural-urban linkages are weak because of physical and institutional factors, rural people and smallholders often cannot equitably reap the benefits of urbanization, most notably those related to burgeoning urban demand for agrifood products.

*Inadequate financial inclusion*: The same set of pressures experienced by Amplifiers applies here.

#### Policy reforms

Fiscal, legal and regulatory reforms to improve the rural investment climate: In addition to increased investment in physical infrastructure and in efficient public institutions working with the private sector, there is a pressing need for other measures. These are to put in place missing rules and/or remove or clarify the large body of ambiguous, economically flawed, excessive or poorly implemented laws and regulations that impede private investment in rural areas. Special attention should be paid to removing impediments to private investment in improved agricultural technologies, including adapting seed varieties to local conditions, ensuring seed multiplication and distributing agrochemicals and agricultural machinery. Enforcing intellectual property rights is crucial.

#### Institutional innovations

*Rural financial system expansion and deepening:* The same set of institutional innovations experienced by Amplifiers applies here.

*Territorial approaches*: The same set of institutional innovations experienced by Amplifiers applies here.

Public-private partnerships for agrifood system strengthening, focusing on major staples, livestock, and horticulture: The same set of institutional innovations experienced by Amplifiers applies here.

#### Investments

*Enhanced agricultural* R&D: The range of providers of inputs, advice and technology must be widened hugely. Increased private sector R&D helps in crops, traits and technologies in which profits are appropriable and therefore important to the livelihoods of the poor. Research by, or financed by, the public sector remains vital as there are many areas of technology in which private firms have little incentive to invest, such as basic research, agronomy or soil science. Support should be given to participatory research that involves or is led by farmers and includes other local stakeholders, and that combines technical innovation with collective action. Innovative approaches to technology development and dissemination, such as information and communications technology, can help technology adoption among smallholders. The effectiveness of such new approaches must continue to be carefully evaluated. Index-based insurance is still in the development stage, while most "smart subsidy" programmes have suffered from displacement of market demand of fertilizer by subsidized fertilizer, and from large diversions even before fertilizers reach the farm. These innovations still have to overcome political, structural or institutional factors that impede effectiveness and inclusiveness.

Improved market infrastructure: To boost commercial linkages between rural and urban areas and ease the growing demand-pull from the latter to the former, commerce-enhancing infrastructure (hard and soft) must be expanded, including roads, electricity grids, connectivity, storage and warehousing capacity, and rural and wholesale markets (and complementary services). Investments that enhance transparency and reduce transaction costs in markets for major staples are especially important.

Technical and operational upgrading of farmer organizations and other rural collectives representing marginalized groups: The same set of investments experienced by Amplifiers applies here.

#### Amplifying accelerators – slow transformers/slow includers Pressure points

Unfavourable conditions for technology adoption and market development: Technology development and adoption suffer from straitened research budgets and inadequate extension services. Wide spatial dispersion of production, high transport costs and seasonality yield high market-price risks and aggravate unequal financial bargaining power. Multiple policy-related impediments to commodity movement and efficient price discovery impose deep challenges on small farmers and traders. For many smallholders, market-based input and output prices can imply negative returns to adopting hybrid seeds and inorganic fertilizers. Subsistence-oriented production persists and marketing decisions are constantly affirmed.

Low purchasing power and vulnerability: Many spatially dispersed producers face high risks, lack on-farm storage capacity, and produce and trade bulky and low-value staple foods in small quantities. These producers lack purchasing power to serve as incentives for service providers to make the investments that would improve farmers' access to the items and services they need to intensify production. With climate change, droughts, floods and storms are wreaking greater havoc on agricultural production systems, trapping households in cycles of food insecurity and poverty that may lead to destitution.

#### Policy reforms

Input and output market and pricing reform: Markets for farm inputs and staple foods are often costly and volatile for smallholders to depend on. Prices and trading conditions can be manipulated with impunity by powerful market agents. On the input side, subsidies remain controversial, but scope for broad-based adoption of improved technologies without them is narrow. The central political, design, and implementation challenges are well understood and must be overcome to increase efficiency, control costs, and check patronage and fraud. It is vital to integrate these with other policies so as to increase agricultural productivity and manage production surpluses. Barriers to movement of goods from surplus to deficit areas and to urban centres must be removed, allowing the private sector to perform this vital function. To improve incentives for investing in technology, it is important to tackle the "good year" problem that leads to wide price fluctuations and spoilage. The key policy need is to find ways to absorb harvest-time surpluses and stabilize prices, but without blunting incentives for private arbitrage over space, time and processing

form. Significant procurement and storage at harvest time and during distribution involve coordination of public and private actors, which, if well implemented, will help to stabilize prices for producers and consumers. For that to happen, major political and governance weaknesses must be addressed.

Land tenure reform for greater access: Improvements in transparency and security of land rights is vital. Land rental markets can improve the allocation of land to youth and part-time farmers, as well as to consolidating full-time farmers. They function fairly well, but where property or use rights are insecure, they are underdeveloped. Smallholder farmers and indigenous groups should be protected from land grabbing. Internal acquisition pressures coming from urban groups and wellconnected farmers are as much of a problem as external demand for land. For large land investments, assessments, guidelines and codes of conduct have been developed and need to be promoted to guide governments and investors - and then enforced. Recent progress in land administration and documentation of tenure rights must be expanded and sustained. Underlying all successful programmes have been major investments in the infrastructure of land registration, including cadastral surveys, computerized records, training in legal rights and resolution of land disputes. Even though culture and customary law still undermines land rights of women, successful programmes have greatly strengthened their rights and must be continued and expanded.

#### Institutional innovations

*Essential rural financial system development:* By lubricating, deepening and expanding economic activity, finance and financial services contribute to rural transformation. On the supply side, it is necessary to develop the basic backbone of a modern financial system: key organizations with a wide range of financial services (banks, non-bank financial institutions and insurers) and financial infrastructure (credit reference databases and payments and settlement systems). On the demand side, requirements are increased financial literacy, secure land and other property rights, and more accessible judicial processes.

#### Investments

Essential agricultural R&D: With official development assistance diminishing and unlikely to return to previous levels, greater volumes of domestic resources must be mobilized to finance agricultural R&D, at least to the widely accepted target of 1 per cent of GDP. Such investments must be backed by rigorous priority setting. The types of technologies that are most suitable for supporting inclusive structural and rural transformation processes depend on context-specific conditions, implying the need for continued efforts to develop new varieties. But a large body of proven improved technologies is grossly underutilized, in part due to microeconomic conditions in poor areas that militate against their adoption and diffusion. Adaptive research to understand technical, institutional and policy factors that ease key constraints must be prioritized. Special attention should be paid to novel "management platforms" that bundle together soil improvement, proven crop and livestock varieties, intensified input use and farmer collective action, and are revealing their potential for increased incomes, improved sustainability of farming systems, and adaptation to a range of farming systems and agroecologies.

*Essential rural infrastructure:* Significant investment is required to expand basic rural infrastructure in the form of roads and footpaths, bridges, schools and other buildings, irrigation and drainage, water supply and sanitation, energy, and telecommunications. These investments catalyse and enhance the impacts of improved access to other assets and services (such as land and finance), enhance rural-urban linkages and boost commercial activity within rural areas

Essential capacity development of farmer organizations and other rural collectives: The same set of investments experienced by Amplifiers applies here.

Public works and employment guarantee schemes: Investments in initiatives that engage participants in manual, labour-oriented activities, such as building or rehabilitating community assets and public infrastructure, can support consumption and avoid distress sales of land and other assets, thereby boosting purchasing power and enhancing resilience in the process. Selected assets should address immediate problems of food security, employment and high priority needs such as access to planting materials and stabilizing environmental degradation.

#### Conclusion

While the private sector and many nonstate actors are increasingly engaged in rural development, in all contexts national and local governments remain key actors: as investors themselves, as creators of conditions that draw in the resources from private and philanthropic sources that drive and sustain change, and, crucially, as protectors of the public interest. A major dimension of that public interest is the inclusivity of unfolding transformations.

The core message of this report is that fostering inclusive rural transformation is about making the right strategic choices in different contexts. That is part art, part science. The art lies in generating and sustaining political momentum for prioritizing agriculture, rural areas and agrifood systems as structural transformation unfolds, deepening and expanding the socio-economic mainstream. The science centres on the design and implementation of policies, institutions and investments that draw ever-increasing numbers of rural people into that mainstream.

Neither is straightforward. Problems of performance and equity within agriculture, rural areas and agrifood systems are recurring, deep, and widespread. Truly inclusive rural transformations must not only boost incomes broadly, they must reduce the non-monetary deprivations of rural people and enhance both their access to services and resources, and their political voice and participation. This report shows that when these challenges are met, rural areas can play decisive roles in social and economic development and can be inclusively transformed in the process. The link to the 2030 Agenda for Sustainable Development is clear, powerful and affirmative. Rural people in inclusively transforming rural areas will be key actors in sustainable development solutions.

Timmer (2014) notes the importance of not overinterpreting the implications of structural transformation for rural areas. The suggestion that rapid exit from rural areas to urban areas – domestic or foreign – is a reasonable development strategy is misguided at best. IFAD has never adhered to that view. This report adds to that conviction, for it shows very clearly that the right selection of policies, institutions and investments can reward all rural lives today, tomorrow and long into the future.

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## Introduction to the report



In 2015, as the world reflected on achievements against targets in the Millennium Development Goals (MDGs) and crafted the 2030 Agenda for Sustainable Development, the dominant narrative was sober yet positive and upbeat, and rightly so. In 1990, some 44 per cent of the population in developing regions lived on less than US\$1.90 a day. This rate had dropped to 14.9 per cent by 2012, reducing the number of people living in extreme poverty by 1.06 billion (World Bank 2016). Progress on inequality was not as strong. As measured by the Gini coefficient, inequality in low- and middle-income countries increased from 38.5 in the early 1990s to 41.5 in the late 2000s (UNDP 2013). Nevertheless, between 1990 and 1992 and 2010 and 2012, the proportion of undernourished people in developing countries declined from 23.3 per cent to 12.9 per cent, and from 1.01 billion people to 795 million in absolute terms (FAO et al. 2015).

The declines in poverty and undernutrition were sharpest in Asia, with China alone reducing its rural poverty rate from 66.6 per cent in 1990 to 6.5 per cent in 2012 (World Bank 2015). Gains in other regions of the world were less dramatic, but also important. But there is no escaping the fact that in most regions poverty rates in rural areas stood well above those in urban areas. With the exception of Asia and the Pacific and, to a lesser extent, Latin America and the Caribbean, the gap did not decline significantly over the period.

Rural development is one of the most reliable and potent forces for overcoming these trends and achieving broad-based social and economic development. The evidence is strong and clear that sustained investment to enhance productivity in agriculture and the broader rural economy has a large impact on both growth and poverty reduction (Fan 2008; Fan et al. 1999, 2002). The impact pathways are both direct, through increased incomes and enhanced food and nutrition security, and indirect, through improved education, healthcare and other important services.

This report examines rural development through the prism of the transformation of rural areas and the wider economy – rural transformation and structural transformation. By embedding rural development within rural transformation, and that within structural transformation, developments in urban and rural areas can be viewed together and seen to be interconnected. The implications for rural development and rural transformation of deep and rapid demand-side changes in global and national factor markets and agrifood value chains can be examined. Drivers and determinants of pathways and levels of structural and rural transformation can be explored, with the aim of building an understanding of how they shape both opportunities and constraints to rural development and its inclusiveness.

The core strategic challenge facing governments, development agencies and other stakeholders is how to draw ever-increasing numbers of the poor and marginalized in rural areas into the mainstream.

#### Focus and analytical framework

With the aim of speaking to these strategic challenges, shedding light on the strategic opportunities, and thereby articulating and clarifying the strategic choices facing decision makers in the coming years, the following three questions shape the report's overall narrative and content:

1. What are the different pathways (or patterns) of structural and rural transformation across the developing world?

2. What are the consequences of transformation for poverty reduction and inclusion?

3. What can be done by governments, the private sector, civil society and development partners, including IFAD, to stimulate and support inclusive rural transformation in different contexts?

#### Propositions

In addressing these questions, the primary proposition of the report is that historical legacies and policy and investment choices shape the pathways, speeds and results of structural and rural transformations, leading to sharply different transformation and inclusion outcomes across countries. A supplementary proposition is that a rural development strategy to promote inclusive rural transformation must recognize and accommodate these outcomes, strengthening inclusion-enhancing forces and blunting exclusion-promoting ones. These two propositions shape the design of the report's analytical framework, the selection and interpretation of evidence gathered in applying the framework, and the development of implications for policy reform, institutional innovation and investment.

#### Analytical framework

Figure N illustrates the analytical framework guiding the report. As signalled by the propositions, the point of departure is the set of initial conditions that exist in a country: endowments or factors of production, human capital, traditional identities and historic legacies. These initial conditions affect the range and nature of choices available to governments and other key actors with respect to institutions, policies and investments aiming to affect the pace and nature of structural and rural transformation, which, in turn, condition and reflect each other.

These influences are mediated through interventions that, directly or indirectly, affect the level and rate of employment, access and rights to land and natural resources, availability of, and access to, rural finance, the depth and complexity of agrifood markets and value chains and agricultural technology innovation, empowerment and gender equality, and social protection. Several external factors shape the contexts within which these choices are made. Notable among these factors are political and social fragility, demographic conditions, urbanization, conditions of trade in international markets and, more recently, climate change.

Outcomes of structural and rural transformation include a reduction in rural poverty, improved food and nutrition security, and increased resilience to shocks and overall fragility, and more social and political inclusion for rural people. To be truly inclusive, these outcomes have to create lasting effects in the lives of rural people and thus be sustainable over the long run. The extent to which this occurs, however, is predicated on the pace and quality of the underlying transformation.

The analytical framework is employed to examine these issues from two perspectives: (1) a regional perspective based in part on a cross-cutting empirical analysis of levels and speeds of transformation and inclusion for a set of countries selected from all regions of the developing world, and also by examining how regional developments and country-specific choices featured in the framework have impacted transformation pathways and outcomes, and (2) a thematic perspective based on an analysis of the key policy action areas, key outcome areas, and cross-cutting issues signalled by the analytical framework.

#### The regional perspective

The empirical analysis (detailed in the Overview and synthesis) reveals several regularities regarding structural transformation, rural transformation and rural inclusion (as captured by rural poverty reduction). Relatively more structurally transformed countries are also more rurally transformed. The higher the speed of structural transformation, the faster the pace of rural poverty reduction. Similarly, the higher the speed of rural transformation, the faster the pace of rural poverty reduction. Where structural transformation is relatively slow, fast rural transformation coincides with fast rural poverty reduction. Both rural transformation and rural inclusion would therefore appear to be most dynamic in the context of fast structural transformation, which, in turn, and especially where it is proceeding relatively slowly, is most vibrant alongside rapid rural transformation and rapid rural inclusion.

Rapid reduction in rural poverty in the absence of rapid structural and/or rural transformation is rare. However, several fasttransforming countries have not done so inclusively. Structural and rural transformations may be necessary for rural inclusion, but they are not sufficient. To achieve inclusion, not only must countries transform quickly, they must also take specific actions to reduce rural poverty and enhance inclusion more broadly.

#### FIGURE N Analytical framework



Source: Authors.

Based on these findings, the report hypothesizes that the inclusiveness of structural and rural transformation is an empirical issue whereby the path and speed of transformation and inclusion are linked to initial conditions, institutional factors, policy and investment. Two specific hypotheses are examined: (1) No country has reduced rural poverty significantly in the absence of rapid structural and/or rural transformation. This statement should be confirmed by the data, with few exceptions. (2) Countries that have gone through a significant structural and/or rural transformation have reduced rural poverty - and enhanced inclusion - significantly. This statement should be qualified by the data, with some countries having transformed inclusively, but several

having transformed non-inclusively. In the full report, four regional chapters consider the extent to which these hypotheses hold in different parts of the world, further examining how initial conditions, institutional factors, policy and investment choices have manifested themselves in each region, and how – or if – they have affected the speed and inclusiveness of rural transformation.

#### Latin America and the Caribbean

Most countries in the LAC region had already reached relatively high levels of structural and rural transformation by the start of the period of analysis, with an urbanization rate of over 75 per cent. Growth and poverty reduction over the period were strong overall. Countries underwent a vast rural transformation in the second half of the twentieth century, with four features in common: spatial integration as functional rural-urban territories formed where the majority of the rural population lives, diversification of rural economies from agriculture, transformation of agrifood systems and value chains under the dominance of corporations, and a blurring of the cultural distance between rural and urban youth owing to rural roads and communications technologies. The old rural and fundamentally agrarian societies have been replaced by new types of rural societies, in which agriculture is still important but no longer predominant.

Findings are consistent with the main hypotheses, namely that all countries (but one) that have reduced rural poverty faster than the region as a whole have also experienced rapid structural or rural transformation, or both, but that not all countries that experienced rapid transformation cut rural poverty rapidly. Almost every country with rapid rural poverty reduction also narrowed rural income inequality faster than the regional average.

As in APR, therefore, agricultural productivity growth and strengthening of the agriculturebased rural non-farm economy will be important to enhanced inclusion. In addition to prosmallholder productivity-enhancing policies and investments (such as infrastructure investment in lagging areas, land reform for excluded people, focused agricultural R&D and improved access to technology and finance), social protection programmes have been and will remain central to rural poverty reduction in LAC.

Training to allow people to have access to more productive jobs and support for collective action and empowerment were critical to inclusion, and will remain so. In countries with sharp subnational differences in agro-climatic, socio-economic and structural conditions, territorial development strategies may be appropriate. A major emphasis should be to support the expansion of high-quality public goods, which will also demand a major effort to coordinate agricultural (and smallholder) policies and programmes with those related to public services, infrastructure and broader economic development – something that probably can only be done on the basis of regional and territorial development approaches.

#### Asia and the Pacific

In APR, where growth was rapid and poverty reduction significant over the period of analysis, the rural sector has been gradually transforming, moving from largely cereal- or grain-based production to higher-value production, such as livestock and fisheries. Driven mainly by rising income and urbanization, food-consumption patterns have been changing, shifting from starchy staples and rice towards fruit and vegetables, livestock and dairy products, fish, sugar and oils. Findings are strongly consistent with the two hypotheses, and more so than for any other region. Recent transformations of economies and rural societies in the region have coincided with the deepest and fastest structural transformation in developing countries, cutting sharply into rural poverty. The data do not reveal any country that transformed quite quickly that did not also cut poverty relatively fast. The data confirm that countries that transformed relatively slowly made significant progress against poverty, but did so more slowly than the regional average.

In countries registering fairly high rates of transformation and poverty reduction, productivity growth on smallholder farms and rapid growth of the rural non-farm economy were decisive. While labour-intensive manufacturing is a source of inclusive employment growth in the region, agricultural productivity growth and the agriculture-based rural non-farm economy remain central to structural and rural transformation that draws the rural poor into the mainstream.

Inclusion-enhancing policies and investments included infrastructure investment in lagging areas, land reform for excluded people, demand-driven agricultural R&D and enhanced smallholder access to technology and finance. Especially important were coherence and appropriate sequencing of institutional reforms, policies and investments.

Labour-intensive manufacturing will remain an important source of inclusive employment growth in many countries in the region, but continued agricultural productivity growth and strengthening of the agriculture-based rural non-farm economy will be central to the structural and rural transformation that draws the rural poor into the mainstream.

#### Sub-Saharan Africa

In SSA, the dominant narrative of a fasttransforming continent showing mixed but generally positive performance is valid, but must be tempered by recognition of challenging trends that threaten continued progress. Agriculture shows healthy growth in terms of both output and productivity, but the commodity mix has not been diversified much. The picture that emerges is of an expanding agricultural sector, but one with weak fundamentals that are preventing a broad-based reduction in poverty and inequality. Nevertheless, Africa's rural areas are transforming deeply and rapidly. Findings with respect to the hypotheses are that of the 23 countries out of 28 in the region that registered quite fast structural and rural transformation over the period of analysis, only 15 managed to cut poverty quickly. The burden of high population growth rates, poor infrastructure, and policy and institutional gaps is heavy. Notably, however, nine relatively slow transformers were able to reduce poverty at quite fast rates. These cases confirm that the demographic and political challenges facing African countries are not insurmountable. They also show that the direction and quality of public investment is central to inclusive pathways.

Because of the continued "youth bulge" in the labour force across the continent, inclusive transformation must focus on youth. Despite rapid urbanization, the waves of young people reaching adulthood and seeking to establish families and livelihoods will be predominantly rural for at least two more decades. While speeds and patterns of structural and rural transformation differ across the continent, similarities in factor proportions and competitive advantage imply that inclusive transformation springs mainly from agriculture and the rural non-farm sector. Both of these require sustained productivity-enhancing investment to reach their full potential.

Agriculture is the primary employer, and will be called on to absorb new entrants to the labour force. Increased agricultural productivity and improvement in agriculture-related rural livelihoods will continue to be the primary avenue to achieve such inclusion in the near term. Enhanced agricultural growth will also drive growth in the rural non-farm sector. Targeted investment in infrastructure, skill development, and increased access to land and finance are critical. Rapid urbanization and fast changing food consumption patterns point to continued demand-driven changes in agrifood systems as high-potential sources of employment and income growth in rural areas.

## Near East, North Africa, Europe and Central Asia

In the NEN region, despite high diversity in their geography, history, natural resource endowments and socio-political contexts, countries have in common deep and farreaching political and economic transitions that are strongly determining their structural and rural transformations. In particular, many countries are grappling with the aftermath of two major events separated by nearly two decades: the far-reaching remodelling of the Commonwealth of Independent States (CIS) triggered by the demise of the Soviet Union in the early 1990s, and the current reshaping of NEN political and socio-economic landscapes unleashed by the Arab "revolutions" that began in 2011. Factor endowments, particularly natural resource endowments such as water, farmland and minerals, are important drivers of structural and rural transformations. In most countries in the NEN region, dependence on oil revenue and its cyclical commodity effects translate into pronounced volatility in economic growth, which is particularly detrimental because stable growth is better than volatile growth at tackling poverty.

Findings indicate that the urban-rural poverty gap is a strong indicator of inclusion (the wider the gap, the lower the inclusiveness). Countries that have succeeded in narrowing the gap typically register higher agricultural value added per worker. A combination of above-average structural transformation with above-average rural transformation results in relatively fast rural poverty reduction and a narrower urbanrural poverty gap. Conversely, countries featuring a combination of below-average structural and rural transformations achieve slow rural poverty reduction and see a wider urban-rural poverty gap.

Thus, no country has achieved an inclusive development pattern characterized by relatively fast overall poverty reduction and a concomitant narrowing of the urban-rural poverty gap without paying careful attention to how rural transformation interacts with the wider structural transformation. Key interventions to promote inclusive transformation patterns include boosting agricultural productivity and shifting to high-value agrifood chains, building resilience to anthropogenic and climate-induced shocks, empowering women, investing in infrastructure, and expanding access to farmland and other productive assets, especially for historically excluded populations.

#### The thematic perspective

At issue in the full report are drivers of inclusiveness and policies and investments that can enhance inclusiveness. The logic of inclusive rural transformation as captured in the analytical framework points to a set of six critical areas for policy action and investment: employment, markets and value chains, rural finance, agricultural technology innovation, land and natural resources, and collective action. Six chapters are devoted to these issues.

The full report also includes eight brief thematic "Spotlights." Two spotlights focus on two socio-economic outcomes that are powerful signals of the degree of inclusion: food and nutrition security and resilience to shocks. Given the increasing importance of civil strife, population dislocation, and natural and anthropogenic disasters, prospects for inclusive transformation in fragile situations are also considered in a spotlight. Also examined in spotlights are two issues that cut across the policy actions and outcome areas set out above: gender equality and environmental sustainability. Not only do both of these issues have strong policy content in themselves, they are also powerful reflections and outcomes of inclusion. A sixth spotlight is devoted to the special circumstances facing indigenous peoples under rural transformation, a seventh to social protection and an eighth and final one to institutions and governance. Outlined below are key findings from the full report's thematic chapters and spotlights.

#### Employment

Overall employment trends – globally and nationally – will strongly influence the types and qualities of employment opportunities open to rural populations in the future. The better the overall employment prospects, the greater the chances that rural people will be able to improve their lives via employment and higher wages in rural and urban areas. The converse is true, of course – poor employment trends will have major implications for rural and agricultural development strategies.

Patterns of transformation seen in the past, where low-skilled labour left agriculture for low-skilled but higher-paying industrial jobs, will be hard to replicate. Manufacturing will not be available to many countries as an avenue for significant employment growth. The role of the state is thus primary, entailing a strengthening of the fundamental capabilities of the populace, expanding access to new technology, addressing gender- and culture-based inequities, providing a broad cushion of benefits, providing public goods, and strengthening the business environment through policy and infrastructural investment, which rural areas especially need.

#### Markets and value chains

The chapter in the full report documents the drivers and implications of radical but predictable changes underway in the industrial organization of food markets across the globe. The drivers are urbanization, changes in food demand (dietary change itself driven by rises in income), the diversification of rural economies, and institutional changes that modify the set of actors in the agrifood system and the relations (including power relations) between them.

The overall configuration of agrifood supply chains has changed from local and fragmented to geographically far longer chains. The role and importance of traditional village traders have declined, while those of urban wholesale markets and specialized modern wholesale and logistics have risen. Concentration (with a rise in scale), multi-nationalization and technology change (capital:labour ratio increase) of food retailing, processing and wholesale logistics have also increased. The expansion of these segments has provided employment opportunities to the poor as workers in food processing and wholesale/logistics firms.

Private standards of quality and safety have emerged, as has greater contract use. New opportunities are opening up for smallholder farmers, small traders and rural processors and other rural agrifood SMEs. But barriers to entry remain a significant problem.

The best remedial strategies are broad policy and public investments to enhance collective and individual assets and to improve capabilities for participating and prospering in the changing domestic markets for major staples, livestock and horticulture – the mainstream of market change.

#### **Rural finance**

Over the past few decades, with the emergence and spread of innovative institutions and models, financial services have expanded around the world, with investments in rural financial systems being increasingly profit driven. Several investment funds now target agriculture. Agricultural value-chain finance offers new mechanisms that respond more closely to the investment needs of smallholder farmers and rural SMEs.

Remittances have become increasingly prominent sources of finance for rural households, and are especially important for the most vulnerable. But access is not yet broad-based, excluding the vast majority of poor, leaving them with unreliable ways to save money, protect and build assets, transfer and receive money and obtain credit. The implications of expanding their access to these services for the inclusiveness of rural transformation are profound. Remedies include changes to regulations that reduce the costs of formal lending and financial service delivery to the poor, alongside support for financial literacy. Informal channels, too, fill important gaps that formal systems cannot address, and their roles should be recognized as valuable for financial inclusion.

#### Agricultural technology innovation

Increases in agricultural productivity can drive rural and structural transformation by helping farmers to produce more and of greater value, as illustrated by Asia's Green Revolution. The types of technologies most suitable to support inclusive transformation depend on contextspecific conditions, often changing as the transformation proceeds.

Smallholder farmers must be able to adopt and adapt more productive technologies. For that, they must have the means to overcome a range of impediments such as inadequate education and knowledge of the new technologies, as well as constraints on access to financing and markets. The remedies include innovative approaches to technology development and dissemination, improved governance, a better institutional environment for agricultural R&D, and enhanced access to agricultural finance, inputs, advisory services and output markets.

#### Land and natural resources

Land, forest and water resources are crucial to transformation processes and to the livelihoods of rural people, especially smallholder farmers and ethnic minorities. Historically, depriving people of access to these resources has led to the mass exclusion of smallholders, indigenous groups and ethnic minorities – and for the latter two groups, often pushing them near to extinction – creating many of today's most vulnerable and marginalized populations. Risks of exclusion remain high because structural and rural transformations demand more and more of all three resources. Collective action is vital in inclusion, as are institutions that can manage the resources at local, meso and micro level.

Remedies include institutions and policy measures that foster proper management of these resources while preventing further threats to rights-holders. It is critical to clarify and enforce property rights, especially for women, by enhancing transparency in managing and allocating the resources, ensuring participation in policy processes, enabling greater inclusion of historically deprived groups and reducing risks of exclusion of other groups.

#### **Collective action and empowerment**

Even as structural and rural transformation opens up new opportunities for rural communities, it also generates major risks that smallholders, rural SMEs and other marginalized groups in rural areas may be left behind, excluded from benefits or rendered worse off in absolute terms. Such transformation can weaken the legitimacy of local norms and institutions and lower the potential of collective action as a force for inclusion.

Historically, rural elites all over the world have primarily used collective action to extract tribute or labour services from peasants. Even today, the capture of benefits of policies and programs by rural elites is still very widespread. Still, collective action organizations of small farmers and disadvantaged groups, while fraught with profound difficulties in largely uncharted waters, can enhance the scope for inclusive rural transformation. Countless farmer organizations and other rural collective bodies are already in place, often as entry points for multiple development initiatives. Building robust organizations that can empower rural communities to benefit from changes brought on by rural transformation can only be gradual - but is critical. Support must be consistent and sustained. Traditional norms and institutions, based on local culture and authorities, may serve to exclude women and other disadvantaged groups from participating on an equal basis in economic, social and political terms. Several trends and conditions associated with structural and rural transformation challenge the legitimacy of local norms and traditional

authorities and institutions and, therefore, may weaken both negative and positive forms of collective institutions. New forms of inclusive collective organizations need to take their place and tackle both existing and new challenges.

Policy and investment to enhance the delivery and inclusion-enhancing capacities of these organizations must focus on four areas: governance, operations, financing, and strategy and policy engagement. Government and the private sector have complementary roles for enabling them to deal with their many constraints. These roles must be identified, to provide incentives and enabling conditions for rural collectives to form, operate effectively and contribute to shaping rural transformation pathways in the interests of marginalized groups and individuals.

#### **Social protection**

When inclusion-fostering policies and programmes are not enough to remedy exclusion, social protection – general or targeted – becomes necessary. Social protection regimes featuring safety nets and direct interventions to address vulnerability can be key complements to growth strategies. Where well targeted and run, they can ease access to investments and supplyside interventions, enhance resilience, promote equitable distribution of economic and social benefits from growth, and draw vulnerable areas and groups into mainstream growth processes.

When "preventive" and "protective" measures are supplemented by "promotional" investments in the productive capacities of rural populations, social protection can provide pillars of inclusive transformation. However, these measures must be supported to overcome challenges related to targeting in rural areas and long-term financial sustainability.

#### Institutions and governance

Institutions are important in catalysing and sustaining inclusive transformation, as for example through setting common rules and creating incentives. They can open up opportunities for poor people and their organizations to seize economic, political and social chances, but can also increase the challenges they face. Under different conditions of governance, income and capacity, similar institutional arrangements can lead to vastly different outcomes. Thus, asking which institutional arrangements matter most for inclusive rural transformation would be misleading. There is no unique set of formal and informal rules that can foster economic growth and social inclusion. Initial conditions – natural endowments, human capital, traditional identities and historical legacies – and governance affect the range and nature of choices open to governments and other key actors.

Macro institutional reforms may not be needed to boost sustainable and inclusive transformation but what are definitely needed are political and economic institutional principles that release the binding constrains on the rural economy, help strengthen state capacity to implement programmes and enforce decisions, ensure property rights (so that more investment goes into agriculture and the rural sector), and promote the participation of rural people, making them active actors in the transformation processes.

#### **Resilience to shocks**

While structural and rural transformation does not "cause" shocks, it is a powerful disruptive force that fuels changes in rural economies that can potentially affect households' and communities' capacities to cope with the myriad hazards, vulnerabilities and risks they face. The forces underlying the transformation - especially commercialization and specialization - can catalyse and reward acquisition and use of new kinds of assets and capabilities that yield new livelihood options and new organizational forms and arrangements. Together these can confer greater resilience to shocks and boost capacity to recover from them. Yet those same forces can breed new hazards, vulnerabilities and risks that may combine to blunt the capacity to withstand and recover from shocks.

On balance, however, the forces underlying structural and rural transformation generate impacts that do more to enhance households' and communities' capacities to cope with and recover from shocks than the converse. But as the overall aim is a transformation that features ever greater inclusion, there is scope for policy to enhance measures to improve capacity to manage risk: promoting efficient and effective disaster preparedness and response, enhancing risk transfer, and encouraging prudent risktaking and livelihood diversification.

#### **Fragile situations**

Fragility is a key driver of socio-economic change and is among the greatest development challenges. There were 47 fragile states and economies in 2013 and 50 in 2015, according to the OECD. In 2015, these states were home to 1.4 billion people – 20 per cent of the world's population, with 43 per cent of those in absolute poverty. Over half of these states were in Africa. Although fragility is a complex phenomenon that varies over time and space, its impacts on structural and rural transformation are specific to the context, population and period.

Fragility may impede the efficient flow of resources to industrial and urban-based economic activities, forestalling higher productivity and incomes. It may also exacerbate rent-seeking behaviour that works against equitable and inclusive development.

Situations of fragility and violent conflict have some common elements such as poverty, inequality and vulnerability. They typically lack good governance and strong and effective policies, have limited numbers of highly educated and skilled workers, suffer from poor infrastructure and services, and sometimes have limited civil society and private sector activity. International support may be required to meet people's basic needs, including security, and to ensure access to basic services according to humanitarian principles.

#### **Gender equality**

Structural and rural transformations may have very different impacts on women and men. This is especially apparent in migration, where women may be disadvantaged because of the importance of childcare. For similar reasons, opportunities to participate in the rural non-farm sector also differ by gender. The same is true of access to land and a range of productive resources. Women often face major barriers to entering the high-value agrifood supply chains that take on greater importance as transformation evolves. Women also face major hurdles in rural labour markets, which tend to favour educated young men.

Measures to overcome these constraints include direct interventions to enhance skills, build assets and improve access to key resources, alongside broader policy and institutional reforms to address sociocultural dimensions of gender bias and inequality.

#### Food and nutrition security

Inclusive structural and rural transformation requires expanded food and nutrition security. Such transformation has been accompanied by wide and deep improvements in food and nutrition security, with food availability, access and utilization all registering steep gains.

But even in some places where the transformation has been rapid and sustained, incomes have increased, and food supply has been relatively easy with comparatively low and stable prices, food and nutrition insecurity has persisted, with undernutrition, overnutrition and micronutrient deficiencies coexisting. Different forms of food and nutrition insecurity thus serve as powerful signals of incomplete, uneven, unbalanced and non-inclusive transformation.

Policy on food and nutrition security – serving as a platform for inclusive and sustained structural and rural transformation – centres on nutrition-specific and nutrition-sensitive measures and investments that render fastchanging food systems better able to deliver and support healthy and nutritious diets for all consumers, especially pregnant women and young children, for whom malnutrition has long-lasting consequences. Also key are policy measures to counter the effects of forces that militate against expanded participation by small farmers and traders in commercial food production and trade.

#### **Environmental sustainability**

In the long run, rising incomes associated with transformation enhance environmental consciousness and lead to environmental

improvements, albeit at different times and varying speeds depending on the issue at hand and other conditions. In the shorter run, however, transformation is likely to lead to environmental stresses. Spotlight 7 in the full report argues that transformation cannot be considered successful unless progress is being made with respect to environmental sustainability. During their period of classic transformation, OECD countries experienced many severe problems of urban sanitation, deforestation, loss of biodiversity, and air and water pollution. Sanitation improved during the late nineteenth and early twentieth centuries, but other challenges were not systematically addressed until the 1970s and 1980s. Since then environmental laws and programmes have led to major improvements.

Developing countries have also initiated programmes to safeguard the environment. Over the last decade, India and China have started to remedy the enormous congestion and pollution problems associated with their rapid economic growth. Yet many rural areas, especially in Africa, are experiencing serious soil degradation, and while progress has been made, especially on setting aside protected areas, deforestation and loss of biodiversity continue. To manage these issues, there is a need for major policy and institutional reforms and physical, institutional and capacity-development investments.

#### Indigenous peoples

The world has more than 370 million selfidentified indigenous peoples in some 70 countries. Latin America has more than 400 groups, each with a distinct language and culture. The biggest concentration is in Asia and the Pacific – an estimated 70 per cent.

They have rich and ancient cultures and regard their social, economic, environmental and spiritual systems as interdependent. They make valuable contributions to the world's heritage via their traditional knowledge and their understanding of ecosystem management. But among those who have been traditionally subjected to social, political and economic exclusion, indigenous peoples continue to face discrimination based on their identities and disadvantages that limit (or even prevent) their access to social, economic and political opportunities and resources. Their socio-economic and human development conditions are significantly worse than those of other population groups. Even when they have made social and political progress, rural transformation may represent a threat to their traditional land-use practices or to their cultural and linguistic diversity.

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# Annex: Data on trends in structural transformation, rural transformation and rural poverty

Region/country	S	Stro Share of		transfo gricultu			Agr	iculture	al trans value a nstant 2	added p	er worl	ker
ASIA AND THE PACIFIC (APR)	1990- 1994	1995- 1999	2000- 2004	2005- 2009	2010- 2014	Change	1990- 1994	1995- 1999	2000- 2004	2005- 2009		Change
Bangladesh	71.1	75.4	78.1	81.3	83.0		276	304	358	443	563	<b>A</b>
Cambodia	52.9	53.6	65.7	66.7	65.6		363	383	371	455	516	
China	77.8	81.9	86.5	89.4	90.6		336	404	464	576	722	
India	71.2	74.1	78.7	81.8	81.5		465	512	537	607	697	
Indonesia	81.7	82.5	84.8	86.1	86.5		631	663	704	820	992	
Lao PDR	40.7	46.2	57.6	64.5	71.1		349	392	442	468	489	
Pakistan	74.3	73.5	76.2	77.1	75.1		889	1 030	1 020	1 051	1 065	
Philippines	78.3	81.8	86.7	87.2	88.1		822	825	918	1 064	1 120	
Viet Nam	65.9	73.6	78.7	80.8	81.0		277	316	367	420	468	
LATIN AMERICA AND THE CARIBBEAN (LAC)	1990- 1994	1995- 1999	2000- 2004	2005- 2009	2010- 2014	Change	1990- 1994	1995- 1999	2000- 2004	2005- 2009	2010- 2014	Change
Bolivia	83.3	83.9	84.8	86.3	87.1		622	630	617	639	644	
Brazil	91.8	94.6	93.7	94.7	94.7		1 750	2 168	2 873	3 751	4 943	
Chile	90.6	93.3	94.7	96.1	96.6		3 303	3 615	4 718	5 697	6 371	
Colombia	84.0	85.8	91.0	92.1	93.5		3 510	2 960	2 889	3 308	3 657	
Costa Rica	86.9	87.4	91.2	91.8	93.7		3 499	4 154	4 575	5 568	6 383	
Dominican Republic	87.6	91.0	92.9	93.0	93.7		2 757	3 206	4 074	5 225	7 389	
Ecuador	78.0	79.7	87.1	90.1	90.5		2 087	2 406	2 792	3 399	4 000	
El Salvador	84.1	86.6	90.4	88.4	88.1		2 141	2 246	2 416	3 037	3 4 4 4	
Guatemala			85.3	87.5	88.5		1 557	1 859	1 842	1 823	1 930	
Honduras	77.9	79.6	86.0	87.1	86.1		1 274	1 368	1 591	1 969	2 406	<b>A</b>
Mexico	93.8	95.7	96.4	96.7	96.7		2 713	2 889	3 284	3 629	4 064	
Nicaragua	78.7	77.8	81.3	82.3	80.2		1 623	1 907	2 402	3 072	3718	
Panama	91.3	92.6	92.3	94.3	96.5		2 396	2 662	3 490	4 081	3 868	
Paraguay	82.4	81.8	83.2	79.5	79.0	▼	1 678	1 846	1 911	2 207	2 807	
Peru	90.7	90.6	91.6	92.4	92.6		1 029	1 230	1 401	1 626	1 848	
Uruguay	91.6	92.2	90.8	90.0	91.0	▼	5 690	7 108	7 003	8 283	9 612	<b>A</b>

						l inclusior						
rate			ural pove \$1.25/p		Ex	ntry		adcoun y line (%	verty he povert	lural po	F	
Change			2000- 2004	1995- 1999	1990- 1994	Change	-	• •	-	1995- 1999	1990- 1994	
▼	48.9	56.0	65.1	70.1		▼	35.2	43.8	52.3			
▼	7.7	28.8	30.6		48.0	▼	23.2	39.1	54.2			
▼	13.5	24.2	43.7	50.2	72.3		7.9					
▼	29.4	43.8			52.5	▼	25.7	33.8	41.8		50.1	
▼	14.6	25.1	33.9	50.1	57.6	▼	15.2	19.7	20.5	22.9		
▼	32.1	30.6	48.0	63.4		▼	28.6	31.7	37.6	42.5		
▼	8.5	19.5		17.7		▼		27.0	33.7	34.7		
▼	25.1	29.7	34.8	33.5								
▼	3.2	21.5	35.3	37.0			22.5					
Change	2010- 2014	2005- 2009	2000- 2004	1995- 1999	1990- 1994	Change	2010- 2014	2005- 2009	2000- 2004	1995- 1999	1990- 1994	
▼	18.6	35.0		49.2		▼	60.8	74.3	80.3	84.0		
▼	5.6	7.8		10.3		▼	31.1		70.6			
▼	0.8	0.8	1.2	1.2		▼	32.8	47.7				
▼	11.4	12.9	23.6			▼	45.4	55.6	58.9			
▼	1.5	3.5		4.7			27.9		26.3			
▼	3.2	6.3	8.0	5.8		▼	48.7	53.8	51.5			
▼	7.3	12.8		23.1		▼	46.1	60.7	73.7			
▼	1.6	5.7		20.2		▼	42.1	43.5				
	22.3	19.2	16.8			▼	71.4	70.5	74.5			
▼	25.2	34.1		29.3		▼	66.7	65.8	71.8			
▼	4.0	3.5	9.5	14.4		▼	62.4		66.5			
▼		15.4	24.6	25.5		▼	50.1	66.8	70.3			
▼	8.3	13.7		23.0		▼	51.0	61.4	64.4			
▼	5.7	8.1		12.2		▼	40.3	50.0	50.7			
▼	7.1	18.4		23.9		▼	52.8	74.3	78.5			
	0.2	0.3				▼		14.4	20.7			

	SI 1990-	hare of	non-ag	aricultu	ra in CI	(0/) סר					Rural transformation					
SOUTHERN	1000				re in Gi	ר (70)	Ag			added 2005 l	per wo JS\$)	orker				
	1990- 1994	1995- 1999	2000- 2004	2005- 2009	2010- 2014	Change	1990- 1994	1995- 1999	2000- 2004	2005- 2009	2010- 2014	Change				
Botswana	95.2	96.1	97.2	97.4	97.3		854	801	642	734	777	▼				
Burundi	47.4	50.2	53.6	58.5	59.9		226	193	170	129	126	▼				
Ethiopia	40.5	46.4	56.5	53.4	55.2		175	176	164	208	258					
Kenya	69.8	68.7	70.0	75.1	70.8		374	349	364	370	384					
Lesotho	80.6	82.1	89.1	91.9	93.8		372	370	355	304	347	▼				
Madagascar	72.0	70.8	70.6	72.9	72.5		239	228	219	207	188	▼				
Malawi	59.7	65.8	63.0	68.6	68.5		120	180	207	201	233					
Mozambique	64.9	67.9	75.6	72.4	72.5		155	186	201	262	301					
Namibia	90.5	90.0	89.2	90.4	91.9		2 049	2 375	2 687	2 557	2 370					
Rwanda	63.7	56.0	62.7	64.1	67.0		208	228	248	268	301					
South Africa	95.7	96.1	96.6	97.1	97.5		3 172	3 341	4 072	5 036	6 461					
Swaziland	89.1	86.8	89.8	91.9	93.3		1 065	1 066	1 160	1 279	1 405					
Tanzania	53.0	58.0	67.1	69.3	67.8		254	263	291	332	353					
Uganda	47.6	56.6	73.4	74.6	72.5		205	220	234	226	220					
Zambia	78.1	82.9	82.4	86.3	89.8		429	492	454	388	357	▼				
	1990- 1994	1995- 1999		2005- 2009		Change	1990- 1994					Change				
Benin	66.0	66.5	73.7	72.5	75.2		522	614	745	846	911					
Burkina Faso	68.5	63.2	64.0	63.2	65.3	▼	229	269	310	327	326					
Cabo Verde	87.5	87.5	89.1	91.6	91.9		1 060	1 795	2 558	3 243	4 291					
Cameroon	75.8	75.7	78.3	77.7	77.0		564	681	810	967	1 181					
Central African	53.3	47.9	45.7	45.1	44.2	▼	432	480	561	598	563					
Republic																
Congo	88.6	90.4	94.2	95.8	95.9		451	415	466	586	731					
Guinea	80.3	79.4	76.7	75.2	79.0	▼	145	149	176	192	212					
Mali	59.9	61.0	63.1	62.1	60.0		601	637	659	747	870					
Mauritania	64.1	64.9	64.6	74.5	78.9		1 169	1 137	956	975	1 046	▼				
Nigeria	67.5	65.7	63.0	66.5	78.1				2 157		4 406					
Senegal	80.3	80.2	82.8	84.3	83.7		396	393	367	360	367	▼				
Sierra Leone	58.8	45.4	48.4	45.1	45.3	▼	619	597	607	752	896					
Тодо	63.8	61.5	63.4	63.1	63.4	▼	580	668	643	658	600					
NEAR EAST, NORTH	1990- 1994	1995- 1999				Change	1990- 1994		2000- 2004			Change				
Armenia	66.1	65.1	74.4	80.2	79.3		2 293	3 021	4 265	6 626	8 258					
Egypt	82.6	82.9	83.7	86.0	85.6		1 310	1 536	1 774	2 030	2 392					
Jordan	93.0	96.6	97.4	97.1	96.6		2 641	2 060	2 395	3 584	4 627					
Kazakhstan	80.1	88.6	91.5	93.8	95.1		3 013	1 954	2 518	3 3 1 6	3 821					
Kyrgyzstan	61.7	56.9	63.6	71.2	81.7		837			1 284						
Morocco	80.4	80.9	83.7	85.7	86.1		2 010	1 896	2 2 4 8	2 957	4 228					
Tajikistan	71.1	66.5	74.6	77.2	74.2		536	452	600	773	1 026					
Tunisia	82.6	86.9	89.5	90.6	91.1		3 205	3 217	3 609	4 061	4 356					
Turkey	83.7	85.3	88.9	90.8	91.3		3 649	3 961	4 547	5 337	6 493					

Source: IFAD, based on World Bank.

F	lural po	-	adcoun y line (%		intry	Ex		ural pov S\$1.25/p	-		rate
1990- 1994	1995- 1999	2000- 2004			Change	1990- 1994	1995- 1999				Change
40.4		44.8	24.3		▼	20.9		34.2		14.9	▼
			68.9				87.3		82.0		▼
	46.5	39.3		30.4	▼			50.8	35.3	28.5	▼
			49.1				32.9		48.5		
68.9		60.5		61.2	▼		40.9	58.6		58.4	
		78.2	80.6	81.5					87.6	92.4	
	66.5	55.9		56.6	▼		97.5		79.0	77.9	▼
	71.3	55.3	56.9		▼		81.6	78.4	61.0		▼
81.6		48.7	37.4		▼			34.1		23.7	▼
			61.9	48.7	▼			82.0	73.3	62.1	▼
 			87.6	77.0	▼		38.3	42.1	34.1	8.3	▼
		79.7	73.1		▼			52.5		47.4	▼
 				33.3		71.8		88.0	54.1	48.2	▼
 60.3	43.1	42.7	30.7	22.4	▼		53.8		55.0	34.0	▼
 				77.9			71.6		83.9	89.2	
1990- 1994	1995- 1999	2000- 2004	2005- 2009	2010- 2014	Change	1990- 1994	1995- 1999	2000- 2004	2005- 2009	2010- 2014	Change
			37.8	39.7				49.0		43.5	▼
		65.8	52.8		▼		81.6	61.6	46.0		▼
			44.3					33.4	23.2		▼
	59.6	52.1	55.0		▼		57.2	31.1	38.5		▼
			69.4					65.5	71.7		
		65.2		74.8					67.3	81.2	
82.1		59.9	63.0	64.7	•						
 		64.8	53.8					65.6	55.5		▼
		62.6	59.4		-	91.2	25.0	20.8	14.3	07.0	<b>•</b>
		56.6	52.8	·	•		69.9	67.6	04.0	67.2	-
 		65.1	58.8	57.1	-			45.9	34.2	33.8	<b>•</b>
		78.7	75 4	66.1	<b>•</b>			71.8	01 5	70.8	<b>V</b>
1000	1005	0000	75.1	73.4	Change	1000	1005	0000	61.5	63.6	Chang
1990- 1994	1995- 1999	2000- 2004	2005- 2009	2010- 2014	Change	1990- 1994	1995- 1999	2000- 2004	2005- 2009	2010- 2014	Change
 		47.9	31.2	33.6	▼						
 		24.5	28.9	32.3				2.0	3.4		
				16.8				1.1	0.3	0.3	▼
		54.5	23.2	7.5	▼		6.6	9.6	0.2	0.1	▼
			40.8	38.7	▼		29.2	42.7	27.3	11.1	▼
	24.2	25.1	14.4		▼			7.4	3.9		▼
		73.8	49.2	25.7	▼		61.5	18.5	6.1	31.6	▼
							4.8	1.8	1.2	0.8	▼
		34.5	19.4	7.4	▼			1.4	1.8	0.0	▼

## Endnotes

- SDGs affected directly and indirectly by rural development 1 and transformation include: Goal 1 - End poverty in all its forms everywhere; Goal 2 - End hunger, achieve food security and improved nutrition and promote sustainable agriculture; Goal 3 - Ensure healthy lives and promote well-being for all at all ages; Goal 4 - Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all; Goal 5 - Achieve gender equality and empower all women and girls; Goal 6 - Ensure availability and sustainable management of water and sanitation for all; Goal 8 - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all; Goal 10 - Reduce inequality within and among countries; Goal 12 - Ensure sustainable consumption and production patterns; Goal 13 - Take urgent action to combat climate change and its impacts; and Goal 15 - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
- 2 The reliability of this widely used measure of agricultural productivity is often questioned due to large crosscountry disparities in levels. Gollin et al. (2014) find that these large disparities are real and not merely an artifact of mis-measurement or poor data quality.
- 3 This focus on the income poverty dimension of inclusion does not negate or minimize the importance of other aspects of inclusion. There is far more to inclusion than income. Other dimensions of inclusion are considered in the regional and thematic chapters, and in the Spotlights (described in the next section). But because data on income poverty exist for most countries, such a focus allows for rigorous comparing and contrasting of alternative pathways and patterns of rural transformation through one important lens.

- 4 IFAD has launched an analytical programme with that aim.
- 5 The eight countries are Peru, Brazil, Mexico and Uruguay (LAC), Jordan (NEN), and Botswana, Namibia, and South Africa (ESA).
- 6 The two countries are Turkey (NEN) and Uruguay (LAC).
- 7 Due to lack of relevant data for Jordan and Tunisia on rural poverty at country lines, this analysis was completed for only 60 of the 62 countries in the dataset.
- 8 This representation of the relative importance of agriculture under structural transformation is similar in spirit to that in the World Development Report 2008: Agriculture for Development (World Bank 2008). But here the focus is on the political economy of different rural development approaches, with the changing importance of agriculture under structural transformation a defining feature.
- 9 Measures classified here as "institutional innovations" may be considered "policy reforms" elsewhere, and "investments" here may be "institutional innovations" elsewhere. The issue is not which measure fits in what category (the table's rows), but rather which measure is most relevant in a given context (the columns).

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