



BETTER BUSINESS BETTER WORLD

Sustainable Business Opportunities in Africa

February 2017



Business and Sustainable Development Commission

c/o Systemiq
1 Fore Street
London ECY 5EJ

info@businesscommission.org

www.businesscommission.org and
report.businesscommission.org

Managing Partners



<http://www.systemiq.earth>



<http://www.unfoundation.org>

Copyright Business and Sustainable Development Commission. This work is licensed under a Creative Commons License Attribution-NonCommercial 4.0 International (cc by-nc 4.0).

February 2017

THE COMMISSIONERS

Lord Mark Malloch-Brown,
former Deputy Secretary-General, United Nations (Chair)

Amr Al-Dabbagh,
Chairman & CEO, The Al-Dabbagh Group

Laura Alfaro,
Professor, Harvard Business School

Peter Bakker,
President, The World Business Council on Sustainable Development (WBCSD)

Sharan Burrow,
General Secretary, International Trade Union Confederation (ITUC)

Ho Ching,
CEO, Temasek Holdings Private Ltd.

Bob Collymore,
CEO, Safaricom Ltd.

John Danilovich,
Secretary General, The International Chamber of Commerce (ICC)

Begümhan Doğan Faralyalı,
Chairwoman, Doğan Group

Hendrik du Toit,
CEO, Investec Asset Management

Richard Edelman,
President & CEO, Edelman

Hans Vestberg/Elaine Weidman Grunewald (acting),
CEO, Ericsson

John Fallon,
CEO, Pearson plc

Ken Frazier,
Chairman & CEO, Merck & Co Inc. (2016)

Mats Granryd,
Director General, The GSM Association (GSMA)

Helen Hai,
CEO, The Made in Africa Initiative

Svein-Tore Holsether,
President & CEO, Yara International ASA

Mo Ibrahim,
Founder, Celtel & The Mo Ibrahim Foundation

Mary Ellen Iskenderian,
CEO, Women's World Banking

Dr. Amy Jadesimi,
Managing Director & CEO, Lagos Deep Offshore Logistics Base (LADOL)

Donald Kaberuka,
former President, African Development Bank Group

Lise Kingo,
Executive Director of the United Nations Global Compact

Jack Ma,
Founder and Executive Chairman, The Alibaba Group

Andrew Michelmore,
CEO, MMG Ltd.

Sam Mostyn,
President, Australian Council for International Development (ACFID)

Arif Naqvi,
Founder & Group CEO, The Abraaj Group

Mads Nipper,
Group President & CEO, The Grundfos Group

Cherie Nursalim,
Vice Chairman, GITI Group

Ricken Patel,
President & Executive Director, Avaaz

Daniel Pinto,
CEO, Corporate & Investment Bank, JP Morgan Chase & Co.

Paul Polman,
CEO, Unilever

Vineet Rai,
Co-Founder & Chairman, Aavishkaar Intellectap Group

Grant Reid,
CEO, Mars, Inc.

Dinara Seijaparova,
CFO, 'Baiterek'

Sunny Verghese,
CEO, Olam International

Gavin Wilson,
CEO, IFC Asset Management Company LLC

Mark Wilson,
CEO, Aviva plc



THE GLOBAL GOALS MATTER FOR AFRICAN BUSINESS LEADERS

Over the past 30 years, the world has seen huge social improvements and technological progress. Yet despite these successes, our current model of development is deeply flawed. Signs of its failure and imperfections in today's markets are everywhere. There are vast numbers of people who do not have access to basic services such as healthcare, clean water, clean energy and sanitation. Social inequality and youth unemployment is worsening in countries across the world, and many education systems are still failing to deliver access to high quality education. The uncertainty created by these burdens makes it hard for businesses to invest with confidence.

The *Better Business, Better World* report offers a positive alternative: setting business strategy and transforming markets in line with the United Nations Sustainable Development Goals (Global Goals). These 17 Global Goals and their 169 component targets have been designed from the bottom up, with collaboration from government, business and civil society, to deliver the practical solutions needed to protect the planet's resources and leave no one behind. Getting policies and public investment right is necessary to delivery this outcome. But it is not nearly enough.

The Global Goals for sustainable development



The Global Goals will be delivered only with strong private sector engagement. Getting the right private sector and market development is key to driving sustainable growth. This is because Africa is the continent where the potential for inclusive, green growth and development remains most untapped. Many African countries have burgeoning populations with improving education levels and a growing middle class. There are more mouths to feed, housing and urban settlements to be provided, and power and infrastructure bottlenecks to be resolved. At the same time, they are also vulnerable to droughts, poor agricultural yields, poor management of the very bio-diversity that gives us life, an over-reliance on base commodities and global trade, and conflict for which we have a global cost of 9.1 percent of GDP in 2014.

The research conducted by the Business and Sustainable Development Commission shows that the Global Goals offer a compelling growth strategy for business leaders in Africa, one that opens up immense new market opportunities. African business leaders can drive sustainable development at home by incorporating the Global Goals into their core growth strategies, value chain operations and policy positions, whatever the scale of their operations. What we describe below are some of the biggest market hot-spots for sustainable business-led growth in Africa.

MAJOR MARKET OPPORTUNITIES IN AFRICA OPENED UP BY DELIVERING THE GLOBAL GOALS

Key points

- **Achieving the Global Goals opens up an economic prize of at least US\$1.1 trillion by 2030 for the private sector in Africa.**
- **Over 85 million new jobs could be created in Africa by 2030. One market hot spot alone, affordable housing, could create over 13 million of these jobs.**
- **Risk pooling is the single largest monetary opportunity in Africa, valued at US\$150 billion.**
- **African business leaders are already using innovative technology and business models to enter Global Goals-related markets.**

The business case for sustainable development as core strategy gets much stronger as the world achieves the Global Goals. This is especially true in developing countries, where more than half of the total value of business opportunities from the goals arises. In Africa, our research shows that achieving the Global Goals could open market hotspots worth an estimated US\$1.1 trillion by 2030 in business savings and revenue, out of the global prize of US\$12 trillion. Pursuing these opportunities could create up to 85 million new jobs in Africa by 2030.

Food and Agriculture. About 40 percent of all food produced is either lost or wasted in developing countries before it reaches the market, while hunger and food scarcity affect millions of people every day.¹ Food production must increase by 60 percent to 70 percent by 2050 to feed the growing global population.² However, major environmental stresses – water scarcity, loss of biodiversity, unsustainable fertiliser use, and climate-driven extreme weather – threaten supply.

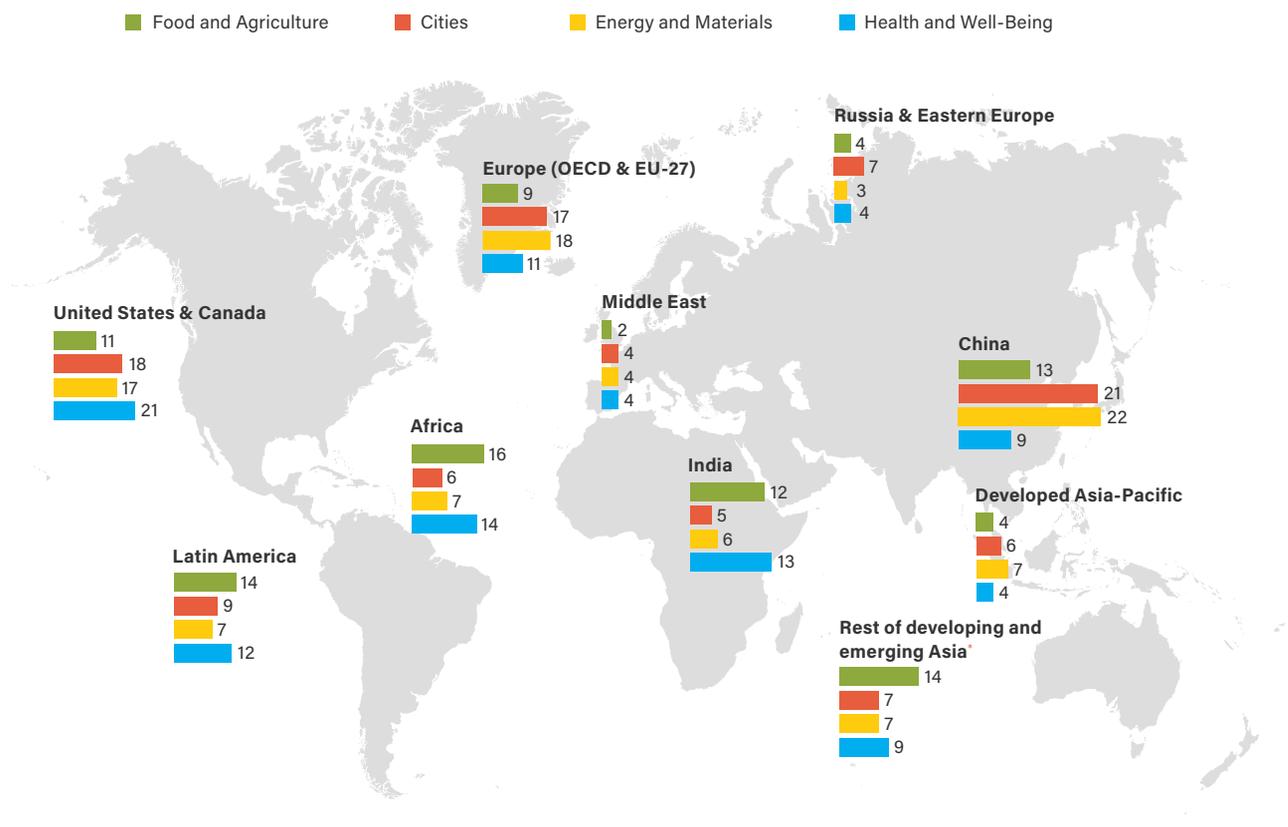
In Africa, the largest agriculture and food opportunities have an estimated potential value of over US\$367 billion at current prices and could create over 21 million new jobs. Opportunities include:

- **Forest ecosystem services (worth US\$100 billion a year by 2030 in Africa).** A carbon price of US\$50 per tonne by 2030 opens up major new opportunities in sustainable forest services, such as climate change mitigation, watershed services and biodiversity conservation.
- **Low-income food markets (US\$67 billion).** Business can invest in supply chains and food innovation to give those on very low incomes – who spend as much as 60 percent of their household income on food³ – access to food products that are more nutritious.
- **Reducing food waste in the value chain (US\$57 billion).** In Rwanda, technologies such as small metal silos or plastic crates have reduced post-harvest losses by over 60 percent and increased smallholder farmers' incomes by more than 30 percent.⁴
- **Technology in smallholder farms (US\$39 billion).** There is the potential to double current yields for the 33 million smallholder farms in sub-Saharan Africa, representing 80 percent of all farms in the region, which are still operating at a low-income, subsistence level.⁵
- **Technology in large-scale farms (US\$28 billion).** There is the opportunity for a further 40 percent improvement in yields by using

technologies such as big data to optimise crop yield and tractors with GPS and multispectral sensors to allow precise application of nitrogen.⁶

More than half the value of the Global Goals business opportunities arises in developing countries

Share of value of SDG business opportunities by region and system; Percent



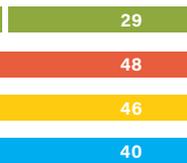
Total opportunity share, %

Food and agriculture
 Cities
 Energy and Materials
 Health and Well-being

Developing



Developed



* Rest of developing Asia includes Central Asia (e.g., Uzbekistan), South Asia (e.g., Bangladesh), Southeast Asia (e.g., Laos), and North Korea.

Note: Numbers may not sum due to rounding.

Source: Literature search, AlphaBeta analysis.

Case Studies in Food & Agriculture

ColdHubs provides farmers in Nigeria with chilled storage rooms at food markets and farms to extend the shelf-life of perishable foods from 2 to 21 days. Farmers can buy crates in a modular, solar-powered walk-in cold room through a flexible pay-as-you-go subscription for US\$0.50 a day per crate. By reducing post-harvest loss by 80 percent, therefore selling a larger portion of crops, small farmers can raise their income by 25 percent. (For more detail, visit www.coldhubs.com.)

Hello Tractor has developed low-cost smart tractors in Nigeria with various attachments for irrigation, ploughing, fertilizer distribution, and other tasks. Smallholder farmers can request, schedule, and prepay for tractor services from nearby smart tractor owners via SMS. The smart tractors have a GPS antenna to track usage and gather data on location, market trends, and uptake. Farmers participating in the beta period saw yields increase by 200 percent. (For more detail, visit www.hellotractor.com.)

Cities. The share of Africans living in urban areas is projected to grow from 36 percent in 2010 to 50 percent by 2030 – the highest urbanisation rate in the world.⁷ Up to 440 million urban households could lack access to affordable housing by 2025.⁸ Access to clean water and sanitation remains challenging in fast-growing cities of the developing world, with almost 20 percent of urban dwellers still lacking improved sanitation facilities.⁹

For businesses in Africa addressing these challenges, the largest opportunities have a potential value of US\$214 billion and could create over 32 million jobs. These include:

- **Affordable housing (US\$89 billion).** The current global housing affordability gap is US\$650 billion¹⁰; closing this gap would offer a massive opportunity across Africa, provided that land-tenure, planning and mortgage finance systems can be put in place.
- **Water and sanitation infrastructure (US\$46 billion).** There is a significant opportunity for private sector collaboration with governments to build and maintain this infrastructure.
- **Energy efficiency – buildings (US\$32 billion).** There are large opportunities to improve building energy efficiency through heating and cooling performance and switching to efficient lighting, appliances and electronics.

Case Study in Cities

Cityspec is a mobile monitoring device that addresses communal service delivery challenges by enabling residents to report problems and community workers to track inspections and monitor the status of facilities. The initiative was piloted in South Africa, where about 25 percent of clean drinking water is lost to leaks and poor infrastructure. In January 2016, 56 faults on water taps and 115 on toilets were identified and reported. Estimates show that the tool can help reduce US\$480 million worth of water lost annually in South Africa. (For more detail, visit www.formula-d.com.)

Energy and Materials. Great inequality in energy consumption persists, with more than 620 million people – two-thirds of the population in sub-Saharan Africa – lacking access to an electricity grid.¹¹ Moreover, risks concerning the location of new sources of supply, their environmental impact, water use and technical complexity are likely to add to the supply costs of energy and materials.

The largest business opportunities in Africa from tackling these and further energy challenges have a potential value in 2030 of over US\$296 billion and could create nearly 16 million jobs. They include:

- **Shared infrastructure (US\$72 billion).** A substantial portion of extractive infrastructure, such as railways and ports, as well as power infrastructure, could be shared.
- **Local content in extractives (US\$60 billion).** In the oil and gas sector and the mining sector, manual and low-skilled labour and basic materials can be easily localised. In the case of South Africa, 70 to 85 percent of mining spending is amenable to local content.¹²
- **Energy access (US\$38 billion).** Energy access could be significantly improved through low-cost household products, such as solar lanterns and improved cook stoves, and community-level mini-utilities.
- **Expansion of renewables (US\$29 billion).** The shift to reduce the carbon intensity of electricity by increasing the share of renewables in the power sector creates a significant business opportunity.
- **Circular models – automotive (US\$25 billion).** Only a small number of “weakest-link” components are typically responsible for ending a

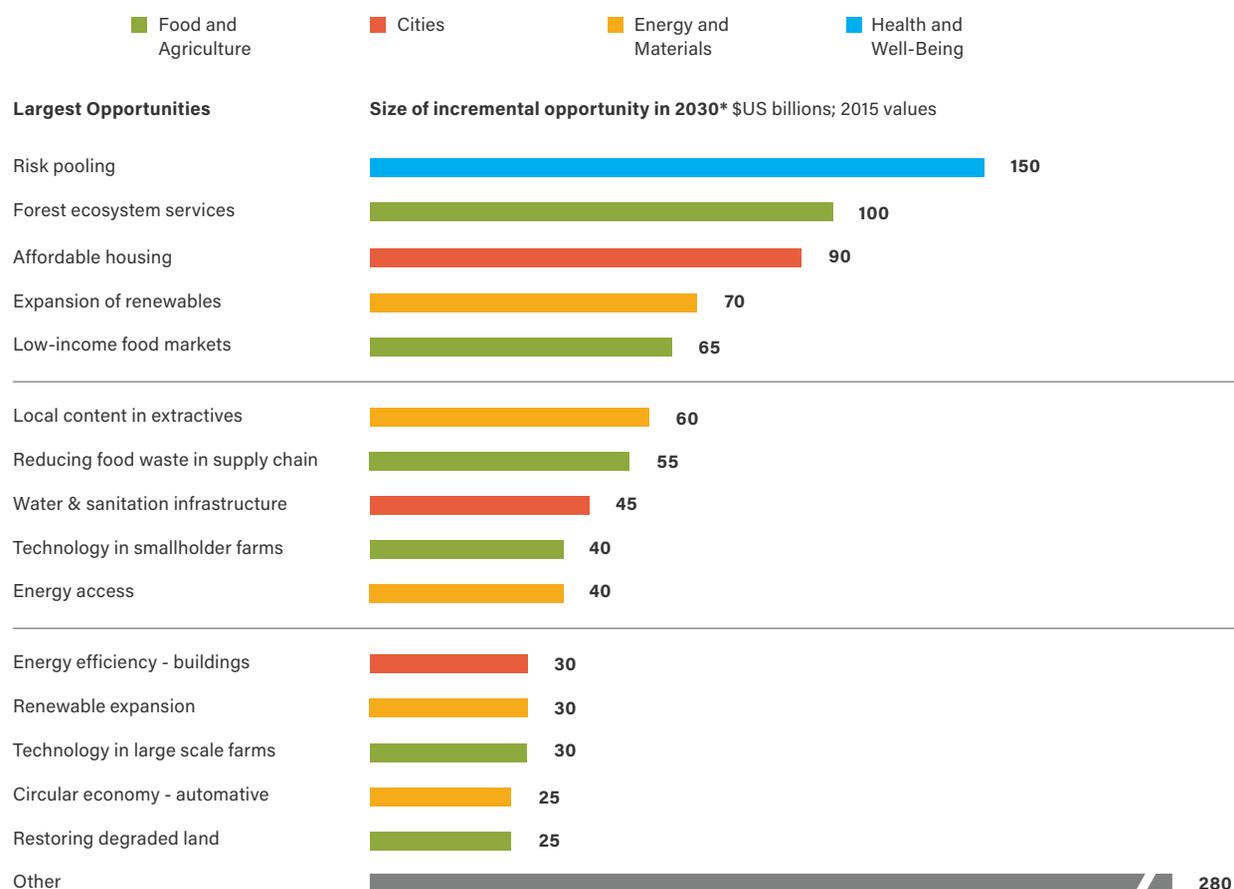
vehicle's useful life, which can be significantly extended if components are remanufactured and used to refurbish cars.

Case Studies in Energy & Materials

M-KOPA provides pay-as-you-go energy services to off-grid customers in East Africa by combining micropayment and mobile technology to enable leasing of solar power systems. Each system is bought with an initial deposit of US\$35, followed by a daily payment of US\$0.50 for one year. The company has connected more than 400,000 homes in Kenya, Uganda, and Tanzania to solar power with over 500 new homes being added every day, and aims to reach 1 million homes by the end of 2017. Current customers are projected to save US\$300 million over the next four years and enjoy 50 million hours of kerosene-free lighting per month. (For more detail, visit www.m-kopa.com.)

TRINE's crowd-investing model for financing solar energy solutions provides electricity to communities that cannot bear the upfront costs themselves, while delivering a financial return for investors. Growing access to off-grid solar is allowing families across Africa to swap kerosene for clean, cheap energy, boosting health and wealth, and cutting carbon emissions. An initiative in Jinja, Uganda providing solar lights to fishermen is expected to generate 6.75 percent annual returns after a 1.5-year payback period. It is also spawning opportunities for local industry: in Sidonge, Kenya, plans for solar-powered bottling and refrigeration services would allow locals to sell purified water and milk. (For more detail, visit www.jointrine.com.)

Delivering the Global Goals in Africa could generate over US\$1 trillion worth business opportunities



*Based on estimated savings or projected market sizings in each area. Only the high case opportunity is shown here. Note: rounded to nearest \$5 billion.

Source: Literature search; AlphaBeta analysis.

Health and Well-Being. Access is the greatest challenge to health care delivery in Africa. On average there are only 9 hospital beds per 10,000 people, in comparison to the world average of 27, and only two physicians per 10,000, versus 14 globally.¹³ Basic medical services and supplies are lacking, and there are looming skill gaps in the medical profession.

The largest opportunities for businesses addressing these challenges have a potential value in 2030 of US\$259 billion and could create over 16 million jobs in Africa. Opportunities include:

- **Risk pooling (US\$150 billion).** Increasing penetration and scale of private, public-private and community insurance schemes could

transform access to better healthcare if the right insurance mechanisms, including forms of micro-insurance, are put in place.

- **Better maternal and child health (US\$15 billion).** Effective delivery of interventions requires talent development, supply chain management and partnerships with the public sector.
- **Remote patient monitoring (US\$15 billion).** Sensors that read the vital signs of patients at home alert nurses and doctors cost effectively to problems before they worsen.
- **Better disease management (US\$14 billion).** Much of the mortality associated with the burden of disease is preventable through relatively low-cost interventions.
- **Telehealth (US\$11 billion).** Primary healthcare provision could be transformed through telehealth and remote monitoring of patients, combined with new financing approaches (such as risk pooling) to support healthcare access.

Case Studies in Health & Well-Being

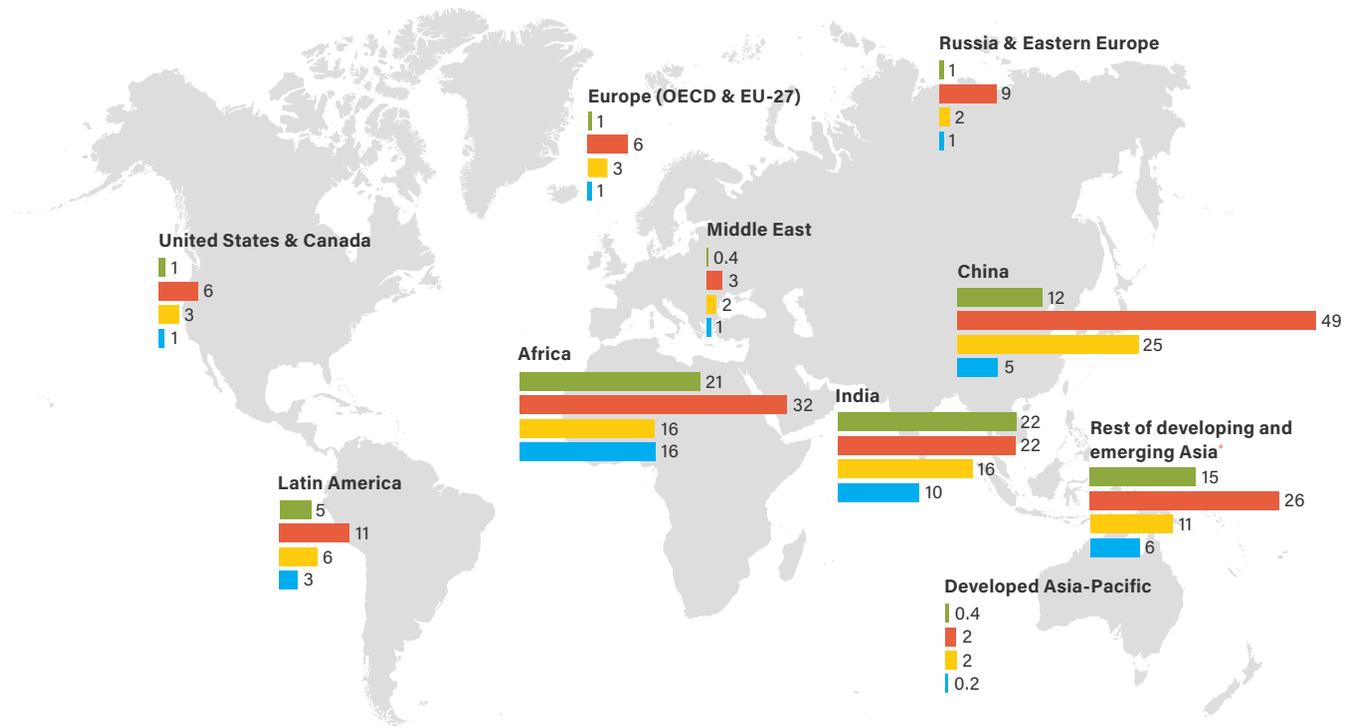
Peek Vision is a Kenyan company that saw a market opportunity in the bulky, fragile and expensive equipment used for eye examinations. The firm's mobile app and US\$5 clip allows anyone with a smartphone to turn their handset into a diagnostic tool with the ophthalmological accuracy of a US\$25,000 camera, able to spot conditions from cataracts to glaucoma. (For more detail, visit www.peakvision.org.)

MicroEnsure extended its market by finding ways to bring affordable insurance to previously unreachable groups in Africa, where less than three percent of the population has health insurance.¹⁴ MicroEnsure's innovative SMS-based platform and partnerships with mobile carriers provides free basic insurance in exchange for improved consumer loyalty to local telecoms companies, with the option for consumers to buy more extensive cover once they understand the value of being insured. Since its inception, the company has paid more than US\$38 million in claims. (For more detail, visit www.microensure.com.)

Almost 380 million jobs could be created by Global Goals business opportunities in the four systems

Total jobs created by SDG business opportunities by region and system;
In millions

■ Food and Agriculture
 ■ Cities
 ■ Energy and Materials
 ■ Health and Well-being



* Rest of developing Asia includes Central Asia (e.g., Uzbekistan), South Asia (e.g., Bangladesh), Southeast Asia (e.g., Laos), and North Korea.

Note: Numbers may not sum due to rounding.

Source: Literature search, AlphaBeta analysis.

REFERENCES

¹FAO. "Seeking End to Loss and Waste of Food along Production Chain." 2011.

²FAO. "Sustainability." Undated.

³The World Bank. "Global Consumption Database."

⁴World Food Logistic Organization. "Identification of appropriate postharvest technologies for improving market access and incomes for small horticultural farmers in Sub-Saharan Africa and South Asia. Part 2: Postharvest Loss Assessments." 2010.

⁵ODI. "Leaping and learning: linking smallholders to markets." May 2013. McKinsey Global Institute. "Resource Revolution: Meeting the world's energy, materials, food, and water needs." November 2011.

⁶The Economist. *The future of agriculture*. June 2, 2016

⁷ADB, OECD, and UNDP. "2016 African Economic Outlook."

⁸McKinsey Global Institute. "Tackling the world's affordable housing challenge". October 2014.

⁹UNICEF and WHO. "Progress on sanitation and drinking water – 2015 update and MDG assessment". 2015

¹⁰McKinsey Global Institute. "Tackling the world's affordable housing challenge". October 2014.

¹¹IEA. "World Energy Outlook." 2014.

¹²AlphaBeta. Expert interviews.

¹³IFC and the World Bank. "Healthy Partnerships." 2011. WHO. "Atlas of Health Statistics". 2011.

¹⁴USAID. "Special Edition 2016: Reaching Scale". 2016.

THE BUSINESS AND SUSTAINABLE DEVELOPMENT COMMISSION

The Business and Sustainable Development Commission was launched in Davos in January 2016. It brings together leaders from business, finance, civil society, labour, and international organisations, with the twin aims of mapping the economic prize that could be available to business if the UN Sustainable Development Goals are achieved, and describing how business can contribute to delivering these goals.

The *Better Business, Better World* report was led by the commissioners, and supported by: the Australian Department of Foreign Affairs and Trade (DFAT), the Bill & Melinda Gates Foundation, the Global Green Growth Forum (3GF), the Swedish International Development Cooperation Agency (Sida), the Netherlands Ministry of Foreign Affairs (MoFA), the Norwegian Ministry of Climate and Environment, the Rockefeller Foundation, and the UK Department for International Development (DFID). The Commission also benefits from the generous financial support of its commissioners.

The Business and Sustainable Development Commission has overseen this report with secretariat support provided by the UN Foundation and SYSTEMIQ. Chaired by Lord Mark Malloch-Brown, the Commission comprises business leaders from around the world.

Members of the Business and Sustainable Development Commission endorse the general thrust of the arguments, findings, and recommendations made in this report, but should not be taken as agreeing with every word or number. They serve on the Commission in a personal capacity. The institutions with which they are affiliated have not been asked to formally endorse the report.

Learn more at:

- © <http://businesscommission.org>
- in <https://www.linkedin.com/company/business-commission>
- f <https://www.facebook.com/businesscommission>
- 🐦 <https://twitter.com/bizcommission>

Readers may reproduce material for their own publications, as long as they are not sold commercially and are given appropriate attribution. Copyright Business and Sustainable Development Commission. This work is licensed under a Creative Commons License Attribution-NonCommercial 4.0 International (cc by-nc 4.0).