

POLICY MEASURES TO SUPPORT INCLUSIVE AND GREEN BUSINESS MODELS



United Nations Global Compact



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EXECUTIVE SUMMARY

Inclusive business – the inclusion of the poor as consumers or producers – and green business – reducing environmental impacts – are often highly interlinked. Inclusion without greening can lead to pollution, ecosystem decay and depletion of natural resources – all of which ultimately harm the poor. Focusing on greening to the exclusion of the poor can create political resistance and make environmental business models increasingly difficult to implement. Business models that focus on one set of issues at the expense of the other are thus not only difficult to justify; they are also often unviable over the long-term.

Realising synergies between inclusion and greening requires innovating technologies, products and services, and, ultimately, business models. Responsible companies that aim to bring about both green and inclusive innovations need sufficient financial, technical, human and organisational resources to address the multiple challenges inherent in low-income markets in developing and emerging countries. A diverse set of actors is involved in such processes – each of them taking a different role. Mission-driven organisations, like social enterprises or market-oriented NGOs, employ market-based mechanisms to address social and environmental challenges, and often tend to take on risky and uncertain pioneering and development work. But traditional businesses are also increasingly recognising the inherent risks in business models that neglect inclusion and greening – or aim exclusively for only one of those objectives. They often take up the models and help them achieve scale. Coordination efforts and partnerships crucially support this process – driven by actors such as social investors, local intermediaries, donors and policy-makers.

The latter play a key role in supporting the efforts of the different types of organisations involved in market-based inclusive and green innovations. First and foremost, policy-makers matter in providing an appropriate infrastructure for markets, including physical infrastructure, and also regulatory frameworks that are stable and secure, yet flexible enough to allow room for experimentation. Secondly, policy-makers can influence market mechanisms by designing subsidy and incentive systems for green and inclusive innovations, helping mission-driven pioneers to survive during the pioneering phase, and allowing all players to realise market-wide strategies and economies of scale. Thirdly, policy-makers can facilitate cooperation and partnerships between actors, and provide them with the appropriate learning environment to make achieving inclusion and greening a reality.

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1 INTRODUCTION

Are poverty alleviation and environmental sustainability conflicting objectives? Or do the two goals support each other? Both are traditional domains of policy-makers aiming to promote green growth and pro-poor or inclusive growth. But in recent years, market-based approaches that harness the capabilities of private-sector players have gained credibility and attracted increasing attention. In the process, traditional roles have been blurred. Today, solutions to tackle poverty alleviation and environmental sustainability are being implemented by a wide array of actors.

Strategies to alleviate poverty and achieve environmental sustainability are often highly interlinked and definitions by both policy and business actors of one strategy will often cross-reference the other. UNESCAP's definition of green growth, for example, refers to 'socially inclusive development,'¹ while the Millennium Development Goals include 'Ensure Environmental Sustainability' as one of their eight goals. On the business level, definitions of inclusive business strategies state that their objective is to include the poor as 'participants in low-carbon and climate-resilient growth.'²

While there are examples of solid, scaled business models that satisfy both social and environmental criteria, in practice the two objectives often collide. The question remains as to how businesses succeed in aligning both objectives – and how they can be supported in doing so. This report addresses these questions by, first, analysing the underlying tensions between inclusive and green business, secondly, mapping the paths towards synergies on a business level and, finally, sketching policy options to support market-based approaches in this field.

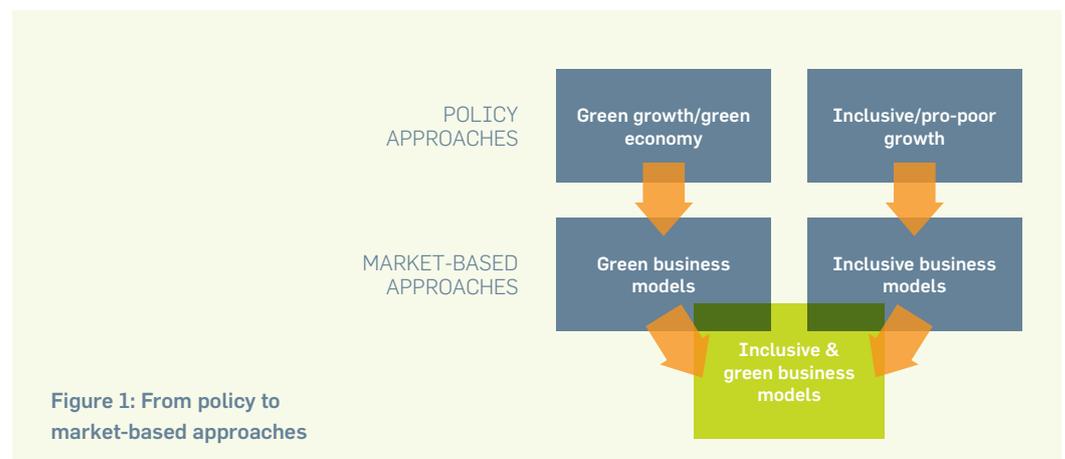


Figure 1: From policy to market-based approaches

¹ UNESCAP website (2012), <http://www.greengrowth.org> (accessed: April 2012).

² Business Innovation Facility website (2012), <http://businessinnovationfacility.org> (accessed: April 2012). References to environmental issues can also be found in the academic literature, especially Prahalad, C. K. 2004. *The Fortune at the Bottom of the Pyramid: Eradicating Poverty through Profits*. Wharton School Publishing.

2 OPPORTUNITIES FOR INCLUSIVE AND GREEN INNOVATION

Are poverty reduction – by including the poor as consumers or producers – and greening – the reduction of environmental impacts – mutually supportive or conflicting objectives? This chapter will first analyse how inclusive business practices targeted at low-income markets in developing and emerging countries relate to greening aspects, and second, how green businesses relate to inclusion. Both analyses show that, in practice, the concepts are highly interlinked, and that focusing on one objective by compromising the other is unviable over the long-term.

2.1 INCLUSIVE BUSINESS – WITHOUT GREENING?

Inclusive business highlights the role of market-based approaches to reducing poverty and addressing development challenges in low-income countries often facing institutional and infrastructure failure. It calls for business models that bridge commercial, business development objectives and social objectives concerning human well-being, like the reduction of hunger or the empowerment of women³:

‘Inclusive business models include the poor on the demand side as clients and customers, and on the supply side as employees, producers and business owners at various points in the value chain. They build bridges between business and the poor for mutual benefit.’⁴

Like all economic activity, the consumption and production activities in developing and emerging countries, which inclusive business models facilitate, require natural resources, and tend to create emissions and environmental pollution. It might thus be argued that inclusive business – essential to lifting people out of poverty – can only be realised at the cost of the environment. However, on closer examination, it becomes clear that inclusion without greening can actually harm the poor in several ways:

- Selling fossil fuels or promoting unsafe biomass for lighting and cooking causes indoor air pollution and has been linked to respiratory diseases, especially among vulnerable groups like women and children;
- Business models that contribute to the decay of ecosystems, on which many poor communities depend, can undermine traditional forms of agriculture, access to clean water provided by those ecosystems, and the regulation of floods by retaining heavy rainfall.⁵
- Selling low-quality goods with a short lifespan not only increases waste, but also incurs higher expenditure for repeat purchases over the long term.
- Low-quality infrastructure, such as poor insulation and building quality in some low-income housing projects, can increase energy demand for heating or cooling, which leads to higher energy costs for the poor. Lower quality buildings also typically have a shorter lifetime, with added environmental and monetary costs for building maintenance or reconstruction. At the same time, low quality infrastructure can expose the poor to additional risks from natural disasters, which they may be ill-equipped to adapt to.

³ See the UN Global Compact website for an overview on the multiple contributions by business organisations to sustainable development, especially in the area of poverty: <http://www.unglobalcompact.org> One example is the Women’s Empowerment Principles – a set of Principles for business offering guidance on how to empower women in the workplace, marketplace and community. They are the result of a collaboration between the United Nations Development Fund for Women (UNIFEM, part of UN Women) and the United Nations Global Compact. For more information, visit: http://www.unglobalcompact.org/issues/human_rights/equality_means_business.html

⁴ UNDP. 2008. Creating Value for All: Strategies for Doing Business with the Poor. United Nations Development Programme.

⁵ For details see MEA. 2005. Ecosystems and Human Well-Being: Synthesis. Washington, DC.: Millennium Ecosystem Assessment, Island Press.

**CASE
STUDY
1**
Sachet marketing

Selling products in small packages, known as sachet marketing, is often employed to give poor customers access to personal hygiene products and create local employment opportunities in distribution.⁶ However, since they increase packaging waste, these business models create a challenge, especially in view of a widespread absence of collection, treatment and recycling systems. Waste from sachet packaging contributes to the accumulation of non-biodegradable waste in local communities.⁷ While the impact is small on a per-unit basis, it increases with the scale of the business. And the burden is not restricted to the environment, since solid waste can become a breeding ground for mosquitoes and has been linked to the spread of malaria.⁸

As a consequence, integrating both greening and inclusion objectives into business models improves the chances of reaching the original poverty reduction goals by improving the overall living conditions of the poor. This also reduces the inherent risks in business models for the organisations implementing them, since they protect the natural resource base and respect the limited availability of key environmental inputs on which many of these business models depend. This is particularly relevant when scaling business models to reach a significant share of the target population.

**CASE
STUDY
2**
Waterlife, India

Waterlife tackles the acute lack of safe drinking water in India. Contaminated water is widespread in the country and causes disease and death. Initially, the government built large water treatment systems, which, however, quickly stopped running due to inadequate operation and maintenance. Waterlife pioneered an innovative business model, which integrates long-term operation and maintenance by charging small user fees for safe water. In cooperation with local government, Waterlife has expanded its work to seven states and installed over 17,000 systems. The community water systems (CWSs) provided by Waterlife will be maintained for five to ten years, after which the villagers own and maintain their own CWS – employing a so-called ‘build-operate-transfer’ model.

As a result of Waterlife's activities, villagers now have access to clean drinking water. The positive health effects associated with access to clean drinking water create further ‘spillover effects:’ villagers can work more productively, increasing their income; children can attend school, and women in particular save time previously dedicated to fetching water. Local businesses also benefit directly, as they operate as distributors of the water. Additionally, local people are hired and trained to operate, maintain and service the CWSs.

To implement this inclusive business model, greening aspects were integrated into its design from the outset. Sudesh Menon, the co-founder of Waterlife, states: ‘We wanted to do this in an environmentally sustainable manner. India will be water-stressed for the next ten years, and by 2030 demand-supply gap will be 50%. People who aim to address water scarcity often use technologies that damage the aquifers. However, we are convinced that you can't use a model that brings social and economic sustainability, but damages the environment.’ Thus, it employs a variety of green technologies and innovations. For example, the company uses bioremediation to treat arsenic. Waterlife also provides systems with alternate energy sources in villages that do not have grid power.

Source: Gilcher, Sebastian. 2012. Green and Inclusive Businesses in India: A Summary and Evaluation of Surveys. GIZ; Interview with Sudesh Menon, Co-Founder, CEO and managing director of Waterlife India.

⁶ Singh, Ramendra, Rodolfo Ang, and Joseph Sy-Changco. 2009. ‘Buying Less, More Often: An Evaluation of Sachet Marketing Strategy in an Emerging Market.’ *Marketing Review* 9: 3–17.

⁷ Karnani, Aneel. 2007. ‘The Mirage of Marketing to the Bottom of the Pyramid: How the Private Sector Can Help Alleviate Poverty.’ *California Management Review* 49: 90–111.

⁸ Amoatey, P.K., J. Winter, and C. Kaempf. 2008. ‘Solid Waste Disposal and the Incidences of Malaria: Any Correlation?’ *Proceeding (604) Water Resource Management*.

2.2 GREEN BUSINESS – WITHOUT INCLUSION?

The private sector has great potential to contribute to environmental protection and ‘green growth’ or a ‘green economy,’⁹ with technologies that reduce resource consumption and environmental impacts, by replacing traditional sources of energy with renewable ones, protecting biodiversity and ecosystems, and promoting overall low-carbon development.

Nevertheless, green business initiatives can inhibit inclusion of the poor, and negatively impact them. For example:

- Initiatives that aim to protect natural resources and ecosystems, by establishing natural reserves that ban or strongly restrict economic activities in certain areas – hunting, fishing and lumbering, for example – may conflict with the traditional livelihood strategies of poor communities.
- Charging market rates for environmental goods like water or energy is seen as a way to promote the efficient and careful use of natural resources. However, the financial burden often falls disproportionately on low-income consumers, who already spend a higher proportion of their income on basic services. Thus, they often tap connections illegally, causing high levels of inefficiency and losses.
- An increasing demand for renewable raw materials, such as biofuels, can lead to higher land-use demands and rising food prices: ‘[Until] new technologies are developed, using food to produce biofuels might further strain already tight supplies of arable land and water all over the world, thereby pushing food prices up even further.’¹⁰ In extreme cases, competition over land-use can lead to conflict, human rights abuses and displacement (see case study 3).

CASE STUDY 3

Biomass, Latin America

Using biomass for energy and other needs is often hailed as a solution to pressing environmental challenges, as demand is shifted from non-renewable resources, like petroleum, to renewable ones like wood or plant oils. But biomass production in some regions is dominated by large-scale plantations, especially for the production of palm oil. While there are concerns about land rights and treatment of workers in several countries, palm oil production has expanded, particularly in Colombia, which is now the world’s fifth largest producer. This expansion in Colombia has been linked to displacement, human rights abuses and paramilitary activities.¹¹ In 2008, Colombia had 2.3 million internally displaced people, a growing share of these linked to “land grabs” for the production of palm oil and other bio-fuels.

Further, including the poor in green business models can support the implementation of environmental projects. For example, providing them with alternative income opportunities can prevent the hunting, fishing or lumbering activities which many communities rely on as a basis for their livelihoods and wellbeing (see case study 4). Avoiding exclusion can also reduce political resistance and avoid reputational damage once the social implications of some green business strategies surface. In addition, making inclusion an integral part of green business models can also expand the customer base beyond the upper and middle classes, thus increasing the market size and expanding opportunities for enterprises.

CASE STUDY 4

Blue Ventures, Madagascar

Tropical coastal ecosystems are home to hundreds of millions of people around the world. They are also the basis of their livelihoods. The effects of climate change on coastal ecosystems, such as coral bleaching, destruction by storms, and erosion from heavy rain, can harm these livelihoods. In the coastal regions of Madagascar, people depend on fishing and reef gleaning for at least 85% of their income. The social enterprise Blue Ventures aims to strengthen the resilience of coastal ecosystems and communities in Madagascar through marine conservation initiatives and socio-economic programmes that help local fishermen to respond and adapt to actual and anticipated climatic effects.

⁹ BMZ. 2011. Green Economy. Federal Ministry for Economic Cooperation and Development (BMZ).

¹⁰ Mercer-Blackman, Valerie, Hossein Samiei, and Kevin Cheng. 2007. ‘Bio-fuel Demand Pushes Up Food Prices.’ IMF Survey Magazine: IMF Research.

¹¹ War on Want, 2008. Fuelling Fear: The Human Cost of Biofuels in Colombia. London: War on Want; Carroll, Rory. 2008. ‘UK Palm Oil Consumption Fuels Colombia Violence, Says Report.’ The Guardian.

To do so, Blue Ventures supported 25 fishing communities in establishing a locally managed marine area (LMMA) along the southwest coast of Madagascar. The LMMA enables these communities to have management control over the use of local marine and coastal resources. For example, they introduced bans on destructive fishing practices such as poison fishing and beach seining. At the same time, alternative practices are introduced to fishers, such as farming seaweed and sea cucumbers, which have brought in a total of over USD 3,000 to participating households in 2011.

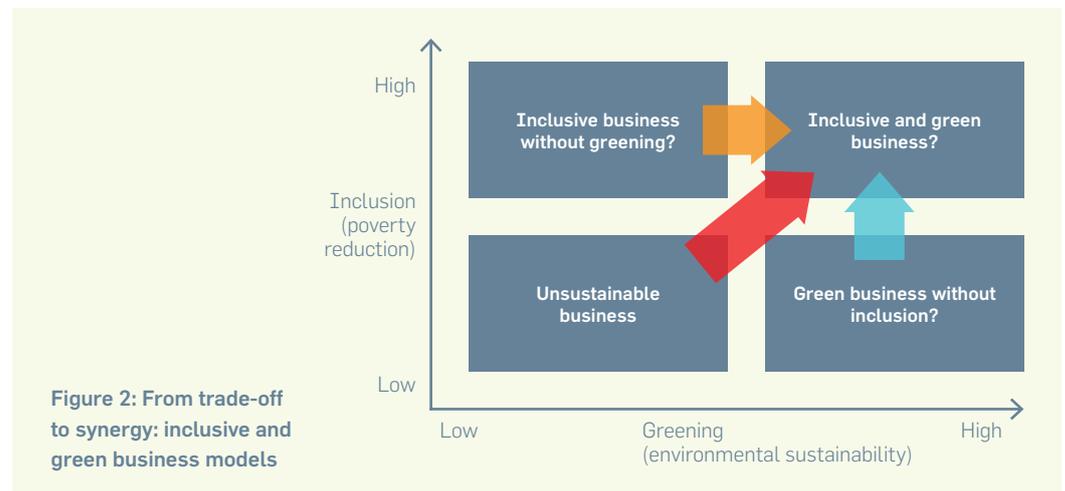
These activities are financed through Blue Ventures Expeditions (BVE), the business arm of the social enterprise. BVE organizes volunteer diving expeditions for tourists that run for 6 weeks and cost approximately USD 3,400. The participating volunteers learn to dive, and conduct coral reef and fish monitoring. The data is used to inform local marine management about ecological changes due to climatic and anthropogenic stressors.

Source: Christina Gradl, Aline Krämer and Julia Winkler. 2011. Wealth of the Oceans. Blue Ventures, Madagascar. BMZ/GIZ.

2.3 THE NEED FOR SYNERGIES

The analysis above shows that the two objectives are closely linked. While there can be trade-offs in the short-term, in the long term poverty alleviation cannot be achieved without environmental sustainability – and vice-versa. Successful business models – like those used by Waterlife and Blue Ventures (see case studies 2 and 4) – have shown that it is possible to align the two objectives in practice.

A key question is how the synergies between the two objectives can be realised in practice. This often requires two enabling features, innovation on multiple levels and cooperation among a variety of actors, which will subsequently be addressed.



3 PATHWAYS TO INCLUSIVE AND GREEN INNOVATION

While the last chapter has shown that combining inclusion and greening is important for building stable business models in developing and emerging countries, this chapter highlights different ‘pathways’ through which such business models develop – i.e. the types of innovations required, actors involved, and the collaboration and partnerships patterns that might bring them together.

3.1 THE ROLE OF INNOVATION

Operating in low-income markets means addressing the multiple challenges inherent in this market environment, such as inadequate infrastructure, a lack of education and skills, gender inequity, and insufficient financial resources and payment capacity. Innovations on various levels are essential to address these challenges and create opportunities for linking inclusion and greening.

For example, new, more efficient technologies – like light-emitting diode (LED) technologies, solar home systems, or new water filtering technologies – use fewer resources and are therefore environmentally friendly. At the same time, they are more inclusive in that they replace expensive energy sources like kerosene, or labour intensive activities such as fetching water or collecting firewood that burden the poor, in particular marginalised groups like women. Furthermore, these product innovations, which target low-income markets, are often adapted to the particular environment of the poor. For example, solar lamps are often equipped with other functions, such as cell phone charging, a critical functionality for customers without landlines and access to the electricity grid.¹²

Secondly, business model innovations can make green technologies more widely available and affordable. For example, innovative distribution systems that reach remote areas create opportunities for employment and entrepreneurship. Innovative financing mechanisms – involving microcredit, shared-use or

CASE STUDY 6

Grameen Shakti, Bangladesh

1.4 billion people lack access to electricity. To cook, have heat and light or run machinery, they rely on firewood, biomass, batteries or fossil fuels –

which are not only inefficient, but also expensive and harmful to health as well as the environment. To address these challenges, the social enterprise Grameen Shakti (GS) sells Solar Home Systems (SHSs) in rural Bangladesh. These are highly independent systems that rely on solar energy, which is stored by a battery.

To make SHSs affordable to low-income households, GS introduced an innovative financial model that enables people to purchase SHSs through microcredit. Customers make a down payment of 15–25% of the total price – and can immediately benefit from clean energy. The monthly payments are designed in a way that users pay the same as they would normally pay for other sources of energy. Depending on the model, the costs of the installation are repaid within two to three years. The company also offers a micro-utility model, under which one entrepreneur installs the system at his or her own premises and shares the load with neighbours. While the owner of the system is responsible for paying the instalments to GS, over 50% of the amount paid is covered by the rents collected from the users of the system.

To ensure the longevity of the SHSs, GS provides free monthly check-ups during the payment period, an inclusive warranty system plus a buy-back system, under which buyers may return the system to GS once their area is connected to the grid. Furthermore, users are trained to take care of their own systems. GS also trains and recruits local young people as technicians and collects discarded batteries.

Source: Grameen Shakti website (accessed: April 2012) – <http://www.gshakti.org>

¹² This could replace time-consuming sending of batteries to larger villages and semi-urban areas for recharging.

pay-per-use mechanisms – make them affordable for low-income consumers.

Developing innovations of this kind takes a lot of time and involves a great deal of trial and error and fine-tuning. Even when adopting products and services from a similar context, the adaptation to the specific local context needed may still be significant.¹³ Such innovations are thus, at least in the short-term, often less financially attractive than other strategies that target the growing middle class or are subject to fewer environmental standards.

3.2 ORGANISATIONS INVOLVED IN THE DEVELOPMENT OF GREEN AND INCLUSIVE INNOVATION

Overcoming innovation challenges requires the involvement of a broad and diverse range of actors, driven by multiple and often interlocking motivations. They include accessing new markets, solving social and environmental problems, and improving a company’s reputation, employee motivation, and relations with regulatory agencies. While various types of organisation employ ‘market-based’ approaches, the different background and history of

the organisations involved creates different internal justifications for green and inclusive innovation, and different sets of resources they can access.

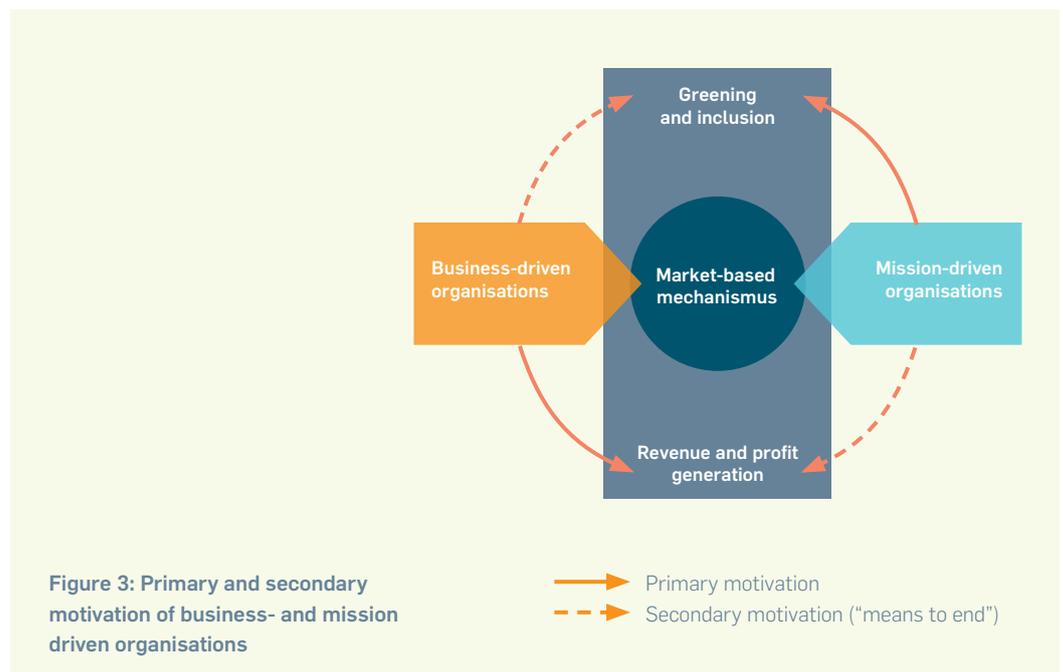
This analysis will group these actors in two main clusters: business-driven organisations, whose primary interest is revenue and profit generation, and mission-driven organisations, which employ market-based mechanisms to solve greening and inclusion problems.

Business-driven organisations that primarily seek to realise commercial objectives are one set of key players in market-based approaches to environmental protection and poverty alleviation. Large businesses in particular have access to substantial financial, human and technical resources that they can dedicate to market research, technical research and development, and innovative distribution strategies.¹⁴ Multinational companies have the additional advantage of being able to replicate business models across different countries. Small and medium-sized enterprises are also important, since they are often strongly rooted in local markets and have strong ties to local communities and their decision-makers, which can often be difficult to build up and maintain.¹⁵

¹³ Even the now relatively standardised microcredit model shows significant local variance and constant evolution. Group liability, considered a core feature for a long time, has now been phased out, even by the Grameen Bank that pioneered and promoted the model (Armendáriz, Beatriz. 2010. *Economics of Microfinance*. MIT Press).

¹⁴ Prahalad, C. K., and Stuart L. Hart. 2002. 'The Fortune at the Bottom of the Pyramid.' *Strategy + Business* 26: 54–67.

¹⁵ Rivera-Santos, Miguel, and Carlos Rufin. 2010. 'Global Village vs. Small Town: Understanding Networks at the Base of the Pyramid.' *International Business Review* 19: 126–39.



While a key driver is the exploitation of new market opportunities, large companies might also engage in low-income communities with scarce environmental resources to develop innovations that might even have the potential to 'disrupt' more established middle and high-income markets.¹⁶ Businesses might also engage in green and inclusive innovation to improve their brand image, raise employee morale through making a social contribution, or diversify to mitigate risks by accessing new customer groups and reducing their dependency on natural resources.

CASE STUDY 6 Mars Partnership for African Cocoa Communities of Tomorrow (iMPACT)

Mars Inc. is one of the world's largest chocolate producers. 40 % of global cocoa is produced in Côte d'Ivoire, about 23 % in Ghana. The company heavily relies on smallholder farmers, who are the main producers of cocoa. However, the farmers themselves are challenged by low productivity rates – and hardly earn enough to make a living. Furthermore, unsustainable production methods, combined with limited ability for farmers to diversify their production, is putting a strain on the environment.

To contribute to the development of cocoa farming in Ghana and Côte d'Ivoire as a profitable, socially rewarding and environmentally sustainable livelihood, Mars Inc. jointly set up the initiative iMPACT; Africare with several partners: the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), International Cocoa Initiative (ICI), International Foundation for Education and Self-Help (IFESH), Rainforest Alliance (RA) and the Sustainable Tree Crops Program (STCP). Farmers are trained in good agricultural practices related to cocoa, and their skills in non-cocoa farming are enhanced. iMPACT also works on strengthening farmers' ecosystems, e.g. by building the capacity of intermediary organizations to professionalize their services to farming communities, by facilitating their access to affordable sources of finance, or by collaborating with relevant government institutions such as the Ministry for Agriculture, Health and Education.

Through this integrated partnership approach, the living conditions of around 40,000 people have been improved. More than 70 % of the participating smallholders adopted sustainable agricultural practices. Further, the project was able to increase productivity of cocoa production, boosting incomes by up to 30 – 40 %.

Source: GIZ website (accessed: April 2012): <http://www.gtz.de/de/dokumente/gtz2010-en-mars-impact.pdf>; Sustainable Cocoa Initiative Website (accessed: April 2012): <http://cocoa-sustainability.com>

A second major contribution to inclusive and green innovation comes from **mission-driven organisations**.¹⁷ Social enterprises have been founded specifically to employ market-based approaches to achieve environmental or social goals, and have driven innovation in many areas.¹⁸ There are also strong examples of national and international NGOs that build on prior humanitarian or development work, and cooperatives that seek to deliver specific benefits to their members or local clientele, who find that market-based mechanisms are a good strategy to achieve inclusion and greening.

Although they often employ similar activities to those of business-driven organisations, their internal motivations and challenges are markedly different. What makes the contribution of mission-driven actors unique in such settings is their willingness to 'make things work,' even (or especially) under difficult circumstances. While, in a business setting, proposals for inclusive and green business projects compete (and often lose) against traditional business proposals, they are at the core of the work of mission-driven organisations. As they are often unprofitable initially, the business models of mission-driven companies are often supported by grants or patient capital with lower return expectations and higher flexibility.¹⁹ Sometimes they are supported by other organisations such as research institutions, local NGOs or policy-makers.

¹⁶ Govindarajan, Vijay, and Ravi Ramamurti. 2011. 'Reverse Innovation, Emerging Markets, and Global Strategy.' *Global Strategy Journal* 1: 191–205. Hart, Stuart L., and Ted London. 2005. 'Developing Native Capability: What Multinational Corporations Can Learn From the Base of the Pyramid.' *Stanford Social Innovation Review* 3: 28–33.

¹⁷ The term was originally proposed by Russo, Michael V. 2010. 'What You Can Learn From Mission-Driven Companies.' *Harvard Business Review Blog* and Russo, Michael V. 2011. *Companies on a Mission*. Stanford University Press.

¹⁸ Seelos, Christian, and Johanna Mair. 2005. 'Social Entrepreneurship: Creating New Business Models to Serve the Poor.' *Business Horizons* 48: 241–6.

¹⁹ Friedman, Thomas L. 2007. 'Patient Capital for an Africa That Can't Wait.' *The New York Times*.

CASE
STUDY
7

Ecotact, Kenya

David Kuria had worked as a city planner for the Kenyan government and for an NGO, setting up water and sanitation projects in low-income communities – with mixed results. He says: 'I ended up with a deep dissatisfaction and a burning desire to work on projects that really make a difference in improving the urban landscape for low-income communities through environmentally responsible projects.' To realize his mission, he chose a market-based approach and founded the company Ecotact. The company builds and operates high-quality pay-per-use toilet and shower facilities with particular emphasis on operations in the most disadvantaged areas such as urban slums. Users pay a small fee to get access to sanitation facilities. Furthermore, the facilities function as 'kiosks,' leasing out space to micro-entrepreneurs who sell additional services such as airtime for mobile phones, snacks, magazines or shoe shine services.

Local governments were a crucial partner for the business model: Ecotact uses a build-operate-transfer model of public-private partnership, entering into long-term contracts with municipalities to secure use of public lands. Ecotact covers the cost of constructing the facilities on municipal land, runs them on a commercial basis for five years to recover the investment and then turns the facilities over to the municipal council to run or lease them. The model was also supported by a variety of business partners, funding and research institutions as well as NGOs.

By providing access to a basic service in a dignified way, Ecotact was able to change the negative attitude towards public sanitation facilities. The inclusive business model is environmentally sustainable, as it reduces urban pollution from human waste – which, in turn, reduces the risk of waterborne diseases. Furthermore, it makes use of water-saving facilities and bio-digestion systems. As of 2010, it had served 50,000 customers and created jobs for around 260 people.

Source: Karugu, Winifred. 2010. Ecotact: Affordable Sanitation Services in Pleasant Surroundings. GIM Case Study No. B060. New York: United Nations Development Programme; http://growinginclusivemarkets.org/media/cases/Kenya_Ecotact_2011.pdf

3.3 THE ROLE OF PARTNERSHIPS AND THE INNOVATION ECOSYSTEM

The diversity of organisations described above is often critical in overcoming the multiple challenges in inclusive and green innovations. There are few examples of business and mission-driven organisations that actually realise synergies between the two objectives on their own, and do so on a profitable basis. This indicates that partnerships are almost indispensable when aiming to align greening and inclusion objectives.²⁰

As a solution, **cross or multi-sectoral partnerships** often play a crucial role in combining the diverse sets of motivations and resources. Both business and mission-driven organisations have had success in bringing inclusive and green innovations to market by learning to rely on a broad network of support institutions, ranging from impact investors to international development organisations.

In the case of business-driven organisations, these support institutions may provide them with access to market insights they frequently lack²¹ – such as information on the size of low-income markets, the purchasing behaviour of low-income consumers, or reliable on-the-ground partners and networks that could leverage their activities. Also, they can help them to strengthen their business case in terms of visibility and reputation, or mitigate risks by gaining public approval.

Due to their own set of challenges, mission-driven organisations often rely on partnerships with support institutions to access financial resources from large foundations or companies, or to collaborate on technological research and development. While they are often particularly good at the pioneering work and early development of a new business model, they often rely on other businesses to take up the models developed and replicate them, or on policy-makers to integrate them into public policies and disseminate them (see case study 7).

²⁰ An early critique in that regard is Karnani, Aneel. 2007. 'The Mirage of Marketing to the Bottom of the Pyramid: How the Private Sector Can Help Alleviate Poverty.' *California Management Review* 49: 90–111.

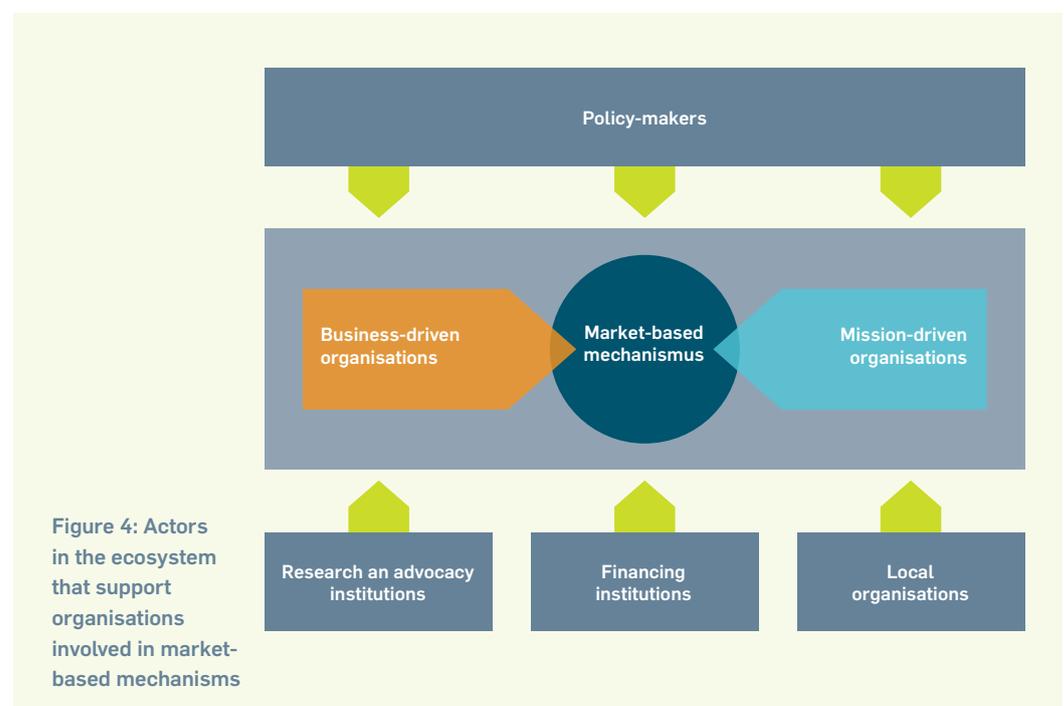
²¹ Seelos, Christian, and Johanna Mair. 2007. 'Profitable Business Models and Market Creation in the Context of Deep Poverty: A Strategic View.' *Academy of Management Perspectives* 21.

Over time, partnerships between business and mission-driven organisations and/or adequate support institutions can develop into an ‘ecosystem’ of mutually supportive actors²², through which partners from the different worlds get to know each other, and develop trustful relationships. Such innovation ecosystems typically are comprised of the following types of organisation²³:

- **research and advocacy institutions**, for example, provide businesses with critical insights about existing success models and local market insights;
- **financing institutions** provide seed and growth capital;
- **local organisations** offer complementary capabilities – e.g. for setting up distribution and maintenance networks; and
- **policy-makers** create regulatory frameworks and incentive systems (see chapter 4).

These innovation ecosystems are particularly useful in helping to bridge the gap between inclusive and green business by bringing together actors from both worlds – i.e. actors that previously focused only on greening or actors that focused only on inclusion – and thus spark innovative cooperation. Furthermore, the different actors in innovation ecosystems tend to specialise, and new bodies, e.g. for setting standards or brokering access to capital, can be built up.

As innovation ecosystems have a ‘public good’ character, in that they benefit all players involved, policy-makers and donors often play a key role in supporting or facilitating them. The next chapter will thus focus on policy-makers and their role in determining the general regulatory and incentive environment in which business and mission-driven organisations develop market-based strategies.



²² Innovationssystemförderung, Arbeitskreis. 2010. Förderung von Innovationssystemen: Ein Förderansatz für die Deutsche Entwicklungszusammenarbeit. DIE, GTZ, InWEnt, KfW, PTB und DAAD, and Gradl, Christina, and Beth Jenkins. 2011. ‘Tackling Barriers to Scale: From Inclusive Business Models to Inclusive Business Ecosystems.’ Cambridge, MA: CSR Initiative, Harvard Kennedy School.

²³ UNDP. 2010. The MDGs: Everyone’s Business. How Inclusive Business Models Contribute to Development and Who Supports Them. New York: United Nations Development Programme, page 12.

CASE
STUDY

8

**Innovation, Collaboration,
Entrepreneurship – iceaddis**

Local network organisations can become manifestation points for innovation ecosystems, and provide critical resources to the different types of organisations. This is especially true when they provide both services and a physical space that can be used by a wider set of organisations. iceaddis is an example of such a 'hub' that brings together market-driven actors and solutions in a local context:

'iceaddis is a technology innovation hub, which aims at accelerating Ethiopia's economic growth by promoting market-driven and environmentally viable innovations through enabling new private sector initiatives and facilitating the constructive interaction between technologists, entrepreneurs, investors and creative workers.'

The services offered combine co-working, i.e. providing access to office infrastructure, with business training and start-up coaching, and prototyping facilities that support product development efforts. It is also linked internationally – to ice centres in Cairo and Weimar, Germany – allowing its members access to an emerging global network. Other networks, such as The Hub, which offer similar services, are increasingly present in cities in developing countries such as Oaxaca (Mexico), Sao Paulo, Curitiba and Belo Horizonte (Brazil) or Johannesburg (South Africa).

Source: ICE Addis. 2012. About (<http://www.iceaddis.com/pages/about>), Services (<http://www.iceaddis.com/pages/services>). The Hub. 2012. Network (<http://www.the-hub.net/network>)

4 POLICY MEASURES TO PROMOTE INCLUSIVE AND GREEN INNOVATION

While the development and implementation of market-based approaches, i.e. inclusive and green business models, lies outside the remit of policy-makers or donors, they still play a crucial role in making sure that the markets on which such approaches are based are in place and working. While barter and exchange is a global phenomenon, well-functioning markets require a broad range of institutions, both formal and informal.²⁴ Making markets work requires multiple interventions, combining traditional regulatory and fiscal policy, planning and partnering instruments.²⁵

To foster inclusive and green innovation, policy-makers, with donor support, can make interventions in three policy domains:

1. Foremost, providing an enabling market environment – in terms of market infrastructure and regulatory stability and flexibility – is key for innovation ecosystems.
2. They may engage in creating and strengthening inclusive and green innovation opportunities. This involves incentives and making pricing mechanisms work for poverty alleviation and environmental sustainability.
3. Policy-makers and donors can support inclusive and green innovation ecosystems that enable and facilitate the interaction and cooperation between different kinds of organisation to effectively overcome the multiple challenges to green and inclusive innovation.

²⁴ See McMillan, John. 2002. *Reinventing the Bazaar: A Natural History of Markets*. W.W. Norton & Company, or De Soto, Hernando. 2000. *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*. Basic Books.

²⁵ UNEP and UNDP. 2009. *Mainstreaming Poverty-Environment Linkages into Development Planning: A Handbook for Practitioners*. United Nations Environment Programme, United Nations Development Programme.

This section will look at these three policy domains in detail, providing case studies that illustrate both the potential benefits as well as the difficulties in making necessary interventions.

4.1 PROVIDING AN ENABLING MARKET ENVIRONMENT

For market-based approaches to inclusive and green innovation to work, basic market infrastructure has to be in place. This is an area where policy-makers, supported by donors, have a key role and responsibility. While this is true for physical infrastructure – roads, harbours, etc. – it is even more important in the area of formal and informal market institutions. To unlock and enable innovation, market institutions need to satisfy two partially conflicting demands: the ability to provide both stability and flexibility.

Regulatory stability starts with the general business environment: rule of law, security and the protection of property rights provide the basis for business models that take a long-term perspective on social and environmental change. Reducing corruption and clientelism can directly help to strengthen ecosystem governance, and empower disenfranchised groups, like ethnic minorities, traditional communities, or disadvantaged groups like women. The implementation of regulation and quality standards for inclusive and green innovation, along with adequate competition policy, can secure the prevalence of high-quality suppliers who seek to build business models offering long-term stability. Such stability would provide a level playing field for organisations seeking to implement genuinely inclusive and green business models that are forced to compete with businesses simply seeking to exploit loopholes in environmental or social governance.

For example, companies that aim to bring inclusive and green innovations to market often face challenges from low-quality competitors offering lower prices initially and implementing business models that rely on ‘dumping’ technology without building up the (costly) maintenance and support infrastructure. Without adequate policies and standards in place, this kind of competition can jeopardise the market success of both mission and business-driven organisations that are aiming to bring green and inclusive high-quality products to market, since the ‘low-cost competitors’ may both undercut their ‘tag price’ and undermine people’s trust in the technology in question.

On the other hand, the development of inclusive and green business models requires regulatory flexibility. The potential of inclusive and green innovation may not be realised if overly strict regulatory frameworks inhibit the establishment and growth of new organisations. Excessively detailed technical standards and requirements, even when meant to assure the high quality of infrastructure, might prevent innovation and technological progress. This is particularly relevant in cases where regulations do not take into account the specific demands of green and inclusive business models (see case study 10). Finally, high levels of bureaucracy repeatedly prove to be a barrier for organisations seeking to access the support mechanisms for green and inclusive business. Registering carbon credits under the Clean Development Mechanism is one example of this (see case study 11).²⁶

CASE
STUDY
9

Sustaintech, India

Sustaintech is a start-up company that promotes a fuel-efficient wood burning stove for commercial kitchens. The stove was developed by a local non-profit organization (TIDE), which judged that a non-profit model would not be an effective way to promote and sell the stove widely.

TIDE thus developed a way to produce the stove based on the generation of (small) profits to finance its distribution. However, as a charity, the organization was not allowed to engage in commercial activities, even though it was clear that the profits were exclusively intended to scale up the business. As a result, Sustaintech had to be created out of TIDE, which took on the burden of registering a new organization with appropriate legal status and going through many lengthy registration periods. Although the regulatory barriers were overcome, they delayed the project significantly and made it more complex.

Winning prize money from the Ashden Award enabled the company to succeed and fine-tune the stove. It now saves consumers at least 40% in fuel (firewood or charcoal) and between Rs 14,000 and Rs 40,000 (EUR 200–570) per year.

Source: Gilcher, Sebastian. 2012. Green and Inclusive Businesses in India: A Summary and Evaluation of Surveys. GIZ.

²⁶ Acharya, Keya. 2007. ‘Solar Energy Firm Says Carbon Credits Don’t Work.’ IPS/IFEJ.

4.2 STRENGTHENING INCLUSIVE AND GREEN INNOVATION OPPORTUNITIES

Even when basic market mechanisms work, they may not automatically set the right incentives for greening and inclusion, especially in the short term. A second field of policy support would thus be to provide incentives for greening and inclusion that address real or perceived trade-offs between the two goals. Raising the attractiveness of green and inclusive innovation can work through two mechanisms:

First, policy-makers can directly support greening and inclusion. For example, providing appropriate support for renewable energy options and rural electrification can come in the form of capital subsidies, feed-in tariffs or reduced-interest credit (see case study 10). The latter in particular can be used to tackle a multitude of social and environmental challenges. Policy-makers can also differentiate taxes in a way that makes it more attractive for businesses to serve lower-income populations – by giving tax credits to companies sourcing from or selling environmentally-friendly products to the poor, for example. As both the organisations involved in inclusive and green innovation and their clients often lack access to the financial resources needed to switch to more renewable options, special interest rate loans can also be offered to end-consumers to overcome that hurdle.

Secondly, policy-makers can make ‘business as usual’ more expensive – by raising the price for environmental harmful or socially exclusive behaviour. One option is to introduce taxes or levies on consumption of natural resources, emission of harmful substances, or causing harm to ecosystems – especially if such damage has implications for people living in poverty. Similarly, reducing existing subsidies on the consumption of non-renewable resources can support green business models. Such environmentally harmful subsidies²⁷ are often created to benefit people living in poverty. For example, kerosene – used for lighting and heating – is often subsidized to replace time-consuming firewood collection and provide access to energy for people not connected to the grid. They can be replaced by direct financial support, such as conditional cash payments, allowing consumers free choice among different energy options, including solar energy.²⁸

For both approaches, policy-makers need to take into consideration how such incentives work for the different organisations involved in inclusive and green innovations. First, they affect the perceived financial attractiveness of projects and help to get internal buy-in for such projects, a key factor in more business-driven organisations. Secondly, they can give a political signal, which is important for both business and mission-driven organisations seeking to improve their reputation and brand image. Finally, subsidy schemes can be crucial to the survival during the pioneering phase of a business model, a critical concern for mission-driven organisations with scarce resources and no option to internally finance inclusive and green innovation from existing, mainstream business activities.²⁹

These policy measures need to be carefully implemented, building on best practice. A key lesson learned is that the specific design of financial incentives of this kind matters. For example, subsidies for capital expenditure in rural electrification projects may encourage low-quality suppliers to pursue ‘hit-and-run’ strategies (see case study 10). Similarly, bureaucratic, non-transparent and politicised procedures for disbursing subsidies raise the risks for companies relying on such measures.

²⁷ OECD. 2003. *Environmentally Harmful Subsidies: Policy Issues and Challenges*. Paris: Organisation for Economic Co-operation and Development (OECD).

²⁸ ‘Cash for Kerosene Instead of Subsidy.’ *The Times of India*, 2011.

²⁹ Most interviewees stressed that they did not build their business model in response to specific subsidy schemes, but that they built a working model to solve a challenge they perceived as urgent and pressing, that then benefits from various subsidy schemes during development and implementation.

**CASE
STUDY
10**
Solar energy industry, India

To support solar energy, the Indian state set up the 'Jawaharlal Nehru National Solar Mission.' While the Mission mainly promotes grid-connected solar energy (20,000 MW), it also devotes a significant part of its efforts to off-grid generation (2,000 MW).³⁰

Different policy measures to support rural electrification have been tried in the past in India. Both government-run programmes and direct capital subsidies for installations have proven relatively in-efficient, and a lack of incentives to provide high-quality systems and maintain them over time often resulted in systems ceasing operations. Feed-in tariffs, proven to be a useful tool in developed countries, provide the required long-term incentive to maintain the systems, but are difficult or very costly in decentralized, off-grid energy provision, since the energy generated by each individual system has to be monitored. As a consequence, many pioneers such as Solar Electric Light Company India (SELCO India) have started to work outside the subsidy system, building models for solar energy that are financially viable without government support. Nevertheless, credit lines from the Indian rural development bank NABARD for solar energy providers facilitate reduced-interest loans that provide the much-needed finance for installations.

Two barriers noted across the different support options are the bureaucratic obstacles to accessing funds and the perceived risks in relying on public funds, which can even jeopardise a company's survival should subsidies be withdrawn or substantially delayed.

Source: Interviews (see publication details)³¹

Incentives can also work on the global level: the Clean Development Mechanism has incentivized a number of business models (e.g. around biomass and other renewable energies) that are inclusive and environmentally sustainable, without inflicting financial burdens on governments of developing countries. While the first round of CDM projects was skewed towards emerging economies, innovations like the Programme of Activities (PoA) mechanism that allow small-scale projects to be bundled, have already boosted participation of actors from previously under-represented Least Developed Countries.³²

**CASE
STUDY
11**
Rural electrification, Africa

Government and donor-backed programmes frequently offer strong incentives to supply electricity and other forms of clean energy to rural households, and the global carbon trading system also creates opportunities for local projects worldwide under the Clean Development Mechanism. However, most of the projects initially implemented were in rapidly growing emerging economies: in 2009, 77% of registered projects were in just four countries (34% in China and 26% in India), whereas 60% of eligible countries did not have a single project. To counter this trend, a range of African countries have set up rural energy or electrification agencies, mostly attached to the respective ministries of energy. Tanzania's Rural Energy Agency, for example, provides technical assistance and matchmaking for local and foreign entrepreneurs offering clean energy solutions, including pre-feasibility studies and project assessment and appraisal. They frequently work with international agencies and solution providers.

Source: Elkhamlichi, Samira. 2009. Side Event 'Regional Distribution of CDM Projects.' Carbon Finance Assist, World Bank. For more information, see <http://www.rea.go.tz>

4.3 SUPPORTING INCLUSIVE AND GREEN INNOVATION ECOSYSTEMS

Finally, even if markets work and the correct incentives are set, the right organisations or networks to explore opportunities for inclusion and greening might not be in place. Thus, one way that policy-makers and donors can directly support innovation ecosystems is by facilitating the creation of networks and direct cooperation among actors.

Networks can be created or strengthened through regular events and online platforms. While the latter are perceived as useful, the personal and face-to-face contact that occurs at real events is crucial to building trust-based relationships, which may also be sensitive to cultural factors.³³ Innovation clusters can bring different types of organisations together – i.e. business and mission-driven organisations as well as potential support institutions. This can make it possible to foster cross-fertilisation of ideas and technologies and economies of scale

³⁰ Ramanathan, Gayatri. 'The Solar Mission is Technology Neutral: Dr Farooq Abdullah, Minister for Renewable Energy.' The Energy Business, <http://energybusiness.in/the-solar-mission-is-technology-neutral>

³¹ Background information to this case was provided by Srey Bairiganjan and Sanjoy Sanyal (New Ventures India/World Resources Institute), Sachin Joshi (CII, Confederation of Indian Industry) and Hari Natarajan (Global Village Energy Partnership, GVEP, International).

³² Blum, Nicola Ursina, Christina Gradl, and Anna Santa Cruz. 2011. 'Clean Development Mechanism: Auch Kleinvieh Macht Klimawandel.' E + Z 10: 386–7.

³³ Gilcher, Sebastian. 2012. Green and Inclusive Businesses in India: A Summary and Evaluation of Surveys. GIZ.

in nascent industries on a regional level.³⁴

Often, such knowledge hubs will be based on strong, locally integrated networks that are nevertheless part of global networks providing access to best-practice and up-to-date technologies from other countries.

Competitions and award programmes can raise awareness for inclusive and green innovations – and ultimately also facilitate matchmaking between businesses and relevant support institutions. This is particularly relevant for the pioneering work of mission-driven organisations: while they are good at innovation, they often lack the funds to scale them. Competitions and awards can help these organisations to find business partners with significant resources to help them spread their models beyond their home country, or attract the interest of potential investors.³⁵ Regarding access to capital, policy-makers can also specifically try to attract social or impact investors by providing market data, and by providing direct matchmaking and due diligence support to local, mission-driven organisations implementing new business models.

Finally, development partnerships have shown how public and private partners can cooperate to realise innovations and support their dissemination. They can be local, government-business partnerships that provide the business partner with political support and legitimacy, or international, donor-business partnerships that provide access to scarce resources, networks and the knowledge required to operate successfully in low-income markets.

CASE STUDY 12

SABMiller, South Africa

Through its Africa Facility, a public private partnership (PPP) implemented by the Gesellschaft für Internationale Zusammenarbeit (GIZ), the German Federal Ministry for Economic Cooperation and Development (BMZ) supports development partnerships with Africa-based companies. It also supports companies in other regions through its bilateral partnership programmes.

For businesses based in Europe, GIZ's public-private partnership programme developPPP provides support services to businesses seeking to contribute to development. One such partnership is the strategic alliance of London-based SABMiller, GIZ and the World Wide Fund for Nature (WWF). The project aims to contribute to sustainable management of water resources, for example by helping agricultural suppliers in Tanzania, South Africa, Peru and Ukraine to reduce their water consumption. In addition to helping SABMiller to significantly reduce the amount of water used to produce its beer, the collaboration helps to improve the business environment by reducing potential conflicts between industry and local populations over water usage.

Andy Wales, SABMiller's head of Sustainable Development, confirms the benefits of joining forces with a variety of partners: 'Single actors cannot alone effectively mitigate the complex and often deeply-embedded causes of water risks. [...] We recognise that these challenges can only be addressed through multi-stakeholder collective action and openly invite other NGOs, donors and public sector agencies [...], to join our partnership.' On the role of GIZ, Andreas Kanzler – head of GIZ's water section – confirms: 'Our partnership follows an innovative and participatory approach to sustainably managing water resources. This should equally benefit the entire population, the environment and production processes. [...] We see our role as facilitating this dynamic dialogue among all stakeholders.'

Source: SABMiller website (accessed: April 2012); <http://www.sabmiller.com/index.asp?pageid=149&newsid=1705> and <http://www.sabmiller.com/index.asp?pageid=2036>; GIZ (2011): 'Fast Growth and Big Impacts: How Emerging Market Multinationals are advancing sustainable development.'

³⁴ A good practice example of an organisation that brings together green and inclusive business is the Uganda Carbon Bureau (<http://www.ugandacarbon.org>).

³⁵ Examples include the G20 Challenge on Inclusive Business Model Innovation (<http://www.g20challenge.com>) and the Seed Initiative (<http://www.seedinit.org>).

5 CONCLUSIONS

While integrating greening and inclusion into business models in developing and emerging countries may be beneficial or even necessary in the mid to long term, the innovation process required is often difficult, with uncertain outcomes and high resource demands.

Such innovations will often be brought about by a **diversity of organisations**. Different actors contribute in distinct but interlocking ways. In many situations, organisations – both large and small, local and foreign, mission and business-driven – as well as support institutions, will contribute their resources and combine their efforts to develop and subsequently scale models. Often, the efforts of these organisations will be organised in partnerships, or take place within local, densely woven ecosystems.

As part of the support ecosystem, policy-makers, supported by donors, play **complementary roles** vis-à-vis both mission and business-driven organisations. Since markets do not emerge and work by themselves, their role in creating the market environment and setting up market institutions is crucial. Furthermore, they can build opportunities through a diverse array of incentives and, by facilitating partnerships, they can help develop and strengthen the innovation ecosystem in which market-based solutions to pressing environmental and social challenges can emerge.

Finally, the development of inclusive and green business models that have the potential to achieve broad market success will often involve **dialogue and mutual learning**. Policy-makers cannot know in detail which regulations and ecosystems green and inclusive business models require before they are developed. However, policy-makers and mission and business-driven organisations can collaborate to jointly develop both business models that work and create the right regulatory framework to allow them to succeed.

6 PUBLICATION DETAILS

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