Composting rates have been low in developing countries but are growing slowly at all scales. Composting is being adopted as an organic waste management strategy as well as a way to address climate change and agricultural needs. However, it is a solution that has been widely unsuccessful in low and middle income countries for a number of reasons including technical, financing and policy issues. This report focuses on the financing and policy environment that could lead to successful composting projects and the preconditions that must be in place before considering composting as an option.

Composting plants in developing countries operate in a fragile market. Consumers face competing products that can provide fast-acting results and are cheaper due to fertilizer subsidies. However, compost provides many advantages to the end user, varying from land restoration, moisture retention, and long-term crop nutrition. This paper discusses a number of operational strategies, reflecting on composting operations that have been succeeded and failed. These include designing an end product that fits a specific customer and end use, manufacturing high-quality compost from uncontaminated feedstock, utilizing quality assurance schemes and branding, and deploying business-savvy marketing and distribution schemes.

While all steps from determining a market to distributing compost products are important, a common failure seen globally is with regards to the feedstock utilized. A lesson learned repeatedly throughout the world is that pure organic materials will result in a higher quality compost product than contaminated organic materials. Agricultural waste and market waste tend to be the cleanest, most accessible inputs; however, some cities have experimented with mixed municipal solid waste (MSW) derived compost which quickly harms the reputation and development of the sector when not managed properly. There are opportunities to utilize source-separated MSW if strict quality enforcement exists.

Market considerations are only one piece of a complex puzzle. Other essential success factors for composting projects lie in the project’s financial management and the policy environment of the locality. On the financial management side, experience has shown that while grants and loans are necessary for the initial buildout of the facility, operating costs must be financially self-sufficient. Aside from gate fees and sale of compost, projects have diversified their revenues through collection fees, sales of recyclables, consulting and educational services, and while markets were supportive, carbon credits. As evident within the upcoming narratives, financing strategies vary greatly by model and region.

Even if a composting project is soundly planned and financed, a plant cannot succeed without the support of an enabling policy environment. Policies that nurture the development of a composting sector include landfill taxes and organic waste disposal bans that channel feedstock to organic composting methods. In contrast, policies that stifle composting projects include those that create an uneven playing field between compost and fertilizers through subsidies.
and those that force organic waste treatment facilities to compete for feedstock. Ensuring that policies are aligned to support composters requires coordination between all stakeholders: national and municipal governments, NGOs, financiers, and the private sector. Beyond these policies, which help develop the composting sector, quality assurance of the product is a necessary mechanism to sustain operations.

While municipal-scale composting has traditionally been more successful in upper-middle and high-income countries than low-income countries, tried and true models are slowly paving a path for this cost-effective organics management technique around the world.

**Report Approach and Structure**

This report will provide an overview of optimal market conditions, common financing options, and enabling policy environments for composting projects globally. In order to understand the success factors of current composting practices, field research was commissioned in seven countries and one region: Austria, Bangladesh, Brazil, Ghana, India, Sri Lanka, Uganda, and Europe. Municipal-level composting is being undertaken nationally in these countries. However, each composting project occurs within differing circumstances and incentive structures. In practice, composting projects vary as much by national directions and practices as the social, policy, and economic environment of the city or locality—these case studies highlight the interplay between national and local conditions that enable the projects’ success. This report is structured as follows:

- **Chapter 1** introduces background information on composting generally and discusses the opportunities and challenges faced in developing countries
- **Chapter 2** provides an overview of prevailing market conditions and strategies that would ideally lead to a sustainable composting sector
- **Chapter 3** details common financing mechanisms for composting projects that have been used for composting projects globally
- **Chapter 4** discusses the policy environments and incentives that promote composting production and market development
- **Chapters 5-10** offer the commissioned case studies that provide insights into national policies and enabling environments in different geographies. These allow for learning from tangible actions taken and associated outcomes. Shorter case studies or examples are provided throughout the report to illustrate other global scenarios.
  - **Chapter 5** discusses Austria’s decentralized, agricultural model of composting
  - **Chapter 6** presents success factors behind Waste Concern, a private joint venture formed in Bangladesh
  - **Chapter 7** features the organic farm model of composting in Brazil
  - **Chapter 8** discusses a public and private composting operation in India
  - **Chapter 9** describes a national grant program that powered municipal-scale composting in Sri Lanka
  - **Chapter 10** highlights the history and development of organics recycling in Europe

A summary of the key lessons drawn from the global case studies is included in Table 1. For ease of reading, key messages and lessons are highlighted at the beginning of relevant chapters or sections throughout.