Smallholder pathways towards inclusive and sustainable rural transformation

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There are 3.4 billion people living in rural areas of the world today. Despite rapid urbanization, this number will likely remain constant through 2030 due to population growth. Achieving the United Nation’s Sustainable Development Goals (SDGs) of ending extreme poverty and hunger by 2030 will not be possible without inclusive and sustainable rural development that benefits the rural poor.

In too many countries, rural development is equated with support for large farmers, on the grounds that only large farms can take advantage of scale economies and modern production techniques. But inclusive rural development must also concern itself with smallholders. Numerically, smallholders dominate rural economies. Two thirds of rural inhabitants depend on roughly 500 million small and family farms for their livelihood. They face significant constraints in accessing resources and technology. Many smallholders face transport, information and financial barriers that limit participation in input and product markets. As a result, smallholders do not use modern farming technologies, their crop yields are low, and much of their diet is limited to what they produce themselves, resulting in undernourishment and malnourishment.

The production issues faced by smallholder and family farmers are place specific, with their own soil, climate, crop, market and institutional characteristics. This presents a challenge for scaling up support whether by governments, businesses or non-profits. A true rural transformation will require efforts that are sufficiently coordinated and scaled to reach hundreds of millions of farmers across diverse geographies. They must be coherent and address multiple objectives at the same time – ending hunger and introducing resilient climate-smart technologies and providing a diverse diet to end malnutrition and fostering a culture change of entrepreneurship by providing access to modern finance and global markets.

What is needed is a system-wide transformation that would permit transformation of smallholders into dynamic small enterprises, integrated into local and global markets. This has been the historical experience with smallholders in Asia and other rapidly growing developing countries.

Indeed, support for smallholders provides an entry point for many of the interlinked SDGs. A transformation of smallholders would contribute to SDG 1 (ending extreme poverty), SDG 2 (ending hunger, especially target 2.3 on doubling the productivity of smallholders), SDG 5 (gender equality, especially dealing with special issues related to women farmers), SDG 8 (jobs and growth), SDG 10 (reduced inequalities, especially between rural and urban areas), SDG 13 (climate action, especially resilience to climate shocks), SDG 15 (life on land, especially conservation of forests and mountain ecosystems), and SDG 17 (multistakeholder partnerships).

One critical constraint on smallholder transformation is lack of access to finance. Dalberg Global Development Advisors estimated a potential market demand for smallholder finance of $450 billion in 2012, but concluded that only about 2 per cent of this market was actually supplied. The report went on to suggest that multiple stakeholders – donors, impact investors, agrifood businesses, commercial lenders and social lenders – would have important roles.

The gap in smallholder financing is not surprising. Smallholder credit demands fall between microfinance and commercial loans. Their needs are too large for microfinance to provide a solution. They are rationed out of commercial lending due to high administrative costs per dollar lent, high risk (climate, seeds, markets and new farming techniques), low collateral and significant seasonality in earnings. The market, left to itself, will not solve this problem in the time frame of the SDGs. A new approach is needed.

This theme has been echoed in a number of international conferences, including an IFAD/Italian Ministry of Economy and Finance co-hosted event at Expo 2015 on “Financing for Food.” The time has now come to move from debate and diagnosis to concrete and structured follow-up. Against this backdrop, IFAD, the Italian Ministry of Economy and Finance, the Brookings Institution and the University of Warwick are convening a conference to explore the setting up of a Smallholder Agricultural Finance and Investment Network.

In the final analysis, efforts at ending hunger will be judged by the outcomes they produce. SDG 2 has four outcome targets: (i) ending undernourishment; (ii) ending malnutrition; (iii) doubling the agricultural productivity and incomes of small-scale producers; and (iv) implementing resilient agricultural practices. In each area the world is currently off-track as a whole, and a significant acceleration of the rate of progress in individual countries will be needed.

As outcomes respond to interventions with a variable lag, it is useful, from a policy perspective, to also monitor intermediate outcomes that could affect hunger. Empirical evidence suggests that government policies and institutions, political commitment, and public and private investments have important roles to play. They work best when linked through partnerships or networks that share a common goal, such as the financing of smallholder agricultural development and rural small and medium-sized enterprises.

Figure 1 below provides a simple accountability framework that can be used to review and follow up on how close countries are to ending hunger. The framework has two distinct parts: (i) a three-pronged structure of elements that all stakeholders should focus on and (ii) a benchmarking around common metrics in each country.

The three prongs of the framework relate to hunger needs (or outcomes), the policies and strategies for intervention, and the resources to invest. The metrics are all at the country level, as the main focus of accountability for the SDGs will remain at the country level. A common framework with common metrics also permits review of progress at the global level. As the following paragraphs suggest, business as usual is not delivering improvement at a scale and pace that would permit achievement of SDG 2. Roughly double the change of pace is required.

FIGURE 1. Linking needs, policies and resources for Ending Rural Hunger

3. This framework was developed by the Brookings Institution project on Ending Rural Hunger; see www.endingruralhunger.org.
Needs

1. **Undernourishment.** Globally, progress on ending hunger is too slow to achieve the targets set for 2030. Most recent estimates from the Food and Agriculture Organization suggest 12.9 per cent of the developing world’s population was undernourished in 2015, down from 13.1 per cent in 2014. However, because of population growth, this implied only 3 million fewer undernourished people. To meet the 2030 SDG target, the decline in undernourishment should be 0.9 percentage points per year. Over the past decade, the average has been 0.4 percentage points per year with only 51 out of 135 developing countries on track to meet the undernourishment target.

2. **Malnutrition.** A similar pattern emerges with regard to malnutrition. Stunting fell by 0.6 to 0.7 percentage points in 2015 according to the World Health Organization (similar to the historical track record of -0.8 percentage points per year), leaving about 156 million children still suffering from stunting. The rate required to get to zero by 2030, -1.7 percentage points per year, is more than double the current trend.

3. **Productivity.** A significant part of the difficulty in ending hunger is that many countries still have very low levels of cereal productivity. Average cereal yields in developing countries rose by 1 per cent in 2014, but there is a high variance in performance. Among 48 developing countries with low yields (below 2 tons per hectare), 25 saw increases in yields while 23 experienced declines.

4. **Resilience.** Annual metrics of resilience are not available, but anecdotal evidence suggests that countries continued to suffer from climate variability in 2016. The El Niño phenomenon had an impact on farms from Honduras, Haiti and Brazil, to South Africa to India and Thailand.

Policies

Each country must determine its own path to ending hunger, and, when laying out a strategy, countries may find it useful to benchmark where they stand against other countries. For example, while Uganda and Senegal have similar levels of GDP per capita and similar needs with regard to ending hunger, 19 per cent of rural Ugandans have an account at a formal financial institution, while only 4 per cent of rural Senegalese have a financial account.⁴ But policies cannot be viewed in isolation from each other and from the overall country context. If improving property rights is a particular problem in a country, then access to rural finance may not have the expected impact on farmers’ willingness to invest. Thus, in identifying lack of finance as a critical obstacle to smallholder development, it is not enough simply to look at data on access to credit, but one must also ask whether credit is a priority given the other obstacles and constraints that smallholders might face. In the example above, it would be important to analyse whether rural Senegalese have a comparative disadvantage in accessing finance.

Agriculture, including smallholder farming, is dominated by private business and investments. These respond to the state of the rural investment climate, agricultural pricing and trade distortions, research and extension services, along with institutional arrangements to understand and respond to the requirements of smallholders. Political commitment at the highest level is also important. Countries that have clear plans and strategies, support breastfeeding, provide rural safety nets and foster women’s participation do better at ending hunger.

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4. Data taken from the World Bank’s FINDEX database. The surveys refer to the share of the rural population aged 15+ with an account at a formal financial institution.
While evidence is strong that policies matter, at all income levels, there is less understanding of the constraints to policymaking and of the priorities and sequencing of reforms. Perhaps for this reason, there is little evidence of policy improvements in developing countries on average in 2015 and 2016, as measured by indicators of rural sector performance assessments. The one exception is in the area of rural finance, where access has improved dramatically over the past few years, although the gap remains significant.

Resources

Ending hunger will not happen by 2030 without stepped-up financing. The scale of what is needed is uncertain; studies using different methodologies have come to different conclusions. The Intergovernmental Committee of Experts on Sustainable Development Financing suggested a range centered on $100 billion per year of incremental investment, but the International Institute for Sustainable Development has far more modest figures, suggesting that even an incremental $10 billion per year of international investments could be adequate.

These figures must be understood in context. The international support for ending hunger is modest compared with national efforts, although it remains of crucial importance in selected countries. Perhaps $25 billion of foreign-sourced investments, public and private, go towards food and agriculture sector development. Compared with that, governments in developing countries spend upward of $200 billion per year to support agricultural development. But this amount is not increasing. Data on public spending on food and nutrition security are scarce, but for 23 countries reporting on 2014 expenditures, 12 showed an increase compared with 2013 while 11 had a decline.

The lack of public spending is particularly acute in sub-Saharan Africa. Several governments there signed the Malabo Declaration, committing to spend 10 per cent of their budgets on agriculture, but few are actually meeting this obligation – only 4 out of the 31 countries reporting on this measure. On average, African governments spend $33 per rural person per year, less than 10 cents per day.

There is no evidence that donors are substantially increasing their assistance towards food and nutrition security. Disbursements remain flat. Some donors have increased the level of their commitments in recent years, but the forward-looking survey of the members of the OECD’s Development Assistance Committee suggests that aid in the aggregate will stagnate at best. The most recent examples of this are the lower donor contributions (in U.S. dollar terms) to the African Development Fund and the International Development Association compared with the last time around. Given other aid priorities for refugee assistance, climate change, sustainable infrastructure, pandemics and humanitarian assistance, it is difficult to believe that food and nutrition security (FNS) aid will increase in the near term.

The range of investments required to end hunger is large. Public investment is needed for the basic functioning of markets, transport, electricity, water and institutional improvements. It can build and strengthen local science and extension services, and provide important safety nets for times when crops fail. It can make sure that farmers are well educated. The impact of public investments in FNS is usually higher when the policy environment is also supportive and when political commitment ensures that programmes continue to be implemented over a long-term horizon.

The point is that a focus on *increasing* investments through mobilizing external funds for new projects and programmes for food and nutrition security is only one part of the story. Rural transformations come about by changing the *allocation* of existing resources that tend to be far larger, notably the private investments made by farmers on a daily basis. The implication is that external resources should be better targeted, made coherent with improved policies and institutions, and used to mobilize and catalyse private financing.

The bulk of investments in agriculture and rural development come from farmers and other rural businesses, sourced domestically and, in some cases, from remittances from abroad or from family members who have migrated to urban areas. Such private investments can be crowded in by public investments and better public policies. They can improve the soil quality of farms, finance modern seeds and fertilizer, reduce food loss through better storage, improve market information through commodity exchanges and the like. The most important private investments may be in providing off-farm opportunities for jobs and livelihoods. Some studies suggest that in the poorest countries 30 cents of private investment in FNS is directly catalysed by each dollar of public investment.\(^7\)

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Metrics and actions in each of the areas outlined above – monitoring needs, improving policies, and mobilizing and targeting resources – will be critical to success in ending hunger. Without a close focus on targets and the pace of improvement, governments and their partners will not be able to adjust the scale of their interventions appropriately. Without improving the policy environment and signalling long-term political commitment, private investments will be smaller than needed and will not be allocated in the most effective way. Without adequate investments, both public and private, there is little chance of achieving scaled-up impact.

The key question, therefore, is who will be accountable for each of these pillars, within countries and internationally?

Many important initiatives are already being undertaken at the global or regional level to promote rural transformations. They include activities that seek to set norms and standards, mobilize finance, share knowledge, exchange policy experiences, and innovate with new technologies, business practices and partnerships. Several have a specific orientation towards smallholders while others benefit smallholders indirectly by addressing the agricultural sector or rural development in a broader way. A sense of the scope of these initiatives and the breadth of issues they address can be gained by looking at the following examples:

- **Rural finance and investment**: The Global Donor Platform, Rural and Agricultural Finance Learning Lab, Initiative for Smallholder Finance, New Alliance for Food Security and Nutrition, Global Agriculture and Food Security Program and Comprehensive Africa Agriculture Development Program bring together public-and private-sector partners to provide access to financial services and to finance public investments that benefit all farmers.

- **Agricultural risk management**: The Platform for Agricultural Risk Management and Farm Risk Management for Africa are designed to strengthen agricultural risk management through insurance, market information and use of warehouse receipts.

- **Climate and sustainability**: smallholder agricultural monitoring for countries in the tropics, the West African Science Service Center on Climate Change and Adapted Land Use and the Agricultural Model Intercomparison and Improvement Project involve academia, civil society and governments in researching and developing tools for climate smart agriculture. The Declaration of Abu Dhabi is developing good practice tools for sustainability. The Adaptation for Smallholder Agriculture Programme channels finance to smallholders to build resilience to climate change.

- **Data and knowledge**: The Family Farming Knowledge Platform and Global Open Data for Agriculture and Nutrition provide global platforms for sharing quality information.
• **Gender and youth**: Gender in Agricultural Partnership and Africa Gender Innovation Lab are looking to bring equality to women farmers’ earnings. The Young Farmers Innovation Lab and Strengthening Rural Youth Development through Enterprise seek to support young farmer entrepreneurs.

• **Technology**: Satellite-Based Credit Assessments for Smallholder Farmers, Agricultural Technology Adoption Initiative, Group on Earth Observations Global Agricultural Monitoring Initiative, AgResults, use satellite-based imagery and other technology-based solutions to improve smallholder yields.

• **Value chains**: Grow Africa, Grow Asia, Global Food Safety Partnership, New Vision for Agriculture, and Community of Practice on Food Loss Reduction look to promote and improve the functioning of markets.

Many of these initiatives have been started within the past decade and suggest that the global community is moving away from business as usual and is viewing partnerships between governments, business, civil society and academia as a fruitful endeavour. But the number of initiatives, each with different focus areas and geographical footprint, suggests the nature of the decision on when to start something new is scattered, not strategic.

There is a major ongoing risk that efforts aiming to support SDG 2 face considerable gaps in coverage, either of geographies or of topics. For example, in the list of activities above there is little focus on the institutional and policy framework that best serves rural transformations, including the need to develop off-farm employment opportunities and better education in rural areas. As another example, until recently there was little research on adaptation to climate change in agriculture.

Equally, with many initiatives there is a risk that the diffuse nature of efforts can distract attention from the most pressing challenges. For example, a global scan suggests there are today some 35 countries where hunger problems are widespread and where progress is far too slow. But there is no international process, responsibility or consensus on identifying and prioritizing such countries, and in turn on breaking down the relevant challenges into manageable and actionable steps.
If the problem is to double the current pace of change in undernourishment, malnutrition and productivity, then new approaches and points of intervention are needed. There must be a sense of urgency that change is needed and an institutionalized focal point for moving the agenda forward.

A sense of urgency

The principal issue is that different FNS organizations concern themselves with different parts of the ecosystem and there is a lack of coordination, leadership and accountability. To paraphrase Henry Kissinger, “who should be called if one wants to talk about global food security?” The closest answer is the Committee on World Food Security, but their mandate is largely around policy recommendations and guidance. They do not provide or advocate for financing, nor do they solicit commitments on implementation.

FAO and the WHO are the principal monitors for long-term needs and structural trends in undernourishment and malnutrition, respectively, while the World Food Programme closely monitors short-term needs. IFAD, the World Bank and others monitor various aspects of the policy environment. IFAD has the most experience with smallholder engagement. The OECD DAC and individual funding organizations provide information on the flow of funds. Few public data for FDI or private philanthropy are available. Cooperation from BRICS countries is not reported in a standardized form. Perhaps most importantly, little information on private domestic investment is available.

This has been a long-standing issue with FNS. To give one example, a U.N. General Assembly resolution in 1975 called for the halving of food loss within a decade. But no agency was accountable, and indeed no metrics were available. Ten years passed with no review or action, or even a proper baseline measurement. Forty years later, the SDGs have an almost identical target and once again there is no metric of food loss or food waste (although work is now proceeding on this). No organization has accountability for ensuring that food loss and waste are reduced.

In the same vein, there is no organization that has explicitly undertaken to address the issues of smallholder transformation at scale. As IFAD has noted: “Inclusive rural transformation is … far from spontaneous. It does not just happen; it must be made to happen.” IFAD itself has had considerable engagement with smallholders, but its activities are small compared with the scale of the challenge, and it does not systematically monitor smallholder outcomes, in terms of their incomes, their productivity levels, their access to and use of credit and insurance, or access to markets for inputs and production.

8. Henry Kissinger is reported to have asked “who do I call when America wants to deal with Europe?”
Institutionalized focus

The proliferation of initiatives that are under way do not necessarily mean a systematic approach to accelerating change is in place.

Given the importance of smallholders for achieving the SDGs, as described above, establishing a multistakeholder network of organizations with a shared commitment to understanding smallholder needs, policy and institutional gaps and financing challenges would constitute a first step forward.

Such a network could operate at global and national levels. Globally, issues around coordination and accountability are particularly serious when discussions turn to smallholders and family farms. Despite the explicit target to double the agricultural productivity and incomes of small-scale food producers (SDG 2.3) there are no appropriate global measures on smallholder yields or income levels.‡ No organization currently has a comprehensive plan for providing such metrics for all countries. Indeed, there is not even a globally accepted definition of what "small scale" means. From a technical standpoint, such a definition could vary depending on the crop being grown.

Tackling the complexity of the global smallholder challenge requires a more coordinated global effort. Smallholders face a range of challenges that are specific to their circumstances, from issues related to financial inclusion (credit, savings and insurance), market information, value chains, access to inputs, quality and reliability of produce, cold storage, farmer cooperatives, and voice and dialogue with local officials. Women smallholders face additional challenges in land ownership, access to extension services, and voice in community decision-making, for example.

There are at least five priorities the network could address:

1. **Identifying the countries with the most pressing challenges.** A global platform can identify priority countries where change must be accelerated, and support national efforts in these countries to build smallholder support structures. Country-differentiated experiences can provide lessons on where new financing instruments are needed and where successes can be taken to scale.

2. **Helping all countries develop national baselines for progress, with periodic interim timetables.** To be effective, a global network must be quantitative and results-oriented. It should establish targets for itself on a time frame for outputs, such as credit extended in countries where programmes are being put in place. This is one lesson from the successful experiences of global coordination in health, for example, where an Institute for Health Metrics and Evaluation provides global burden of disease data that can be used to shape individual country health strategies, peer-reviewed journal articles like the Lancet discuss the most effective actions and policies, and vertical financing mechanisms have been successful in mobilizing more external support for the sector and for targeting resources to countries where health benefits are optimized.

3. **Promoting and advocating for specific attention for smallholders.** A new narrative is needed as to why smallholder transformation is so urgent for achievement of the SDGs and why it represents a sound investment in the future. Smallholders can become stewards of the planet. They could be responsible for some of the most

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‡ SDG 2.3 is: “by 2030 double the agricultural productivity and the incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets, and opportunities for value addition and non-farm employment.”
cost-effective efforts at climate mitigation, like improvements in soil health and pasture management. They could affect rapid reductions in global fertility rates. They could provide jobs for young people and reduce the number of disaffected urban migrants.

4. **Supporting science, research and extension, including research on farmer behaviour and adaptation to climate change.** Too little research currently addresses the issue of smallholder yields and take-up of new technologies, compared with the research targeted to increasing food production on a large scale. A lack of agricultural research capacity and human capital development in many developing countries is a major obstacle to faster progress.

5. **Mobilizing additional resources for investments in FNS, and targeting such resources better.** In addition to the technical issues of sharing experience on how to reach smallholders at scale, a focal point network can encourage international financial institutions and multinational businesses to develop new de-risking instruments, including blended finance and technical assistance, and showcase how such instruments can be applied, in practice, to smallholder finance. Further, new pathways are needed to ensure delivery and accessibility of working capital and equity for smallholders and rural agricultural enterprises. The proposed new Smallholder Agriculture Finance and Investment Network (SAFIN), to be hosted at IFAD, will start to address this component.
There is a short window of opportunity for getting serious about global food security if ending hunger is to be achieved by 2030. Roughly speaking, the pace of change must double. To do this, new approaches are needed. One promising area is to focus more specifically on smallholders and family farmers, and rural small and medium-sized enterprises.

Historically, international summits have provided an opportunity for concerted action in making international coordination more systematic. For example, the idea of the Global Fund was discussed in a G-8 meeting in 2000 in Japan, further advanced at the United Nations and endorsed the following year during the Italian G8 summit. The first pilot Advanced Market Commitment was agreed at the 2006 G8 Finance Ministers meeting. A Global Food Security Initiative was agreed to at the G8 in 2009 and a key component, the Global Agriculture and Food Security Program was based on commitments by G20 members in 2010.

International summits continue to be important foundations for the global community to come together. They bring into the debate perspectives on security (G7), economics and finance (G20) and norm setting and peer learning (United Nations).

The G7 already made a bold commitment in 2015 to lift 500 million people in developing countries out of hunger by 2030 (a bold but not sufficiently ambitious proposal compared with the SDG target). They also agreed on a Broad Food Security and Nutrition Development Approach with a particular focus on the rural poor, smallholders and family farmers, and undertook to ensure their actions empower women, smallholders and family farmers.

In May 2017, the G7 will hold its annual summit in Italy. One of the priorities is food and agriculture. Concrete proposals for how to organize and finance food security interventions are being prepared for leaders to consider at this meeting.

In July 2017, the German government will host the G20 leaders. Germany has been a leader on FNS. It has promised to make Africa a priority, along with climate change, employment, growth and refugees. Ending hunger is a cross-cutting objective that would contribute to all these themes. At the German G20, specific proposals for advancing smallholder financing could be advanced and considered.

Later in July 2017, the United Nations will host the High-Level Political Forum on sustainable development to follow up and review progress on the SDG agenda. The theme: “eradicating poverty and promoting prosperity in a changing world.” There will be a discussion of how to strengthen the means of implementation and countries will present examples of how progress has been made. Identifying selected countries to feature smallholder income and productivity gains would provide a norm from which others could learn.

These events, along with forthcoming donor replenishments of FNS-supporting agencies, including IFAD and the Global Agriculture and Food Security Program, provide forceful moments for the global community to act. Looking back at the experience with implementing the Millennium Development Goals, in expanding access to education, reducing infant, child and maternal mortality, and addressing HIV, it is clear that success was
spearheaded by new approaches and new institutions that brought together new actors in a coordinated and accountable fashion. It is time for the FNS community to reflect on these lessons and ask what it should be doing differently and how to organize for implementation of the SDGs.

A new global network to promote smallholder financing and investments would be a good place to start. SAFIN is a welcome building block that could potentially be broadened into a more comprehensive forum. Based on other international networks and partnerships, a one- to two-year period is desirable to bring together key partners and to design the partnership together from the beginning. Thus, a near-term milestone would be to have a smallholder agriculture finance operational network in place by 2018, responsible for holding a regular biennial conference, as envisaged in the outcomes from the Expo 2015 event.

By 2019, the network should have an established vision of the scope of its work: the target priority countries where change has to be accelerated; the dimensioning of the scale of the change; the likely instruments to be scaled up. 2019 is also the date for the next United Nations SDG Summit meeting where overall progress will be discussed at the highest levels.

By 2023, midway through the SDG period, there should be broad consensus within the network and its supporters, based on actual country experiences, as to the most effective way of solving smallholder financing problems, and a systematic review of the metrics of progress to date.

By 2030, the vast majority of smallholders should have access to credit and should be well positioned to meet the SDG 2 targets of being well nourished, with access to nutritious diets, and having doubled their productivity and income levels.

These timetables, of course, are only indicative. The main point is that a multistakeholder network focused on smallholders, with quantitative targets and milestones, and with a country-differentiated results orientation could help achieve a transformation of smallholders into dynamic businesses that spur rural development.