

# Effectiveness of agri-business incubation

IN EMERGING MARKETS

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Commercial Agriculture for Smallholders and Agribusiness

The CASA programme is a flagship programme of the UK Foreign, Commonwealth & Development Office (FCDO) and is intended to increase global investment in agribusinesses which trade with smallholders in equitable commercial relationships, increasing smallholders' incomes and climate resilience.

The programme aims to help agribusinesses to scale up and trade in larger commercial markets. As part of its work CASA generates new evidence and analysis that supports a stronger, fairer and greener agribusiness sector.

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## Contents

Abbreviations .....	4
Executive summary.....	5
1. Introduction .....	8
2. Scope and methodology .....	8
3. What is an agri-business incubator? .....	9
4. Types of incubators.....	9
5. The incubators selected by CASA.....	10
6. Why can we say that these incubators have so far been successful? .....	12
7. Objectives and focus.....	13
8. Incubation process.....	14
9. Services offered .....	15
10. Ownership .....	18
11. Strategy.....	19
12. Sustainability .....	20
13. Effectiveness and impact.....	22
14. Gender responsiveness.....	24
15. Challenges and key success features.....	25
Management.....	25
Value-chain selection .....	26
Incubatees' selection process .....	26
16. Investing in agri-business incubators .....	27
17. Recommendations .....	29
Donors should keep financing high-risk incubation work.....	29
Stronger links with early-stage investors are essential.....	30
Funders should insist on better data capturing.....	30
A stronger focus is needed on value for money .....	30
Reducing gender disparity via incubators is possible .....	31
The impact of the COVID-19 pandemic.....	31
Bibliography .....	32

## Abbreviations

ABI	Agribusiness Incubator
ANDE	Aspen Network of Development Entrepreneurs
BDS	Business Development Services
BEE	Black Economic Empowerment
CASA	Commercial Agriculture for Smallholders and Agribusiness
CSR	Corporate Social Responsibility
FARA	Forum for Agricultural Research in Africa
GALI	Global Accelerator Learning Initiative
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
KPI	Key Performance Indicator
MEGA	Mpumalanga Economic Growth Agency
NGO	Non-Governmental Organization
SGBs	Small and Growing Businesses
SMEs	Small and Medium-sized Enterprises
SROI	Social Return on Investment
UFV	Federal University of Viçosa
UniBRAIN	Universities, Business and Research in Agricultural Innovation

## Executive summary

Agribusiness incubators play an important role in developing the technology and value chains that let small agricultural businesses thrive in developing countries and emerging markets. Incubators are, therefore, a key contributor to these economies, boosting prosperity and reducing poverty, and there is increased interest in supporting interventions aimed at accelerating or incubating agribusinesses. The topic is especially important now, as public funding is likely to come under pressure in the aftermath of the COVID-19 pandemic.

However, scant evidence has been collected on the effectiveness of such interventions at generating additional investments in the sector. This paper remedies this lack.

The objectives of this paper are to: i) identify examples of incubators of small and medium-sized enterprises (SMEs) that have successfully catalysed investment into the agricultural sector over the last 10 years; ii) identify and analyse types of agribusiness incubators; iii) provide evidence on the results and impact of the different incubation models and, where applicable and information is available, on gendered impacts; and iv) draw conclusions on whether interventions aimed at accelerating and incubating SME agribusinesses are effective in supporting increased investment in the sector. There is a dearth of comparative data and peer-reviewed literature around these questions. The Commercial Agriculture for Smallholders and Agribusiness programme (CASA) has therefore collected evidence via primary research (websites, annual reports and phone calls with key experts and incubator managers), as well as secondary research where appropriate.

### A note on terminology:

Incubators and accelerators are mechanisms that help small and growing businesses (SGBs) grow and expand. However, the distinction between an incubator and an accelerator is often blurred. Incubators are usually defined as organizations that operate at the idea stage (pre-business model) and prototype stage (with a business model and plan but not yet generating revenue). Accelerators are usually defined as operating at the stage when revenue is being generated and finance provided by friends and family, as well as when revenue is accompanied by third-party finance and profits are being produced at scale. The terms are often used interchangeably, particularly in emerging markets. **In this paper, “incubator” will refer to both types of entity.** We will use the term “incubatee” to indicate a company that receives ongoing support from an incubator.

### Conclusions:

#### a) Two types of incubator

This paper finds that agribusiness incubators can broadly be divided into two groups: those focused on promoting agricultural value chains and those focused on supporting early-stage investments in technology – so-called technology transfer incubators. However, incubators are often created to provide solutions to a specific issue but then expand into other areas as they pursue additional opportunities.

The success of **technology transfer incubators** in promoting technologies depends on numerous variables. These include the quality of universities and research centres in a country, the pool of entrepreneurs the incubator is able to attract, the technology and products that an incubatee develops, the presence of early-stage financing instruments and the market uptake for the products and services an incubatee offers.

Unlike agricultural value chain incubators, technology transfer incubators **diversify their technical and mentoring support** across a number of technologies and industries. When possible, they provide seed investments in start-ups active in different areas and products.

These incubators thus effectively adopt a risk diversification strategy that mitigates excessive exposure to any single sector or company.

Agricultural **value chain incubators** usually promote enterprises involved in a **limited range of crops**, and so face a more concentrated set of risks. Provided that agricultural value chains are chosen appropriately and the incubation process is well structured, incubators face operational risks – such as logistics and negotiations with buyers – that can be mitigated. However, these types of incubators are highly exposed to production-related risks affecting the agricultural sector in general, such as changes in pricing, weather conditions and the incidence of pests and diseases.

#### **b) Six leading incubators**

Following a wider analysis of 20 incubators, this paper identifies six leading institutions that have been successful in running agribusiness-oriented incubator and accelerator programmes in emerging markets: ABI-ICRISAT and Villgro in India, CenTev/UFV in Brazil, Fundación Chile in Chile, One Acre Fund in East Africa and Timbali in South Africa. All six incubators have succeeded in either graduating companies out of their programmes to attract commercial funding or in incubating a significant number of micro and small enterprises to become part of established value chains. The activities carried out by these six incubators during the last decade greatly improved the chances of survival of start-up agribusinesses during the first three years of activity.

The main reasons this paper finds for their success are that they are **professionally run**, have kept a **strong focus** on their objectives and have developed **efficient and well structured incubation processes** to attract incubatees and institutional funding. Successful incubators also offer a range of services that allow start-ups to expand. These include high quality mentors, access to infrastructure and markets and a well developed ecosystem of early-stage investors.

As they mature, agribusiness incubators are increasingly developing tailored models of support. Some, such as Fundación Chile and Villgro, have ventured into areas beyond agribusiness; some, such as ABI-ICRISAT and Once Acre Fund, have exported their methodologies to other countries; and others, such as ABI-ICRISAT and Villgro, have become technical assistance providers to other incubators. In some cases, incubators have evolved to become fund managers.

#### **c) The roles of donors and investors**

It is important to note that, while all of the incubators analysed in this paper have catalysed significant investments in the agribusiness space, they are all **highly dependent on donors and state funding for their operation**. This is because they focus on supporting high risk start-ups and, in most cases, smallholder farmers that cannot afford to pay the full cost of their services.

Donors can support incubators by financing high risk activities, letting the private sector finance incubators' support low risk activities, such as training programmes for growth stage companies. By working with SGBs and promoting investments in the agribusiness sector, incubators contribute to building the ecosystem and strengthening the sector which, in turn, generates positive spillover effects that go beyond the direct outcomes achieved with specific companies.

#### **d) Strong links with early-stage commercial investors**

Strong links with early-stage commercial investors are necessary for agribusiness incubators to flourish and should be further incentivized. This could take many forms, such as investors sitting on selection committees or becoming mentors of selected incubatees. Forms of partnership can also be considered under which investors become sponsors, invest in incubators or award monetary incentives to incubators for reaching certain milestones.

#### e) Measuring success

Foundations and development organizations can be a catalyst for collecting **data to compare incubators' performances**. They could require incubators to collect more robust data from their incubatees and alumni on a more regular basis. Standard measures of success can be inferred by collecting data on a regular basis on companies' turnover, profitability, staff and the level of commercial investments attracted (equity and debt) by those companies.

**Global standards** are also needed to evaluate incubators from a value for money perspective, as comparing key performance indicators (KPIs) is not sufficient. To assess in an objective manner whether their resources have been used effectively, donors, public institutions and foundations need to monitor their use. This, coupled with rigorous evaluations of the performances of incubatees and non-incubatees, will incentivize further investments in the ecosystem.

Agribusiness incubators can serve as a platform for donors and social investors to cater to **women entrepreneurs** and, more broadly, to reduce gender disparity. This can be done either by supporting technology transfer incubators to apply a gender lens in their selection of incubatees or by making sure that incubatees' solutions and products take the needs of female clients into consideration. For value chain incubators, donors should insist on a gender lens approach to selecting which value chains to focus on.

## 1. Introduction

Agriculture is a key contributor to the economies of many emerging and developing markets and a powerful tool to end extreme poverty and boost shared prosperity. Recent studies show that growth in agriculture remains 2–3 times more effective at reducing poverty than growth in other sectors and that the world’s 500 million smallholder farmers play a key role in delivering this growth and also in producing 70% of the world’s food.<sup>1</sup>

It is therefore logical that policymakers and donors look at ways to stimulate entrepreneurship in this critical sector.

Incubators and accelerators are important tools to spur entrepreneurship around the world, including in emerging markets and less developed economies. The Global Accelerator Learning Initiative (GALI), which examines the landscape of accelerators, identified more than 240 organizations that are currently operating accelerators, of which nearly half had programmes in emerging markets.<sup>2</sup> Over a quarter of those operating in emerging markets indicated “agriculture and food” as one of their main target sectors.<sup>3</sup>

In spite of the increased interest in supporting interventions to accelerate or incubate agribusinesses in emerging and developing markets, scant evidence has been collected on their effectiveness in supporting additional investments in the sector. [GALI \(2017\)](#), for instance, looks at the performance of accelerators in emerging markets, comparing them with peers in high income countries. It concludes that accelerators in emerging markets are generating consistently positive outcomes across four indicators of venture performance: revenues generated; full-time staff employed; equity raised; and debt finance mobilized. However, the study does not take into consideration incubators and is not sector specific. The challenges associated with effective monitoring are explored further in Section 13.

This paper sheds light on the effectiveness and working methods of some of the most successful organizations running agribusiness-oriented incubators and accelerator programmes in emerging and developing markets.

## 2. Scope and methodology

The objectives of the research are to: i) identify examples of incubators of SMEs that have successfully catalysed investment into the agricultural sector over the last 10 years; ii) identify and analyse typologies and modalities of agribusiness incubators; iii) provide evidence on the results and impacts of the different incubation models and, where applicable and where information is available, on gendered impacts; and iv) draw conclusions on whether interventions aimed at accelerating or incubating SME agribusinesses are effective in supporting increased investment in the sector.

The study analyses different incubation models, looking at their missions, incubation processes, services offered, ownership structures, business models, sustainability and effectiveness in supporting incubatees, investors and industry stakeholders. The document ends with some key recommendations on how to engage investors and donors to support the development and use of agribusiness incubators to drive equitable and inclusive impacts. Evidence has been collected via primary research (internet websites, annual reports, phone calls with key experts and incubators’ managers), as well as secondary research.

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<sup>1</sup> Christiaensen (2018); ISF (2019.).

<sup>2</sup> GALI uses the 2015 World Bank definition of emerging markets, i.e. those countries with a gross national income per capita of less than \$12,476.

<sup>3</sup> <https://www.galidata.org/accelerators/>

### 3. What is an agribusiness incubator?

Incubators and accelerators are mechanisms and structures that help SGBs grow and expand. However, the distinction between an incubator and an accelerator is often blurred. Incubators are usually defined as organizations that operate at the idea stage (pre-business model) and prototype stage (with a business model and plan but not yet generating revenue). Accelerators operate at the stage when revenue is being generated and finance provided by friends and family, as well – in the growth stage – as when revenue is accompanied by third-party finance and profits are being produced at scale. The terms “incubator” and “accelerator” are often used interchangeably, particularly in emerging markets. **In this paper, “incubator” will refer to both types of entity.**

Agribusiness incubation is defined as a process that focuses on nurturing innovative, early-stage enterprises that have high potential for growth and to become competitive agribusinesses by serving, adding value to or linking to farm producers.<sup>4</sup> Agribusiness incubators identify and mobilize small cohorts of emerging entrepreneurs and facilitate their growth through a combination of services, such as shared facilities and equipment, business development, technology, finance, mentoring and networking. At the end of the incubation process, which could last from six to 36 months, incubatees are expected to validate their business model and service offerings and to start generating significant growth in revenues, customers and staff.

### 4. Types of incubators

The World Bank’s InfoDev programme<sup>5</sup> distinguishes between three general types of agribusiness incubator:

- a) agribusiness value chain and sector development incubators;
- b) agribusiness research and commercialization incubators; and
- c) technology transfer incubators.<sup>6</sup>

Some of the agribusiness incubators that specialize in developing value chains or entire sectors provide market access to small-scale farmers, such as Timbali in South Africa and One Acre Fund in East Africa. Others, such as Fundación Chile, leverage their market research capabilities and the comparative advantage of a country to organize entire new value chains from scratch.

Technology transfer incubators focus on supporting technological innovations in agriculture and agri-industry. The literature distinguishes between incubators focused on high-tech technology transfer across borders and incubators more focused on low-tech innovation and entrepreneurship in underserved rural areas. An example of the latter is Villgro, an Indian incubator, which has a mission to incubate social enterprises that are testing disruptive technologies with the potential to create deep, exponential impact for low-income people.

Agribusiness research and commercialization incubators have essentially the same objective as technology transfer incubators. The only difference is that the former is usually anchored in research centres, universities or other higher learning institutions. These incubators have been primarily set up with the objective of supporting and commercializing products and technologies developed by professors and students of the anchor institution. Successful examples include the Agri-Business Incubator of ICRISAT (ABI-ICRISAT), which was set up by the ICRISAT and the Technological Center of Regional Development of Viçosa

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<sup>4</sup> Hjortsø *et al* (2017), p. 19.

<sup>5</sup> InfoDev was a multi-donor programme in the World Bank Group’s Trade & Competitiveness Global Practice that supported entrepreneurs in developing economies (see: <http://www.infodev.org/>).

<sup>6</sup> World Bank (2011), p. 28.

(CenTev/UFV), affiliated with the Federal University of Viçosa (UFV) in Brazil. Over time, the mission of these incubators has changed. They have opened up their campuses to incubate companies and ideas that have not necessarily come from anchor institutions. However, these incubators' relationships with their universities or research institutes remain strong: they are often embedded in their anchor institution both operationally (they share the same physical space) and financially (they do not have an independent juridical status or their own set of financial statements).

Incubators are often created to provide solutions to a specific issue, and then they expand into other areas by pursuing additional business opportunities. For instance, Fundación Chile was historically categorized as a value chain and sector development incubator. Recently, however, it set up ChileGlobal Ventures, a fund that supports, selects and accompanies start-ups that develop impact innovations in sectors of high potential and interest for Chile and Latin America.<sup>7</sup> This activity would put Fundación Chile also in the category of technology transfer incubators. Even anecdotal evidence such as this reflects the challenge of reducing incubators to fixed types.

Incubators' efficiency is often measured in KPIs, such as the number of companies that "graduate from the incubator" (i.e. become self-sustainable without technical support.), the survival rate of companies one or two years after completing the incubation process, the revenues generated by those firms after incubation and the number of staff employed. Another key indicator monitored by investors and donors is the amount of funding the incubatees attract from private investors. The quality of the incubatees is crucial for an incubator to be able to meet those KPIs and to attract additional funding.

## 5. The incubators selected by CASA

This paper will mostly focus on documenting the experiences of six incubators that have managed to successfully catalyse investments into the agricultural sector over the last 10 years. The main criteria used to select the sample of incubators to analyse have been their capacity to remain in operation for at least 10 years delivering meaningful results. The selection process of the incubators started with a review of the existing literature on agribusiness incubators. The World Bank (2011) identifies 10 leading agribusiness incubators in emerging markets. Hjortsø et al. (2017) documents experiences and lessons learned from six agribusiness value chain incubators across Africa that are part of the Universities, Business and Research in Agricultural Innovation (UniBRAIN) programme. Incubators which are no longer operational or for which no up-to-date information could be found were taken out of the sample, leaving a sample of five — ABI-ICRISAT and Villgro in India, CenTev/UFV in Brazil, Fundación Chile in Chile, and Timbali in South Africa- — to which was added One Acre Fund, a not-for-profit organization that has been successfully providing incubation services to smallholder farmers in East Africa.

It should be noted that this paper does not limit itself to drawing conclusions on the performance of those six incubators. In some cases, the paper refers to other incubators or programmes to document additional experiences and lessons learned on the effectiveness of incubators to support increased investment in the industry.

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<sup>7</sup> <https://fch.cl/en/initiative/venture-capital/>

**Table 1: Characteristics of selected incubators**

Name	Started	Purpose	Focus	Areas of activity	Geographical presence	Incubatees
ABI-ICRISAT	2003	Promoting technology-led, innovative AgTech start-ups and agribusiness enterprises to address dryland agricultural challenges	Incubating enterprises oriented to commercializing technology for agricultural development	Five strategic areas: seeds, biofuels, ventures to develop particular innovations (products or services), farming (high-value crops), and agricultural biotechnology	India	Start-ups, early-stage enterprises
CENTEV-UFV	2001	Facilitating the creation and development of new, technology-based businesses and promoting the diffusion of entrepreneurial culture and innovative technologies created within the academic community	Institutions and technology-based companies, for which competitiveness is related to the intensive use of scientific and technological knowledge	All (including agri-tech)	Brazil	Technology-based businesses
Fundación Chile	1976	To innovate in high-impact solutions that drive Chile's transformation towards sustainable development	Sustainable development	Agribusiness, aquaculture, circular economy (new plastics, e-waste), water, energy and mining	Chile	Start-ups, early-stage enterprises
One Acre Fund	2006	Lifting smallholder farmers out of poverty	Supplying smallholder farmers with funding and training	Maize, cereals, legumes, vegetables, poultry and trees	East Africa	Smallholder farmers
Timbali	2003	To establish and support an environment to promote predominately broad-based Black Economic Empowerment (BEE) agribusiness and related enterprises	Integrating small-scale, often inexperienced farmers into large value chains	Flowers and vegetables	South Africa	Low-skilled, young, inexperienced, unemployed rural people (75% women)
Villgro	2001	To create wealth through innovation for rural populations in India	Innovative and scalable solutions for poor customers	Agribusiness, education, employability, healthcare and renewable energy	India, Kenya, Philippines	Start-ups, early-stage enterprises (socially oriented)

Sources: incubators' websites, annual reports and World Bank (2011)

## 6. Why can we say that these incubators have so far been successful?

The six incubators have all been in operation for long periods of time – in the case of Fundación Chile over 40 years. They have incubated hundreds of companies, most of which were able to graduate – i.e. move out of the incubator – to continue growing and expanding. ABI-ICRISAT in India played a key role in building a business around a new seed technology and providing shared equipment for processing sweet sorghum into ethanol.<sup>8</sup> Since its creation in 2003, ABI has incubated 104 agribusiness enterprises, and the large majority of those (75) were able to successfully move beyond the incubation stage and continue their operations without the support of the incubator. Moreover, a large majority (80%) of those that managed to graduate were still trading one year after the end of the incubation phase.<sup>9</sup>

Villgro, one of the oldest incubators in the world, has incubated over 300 companies during the last 20 years, disbursing seed funding of about \$9m and catalysing additional investments into its start-ups of about \$55m.<sup>10</sup> By connecting low-skilled, young, inexperienced and unemployed rural people (75% of whom are women) to sophisticated markets, Timbali in South Africa has helped over 180 micro-enterprises to establish themselves, greatly improving the chances of survival of start-up agribusinesses during the first three years, when they are most vulnerable.<sup>11</sup> In 2019, One Acre Fund achieved the milestone of enrolling one million smallholder farmers across six East African countries, and land that it supported generated an average 44% increase in profits.<sup>12</sup>

Fundación Chile has been successful in creating business ventures from scratch in industries where Chile had a comparative advantage vis-à-vis other countries. Successful projects include farmed Pacific oysters in Tongoy, salmon farming in the Puerto Montt region, boxed beef in Osorno and raspberries and blueberries in Araucanía.<sup>13</sup>

### The case of Salmones Antártica

In 1982, Fundación Chile created Salmones Antártica, the first company to be dedicated to large-scale salmon farming in Chile. This company was purchased by Japanese investors in 1988, allowing the private sector to become a driving force for the industry. By 2013, 31 years after the company's establishment, the Chilean industry reached \$3,500m in exports. This was almost twice the value of Chile's wine exports that year, almost as much as its fresh fruit exports, and more than three times Argentina's beef exports.<sup>14</sup>

Some of these incubators also managed to expand their operations and to export their business models to other markets. ABI-ICRISAT, for instance, was selected as one of the technical partners of the UniBRAIN programme. The project was financed by DANIDA, the Ministry of Foreign Affairs of Denmark, and its objective was to establish six agribusiness value chain incubators across Africa. Villgro has set up operations in Kenya, Philippines and the US, while One Acre Fund launched in Kenya and then expanded into five other East African countries.

<sup>8</sup> [Agricultural Innovation Systems: An Investment Sourcebook](#), p. 392.

<sup>9</sup> ABI-ICRISAT (2018).

<sup>10</sup> [www.Villgro.org](http://www.Villgro.org)

<sup>11</sup> The survival rate of its micro-enterprises in the first two years of operations is 100%. See [www.timbali.co.za](http://www.timbali.co.za).

<sup>12</sup> [oneacrefund.org](http://oneacrefund.org).

<sup>13</sup> [Fundación Chile Incubator – Chile Case Study](#).

<sup>14</sup> <https://fch.cl/noticias/from-the-salmon-to-the-sun/>

## 7. Objectives and focus

Agribusiness incubators have different objectives. We can distinguish between incubators that are focused on developing and commercializing promising technologies, those that are focused on solutions catering to particular market segments (such as low-income customers) and those that are focused on a specific typology of incubatees (such as social enterprises or low-skilled and unemployed people). Three of the six incubators – CenTev/UFV, ABI-ICRISAT and Fundación Chile – are broadly focused on promoting high-impact, technology-led, innovative start-ups and early-stage enterprises, irrespective of the target markets. Villgro developed its own terminology for describing its mission to support innovation: appropriate and affordable technology embodied in new goods and services that are adapted to the needs of rural populations and to the limited purchasing power of poor rural households.<sup>15</sup>

Timbali and One Acre Fund are more focused on the characteristics of their incubatees than on solutions or technologies. The South African incubator's mission is to serve predominately broad-based BEE agribusinesses and related enterprises by integrating them in larger value chains. One Acre Fund is broadly focused on lifting smallholder farmers out of poverty.

### **From innovators to entrepreneurs: the change in focus of Villgro in India**

Villgro's business model has changed over time. In its initial years, Villgro focused on supporting grassroots innovators, but it later realized these innovators often lacked the entrepreneurial skills to grow their innovations and take them to market. The incubator now focuses more on evaluating prospective incubatees' entrepreneurial abilities and not only the technical aspects of their products and solutions.<sup>16</sup>

Most incubators do not focus on specific subsectors. Notable exceptions are Timbali, which, given the nature of its business model, deals with flower producers and vegetable growers, and One Acre Fund, which up until recently focused only on maize. Born out of the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), ABI initially focused on addressing dryland agricultural challenges and was supporting ventures on ICRISAT's focus crops: sorghum, pearl millet, pigeon pea, chickpea, groundnut and finger millet.<sup>17</sup> Over the years, however, ABI has opened up its incubation programmes to all enterprises looking at commercializing technology for agricultural development and to enterprises with the potential to improve the livelihoods of smallholder farmers.

As incubators grow, we observe a tendency to expand beyond agribusinesses and agri-tech and to expand geographically in search of additional opportunities. Out of the six incubators, three – ABI-ICRISAT, One Acre Fund and Timbali – are still exclusively focused on incubating agribusinesses. Both Fundación Chile and Villgro started off working only with agribusiness and agri-tech entrepreneurs and later embraced other industries such as renewable energy, healthcare, education and the circular economy. As said earlier, the two Indian incubators (ABI-ICRISAT and Villgro) ventured out of India to support other incubators in Asia and Africa. Both Indian incubators also started supporting other incubators in India, becoming "incubators of incubators".

Keeping a strong focus is key to the survival of incubators. As explained in a report published in 2017 by the University of Copenhagen on the UniBRAIN programme,<sup>18</sup> the lack

<sup>15</sup> [Villgro Incubator - India Case Study](#).

<sup>16</sup> Ibid.

<sup>17</sup> [Agribusiness Incubator at ICRISAT – India Case Study](#).

<sup>18</sup> Hjørtsø et al. (2017) [Experiences and lessons learned from the UniBRAIN Agribusiness Incubation Programme](#)

of an explicit, realistic and operational strategic focus contextualized to the individual conditions and environment could have contributed to the development of overly generic business models for the agribusiness incubators supported by UniBRAIN. According to the authors: “A more explicit strategic focus could probably have supported a more realistic and contextualized definition of core competencies and enhanced the competitive edge. The lack of clearer strategies for organizational sustainability has also endangered the effort to achieve post-project sustainability”.<sup>19</sup>

## 8. Incubation process

Getting the incubation process right is key for the success of an incubator. The incubation process usually consists of three stages: i) a selection process, where the incubatees are selected from a group of applicants; ii) the actual incubation process, where incubatees are supported with a range of services to help them grow their venture; and iii) the incubatees' graduation from the incubator and shift to post-incubation support.<sup>20</sup>

Usually, incubators identify and select potential incubatees through open and transparent procedures, such as calls for applications. Some also leverage referrals from other stakeholders in the ecosystem, such as anchor institutions, other incubators, venture capital funds and research centres. The evaluation process of applicants needs to be run professionally and according to clear and well defined principles. Villgro, for instance, looks at a few critical criteria when selecting applicants: i) the uniqueness of the proposed innovation or solution; ii) its viability and scalability; and iii) the team working on the venture, which has to be technically savvy and passionate and have experience in consumer and user research.<sup>21</sup> Timbali evaluates potential entrepreneurs using criteria such as the following: access to land, ability to service infrastructure costs, full-time involvement and commitment to the business, product and market accessibility, track record and growth potential, ability to pay for services in future through levies and entrepreneurial inclination.<sup>22</sup>

### The importance of the selection process for an incubator

One manager of an African incubator supported by the UniBRAIN project admitted that, despite being time consuming, the identification of incubatees is critical for the success of the incubator: “We did not devote enough time to identifying important entrepreneurial characteristics of our potential incubatees and other stakeholders that would have strengthened our sustainability strategy.”<sup>23</sup>

Incubators adopt different mitigating strategies at the selection stage to make sure that failure rates remain within acceptable limits. CenTev/UFV, for instance, offers pre-incubation programmes for projects that are at the prototype stage and not yet ready to be commercialized, which allows the incubator to count on a potential pool of companies to be incubated.<sup>24</sup> Villgro selects incubatees that are at different stages of development. In 2020, about 20% of its portfolio companies were at the prototype stage, 50% at the pilot stage and 30% at the revenue-generation stage.<sup>25</sup>

The incubation process of most of the selected incubators is very detailed and well thought through, which is a key characteristic of successful incubators. Villgro, for instance, follows a

<sup>19</sup> Hjortsø *et al* (2017).

<sup>20</sup> Ibid.

<sup>21</sup> Discussion with Villgro's management.

<sup>22</sup> [Timbali Technology Incubator - South Africa Case Study](#).

<sup>23</sup> Hjortsø *et al* (2017).

<sup>24</sup> <http://www.centev.ufv.br/incubadora/en-US/programa/steps>

<sup>25</sup> Discussion with Villgro's management.

proprietary protocol (the “incubation journey”). The process starts with a diagnostic panel, in which entrepreneurs are helped to work on key questions for their business such as objectives, business model, scalability and governance. The initial diagnostic is followed by a 100-day incubation plan during which incubatees are given technical support, as well as seed funding that allows them to go to market. Each company incubated by Villgro is mentored for one year by a high calibre professional paid by Villgro.<sup>26</sup>

Fundación Chile, which has historically implemented a hands-on, top-down approach to business incubation, adopted a five-step transfer process. Fundación Chile’s typical business model began with the identification of an innovative opportunity with high potential, based on technology transfer or development adapted for local conditions. The incubation process was broken down into five phases: i) detecting potentially profitable subsectors; ii) developing and/or importing technology suitable for specific subsectors; iii) selecting appropriate technologies; iv) implementing and adapting technologies, including incubation support and/or investment in pioneer firms; and v) diffusing technology results. As a value chain integrator, Timbali has an incubation process which is quite different from those of technology transfer incubators (see below).

### **The incubation process at Timbali in South Africa<sup>27</sup>**

Timbali applies the traditional franchise model to agribusiness incubation. The model relies on the coordination of production within clusters of entrepreneurs to satisfy market demand. Timbali trains small-scale farmers, establishes infrastructure, coordinates access to finance and production and provides a route to market by negotiating prices with large buyers. Once accepted into the one-year pre-incubation programme, clients are walked through a series of assessments, including needs analysis, land analysis (on their land, in the case of off-site clients), water and irrigation. They also receive basic training in production. Finally, they are assisted in applying for an initial loan from entities such as Mpumalanga Economic Growth Agency (MEGA) for plants, seedlings and land improvement. Clients in the pre-incubation programme meet with Timbali technical leaders and mentors once a month and are evaluated on their technical expertise, professionalism and commitment to the programme and to entrepreneurship. Advancement to the full incubation programme is based on interest in and readiness for the intensive programme, as well as on the receipt of funding to kickstart operations.

Incubatees graduate to post-incubation when all of the work specified in the original incubation plan has been accomplished. At this point, each incubatee is expected to become self-sustaining without additional support from the incubator. If required, incubators provide additional fee-based assistance to graduated companies, which generates additional income for the incubator.

## **9. Services offered**

Typically, incubators provide a combination of the following services to incubatees:<sup>28</sup>

- capacity building, training and mentoring services;
- technology testing and assessment, demonstration and certification facilities;
- technology transfer and intellectual property policy advisory services;
- national and international networking and collaboration;

<sup>26</sup> Discussion with Villgro’s management and reviewing <https://www.villgro.org/incubation>

<sup>27</sup> [www.timbali.co.za](http://www.timbali.co.za) and [Timbali Technology Incubator – South Africa Case Study](#).

<sup>28</sup> [www.infodev.org](http://www.infodev.org)

- policy advocacy and market intelligence;
- seed funding (grants, equity investments and loans);
- links to investors and other financing sources; and
- infrastructure and shared facilities (e.g. IT, office facilities and prototyping workshop).

One of the key questions for incubators is whether they need to invest in physical infrastructure (such as fields, laboratories and workshops) or whether this is not necessary to build a successful incubation programme. Across the managers of agribusiness incubators that were part of the UniBRAIN project, there was a general consensus around the fact that providing physical access to production facilities could potentially be an important source of revenues, both in terms of income from renting out the facilities and as a conduit for possible revenue-sharing agreements between an incubator and incubatees.<sup>29</sup> However, owning physical infrastructure can be costly and inefficient, particularly if many of the potential incubatees are not willing to move into the premises of the incubator.

### **Fixing a cap on fixed assets investments: the UniBRAIN programme<sup>30</sup>**

The UniBRAIN programme fostered the creation of agribusiness incubators across Africa. The concept relied on a tripartite partnership structure involving universities, research organizations and businesses. The programme placed a cap of 20% of the total budget on fixed assets investment. The programme's assumption was that the tripartite partnerships would be able to provide many of the fixed assets needed to engage in incubation. In reality this did not occur even though, according to managers of UniBRAIN incubators, the establishment of incubation technology centres that can provide incubators with access to production facilities is an essential element in a sustainable incubation model for African agribusiness. They have thus found the 20% cap on investments in fixed assets to hinder the realization of this objective.

Incubators that are affiliated to universities or research centres tend to invest in production facilities for incubatees. This is the case with ABI-ICRISAT, which set up an agri-tech and an agri-bio incubator, and CenTev/UFV in Brazil, which has built a technology park with coworking spaces for technology-focused enterprises.<sup>31</sup> Other incubators, such as Villgro, have no physical infrastructure, as their business models rely more on the quality of mentors and the provision of seed funding to incubatees than on offering physical incubation or coworking spaces.

In spite of having invested in physical infrastructure, a number of incubators also offer services to off-site incubatees. Timbali, for instance, adopts a "high-touch" incubation model for entrepreneurs that rent land from it and a "low-touch" incubation model for off-site entrepreneurs (i.e. those that operate on their own land or rent from another landlord).<sup>32</sup> Similarly, ABI-ICRISAT has its physical infrastructure in Hyderabad but incubates off-site start-ups in other cities, such as Coimbatore, Delhi, Chennai and Bengaluru.

The provision of seed funds is recognized as a significant motivation for start-ups to join incubation programmes.<sup>33</sup> All six incubators have successfully tackled the issue of access to finance for start-up incubatees, either by setting up their own seed fund or by collaborating with the ecosystem of angel investors and venture capital funds available in their country. One Acre Fund directly disburses microloans to its smallholder farmers. Timbali has been

<sup>29</sup> Hjortso *et al* (2017).

<sup>30</sup> *Ibid.*

<sup>31</sup> ABI-ICRISAT presentation and CENTEV's website.

<sup>32</sup> <https://www.timbali.co.za/>

<sup>33</sup> Hjortso *et al* (2017).

collaborating since inception with MEGA, which has provided Timbali clients with microloans to develop and expand their businesses. Villgro's incubatees benefit from grants and, in rare circumstances, equity investments, which vary between \$50,000 and \$120,000.<sup>34</sup> ABI-ICRISAT also awarded small seed funds or investment grants to selected incubatees, with funding provided by the Government of India. It works with an ecosystem of over 40 partners, including venture capital firms and angel investors.<sup>35</sup>

Fundación Chile and Villgro went a step further and created venture capital funds with likeminded investors and partners. The investment journey of the South American incubator started with the creation of ChileGlobal Angels, the most active network of angel investors in Chile, with the objective of working with angel investors to scout for investments up to these angel investors' exits.<sup>36</sup> In 2018, it created ChileGlobal Ventures, its own venture capital platform, with the financial support of both large corporations and of CORFO, the Chilean economic development agency.<sup>37</sup> Villgro's management set up Menterra, an impact venture fund with the support of the Lemelson Foundation, a longstanding partner of Villgro, the Small Industries Development Bank of India and others.<sup>38</sup> Villgro's incubatees could then potentially benefit from an initial investment from Menterra during the post-incubation period.

For an agribusiness incubator, it is more difficult to thrive in the absence of a well developed ecosystem of early-stage investors. Venture capital and early-stage funds are usually set up in countries where there is an active secondary market (such as private equity funds) and a functioning local stock exchange, which make it easier to exit from investments. In India, for instance, various specialized venture capital funds have invested in agribusiness incubatees. Examples include Omnivore, Omidyar Network and AgFunder, which have invested in various start-ups supported by Indian incubators.

Incubation programmes typically provide seed funding and coworking spaces, but their success lies in the quality of their training and mentorship. Villgro's mentors, for instance, come with an average of 20 years of experience from various industries and backgrounds.<sup>39</sup> They spend at least four hours a week with incubatees and are remunerated by the incubator for this service.<sup>40</sup> ABI prides itself on being embedded in ICRISAT, the research centre, where its incubatees can have access to ICRISAT's scientists and researchers at a cost. At the UniBRAIN project in Africa, the provision of mentorship to incubatees has been a challenge, given both the difficulty of finding good quality mentors for the incubatees and the programme's lack of remuneration for mentors.<sup>41</sup>

Access to markets is another important service that is highly appreciated by incubatees. By focusing on specific markets and products and by adopting a holistic approach, value chain and sector development incubators are particularly effective at securing routes to market for their incubatees. Timbali, for instance, shelters its client farmers from many of the risks associated with agricultural production and, at the same time, allows them to benefit from direct and efficient access to distant niche markets they could not access on their own. In the 2017/18 fiscal year, 57% of the fresh produce grown by the South African incubatees was exported, 24% sold via wholesalers and 19% sold using retail channels.<sup>42</sup> The berry industry programme created by Fundación Jalisco in Mexico is another example of securing access to markets (see below).

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<sup>34</sup> Call with Villgro.

<sup>35</sup> In total about \$300,000. Source: email exchange with ABI-ICRISAT.

<sup>36</sup> <https://chileglobalventures.cl/angels/>.

<sup>37</sup> [www.chileglobalventures.cl](http://www.chileglobalventures.cl).

<sup>38</sup> [www.menterra.com](http://www.menterra.com).

<sup>39</sup> Villgro's annual report 2018/2019, p. 80.

<sup>40</sup> Call with incubator.

<sup>41</sup> Hjortsø *et al* (2017), p. 150.

<sup>42</sup> Timbali's Annual Report 2017–2018.

### **Fundación Produce Jalisco – the Berry Industry Development Program<sup>43</sup>**

The Mexican state of Jalisco has a warm climate, which makes its berry supply especially competitive with US producers in winter months. Recognizing the potential market opportunity, Fundación Jalisco, a Mexican agribusiness incubator, partnered with VitalBerry, a specialist supplier of soft fruit, and consultants from Chile to start a berry nursery in Jalisco. Created as a public–private partnership in 2008, the Berry Industry Development Program brought 800 producers and 3,500 hectares of berries under one umbrella. Contracts with VitalBerry and other commercial companies in the berry value chain were key to the success of the programme. Farmers ended up exporting to the US and the UK, among other countries.

Strong incubators are a key part of national ecosystems. As such, they offer opportunities for national and international networking. Villgro, for instance, each year organizes Uniconvention, a substantial knowledge sharing event attended by social entrepreneurs, CSR professionals, investors, policymakers and academia.

## **10. Ownership**

None of the large agribusiness incubators examined for this study is incorporated as a for-profit enterprise. Four of the six incubators are not-for-profit entities while the remaining two are part of their anchor institutions (a research centre and a university). Financing also varies, with some incubators having been set up and financed by a combination of public and private resources.

Villgro, Timbali and Fundación Chile are incorporated as not-for-profit entities in their respective countries, while One Acre Fund is an international NGO. Fundación Chile is a public–private partnership between ITT, an American communications conglomerate, and the Chilean Government.<sup>44</sup> CenTev/UFV is owned and partially funded by the Federal University of Viçosa (UFV) in Brazil but has received significant contributions from a foundation (see box below) and currently receives public and private grants. The ABI Program at ICRISAT is a joint initiative between ICRISAT and India’s Department of Science and Technology, a government body that promotes the development and commercialization of indigenous technologies. Villgro was set up with the support of the Lemelson Foundation and has attracted funds from a range of corporations (both local and international) and state-owned entities.

### **The role of FUNARBE in setting up CenTev/UFV in Brazil<sup>45</sup>**

One important contributor to the strengthening of CenTev/UFV’s capacity for innovation has been the FUNARBE Foundation (Fundacao de Arthur Bernandes), which has a goal of facilitating partnerships between UFV and public and private entities to develop and commercialize technologies created on campus. With FUNARBE’s support, UFV secured financing from state and federal R&D institutions and development agencies and also had access to potential private sector partners. FUNARBE’s support enabled UFV to set up CenTev/UFV, and it also helped the university’s researchers to obtain research contracts with private sector clients. FUNARBE’s support has also made it easier for students and professors to deal with intellectual property issues and to form companies.

<sup>43</sup> [Fundación Jalisco – Mexico Case Study.](#)

<sup>44</sup> [Fundación Chile Incubator – Chile Case Study.](#)

<sup>45</sup> [Centev/UFV Technology Incubator – Brazil Case Study.](#)

Nonetheless, public resources have historically played and are still currently playing a key role in promoting and sustaining the operations of most incubators. The CenTev/UFV Technology Incubator was established with an initial investment of around \$8m, largely from the government of the state of Minas Gerais, which invested \$6m to build a 1000m<sup>2</sup> building for the incubator especially designed for business incubation activities.<sup>46</sup> ABI-ICRISAT was set up with an initial start-up grant of \$536,000 provided by the National Science and Technology Entrepreneurship Development Board of India.<sup>47</sup> Fundación Chile benefits from regular subsidies from CORFO, the Chilean economic development agency.<sup>48</sup> Timbali in South Africa has implemented various projects financed by public sector organizations, such as the Small Enterprises Development Agency, the European Union, the Jobs Fund and the Limpopo Department of Agriculture and Rural Development.<sup>49</sup> The Technology Development Board of India has been the driving force behind the creation of numerous incubators in India, and it is still sponsoring key projects for the industry, like the INVENT programme (see below).

### The INVENT programme in India<sup>50</sup>

The Innovative Ventures and Technologies for Development programme is an initiative of the Government of India's Technology Development Board, in partnership with the UK Department for International Development. It aims to encourage social entrepreneurship in low-income states in India. Under the programme, social enterprises from such states can look forward to seed funding of up to 50 lakh Indian rupees – about \$67,000 – and dedicated mentorship. As the implementing agency for the programme, Villgro mentors four INVENT incubators, namely IIM Calcutta Innovation Park (IIMCIP), KIIT Technology Business Incubator at Bhubaneswar (KIIT TBI), SIDBI Innovation & Incubation Centre at IIT Kanpur (SIIC IITK) and Start-up Oasis, Jaipur. INVENT's focus sectors are agribusiness, healthcare, education, energy and livelihoods.

## 11. Strategy

Each incubator has developed its own proprietary methodology to catalyse investments into the agribusiness sector and any other sector targeted as part of its strategy.

Fundación Chile, for instance, historically relied on its technology centre to scout for new investment opportunities. The South American incubator's activities were organized around three main units: the technology centre, the business unit and the companies and investment division. The business unit was specialized in the sale of technology products and services. The companies and investment unit managed the companies that were incubated and created to support the spread of technology innovation. At the core of Fundación Chile's activities, the technology centre worked on over 100 projects annually that were relevant to the organization's principal interests. It also facilitated interactions between business sectors and various technologies, seeking so-called transverse technologies that would take advantage of market opportunities.<sup>51</sup>

One Acre Fund offers a complete bundle of services, from financing to market facilitation. Farmers receive high quality seeds and fertilizer on credit, and inputs are delivered to the

<sup>46</sup> Ibid.

<sup>47</sup> [ABI-ICRISAT](#).

<sup>48</sup> See for instance Convenio de Transferencia entre Cooperacion de Fomento de la Pruduccion y Fudacion Chile (2019, 2018, 2017 and 2015).

<sup>49</sup> Timbali annual report 2017/18.

<sup>50</sup> Villgro annual report 2017/18.

<sup>51</sup> [Fundacion Chile](#).

farmers' locations. Farmers receive training throughout the season on modern agricultural techniques, and One Acre Fund offers crop storage solutions to improve sales.

Timbali adopts a three-pronged approach, in which incubatees are classified based on the incubator's location and the type of technical assistance it provides. Model A (AgriPark) has been developed for farmers producing on Timbali's land for which Timbali prescribes quality supply chain procedures and enforced adherence to the production model. Model B (Satellite AgriPark) is applied to farmers operating on their own land but subject to the intensive franchise-style discipline imposed by export markets. Farmers enrolled in Model C (Effective Skills Development) receive part-time technical assistance from Timbali to improve production and quality.<sup>52</sup>

ABI and Villgro have recently positioned themselves as incubation network integrators. ABI has chosen a fairly risky strategy of combining new entrepreneurs with new technology—a risk that is partly offset by close linkages with world-class scientists. The new strategy is to collaborate with organizations globally in business incubation (co-business incubation).<sup>53</sup> Similarly, Villgro began developing specific programmes for the processes of innovation discovery, market testing and solution delivery at various stages in the product development lifecycle. It has learned that its best chance for successful outcomes is through referrals, so it works with other incubators, donors and government agencies at different stages of product and enterprise development. Both incubators have expanded their service portfolios to adapt to start-ups' changing demands and the emerging opportunities in India.

Incubators generally keep a fairly lean structure, which allows them to keep costs under control. They then work with an ecosystem of partners to perform key incubation activities. ABI, for instance, has a staff of eight. Timbali, according to the latest available information, has a core of nine. Similarly, much of the support that Villgro provides – as its clients move from commercially viable ideas to prototype products, to production and on to marketing to rural communities – comes from its network of specialized partners.

## 12. Sustainability

Incubators vary in the business models they apply – that is, how they fund themselves and pursue financial objectives. For technology transfer incubators, three main traditional income streams have been identified:<sup>54</sup>

- revenue from tenants and other clients (off-site incubatees, post-incubation enterprises);
- revenue from sharing in client success by way of small equity positions, royalty agreements on gross sales or brokerage fees on raising finance; and
- ongoing government or donor funding.

Incubators working on agricultural value chains or sector development obtain additional revenue streams from the sale of goods bought from or sold to incubatees and, in some cases (such as One Acre Fund), the interests received on loans to farmers.

Evidence shows that donor funding and ongoing government contributions represent the bulk of revenues generated by agribusiness incubators. One Acre Fund, for instance, in 2019 managed to mobilize \$79m in grants, which allowed the NGO to cover a portion of its costs. Revenues earned from its core programmes and sales of farm inputs contributed about 73% of One Acre Fund's programme costs.<sup>55</sup>

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<sup>52</sup> <https://www.timbali.co.za/>.

<sup>53</sup> World Bank (2012), [Agricultural innovation systems: an investment sourcebook](#), p. 423.

<sup>54</sup> Business Incubation Toolkit – I-DEV Incubation Good Practice: Module 1 – Start an Incubator.

<sup>55</sup> [One Acre Fund 2019 Financial Analysis](#).

Flowers produced by Timbali's clients are sold under the Amablom banner, which provides entrepreneurs with the opportunity to be part of a collective marketing, branding and bulk selling initiative. In return, the incubatee pays a levy on the flowers produced and undertakes to operate in accordance with the guidelines of Timbali, as dictated by international standards. These principles and practices were borrowed from the franchise industry and allow emerging farmers to be in business for themselves but also to benefit from support. In this way, Timbali aims to minimize the financial risk for both the client and the relevant financial institution. However, sales of products (i.e. flowers and vegetables) coming from incubatees do not cover the incubator's costs, so it relies on ongoing government and donor funding. Timbali's sales of its incubatees' products (i.e. flowers and vegetables) represented 33% of its average revenues in 2017 and 2018, while income generated from renting out land and levies on incubatees accounted for a paltry 2%. An average of 60% of the revenue generated by the South African incubator came from government agency contracts and from other donors.<sup>56</sup>

Centev/UFV's business model was historically based on revenue-sharing agreements with firms during the post-incubation period, but this source of revenue cannot cover its operating costs. The Brazilian incubator provides free services that include management and technical training, market research, business plan development, technological innovation, business development software and a strong institutional network. The network helps UFV professors, scientists and students, as well as other entrepreneurs, convert their ideas into viable businesses. Centev/UFV's main source of revenue is the royalties it gathers from graduated companies. The fee is equivalent to 0.5% of the monthly earnings of post-incubated firms, but unfortunately not all firms are paying their dues.<sup>57</sup> According to the latest available information, the incubator itself can generate revenues equivalent to approximately 40% of its annual costs, which are about \$1.5m. The rest of the funding has been provided by the university and its partners: the Brazilian Micro and Small Business Support Service (SEBRAE), the state government and the city hall.<sup>58</sup>

For technology transfer incubators, which cannot count on sales of products from incubatees, the reliance on donor funding and public agencies' programmes is even higher. In the case of Villgro, for instance, grants represented an average of 94% of revenues in 2018 and 2019.<sup>59</sup>

In addition to the funds received from CORFO, Fundación Chile also generates regular financial revenues by investing a portion of its endowment in fixed income investments and other financial assets. Those revenues contribute to pay a portion of Fundación Chile's operating expenses and are particularly important in periods when cashflows from projects implemented on behalf of partners (i.e. corporations and CORFO) are low.<sup>60</sup>

It is interesting to see how business models have evolved over time across the various incubators. Villgro, for instance, pioneered its own rural distribution system – “Villgro Stores” – to diversify its sources of revenue and to commercialize products made by its incubatees. Villgro marketed these products and those of other innovators through its proprietary distribution network. The incubator had planned to scale up its proprietary rural distribution network from 10 stores to 400<sup>61</sup> but the plan was scrapped and the stores were closed, as managing the network required a lot of energy and resources.<sup>62</sup>

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<sup>56</sup> Timbali's annual report.

<sup>57</sup> In 2014, only 60% of businesses were paying this fee (Source: infoDev, 2014. Centev/UFV Technology Incubator).

<sup>58</sup> [Centev/UFV Technology Incubator](#).

<sup>59</sup> Villgro's annual report.

<sup>60</sup> For instance, in 2016, CORFO's revenues decreased, while its endowment yield has been 5.3% vs a budget of 1.8% (Source: FCH, Memoria Annual 2017, p. 5).

<sup>61</sup> [Villgro](#).

<sup>62</sup> Call with incubator.

ABI-ICRISAT's business model evolved from a fee-based model (rental of infrastructure, offices and facilities) to offering feasibility studies and consulting services. ABI rents most of its facilities from ICRISAT and, in turn, ABI's clients pay rent to use the facilities. In its first five years (2002 to 2006), ABI depended on the initial grant funding provided by the Government of India. From the beginning, however, it tried to adopt a business model that would make it self-sustaining over time, and it has been financially self-sufficient since 2007, although its business model relies heavily on consulting services carried out on behalf of donors and government-related entities.

ABI's original plan was to gradually move towards a capital gains model, with most revenue coming from highly proprietary technologies in the form of equity payments and intellectual property rights. Incubatees suited for this model would include mature and large businesses, as well as start-ups launched by solid entrepreneurs. ABI thought this capital gains model would require less management support and would allow ICRISAT to focus more on supporting entrepreneurs for new technology development.<sup>63</sup> Unfortunately, this model was never implemented. One obstacle was India's ban on not-for-profit entities buying shares in private limited companies.

The UniBRAIN experience in supporting agribusiness incubators tells us it is extremely difficult to make realistic predictions of cashflows, particularly in the case of knowledge transfer incubators. For example, UniBRAIN's project implementers often underestimated the resources needed to provide high quality services, the complexity of engaging business mentors, the demands of established SMEs and the reluctance of incubatees to pay for services. Incubatees' service fees represented a very small portion of UniBRAIN's agribusiness incubators. One of the reasons behind this was that the incubatees enrolled by the project were mainly run by students and graduates with no early-stage start-up experience. Another category of UniBRAIN's incubatees was individual farmers and smallholder associations, which have proven unable and/or unwilling to pay for services offered by UniBRAIN's incubators. The UniBRAIN experience shows that, for an incubator to be able to rely on incubatees' fees to partially cover its costs, it needs to have a track record that demonstrates that the services are worth the cost. It also needs to target companies that can pay for a portion of the services offered, a condition at odds with the goal of setting up incubators to promote start-ups.

The World Bank recommends a 10-year horizon when planning for a new incubator to become self-sustaining.<sup>64</sup> In the case of UniBRAIN, all involved parties acknowledged that the four-year programme horizon was too optimistic: only one of the six incubators it supported had a positive cashflow during the project period.

### **13. Effectiveness and impact**

Section 4 set out some of the key achievements of successful incubators. KPIs on which most incubators base their performance are the number of companies incubated, the funds mobilized by those incubatees, the number of jobs created by the incubatees and the survival rate of the start-ups one or two years after the incubation period.

Over its 20 years of existence, for instance, Villgro has incubated over 300 companies. It disbursed seed funding of about \$9m and catalysed additional investments in its start-ups of about \$55m. So far, it has had a one-year post-incubation survival rate of 89%, which can be considered an excellent result. According to its website, Villgro contributed to the creation of over 4,500 jobs and has had an impact on about 20 million lives.

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<sup>63</sup> [ABI-ICRISAT](#).

<sup>64</sup> [World Bank \(2011\)](#).

ABI-ICRISAT, too, has had positive results. Created in 2003, ABI has successfully incubated over 100 enterprises, 75 of which graduated to the post-incubation phase. Over 80% of them were still trading one year after graduating, and 67% are still operational. ABI-ICRISAT's incubatees have mobilized about \$35.5m in grants, seed funding and venture capital funds.<sup>65</sup> The incubator generated over 2,500 direct jobs and commercialized 10 agri-technologies developed by ICRISAT and other partners. It introduced over 90 agri-products developed by the incubatees to the market and, during the course of its 2018/19 fiscal year, over 3 million farmers used its incubatees' products or services.<sup>66</sup>

According to the latest available information, Timbali supported about 150 SMEs in the 2014 financial year, and their turnover had increased by 20% from 2013. During the 2014 financial year, the South African incubator managed to attract 4m South African rand (about \$230,000) in co-funding to invest in additional SMEs and technology transfer programmes.<sup>67</sup>

In spite of these programmes' positive results, little data is available on the impact of incubators and accelerators on incubatees and investors. This is not just the case for incubators operating in the agribusiness space. A paper from I-DEV International, a consulting firm, in conjunction with Aspen Network of Development Entrepreneurs (ANDE) and Agora Partnerships, which evaluates the value created by impact incubators and accelerators for social enterprises, advocates setting up a framework to allow the comparison of incubators with each other. A common data framework would allow applicants, programme funders and investors to select more accurately which programmes to dedicate their time and resources to.<sup>68</sup>

### **Tracking data and standardizing collection methodologies<sup>69</sup>**

A key ongoing limitation in regard to assessing and quantifying the value created by an impact incubator or accelerator is that few of the key ecosystem players track consistent and reliable data. Therefore, there is a limit to the conclusions that can be made on value creation over time. This lack of consistent data collection across incubator and accelerator programmes has perpetuated the question, "What and how much value do incubators or accelerators offer in constructing a landscape for social enterprises and SGBs?" Furthermore, it has left programmes with limited evidence with which to respond or demonstrate value creation. While funders of most impact investment funds require extensive data tracking and reporting to gauge both financial and social return on investment, impact incubators and accelerators have, for the most part, not been required to provide this.

Although not a typical incubator, One Acre Fund is a notable exception. To measure and improve its impact, the NGO carries out rigorous evaluations on groups of farmers enrolled in One Acre Fund versus comparable groups of non-One Acre Fund farmers from the same villages who are subject to the same agro-ecological conditions. Those evaluations are carried out both by One Acre Fund staff and by independent evaluators. The NGO also measures the value for money in delivering its programmes. It calculates its social return on investment (SROI) by taking the total impact of a programme in terms of new farmer income generated and dividing this by the donor cost of operating the programme. In 2019, the

<sup>65</sup> Email exchange with incubator.

<sup>66</sup> ABI-ICRISAT brief.

<sup>67</sup> [www.timbali.co.za](http://www.timbali.co.za).

<sup>68</sup> This 18-month analysis included over 100 interviews and surveys with stakeholders from eight impact-focused incubator/accelerator programmes, 54 enterprises that had participated in the incubator/accelerator programmes analysed, and 18 active impact investors. See ANDE (2014).

<sup>69</sup> ANDE (2014), p. 36.

SROI of One Acre Fund was 3.1, which means that every \$1 from donors invested in country programmes generated \$3.1 in new farmer income.<sup>70</sup>

## 14. Gender responsiveness

The overwhelming majority of incubators do not publish data on gender outreach on a regular basis, which makes it difficult to conclude that agribusiness incubators are, per se, an effective tool to tackle gender disparity. Incubators would, of course, have an impact on gender disparity if they applied a gender lens to their selection processes for incubatees or sectors of intervention (i.e. value chains or parts of value chains). The Forum of Agricultural Research in Africa (FARA) provided some possible explanations of why most of the incubators supported by UniBRAIN were not gender responsive (see below).

### Why are agribusinesses and incubators often not gender responsive?<sup>71</sup>

FARA's research toolkit for gender mainstreaming in agribusiness incubation gives four main reasons:

- Agribusiness developers and incubators often think that business models are gender neutral. They fail to recognize that men and women may have different starting points and are presented with different opportunities and constraints because of their gender roles.
- Agribusiness incubators may not regard promoting gender equality and women's empowerment as their role. If involving women means extra effort and the expenditure of additional resources, they may view gender mainstreaming as an obstacle to business and profitmaking.
- Incubators may subscribe to stereotypes associated with women's involvement in certain types of business, and they may believe that there could be resistance to women's involvement. Since the purpose of business incubators is to launch successful businesses, if women entrepreneurs are considered high risk then they may not be enrolled in incubation programmes.
- Sometimes incubators acknowledge the relevance of gender integration but lack the knowledge necessary to integrate gender considerations into incubation models and processes. In some cases, they mention the lack of female applicants to the programme or a lack of sound business plans from female applicants.

Value chain incubators operating in sectors with lower access barriers for women tend to cater to a higher percentage of female incubatees than technology transfer incubators. This is the case for Timbali, which, according to the latest available information, works largely with women (77%).<sup>72</sup> This is a deliberate choice by the incubator and its funders but is also because female small-scale and subsistence farmers far outnumber males.

Girls in many countries are not encouraged to pursue technology-related studies, and the industry of technology transfer incubators is still predominantly male dominated. In the case of Villgro, which in 2019 incubated 20 technological companies, the annual goal is to find at least three incubatees that are managed by women or that have a majority of female employees.<sup>73</sup> A study recently published by GALI confirms that certain sectors, such as

<sup>70</sup> [One Acre Fund website](#).

<sup>71</sup> FARA (2015).

<sup>72</sup> Timbali annual report 2017/2018.

<sup>73</sup> Call with incubator.

financial services, ICT and energy, are heavily dominated by incubatees created by men, while women are disproportionately represented in the artisanal sector. Using data from a sample of 318 accelerator programmes, the study reveals that out of the entire pool of 14,985 applicants, 52% of founding teams were made up entirely of men, 35% contained both men and women and only 13% consisted entirely of women.<sup>74</sup> Technology transfer incubators such as ABI-ICRISAT are conscious of the existence of a gender gap and are adopting gender-sensitive policies to promote inclusive impacts.

### **The ABI-ICRISAT approach to promoting gender-inclusive technology in agribusiness<sup>75</sup>**

“Gender is important, given that over 84% of women in rural India depend on agriculture-related business for their livelihoods. We advocate planning our start-up interventions with this in mind, while developing and designing tools and services aimed at improving farm productivity.

For example, we had women farmer trainees operating primary processing machines for millet and pulses. The machines were developed by our start-up and installed at our facility. This gave us vital insights into how to improve the machine components so that women could easily operate the machines. They were redesigned to reflect the feedback and are being installed in our ongoing value-addition project locations in Telangana, India.

In another example, through our farmer collective efforts, we have helped create entities which are wholly managed by women farmers – either as CEOs or as members of the boards of directors. Helping them understand business modalities is a major challenge because of the existing cultural and socioeconomic context. We had to address this to ensure operations were not affected. In-person training programmes were used to explain concepts and encourage them to think through problems and solve them by themselves.

We also involved our start-ups in these programmes. This enabled them to understand how women members look at start-up products and services.”

ABI-ICRISAT programme manager

## **15. Challenges and key success features**

### **Management**

As with every successful entrepreneurial undertaking, a key factor for the success of an agribusiness incubator is strong leadership and management. Strong management will attract good incubatees and investors, helping the incubator to become viable. Many agribusiness incubators flourished thanks to the quality of their founders, managers and key staff. The entrepreneurial drive of Professor Claudio Furtado of UFV’s research department was instrumental in the creation of CenTev/UFV. Similarly, Timbali and Villgro were created out of the visionary spirit of Louise de Klerk, the co-founder and CEO of the South African incubator, and Paul Basil, the founder and CEO of Villgro. Founders were able to recruit managers with significant professional experience in the private sector, either at start-ups or established corporations. In spite of being incorporated as not-for-profits, all successful agribusiness incubators are managed professionally like any other commercially oriented enterprise.

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<sup>74</sup> GALI (2020).

<sup>75</sup> Email from incubator.

One of the key challenges faced by incubators started by UniBRAIN was the lack of knowledge of the incubation process among key staff. When UniBRAIN was launched, there was little knowledge in the target countries of the business model or the key drivers of a typical incubator, and only a few professionals had concrete experience of running similar programmes. As a result, one of the recommendations of the project's evaluators is to devote the necessary time to search for key experts to run incubators as CEO during the start-up phase. As the World Bank puts it, "this person should have business experience, the ability to analyse the issues facing client entrepreneurs as they develop their businesses, the ability to develop networks that will serve clients, and the ability to work with stakeholders to retain their support for the program".<sup>76</sup>

## Value chain selection

Value chain incubators and technology transfer incubators implement different business models, so they face different challenges. One of the most important challenges faced by agricultural value chain incubators at the outset is the choice of value chain to focus on. In the case of UniBRAIN incubators, value chains were assessed using value chain analysis tools – such as the ValueLinks manuals developed by GIZ – and in accordance with countries' investment plans outlined in the principles of the Comprehensive Africa Agriculture Development Programme.<sup>77</sup> By using a fairly structured approach to value chain selection, Fundación Chile was able to create new businesses that, later on, could be sold to established corporations. The South American incubator looked for innovations that were new to Chile, if not new elsewhere. It conducted a market evaluation to search for market needs and designed innovations to fulfil those needs, including changes to products, services and productive processes.<sup>78</sup>

The price of the goods sold also has an important impact on the ability of a value chain incubator to deliver on its impact objectives. One Acre Fund is heavily invested in maize, and in 2018 several of its customers faced leaner harvests due to erratic rainfall and pests. This led the NGO to diversify its crops.<sup>79</sup>

## Incubatees' selection process

Technology transfer incubators' most important challenge is to gain access to a pipeline of potential incubatees with the right entrepreneurial spirit and a good product to bring to market. As we discussed earlier, some incubators, such as CenTev/UFV, have set up pre-incubation programmes to identify potential incubatees. Similarly, ABI-ICRISAT conducts technology expos and entrepreneurship camps to keep its scouting pipeline active. In the case of Villgro, which has a narrower focus, the challenge of finding innovations to match the needs of rural communities is even harder. Villgro initially hired a dedicated scouting team that searches patents, reviews technical papers and assesses leads provided by network partners and other sources.<sup>80</sup> The strategy of the Indian incubator changed over the years. A top-down approach has been replaced by a bottom-up strategy to identify potential incubatees. It launched a national competition called iPitch catering to early-stage businesses (see box below). To recruit, select and insert well trained and energetic young people into start-up companies, Villgro also developed its Villgro Fellowship Programme, which provides participants with a year of mentoring and training.

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<sup>76</sup> World Bank (2012), p. 389.

<sup>77</sup> FARA (2015).

<sup>78</sup> Fundación Chile Incubator – Chile Case Study.

<sup>79</sup> 2018 Annual Report, One Acre Fund.

<sup>80</sup> Villgro Incubator – India Case Study.

### iPitch from Villgro<sup>81</sup>

iPitch is a national competition that targets early-stage enterprises that are in the process of developing their products and services or conducting pilots or that have products already on the market with early revenue traction. The event is an annual investment discovery platform, set up by Villgro to source and invest in for-profit social enterprises in med-tech, agri-tech, ed-tech, skilling, employability, cleantech and renewable energy. Winners have access to seed investment of at least 25 lakh rupees (about \$33,000), with the possibility of Pre-series A investment of up to 5 crore rupees (about \$670,000) by the Menterra Social Impact Fund. iPitch winners also have access to investment and incubation support through partners such as Beyond Capital Fund, Upaya Social Ventures, SINE (IIT Bombay) and TIMed. Up to 12 enterprises are offered the opportunity to be a part of the Upaya Social Ventures' fully-funded accelerator programme. In 2018, Villgro received 1,046 iPitch applications, including 268 from agribusiness ventures. Of those, 11 applicants were selected for seed funding.

## 16. Investing in agribusiness incubators

Technology transfer incubators are subject to different risks and key success factors compared to agricultural value chain incubators. That makes it impossible to compare these two main types of incubators in terms of investment risk and security.

The success of technology transfer incubators in promoting indigenous technologies depends on numerous variables, such as the quality of universities and research centres in the country, the pool of entrepreneurs the incubator is able to attract, the technologies and products the incubatee develops, the presence of early-stage financing instruments and the market uptake for the products and services offered by incubatees.

Technology transfer incubators such as Villgro, ABI-ICRISAT and CenTev/UFV have flourished in countries such as Brazil and India, where many of these key elements are present.<sup>82</sup> Both countries have large markets – and, therefore, a large potential uptake for domestically conceived technologies – as well as good universities and a good ecosystem of early-stage investors willing to take risks by investing in technology-driven start-ups. The experience of UniBRAIN in Africa demonstrates that, when most of these key conditions are not met, it is difficult for technology transfer incubators to be successful.

Unlike agricultural value chain incubators, technology transfer incubators spread their efforts across a number of technologies and industries. By diversifying their technical and mentoring support and, whenever available, seed investments in start-ups that are active in different areas and products, incubators effectively adopt a risk diversification strategy that mitigates excessive exposure to a sector or a company.

Agricultural value chain incubators are usually focused on promoting enterprises across a limited number of crops, and they face a more concentrated set of risks. Provided that agricultural value chains are chosen appropriately and the incubation process is well structured, agricultural value chain incubators face operational risks – such as negotiations with buyers and logistics – that can be mitigated. However, as shown by the experience of One Acre Fund, these types of incubators are highly exposed to production-related risks from external shocks, such as changes in the weather and the incidence of pests and diseases.

For countries that do not have the conditions for the effective establishment of technology transfer incubators, agricultural value chain incubators could represent a better solution in terms of return on investment. Incubatees of agricultural value chain incubators are enrolled

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<sup>81</sup> Company website.

<sup>82</sup> See [Business Incubation in Brazil](#) and [Technology Business Incubators – India](#)

in the programme and, provided that the price of goods sold does not fluctuate significantly and there are no external shocks, their revenues can be forecast in advance (see below for the example of Timbali). This makes it easier for an incubator to calculate its margins and forecast future revenues. This is particularly true for countries with well developed futures markets and stable agricultural pricing policies and for incubators that manage to secure long-term off-take agreements with set pricing.

#### **Profitability analysis of a Timbali incubatee<sup>83</sup>**

On average, Timbali spends approximately 80,000 South African rand (\$4,700) on each client over the four-year incubation process. While the price of cut flowers (the industry of most Timbali clients) fluctuates, the typical Timbali graduate produces approximately 8,000 stems per month. At an average price of 2 rand (\$0.12) per stem, the average Timbali client generates 16,000 rand (\$940) of income per month, thus recouping Timbali's initial investment in less than one year.

However, by benefiting from the exponential growth of some investee firms, technology transfer incubators could potentially have a higher development impact than agricultural value chain incubators in terms of job creation and private sector development. Technology transfer incubators give investors the opportunity to incubate a number of technologies and companies that could then either expand by moving out of the incubator and attracting additional funding from mainstream investors or get acquired by larger companies (see the examples in the box below).

#### **Examples of successful incubatees: Ecozen, Sresta and SeedWorks**

**Ecozen Solutions** is a renewable energy company that developed solar micro cold storage systems for use in agriculture and rural communities. The micro cold storage units help to increase the income of smallholder farmers who previously did not have access to on-farm storage solutions. In April 2015, Ecozen raised about \$1m from Omnivore. With this funding, Villgro, which had invested in Ecozen in March 2014 through a combination of equity and grants, exited the company with a profitable return.<sup>84</sup>

**Sresta Natural Bioproducts** is the market-leading company in India dealing with organically cultivated, processed food products. Sresta has about 200 individual products under its 24 Mantra organic food brand, which are sold in over 7,500 retail outlets and own-stores in India and abroad. After graduating from ABI-ICRISAT in 2010, Sresta raised \$15m from Peepul Capital LLC in 2011.

**SeedWorks India**, an incubatee with ABI-ICRISAT since 2004 in the biotechnology domain that is involved in the research and development of hybrid seeds of vegetables, was acquired by Bayer CropScience in 2015.

If properly managed, agricultural value chain incubators can be an effective tool to lift people out of poverty, and most technology transfer incubators do this indirectly. In the span of only 13 years, One Acre Fund has managed to serve over one million farmers. Thanks to its holistic approach (a combination of training, loans, inputs and provision of storage facilities), farmers have managed to increase their income by at least 49% in each of the last four years.<sup>85</sup> Similarly, Timbali found an effective way to connect low-skilled, young,

<sup>83</sup> Timbali Technology Incubator – South Africa Case Study.

<sup>84</sup> [Case study: Ecozen.](#)

<sup>85</sup> <https://oneacrefund.org/impact/>

inexperienced, unemployed rural people with markets. The outcome of its actions has a direct impact on the lives of farmers, the majority of which (75%) are women. By focusing on innovations that create real value for rural households, technology transfer incubators such as Villgro are also working to provide concrete solutions for poorer segments of the population. However, they do so indirectly, i.e. via their incubatees.

Both models can be relevant and support businesses that provide services, products or new technologies contributing to agricultural innovation. As the World Bank puts it, an “incubator must be designed based on market demand”<sup>86</sup> – and, we would add, based on the existence of basic conditions as outlined above.

Experience shows that incubators of both types must be able to expand into new areas to reach scale. A sector specific incubator is appropriate if there is a sufficient pool of clients (incubatees) and demand for agribusiness development. The examples of Villgro, Fundación Chile and, to a lesser extent, Timbali show that sooner or later incubators are pushed into other areas of intervention, either geographical or operational. A mixed portfolio incubator is often a more appropriate choice in developing countries, particularly smaller ones, because the pool of scalable SMEs in a specific sector is limited, and a sector specific model is not viable without a substantial and ongoing subsidy.<sup>87</sup>

As pointed out by the World Bank, “if a model based on long-term support from an external donor is considered, it will be important to conduct a rigorous cost–benefit analysis to compare incubation to BDS and other business development support mechanisms before committing”.<sup>88</sup> The examples cited in this paper show that, even in more developed markets such as India, Chile and Brazil, it is fairly difficult for agribusiness incubators to become fully self-sufficient. They also show that a degree of ongoing government funding is likely to be required, especially if the social and economic return on investment is greater than for other BDS interventions. However, the financial strain on the public sector in many poor countries may make it very difficult for it to keep on subsidizing incubators.

The cost–benefit analysis of supporting incubator programmes will take into consideration not only the direct outcomes achieved by an incubator but also the indirect spillover effects on the overall sector. Early-stage investors, for instance, acknowledged that incubator and accelerator programmes create value by “building the ecosystem and strengthening the sector”, irrespective of whether or not they invest in the incubatees promoted by those programmes.<sup>89</sup> This contribution to the ecosystem of SGBs is difficult to quantify, but it exists and should be taken into consideration by donors and investors when deciding whether or not to support an incubator.

## 17. Recommendations

The evidence collected on the overall performance of six incubators supports the fact that, should the right conditions exist, incubators can represent an effective tool to support increased investment in the agribusiness sector. However, as this paper shows, incubators often need continuous subsidies from donors and government agencies to support the emergence of innovative start-ups in agribusiness and other key sectors of the economy.

### Donors should keep financing high risk incubation work

Apart from generating potential investment opportunities for early-stage and growth stage funds, incubators play a central role in the wider agribusiness ecosystem, the value of which

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<sup>86</sup> [Agricultural Innovation Systems: An Investment Sourcebook](#), p. 389.

<sup>87</sup> Ibid.

<sup>88</sup> [Agricultural Innovation Systems: An Investment Sourcebook](#), p. 394.

<sup>89</sup> ANDE (2014).

is not directly measured by standard KPIs. For instance, incubators set up programmes supporting students and very early-stage ventures that are, by definition, high risk. Those programmes are essential for the economy, as they offer opportunities for young entrepreneurs to generate and test new business ideas. However, standard KPIs such as the percentage of firms graduated from the programme could by themselves potentially translate into a poor apparent performance by the incubator. KPIs that are better to use include the survival rate of companies one or two years after completing the incubation process, the revenues generated by those firms after incubation, and the amount of funding the incubatees attract from private investors.

Donors should therefore support incubators by financing high risk activities, leaving the private sector to finance incubators' low risk activities, such as training programmes for growth stage companies. In those cases, donors could encourage the adoption of targeted KPIs such as "the age of the incubatee's founders", "the previous occupation of the founders" and "the gender of the founders" to monitor the performance of the incubators in supporting youth, the unemployed and women.

### **Stronger links with early-stage investors are essential**

Strong links with investors are necessary for incubators to flourish and should be further incentivized. ANDE (2014) reveals that 40% of the early-stage investors interviewed had sourced at least one deal directly through an incubator or accelerator programme, compared to only 12.5% of the growth stage investor group.<sup>90</sup> However, the same document states that investors had conflicting views on whether incubator and accelerator programmes should be more selective in their cohort admission process. Some investors felt that improving the selection process of incubatees would benefit their deal flow, while others were concerned that more rigid admission criteria could discourage potential early-stage entrepreneurs from starting a new venture.<sup>91</sup> Incubators should be incentivized to enter formal partnerships with investors, as these are key contributors to success. The partnerships could take many forms, including investors sitting on selection committees or becoming mentors of selected incubatees. Other partnership forms that can be considered include investors becoming sponsors, investing in incubators or awarding monetary incentives to incubators for reaching certain milestones.

### **Funders should insist on better data capturing**

Foundations and development organizations that fund incubators and accelerators can be a catalyst behind the formalization of impact incubators and accelerators by requiring that programmes collect more robust data from their incubatees and alumni on a more regular basis. ANDE (2014) reveals that most programmes do not track even basic information on their incubatees and alumni, such as revenues and profitability over time, capital raised or introductions to investors facilitated. Incubators and accelerators interviewed by ANDE did express an interest in developing more robust data tracking capabilities. However, they also indicated that they lack the necessary funding and bandwidth to do so.<sup>92</sup> Donors and foundations could potentially provide the resources necessary to carry out proper data collection, which will allow stakeholders to compare performances of incubators over time.

### **A stronger focus is needed on value for money**

Global standards should be adopted for the evaluation of incubators' performance from a value for money perspective. Comparing KPIs on incubatees' performance is not sufficient to evaluate the performance of an incubator. To be able to assess in an objective manner whether their resources have been used effectively, donors and foundations need to monitor

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<sup>90</sup> ANDE (2014), p. 25.

<sup>91</sup> ANDE (2014), p. 27.

<sup>92</sup> ANDE (2014), p. 36.

effectiveness in the use of resources, as One Acre Fund has done with its measurement of SROI. This, coupled with rigorous evaluations of the performances of incubatees and non-incubatees, will incentivize further investments in the ecosystem.

## **Reducing gender disparity via incubators is possible**

Agribusiness incubators can serve as a platform for donors and social investors to cater to women entrepreneurs and, more broadly, to reduce gender disparity. This can be done by either supporting technology transfer incubators to apply a gender lens in the selection criteria of incubatees or by making sure that incubatees' solutions and products are developed while taking into consideration the needs of female clients. For agricultural value chain incubators, donors should insist on applying a gender lens when selecting which value chains to focus on.

## **The impact of the COVID-19 pandemic**

COVID-19 is already having an impact on the work of most agribusiness incubators in emerging markets. Social distancing rules have disrupted key activities, such as mentoring incubatees and investor roadshows, which are currently being carried out remotely. The pandemic might also disrupt the critical task of selecting new intakes. It will certainly be easier for technology transfer incubators than for value chain incubators to adjust, as it is more feasible to select and mentor or coach companies online than it is to organize a whole value chain.

The economic consequences of COVID-19 will likely be felt in many developing economies. From a funding perspective, portfolio outflows from emerging and developing markets have been significant since the start of the pandemic. With less commercial money available to finance venture capital funds, incubatees will depend more on patient capital from donors and impact investors in order to graduate from incubators. The agribusiness sector has been significantly impacted by COVID-19. Lockdown measures had a negative impact on the prices of commodities and of locally sold cash crops. Impoverished farmers are bad news for both technology transfer incubators – as their incubatees produce products and services for local farmers – and also for value chain incubators, as farmers need high-enough prices to pay for the services they receive.

## Bibliography

ABI-ICRISAT (2018). Company brochure.

ANDE (2014). [Measuring Value Created by Impact Incubators and Accelerators](#), ANDE Issue Brief.

Christiaensen, M. (2018.). [Agriculture, structural transformation and poverty reduction: Eight new insights](#). *World Development*, Volume 109.

FARA (2015). [A toolkit for gender mainstreaming in agribusiness incubation](#)

GALI (2017). [Accelerating startups in emerging markets. Insights from 43 programs](#).

GALI (2020). [Accelerating Women-led Startups](#). March Knowledge Brief.

Hjortsø, C. N. P., Alexander, I. K., and Hernandez Chea, R. R. (2017). [Experiences and Lessons Learned from the UniBRAIN Agribusiness Incubation Programme](#). IFRO Report, No. 266. Department of Food and Resource Economics, University of Copenhagen

ISF (2019.). Pathways to Prosperity: Rural and Agricultural Finance, State of the Sector Report.

Villgro (2012). Case Study Series, Skymet Weather Services.

World Bank (2011). [Growing Food, Products, and Businesses: Applying Business Incubation to Agribusiness SMEs](#).

World Bank (2012). [Agricultural Innovation Systems: An Investment Sourcebook](#).

World Bank (2014a). [Agribusiness Incubator at ICRISAT - India Case Study](#).

World Bank (2014b). [Centev/UFV Technology Incubator - Brazil Case Study](#). InfoDev Agribusiness.

World Bank (2014c). [Fundación Chile Incubator - Chile Case Study](#). InfoDev Agribusiness.

World Bank (2014d). [Fundación Jalisco - Mexico Case Study](#). InfoDev Agribusiness.

World Bank (2014e). [Timbali Technology Incubator - South Africa Case Study](#). InfoDev Agribusiness.

World Bank (2014f). [Villgro Incubator - India Case Study](#). InfoDev Agribusiness.

World Bank (2017). [Case study: Ecozen](#). Inclusive Innovations Profile.



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