

Module 02 : Scanning the business environment

cewas



Week 04:
Analyse the
institutional framework



Resource Recovery and Reuse
(RRR) Entrepreneurship

Week 4 module 2: Analyse the institutional environment

“Week 4, module 2: Analyse the institutional environment.

As a last step in analysing your business environment, you need to understand the legal and regulatory framework you will be operating in, the organisational set up and any social norms that can support or hinder your RRR business.

As we discussed during the last weeks, high market demand and healthy competition are important factors of success for a RRR business. Similarly, supportive legislation, organisations and communities can be an important success factor for a RRR business. How? Let me give you an example: Environmental legislation demanding safer and more environmentally sound waste management, can push for waste prevention, less dumping on landfills, and investments in alternative practices, including Resource Recovery and Reuse.

Markets regularly fail to prevent negative externalities, like climate change or pollution, caused by industries and unsustainable consumption. The role of government is, among other, to regulate resource extraction, pollution and other externalities. Government is further responsible to ensure minimum quality of services – especially basic services like water supply, sanitation and access to electricity. In this sense, government also plays a role to establish a level playing field for service providers and entrepreneurs.

To do so, governments can establish laws and regulations and set incentives in the form of subsidies or sanctions. Another important approach is that governments can act as role models, both by setting standards related to recycling and reuse in public institutions and by campaigning for the uptake of new solutions.

In this way, governments can tackle bottlenecks in the market, by subsidizing key production factors like land, labour, knowledge or capital. Or they can tackle externalities like greenhouse gas emissions and pollution through incentives to reduce emissions or encourage recycling.

In reality however, political will and policies are often not sufficiently supportive or even counterproductive for a RRR business to be feasible.

Understanding the legal environment of your RRR business is important to

- 1) ensure that it is legally possible to realize your business. The production of biodiesel from used cooking oil for example may require a permit from a petroleum authority that is difficult

to obtain. In some countries the use of fertilizer from faecal sludge is forbidden for any products for human consumption. These examples show that it is important to make sure you find out if your business idea is legally feasible or not, before you invest too much time and resources.

- 2) It is important to understand your business environment to take advantage of any supportive incentives that may be available – like subsidies, tax deductions, etc.
- 3) And lastly it is important to understand the framework conditions to ensure that you comply with laws, regulations and other legal requirements. If you are not compliant, this can easily be used against you.

Aside from the legal framework and policies, there is a broad range of other institutional factors that influence RRR businesses. During this module we will not be able to cover all of these factors for all types of RRR businesses. To get you started on analysing your institutional environment we will look at the following key factors:

- **We will map actors to understand the structure and capacity of institutions:** this includes analysing organizational arrangement and understanding public mandates for water, sanitation and / or waste management. ... When we look at key actors, we will also analyse the effectiveness of these institutions – so understanding e.g. the level of bureaucracy you have to deal with to get a licence or benefits from other public services.
- **Secondly we'll look at the policy and legal framework:** this includes laws and regulations regarding environmental conservation, health, climate change, etc. as well as economic, judiciary or regulatory incentives promoting or hindering RRR businesses.
- **Then there is community support:** in this field we analyse the degree of community acceptance, so public perception of the use of products derived from waste and related RRR businesses.
- **And we'll look at the investment climate:** this refers to the status of capital markets and other forms of investment. So essentially, we will analyse how likely you will be able to access financing from banks and other investors.

Let's go step by step and look at each factor in detail. This will help us establish key questions you need to answer to assess the feasibility of your business idea. Further down, you also find a worksheet that lists all of the questions to help you document the analysis of your institutional environment.

Let us start with the structure and capacity of institutions, mapping the key stakeholders of your RRR business

Understanding who is involved in the sector and what roles each actor plays is an important pre-requisite to be able to properly analyse the legal framework and incentives for your RRR business.

So in a first step, you need to make sure you know all relevant public, private and non-for profit institutions, in the specific sector or sub-sector that you plan to do business in. Make sure you know who sets the rules of the game. So who sets and defines laws, regulations or standards.

Also, analyse if there are any overlapping responsibilities or limited cooperation among ministries and agencies in the area of reuse and crop commercialization as these create uncertainties and reduce transparency.

Overlapping responsibilities are common due to multiple entities and institutions regulating and playing different roles in the sector but not coordinating with each other (remember: we live in a world where everyone wears blinkers). This not only makes it difficult for your business to work and grow. If standards are being set by multiple bodies, this also creates a difficult landscape for investors. Check if there are inter-ministerial coordination committees. These facilitate the collaboration between these various bodies and serve as an interesting information source. At the same time they could be an interesting channel to reach different public institutions as clients or could become an entry-point for establishing public private partnerships.

Then you should assess the strengths and weaknesses of the most important organizations to understand if there are opportunities for mutually beneficial partnerships that can help sustain your RRR business. Public Private Partnerships can be strong vehicles to promote RRR business.

Let me give you a quick overview of the most common types of Public-Private-Partnerships (PPP).

- There is Build Operate Transfer (BOT): Private sector entity is delegated to build and operate a facility for certain time. During this concession period, the private entity is entitled to retain all revenues generated. Afterwards, the facility is transferred to public administration.
- Build-Own-Operate-Transfer (BOOT): Differs from BOT in that the private entity (during concession period) owns and operates the facility.
- Build-Own-Operate (BOO): Variant of BOT. Ownership of facility remains with the private entity (physical life of project coincides with concession period).
- Design Build Operate and Transfer (DBOT): Private entity is contracted to design, build, operate and then transfer facility.

Make sure you know which of these types of PPPs are common in your context to explore which PPPs might be most feasible.

I could continue with many other aspects that you need to know about the actors with a stake in your market. But instead I will rather walk you through a **stakeholder analysis** that can help you identify and understand all the players in waste production, management and reuse of recovered resources in your target area.

1. In module 1, you have already drawn a locality map and should have noted some stakeholders that are relevant for your RRR business. Map these and add any other **organizations involved along the waste stream from supply to reuse that might influence your RRR business. Try to cluster institutions according to waste collection, treatment/resource recovery, product marketing for reuse, product users and regulators. You may use the template provided in the worksheet below.**
2. **Now, note down for each stakeholder their responsibilities,** interests, power, organizational autonomy, and anything else you deem relevant for understanding if they could benefit or harm your business.
3. **Finally add any interlinkages between these organisations, so their** level of collaboration with other stakeholders.
4. Once you have mapped and described your most important stakeholders, start assessing their strengths and weaknesses. Also highlight the **stakeholders that will make the implementation of your RRR business particularly easy or difficult and how influential they are.**
5. Finally, assess if there are any gaps in the types of stakeholders that could make it difficult to establish your RRR business.
6. Now you have developed a good basis to start talking to different actors to complement and validate your stakeholder map. So at this point you should make sure you talk with many of them to make sure you did not forget to map any important actor or information about them.

Next to understanding your key stakeholders and their roles, interests etc. you also need to assess the processes and instruments that exist along the waste value chain. Are there established schedules for the collection of household waste, does this happen rather randomly or is waste collected upon demand? Are there informal waste pickers, who sort out valuable waste components and sell them? Do treatment plants collect tipping fees at the gate? How are budgets for municipal waste management services developed?

As you develop and complement your stakeholder map you will be able to identify the actors that are most relevant for your RRR business – because they may pose an obstacle or because there is an opportunity to cater to their needs or establish cooperation.

Now that we know all of the key actors, let us take a look at the legal and policy framework

The objective of this step is to understand what relevant laws, regulations and policies exist and which ones are in support of or in opposition to your RRR business? And also if they are being enforced...

Understanding the legal framework, in particular the existing environmental and health regulations is important because it will have implications on your technology choice, location, and the feasibility of your RRR business. We also analyse the legal framework, because you want to avoid sanctions and lawsuits!

Many waste-related regulations were originally designed to protect the public and the environment. And they were and are often times designed around conventional and central solutions. As a result, requirements and standards may be very constraining, demanding, cumbersome for innovative RRR solutions – to the point that Resource Recovery and Reuse may eventually not be feasible anymore.

Although in most low- and middle-income countries the value of water reuse is equally recognized in national water policies, these often fail to define related standards, guidelines, or national targets. And all too often, freshwater tariffs for irrigation are heavily subsidized, strongly limiting revenue expectations from wastewater sales.

Or biosolids. They are, for example, often defined as solid waste rather than as a renewable fuel. This makes it difficult for a biosolid business to benefit from renewable energy subsidies.

In this case it is therefore important to understand if there are specific criteria you have to meet, that allow changing the status of a RRR product from “waste” to “raw material”. Aside from potentially qualifying for subsidies, this could also mean that a product can be traded across borders as (new) raw material without the need to comply with sanitary regulations.

So constraining regulations, although designed for safety, may get in the way of your technology and process or finances! Similarly, the presence of certain regulations that limit waste disposal or require households to separate their waste at home can support RRR businesses, as they encourage waste recycling. Already separated biodegradable waste considerably reduces the cost of compost or biogas production for a RRR business.

Let me give you a last example for things to look out when you analyse the legal environment: If it is common practice that municipalities establish waste management contracts with private contractors you should take a look at the contracts they establish. Check, if contracts between the municipality and a private contractor are based on the processed waste volume only, or if they also specify the sale or reuse of the recovered resource. In the former case, it is of low relevance for the private contractor, if compost is eventually ‘burnt’, distributed for free, or sold.

So as you analyse the legal framework, your aim is to detect any incentives in contractual arrangements that could either promote or hinder RRR.

Beyond the analysis of the framework for RRR, you should also take a look at the general conditions for running a business. Take a look e.g. at the World Bank’s doingbusiness.org website, which provides a good initial overview.

I admit laws and contracts can be boring. But they are important to understand. Nevertheless, let’s move on. Let’s also look at whether-or-not the community is supportive of your business:

Next to the formal rules for RRR and doing business, societies are also regulated by informal rules of social conduct – so social norms. For assessing your community's support, you need to know what your community's awareness is on benefits, risks, regulations and laws around waste, sanitation and RRR. Are they aware of the benefits of RRR for society. What kind of RRR products do they know and how do they perceive them? Do they support or reject RRR businesses?

Most societies carry taboos related to faecal matter and waste and might be reluctant to buy products off you that are made of it. You should have already identified most of the social norms in the analysis of the market and your potential customers.

But it is not only RRR related norms that you should be aware of. Maybe you live in a society where for example being a female entrepreneur is frowned upon and it will be challenging for you to get supplies, licences or manage a (male) workforce – for instance. But I have also heard many entrepreneurs, who struggle because when they tell anybody they are founding a start-up their family and peers just consider them as ... well unemployed. It is important to be aware of what you are getting yourself into, so that such difficult reactions do not wear you down, as you hustle to get your business up and running.

The questions and examples I have given you should enable you to assess your local institutional environment now and decide whether it makes sense going ahead with your current business idea or if you need to adapt it to fit into opportunity spaces that you have identified in the institutional framework. Because let's be honest – changing the institutional environment is possible but a very long and tiresome process. Energy that you should rather invest into building a RRR business!

Once you have answered all the questions in the worksheet, head over to module 3 for blueprinting your business model.”

List of Reference:

Graph sources:

- Unless otherwise noted, all graphics and case studies from OTOO, M. (Editor), DRECHSEL, P. (Editor) (2018): *Resource Recovery from Waste. Business Models for Energy, Nutrient and Water Reuse in Low- and Middle-Income Countries*. International Water Management Institute (IWMI). Routledge

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