

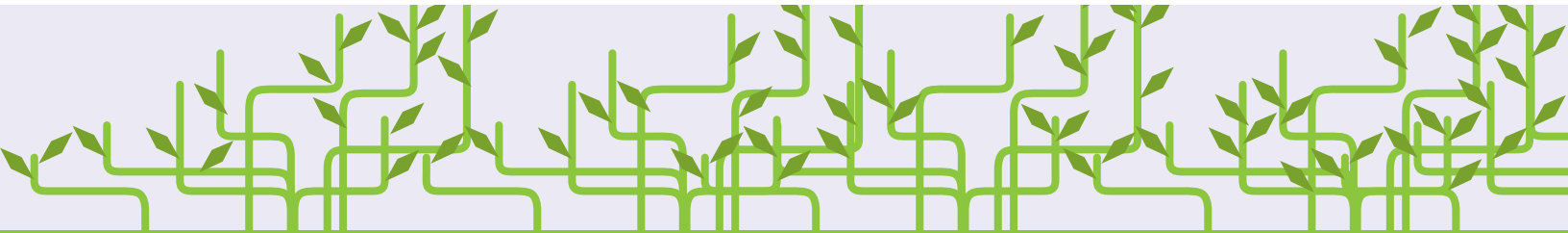
SUMMARY

Africa Human Development Report 2012

Towards a Food Secure Future



*Empowered lives.
Resilient nations.*



Summary

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Towards a Food Secure Future



United Nations
Development
Programme
(UNDP)

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Resilient nations.*

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Foreword

Africa has seen an extraordinary rebound in economic growth over the past decade. Some of the world's fastest growing economies are in Africa, and they have expanded even during the ongoing uncertainty in the global economy. This has brought a much-needed reduction in poverty in the region and a renewed sense of optimism about its future. There is no doubt that economic growth is critical for human development, and it is imperative that growth be sustained. But growth per se is not enough. As this first United Nations Development Programme (UNDP) *Africa Human Development Report* shows, rapid economic progress in Africa has not brought food security for the substantial proportion of the population still gripped by hunger. The importance of an approach to development that includes economic growth but also goes beyond it—and that puts people firmly at the centre of development—has been a key message of UNDP's *Human Development Reports* since their inception in 1990.

Since 2000 Africa has experienced several episodes of acute food insecurity, with immense loss of lives and livelihoods. The Report comes at a time when yet another severe food crisis is affecting the Sahel region of West Africa. In 2011 alone, millions of people on the other side of the continent, in the Horn of Africa, were similarly struck with famine eventuating in parts of Somalia. Droughts, crop failures and other disasters often trigger these crises. But the real causes go deeper.

As the Report shows, crop failure and a lack of food are not the only causes of famine and hunger. More often, the challenge is uneven access to food, which occurs when people lack the means to acquire it. This uneven access is thus a symptom of the low incomes and high levels of vulnerability that still affect many Africans. While famines grab headlines and periodically jolt national authorities and aid agencies into action, the silent crises of chronic malnourishment and seasonal hunger do not receive nearly enough attention. The effects, however, will be felt by generations of Africans, robbing children of their future and parents of their dignity and holding back advances in human development even amid Africa's newfound economic vitality.

Building a food secure future for all Africans requires focus and action in critical areas—from increasing the productivity of smallholder farmers to advancing nutrition among children, building resilient communities and sustainable food systems, and empowering women and the rural poor. Success in these areas will come only if we view food security as a challenge that extends beyond sectoral mandates and reaches across the national development agenda and if we better integrate humanitarian and development work to strengthen the resilience of people and their communities to even the most severe crisis.

This imperative is a driving force behind implementation of the Millennium Development Goals Acceleration Framework in four countries in the Sahel. The framework seeks to speed progress by identifying the bottlenecks and constraints to achieving the targets on food security and nutrition under Millennium Development Goal 1—and by strengthening coordination (including on funding) among national governments, the UN system and other partners. UNDP is committed to such joint and cross-cutting efforts, which we see as even more important in the context of the challenges of feeding growing populations, avoiding environmental degradation and mitigating the impacts of climate change.

The analysis and recommendations in the Report result from extensive consultation with academics, researchers, policy-makers and development practitioners—in Africa and beyond. This is another feature of *Human Development Reports*: they provide a platform for independent and rigorous analysis and for open discussion about critical challenges to development. It is my hope that this first *Africa Human Development Report* will energize the debate on how to strengthen food security and accelerate human development in Africa and will lead to more decisive action. Let us eradicate food insecurity and hunger in Africa for all time.



Helen Clark
Administrator
United Nations Development Programme

Preface

Had African governments over the last 30 years met their people's aspirations, the Report would not be necessary. One quarter of the people in sub-Saharan Africa would not be undernourished, and one third of African children would not be stunted. Nor would so many African farmers have to eke out meagre livelihoods on tiny plots of depleted soil. The region would be food secure, and the gap between its human development and that of more successful regions would be closing rapidly.

Chronic food insecurity in sub-Saharan Africa stems from decades of poor governance. Regimes bent on amassing wealth absorbed the region's resources into patrimonial power structures. Self-serving elites, quick to profit from graft and patronage, have stood between leaders and the people, monopolized state revenues and emptied the countryside, but they have provided neither employment nor industry. Across sub-Saharan Africa rural infrastructure has deteriorated, farming has languished, gender and other inequalities have deepened and food systems have stagnated. Smallholder farmers, on whose shoulders the recovery of its agriculture rests, have long been pinned between a rock and hard place. Rebuilding food security starts with liberating them from this predicament and unleashing their potential.

The international community's record in this misfortune hardly shines. Developed countries maintain agricultural subsidies that benefit their rich producers while pushing sub-Saharan Africa's impoverished smallholder farmers to the margins. For many years externally inspired adjustment programmes weakened state capacity and encouraged African governments to repay ballooning debts by diverting resources from food production to cash crop exports. One by one countries fell victim to falling commodity prices and increasingly volatile and costly imports. The indifference of some development partners to sub-Saharan Africa's agriculture sector mirrored government neglect, often leaving food growers at the mercy of aid tied to counter-productive conditions.

It is a harsh paradox that in a world of food surpluses, hunger and malnutrition remain pervasive on a continent with ample agricultural

endowments. Fundamental change is imperative. Notwithstanding the last decade's impressive economic growth and the turnaround in some human development indicators, sub-Saharan Africa remains the world's most food insecure region. The spectre of famine, all but gone elsewhere, continues to haunt millions in the region. Yet another famine occurred in Somalia in 2011, and the Sahel is again at risk in 2012.

But history is not destiny. Africans are not fated to starve—provided that governments move decisively to put in place appropriate policies and support mechanisms. Famine, starvation and food insecurity are preventable. The shameful scenes of feeding tents and starving children that have been associated with sub-Saharan Africa for far too long can be eliminated once and for all.

In addition to tackling challenges embedded in the African context, food security strategies will need to respond to major changes in the global food system. New factors are reshaping the way food is produced and consumed: demographic pressures, dwindling natural resources (particularly water and soil nutrients) and a progressive shift towards meat-based diets (which demand large quantities of grain and water) by the new middle classes of emerging countries. International food prices are volatile, driven by surging demand for food and disruptions in its supply, in turn linked to climate change and fluctuating prices of agricultural inputs, such as fertilizer and oil.

These challenges will be magnified by a growing and more affluent population in sub-Saharan Africa. The region will need to produce substantially more food in the next half century to feed its people, while mitigating stresses that agricultural production places on the environment.

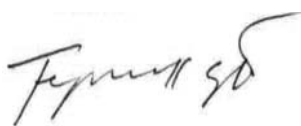
Half a century ago, green revolutions in Asia and Latin America ushered in a steady flow of scientific and technological breakthroughs that ultimately conquered famine in those regions. Millions of lives were saved as these changes rolled across Asia. Basket cases became bread baskets. Why should sub-Saharan Africa be different?

Africa has the knowledge, the technology and the means to end hunger and food insecurity. But still missing have been the political will and dedication.

Africa must stop begging for food. That is an affront to both its dignity and its potential. If some African countries can acquire and deploy jet fighters, tanks, artillery and other advanced means of destruction, why should they not be able to master agricultural know-how? Why should Africans be unable to afford the technology, tractors, irrigation, seed varieties and training needed to be food secure?

The Report argues that sub-Saharan Africa can extricate itself from pervasive food insecurity by acting on four critical drivers of change: greater agricultural productivity of smallholder farmers; more effective nutrition policies, especially for children; greater community and household resilience to cope with shocks; and wider popular participation and empowerment, especially of women and the rural poor. These drivers of change, by ending

the ravages of hunger and malnourishment, will nurture capabilities and conditions for human development. A well-nourished and empowered population, in turn, is more likely to seek education, participate in society and expand its productive and human potential. With the right policies and institutions Africa can sustain this virtuous cycle of higher human development and enhanced food security.



Tegegnework Gettu

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Regional Bureau for Africa
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Overview

Hunger and starvation in sub-Saharan Africa have lasted too long. But Africans are not consigned to a lifetime of food insecurity. The knowledge, technology and resources for closing the food security deficit are available today, and breakthroughs will continue to emerge from research and development. But no one believes it is possible simply to distribute better seeds and more fertilizer to African farmers and then to walk away. Nor will economic growth alone solve the problem. The failures that add up to food insecurity are pervasive, from agricultural, health, education and nutrition policies to research, extension services, sanitation, local government, commerce and transport. An effective response to a challenge this broad cannot be narrowed to a single intervention, discipline or institutional mandate. It will take a coordinated response across sectors.

This *Africa Human Development Report*, the first, argues that sustainable increases in agricultural productivity protect food entitlements—the ability of people to access food. Furthering human development requires nutrition policies that unleash the potential of today's and future generations. Also, communities must be resilient enough to absorb shocks and have the power to make decisions about their own lives.

Food security for human development

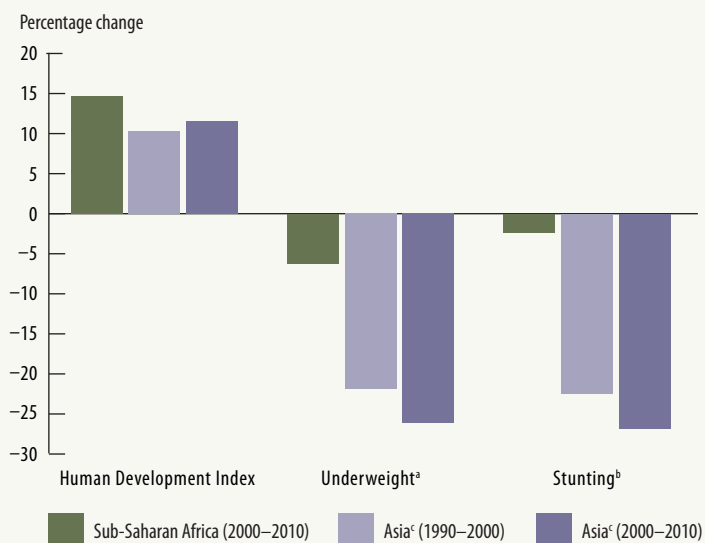
For too long the face of sub-Saharan Africa has been one of dehumanizing hunger. More than one in four Africans is undernourished, and food insecurity—the inability to consistently acquire enough calories and nutrients for a healthy and productive life—is pervasive. The spectre of famine, which has virtually disappeared elsewhere in the world, continues to haunt parts of sub-Saharan Africa. Famines grab headlines, but chronic food insecurity and malnutrition are more insidious, often silent, daily calamities for millions of Africans.

Yet sub-Saharan Africa has ample agricultural land, plenty of water and a generally favourable climate for growing food. And in the last 10 years many African countries posted world-beating economic growth rates and became among the fastest movers on the Human Development Index. With these endowments and important economic and social achievements, why is the region still food insecure (figure 1)?

These two jarring paradoxes are the point of departure for the Report.

The Report argues that sustainable increases in agricultural productivity and better nutrition are the

FIGURE 1 LESS SUCCESS IN REDUCING MALNUTRITION IN SUB-SAHARAN AFRICA THAN IN ASIA



a. Low weight for age.

b. Low height for age.

c. Excludes Japan.

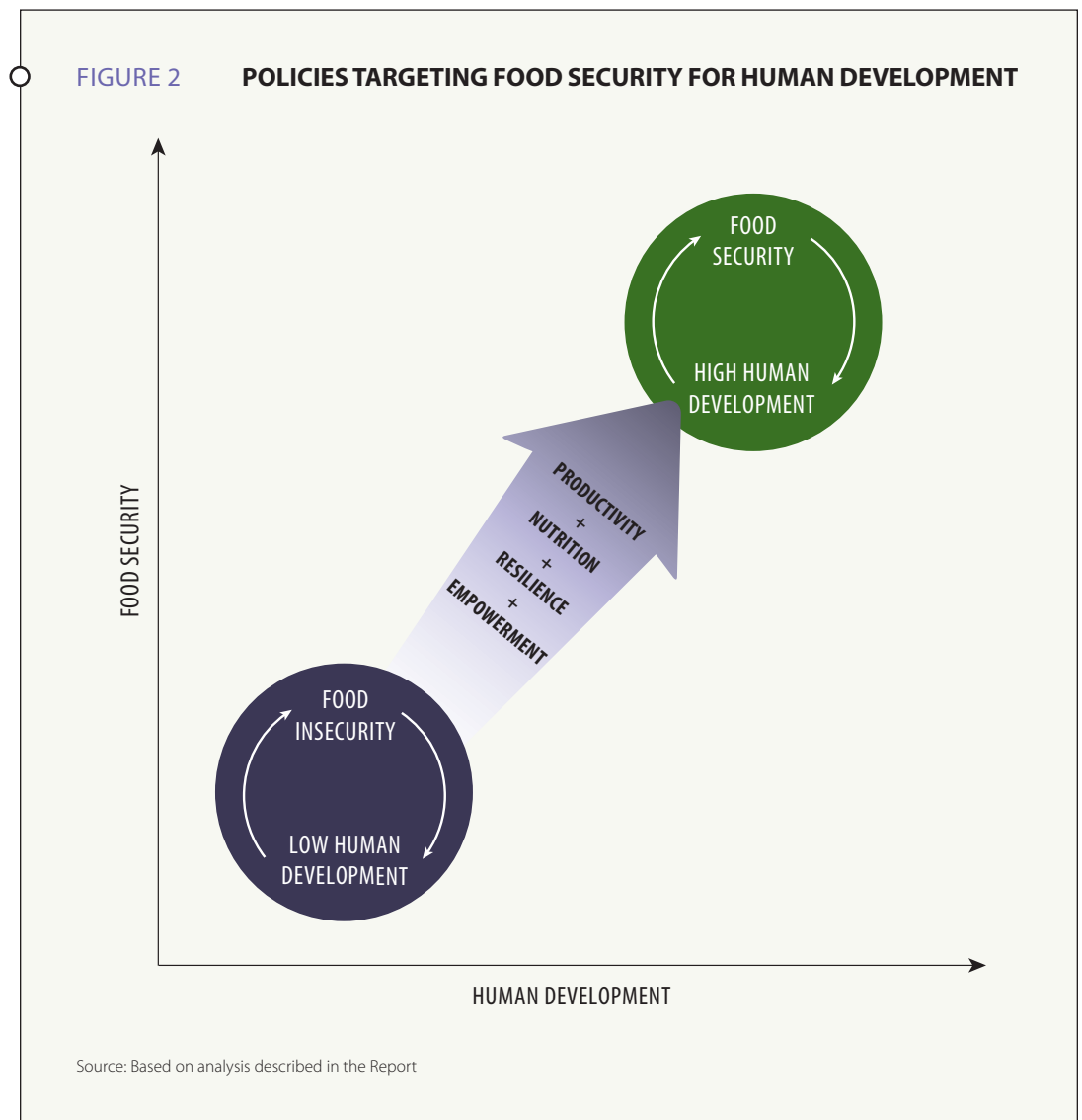
Source: Calculations based on World Health Organization, 2011, *Global Database on Child Growth and Malnutrition*, Geneva, www.who.int/nutgrowthdb/estimates/en/index.html, accessed 7 January 2012, and United Nations Development Programme, 2012, *Human Development Report database*, New York, <http://hdr.undp.org/en/statistics>, accessed 8 January 2012.

drivers of food-secure growth and human development. The argument is straightforward: more productive agriculture will build food security by increasing food availability and lowering food prices, thus improving access. Higher productivity can also raise the incomes of millions of smallholder farmers, elevating living standards and improving health and education, thus expanding people’s capabilities. Through science, technology and the diffusion of innovation greater agricultural productivity can also enable better stewardship of the environment. Sound nutrition links food security to human development. Well-nourished people exercise their freedoms and capabilities in different domains—the essence of human development—and, completing the cycle, will be inclined to demand food security from their leaders.

The human development approach focuses on entitlements and capabilities. Food security should thus be leveraged by empowering people to make their own choices and by building resilience in the face of shocks. That means preserving people’s food entitlements—the income, market structures, institutional rules and governance that enable the poor to buy and trade food in fair markets. It also means reinforcing essential human capabilities in health and education.

Focusing policies on these four areas—agricultural productivity, nutrition, resilience and empowerment—can unleash a dynamic virtuous cycle of food security and human development (figure 2).

Sub-Saharan Africa still trails the world in human development, but the quickening pace of change



and the new economic vitality in the region offer grounds for renewed (if guarded) optimism.

Conditions in sub-Saharan Africa today

Sub-Saharan Africa has abundant agricultural resources. But shamefully, in all corners of the region, millions of people remain hungry and malnourished—the result of glaringly uneven local food production and distribution and chronically deficient diets, especially among the poorest. This is a daily violation of people’s dignity, with many governments not fulfilling their basic responsibility of protecting their citizens from hunger.

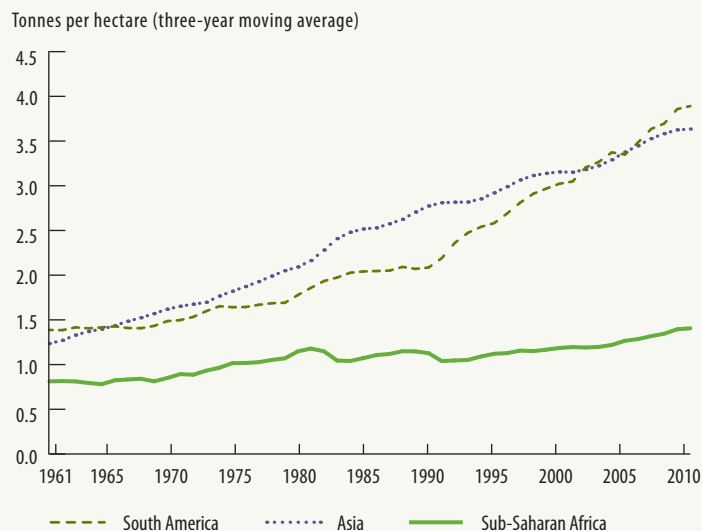
The chain of food security that runs from availability through access to use comes under constant stress in a region vulnerable to the impacts of erratic weather, volatile food prices, and conflict and violence. Agricultural productivity remains low—much lower than in other regions (figure 3). Many sub-Saharan African countries are net food importers and even depend on food aid during all-too-frequent humanitarian crises. Where food is available, millions cannot afford it or are prevented from buying or trading it by underdeveloped markets, poor roads, long distances to markets and high transport costs.

Important as food availability and access are, food security is about still more. Proper use of food and good nutrition determine whether food security sustains human development. Malnutrition leads to illness and death—as insufficient access to safe water, energy and sanitation combine with diseases such as HIV/AIDS and malaria in a lethal mix that perpetuates the problem.

Hunger exacts a crippling toll on individuals and society alike. Poorly nourished children have weakened immune systems and die from communicable diseases that are ordinarily curable. Malnourishment in the first 1,000 days after conception can lead to irreparable damage to children’s physical and mental development. Malnourished mothers are at greater risk of dying during childbirth or of delivering low-birthweight babies who do not survive infancy. Infants that make it through childhood are more likely to suffer stunting that shortens their lives and to perpetuate the cycle of deprivation when those children in turn produce low-birthweight babies.

Africans have been trapped by hunger for decades, with millions consuming staple foods

FIGURE 3 CEREAL YIELDS STAGNATED FOR DECADES IN SUB-SAHARAN AFRICA



Source: Calculations based on Food and Agriculture Organization of the United Nations, 2012, “FAOSTAT,” Rome, <http://faostat.fao.org>, accessed 10 January 2012.

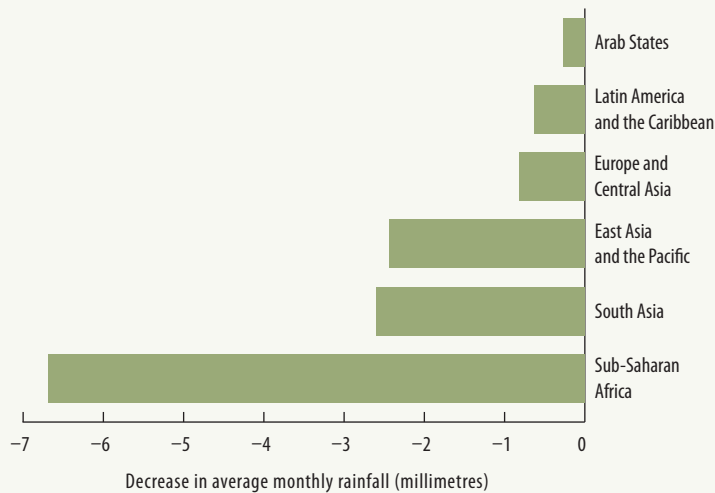
deficient in the micronutrients needed to sustain child growth and adult productivity. Hunger also eviscerates society by increasing disease, mortality and disability. It inflates healthcare costs, reduces worker productivity and diminishes social and economic returns to education. It violates basic human dignity and damages self-esteem.

Persistent challenges and emerging threats

Misguided policies, weak institutions and failing markets are the deeper causes of sub-Saharan Africa’s food insecurity. This tainted inheritance is most evident in households and communities, where unequal power relations trap vulnerable groups—subsistence farmers, the landless poor, many women and children—in a vicious cycle of deprivation, food insecurity and low human development.

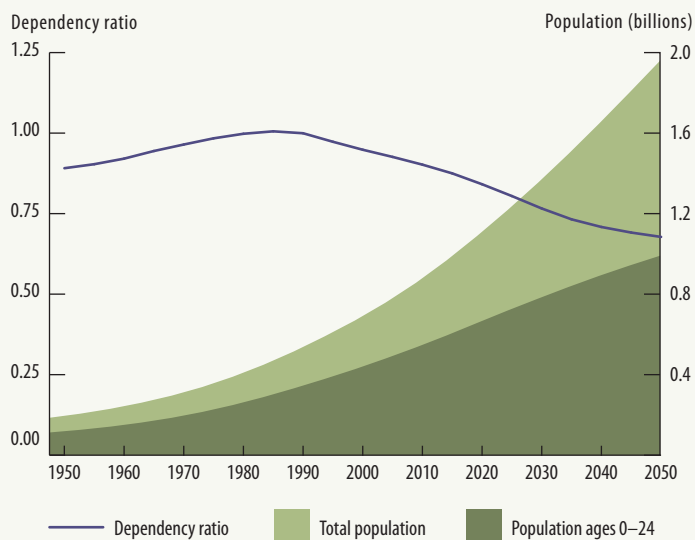
For decades the policies of national governments and international institutions neglected sub-Saharan Africa’s rural and agricultural development in favour of urban populations. Their

FIGURE 4 RAINFALL HAS DECLINED MOST IN SUB-SAHARAN AFRICA, 1951–1980 TO THE 2000s



Note: Regions are those defined by the United Nations Development Programme's regional bureaux. The regional averages are weighted, based on the average population for 1950–2008.
 Source: Calculations based on U.S. National Oceanic and Atmospheric Administration, n.d., "University of Delaware Air Temperature & Precipitation," U.S. National Oceanic and Atmospheric Administration Office of Oceanic and Atmospheric Research, Earth System Research Laboratory, Physical Sciences Division, Boulder, CO, www.esrl.noaa.gov/psd/data/gridded/data.UDel_AirT_Precip.html, accessed 7 January 2012.

FIGURE 5 POPULATION GROWTH IS EXPECTED TO REMAIN HIGH DURING SUB-SAHARAN AFRICA'S DEMOGRAPHIC TRANSITION



Source: United Nations Department of Economic and Social Affairs, 2011, *World Population Prospects: The 2010 Revision*, New York: United Nations Department of Economic and Social Affairs, Population Division, www.un.org/esa/population.

damaging legacies include ineffective postcolonial industrialization plans that exhausted development resources, leaving agriculture behind. Structural adjustment programmes aimed to close budget gaps but instead created large human development deficits, especially among the vulnerable poor, and skewed allocations of national revenue and foreign aid that overlooked agriculture and nutrition.

Despite some improvements since the mid-1990s, many African governments continue to burden domestic agriculture with high, arbitrary taxes while bestowing subsidies, incentives and macro-economic support on other sectors. Meanwhile, many developed countries have moved the other way, heavily subsidizing agriculture long after its role as a development driver has passed, giving their farmers a tremendous advantage in international trade. Sub-Saharan Africa's smallholder farmers, sidelined by biased policies and squeezed by failing markets, long ago gave up struggling to compete against the world's most formidable agricultural systems.

Breaking with the past, standing up to the vested interests of the privileged few and building institutions that rebalance power relations at all levels of society will require courageous citizens and dedicated leaders. Taking these steps is all the more pressing as new threats to the sustainability of sub-Saharan Africa's food systems have emerged. Demographic change, environmental pressure, and global and local climate change are profoundly reconfiguring the region's development options (figure 4).

These new challenges will be magnified by sub-Saharan Africa's rising population, almost 2 billion by 2050 (figure 5). Meeting the increasing demand for food will require substantially boosting food crop yields over the next half century and mitigating stresses put on agricultural production by climate change and current agricultural practices. Only sharp and sustainable increases in agricultural productivity will enable food production, incomes and livelihoods to keep pace with these developments.

Raising agricultural productivity

Local agricultural capacity is the bedrock of food security in sub-Saharan Africa, a truth so apparent it would hardly require stating had it not been so consistently slighted. Agriculture determines the

availability of food, the first link in the chain of food security. For most Africans, especially the poor, agriculture is also the wellspring of income and work, core elements of human development. In turn, earnings and employment bolster food security by enabling access to sufficient quantities of nutritious food. Beyond these crucial and mutually reinforcing effects, agriculture also shapes how—and how sustainably—the region uses much of its land and water.

Despite agriculture’s importance, it has performed below its potential for generations in sub-Saharan Africa, neglected by government policies and held back by low farm productivity. Following age-old practices, African smallholder farmers have long survived by growing crops on reclaimed forest and grazing land or by recycling plots without replenishing their nutrients. Production increases have come from expanding cultivated land area, not from making farming more efficient. The scope for further area expansion is diminishing, and farmers now need to produce more food for each unit of land, with the help of modern technology. Productivity increases will generate farm employment; decent wages, including those for unskilled labour; and income for rural communities.

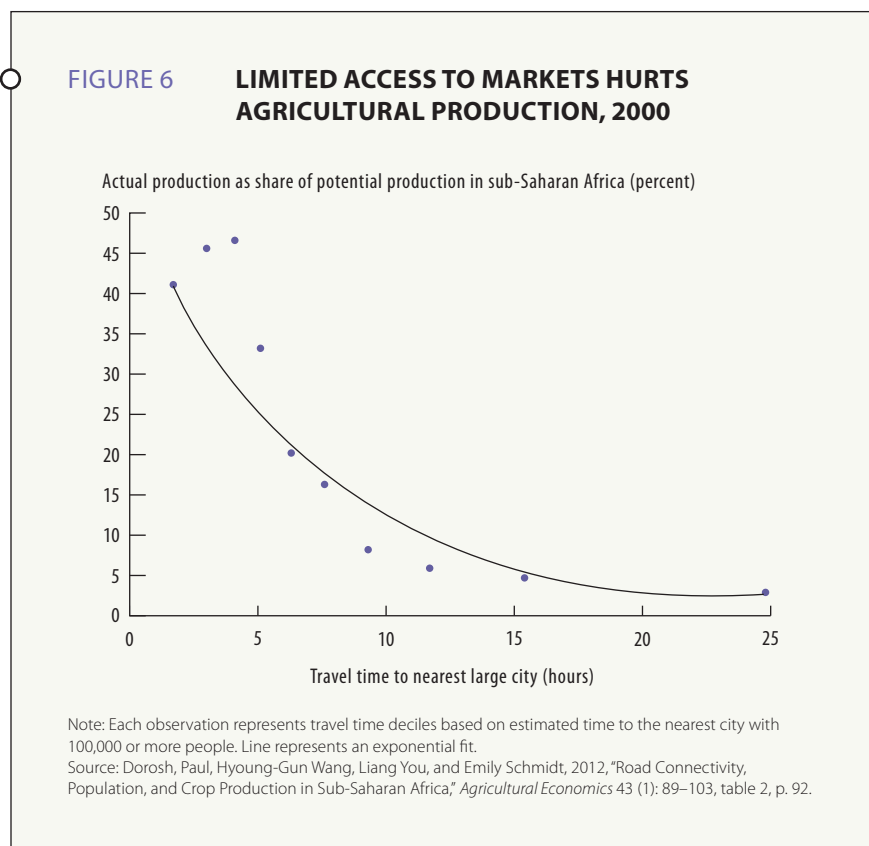
Boosting productivity requires more fertilizers and seeds, stronger research and development, and a more coordinated and responsive extension system staffed by experts versed in the behaviours and habitats of local farming communities. “Smart subsidies,” which encourage smallholder farmers to shift to high-yield crop varieties without saddling the state with long-term costs, can energize food production and markets. Research that embraces local farmers’ knowledge as part of the technology for improving yields can deliver results where blinkered laboratory designs have failed. Encouraging smallholder farmers to adopt new inputs begins with understanding their resistance to change.

Policy-making and institutional research should focus on varietal options for health and nutrition. Multidisciplinary knowledge is required to develop environmentally sustainable farm technologies. Modern agricultural technology can deliver solutions that not only boost yields but also economize on inputs, making fertilizer and water use more environment friendly. Creating and diffusing science and innovation require more collaboration among breeders, researchers and farmers.

Irrigation presents a long-term challenge for sub-Saharan Africa. Most countries have to make large investments in irrigation methods designed for sustainable and employment-intensive water management. But not all parts of the region need irrigation. Many semihumid and humid zones have enough moisture to make other means of water control feasible.

Better market access can also boost yields (figure 6). When farmers can transport their surpluses quickly and cheaply to points of sale or storage, they have incentives to increase production. This will take market development policies, transport regulation reforms to introduce competition, and substantial investment in rural roads, information technology, railways and warehouses. Access to credit and insurance through innovative schemes can lower the risks of adopting new inputs and motivate farmers to experiment with new varieties.

Attracting young Africans to participate in agriculture will bring new energy and ideas into its development. Technology and innovation can create enticing and profitable openings, enterprises and occupations along the value chain of a sector



that young people have come to denigrate as a backwater. Connecting three assets—a bulging youth population, advances in innovation and the promise of agricultural development—is a natural way forward for many countries.

Higher agricultural productivity can deliver a triple dividend—sustained food security, higher human development and lower pressure on land and water. But governments will have to rethink their priorities in order to pay for the required investments. Self-defeating policies that put guns before bread, cities before farms and fatty foods before nutrition will not measure up. Adequate funding for agricultural research and development and for effective regional collaboration on big-ticket investments in land and water control will yield a richer harvest for sub-Saharan Africa (table 1) than will sowing conflicts with bullets or converting continental breadbaskets into fuel tanks.

From food security to human development through nutrition

Too often the news from sub-Saharan Africa is easy to predict: famine and humanitarian food crises on the front page, volatile international food prices in the business section and numbing images of emaciated children in the magazine supplement. But while hunger dominates the African narrative, malnutrition—its silent accomplice—seldom

makes headlines. Malnutrition is an obstacle to human development, inflicting irreversible damage on individuals early in life and imposing large economic and social losses on countries for years to come.

Malnutrition is a plague on childhood. It can span generations in the form of hidden hunger, a life-sapping inheritance of nutrient deficiency resulting from past practices of eating low-quality foods. But fortifying these staples can preserve their place in traditional diets. Improving micronutrient intake is among the most effective—and cost-effective—ways to combat malnutrition. Concentrating on a handful of nutrients (vitamin A, iodine, iron and zinc) can leverage large human development returns from a small input—one of society’s most efficient development investments.

Many of the most critical and cost-effective nutrition interventions are not expensive. One is empowering women, a far-reaching way to help households break the cycle of intergenerational deprivation. When women have less say in decisions than men do, nutrition suffers, household food security deteriorates and access to healthcare lags. When women have more influence on household choices, child nutrition often prospers.

Well-nourished people are more productive and more receptive to learning. Well-nourished children learn better and are more likely to live lives they value. Indeed, the importance of nutrition begins even before children are born: nutrition during

TABLE 1 POLICY OPTIONS FOR SUSTAINABLY INCREASING AGRICULTURAL PRODUCTIVITY

POLICY OPTION	STABILITY OF FOOD SYSTEMS		
	AVAILABILITY OF FOOD	ACCESS TO FOOD	USE OF FOOD
Adoption and sustainable use of agricultural inputs		<ul style="list-style-type: none"> Fertilizer, seeds and water 	
Infrastructure and financial markets	<ul style="list-style-type: none"> Rural infrastructure (roads, storage, water management and control, including irrigation) 	<ul style="list-style-type: none"> Credit and insurance 	
Creating and applying local knowledge		<ul style="list-style-type: none"> Agricultural science and technology 	<ul style="list-style-type: none"> Extension service and support to generation and diffusion of localized knowledge, including on improving the use of food Engaging youth in agriculture and rural activities, including entrepreneurship and innovation

Source: Based on analysis described in the Report.

gestation has long-term benefits for children's ability to learn and grow.

Food science is uncovering new ways to improve the diets of the poor. Research on biofortification—breeding nutrients into crops—holds great promise because it focuses on the unprocessed food staples that poor people eat in large quantities every day. Biofortification implicitly targets its nutrient enrichment to low-income households that do not consume commercially fortified processed foods. While the technology has limits, it could give traditional African diets a major nutrition boost.

Nutrition is affected by a range of circumstances—from the political economy and seasonal and climate conditions to cultural and religious customs, the availability of health services and the level of household education, including knowledge of sound eating and health practices. Also in play are agricultural production and income, access to varied and nutritious foods, a sanitary environment and sufficient safe water and cooking fuel.

A multidimensional challenge of this order demands a multisectoral nutrition strategy—one with high-level government commitment, adequate resources and nutrition-sensitive interventions by the state, civil society, the private sector and the international community (table 2). Nutrition has to move up the policy agenda and down to households.

Otherwise, sub-Saharan Africa will continue to incur the high costs to its citizens and societies of one of the region's most disabling deficits.

Building resilience

From field to table the supply of food in sub-Saharan Africa is fraught with risk. Shocks, cycles and trends threaten food security and livelihoods. Conflict, droughts, floods, food price spikes and other shocks inflict immediate hardship on the poorest and most vulnerable households and constrain future human development. And too often the damage is permanent. Cyclical or longer term stresses—such as seasonal harvesting patterns that result in long “hungry seasons” between harvests, or creeping environmental degradation—are slower moving and more predictable. But they devastate communities all the same—especially those that cannot manage their exposure to hazards and protect their livelihoods. Stresses from population pressure are pervasive and growing.

Preventing or relieving stresses before they undermine food systems requires action across multiple fronts—from the environment to conflict resolution, market stability and women's empowerment. Long-term thinking requires lowering agriculture's contribution to climate change through

TABLE 2 POLICY OPTIONS FOR ACCELERATING GOOD NUTRITION

POLICY OPTION	STABILITY OF FOOD SYSTEMS		
	AVAILABILITY OF FOOD	ACCESS TO FOOD	USE OF FOOD
Stimulating individual action			<ul style="list-style-type: none"> • Delayed pregnancy • Adequate nutrition during pregnancy and breastfeeding
Expanding public services			<ul style="list-style-type: none"> • Education on food use • Healthcare • School feeding programmes • Cash transfers
Generating public action and nutrition-focused policies	<ul style="list-style-type: none"> • Gender equality and stronger legal rights for women • National and international policy engagement 	<ul style="list-style-type: none"> • Micronutrient campaigns • Behavioural change campaigns • Supplementation, food fortification, crop biofortification 	

Source: Based on analysis described in the Report.

policies that emphasize climate-smart practices. Ensuring that techniques to boost agricultural productivity are sustainable will allow farmers to adapt to climate change and to reap the benefits of nutrient-enriched soils today without adding to environmental stress.

Action to curb conflicts in the region would reduce the frequency of food system collapses. Dampening the volatility of global food prices is a collective endeavour for the international community. But African countries have a large stake in backing a new global architecture for agriculture and food security based on better market access for food importers, fewer restrictions on exporters and less distortion in biofuel markets. Effective responses to rising demographic pressures on the food supply start with enlarging women’s capabilities by improving their access to education, earnings and effective family planning services.

Forward-looking measures can buffer food systems from stress—or at least reduce the frequency and intensity of the most damaging strains. But crises happen, and poor communities must be ready to manage risks and cope with shocks. Social protection—such as insurance, employment protection, food and cash-for-work programmes,

food assistance, subsidies and social transfers—can determine whether crisis-struck households survive or succumb.

However, avoiding deterioration in food systems and mitigating the impacts of breakdowns are hardly progress. The most effective social protection policies raise returns to core productive assets—in sub-Saharan Africa, labour and land—and lift people out of poverty, reducing their need for social support and building their capacity to withstand recurring shocks. Linking social protection to measures that enhance farmers’ access to technology, stabilize rural markets and commodity prices, and build up rural infrastructure can make farmers, households and markets more resilient (table 3).

Empowerment, social justice and gender

The Report shows that the basic right to food—and the right to life itself—is being violated in sub-Saharan Africa to an intolerable degree. Building a food secure continent requires transformative change—change that will be most effective if accompanied by a shift of resources, capacities and

TABLE 3 POLICY OPTIONS FOR STRENGTHENING RESILIENCE IN FOOD SECURITY AND HUMAN DEVELOPMENT IN SUB-SAHARAN AFRICA

POLICY OPTION	STABILITY OF FOOD SYSTEMS		
	AVAILABILITY OF FOOD	ACCESS TO FOOD	USE OF FOOD
Prevent and relieve food system stresses	<ul style="list-style-type: none"> Policies that enhance long-term sustainability (related to population growth, climate change, conflict and violence, macroeconomic stability and market reforms) 		
Reduce vulnerability and manage risks	<ul style="list-style-type: none"> Food aid 	<ul style="list-style-type: none"> Weather-indexed insurance Indexed cash transfers Regional and national strategic grain reserves 	<ul style="list-style-type: none"> Conditional or unconditional cash transfers Cash-plus-food transfers
Enhance food security and human development	<ul style="list-style-type: none"> Input subsidies Inputs for work Input trade fairs 	<ul style="list-style-type: none"> Expanded availability of market information 	<ul style="list-style-type: none"> Health insurance School feeding programmes Vaccination Therapeutic feeding Employment guarantee schemes Cash transfers linked to public works programmes for physical infrastructure

Source: Based on analysis described in the Report.

decisions to smallholder farmers, poor communities and women. When women and other vulnerable groups gain a voice in the decisions affecting their lives and livelihoods, their capacity to produce, trade and use food is materially enhanced.

Knowledge and organization are the keys to opening the public space. Information technology can put up-to-the-minute knowledge about market prices and conditions at farmers' fingertips, increasing their leverage, while cooperatives and producer associations can provide platforms for collective bargaining. When food market actors—farmers, transporters, sellers and buyers—communicate regularly and quickly, costs and transaction times fall and farmers' incomes tend to rise. High connectivity can make farmers better traders and markets more transparent.

New inputs and farming techniques can liberate farmers from cycles of low productivity and poverty. But technology is double-edged. Misapplied, it dispossesses or marginalizes smallholder farmers. Science conducted far from where its results are used, and compartmentalized in water-tight disciplines, can lead to designs poorly suited to smallholder farms and local habitats.

Participation and voice grow stronger when political, economic and social power is widely dispersed. Locally determined solutions are usually more sustainable than top-down decisions. Producer organizations amplify the political voice of farmers, reduce the costs of marketing inputs and outputs and provide a meeting point for collective approaches. Community-based targeting can prevent elites from capturing social transfers, drawing on local knowledge to identify people most eligible for social protection.

African farmers have found vocal allies in autonomous civil society organizations, which can mobilize public interest around issues, monitor the performance of governments and lobby them to act in line with basic human rights. In addition to rights-based organizations, a range of development-based civil society organizations focused on charity, recovery and relief undertake food security interventions. But African civil society is still evolving, so its role in delivering food security can be neither discounted nor relied on completely.

Accountability is the necessary counterpart to voice. When accountable authorities answer to engaged communities, social justice is served. In the short run community organization and

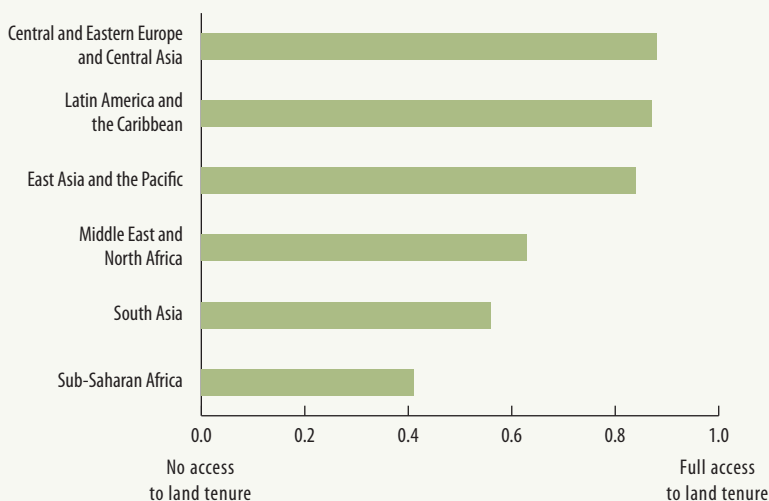
civic engagement will have to fill many gaps. Community-based social audits to monitor delivery of social protection programmes and other public services—and rights-based (rather than discretionary) approaches that elevate interventions to the status of citizens' rights—can strengthen the social contract between people and their government.

Control over land is crucial for smallholder farmers. In sub-Saharan Africa family holdings pass from one generation to the next with ill-defined rights of tenure, leaving smallholder farmers vulnerable to dispossession and exploitation (figure 7). This applies particularly to rural women.

A new development that risks aggravating these insecurities is the recent international scramble for land in sub-Saharan Africa. One danger is that large-scale investments may displace people without consultation or adequate compensation. In countries where many people work in agriculture, separating them from their land without first creating opportunities in nonfarm sectors is likely to increase poverty, unemployment and food insecurity.

There are strong and mutually reinforcing links between expanding women's capabilities—through better education, more direct control over resources and a more decisive voice in decision-making—and

FIGURE 7 WOMEN HAVE LESS CONTROL OF LAND IN SUB-SAHARAN AFRICA THAN ANYWHERE ELSE, 2009



Note: Regions are those defined by UN Women.
 Source: United Nations Entity for Gender Equality and the Empowerment of Women, 2011, 2011–2012 *Progress of the World's Women: In Pursuit of Justice*, New York, map 1.1, p. 40.

enhancing food security. Empowering women, who make up almost half the agricultural labour force in sub-Saharan Africa, is a highly efficient way to achieve progress across the multiple dimensions of food security. But even beyond such instrumental qualities and possible gains in efficiency, women's empowerment must remain a central policy priority because equality and nondiscrimination are of intrinsic value. As human rights, women's rights deserve to be promoted for that reason alone. Yet women in sub-Saharan Africa have less control than men do over productive resources such as assets, land and credit; their time is often devoted to activities that are nonmarketed and undervalued; and

their access to key institutions such as courts and markets is curtailed.

Famines and food crises continue to plague the region as nowhere else. The cycles of hunger and despair with which so many Africans struggle and "cope," and which too often trap them, show no signs of letting go. Responsibility for these appalling conditions is shared among governments, institutions and markets in the region and abroad. The challenge of food security in sub-Saharan Africa is formidable, the timeframe for action is tight and the investment required is substantial (table 4). But the potential gains for human development are immense.

TABLE 4 POLICY OPTIONS FOR EMPOWERING THE FOOD INSECURE

POLICY OPTION	STABILITY OF FOOD SYSTEMS		
	AVAILABILITY OF FOOD	ACCESS TO FOOD	USE OF FOOD
Access to information and knowledge	<ul style="list-style-type: none"> Information and communication technology Innovations in farm technologies 	<ul style="list-style-type: none"> New technology, especially to reduce the time burden on women and increase equality of access to information Basic education 	
Voice and participation	<ul style="list-style-type: none"> Producer organizations Gender-sensitive participatory methods for varietal selection and breeding 	<ul style="list-style-type: none"> Targeted cash transfer programmes Civil society organizations 	
Social justice and accountability	<ul style="list-style-type: none"> Social audits Accountable institutions Rights and guarantees, especially for women Access and control over land, with a focus on women Media freedoms 		

Source: Based on analysis described in the Report.

STATISTICAL TABLE 1

HUMAN DEVELOPMENT

COUNTRY	HUMAN DEVELOPMENT INDEX	LIFE EXPECTANCY AT BIRTH	MEAN YEARS OF SCHOOLING	EXPECTED YEARS OF SCHOOLING	GROSS NATIONAL INCOME PER CAPITA
	value	years			2005 PPP ^a \$
	2011	2011	2011	2011	2011
Angola	0.486	51.1	4.4	9.1	4,874
Benin	0.427	56.1	3.3	9.2	1,364
Botswana	0.633	53.2	8.9	12.2	13,049
Burkina Faso	0.331	55.4	1.3	6.3	1,141
Burundi	0.316	50.4	2.7	10.5	368
Cameroon	0.482	51.6	5.9	10.3	2,031
Cape Verde	0.568	74.2	3.5	11.6	3,402
Central African Republic	0.343	48.4	3.5	6.6	707
Chad	0.328	49.6	1.5	7.2	1,105
Comoros	0.433	61.1	2.8	10.7	1,079
Congo, Democratic Republic of the	0.286	48.4	3.5	8.2	280
Congo, Republic of	0.533	57.4	5.9	10.5	3,066
Côte d'Ivoire	0.400	55.4	3.3	6.3	1,387
Equatorial Guinea	0.537	51.1	5.4	7.7	17,608
Eritrea	0.349	61.6	3.4	4.8	536
Ethiopia	0.363	59.3	1.5	8.5	971
Gabon	0.674	62.7	7.5	13.1	12,249
Gambia	0.420	58.5	2.8	9.0	1,282
Ghana	0.541	64.2	7.1	10.5	1,584
Guinea	0.344	54.1	1.6	8.6	863
Guinea-Bissau	0.353	48.1	2.3	9.1	994
Kenya	0.509	57.1	7.0	11.0	1,492
Lesotho	0.450	48.2	5.9	9.9	1,664
Liberia	0.329	56.8	3.9	11.0	265
Madagascar	0.480	66.7	5.2	10.7	824
Malawi	0.400	54.2	4.2	8.9	753
Mali	0.359	51.4	2.0	8.3	1,123
Mauritania	0.453	58.6	3.7	8.1	1,859
Mauritius	0.728	73.4	7.2	13.6	12,918
Mozambique	0.322	50.2	1.2	9.2	898

	HUMAN DEVELOPMENT INDEX	LIFE EXPECTANCY AT BIRTH	MEAN YEARS OF SCHOOLING	EXPECTED YEARS OF SCHOOLING	GROSS NATIONAL INCOME PER CAPITA
	value	years			2005 PPP ^a \$
COUNTRY	2011	2011	2011	2011	2011
Namibia	0.625	62.5	7.4	11.6	6,206
Niger	0.295	54.7	1.4	4.9	641
Nigeria	0.459	51.9	5.0	8.9	2,069
Rwanda	0.429	55.4	3.3	11.1	1,133
São Tomé and Príncipe	0.509	64.7	4.2	10.8	1,792
Senegal	0.459	59.3	4.5	7.5	1,708
Seychelles	0.773	73.6	9.4	13.3	16,729
Sierra Leone	0.336	47.8	2.9	7.2	737
South Africa	0.619	52.8	8.5	13.1	9,469
South Sudan ^b
Swaziland	0.522	48.7	7.1	10.6	4,484
Tanzania, United Republic of	0.466	58.2	5.1	9.1	1,328
Togo	0.435	57.1	5.3	9.6	798
Uganda	0.446	54.1	4.7	10.8	1,124
Zambia	0.430	49.0	6.5	7.9	1,254
Zimbabwe	0.376	51.4	7.2	9.9	376
Sub-Saharan Africa	0.463	54.4	4.5	9.2	1,966

Note:

a Purchasing power parity.

b South Sudan's statistics are not yet fully available from the internationally harmonized data sources that are the basis for this statistical table. Technical note 2 in the full Report presents recent national data on human development and food security for South Sudan.

Sources:

Column 1: Human Development Report Office (HDRO) calculations based on data from UNDESA (United Nations Department of Economic and Social Affairs), 2011, *World Population Prospects: The 2010 Revision*, New York: United Nations Department of Economic and Social Affairs, Population Division, www.un.org/esa/population; Barro, Robert J., and Jong-Wha Lee, 2010, *A New Data Set of Educational Attainment in the World, 1950–2010*, NBER Working Paper 15902, Cambridge, MA: National Bureau of Economic Research; UNESCO (United Nations Educational, Scientific, and Cultural Organization) Institute for Statistics, 2011, UNESCO Institute for Statistics: Data Centre, <http://stats.uis.unesco.org>; World Bank,

2012, World Development Indicators database, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators>; and IMF (International Monetary Fund), 2011, World Economic Outlook database, April 2011, Washington, DC, www.imf.org/external/pubs/ft/weo/2011/01/weodata/index.aspx.

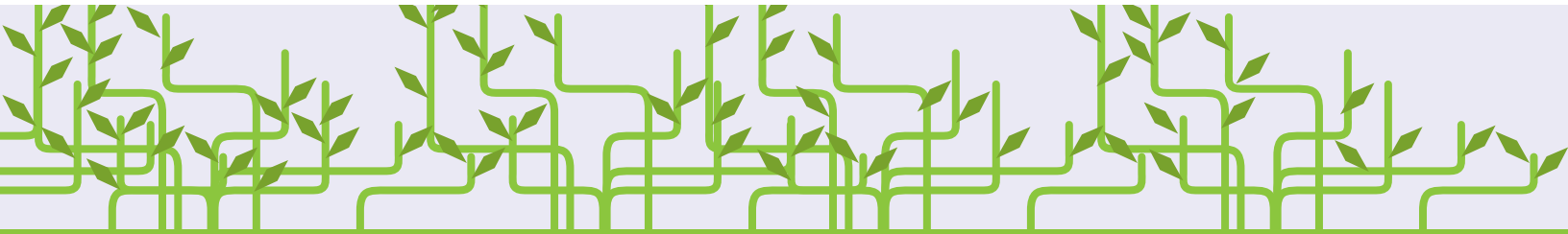
Column 2: UNDESA, 2011, *World Population Prospects: The 2010 Revision*, New York: United Nations Department of Economic and Social Affairs, Population Division, www.un.org/esa/population.

Columns 3 and 4: HDRO calculations based on data from Barro, Robert J., and Jong-Wha Lee, 2010, *A New Data Set of Educational*

Attainment in the World, 1950–2010, NBER Working Paper 15902, Cambridge, MA: National Bureau of Economic Research.

Column 5: HDRO calculations based on data from World Bank, 2012, World Development Indicators database, Washington, DC, <http://data.worldbank.org/data-catalog/world-development-indicators>; IMF, 2011, World Economic Outlook database, April 2011, Washington, DC, www.imf.org/external/pubs/ft/weo/2011/01/weodata/index.aspx; and UNDESA, 2011, *World Population Prospects: The 2010 Revision*, New York: United Nations Department of Economic and Social Affairs, Population Division, www.un.org/esa/population.

For too long the face of sub-Saharan Africa has been one of dehumanizing hunger. Food insecurity—the inability to consistently acquire enough calories and nutrients for a healthy and productive life—is pervasive. The spectre of famine, which has virtually disappeared elsewhere in the world, continues to haunt parts of the region.



Yet sub-Saharan Africa has ample agricultural land, plenty of water and a generally favourable climate for growing food. And in the last 10 years many African countries posted world-beating economic growth rates and became among the fastest movers on the Human Development Index. This first *Africa Human Development Report* seeks to understand the deeper causes behind these two jarring paradoxes and explores options for unleashing an era of mutually reinforcing advances in food security and human development.

The chain of food security that runs from food availability through food access to food use is under constant stress in sub-Saharan Africa. Agricultural productivity remains much lower than in other regions. Many countries in the region are net food importers, and some frequently need food aid. Even where food is available, millions cannot afford it or are prevented from buying or trading it. Important as food availability and access are, food security is about still more. Proper use of food determines whether food security sustains human development. Malnutrition leads to illness and death—as insufficient access to safe water, energy and sanitation combine with diseases such as HIV/AIDS and malaria in a lethal mix.

Misguided policies, weak institutions and failing markets are the deeper causes of sub-Saharan Africa's food insecurity. This tainted inheritance is most evident in households and communities where unequal power relations further trap vulnerable groups in a vicious cycle of deprivation, food insecurity and low human development. Moreover, demographic change, environmental pressure and climate change add formidable threats to the region's food security.

The Report argues for action in four interrelated areas. First, boosting agricultural productivity in sustainable ways can improve food availability and economic access by bolstering food production and purchasing power. Second, effective nutrition policies can set the conditions to absorb and use calories and nutrients properly. Third, building resilient communities and households can protect access to food. Fourth, empowering the rural poor and especially women can improve access to food by harnessing the power of information, innovation and markets and more equitably allocating food and resources within families and across communities.

The end of hunger and starvation in sub-Saharan Africa is much overdue.



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