

Financial models

Introduction

From the HCoE review it became clear that the development of an HCoE requires a long time path, often of a period of 4 up to 7 years. This is the case for the donor-funded or subsidized initiatives that were build up together with a local partner that already had an existing business. Starting off from scratch without donor funding to realize the basic necessities in hardware and setting up an organization seems hardly possibly for developing countries. This is the result of the combination of high investment costs required to start-up and the very high interest rates. Also development of curricula is a time consuming activity that takes a long time before it generates any revenues.

During all different HCoE set-up phases including design and development, construction, implementation and further growth and development, costs will have to be covered. According to Latia Resource Centre it took them from a start in 2011 till 2017 to reach the break-even point. Ceickor in Mexico also mentioned financial support of the national government and federal resources at the start-up of the centre. They managed to quickly attract good partners to support the centre and managed to realize positive financial results in time.

From the review it became clear that the bulk of private sector parties active in HCoE initiatives in developing countries usually remain involved for 2 to 4 years. However, when some companies move on into more individual business activities, other newcomers will present itself. New companies follow the front runners by the time the sector develops to a higher level or when 'new' horticulture subsectors are being supported by the HCoE. As long as the HCoE is well managed and implements a sufficient level of activities that can create benefit to Dutch private sector, the facilitation of market access opportunities by an HCoE can be stretched longer.

In some of the reviewed initiatives long term, structural commitment (>4 years) was observed by groups of companies. This was usually the case for 'closed' consortium activities by groups that managed to build up a working relationship for a specific region with a complementary group of companies.

Centre of Excellence income generating activities

In the following paragraph the income generating activities that an HCoE could become involved in are described. The activities are collected based on the information and business plans of the reviewed centres of excellence and interviews. It has to be noted that on paper a business plan may seem financially sustainable, but that in practice results may differ depending on the organisation and management of the centre.

The main income generating activities that were collected are:

- Training programs, including train-the-trainer
- Consultancy
- Contract research
- Demonstration
- Local distributor
- Local consolidator
- Sales of production
- Agribusiness incubator
- Funding of start-ups
- Recruitment services

Training programs can include longer term and short training to SME farmers, farm employees, including farm management and owners. Training topics can include technical issues, as well as business and financial management topics, depending on the expertise that can be incorporated in the organisation. Generally the training fees that are accepted in developing countries are not on the level that it can form a substantial part of the income of an HCoE. For the SME client segment often it is rather challenging to try to have the SME farmers paying for technical support as they are accustomed to receiving this for free from government extension or donor funded aid projects.

Also train-the-trainer-programmes can be developed for people who are appointed as future trainers in horticulture, such as staff of production companies, extension workers or other advisors.

In the train-the-trainer-programmes also courses on didactical skills can be included such as transfer of theoretical and practical knowledge, define learning objectives, design of curricula, compose learning materials, stimulate and inspire students and trainees.

Consultancy done by a privately managed HCoE usually involves technical advisory to farmers. In case of involvement with a knowledge institute, with more highly educated consultants available, more types of consultancy work can be done including participating in larger projects for the large scale, highly professionalized growers, for sector organizations, donor funded sector support programmes and such. In the latter situation the fee levels could become rather substantial.

Contract research can be offered – provided the required facilities are there- to growers, grower associations, breeders, technology suppliers, and possibly knowledge and educational institutions. Especially the outsourcing of seed trials is rather common and can form a basic income for the centre. Testing of new high tech or low tech technologies for the sector can also be very interesting. This is usually linked to demonstration of technology. In case suppliers finance the tests, a - more or less-independent testing centre can be set up, with the outcomes being communicated to the supplier. If the CoE becomes the **local distributor** of the technology after success has been proven, the independency will however be breached. This model however is often observed in developing sectors. What can also be an interesting business activity when active in the SME segment is to function as a **consolidator** of farm input orders, purchase in bulk and organize the distribution among the SME farmers. The other way around, the centre could also become a consolidator for produce and organize the post-harvest handling activities and perhaps even sales.

Demonstration of technology can be offered to suppliers against a fee or sponsorship agreement, while the technology can be applied in the production process. Often the demonstrated technology is provided by the supplier as an in-kind contribution to the centre and the payment for demonstration is limited.

For many HCoE's a significant part of their revenues is realized through the **sales of production**. Being able to produce large volumes and/or high quality products that sell at good prices ensures a continuous generation of income and it is the best example that the centre can set for the sector. If an HCoE is not capable of performing in the field of production, their credibility as an HCoE becomes less. The fact that production is such an important factor in the centre's financial model makes it more interesting to work with a well-established grower as a local host instead of a partner that does not have production as its core business.

An **agribusiness incubator** is a physical organisation, consisting of a small group of agriculture and organisational experts that offer services to stimulate agribusiness development. As an incubator an HCoE can provide any service relevant to agribusiness development within a particular context, ranging from technical expertise to grow crops, to management support, to bookkeeping support. **Funding of promising start-ups** in the agriculture sector can be linked to the incubator.

There are three different types of designs of agribusiness incubators, each of these types has a different focus in terms of providing services to its target group [Makumire, Nijhoff, de Vries, 2013]:

1. **Agribusiness value chain and sector development** incubators focus on the development of agricultural value chains or entire sectors, or on stimulating market access.
2. **Agricultural research commercialization incubators** focus on research and the transfer of technology. There is usually an affiliation with a research or learning institute, which of course has interests of its own. A balance needs to be found between the needs of the farmers and entrepreneurs on the one hand and the capacity of the research/learning institute on the other hand. When the incubator is mainly focused on the expertise of the institute, the technologies developed may not correspond with the needs of the farmers/entrepreneurs. And vice versa.
3. **Agricultural technology transfer incubators** can be divided into two focus areas. On the one hand there are those that focus on low-tech domestic innovation, and on the other those that focus on high-tech international innovation. Consequently, low-tech incubators work with small-scale businesses at grassroots level. High tech incubators work with bigger businesses and face the challenge of transferring a technology that is new in the local context into product and market.

Recruitment services for the horticultural sector, both for the large scale farms as SME's, can also have a supporting function in sector development and generate income. This can be done as an online job board where horticultural companies and job seekers meet, perhaps complemented with options for internship positions for students. Income generation can be realized through administration fees for users, and for instance sponsors and advertisements.