



# ▶ Market Systems Development and the Environment: A Strategic and Operational Guidance Note

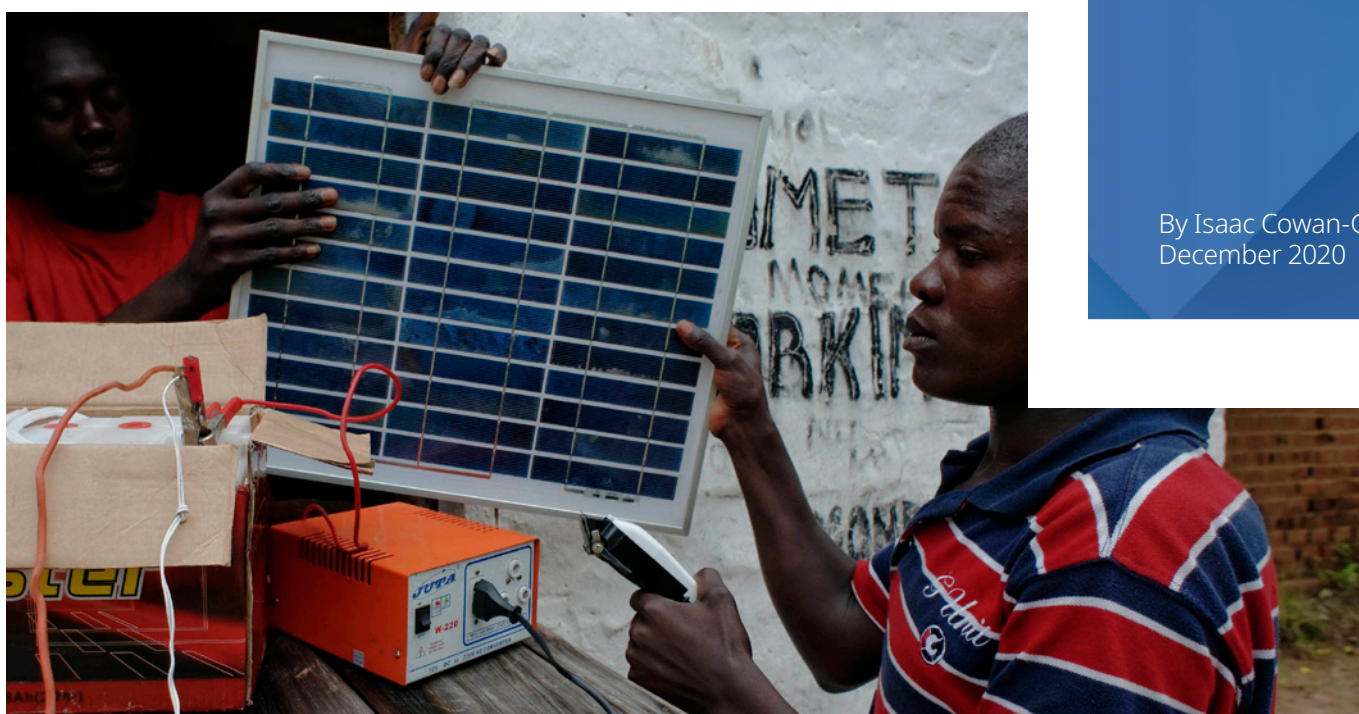
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## ▶ Introduction

Back in 2010, for the approximately 240 mostly informal, family-run brick kilns operating in San Jeronimo, Peru, production typically required 14-hour workdays, 7 days a week, with help from everyone in the family including the children. Beyond the gruelling physical labour, brick-making methods and combustible materials like tires and plastic waste generated incredibly toxic fumes which both polluted the air and caused many workers to develop chronic respiratory diseases. Barely able to scrape out a living and unable to access credit, most brick

producers were essentially trapped in a vicious circle of low productivity and low investment capability. And even if they managed to save for reinvestment, it was nearly impossible for them to get their hands on the equipment needed to upgrade their brick kilns in local markets.

Against this backdrop, the *Energy Efficiency in Artisanal Brick Kilns in Latin America* (EELA) project zeroed in on San Jeronimo as a high potential district for introduction of energy efficient brickmaking technologies that could reduce gas emissions and, in the process, also enhance productivity, incomes and working conditions. However, EELA also understood that, in order to achieve sustainable and scalable impact, merely supporting brick producers to get their hands on the necessary technologies

would not suffice. Therefore, beyond working with “first mover” brickmakers, EELA notably also partnered with local financial institutions to fund equipment purchases, suppliers to improve local access to these technologies, and government to regulate emissions and support enterprise formalisation.

Slowly but surely, brick kilns all over San Jeronimo and in neighbouring clusters started adopting good production practices, purchasing basic technology such as fans to boost combustion, and eventually for some, even acquiring advanced, industrial-level equipment worth thousands of dollars. As a result of EELA’s efforts, during its second phase alone, Peruvian brick kilns saved close to one and a half million dollars in combustible material expenses and reduced greenhouse gas emissions by more than a hundred thousand tons, also leading to producer income increases and better occupational health and safety.

Bolstered by success stories of “market facilitation” like this one from EELA, an increasing number of donors and projects are turning to the Market Systems Development (MSD) approach (see Box 1) to drive both employment and environmental outcomes. Nevertheless, while guidance on MSD’s potential to stimulate economic growth and create or improve jobs is strong, guidance on how the approach can be used to advance socio-economic objectives while also achieving environmental objectives remains scarce.

In order to address this gap, the Lab examined the experiences of MSD projects (including EELA) that have contributed to both environmental and socio-economic objectives (see table 1), reviewed relevant literature and sought insights from the ILO’s Green Jobs Programme and its experts on intervention at the employment-environment nexus. This brief synthesises the findings of this research into practical guidance to help projects and donors ultimately better integrate and achieve environmental objectives in MSD programmes.

The guidance note is divided into four sections:

- 1. Environment, MSD & Decent Work** – Exploring the relationship between environment, the economy and employment outcomes, and the scope for MSD intervention at their nexus
- 2. Project Design** – Outlining the major project design implications of integrating environmental objectives in market systems development projects
- 3. Project Scope Identification** – Examining how projects can select sectors and analyse them to identify high potential intervention opportunities to advance environmental objectives
- 4. Project Implementation** – Considering how to design and lead interventions geared towards catalysing sustainable and widespread “green” practice change

### Box 1. What is the market systems approach?

A market system is made up of the many ‘supporting functions’ and ‘rules’ shaping how well a market works for women and men. A market systems approach, in turn, seeks to identify, address and remove constraints that inhibit the growth of more inclusive markets. The goal is impact that is both:

- ▶ **Sustained.** Projects achieve lasting behaviour change in public and private actors by aligning interventions to their incentives and capacity to adopt new ways of working. Impact continues long after interventions end because actors see organisational value in continuing the new way of working; and
- ▶ **Scaled.** Since constraints to industry growth are removed, change is replicated and mainstreamed across the sector – rather than being confined to just the actors that the project directly works with.

Projects usually partner with a small number of actors to test out new ways of working and, if successful, look to get others to copy the innovation. The range of activities that projects undertake to encourage partners to change can vary – from using ‘soft’ facilitation tactics such as advice or brokering relationships to ‘harder’ tactics like financial cost-sharing. Such facilitation is an art – not a science. It needs to strike a balance between support that ends up being too light to overcome resistance to change, and too heavy leading to dependence.

*For more info see the Lab policy brief [“A Systemic Approach for Creating More and Better Jobs”](#), 2019*



**Table 1 – Overview of programmes researched**

Project	Energy Efficiency in Artisanal Brick Kilns in Latin America (EELA)	Musika	The Zambia Green Jobs Programme (ZGJP)	Élan	Ecovecindarios (now Markets for Recycling (M4R))
Country	Argentina, Brazil, Bolivia, Colombia, Ecuador, Mexico and Peru	Zambia	Zambia	Democratic Republic of Congo (DRC)	Bolivia
Focal Sector <sup>1</sup>	Brickmaking	Agriculture	Construction	Renewable Energy	Waste Management
Donor, Duration & Implementer	Funded by Swiss Development Cooperation (SDC) and implemented by Swisscontact from 2010 to 2017	Funded by Sida, Irish Aid, Norad, and WorldFish and implemented by Musika since 2011	Funded by the Finnish government and implemented by the ILO, UNEP, ITC, UNCTAD and FAO from 2013 to 2018	Funded by DFID and implemented by Adam Smith International since 2015	Funded by SDC as well as other public and private Swiss donors and implemented by Swisscontact since 2011
Objectives	Increase incomes and decrease greenhouse gas emissions (GHGs) by supporting adoption of more energy efficient brick production practices and technologies	Increase incomes and create jobs while supporting adoption of greener and more climate resilient agricultural practices and inputs	Increase incomes and create (green) jobs by supporting adoption of greener construction materials and practices	Grow the renewable energy sector and improve access of poor households to energy	Grow the waste management sector and increase incomes among waste management market actors and create green jobs

<sup>1</sup> Musika and Elan both have other sector foci but our analysis focused only on their activities in the agriculture and renewable energy sectors, respectively.



## ▶ 1. Environment, MSD and Decent Work

Understanding how environmental and employment outcomes align and interact (section 1.1) is essential for developing interventions that can have “win-win” impacts. To do this effectively, MSD projects also need to understand the role they can play (section 1.2) and the different pathways that can make economic activity more environmentally sustainable and resilient (section 1.3).

### 1.1 The Relationship between Employment and Environmental Outcomes

**Economic systems are embedded within a wider natural system**, which supplies material and energy inputs, and absorbs the pollution and waste they generate. As such, environmental degradation and resource depletion bear an inherent impact on economic development and hence on employment and decent work (as well as on prices and consumer outcomes).

**Current models of economic development are environmentally unsustainable, which threatens jobs and job quality.** Economic development, which is still widely fossil fuel powered and coupled with resource extraction, is exerting mounting pressures on the earth’s natural resource stocks and its ability to regenerate and absorb waste.<sup>2</sup> This is now threatening the viability and profitability of numerous industries<sup>3</sup> as well as the existence and quality of millions of jobs,<sup>4</sup> particularly in the Global South and in environmentally sensitive sectors such as agriculture, in which a large number of working poor operate. Beyond this, economic activity is also often at the origin of various hazards such as smoke and toxic chemicals which threaten the health and safety of workers and communities.

**Decent work deficits contribute to poor environmental outcomes.** Insufficient incomes and inadequate social protection, for instance, force many workers to pursue livelihood strategies that satisfy immediate needs at the expense of future opportunities (e.g. overgrazing pastures or logging and fishing in protected areas). Insecure and insufficient income and inadequate skills development provide another barrier for business owners to adopt more environmentally sustainable (and profitable) business models and technologies.

**Environmental sustainability constitutes an opportunity to create and improve jobs.** Remedying looming ecological scarcities and the erosion of ecosystem services is largely achievable and doing so bears the potential to create millions of additional jobs while helping

2 See Rockström et al. (2009) and Steffen et al. (2015) for information on our planet’s major bio-physical systems and where we stand relative to the “planetary boundaries” beyond which the stability of these essential systems is likely to be jeopardised.

3 A business as usual scenario is associated with a projected 7.2% productivity decrease by 2050 (ILO, 2012).

4 An estimated 40% of employment is dependent on the provision of ecosystem services such as stable rainfall patterns and pollination (ILO, 2018).



secure the livelihoods of many more.<sup>5</sup> However, in transitioning towards greener economies, some workers may suffer in the absence of inclusive skills development opportunities, labour mobility and social protection.<sup>6</sup>

### 1.2 The Scope for MSD Intervention

**MSD initiatives can play a crucial ‘meso-level’ role in “greening” economies and supporting a just transition<sup>7</sup>.** Most green economy related private sector development initiatives tend to focus on improving the conduciveness of the enabling environment – for instance, promoting green finance, sustainable standards or relevant public policy initiatives.<sup>8</sup> MSD projects can complement these ‘macro-level’ and often “tool specific” approaches by intervening in high potential sectors to alleviate systemic constraints that limit an enterprise’s ability to identify and take advantage of business opportunities that improve economic, social and environmental outcomes.

**Considering the sectoral focus of MSD projects, environmental objectives can be framed along ‘sectoral’ lines.** To this end, the environmental objectives of an MSD project will consist of one or more of the following:

- ▶ Promoting growth in a “green” sector such as renewable energy
- ▶ “Greening” / improving the environmental sustainability of a sector (including “green” sectors)<sup>9</sup>
- ▶ Increasing resilience of a sector to environmental constraints, particularly climate change
- ▶ Promoting a do-no-harm approach relative to environmental impact in supporting sector development<sup>10</sup>

5 ILO (2018).

6 ILO (2012).

7 For more information on what a just transition entails and it may be achieved, see [ILO \(2015\)](#).

8 See DCED (2014) for an overview of private sector development approaches used to promote green growth.

9 Green sectors can also be made *greener* – there is no “green” end-state. To green the renewable energy sector, for instance, projects might focus on limiting the impacts related to the generation of E-waste (e.g. discarded batteries).

10 This type of environmental objective is, in essence, a weak version of the objective ‘improving environmental sustainability of a sector’. Nevertheless, it represents a minimum threshold that all projects should strive to achieve, even those without any explicitly targeted environmental objectives.



## Box 2. Green lingo – What are green jobs, green sectors and green economies?

- ▶ **Green jobs** are decent jobs that produce goods, provide services or make production processes more energy and resource efficient and less polluting. Green jobs exist in traditional sectors, such as manufacturing and construction or in green sectors, such as renewable energy and energy efficiency.<sup>11</sup>
- ▶ **Green sectors** are sectors that produce environmental goods and services, which can be broadly defined as goods and services helping measure, prevent, limit, minimise or correct environmental damage. This includes sectors such as renewable energy, water and waste management, environmental consulting, cleaner technologies or carbon capture and storage.<sup>12</sup>
- ▶ **Green economies** are low carbon, resource efficient and socially inclusive. In a green economy, growth in income and employment is driven by economic activities that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services.<sup>13</sup>

## 1.3 Unpacking Environmental Objectives

From a “programming” standpoint, it is important to ‘demystify’ MSD environmental objectives by unpacking the ‘outcomes’ and ‘impacts’ these imply. This can ultimately help projects better target interventions, take advantage of existing synergies between different environmental objectives, and safeguard against potential trade-offs. Moreover, this can also inform monitoring and results measurement efforts.

To put it simply, an MSD project’s environmental objectives will ultimately be to address one or multiple (potentially overlapping) environmental challenges in and around a value chain. These challenges might, for instance, include biodiversity conservation, climate change mitigation, climate change adaptation and resilience to natural disasters, or remedying resource depletion.<sup>14</sup> In order to ultimately bring improvements at these ‘impact’ levels, MSD projects essentially will promote more environmentally friendly and resilient production (and consumption<sup>15</sup>) practices (see Box 3).

<sup>14</sup> See VCD greening note by the ILO Green Jobs Programme (forthcoming) and Miedzinski et al. (2013:7) for more in-depth information on potential environmental impacts of economic activity.

<sup>15</sup> It should be mentioned here that, often, the most environment friendly consumption pattern is no consumption at all. From a business standpoint, however, this is undesirable and hence outside of the scope of this study. Nevertheless, as further explained in box 3, certain goods and services are more environment friendly than others while certain business models can help mitigate “wasteful” production and consumption patterns, hence reducing production and consumption levels overall.

<sup>11</sup> ILO, n.d.

<sup>12</sup> ITC, 2014.

<sup>13</sup> UNEP, 2011.

### Box 3. Greening pathways to promote environmentally sustainable and resilient economic activity

To promote environmentally sustainable and resilient economic activity, MSD projects can promote business model innovation<sup>16</sup>; more environmentally sustainable sourcing and consumption; and adoption of sustainability and resiliency enhancing technologies, processes or product designs. Concretely, these “green” practice changes might equate to promoting greater “eco-efficiency” (i.e. a better ratio of economic output/value to environmental impact) and/or increasing resiliency to environmental constraints, and include promoting:

- ▶ **Environment-friendly material and energy inputs.** Eco-efficiency can be increased by using inputs that are sustainably extracted and that generate less pollution and waste. This might, for instance, entail giving priority to renewable resources (e.g. using compost rather than chemical fertiliser), or promoting technologies that use such resources (e.g. using solar power rather than fossil fuels; or cellulose rather than petroleum-based packaging).
- ▶ **Resource efficiency.** Eco-efficiency can be increased through the adoption of technologies, processes and product designs that decrease the total amount of material and energy inputs necessary to produce, deliver and consume a given product or service. For instance, a fan might be used to boost combustion of brick kiln fires and hence decrease the amount of fuel needed to produce a brick; while brick design might be adapted to enable better thermal insulation and hence decrease energy consumption of buildings.
- ▶ **Reduction of pollution and waste.** Eco-efficiency can be increased by designing products that are more durable, easier to repair and which can be disposed of in environmentally friendly fashion. Moreover, “waste” generated by the production of a given product or following its consumption can be reduced by transforming/recycling it into other products or inputs (e.g. agricultural waste used as fertiliser; heat generated during an industrial process used to heat the factory). Lastly, certain business models can promote less wasteful production and consumption patterns, for instance, via reducing unneeded production (e.g. production on demand).
- ▶ **Resilience to environmental degradation and variability.** Exposure to environmental conditions can be mediated by designing products and adopting technologies and processes, which can help economic activities withstand or better prepare for environmental variability, inhospitable conditions and natural disasters (e.g. flood resilient infrastructure; drought resistant seeds; weather prediction services; or “climate” insurance).

## ▶ 2. Project Design

The first step to getting an MSD project off on the right foot is to take a **pro-active approach** to embedding environmental objectives in **project design** and streamlining them throughout project activities. At the earliest possible stage, projects should establish **two key foundations for further integration** of environmental considerations.

- ▶ **Projects should clearly articulate their environmental objectives and define their importance** and relationship to other project objectives. This is especially critical to help identify mutually reinforcing areas and potential synergies to leverage.
- ▶ **Projects should also make their environmental stance clear to all** project staff, partners and stakeholders. Ultimately, the most important element is perhaps for projects to have secured the staff buy-in and relevant skills necessary for actual onboarding of environmental considerations at different stages of programming (see Box 4 below).

Depending on the **type of environmental objective** a project is trying to tackle, it will also need to draw upon different types of **expertise and tools** at specific stages of programming.

- ▶ **To generate growth and employment in a green sector (e.g. renewable energy), environmental considerations are most important early on, notably at the sector selection stage.** In effect, if a sector and its products are “green”, an increase in economic output will drive improved environmental outcomes.<sup>17</sup> As such, projects should look at how to increase the availability and quality of products and services, shore up demand and maximise decent work opportunities – just as it would in a “traditional” MSD project.
- ▶ **To improve environmental sustainability of a sector, adapt it to climate change, or “do no harm”, a project’s environmental focus should extend into analysis and implementation.** For each of these environmental objectives, a set of tools and institutional processes should be developed to identify and address environmental impacts and vulnerabilities, before, during and after interventions. These might include environmental management plans, analytical tools such as environmental risk assessments or partner engagement tools such as partnership agreements specifying obligations relative to the adoption of measures to minimise environmental impact. Here, expertise in designing as well as properly applying these tools and processes is crucial.

<sup>16</sup> See SustainAbility (2014) for more information on more environment friendly radical business model innovations including: physical to virtual – replacing brick and mortar infrastructure with virtual services; closed-loop production; production on demand; re-materialization; shared resource; and, product as service business models.

<sup>17</sup> Evidently, as previously mentioned, being “green” is not an end-state; green sectors also bear negative environmental impacts, which can be quite consequential, and thus should be taken into account.

#### Box 4. Musika's environment mainstreaming journey

By 2017, the Musika project had four years of activity under its belt and established a strong reputation as a key facilitator of economic development in Zambia's agriculture sector. The project had already integrated certain environmental considerations at various levels, however, the project's donors, notably Sida, felt that there was an opportunity for the project to do more. Initially, many of the members of Musika's board and its project staff felt that Musika was already accomplishing a lot and that it was too early to focus on developing green opportunities. They saw their primary goal as creating jobs and increasing incomes, and felt that integrating environment would simply slow them down and not make much of a difference to their target group.

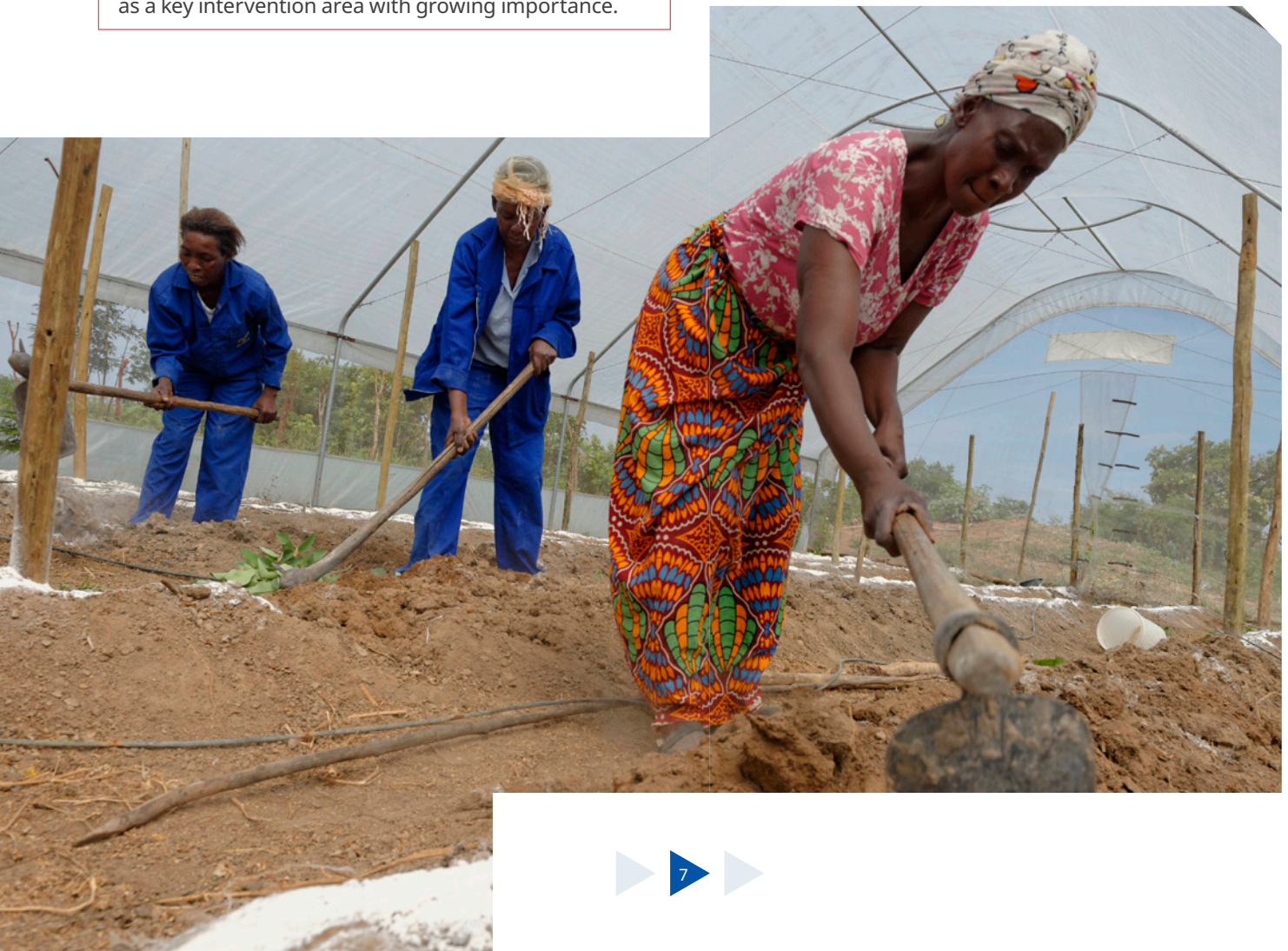
In order to further mainstream environmental objectives across project programming, Sida thus pro-actively took steps to change the "corporate culture" at Musika. To do so, Sida mandated multiple trainings/workshops on the topic, instilling greater environmental awareness and understanding, and making clear that this was a priority for Sida, not just a bonus add-on. Musika also hired a full-time environmental expert whose job was to green project activities wherever possible. Two years later, the mind-set of project staff had completely shifted. They recognised that integrating an environmental lens could bring value and have since started focusing on environmental markets as a key intervention area with growing importance.

To ensure that the design and application of tools can bring positive environmental outcomes, projects need to ensure that they use environment-related expertise. Here, projects can:

- ▶ **Look outwards, to build on existing tools and knowledge, and expert organisations.** Projects may use codified best practices or industry benchmarks that can provide a good starting point. Beyond this, projects might call on the expertise of their donor, or even cooperate with other projects/initiatives operating within the same geographical and/or sectoral scope.
- ▶ **Whether these tools and expertise are outsourced or developed in-house, close involvement by project staff will be key** to institutionalising learning on the environment. Furthermore, involving local actors in environmental analyses can raise awareness, build local capacity and secure buy-in to the approach.

#### KEY LESSONS ON PROJECT DESIGN

- ▶ Ensure clarity and buy-in relative to environmental objectives among project staff and stakeholders
- ▶ Determine what environmental tools and processes will be necessary to achieve objectives and how these will be acquired and implemented
- ▶ Involve project staff and, where appropriate, local actors in environmental processes to strengthen environmental capacity and secure goodwill





## ▶ 3. Project Scope Identification

Once broadly conceived project objectives and target group(s) have been defined, MSD projects typically turn to 'sector selection' and 'market systems analysis' to further narrow down the project scope. The following section unpacks existing guidance as well as key lessons from the Lab's own research on how to integrate environmental considerations at these stages.

### 3.1 Sector Selection

A well-considered sector selection exercise is key to enabling projects to achieve their environmental objectives. To this end, **existing MSD guidance suggests including environmental sector selection criteria**, which may relate to the focal value chain's negative environmental impacts and potential for improvement, its potential to advance green growth, or its degree of present or forecasted vulnerability to environmental degradation and climate change.<sup>18</sup>

While this guidance is quite comprehensive, the projects researched for this study stressed the **importance of feasibility considerations**. In developing countries, market incentives may be heavily skewed against environmentally sustainable outcomes due to significant constraints in the enabling environment such as distortionary policies (e.g. fossil fuel energy subsidies) or inadequate infrastructure (e.g. missing municipal waste management infrastructure). Here, projects may still engage though they may **first need to focus on easing**

<sup>18</sup> For more information on these criteria, how to evaluate value chains against them, and how to balance them with other feasibility and socio-economic criteria, see ILO (2014a:17), ILO (2014b:2), GIZ & ILO (2015) and GIZ (2019:116). See also VCD Greening Note (forthcoming).

**these constraints to establish favourable market conditions**. This will generally require **prolonged effort** and potentially warrant different skillsets and methods than that of the typical MSD project (see section 4.1).

Furthermore, to advance environmental objectives, rather than focusing on one sector / value chain, projects can adopt a wider scope and focus on **promoting cross-cutting "green" supporting functions or the sustainable management of key natural resources**<sup>19</sup> that can benefit multiple value chains. Projects seeking greening in agriculture may for instance find that they can achieve greater environmental impacts when promoting organic inputs or organic farming skills fit for multiple horticulture value chains – as focal market systems of their own right – rather than necessarily focusing on specific horticulture crops.

### 3.2 Market Analysis

Market analysis is crucial for MSD projects to identify opportunities fit to advance their environmental objectives but it must be adapted accordingly. To identify opportunities to stimulate economic growth and employment **in 'green' sectors, practitioners can essentially apply market systems analysis as they would with any other sector** aside from certain tweaks such as paying extra attention to 'environment relevant' stakeholders like the Ministry of Environment. However, when it comes to identifying and evaluating opportunities **to increase the environmental sustainability or climate resilience of a sector, or to promote sector growth while 'doing no harm', "traditional" market systems analysis methodologies should be complemented** by and ideally even integrated with environment related analysis<sup>20</sup>. The objectives of such analysis should ultimately be to help projects identify and evaluate "environmental deficits" (i.e. environmental impacts and vulnerabilities) in and around the focal value chain, and prioritise upgrading solutions that can advance both environmental and socio-economic outcomes (see Figure 1 below)<sup>21</sup>.

<sup>19</sup> Also known as a "landscape approach" (DCED, 2014:16).

<sup>20</sup> For an example of a market systems analysis seeking to identify potential to stimulate green and climate resilient growth, see The Lab (2020) "Market Systems Development and a Just Transition: Learnings from an ILO experience in Tanzania" available [here](#).

<sup>21</sup> The stages presented below are adapted from the methodology outlined in ILO (2014a) and ILO (2014b), which itself draws heavily on the methodology ascribed to life cycle assessments.



Figure 1 – Potential roadmap for environment centred market systems analysis



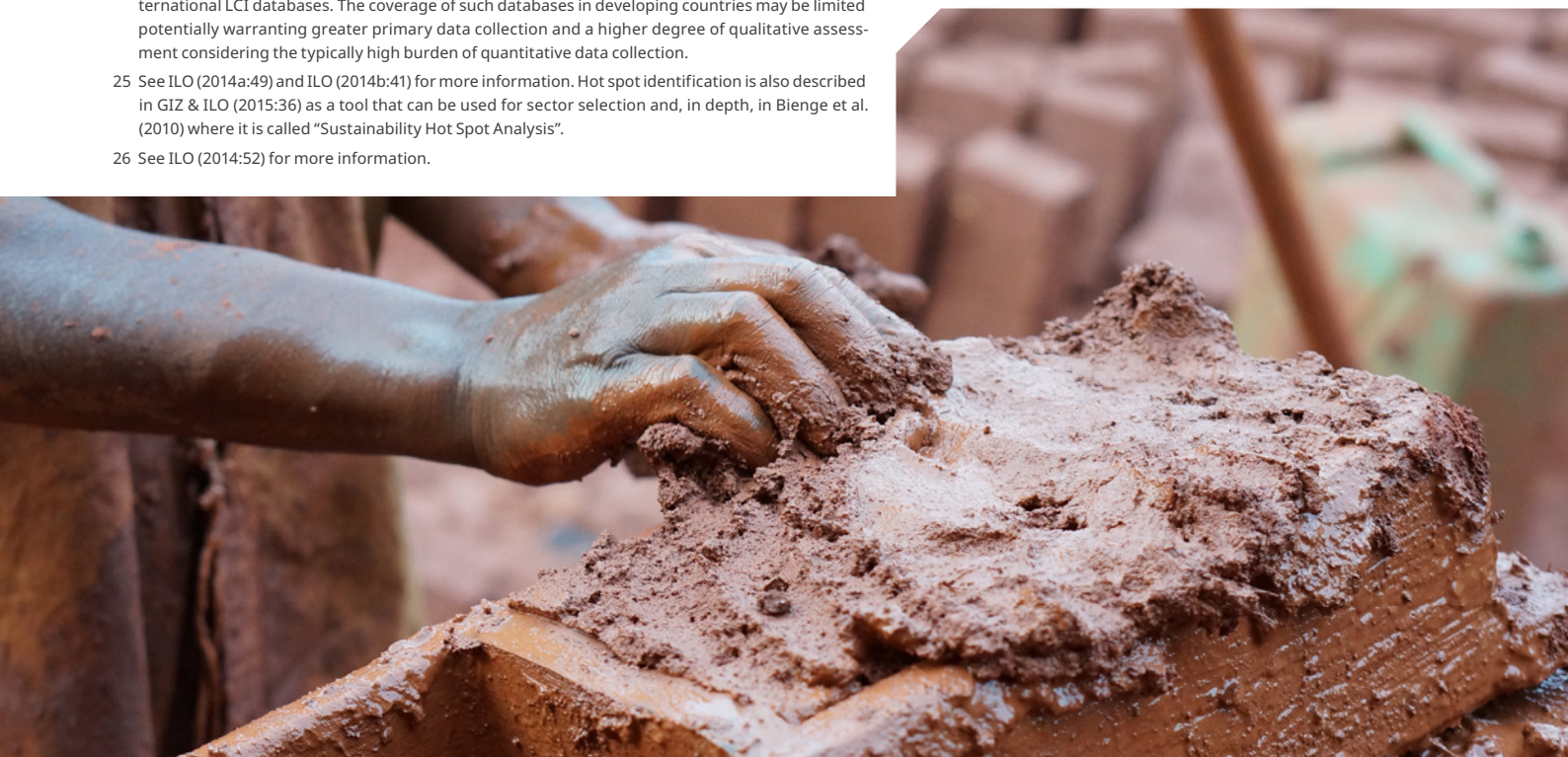
22 See ILO (2014a:43) and ILO (2014b:29) for more information.

23 The life cycle of a product or service includes all value chain stages as well as consumption and product end of life stages (i.e. when disposed of and potentially recycled), following the “cradle to cradle” perspective.

24 The Life Cycle Inventory (LCI) of material and energy inputs as well as solid, liquid and gaseous outputs (and products) associated with different stages along the value chain is typically in large part derived from existing benchmark data contained in various national or international LCI databases. The coverage of such databases in developing countries may be limited potentially warranting greater primary data collection and a higher degree of qualitative assessment considering the typically high burden of quantitative data collection.

25 See ILO (2014a:49) and ILO (2014b:41) for more information. Hot spot identification is also described in GIZ & ILO (2015:36) as a tool that can be used for sector selection and, in depth, in Bienge et al. (2010) where it is called “Sustainability Hot Spot Analysis”.

26 See ILO (2014:52) for more information.



**Projects should evidently adapt environmental analysis as they see fit.** For instance, projects can adapt the level of resource investment and specificity of the tools used<sup>27</sup>; the extent to which socio-economic considerations are taken into account; and the degree of depth and sequencing of different steps in the process. In any case, ensuring that the analysis is a participatory process can be extremely useful in building ownership and awareness among stakeholders.

Lastly, considering the often nascent nature of green sectors and greening processes, projects may still have uncertainties following the “analysis stage”. As such, **projects should remain flexible relative to chosen intervention areas and consider that “implementation” might also serve as a means to explore different upgrading opportunities and assess their attractiveness** for further support. For example, the EELA project spent significant resources testing and validating various brick kiln upgrading technologies in its first phase, which allowed it to concentrate its efforts and ultimately surpass its objectives during its second phase.

For additional information on conducting sector selection and market systems analysis towards achieving environmental objectives, see VCD Greening Note (forthcoming).

#### KEY LESSONS ON PROJECT SCOPE IDENTIFICATION

- ▶ Use environmentally related criteria to select sectors while paying extra attention to feasibility
- ▶ Consider focusing on cross-cutting “green” supporting functions and natural resources impacting multiple final-product value chains
- ▶ Use environmental market analysis to identify opportunities to green or increase environmental resilience of selected sectors
- ▶ Recognise that there may be no better “analysis” than experimentation during implementation, especially given the nascent nature of green sectors and greening processes

<sup>27</sup> See VCD Greening Note (forthcoming) for information on the specific tools that might be best suited to evaluate different environmental challenges. For in-depth information on specific environmentally relevant value chain analysis tools and methodologies, see Faße et al. (2011) and Faße et al. (2009).

## ▶ 4. Project Implementation

**MSD projects integrating environmental objectives often face wide ranging challenges during implementation.**<sup>28</sup> Here, we look into where and how MSD projects can support greening through change in an often particularly uncondusive enabling environment (section 4.1), and the key strategic considerations to design and pilot market-based interventions aimed at facilitating sustainable and scalable ‘green practice change’ (section 4.2).

### 4.1 Supporting Change in the “Enabling Environment”

**In general, projects will typically encounter many broadly conceived “enabling environment” constraints** such as: significant infrastructure and skills gaps; weak awareness of environmental issues in government, the private sector and civil society; or unaccounted for environmental externalities. Such constraints often wield a large impact on the potential returns to “green” investment and innovation though these are also typically very challenging and take time to address. MSD projects should thus make an early decision about whether they will work in this area and, if they do, **focus efforts on what is most feasible, most critical to boost sector development, and most conducive to “win-wins”** e.g. synergies between improved environmental and employment outcomes.

Here, MSD projects can **work with the public sector** to develop and implement policy instruments including

<sup>28</sup> The prevalence of many of these challenges appear to be in large part due to the infancy/nascency of green sectors and of “green” policy in many developing countries. For a typology of the “economic” constraints to green growth, see OECD (2011:5).



regulations, fiscal incentives or public investment (section 4.1.1), **or with the private sector** to inform and advocate for change in government policy and provide “collective goods” (section 4.1.2).

### 4.1.1 Working with government

**In many developing countries**, government policy aimed towards greening the economy is often a relatively new and “niche” policy area. As such, **environmentally relevant policy is often weak**, which means projects can **make large strides** in strengthening the incentives for “green” innovation and investment with relatively simple policy instruments. **On the flipside, working in the policy sphere can be inherently challenging** given vested interests, perceived or real trade-offs with socio-economic political priorities<sup>29</sup>, and insufficient or “misplaced” government expertise on environmental issues and associated policymaking. As such, MSD projects might not always be best suited to this issue area.

**Nonetheless, the policy sphere can hold various feasible, ‘quick-win’ opportunities for MSD projects.** For instance, supporting **implementation of existing environmentally relevant policies**, which are often poorly implemented, might be more feasible (and potentially impactful) than working on developing new policies. An MSD project focused on greening agriculture, for example, might have a greater impact in building the capacity of government to trace and test agricultural products for currently banned pesticides rather than attempting to get government to ban more pesticides. Furthermore, **issue areas where there is clear potential for win-wins** (e.g. to create green jobs) will typically be more likely to be addressed.

<sup>29</sup> One notable exception here is the issue of climate change and the ‘existential’ threat it represents for various sectors (e.g. agriculture) and countries (e.g. Small Island Developing States).

In looking at government partners, MSD projects may find that **local authorities provide a good entry point, notably as they are often in charge of implementation.** Local authorities often have strong appetite to develop and implement environmentally relevant policy in jurisdictions where environmental impacts are highly concentrated such as in cities affected by heavy air pollution or waste proliferating in the streets. Moreover, local administrations are generally more aware of the challenges felt by local businesses and thus, are more likely to pursue more ‘context-relevant’ environmental policy development and implementation.

**However, local authorities are also often constrained** in terms of resources or even the policy tools they have at their disposal. Here, a common key underlying constraint can be that authority and mandate over different areas of environmental policy can be concentrated at national level; in the hands of the wrong government departments; or too spread out. This limits the ability of willing public authorities to invest in environmental initiatives or regulate industries impacting their constituencies.

Lastly, **informality can be extremely high** in nascent “circular economy” sectors<sup>30</sup> such as waste management and highly polluting “artisanal industry” sectors like brick-making in much of South America, which can limit the effect of green policy. Where informality is high, projects should help government ease enterprises’ path towards formalisation while increasing their potential benefits of doing so through improved access to enterprise support programmes or public tenders.<sup>31</sup> At the same time, they should strive to safeguard against exclusion of informal enterprises and workers from solutions they support.

### 4.1.2 Working with the private sector

**Strong sector cooperation and coordination is critical for improving the enabling environment.** It can improve social dialogue and lead to ‘win-win’ policies and, perhaps more importantly, to the provision of “collective goods” that incentivise greener business practices. These collective goods might include the development of private sector standards or guidelines for production practices, awareness raising campaigns that promote the purchase or adoption of greener goods and practices, private sector skills development initiatives, or the setup of online marketplaces for green goods and services.

**Here, business membership organisations (BMOs) are often key partners**, which typically both advocate for conducive policy change and provide “collective goods”. In choosing specific BMO partners, projects can work with BMOs already active within the project’s scope, which have appetite to onboard environmental dimensions, or even consider the setup of associations specifically dedicated to ‘green sector’ development (like Elan helping set up the DRC Renewable Energy Association) or sector greening (like ZGJP helping set up the Zambia

<sup>30</sup> In simple terms, circular economy sectors focus on reuse and recycling of waste, and remanufacture and repair of goods. In many developing countries, for instance, re-valorisation of solid waste is enabled mainly by informal waste pickers, while re-valorisation of agricultural waste for example into fertiliser or bio-fuel (e.g. dung cake in India) is often characterised by traditional, unproductive methods and informal small-scale commercial operations if any.

<sup>31</sup> For more information on how MSD projects can help tackle informality, see the Lab brief “Formally Challenged: Tackling Informality in Market System Development projects”, available [here](#).





Green Construction Association). However, forming BMOs typically requires the presence of a critical mass of willing market actors, which might be slow to reach in nascent green sectors. Elan, for instance, had to wait several years before the market was populated by enough willing renewable energy businesses to push its formation forward.<sup>32</sup>

### Box 5. Reaching the right enabling environment for market development: Ecovecindarios' experience in Bolivia's waste management sector

When Ecovecindarios began operations, in its target areas, 'waste management' functions were essentially being performed by informal waste pickers who would rummage through trash laying in the streets or in de-facto urban dumps in search of glass or scrap metal they could re-sell as cheap raw materials. Separation of waste at point of origin – among households and businesses – was generally improper while minimal involvement of established waste management enterprises and of public authorities meant that waste collection points, collection trucks and processing plants were lacking.

Against this backdrop, in order to promote better waste management and help develop 'waste markets' beyond a subsistence economy, Ecovecindarios thus adopted a multi-pronged, sequenced approach. It started at the neighbourhood level, working in close coordination with neighbourhood councils ("OTBs") to set up local waste collection points, raise awareness among the population to better separate the waste they generated, and support waste pickers to upgrade and integrate within newly developed neighbourhood 'waste collection systems'. Once these foundations were in place, Ecovecindarios scaled up by working with municipalities to develop 'municipal' waste management systems enabling further improvements relative to collection and treatment of waste and by increasing its focus on strengthening markets for recycled waste products. Here, the project notably supported the development of green businesses involved in the recycling and re-valorisation of waste into new products as well as the improvement of linkages between waste generators and waste buyers through the setup of online market places managed by Chambers of Industry in Cochabamba, La Paz and Santa Cruz.

### KEY LESSONS ON SUPPORTING CHANGE IN THE ENABLING ENVIRONMENT

- ▶ Start early on addressing enabling environment constraints while taking stock of their potential impact for further greening and intervention feasibility
- ▶ Consider prioritising support for improving the implementation of existing policies and, more generally, support for policies where clear "win-wins" exist
- ▶ Consider working with local authorities as key leverage points for developing and implementing policy, while being mindful of their mandate and resource limitations
- ▶ Ensure policy takes account of informal enterprises and informal workers, which often play a key role in nascent "circular economy" sectors and artisanal industries

Work with BMOs to facilitate the provision of collective goods while taking account of the challenges associated with sector coordination in thin markets

## 4.2 Leveraging Incentives, Capacity and Market Dynamics

To stimulate the adoption of greener and resilient business practices and the demand for green goods and services, projects must first understand the incentives that underpin adoption and then design interventions that leverage these incentives and work within business capacity (section 4.2.1). Moreover, to get to scale, projects should strategically target interventions increasing potential dissemination of supported (green) practice changes and growth of green sectors (section 4.2.2).

### 4.2.1 Intervention design – leveraging incentives and capacities

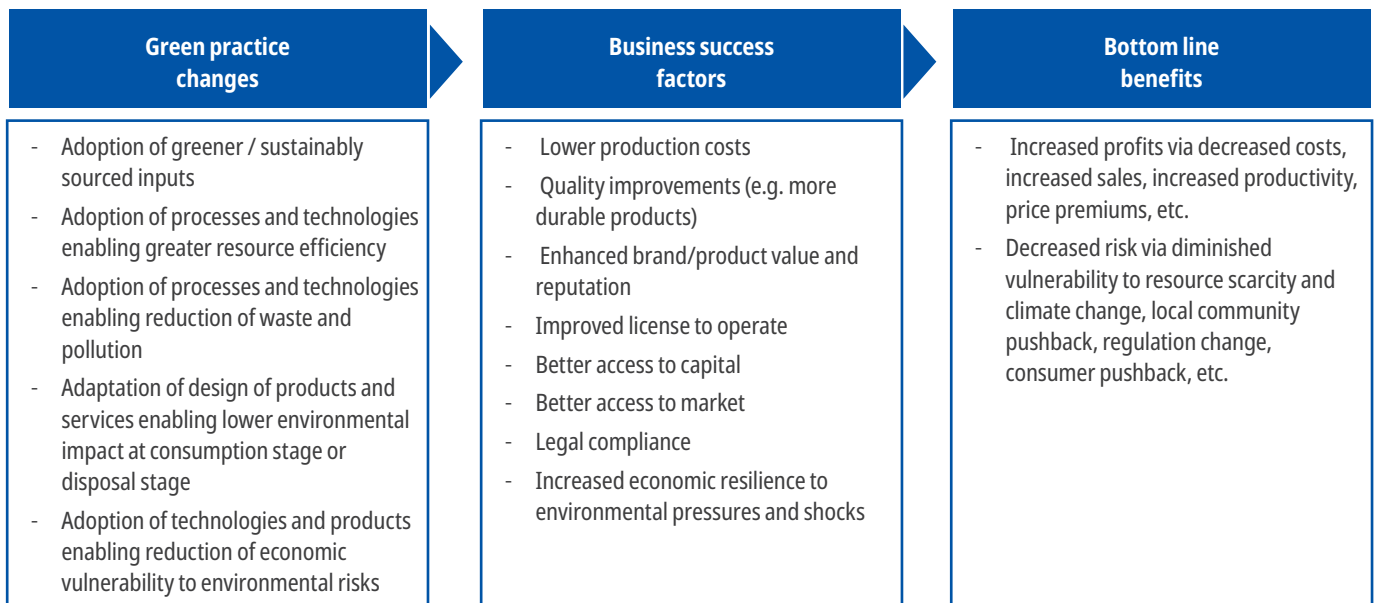
To stimulate the adoption of greener practices, projects must leverage the drivers of behaviour change among enterprises (and individual end-consumers) and promote solutions in line with their capacities.

#### *Unpacking and leveraging the driving forces underpinning green practice change*

A business owner's interest to pursue a given 'green practice change' can often be traced back to its expected economic benefits. Therefore, regardless of the green practice changes targeted, **projects need to demonstrate the potential business success factors and bottom-line benefits for a business to adopt green practice changes.** (see Figure 2 below).

<sup>32</sup> For more information on how MSD projects can support BMOs, see Cowan-Gore (2019), accessible [here](#).

Figure 2: The Drivers of Green Practice Change<sup>33</sup>



33 Adapted by author, inspired by IFC (2002).

**From a business standpoint (and, correspondingly, that of a project), not all green practice changes are equally attractive. Certain practice changes are inherently more complex to translate into bottom line benefits than others** – and hence arguably also inherently less attractive to businesses (and projects). Indeed, certain green practice changes *directly* result in cost or risk reductions (which can thereby directly bring bottom line benefits)<sup>34</sup> – for example farmers going from manual ‘bucket irrigation’ to mechanised drip irrigation, which can decrease overall water consumption, watering labour costs and vulnerability to drought. Conversely, the pay-off for other green practice changes can be less straight forward – such as a hotelier’s investment into adopting green practices to achieve a green certification, hoping this will ultimately attract more customers or enable better access to credit. Evidently, other factors such as market conditions<sup>35</sup>, policy frameworks or individual business specificities also matter. For instance, compared to a small sized hotel, a large hotel chain will typically be more likely to get better access to credit or to reap substantial reputational benefits as a result of green certification.

34 Here, it is important to note the distinction between green practice changes bringing bottom line benefits to adoptee businesses and those bringing economic benefits to other, third party market actors such as consumers, which may for instance benefit from enterprise investment in developing less resource-hungry products (e.g. more fuel-efficient cars).

35 DCED (2014:17) for instance found that “MSMEs in markets with high uncertainty are often reluctant to make investments, irrespective of the payback time [while] MSMEs in high growth markets often prefer investing their time and money in opportunities with a higher return on investment, and therefore have limited interest in cost saving measures.

### Box 6. Leveraging incentives and market forces: EELA’s switch to MSD

When it started its activities in 2010, EELA was not an MSD project. Nonetheless, early on, it saw the importance of adopting a more systemic-oriented approach. The project, for instance, quickly realised that for virtually all artisanal brick producers, hard economic incentives were king (even benefits to the own health of brick kiln owners were generally disregarded).

By the start of its second phase in 2013, EELA shifted towards a more facilitative and business minded approach. As brickmakers were reluctant to take risks and invest their hard-earned money into a new way of doing business, EELA provided information and advice to show how proposed innovations would impact production costs and brick quality – the main drivers of practice change in this instance. The project uploaded detailed upgrading technology profiles on its “RED Ladrilleras” website, developed a tool to simulate the energy efficiency gains a brick-kiln would get from adoption (its “PEFAT” tool), and stimulated local, national and international peer to peer discussions and visits between early adopters and more hesitant brick-makers to help them to make the leap.

### Starting small and building bigger

Since projects typically support multiple practice changes among target enterprises, **the question is often not just what to support but which to support when.** Here, projects may potentially find success when focusing first on stimulating adoption of ‘low-hanging fruit’ i.e. practice changes whose benefits are clear and quick to materialise (or even to breakeven) and whose costs are not prohibitive. This can establish buy-in among adoptee enterprises for environmentally linked upgrading and increase their capacity for additional investment.



In the same vein, projects can also help demonstrate an environmental upgrading pathway for enterprises, made up of different practice change steps, each leading to increased bottom line benefits and improved environmental outcomes. For instance, a project might first focus on helping farmers achieve cost savings through the adoption of certain organic farming practices and, once these have been established, move on to other, more advanced practices and developing potential new market opportunities associated with organic branding of these products.

### **Safeguarding against potential negative side-effects of intervention**

Lastly, in order to ensure that support does not contribute to negative environmental impacts and that it builds awareness on environmental issues, projects can set certain rules of engagement in deciding who to partner with and how (see Box 7). This is especially important given that local partners with the greatest capacity to improve socio-economic outcomes or a given environmental outcome may have weak incentives to support other environmental outcomes. For instance, working with a large agricultural input supplier may be a good way to get quality seeds to farmers. However, on the other hand, it might also equate to strengthening linkages between farmers and a business that is vying to support adoption of its agro-chemical products as well, which can significantly harm the environment.

#### **Box 7. Musika's MoUs: Setting the rules of engagement and signalling importance**

One of the most impactful “tools” Musika developed to green its interventions was a Memorandum of Understanding (MoU) which included pledges by partners to comply with relevant Zambian environmental laws (e.g. relative to banned pesticides or legally mandated environmental impact assessments) and fulfil certain obligations beyond these (e.g. to promote responsible handling and use of agro-chemicals). This helped Musika communicate to partners how important environment was up on the list and enabled it to establish processes through which it could meaningfully engage with partners on this topic.

Musika also conducted in-depth partner environmental appraisals to better understand how partner activities impacted the environment and human health. Depending on the results of this assessment, various measures were put in place, for instance, to further monitor the impact of activities, or potentially even to mitigate any environmental risks identified. Here, it was extremely important for Musika to brand these assessments as “learning audits”. This made it clear that the objective was not to scorn or coerce partners into compliance but rather to help them identify and address environmental risks.

### **4.2.2 Intervention strategy – leveraging market dynamics**

**Weak awareness relative to environmental issues and solutions, and ‘thin’ green sectors** (i.e. sectors with low numbers of suppliers, offering a limited range of products, to limited a number of customers) **are often key barriers** to green sector growth and to increasing environmental sustainability and resilience of other sectors. This bears significant consequences on MSD project intervention strategy.

#### **Stimulating supply of environmental goods and services**

The mere scarcity of suppliers of environmental goods and services can be a significant constraint to achieving environmental objectives. Indeed, within the project’s scope, even the most promising green enterprises will often have limited capacity, and the potential for “replication” of innovations among these will be inherently limited considering the scarcity of potential “replicators” (i.e. peer green enterprises).

**One major implication is that, in its early stages, projects should work towards “thickening” markets for targeted environmental goods and services** by supporting market entry of new businesses in addition to the development of incumbent businesses. EELA for example, supported the entry of brick kiln equipment providers from Brazil into other countries in the region such as Peru and Ecuador, where the market was much less advanced and mechanised. They also supported local ‘metal works’ manufacturers and others to diversify their business into producing and repairing small brick kiln equipment items such as fans.

**In supporting these businesses, one important strategic consideration** is that early market thickening support might be more direct than “facilitative”, which can come into conflict with stringent MSD facilitation principles (see Box 8).<sup>36</sup>

#### **Stimulating demand for green practice change (including adoption of green goods and services)**

**Projects also need to think strategically about demand.** This is particularly important when attempting to introduce and disseminate green goods and services (and green practice<sup>37</sup>) and environment-friendly products where market recognition and demand are low.

To promote consumption of environment-friendly goods and services, projects can raise awareness on associated environmental issues (e.g. the negative effects on health of pesticides to promote organic products) or by marketing products through leveraging relevant social norms and positioning them as status symbols/aspirational products.

<sup>36</sup> For more information on thin markets and the means through which MSD projects can promote their development, visit the BEAM Exchange’s dedicated thin markets page [here](#).

<sup>37</sup> Not all green practice changes require green goods and services, especially those which are low tech and straightforward to implement e.g. stopping to use tires to fuel brick kiln fires and using more firewood instead.

More generally, projects can also support better access, for instance, by supporting expansion of distribution networks or sale of products on credit (see box 8).

### Box 8. Elan's experience of building up a renewable energy market from scratch

Qualifying the DRC's home ("pico") solar system sector as thin would have been generous back when Elan started work. With virtually no existing local supply, the market was essentially made up of products imported by a couple of companies twice a year, which slowly made their way through fragmented distribution networks. Distributors and retailers lacked the working capital necessary to ensure stable replenishment of their stock, and most end consumers had weak purchasing power – so products often simply sat in warehouses or on store shelves for weeks or even months on end.

To stimulate end-market demand, Elan supported sellers to market solar home systems as 'aspirational' products and to adopt 'pay as you go' solutions – enabling them to sell their products on credit to consumers. However, considering their own weak access to credit, this further strained retailers ability to replenish stocks since the money they needed to do so (i.e. payment from customers) now came in gradually. Given the weakness of local financial markets, Elan recognised that simply injecting cash into distributors' and retailers operations to smooth over their working capital constraints was the most obvious way forward. However, being an MSD project, doing so also went against many of Elan's core principles including the fact that the amount that the project invested had to be matched by the partner. In order to use the tools and pursue the strategy that eventually enabled it to achieve its ultimately impressive results, Elan project staff and its donor thus had to first reconcile with the fact that "facilitation", in this case, would be difficult and that original project design imperatives were too constraining.

In looking at business level adoption of greener inputs, technologies and practices, projects can play on the potential "market pull" that powerful market actors can create. Indeed, projects might for instance **focus efforts on facilitating adoption among market actors that wield power to "shape" the market** and set trends given their reputation as market leaders or their position in the value chain as lead buyers<sup>38</sup>. This can also mean **supporting green enterprises to target early adopter market segments** – with high potential to 'kickstart' the market and bring visibility to focal products (see box 9).

<sup>38</sup> See the Market Links' webpage on Lead Firms (available [here](#)) for more information on how working with them constitutes an easy option to gain leverage in a value chain.



### Box 9. The Zambia Green Jobs Programme – Targeting institutional buyers to stimulate green construction

The Zambia Green Jobs Programme, had the twin objective of stimulating green construction practices and creating and improving jobs. However, because construction industry actors and most house buyers were either sceptical or not aware of benefits of environmental upgrading, this was a tough sell.

A key turning point was arguably reached when the project targeted institutional buyers including social housing investors and large mining companies interested in providing green housing for their workers as well as advancing their corporate social responsibility<sup>39</sup>. Indeed, while the ultimate aim was to stimulate demand in the wider market, among "individual" Zambian consumers, stimulating demand here served as a crucial launching pad to bring visibility to the "green construction" sector and to jolt the industry with large one-off commitments to build and buy many "green houses".

<sup>39</sup> Corporate social responsibility includes environmental sustainability concerns.

## Strengthening linkages along the value chain

Considering that practice changes at different levels including product design, sourcing of inputs, production and delivery can all significantly impact greening potential and build upon one another, weak linkages between market actors along the value chain can be a significant constraint to greening potential.

**Strengthening linkages between market actors can incentivise and enable them to support each other to pursue environmental upgrading.** For instance, while some lead buyers seek better environmental performance within their supplier networks, they often do not have sufficient incentive to themselves invest in their suppliers' environmental upgrading nor even the ability to do so if their relationship with them is weak and unstable. In effect, without strengthening linkages with buyers, incentives and capacity to pursue environmental upgrading among lower tier suppliers – which typically operate in the “shadows”, compete on cost and where significant environmental risks often exist<sup>40</sup>– are generally limited.

**Strengthening linkages between market actors can also increase their ability to compete based on environmental upgrading.** For example, in order to build and sell a “green” house, construction companies will likely have to showcase *greenness* at different levels such as by sourcing environment friendly construction materials *and* by working with architects who can design houses as to improve thermal insulation. Otherwise, it will be difficult to market a final product as being green and reap a **competitive advantage based on green branding-based product positioning.**

## KEY LESSONS ON LEVERAGING MARKET INCENTIVES, CAPACITY, AND MARKET DYNAMICS

- ▶ Leverage economic incentives to advance environmental outcomes
- ▶ Focus first on adoption of “low-hanging fruit” while carving out a longer-term environmental upgrading pattern for enterprises
- ▶ Set “rules of engagement” conditioning support to partners with certain environmentally relevant obligations to ensure that support does not contribute to environmental degradation
- ▶ “Thicken” markets for targeted green goods and services by supporting market entry and geographical expansion
- ▶ Loosen MSD facilitation principles when supporting thin green markets
- ▶ Target partners with high potential to “set trends” or customer segments with potential to create significant “market pull”
- ▶ Build linkages among environmentally minded market actors at different stages of the value chain so they can support each other's environmental upgrading and leverage a “market chain” competitive advantage

<sup>40</sup> See The Lab's brief “Getting Beyond Tier 1: Using a systems approach to improve working conditions in global supply chains” available [here](#).





## Summary of Key Lessons

### Project Design

- ▶ Ensure clarity and buy-in relative to environmental objectives among project staff and stakeholders
- ▶ Determine what environmental tools and processes will be necessary to achieve objectives and how these will be acquired and implemented
- ▶ Involve project staff and, where appropriate, local actors in environmental processes to strengthen environmental capacity and secure goodwill

### Project Scope Identification

- ▶ Use environmentally related criteria to select sectors while paying extra attention to feasibility
- ▶ Consider focusing on cross-cutting “green” supporting functions and natural resources impacting multiple final-product value chains
- ▶ Use environmental market analysis to identify opportunities to green or increase environmental resilience of selected sectors
- ▶ Recognise that there may be no better “analysis” than experimentation during implementation, especially given the nascent nature of green sectors and greening processes

### Supporting Change in The Enabling Environment (Implementation)

- ▶ Start early on addressing enabling environment constraints while taking stock of their potential impact for further greening and intervention feasibility
- ▶ Consider prioritising support for improving the implementation of existing policies and, more generally, support for policies where clear “win-wins” exist
- ▶ Consider working with local authorities as key leverage points for developing and implementing policy, while being mindful of their mandate and resource limitations
- ▶ Ensure policy takes account of informal enterprises and informal workers, which often play a key role in nascent “circular economy” sectors and artisanal industries
- ▶ Work with BMOs to facilitate the provision of collective goods while taking account of the challenges associated with sector coordination in thin markets

### Leveraging Incentives, Capacity and Market Dynamics (Implementation)

- ▶ Leverage economic incentives to advance environmental outcomes
- ▶ Focus first on adoption of “low-hanging fruit” while carving out a longer-term environmental upgrading pattern for enterprises
- ▶ Set “rules of engagement” conditioning support to partners with certain environmentally relevant obligations to ensure that support does not contribute to environmental degradation
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- ▶ Target partners with high potential to “set trends” or customer segments with potential to create significant “market pull”
- ▶ Build linkages among environmentally minded market actors at different stages of the value chain so they can support each other’s environmental upgrading and leverage a “market chain” competitive advantage

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