Impact investing: Measurement valued by investee businesses







Rory Tews and Thomas Scheuerle (Roots of Impact)

July 2017



About the authors

This report was written by Dr Rory Tews and Thomas Scheuerle from Roots of Impact.

Dr. Rory Tews is programme manager at Roots of Impact where he is responsible for impact management and guiding social entrepreneurs on impact generation, incentives and measurement. Rory is a social scientist by training, having earned his PhD at the University of Bielefeld, Germany. He currently manages a multi-year blended finance project in Latin America, has authored several articles, and has co-developed a new impact optimisation approach.

Thomas Scheuerle has been working as a researcher and scientific advisor in the fields of social entrepreneurship, social impact investing and social impact measurement since 2010. Trained in economics and social sciences at the Universities of Heidelberg, Mannheim, St. Gallen and Philadelphia (UPenn), his research focuses on how to leverage market mechanisms to achieve social and ecological goals. He has recently submitted his PhD thesis on cross-sector collaboration at the University of St. Gallen.

The authors would like to offer a special word of thanks must go to Patrizia Baffioni for her multi-faceted support. Thanks also go to Bjoern Struewer, Christina Moehrle and of course the interviewees for their contributions.

Thanks also go to members of the DCED Results Measurement Working Group for their contributions to and review of the study.

About the Donor Committee for Enterprise Development (DCED)

The Donor Committee for Enterprise Development (DCED) is the global forum for learning, from experience, about the most effective ways for creating economic opportunities for the poor by working with and through the private sector. The DCED's member agencies have developed a substantial body of knowledge and evidence about effective approaches.

The Results Measurement Working Group serves as a platform to share information and knowledge on results measurement in international development and to identify and support good practices and new approaches in this field.

Donors are now engaging directly with the private sector, as partners in development. In addition to this report, DCED research has examined the information valued by investees, how organisations are supporting their increased work with the private sector, how business structure influences social impact, and the enabling environment for inclusive business.

More information about the DCED can be found <u>here</u>; information about the Results Measurement Working Group <u>here</u>; and the DCED's work on the topic private sector engagement <u>here</u>.

Photographs on the front page are courtesy of Drik/Katalyst and ALCP Georgia

CONTENTS

EXE	CUTIVE SU	JMMARY	i				
1.	BACKG	ROUND TO THE STUDY	1				
2.	RESEARCH DESIGN						
	2.1	Terminology					
	2.2	Hypothesis development	3				
	2.3	Sampling	3				
	2.4	Interview approach	5				
3.	FINDIN	gs	5				
	3.1	Why do SEIBs engage in impact management?	5				
	3.2	indicator development and evolution	9				
	3.3	How is impact-related data getting generated?	11				
	3.4	What impact-related data gets generated by SEIBs?	13				
	3.5	How do SEIBs use their impact-related data?	14				
4.	DISCUSSION		18				
5.	SUGGESTIONS						
Ann	IEX		21				

This report was commissioned by the Results Measurement Working Group of the Donor Committee on Enterprise Development in order to shed light on the topic of data being generated by impact investee organisations. Little is known about the forms of impact data generated and valued by these enterprises, particularly why they are generating it and how they are using it.

Two key questions guided the study:

- (1) What information do social and environmental impact businesses value most and least, and why?
- (2) What are the key incentives for social and environmental impact businesses to collect, analyse and use information?

The terms Social and Environmental Impact Businesses (SEIBs) and impact-related data were used in this study, while the focus was placed on impact management as opposed to purely on impact measurement. SEIBs are businesses with explicit objectives aimed at mitigating or solving an environmental or social problem. Impact-related data refers to data generated and used by organisations to track and manage their impact and includes input, output, outcome and impact data. Impact data refers to data that only relates to impact.

Twenty-four interviews were conducted with agricultural and energy enterprises of varying maturity from Latin America (LatAm), South East (SE) Asia and East Africa. Three hypotheses were developed and used to guide the research process. The **major findings** include:

- Investor demands are a central motivation for impact management, but intrinsic motivation of interviewees seems to equally important.
- SEIBs make little use of standards and indicator databases, with the majority developing their metrics in iterative processes.
- SEIBs use two approaches to generate impact-related data. Extrapolation involves the use of coefficients/formulae to convert other data (primarily sales data) into impact-related data. The second approach is direct data collection. Many SEIBs also make use of hybrid data, which is data that is considered both business and impact-related data.
- Most impact-related data generated by SEIBs can be associated with the output and outcome levels of an impact chain. Little impact-level data is generated due to the high levels of complexity and cost involved.
- Technological solutions for impact management are prevalent among SEIBs, particularly for direct data collection.
- SEIBs use impact-related data in a number of ways, including for forecasting and impact
 optimisation. One finding of note is the use of impact-related data as a basis for real-time
 operational decisions, which can be used to improve organisational impact. This
 development is tied to the use of big data-type approaches.

The study concludes that **impact management is at a nascent stage in its development**, and that further support is needed to catalyse further development. Some **suggestions for support** include:

- Raising awareness of the benefits of impact management through advocacy or case studies;
- Offering education and consultancy support (particularly for early-stage SEIBs);
- Supporting the development of or subsidising technological solutions for impact management.

1. BACKGROUND TO THE STUDY

In a <u>preliminary review</u> of current practices in results measurement in the context of impact investing, the *Results Management Working Group* (RMWG) at the *Donor Committee for Enterprise Development* (DCED) identified a lack of relevant knowledge around the information that social and environmental impact businesses (SEIBs). The purpose of this report is to deepen the knowledge about impact measurement practices of SEIBs operating in emerging market and developing economies¹. Two key questions guided the study:

- (1) What information do social and environmental impact businesses value most and least, and why?
- (2) What are the key incentives for social and environmental impact businesses to collect, analyse and use information?

The analysis of these questions is based on a systematic and solid empirical basis that goes beyond anecdotal evidence, and the results help to identify useful measures to support investees, investors, intermediaries and other stakeholders in the field.

The Global Impact Investing Network (GIIN) describes impact investing as 'investments made into companies, organisations, and funds with the intention to generate social and environmental impact alongside a financial return.' It is being touted as an approach to mobilising private investment from fund managers, private foundations, business angels, or development financial institutions to help achieve the Sustainable Development Goals (SDGs). Of course, addressing sustainable development through private investments involves challenges with respect to measuring and managing the impacts (both positive and negative²) generated by investee organisations.

On the other side, impact management in SEIBs has been receiving some attention over the past years. On a practical level, various organisations — enterprises themselves as well as support organisations or funders — have been developing frameworks and approaches to track impact and manage for impact as well as to communicate impact to clients and investors. For illustration, among those pushing the boundaries in this respect are Acumen with their <u>Lean Data</u> approach, CERISE's social business <u>scorecard</u>; or Grameen Foundation's <u>Progress out of Poverty Index</u>; or on a technical level service providers such as <u>Field Buzz</u> or <u>TaroWorks</u>.³

However, there is a general lack of research focused on impact management practices among SEIBs in developing contexts. Often, research is skewed toward assessing practices among investors as opposed to investees.⁴ This study builds upon insights from the field, and hopefully produces fresh insights and further conceptual building blocks.

² Dealing with the issue of negative impact was unfortunately outside of the scope of this study.

¹ As defined in the World Economic Outlook 2017 of the International Monetary Fund.

³ These examples are far from being comprehensive; other publications offer further examples (see the <u>report on impact measurement</u> of the Social Impact Investment Taskforce or the report on the <u>business value of impact measurement</u> of the GIIN network.)

⁴ Among the exceptions are, for example, Acumen and Root Capital's report on <u>mobile technology</u> in impact assessment, Keystone Accountability's report on <u>investee perceptions of investor performance</u> or ANDE's work on impact measurement around the SGB sector.

2. RESEARCH DESIGN

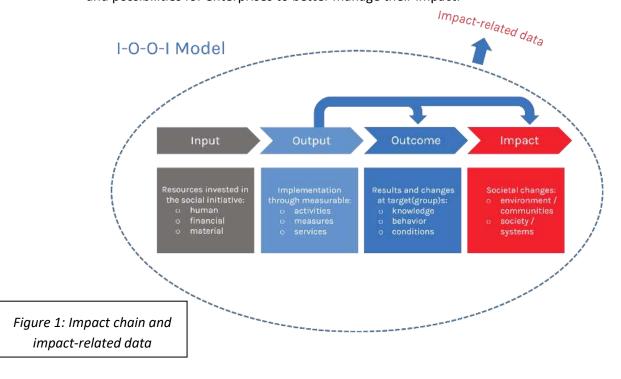
KEY POINTS:

- The terms *impact management* and *impact-related data* were used in this study (as opposed to impact measurement and impact data).
- Three hypotheses were developed and used to structure the research.
- 24 semi-structured interviews were conducted with energy and agricultural SEIBs in LatAm,
 East Africa and SE Asia.

2.1 TERMINOLOGY

As in many nascent (research) fields, key terms in impact measurement and impact investing are used in different ways by different actors. Before starting into the actual analysis, it is therefore instructive to provide further clarification on key terms used in this report:

- Social and environmental impact businesses (SEIB) are organisations with explicit objectives aimed at mitigating or solving an environmental and/or social problem. Examples of such issues include poverty, climate change, or dangerous living conditions. These impact-goals are linked to or accompany financial objectives and a predominantly market-based income model.
- Impact measurement is understood in this study as the process of data generation and analysis. Impact measurement is an integral part of impact management. The latter also covers processes and decision-making regarding impact, which are based around the impact measurement process. Impact management may also include impact forecasting, leveraging of impact results to acquire funding or clients, or impact optimisation efforts.
- Impact data is distinguished from impact-related data in this study. The reason for this distinction stems from the 'impact value chain' made up of input, output, outcome and impact. Practitioners tend to use the term 'impact data' to describe data from all steps, while for the DCED impact data refers to data reflecting actual environmental/societal changes. The volume of impact data in the narrow sense is limited in comparison with data from earlier steps in the impact value chain. Thus, the term 'impact-related data' is used when referring to data that are generated and used by organisations to track and manage their impact. Data from all steps, and not only impact data, can provide key insights and possibilities for enterprises to better manage their impact.



2.2 HYPOTHESIS DEVELOPMENT

To generate data relevant to the key questions motivating this study, three initial hypotheses were derived from a literature review, which then formed the basis for the interview structuring and interpretation.

In addition to the final formulations in the hypotheses below, other issues closely considered included the question as to SEIBs' understanding of impact and impact-related data, the pressure SEIBs get placed under by investors, and the actual costs of data generation. The initial hypotheses were discussed with seven experts experienced in dealing with SEIBs. The appropriateness of the hypotheses, their formulation, and the possible means of generating related data were explored.

The character of the hypotheses is thus rather broad to subsume the wide range of aspects deemed relevant for the study, yet focussed enough to be of use in structuring the research process:

- Hypothesis 1: Impact-related data is not used in management decision-making processes.
 - The aim of this hypothesis was to shed light on how central a role impact-related data plays for SEIBs, thus highlighting what data is valued (or not) and for what purposes. A particular emphasis was placed on the relative importance attached to financial versus impact-related data in decision-making processes.
- <u>Hypothesis 2</u>: With respect to impact-related data, external factors are more influential than internal factors.
 - This hypothesis aimed to assess how much intrinsic motivation the SEIBs exhibit with respect to impact-related data. Do they push themselves as far as possible when assessing their social/environmental performance and make business model adjustments accordingly, or do they only react to external factors such as information requirements from investors?
- <u>Hypothesis 3</u>: Awareness of the value of impact-related data is more important than the capacity to generate it.

The third hypothesis aimed to shed light on the factors that influence the generation of impact-related data, and to find out how best to tackle deficiencies in impact management processes among SEIBs. It is still unclear whether SEIBs invest into impact management, and why they do or do not. Issues that get cited in the literature include capacity deficiencies around financial and personal resources, or a lack of knowledge about the value that such data can bring to their organisation (i.e. lack of awareness).

2.3 SAMPLING

There were five primary parameters set out by the DCED for the study: social and market orientation, sectors, regions, investment history, and stage of enterprise development. A total of 24 interviews were conducted (see Annex 1) and Figure 2 summarises the breakdown according to the parameters.

- Social and market orientation: All interviewed SEIBs needed to self-identify as being impact-focussed. There were no criteria with respect to legal form nor profit distribution. Furthermore, the businesses should aim at financial self-sustainability through their market activities or in the case of start-ups/growth stage businesses, they should plan on achieving financial sustainability based on revenue generation.
- <u>Sectors</u>: The agriculture and energy sectors were singled out for this study due to their crucial importance within a developing context and interest to DCED RMWG members. Advances in the agricultural sector heavily influence food security and employment rates, while access to energy (particularly electricity supply) has strong developmental effects across an array of areas including health and education.

- Regions: Interviews were conducted with partners operating primarily in Latin America, East Africa, and South-East Asia to assess whether there were any major variations, which could be identified due to geographic context.
- Investment history: Interviewees should already have secured some form of 'hard' investment. Hard investment refers to investments whereby at least the amount initially invested has to be repaid by the enterprise. The standard forms of relevant investment were taken to be debt and equity. The interviews showed that SEIBs in all stages, i.e. also in growth and mature stages, also utilise grant funding to a greater or lesser extent. They use this money for product development, but at times for targeted scaling activities.
- <u>Stage of organisational development</u>: Each of the enterprises were assessed to ascertain their level of organisational development, with organisations from three stages involved in the study:
 - Start-ups: Business model still in development; initial funding secured, though not necessarily repayable investment (this is the only organisational type which does not have to have had a round of 'hard' investment).
 - Growth stage: Business model is settled; organisation entering or in expansion phase; investment has been secured.
 - Mature organisations: At least one phase of expansion has been executed; multiple rounds of investment may have been closed.

The stage of organisational development was simultaneously the most difficult criterion to judge objectively, and the one which had the clearest level of significance with respect to variations in the findings.

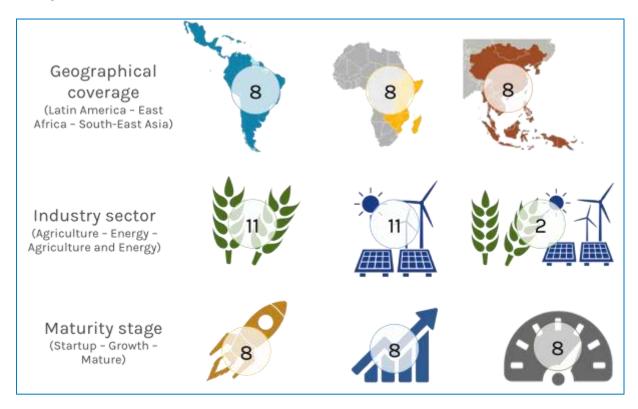


Figure 2: Breakdown of interviewees by region, sector and stage of development

-

⁵ Though some start-ups were exempted.

⁶ This is in contrast to 'soft' investment, which would not have to be repaid (i.e. grant funding).

⁷ The founding years were also used as an initial indicator, and used for the filtering and approach. Actual maturity stages did not always correspond exactly with those dates.

2.4 INTERVIEW APPROACH

The research was conducted using a qualitative paradigm. The interviews relied on a semi-structured style, meaning that there was a prescribed set of questions to be asked, but that the interviewer also had some freedom with respect to the order in which the questions got asked and whether additional questions could be added. The semi-structured approach is advantageous in that it leaves room for the interviewees to express concerns or ideas, which may not have been considered significant as we designed the research project. There were two sets of interview guidelines, one for start-ups, and one for growth or mature enterprises (see Annex 2).

Once the interviews had been conducted, summaries were produced for each. The data generated were sorted along the lines of the three hypotheses, while further points of significance were also noted. The data was jointly interpreted by the research team in a series of calls and workshops.

INFLUENCE OF MATURITY, REGION AND INDUSTRY

The findings outlined in the following section were generally constant across the examined regions and industries. The strongest influence on the impact management structures was the stage of organisational maturity, with sophistication increasing with maturity. The influence of maturity, region and industry is highlighted where relevant in following sections.

3. FINDINGS

3.1 WHY DO SEIBS ENGAGE IN IMPACT MANAGEMENT?

KEY POINTS:

- Investor demands are a central motivator, but not as negatively perceived as assumed.
- Interviewees expressed very high levels of intrinsic motivation for impact management.

EXTERNAL FACTORS

Several external drivers for the collection, analysis, usage and reporting of impact-related data emerged from the study.

Interviewees noted that the most central consideration regarding impact-related data is to attract investment and serve investors' needs. Several SEIBs stated that they are generally open to the type of data they collect if it is necessary to secure funding. The requirements of private and public entities vary, as do requirements associated with repayable and non-repayable finance.

Investor demands vis-à-vis impact-related data are often considered by interviewees to be particularly demanding, as they drain resources away from what interviewees consider their social mission. With respect to impact management, both public and private providers of non-repayable finance, i.e. grants, are in general more demanding. They often require specific impact-related data and more commonly set concrete goals that should be achieved. When it comes to investors of repayable finance, the picture which emerged was very heterogeneous. With regards to data requirements, three basic types of investors were distinguished from the analysis:

⁸ E.g. three start-ups and one growth stage SEIB had not yet established any form of impact measurement system.

• Impact-focussed investors⁹ have relatively high data demands, sometimes even for complex and costly approaches such as *randomised control trials (RCT)*. This led to SEIBs setting up new indicators for new investments:

"Usually, what we have to do is to learn what the funder wants to hear and what they are interested in, and develop the data that fits that interest."

- Sector-specific-investors place an emphasis on indicators related to the issue they are themselves trying to address (such as biodiversity or livelihood in rural areas). Such investors tend not to pay too much attention to other 'general' impact-related data the SEIBs generate.
- Impact-adaptable-investors assess what type of data the SEIB was generating previously, and then continue with this or even help in further developing the impact management approach:

"We contributed in the design of reporting templates for investors. They don't want to be an additional burden; they are helping in simplifying the reports."

Only two SEIBs reported cases of having to generate data they were not actually interested in. In another case, the investee had to align its indicators with the terminology of the funders. In some cases, SEIBs had to provide data to unlock new tranches of a loan.

Where interviewees mentioned investor demands (only three SEIBs did not mention them), there were mixed views on whether impact investors are demanding about impact-related data. Some

SEIBs expressed frustration that while investors may demand impact-related data, they are only interested in financial data when it comes to decision making. Early-stage SEIBs noted it difficult to assess the strategic focus of investors. Several interviewees noted a lack of impact-first investors¹⁰, having the impression that impact-related data serves little purpose beyond window-dressing.

"Also, the impact sector in general is important.

Sometimes you get the impression that it is about the same returns as in commercial investments, and that the only purpose is to put a nice bow around it. It is at least as important to address the mindset of the investors as those of the social entrepreneurs."

Impact-related data can also be of interest for **stakeholder alignment** encompassing parties other than investors. For example, SEIBs conduct studies with NGOs or public entities who have an interest in understanding and demonstrating the impact of their projects, with some collaborations for scale-

_

⁹ Including grant-makers.

¹⁰ The term 'impact first' refers to impact investors who prioritise the social or environmental impact of their investment over the financial returns whereas 'financial first' investors prioritise market returns, supported by social or environmental impact. Therefore, several interviewees felt that the prioritisation of impact vs finance influenced the attitudes of investors towards impact-related data. However, it was unclear whether interviewees' views hold for both public and private entities; interviewees did not usually differentiate explicitly during the interviews.

up reported. A particularly interesting case occurred in Rwanda, where impact tracking structures are being established on a macro level (see mini case study on Nuru Energy).

Mini case study "Nuru Energy": Linking impact data to macro welfare indicators

Nuru Energy from Kigali (Rwanda) sets up a local village entrepreneur, individuals or groups, who sell devices (LED lamps, mobile phones, etc) to households as loss leaders and who then use Nuru Energy's portable, off-grid recharge equipment to recharge them on a fee for service basis. In this way, households get access to energy when they need it and do not have to invest in infrastructure they cannot afford. Impact-related data is particularly important for Nuru Energy in Rwanda, where President Paul Kagame and his government have developed a set of KPIs that is established through the hierarchical administrative structure all the way to the village level. Village leaders themselves are incentivized to achieve good results in certain KPIs such as economic development, reduction of environmental degradation and social improvement. These indicators are covered and monitored by Nuru Energy, which helps them in disseminating their business model.

The external factors affecting data collection, analysis and use were consistent across the three regions and two sectors covered in the study. However, there were some differences according to the maturity of the organisation. Most interviewees from start-ups did not emphasise external factors since early funding rounds often rely on money from family and friends or small seed grants with low reporting requirements. However, two start-up enterprises reported that they had incorporated impact-related data from the beginning to secure funding. Other SEIBs stressed the importance of impact-related data for attracting investors in the growth phase where the capital requirements are particularly high. By this stage, sufficient impact-related information is generally available, offering potential investors a comparative basis and thus impact-related data is a potential competitive advantage for some SEIBs.

INTERNAL FACTORS

All but two SEIBs stated that they had an *intrinsic, mission-related motivation* for generating impact-related data. The entrepreneurs are personally interested in their impact, since they are driven by a social mission and they want to know whether they achieve that. Interviewees noted that impact-related data motivates and "encourages" them and "keeps the moral up".

Mini case study "Ilumexico": Impact-related data for team awareness

Ilumexico regularly shares Impact-related data among the team members in order to foster internal motivation of the team and keep them aware of the progress. "It is a metric, a KPI of success for the organisation and it is shared with everyone in the organisation, from the field officer to the CEO, they receive every Monday in an email the comedown of our five central KPIs." The key indicators shared internally are: capacity installed (sales), amount of CO2 saved (based on sales data), power generated based on a calculation, number of people served in remote areas, amount of money lent.

This intrinsic motivation translates into SEIBs, regardless of their region or sector, actively using impact-related data for running their organisations and making actual business decisions – which we will come back to later. Although almost all SEIBs in all maturity stages noted that they are intrinsically interested in their impact, six SEIBs stated that they explicitly try to balance financial and impact data needs.

"We divide our market in three sub-segments: we work with subsistence farmers, small farmers and productive farmers. So, in terms of business decisions we will think a lot about this mix. In our business model, it is less effort for more money to sell a larger system. Also, the environmental impact, such as the CO2 emissions avoided, will be higher for these systems. But the social impact will be lower because these are usually people who are not poor. We keep a very high focus on the subsistence and small segments in terms of our mission and impact."

Only two SEIBs went so far as to say they were impact-first, prioritising impact concerns over financial in decision-making processes. By contrast, thirteen of the 22 interviewees stated that when

making decisions they give priority to financial viability — mirroring to an extent SEIBs' perceived views on impact investors' priorities vis-à-vis the use of impact-related and financial data. The logic here is simple: If the enterprise goes bankrupt, it will not generate any impact.

"[Name] is a for-profit business, our first responsibility is to create income to pay the salaries. But when this is achieved, impact is a strong focus. And it also helps us to raise additional funds and to grow."

Several interviewees implied that the

use of impact-related data in organisations is a question of awareness and culture. This holds firstly for the relevance of such data for the executive management team and their perspective on how it should be integrated into the organisation. A SEIB with a strong affinity for data stated:

"From the moment we were founded, we were very data-driven. Data has always been part of what we do."

The attitude towards data among the SEIBs also plays a role in its generation. Motivation of field officers, sales agents and other employees to collect data and keep data systems up-to-date can be comparably low:

"We had no – let's say 'culture of importance of good data'."

Awareness of the significance of impact-related data seems to be lower in early growth stages of SEIBs (independent of sector or region). One start-up admitted, however, that funders' earlier pressure for impact management might have been unfavourable in the short run, but the SEIB benefits from it now. If the funders had not pushed for the impact management (which had been "nice to have"), the start-up stated that it probably would not have done it, with the focus instead on sales and product development. Today, however, it is perceived as helpful to have the data for efficient marketing activities.

Impact is thus a central motive for the SEIBs interviewed, but interviewees noted that it is vital that the product/service works and the business takes off to achieve financial sustainability. It is unclear from interviews whether there is a tipping point after which impact-related data becomes more central to decision-making. What is clear, however, is that SEIBs are using their impact-related data in a variety of ways.

3.2 INDICATOR DEVELOPMENT AND EVOLUTION

KEY POINTS:

- There is limited use (and awareness) of indicator databases and standards.
- Most SEIBs develop their systems in an iterative, trial-and-error manner.

Few interviewees reported using indicators from standards such as IRIS or the Global Value Exchange. SEIBs tended to develop their own indicators from scratch. Some SEIBs used common indicators such as beneficiaries' income increases or reduced CO2 emissions (with minor variations in their practical implementation). Most SEIBs feel positively about standard approaches and are open to utilising standards should they be required by investors, or if there is a need for standards to learn from and to implement in their own businesses.

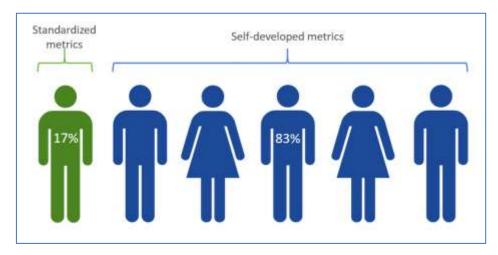


Figure 3: Use of standard metrics vs. self-developed

The results indicate that many entrepreneurs are not yet aware of the various possibilities available, or if they are aware then they are not satisfied with them. For example, two interviewees that had a successful business career before starting their SEIBs criticised the problem of benchmarking impact through current indicators in comparison to established business indicators. One stated that the number of indirect beneficiaries is understood in a far broader sense in Kenya than in Mexico (grandparents/-children, nephews and nieces etc. vs. core family). Another social entrepreneur argued in the context of impact forecasts that it is extremely difficult to make clear predictions about potential income increases of beneficiaries in new communities because contexts (e.g. distance to next town and the related work and shopping opportunities) vary strongly.

The vast majority of SEIBs took a bottom-up approach, developing indicators from their own impact model rather than selecting from lists of standardised indicators. The impression from the interviews is that there are differences in the interpretation and actual application of indicators, even if the same name is used for a given indicator across organisations. The limited use of standardised indicators complicates the process of comparing impact (both for investors and enterprises themselves) and the process of comparing the methodologies used in generating the data. SEIBs reported drawing on external help from consultancies and academic institutions in order to help develop their impact metrics. One of the most positive insights from the study was the number of SEIBs who reported funder collaboration (and not simply financial resources) as a source of support for metric development.

¹¹ This case might, however, show the influence of a geographical factor due to different cultural caregiver and family structures in East Africa and Latin America.

¹² In the rare cases of gathering data at the impact level, studies were also designed with control groups.

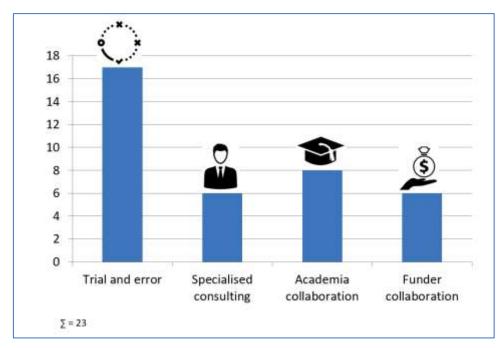


Figure 4: Means of metric development among SEIBs

While it was difficult to identify the factors which influence the further *evolution of metrics*, one point stood out that indicates a limited focus on continuous development: Baseline conditions are usually checked, at least on a superficial level, before starting operations in an area. This does not mean, however, that changes in contextual factors are tracked on an ongoing basis. For example, if a previously pressing problem is overcome, enterprises may not adjust their impact-related calculations and messages to reflect these shifts¹³. The following case study illustrates how one firm deals with this issue.

Mini case study "aQysta"

aQysta from the Netherlands focuses on extrapolation of data for tracking and managing impact. The company developed a high-tech water pump to support local farmers initially in SE Asia. The pump improves the efficiency of their irrigation system, and allows the replacing of costly and air-polluting diesel through water power. The pump performance has an impact on income opportunities, nutrition dependency from import of "cash crops" such as fruits of the farmers and their families. To generate valid data, aQysta has not only developed a smart phone app to easily record the performance of pumps in the field (and send it to a centralized database) but also set up an own demo farm to measure input and output parameters of the pump and farm. By testing their assumptions and creating reliable coefficients, they aim to "extrapolate" impact data from certain key performance indicators as precisely as possible.

_

¹³ E.g. one interviewee pointed out that if no kerosene is used in rural communities over the last years, some enterprises still argue that solar panels replace it and base model calculations on this assumption.

3.3 HOW IS IMPACT-RELATED DATA GETTING GENERATED?

KEY POINTS:

- Two impact-related data generation strategies are identified: Direct data collection and extrapolation. The use of 'hybrid' data is commonplace.
- The use of technological solutions is widespread.

	Industr	y sectors			Matur	ity stage	
	Tech solutions applied	Interested in tech solutions	Tech solutions NOT applied		Tech solutions applied	Interested in tech solutions	Tech solutions NOT applied
***	8	1	1	3,0	3	3	2
いない	5	3	2	41	5	1	
######################################	2				7	1	
Σ = 22				Σ = 22			1

Figure 5: Application of technological solutions by industry and stage of maturity

Regarding *data generation*, three basic approaches can be distinguished. The first approach is direct *data collection*, which 22 of the 24 interviewees engage in. Data is collected mostly via surveys, questionnaires or interviews¹⁴.

It is notable that SEIBs interviewed exhibit a high affinity to using digital and mobile technologies to collect data. Fourteen interviewees use these technologies already and at least five more are interested in doing so in the future. Technology solutions include mobile phones used for surveys; sensors which, for example, track the amount of water pumped or the fume production of stoves; and 'connected' devices, such as solar-based kiosks as charging stations, that provide real-time data.

Mini case study "Farm from a Box": Increasing productivity and continuous improvement through smart technologies

Farm from a Box supports rural communities in growing their own food and earning an income. A modified shipping container serves as a turnkey solution; it contains a complete toolkit of smart farm technologies for renewable power, micro-drip irrigation, or supportive information and communications technology. Sensors constantly collect data such as the amount of solar power collected, the amount of water pumped, temperature in cooling devices, evaporation in the field and weather conditions. This data – together with external data such as market information - is permanently analysed and used for improving agricultural productivity, such as for example efficient watering with rainwater.

The second approach for impact-related data generation is *data extrapolation*, where SEIBs rely on evidence-based coefficients and model calculations. Eight of the interviewees in the sample used such approaches. Data extrapolation enables businesses to convert easily trackable indicators, such as sales figures, into outcome or impact data. For example, the amount of briquets or lamps sold or

_

¹⁴ The target groups generally are not involved in the impact measurement set-up.

the number of trees planted can then be translated into amount of CO2 emissions saved. Existing research is used to estimate benefits such as additional learning time in the evenings due to light from an installed solar lamp system. Indicators are identified through reviewing existing research on the benefits of such products or their relevance to the businesses operational model.

Mini case study "Green Bio Energy": Extrapolation of impact-related data

Green Bio Energy from Kampala (Uganda) energy-efficient briquettes and cooking stoves in order to address high costs of energy supply, deforestation, carbon emission, and unhealthy fumes caused by the use of conventional fire-wood and charcoal for cooking. The company uses model calculations and coefficients to measure their impact, e.g. estimating the CO_2 offset or the trees saved from cutting per ton of briquettes sold. In the model calculation for the latter, the equivalent in energy from an average tree is estimated by subtracting branches and leaves that don't burn, as well as losses in the inefficient carbonisation to charcoal, through transport and through related losses such as through friction.

The interviewees who use extrapolation consider the technique to be less resource-intensive than direct data collection. There was little indication that interviewees considered the relevance of this data, the accuracy of the calculations and the transferability of the data across contexts. For instance, context-specific variations in the reception of services and products as well as changing conditions may affect the accuracy of the assumptions underpinning the extrapolations, particularly in the case of new markets or market segments.

Finally, many SEIBs engage in the use of *hybrid data*. Here, impact-related data such as 'income increases' or 'amount of electricity provided' is directly extracted from the SEIB's key performance indicators (KPIs) which serve as *proxies* in such cases. Hybrid data is understood not simply a usage of business KPIs, but a means of reframing data to serve a dual purpose of representing both commercial and impact performance of the enterprise. The use of impact-related data is explained in Section 3.5.

Mini case study "Coffee for Peace": Using sales data in forecasting impact

Coffee for Peace from the Philippines supports local farmers in producing and marketing - as an intermediary trader - high quality coffee, thereby promoting peace building and protecting the environment. The impact created by the company is calculated from the sales figures; the amount of purchased coffee by Coffee for Peace translates into an increase in income for the farmers. This higher income is directly connected to the increased ability to send children to school and access to healthcare services.

For example, when an SEIB purchases crops from its target group (smallholder farmers) to process and sell on international markets, the SEIB's purchasing data equates to the income for the farmers. In decentralised electricity provision via micro franchise models, the amount of energy sold by the franchisees provides information about the additional energy that has been supplied to the communities in question.

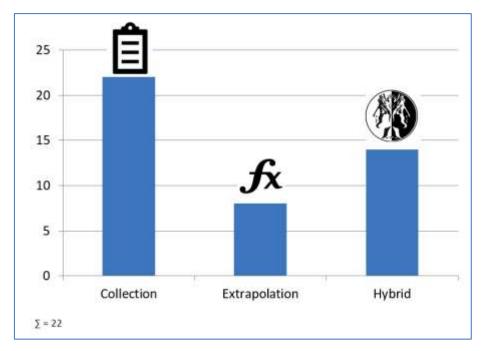


Figure 6: Means employed by SEIBs in sourcing impact-related data

3.4 WHAT IMPACT-RELATED DATA GETS GENERATED BY SEIBS?

KEY POINTS:

Impact-related data most often concerns the output or outcome levels of impact chain.

• Three categories of data are identified: environmental, socio-economic, and social.

Generally, SEIBs across both sectors and the three regions generate data at the *output* and *outcome* levels of their impact model. Only five SEIBs in the sample generate *impact data*¹⁵. However, SEIBs collect data in the context of specific projects and not for all their activities. SEIB leaders are aware of the difference between output, outcome and impact, and many stated that they would be interested in collecting impact data if they had more expertise and resources.

Based on an inductive approach, this study identified three categories of data that are strongly interrelated in terms of the underlying measurement approach and the position along the impact-chain.¹⁶ Examples for each classification are placed along the impact-chain in Annex 3. Some stable patterns between the types of data and the way data is gathered were found:

Environmental impact data cover aspects that have an impact on the natural environment.
 Depending on the individual perspective, SEIBs generally consider positive achievements as being intrinsically valuable (e.g. biodiversity as a value for itself) or because of the effects on human living conditions¹⁷ (e.g. biodiversity as a precondition for the development of medicine).

Findings suggest that for *environmental data*, SEIB rely heavily on *data extrapolation*, since aspects such as CO₂ emissions can realistically only be estimated. Compared to

-

¹⁵ This was in line with our expectations.

¹⁶ There is, of course, a wide range of theoretical frameworks, which one could use to categorise impact data. For the sake of brevity – and in the light of our research question –, we chose to simplify the distinction.

¹⁷ The question of the intrinsic or instrumental value of the environment (the latter corresponds to an anthropocentric of human-centred view of the world is generally in line with the debate around <u>ecosystem</u> services) is a fundamental one in environmental ethics, but not one we engage in here.

socioeconomic or social data, heterogeneous contexts are seen as having a lesser influence on the impact generated across different contexts and as such extrapolating from outputs or outcomes to impact across different contexts is considered reliable.

- Socio-economic data covers impact on the *economic* conditions for ensuring individuals can live and work in a given region. Socio-economic data may relate to the micro level that is for individuals, households or enterprises, or at aggregated levels such as communities, regions or even countries¹⁸. Data often relates to access to basic goods and services via markets, increases in potentially productive (human) capital that can improve economic livelihood, or the resources and infrastructure available.
 - In contrast to environmental data, socio-economic data is generated primarily through direct *data collection* mechanisms such as surveys, or the use of hybrid data extracted from procurement or sales figures. Socioeconomic data and financial KPIs of the SEIB are often considered as two sides of the same coin by interviewees (i.e. hybrid data is common). SEIBs generally try to gather such data efficiently, either by linking it with customer satisfaction surveys or by a close correlation with financial data.
- Social data covers aspects that capture the quality of life for individuals, households and communities. Social data often relates to people's opinions about their experienced 'empowerment', 'participation' or 'health' and can be related to the impact level. Measurement of social data is usually complicated and SEIBs report needing support when attempting to generate such data.

In this study, few SEIBs undertook the effort to generate social data on a regular basis. Interviewees reported using methodologically elaborate data collection processes to collect qualitative data, implying that hybrid data and extrapolation are less effective for social data. Further, whilst the ecological and socio-economic data categories are dominated by quantitative data, qualitative data is more commonplace when it comes to social data. An overview of indicators used by the interviewees sorted per type (input, output, outcome, impact) are outlined in Annex 3.

3.5 HOW DO SEIBS USE THEIR IMPACT-RELATED DATA?

KEY POINTS:

- Five inter-related uses for impact-related data arose in the study.
- Impact-related data can help identify additional business opportunities.
- Impact-related data is emerging as a means of identifying impact opportunities.

From the interviews, five key uses for impact-related data have been identified: forecasting impact, tracking impact, optimising impact, leveraging impact and — unexpectedly — identifying impact opportunities. The term impact intelligence is used to designate the whole cycle of data use within SEIBs.



Figure 7: Impact intelligence cycle for SEIBs

¹⁸ Impact measurement is usually restricted to the community level, however.

¹⁹ More cultural and political aspects such as 'tolerance', 'freedom of speech', 'democratic rights' etc. could be a part of this dimension, but were not relevant in this study.

FORECASTING IMPACT

Five SEIBs interviewed use impact-related data to produce *forecasts and target-setting* for their impact. Parallel to their financial planning, impact forecasts allow them to monitor their impact-related performance against the targets set, strengthen the focus on impact, and see potential conflicts between financial and impact goals. It was used by some SEIBs for benchmarking, e.g. on how different branches or franchises achieve their targets. A mature SEIB engaged in fair trade agriculture applied impact forecasting for the first time this year:

"We do an impact forecast, such as the number of farmers to be reached etc. This forecast is transferred to local teams, which have to achieve these in the same way as financial targets. It is happening for the first time now, so I have no experience. But at the end of the day, it is part of the business model; helps us in focus on impact; and can also influence decision-making when impact results are more important than solely financial goals."

Forecasting can also be important for attracting investors. For example, one highly professional, experienced start-up team used an extrapolation-based approach to generate forecast which they included in their feasibility studies. They also used these projections when approaching impact investors.

TRACKING AND OPTIMISING IMPACT²⁰

While all interviewees reported generating some form of impact-related data, the interviews did not explicitly cover whether they use impact-related data to directly optimise their impact, e.g. through

adjusting their business model or reallocate resources. However, as mentioned above, more than half of the interviewees emphasised that financial viability must be secured and therefore their focus is primarily on financial data for decision making rather than impact-related data.

"We want to be profitable but we want also to serve the poor. So this mix which has impact for a number of people who benefit from the technology is one of the key indicators that we track and is useful for decision making."

One interviewee emphasised that in the early stages of projects or company activities there is strong need to check basic assumptions about impact with empirical data to refine the business model. It is unclear whether this is common practice, or if it applies for growth activities where a model is applied in new contexts.

The findings indicate that balancing impact performance – and by implication efforts to optimise it – with financial performance is more common in the agricultural sector than the renewable energy sector (six of eight interviewees who said impact performance is as, or more, important than financial performance were from the agricultural sector). The maturity of the SEIB showed no significant influence.

_

²⁰ While tracking and optimising impact may be viewed as being conceptually distinct activities, they have been collapsed them here for brevity as the tracking process was addressed in the section on how impact-related data gets generated.

LEVERAGING IMPACT

The impact-related data generated and analysed is invariably interwoven with the interests of actors outside the SEIBs. Twelve interviewees reported that there was a direct relationship between their impact-related data and external actors who were funders. Interviewees reported that impact-related data used by impact investors, grant makers, NGOs or public entities to demonstrate that they have achieved specific goals. Various ways of leveraging the SEIB's impact were mentioned.

One interviewee stated that impact-related data helped to strengthen the brand of his company. Several interviewees stated that impact-related data is used to convince users themselves and that it is a useful sales argument. For example, a renewable energy business may use data to demonstrate to potential customers that the cost of electricity can be reduced if renewable sources are used.

Some SEIBs use both qualitative and quantitative data to illustrate success stories or publish videos on their web pages. Stories and material focussing on an estimated monetisation of the impact are seen as helpful in many situations, while environmental and social data might be relevant for other stakeholders, including others in the supply chain. In fair trade agriculture, for example, firms who process commodities or products bought from an SEIB can use impact-related data for marketing purposes:

"Traceability is also very important for our clients. So where do we get our natural resources from, what is the impact of buying the products on the life of those farmers. So, we have to be really explicit about that."

Crucially, several SEIBs create revenue streams from the data collected. Examples provided by interviewees included analysing it to identify further client needs; partnering with companies that might pay a commission for the knowledge; using data to learn about the functioning of their innovative products and services used in the business model. Another interviewee stated that sensors that measure the water streaming will lead to the emergence of interesting new services.

Mini case study "Village Infrastructure Angels (VIA)": Open data and mapping services for infrastructure development

Village Infrastructure Angels develop solar-based power projects at community levels, with solar technology for homes and agro-processing. Based on their experience, they produced mapping and field studies for identifying the best impact opportunities as a key component of their services. The company helps rural villages in developing countries to access important infrastructure necessary to reduce poverty, e.g. access to electricity, agricultural machinery, and water pumps for irrigation and drinking water. But VIA have also created on-line containing over 500 layers of useful information and over 2 million points of data, for example about access to electricity in households. They sell knowledge and consulting services as additional revenue streams. At the local level, tools have been created to map individual households in remote unmapped rural areas or to create least-length rural electrification networks using open source algorithms, producing network plans. In addition to that, they collect real-time data on home and agro-processing units leased to end-users.

IDENTIFYING IMPACT (OPPORTUNITIES)

In addition to measuring impact ex-post to adjust general business structures or to produce forecasts on an aggregated level of indicators, ten SEIBs stated that they are experimenting with ways to make use of data to increase the real-time impact on the ground. The use of impact-related data to identify impact opportunities goes to the level of single beneficiaries. SEIBs report that

mobile technologies and sensors now allow for real-time data monitoring. Coupled with possibilities to analyse large amounts of data (big data), real-time impact-related data may enable a constant optimisation of pricing models, performance, or location and distribution decisions:

"The more baseline data we have, the more we will be able to modify and make whatever changes are necessary to make our product even better. We will definitely use all that data as we grow. [...] it is our opinion that the data we provide will be positive for us, our investors, our potential clients down the line and any other agents that sees the benefit of what we have created."

"For market identification, it is important to understand for [name of the company] where there is cell phone coverage, lack of electricity and high population density.

We match this with performance of our sales agents and marketing efforts (Radio, TV in this region)."

Ten SEIBs already link and leverage their own data and/or data provided by third parties (governments, NGOs etc.) to help identify the most likely possibilities to make an impact. It is not always clear if data is used for assessing real-time impact potential as opposed to commercial potential. This is partially because of the strong overlap between financial KPIs and impact-related data (which is primarily at the output and outcome levels) e.g. households with low incomes or cut-off from energy are simultaneously a business and impact opportunity. Data exhibits a hybrid character: It can either be framed as relevant from an impact-generation perspective, or as a basis for making sound 'business' decisions:

"We have been conducting a very experimental data analytics project which correlates for example the number of family members with payment or credit performance. Now you cannot say for sure that with more than five people in one household who make less than 2.000 pesos, it is very unlikely that they can pay the credit. But that is where we are heading. We need more of that data in order to make that assumption."

This new opportunity for re-framing data analysis and use could be a chance for major shifts in impact management, as there is a stronger intrinsic incentive to collect and build databases capable of supporting impact-related analysis. This impact intelligence is, however, not a guarantee that impact will be improved. As the interviews show, there clearly remains the possibility of a dominant finance-first mentality, especially in ethically complex constellations. Taking the example of one interviewee to illustrate: If franchisees do not perform in line with a given target, they are helped (e.g. by changing the location), but ultimately the contract must be cancelled if (commercial) performance is inadequate. The issue remains as to what role impact plays when judging inadequacy of performance.

4. DISCUSSION

KEY POINTS:

- SEIBs operate in tough conditions and their approaches to impact management and impactrelated data are focussed on pragmatism and cost-effectiveness
- Digitalisation is having effects both on data generation and use
- Internal and external factors are relatively balanced when it comes to impact management, and harmonisation of these factors may improve SEIB performance

While generalisation of results should be undertaken with caution, through the cases examined there were findings which provide insights and points of discussion. Using the key questions laid out at the beginning of this study as a guide, key insights are:

Key question 1: What information do social and environmental impact businesses value most and least, and why?

- SEIBs operate under tough market conditions. Their customers are often low-income households, and there are external factors such as currency or political and physical climate to contend with. Thus, their primary focus is on information that will help their organisations to survive and grow. The incentives for SEIBs to focus on certain information types is discussed below, but in reality it is not possible to separate SEIBs' valuation of information from the incentive structures in which they are situated.)
- The information which SEIBs can generate is influenced strongly by pragmatic considerations, which obviously has implications for the information they do value as opposed to information they would value, if they could obtain it. All SEIBs have operational metrics, which are made up mostly by financial/business KPIs. Financial data is collected by all SEIBs as it is mandatory (and useful) to do so. Impact-related data is also collected directly by most SEIBs. Quite often, however, impact-related data is not 'measured' in a strict sense, but generated through extrapolation of business data such as sales figures or through a 'reframing' into hybrid data. It is tempting to classify these as merely strategies to secure resources, but this would be missing the potential for SEIBs to cost-effectively understand and manage their impact, thereby supporting a mission focus.
- When asked about impact-related metrics they track, interviewees primarily listed environmental and socio-economic indicators at the output and outcome levels. Based on the conditions under which they operate, this is not surprising. SEIBs must maintain a balance between financial sustainability and the impact they seek to generate. The first hypothesis used in this study stated somewhat provocatively was that impact-related data is not used in decision-making processes in SEIBs. This hypothesis was largely rejected as all SEIBs in the sample do generate and use impact-related data, usually on the output and outcome level, for different types of decisions. However, data related to actual impact is rarely generated, often due to resource restrictions. This is problematic only insofar as the products and/or services provided have not been demonstrated to have an impact. If the assumptions behind the impact-related data used by SEIBs is not scrutinised and tested regularly, then there is no assurance that impact-related data demonstrates impact generated by the SEIB.
- Broader societal trends toward digitalisation appear to be having an influence on SEIBs.
 SEIBs are making use of a growing amount of digitally-generated data and big data analytics is enabled by digitalisation. This data is no longer only for measuring and reporting impact ex-post, potentially as a basis for adjusting strategies and structures. It is now being used by SEIBs to generate impact-related data in real-time and to identify promising impact

opportunities on a fine-grained level, directly supporting business decisions. Digitalisation is established and spreading in SEIBs (at least in the renewable energy and agricultural industries interviewed in this study), and some of the interviewees in the sample seem to be forerunners in this respect. These developments are significant in that real-time impact-related data from sensors or SEIB-internal IT systems potentially offer scalable solutions to circumvent or minimise resource issues around data generation – with knock-on benefits, particularly for benchmarking.

Key question 2: What are the key incentives for social and environmental impact businesses to collect, analyse and use information?

- As noted above, SEIBs have a strong incentive to generate financial data, but one of the two primary incentives for SEIBs to manage impact-related data is for securing resources. Both private and public entities who provide resources for SEIBs make demands vis-à-vis impact-related data. These demands vary, but meeting them is a primary concern among SEIBs seeking to survive and thrive. What emerged from the study is that many private investors tend to place more emphasis on financial performance than on impact performance. It could be argued that investors and investees should be free in how they deal with impact performance. However, for the legitimacy of impact investing, this might be a bit short-sighted. Ideally, the resources should be invested in those organisations that (promise to) have the highest impact while achieving an appropriate level of financial performance. The feedback from this study would seem to be that financial performance remains the deciding factor in many cases. Impact investors seem to have low expectations with respect to impact performance data, especially when compared with their requirements on financial data. Thus, SEIBs are incentivised to not only focus on financial performance, but also on investing in financial management systems.
- The second major incentive to generate impact-related data stems from the intrinsic motivation of the SEIBs to create impact. While the level of motivation expressed was very high, how this motivation converts into action differed greatly. For some SEIBs, it is enough that they have a general confirmation that they are generating positive impact, and more likely tracking it at the output and outcome levels with a broad definition of impact used. On the other hand, some SEIBs really push the boundaries vis-à-vis their impact management approaches. This point relates to the third hypothesis set out on whether awareness of the value of impact-related data is more important than the capacity to generate it. While it is difficult to distil a clear answer from the interview results, an important insight was that SEIBs exposed to impact management at an early stage internalise the processes and build upon them. This would imply that cultivating a culture of impact management plays a key role in how concretely the intrinsic motivation of SEIBs manifests itself within the organisation.
- Finally, it may be important to position impact management not as an optional add-on, but as an inherent element of steering an SEIB towards financial sustainability and optimal impact. In such a case, there should be both an overarching strategy and permanently established structures for how impact-related data is used for *forecasting*, *tracking*, *optimising*, *leveraging* and *identifying impact opportunities*. Of course, external factors also play a role. The second hypothesis addressed the point as to whether external or internal factors were more influential when it comes to impact-related data. This study concludes that both sets of influences must be harmonised if SEIBs are to succeed. This is due to the unique requirements and possibilities available to SEIBs given their mission orientation (e.g. potential to draw on grant funding over all stages of maturity or their expanded value proposition for customers). Therefore, impact-related data should not be managed separately, but integrated with other operational KPIs including financial. This could allow for the identification of interrelations between performance dimensions, with increased potential for making better decisions.

KEY POINTS:

- The value of impact management is not yet established, with implications both at the field level and for individual organisations
- Support around impact management in early stages of development has a catalytic effect on impact management processes throughout development

Based on the findings of this study, there is a range of actions that could be taken to improve impact management for impact investing:

- Strengthening awareness of the benefits of impact management: Raising awareness about the value of impact-related data is the basis for the other activities that follow and for impact investing in general. Among SEIBs and impact investors, as well as grant makers or public entities, there appears to be low awareness of how impact management supports the social and financial performance of the SEIB. Improving this situation could be achieved through *advocacy* and word of mouth in *networks* and stakeholder debates, by further studies such as the one at hand, or by sharing case studies of effective impact management systems. One issue that requires more attention is the understanding the correlation between impact and financial performance.
- Imparting and advancing knowledge: The area of knowledge provision is closely related to that of awareness, but focuses more on technical knowledge for impact management. There is little use of standardised impact management practices among SEIBs. Therefore, the opportunity here lies in improving the understanding of the role and aspects of impact management (as a holistic approach) in general, but also the application of measurement frameworks, use of standard metrics, efficient data generation and analysis procedures, automatization, monetarisation etc. As such coaching and trainings should be adjusted to the level of experience of the audience (investees and investors) and strongly relate to their daily experiences.
- **Supportive software and hardware**. Given the increasing role of digital data, impact management solutions both *software* (e.g. data collection applications or online platforms) and *hardware* (customised smartphone solutions) are helpful for SEIBs. Investment in further development of open-source solutions, or subsidisation of relevant costs for SEIBs using private services would support this momentum. It is also important to better understand the *potential of large data sets* (including geo data, social media data, open public data etc.) and their analysis for generating impact through supporting decision making²¹.
- Catalytic seed-funding. Some interviewees stated that awareness of the potential of impact management increases SEIBs' resource allocation for impact management. However, many of them still mentioned resources as a constraining factor for impact management in particular for initially setting up the framework, data generation and analysis, as well as in meeting demands for higher quality data. Bringing in additional (primarily financial) resources in a smart way may be another opportunity to support improved and increased impact management. Additional resources could be provided by grant-makers through a form of seed-funding for impact management. Furthermore, enabling collaborations with academics or advisory firms to develop basic frameworks and indicators can catalyse the setting up of sustainable impact management structures in SEIBs long-term.

²¹ http://merltech.org/

ANNEX

ANNEX 1 – LIST OF INTERVIEWEES²²

Esther Altorfer, Finance Director, Sistema.biobolsa

Simon Bakker, Kennemer Foods International, CEO

Arine de Bordes, CEO, Purasol - Solar Energy

Lennart Budelmann, Co-founder and Managing Director, aQysta

Rutger Bults, Business Developer, Grounded Madagascar

Michael Callahan, Co-founder, PowerMundo

Ana Coll, Chief Commercial Officer, Iluméxico

Stewart Craine, Managing Director, Village Infrastructure Angels

David Gerard, Deputy Managing Director, Green Bio Energy

Sameer Hajee, Founder and CEO, Nuru Energy

Felix Hallwachs, Managing Director, Little Sun

Orisa Raphael Jawino, Founder and Managing Director, Divine Masters Limited

Fredrick Matress, Co-founder and Managing Director, Honey Products Industries

Nawee Nakwatchara, Founder, Grassroots Innovation Network

Retno Nuraini, Production Manager, Nusa Berdaya

Henri Nyakarundi, Managing Director, ARED

Joji Pantoja, CEO, Coffee for peace

Isabela Ribeiro, Founder, Saladorama

Fernando Sagastume, Director of Operations (Guatemala), Development Ventures

Patrick Struebi, Founder and CEO, Fairtrasa

Scott Thompson, Founding Partner, Farm from a Box

Matt Viner, Project Manager, Kamworks

Ruben Walker, Commercial Director and Co-founder, Africa Clean Energy

-

²² One interviewee did not wish to disclose his name and company publicly

ANNEX 2 - INTERVIEW GUIDELINES

INTERVIEW GUIDELINE FOR GROWTH/MATURE SEIBS

- Can you tell me about your business, and what it is you're trying to achieve?
- OK, so your company is trying to [insert reformulation of company mission]. It must be difficult to check on your progress. How do you measure your success, do you have some kind of system in place?
- How would that help your organisation to perform, do you use that knowledge somehow?
- So why do you gather information about [x] and not something else?
- Do you collect some information that you would rather not collect? Why do you collect it?
- Are you required to report impact data to anybody? Can you tell me who?
- Have you had any help in setting up your data collection structures, maybe advisory services, or help from peers?
- Have there been any major changes in the information you've been gathering?
- If you could use any approach for measuring your social impact, what would you do?
- If you had more impact information, do you think it would influence your decision-making processes?
- Would that information be more important than the financial information you gather at the moment?
- How balanced are the financial and social parts of your business?
- Which do you think is more important for a social enterprise: Knowledge about how to use impact data, or resources to collect impact data?

INTERVIEW GUIDELINE FOR SEIBS IN STARTUP PHASE

- Can you tell me about your business plans, and what it is you're trying to achieve?
- OK, so your company is trying to [insert reformulation of company mission]. It probably going to be difficult to check on your progress. Do you already have some processes in place for tracking your impact?
- How do you plan to measure your success in the future?
- How would that help your organisation to perform?
- Why would you gather information about [x] and not something else? Is there a reason?
- Do you collect some impact information that you would rather not collect? Why do you collect it?
- Is there anybody who you have to report impact data to?
- If you could use any approach for measuring your social impact, what would you do?
- What's stopping you from doing that?
- If you had that information, how do you think it would influence your decision-making processes?
- Would that information be more important than the financial information you gather?
- How do you balance the financial and social parts of your business?
- Which do you think is more important for a social enterprise: Knowledge about how to use impact data, or resources to collect impact data?

ANNEX 3 – SAMPLE OF INDICATORS REFERRED TO BY INTERVIEWEES

	Input	Output	Outcome	Impact
Environmental data	Tons of waste treated	 No. of lamps sold in off grid area Amount of water pumped for irrigation Business-relevant power generated No. of digestors installed Amount of water pumped / pressure No. of planted trees 	 Reduction in fuel use CO2 emissions avoided Equivalent of trees not cut Amount of solar power produced Ha of conventional agriculture turned into bio agriculture Ha of land saved/recovered from erosion Ha covered with fertilizer 	Reduced impact on climate change Reduced smoke pollution in building
Socio-economic data	Repayment rates of clients No. of sales agents and distributors Amount of money lent Time and use of digital contents in Intranet (own content) of Wi-Fi spot Time needed for changing economic productivity stage Maintenance expenses	 No. of direct beneficiaries reached No. of direct beneficiaries reached in remote areas No of indirect beneficiaries reached (family) No. of trainings provided No. of franchisees No. of farmers supported No. of farmers certified 	Amount of income for clients/ franchisees (compared to average loan) Financial savings made by the consumers by using briquettes and cook stoves Economic activity of women benefiting from access to power Money saved for candles Income of sales agents and distributors Increase in productivity Amount of financial savings for farmers (based on substitution of other energy sources)	Improved economic livelihood (Additional learning success through extra light)
Social data			 Adoption and customer satisfaction Share of women in the company Share of people under 35 in the company No. of people with access to electricity No. of jobs created (integrative and confidence-strengthening aspect) 	 Overall improvement in life quality Less bad smells, less flies, environment is more comfortable (qualitative) Lives saved through secure energy Reduction of burns / live saving (Health improvements through affordable healthcare)

^{() =} only in side studies, no regular monitoring; indicators mentioned multiple times are in **bold**

Black = business active in both sectors; green = business active in the energy sector; *blue* = business active in the agriculture sector.