

Study of Social Entrepreneurship and Innovation Ecosystems in the Latin American Pacific Alliance Countries

Case Study: Asembis, Costa Rica

Fundación Ecología y Desarrollo

Office of the Multilateral
Investment Fund

TECHNICAL
NOTE N°
IDB-TN-1195

Study of Social Entrepreneurship and Innovation Ecosystems in the Latin American Pacific Alliance Countries

Case Study: Asembis, Costa Rica

Fundación Ecología y Desarrollo

July 2016



Cataloging-in-Publication data provided by the
Inter-American Development Bank

Felipe Herrera Library

Ecología y Desarrollo (Organization).

Study of social entrepreneurship and innovation ecosystems in the Latin American
Pacific Alliance countries: case study: Asembis, Costa Rica / Fundación Ecología y
Desarrollo.

p. cm. — (IDB Technical Note ; 1195)

1. Social entrepreneurship-Costa Rica. 2. Technological innovations-Social aspects-
Costa Rica. I. Inter-American Development Bank. Office of the Multilateral Investment
Fund. II. Title. III. Series.

IDB-TN-1195

JEL Codes: A130

Keywords: Social enterprise, Social entrepreneurship, Social innovation, Social
business, Social impact, Impact investment, Social entrepreneur

<http://www.iadb.org>

Copyright © 2016 Inter-American Development Bank. This work is licensed under a Creative Commons IGO 3.0 Attribution-NonCommercial-NoDerivatives (CC-IGO BY-NC-ND 3.0 IGO) license (<http://creativecommons.org/licenses/by-nc-nd/3.0/igo/legalcode>) and may be reproduced with attribution to the IDB and for any non-commercial purpose. No derivative work is allowed.

Any dispute related to the use of the works of the IDB that cannot be settled amicably shall be submitted to arbitration pursuant to the UNCITRAL rules. The use of the IDB's name for any purpose other than for attribution, and the use of IDB's logo shall be subject to a separate written license agreement between the IDB and the user and is not authorized as part of this CC-IGO license.

Note that link provided above includes additional terms and conditions of the license.

The opinions expressed in this publication are those of the authors and do not necessarily reflect the views of the Inter-American Development Bank, its Board of Directors, or the countries they represent.



Study of Social Entrepreneurship and Innovation Ecosystems in the Latin American Pacific Alliance Countries

CASE STUDY

Asembis, Costa Rica

**Multilateral Investment Fund (IADB) ·
Fundación Ecología y Desarrollo**

July 2016



Contents

1. Introduction.....	3
2. Local Social Issue and the Challenge.....	4
3. Solution and Social Impact.....	5
4. The Social Entrepreneur.....	6
5. Business Model.....	7
6. Social and Financial Performance.....	11
7. Business Development and Ecosystem Evolution.....	13
8. Scalability and Replicability.....	19
9. Final Reflections.....	21

Acknowledgements

The author **Heloise Buckland** would like to acknowledge the following individuals for their contribution to this study, through participating in personal interviews and making comments on draft versions of this report.

Rebecca Villalobos, Founder and President of Asembis

Edwin Contreras, Director of Corporate Development

Carlos Castillo Mallorca, Head of International Purchasing

Maria Jose Carbajal, Head of Social Program Area

Marco Villegas, Director of Federation Services, Federation of Social Organizations

Wiliam Nuñez, Communications Coordinator, Federation of Social Organizations

Erick Mora, Director of Social Business, Federation of Social Organizations

1. Introduction

Name: Asembis	
Description	Asembis provides high quality, affordable health care with a multi-tiered pricing strategy enabling the most vulnerable to access discounted and free services in eye care and 30 other areas of medical expertise.
Founded	1991, San José Costa Rica.
Legal format	Non-for profit organization (in Spanish <i>Asociación</i>).
Num. employees/volunteers	351 full time employees.
Geographical reach	Costa Rica, with operations starting in Nicaragua in 2016.
Certifications/ awards	Bravo Business Wards, Humanitarian of the Year & ISO9001 (2009), Best Life Achievement Award, International Organization for Training and Medical Research (2013), CBN Innovation Prize (2013).
Social innovation variables	
1. Innovation type	Key innovations are the multi-tiered pricing model, outsourcing new medical areas to broaden the service, and a health insurance model for organizations.
2. Social impact	3 million people served in total, 65% of the population of Costa Rica has access to Asembis health services and 17,254 people have been supported with free or discounted health care.
3. Financial sustainability	Profit margins on more expensive treatments subsidize access to discounted or free health care for lower income groups with the surplus constantly re-invested to expand infrastructure.
4. Key Partners and Support ecosystem players	Key partners include 900 organizations who Asembis delivers health cover to, multiple government institutions and key suppliers in the US and China.
5. Scalability and Replicability	Effective expansion strategy achieved with 8 clinics across Costa Rica, international replication starting in Nicaragua in 2016 with other Central American countries to follow.
References	www.asembis.org

2. Local Social Issue and the Challenge

The key social challenge that Rebecca Villalobos, founder of Asembis set out to tackle when she set up the organization in 1991 was the lack of access to eye care in poor communities in Costa Rica. Today, Asembis addresses several other health care deficits for poor communities as well as the general lack of affordable healthcare for middle class populations.

Costa Rica is one of the few countries in Central America where inequality has been increasing over the last 5 years and many of the poorer municipalities are very under-served in terms of basic health provision. While the country as a whole has a relatively high level of wellbeing (scoring 78 on the Social Progress Index, as 28th country worldwide) half of the regions (in Spanish *cantones*) have a score of less than 60, which ranks them alongside countries such as Bolivia, China, Zambia, around 70th in the worldwide ranking.¹

Untreated cataracts and blindness

Vision impairment affects over 700 million people worldwide and in poor communities across Latin America, most people have never had their eyesight tested. The eyesight examination chart traditionally used in developed countries is an unfamiliar novelty in many places. According to Ashoka's globalizer program, "*Adults with deteriorating eyesight and more severe ocular problems, like cataracts, are commonly left to stumble along toward preventable blindness, typically jeopardizing the income-generating activities with which they support their families.*"² Children with minor vision problems are often misdiagnosed as having learning disabilities and are placed in special needs class, rather than having their eyesight tested.

In Costa Rican communities where medical attention is limited, local health professionals are often untrained to detect basic ocular problems. The Ministry of Health does not offer eye care and there are very few trained optometrists³ and ophthalmologists⁴ in Costa Rica. Where there is a service, it is usually expensive. Costa Rica only has 70 ophthalmologists in the whole country, 75% of whom are located in the capital city of San José.⁵ In addition, many of these specialists practice privately and their services are not affordable even for middle class Costa Ricans. The waiting list for an ophthalmologist on the public health system can be up to a yearlong and people living below the poverty line cannot afford glasses or ocular surgery, even when they have been given basic vision testing.

The eye care situation is similar (if not worse) in other Central American countries and extends to the fields of hearing and dental care where low and middle-income patients face a shortage of available options and where trained professionals are not equipped to handle the demand.

¹ www.costaricapropone.go.cr

² www.ashokaglobalizer.org

³ An optometrist is trained to prescribe and fit lenses to improve vision, and in some countries are trained to diagnose and treat various eye diseases.

⁴ An ophthalmologist is a specialist in medical and surgical eye problems. Since ophthalmologists perform operations on eyes, they are both surgical and medical specialists.

⁵ www.lightedlamp.com/asembis-problem-costa-rican-public-healthcare-system/?lang=en#sthash.qaTh2apC.dpuf

3. Solution and Social Impact

Asembis is a non-for profit organization that provides affordable, high quality health care to the low and middle class and poor communities of Costa Rica, using world class technology supported by a team of medical professionals committed to the delivery a high quality service. Asembis operates a multi-tiered pricing strategy to provide free health care to the most vulnerable, and discounted services to low income families. Asembis operates specialized health clinics across the country, mobile health care services for remote areas and several education programs.

Innovations in ocular care

Part of Asembis' vision for widening access to eye care was centered on the notion that blindness is not solely a health problem. Like deafness and dental decay, vision loss is a social problem that requires a range of community players for effective diagnosis, treatment and prevention. To empower young people to integrate responsible eye care into their everyday lives, Asembis developed the Windows of Light program to train schoolchildren to promote proper vision care, by testing each other's sight, recording and monitoring the results. Eye charts and training are delivered to schools to ensure that teachers do not misdiagnose children with poor eyesight. Asembis also organizes glasses donation campaigns, whereby old glasses are donated to Asembis who integrate them into their mobile health services that serve the most remote communities and donate glasses to the poorest families.

Through a unique combination of large-scale diagnosis, low-cost glasses and cost-efficient clinics, Asembis helps detect and correct vision problems on a massive scale. This model has now been adapted to other health fields, including hearing and dental care, where citizen-based initiatives and community partnerships reduce the incidence of preventable illness.

Health clinics, partnerships and mobile services

Asembis currently operates 11 health clinics across the country to provide the general public with a full range of affordable health care services with a total of 30 specialized areas including physiotherapy, gynecology, gastroenterology, cardiology, dermatology and odontology. In addition, the organization has established 900 partnership agreements with a variety of organizations including private businesses, associations and cooperatives to provide them with discounted healthcare for their workers and members. Asembis also organizes mobile health clinics to reach the most remote areas of the country where services are limited. Asembis' social program provides financial support through the clinics and mobile services for those people who cannot afford to pay for the health care.

Social impact

Asembis provides 65% of the Costa Rican population with affordable health care and to date has treated a total of 3 million patients with 27,000 eye surgeries performed. 17,254 people have been supported with an entirely free or partially subsidized service and in the last 5 years an average of 480,000 USD worth of services has been donated to those who cannot afford to pay for their health care.

4. The Social Entrepreneur



Rebecca comes from a single parent middle class Costa Rican family and is the youngest of 7 siblings. To help fund her psychology studies at the University of Costa Rica, aged 19, she began working with the NGO Good Will Caravan (in Spanish *Asociación Caravana de Buena Voluntad*), which provided a range of social services to poor communities in rural Costa Rica. She was first exposed to the lack of proper vision care and the inefficiencies of the eye care industry when she traveled to underserved rural communities as secretary for the Caravan's ophthalmology department. The Caravan provided eye testing and donated second hand glasses.

Rebecca noticed that many children were failing their classes because they did not have glasses, and others were slowly going blind due to lack of access to proper treatment, which compelled her to start thinking of new, more effective methods for diagnosis and treatment. Many people had to accept blindness as they didn't have access to cataract operations. *"What I saw upset me,"* Villalobos says. *"But at the time, I really didn't know how to help."* She never imagined that she would one day become an international leader in the promotion of affordable vision care.

Several years later, she won a scholarship to study Administration and Planning of Social Projects at the School for International Training in Vermont. For her final project, she developed a plan for a low-cost ophthalmology clinic. On return to Costa Rica the Caravan gave her the funding to develop her proposal. However, just as she was getting started one of the major donors of the Caravan pulled out and the organization was forced to lay off most of their staff. This was Rebecca's second inspiration, to develop a financially sustainable model that did not depend entirely on external donations to provide health care to Costa Rica's vulnerable communities, but was also capable of generating its own income. She decided to leave the Caravan, which, 5 years later was forced to close.

In 1991 Rebecca and 12 colleagues from the Caravan decided to set up a new organization, and with her two months rent savings of 500 USD they began providing basic eye tests, charging 2 USD per visit. They were soon provided with financial support from the foundation Germany and within three years reached breakeven point. 25 years later she continues to serve as executive director of what is now a multi-million self-sustaining enterprise with 11 clinics across the country, operating in 30 different medical areas. She is an Ashoka Fellow, has since completed degrees in Community Ocular Health and Optometry and has proven herself as a tireless leader in providing affordable health care in Costa Rica, and soon across Latin America.

5. Business Model

Asembis is a non-profit organization registered in 1991 that has always worked towards a vision of generating enough surplus revenue to continue expanding, and be able to invest in new clinics, high quality equipment, professional development and an ever-broader range of medical services. Asembis chose non-profit status to be able to receive grants in the Startup and Early stages of development, and has continued with this status, which also gives the organization fiscal benefits (donations can be made tax free to Asembis). Asembis operates a multi-tiered pricing model in which higher revenues earned from wealthier patients cross-subsidize low-income patients who can apply for assistance with the costs of treatment. All patients receive first-class attention with cutting edge technology. *“Asembis has a financially self-sustaining network of clinics that offer services from basic eye examinations to sophisticated surgical procedures at between 40 and 70% discount from the market rate.”*⁶ Rebecca comments that *“sheer volume”* enables the clinics to contain their costs whilst fuelling growth. *“It requires a lot of work, but the volume of patients helps us make surpluses, which we turn around to invest in new technology or buildings (...) all the money we make is reinvested in Asembis.”*

5.1 Characteristics

Asembis has 35 voluntary members who meet once a year for the annual general meeting and to advise on long-term strategy of the organization. In addition there is a Board of Directors, which meets ten times a year to review financial and social progress. Rebecca Villalobos has been president of the association for the last 6 years and is also currently executive director.

11 specialized clinics

60% of Asembis operations are related to eye care however the organization also offers 30 other areas of specialization in its 11 clinics situated across Costa Rica. Most of the clinics offer services in optometry, ophthalmology, audiology, general medicine and dental care and the largest of the clinics, Guadalupe based in San José offers an additional set of specialties as illustrated in Table 1. The number of specialist medical staff based in each clinic ranges from 5 in the smaller clinics to 20 in the larger clinic as shown in Figure 1. These are supported by a team of administrative staff with a total of 351 people working for the organization. Asembis has a hub-and-spoke type of model with San José and Guadalupe operating as the two large central clinics that perform the majority of operations. These central clinics also accept referrals from the smaller clinics.

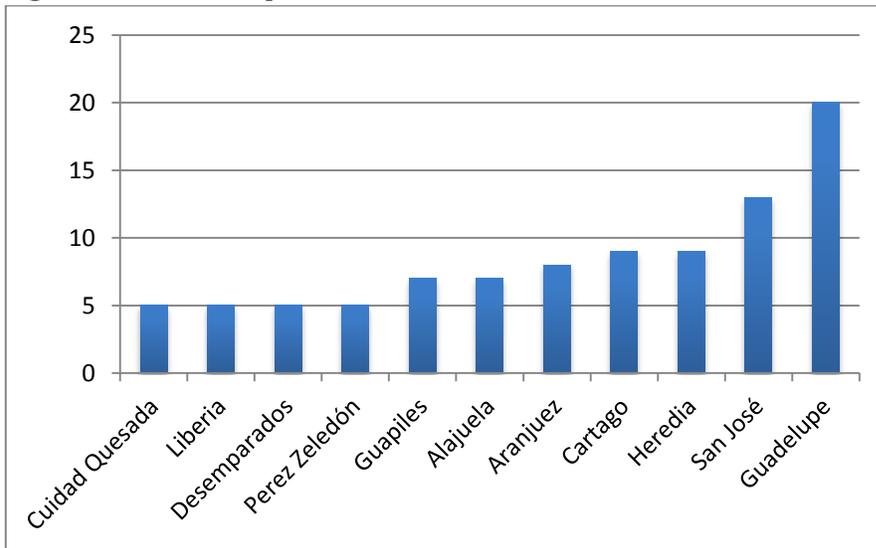
Table 1. Specialist professionals working at Asembis clinics

Clinic	Areas of specialization	
San José (center), Guapiles, Liberia, Aranjuez, Alajuela, Cartago, Heredia, Ciudad Quesada,	Optometry Ophthalmology Audiology	General Medicine Dental care Medical Examinations

⁶ <http://healthmarketinnovations.org/program/asembis>

Desemparados, Perez Zeledón		
Guadalupe (San José)	Optometry Ophthalmology Otorhinolaryngology (ear, nose and throat) Retinal Ophthalmology Corneal Topography Angiography Audiology Ear, nose and throat General medicine Physiotherapy	Dental care Cardiology Gastroenterology Gynecology Dermatology Bone densitometry, mammograms X-Ray Ultrasound Social Work

Figure 1. Number of specialized medical staff at different Asembis clinics



Health care for organizations

As well as attending the general public through the 11 clinics across the country, Asembis also has a partnership model whereby an agreement is signed with organizations to provide discounted healthcare to their employees and their families. This represents 30% of total revenue and Asembis has a total of 900 partnerships signed with organizations of different types, including private businesses, non-for profit organizations, working cooperatives and other institutions. The agreement usually includes a 10% discount for the workers or affiliates of the organization and in some cases more generous discounts, such as 50% off discount for computer users' eye testing. For certain organizations Asembis also offers credit for the organizations whereby employees can access the service immediately and payments are

processed at specific times of the year. Employees access these benefits from any of the Asembis clinics.

Mobile clinics, glasses donations and discounted services

The final mechanism for delivery of health services is through the mobile clinics which are large equipped vehicles that visit the more remote, rural areas of Costa Rica to offer affordable treatment to poorer communities. A large part of the services offered are related to eye care. Via the mobile clinics early detection campaigns, training in schools for the Windows of Light program, prescription lenses and sophisticated cataract surgery are offered. The mobile clinics can attend up to 70 patients a day for basic eye testing. The clinics are managed by Asembis' social program which is also responsible for managing the discounted and free services to low income families, workshops held in schools and glasses donations campaigns.

5.2 Fee structure or pricing model

Asembis has a multi-tiered pricing model whereby the majority of its services are offered at a price that is lower than the market price, however high enough to generate a margin which enables the organization to offer discounted prices for lower income groups as well as free services for the most vulnerable. To generate sufficient margin to offer services to lower income groups the business model depends on a high volume of transactions. Overall Asembis offers 60% cheaper consultations than other private medical care available in Costa Rica, 40% cheaper surgeries and 5% of its operations are free to the poorest people.⁷ Asembis constantly reassesses costs and prices through bi-annual market studies including considerations of inflation, minimum wages, market prices, inputs, and analysis of the competition and presents a "Justice Report" at board meetings to ensure the organization remains true to its mission of providing affordable health care. Asembis also makes continued efforts to keep operational costs to a minimum, above all sourcing the most cost effective supplies. Around 70% of the supplies are imported from the US, with the lenses and frames for glasses imported from China and assembled in Costa Rica.

Subcontracting services

Key to Asembis' success has been the capacity to grow quickly offering a wide range of services. This has been achieved through an outsourcing strategy for medical areas where Asembis does not already have its own trained staff. For example in the case of dental services, Asembis sub-contracts this entire area to another company, ASEA, who use Asembis infrastructure, clinics, brand and access to clients, and in return pay a % fee of the services they sell back to Asembis. This means that Asembis avoids the investment needed in training new staff and developing new areas of expertise.

5.3 Target beneficiaries

Asembis claims to serve 65% of the Costa Rican population and essentially has three target groups;

⁷ www.lightedlamp.com/asembis-problem-costa-rican-public-healthcare-system/?lang=en

- **Middle income** (40-60% of the population) **and lower to middle income citizens** (20-40% of the population), who cannot afford the more expensive private health care, however are willing to pay for a better service than what is on offer from the limited public health care service. This target is reached through general marketing campaigns and Asembis is now one of Costa Rica's well known brands. The partnership agreements with businesses and other organizations who are then able to offer their employees discounted services is another way to reach this target and represents 30% of Asembis' revenue.
- **Low-income families** (20% of the population), who cannot afford to pay the Asembis fees but are willing to pay something for essential medical treatment, often cataract operations and other essential surgeries. This target is reached through Asembis' social program, which enables individuals to apply for a discount based on their economic and personal situation. Each case is individually assessed by Asembis' social program, which includes a visit from Asembis' social workers to the family's home to verify the economic situation.
- **Individuals below the poverty line** who cannot afford to pay for medical care. 90% of the entirely free services are for cataract operations and other essential surgeries. Given that 24% of the population of Costa Rica lives in rural areas, the mobile clinics are one way that this target group is reached and in many rural areas Asembis is the only provider of health services. However, in some cases individuals also make the journey to the clinics to apply for free medical assistance. An Asembis mobile health clinics charge 1 USD for an eye test, which in the clinic would cost 4.50 USD.
- **Asembis employees** from poor backgrounds are also supported by the organization through the "Zero Poverty" campaign, which offers employees lower cost services, the donation of materials or sponsorship to continue their studies. Just as with the patients who apply for discounts the Asembis social program team visits the employee's house to verify the need for support.

6. Social and Financial Performance

6.1 Social Impact Performance

6.1.1 Social impact achieved

Asembis has generated a huge social impact in Costa Rica, now serving 65% of the population with affordable health care. Over the last 25 years the organization has treated a total of 3 million patients since its first operations in 1991 with a total of 27,000 eye surgeries performed. For a country with a population of 5.7 million this is a significant achievement. Currently around 10,000 people per month are attended in the clinics. Asembis overall has helped bring down the cost of medical care and particularly eye care over the years. In 1991 a pair of glasses costs 150 USD and today Asembis sells them for 4 USD.

In terms of the low income populations and those under the poverty line, 17,254 people have been supported with an entirely free or partially subsidized service. In the last 5 years an average of 300,000 USD worth of services have been donated annually to those who cannot afford to pay for health care.

6.1.2 Social impact measurement

Asembis' impact is measured in several ways; the total number of patients served, the number of operations carried out and for the most vulnerable the number of patients supported with discounts and free services per month.

The social program has a staff of three people and processes around 100 applications per month, giving a discounted service to around 40 people per month with different levels of financial support from 1% of the fees paid to 100%. The program is assigned a monthly budget for cataract operations (each operation costs around 800 USD), which means that around 16 cataract operations can be delivered each month. The social program monitors the % of budget spent each month and how much time each application has taken to process. For each applicant a personal interview is carried out for the more basic services such as eye tests and simple cataract operations, and for more sophisticated operations a visit to the patients home is made to verify their situation.

Table 2. Key social performance indicators for Asembis

<ul style="list-style-type: none">• 100 applications for discounted services per month (40 attended per month)• Average annual spend on discounted services 300,000 USD• Monthly budget of 12,800 USD for cataract operations (800 USD cost per operation)• Monthly budget of 3,600 USD for workshops• Monthly budget of 3,600 USD for discounted glasses on mobile clinic tours• 16 subsidized cataract operations performed per month• 4,661 glasses collected in 2015 donation campaign
--

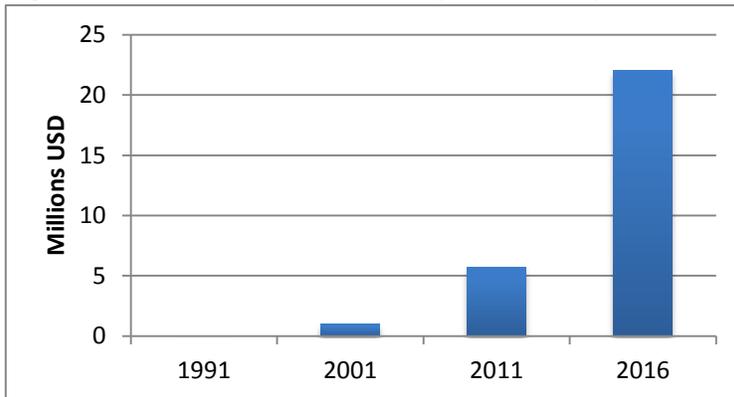
6.2 Financial Performance

Asembis currently has an annual revenue of 22 million USD and as a non-profit organization re-invests any surplus generated into infrastructure developments, such as the construction of new clinics, or the purchasing of medical equipment to improve the quality of service as well as investment in the social program to provide discounted and free services to low income and vulnerable families.

6.2.1 Revenue and Expenses

Figure 2 shows how Asembis' revenue has grown exponentially over the last 25 years. The organization began with the symbolic contribution of capital from Rebecca Villalobos of 500 USD, and this was shortly followed by the grant from Christoffel Blindenmission International. Within the first 3 years Asembis broke even and has been financially sustainable ever since with an increasing turnover as the number of clinics has expanded. Each new clinic takes an average of one year to break even in its operations.

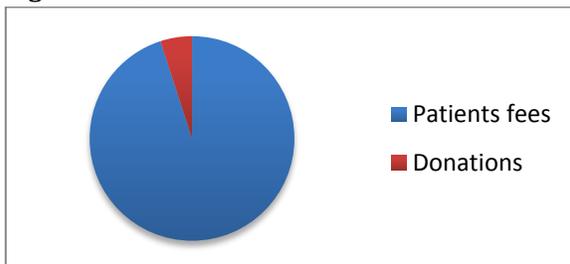
Figure 2. Asembis Annual Revenue (1991 - 2016)



6.2.2 Proportion of Income from Sales

Patient fees generate 95% of Asembis' income. The remaining 5% is generated from monetary or in-kind donations (technical training, medicine, equipment etc.) from partner organizations including Christoffel Blindenmission International, World Vision, and ASEA.

Figure 3. % of income from sales



7. Business Development and Ecosystem Evolution

Asembis was founded long before the concept of social enterprise became known in Costa Rica. In 1991 it operated as a small NGO offering eye tests and low cost glasses from a small clinic in San José. 25 years later it has become a multi-million dollar enterprise, whose model has been copied in several countries across Latin America and operations have started in Nicaragua. Below we describe three stages of development: Start-up Stage, Early Stage and Growth Stage.⁸

Stage	Year	Description
Start-up	1991	Rebecca Villalobos and colleagues from Caravan association registered Asembis and started offering optometry and ophthalmology from a small center in San José.
	1992-1995	Support from Christoffel Blindenmission International received to fund equipment and pay salaries.
	1994	Recognized by the government as providing a basic service, so eligible for public funding for serving the most vulnerable.
	1995	Asembis was able to finance running costs and salaries and Christoffel Blindenmission continued support for infrastructure projects and equipment.
	2001	First clinic Cartago opened.
Early	2002	Rebecca Villalobos nominated as Ashoka Fellow, visited Israel and discovered children's eye-testing model, which she replicated in Costa Rica. The second clinic, Guadalupe clinic opened.
	2003	Heredia clinic opened. Rebecca returned to study Optometry and Ophthalmology.
	2004	Alajuela Clinic opened and Asembis started to broaden medical offer and establishes partnership with ASEA for dental services. 350,000 patients attended so far.
	2008	San José Centro Clinic opens.
Growth	2009	Liberia Clinic opened. Rebecca awarded several prizes, 8,000 patients per month, and first million patients in total. Annual revenue of 6 million USD, 180 employees and 8 clinics. Organizational partnerships started.
	2010	10,000 patients per month were attended, new operating system installed.
	2011	Guapiles Clinic opened, budget of 300,000 USD per year for social programs.
	2012	Perez Zeldón and Desamparados Clinics opened. Asembis joined Federation of Social Organizations.
	2013	Cuidad Quesada Clinic opened.

⁸ **Start-up stage:** a preparation period for setting up a business or an enterprise. An entrepreneur's team develops a business idea and a business model. In some cases, they have product/service prototypes which are not fully developed or tested. **Early stage:** A period from business initiation until business scale-up. An entrepreneur's team may first deliver its products/ services in a test market to examine its business model. Also, the team may file patents or obtain licenses, if necessary. Once the business model is consolidated, it starts its business. However, the business remains quite small due to lack of capacity and resources. It may reach a breakeven point at the end of this period. **Growth stage:** A period after scaling up the business. The business exceeds the breakeven point and increases its sales, number of beneficiaries, the market share etc. The team revises the business model in order to sustain and/or expand the business, if necessary. In some cases, the team starts to investigate new products/services.

	2016	Government program with Asembis to implement Caring networks enabled young people to take care of elderly. Social program started anti-bullying workshops in schools. Total of 3 million patients attended.
--	------	---

7.1 Startup Stage (1991 - 2001)

7.1.1 Milestones

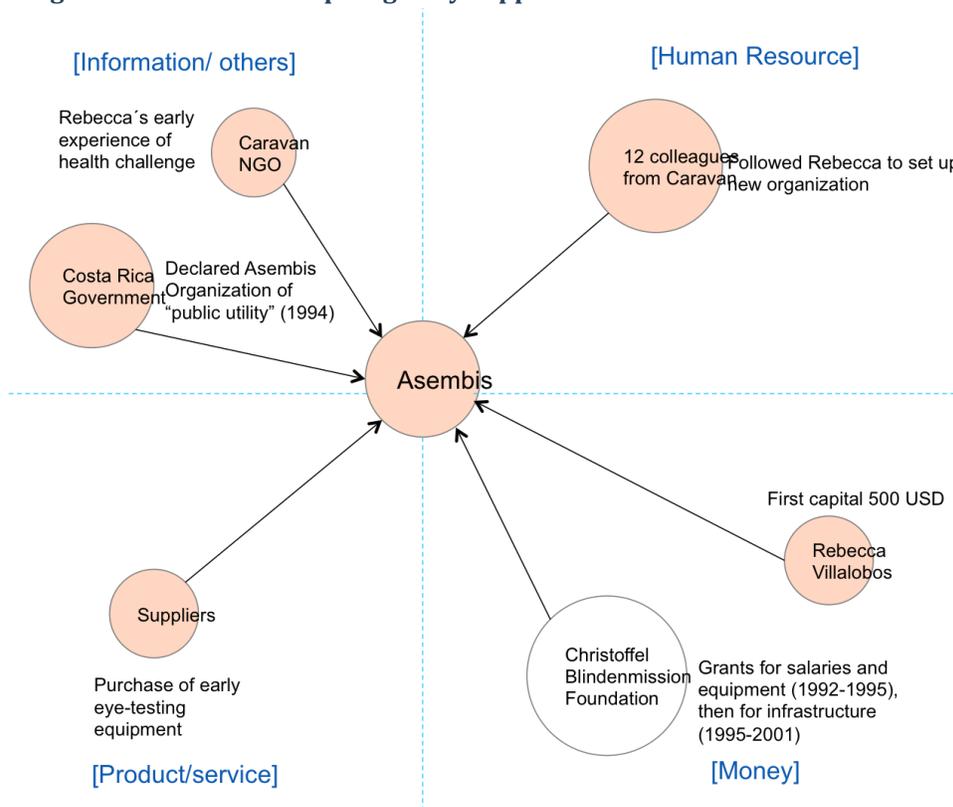
The idea of Asembis stemmed from Rebecca Villalobos' realization that the donation model for serving the poor with essential eye testing, surgery and other medical needs was not sustainable. After several years working with the NGO Caravan she and 12 others decided to leave and set up their own organization. In 1991 Rebecca and her team registered the Association of Medical Services for the Social Good and within 15 days started renting small premises to deliver basic optometry and ophthalmology services. By 1992 the German Christian Foundation for the blind Christoffel Blindenmission had heard of Asembis and started to support the organization.

Between 1992 and 1995 the funding from the German Foundation paid for salaries as well as equipment, however after this period the grant income was solely used on infrastructure projects, largely building new clinics, which enabled Asembis to expand its volume of operations. In 1994 Asembis was officially recognized by the Costa Rican government as an association of public utility (in Spanish "*de utilidad pública*"), which meant that it could start to access certain tax exemptions and benefits, access public subsidies and free legal assistance in certain areas. At this point donations to the organization became tax-free.

By 1995 Asembis was self sufficient enough to pay for salaries through revenue generated from eye testing, cataract removal surgeries and cheap glasses. The German Foundation continued to support Asembis for building new clinics rather than paying salaries. The first clinic was built in 2002, which marked a turning point for the organization.

7.1.2 Key supporters

Figure 4. Asembis Startup Stage Key Supporters



7.2 Early stage (2002 – 2008)

7.2.1 Milestones

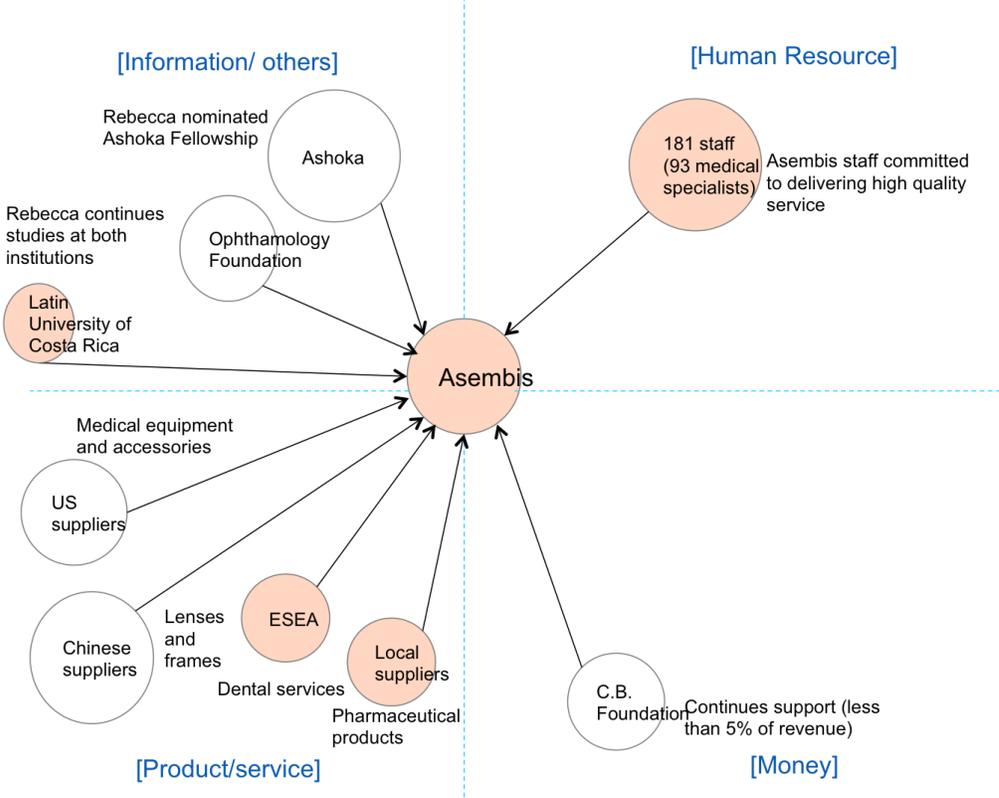
Once the first clinic had been built the momentum of Asembis really began and during the next six years a further four clinics were built across Costa Rica, including the largest clinic to date Guadalupe which currently serves all of the organizations areas of expertise. With more infrastructure and space, and an increasing awareness of Asembis services the organization was able to start broadening the medical offer to include general medical consultations, dentistry, cardiology, gynecology and x-rays. For several of these areas the strategy to develop quickly was achieved through sub-contracting services out to third party specialist organizations, such as ASEA for dental services, with a commission on each sale going to Asembis. The service would be sold under the same brand, with patients unaware that they are being treated by a different organization.

Key in this stage was Rebecca's development and support as a recognized social entrepreneur in 2002 by Ashoka. This gave her the opportunity to travel and on a trip to Israel she first discovered students fully engaged in their ophthalmologic examinations. She realized the potential to build directly on children's natural enthusiasm and intelligence and developed the Little Windows project, a true innovation in low-cost vision testing and treatment.

Rebecca also returned to study, having started Asembis with no medical training at all, and studied Community Ocular Health at the Santander Ophthalmology Foundation in Colombia and a degree in optometry from the Latin University of Costa Rica. Her persistence and leadership was recognized as a key factor in the organization’s development. “*Rebecca has always had a vision of what she wants,*” says Asembis medical director Edwin Contreras, who has watched the clinics grow into a multimillion-dollar, self-sustaining enterprise that generates cash for expansion. “*She persists and persists until she accomplishes [her goal,] which makes her a very strong person.*” By 2004 Asembis had treated a total of 350,000 patients.

7.2.2 Key supporters

Figure 5. Asembis Early Stage Key Supporters



7.3 First growth stage (2009 - 2016)

7.3.1 Milestones

2009 was a significant year for Asembis, particularly in terms of international recognition, winning the Humanitarian of the Year Award. By this year Asembis had an annual turnover of 8 million USD, 8 clinics and 180 staff. In addition, the organization started to assemble their own glasses, significantly reducing the cost to patients and a call center was opened. This stage saw growth in the partnership agreements with organizations to provide a type of health “insurance” for employees and their families. By 2016 there were a total of 900 partnership agreements made.

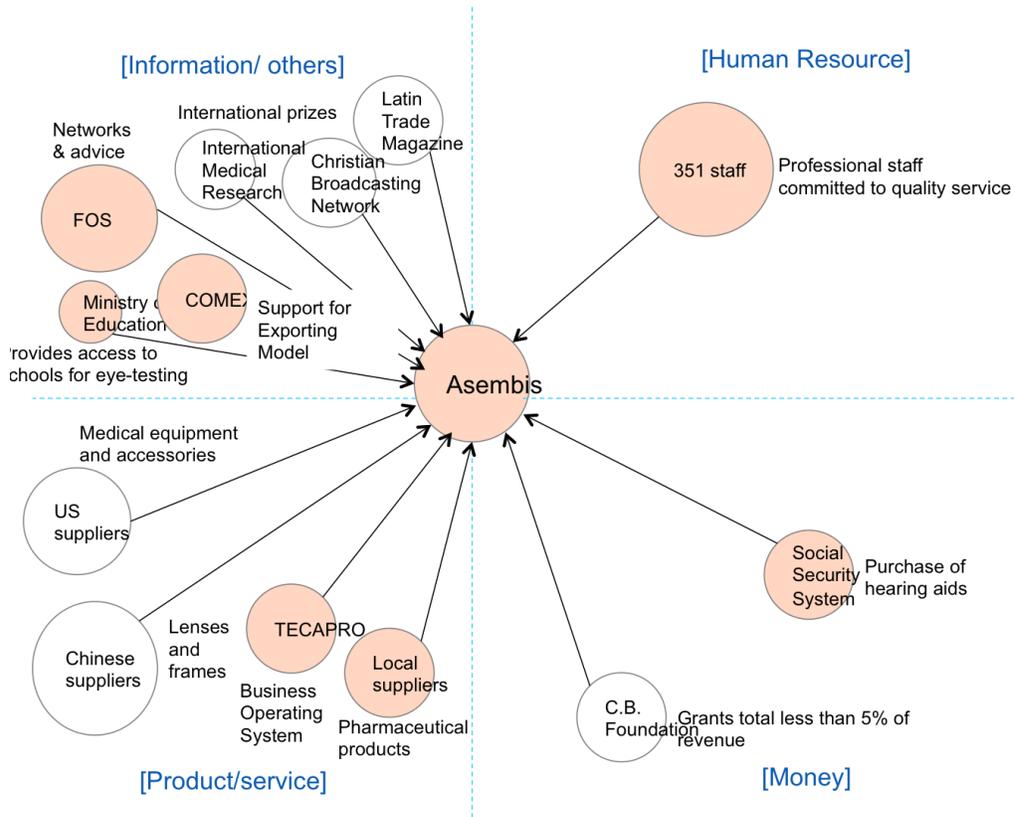
Asembis has always had a strong focus on business excellence. This was motivated from Rebecca's early disappointment with the Caravan business model and this trend continued as the organization grows. In 2010 Asembis installed a new business operating system supplied by Tecapro which helped the organization achieve more operational efficiencies such as reducing the administration time to generate financial reports (from 8 days to less than 24 hours), as well as financial savings from using less paper as systems become digitalized. Rebecca praises this system, "*We are now more agile,*" and by 2009 Asembis was attending 10,000 patients per month.

In 2014 Asembis acquired a new world class laser equipment WaveLight EX500, to be able to carry out high correction treatment of ocular disorders such as short sightedness, long sightedness and stigmatism. This new equipment enabled Asembis to include safe, fast and effective eye treatments to world-class standards.

Whilst previously there was little engagement with the public sector from Asembis, at this stage the organization began several collaborations with different areas of government. For example Asembis became the official supplier of hearing aids and apparatus from the Social Security system for Costa Rica, and the Ministry of Education provided the organization with access to all schools for early detection of eyesight problems in children and the public Institute for Social Welfare (acronym in Spanish IMAS) provided financial support for cataract surgeries in remote areas. By 2015 the President of Costa Rica began supporting the recycling glasses campaign with a video on the Asembis website.

7.3.2 Key supporters

Figure 6. Asembis Growth Stage Key Supporters



8. Scalability and Replicability

Asembis has 25 years experience of providing high quality, affordable eye care in Costa Rica and has been replicating the model across the country over the last 10 years. The organization is now beginning a process of internationalization.

Local expansion

Between 2002 and 2016 Asembis opened 10 new clinics, with almost one new clinic opened each year. This process of expansion across Costa Rica has been undertaken in a measured and methodical way. For each new clinic Rebecca and her team conduct a feasibility study and develop a business plan to ensure that break-even will be achieved within 12 months. Each new clinic is perceived as an independent business unit that needs to be self-sufficient after an initial loan from the central funds.

Asembis operates an ongoing training program for the younger employees with leadership qualities who are trained to operate as the future leadership team in each new clinic. The combination of commercial expertise and social values is at the core of Asembis internal professional development program, "*We train people to have the vision in their hearts,*" states Rebecca. In addition, the training aims to conserve the uniformity in the quality and type of service that is delivered involving a standardization of processes across the organization. A series of manuals and procedures have been developed and there is an ongoing process of monitoring service quality. Rebecca has also installed a system of weekly audits and constant supervision of the 8 clinics. In addition, the beneficiaries guide the organization's operations by regularly responding to satisfaction surveys to ensure delivery is adequate and effective. All staff members participate in an inclusive annual planning process, contributing with different perspectives and experience and there are key opportunities for professional growth.

On an operational level to ensure the national expansion has been as efficient as possible, all supply and equipment purchases are centralized to generate economies of scale, as well as maintain uniformity in quality.

International expansion

In terms of international replicability, Rebecca has been open from the start to other organizations replicating the model in other countries and elements of the model, particularly the multi-tiered pricing model has been adopted by organizations in Mexico, El Salvador, Honduras and Panama. "*This model for delivering healthcare can be replicated in any other country and can help many more people,*" states Rebecca.

In 2012 Asembis had the intention of formally replicating the model in other Latin American countries, however after a period of rapid growth, they did not have the suitable administrative support systems in place to be able to go through with this. Later in 2015 with the advisory support of the Federation for Social Organizations (acronym in Spanish, *FOS*), Asembis was able to join a program for export supported by the British Council and organized

by the Ministry of Commerce. The outcome of this course was a more informed position for Asembis in terms of the internationalization strategy. Since then progress has been made in Nicaragua, with a market study completed, meetings carried out with Health and Education Ministers, an administrator has been hired, and a premises rented out with refurbishment starting in 2016. Asembis has the full support of COMEX in their expansion plans and the Ministry who see their long experience and proven track record as a solid base for internationalization.

9. Final Reflections

Key milestones

Asembis has a long history of delivering eye care to the Costa Rican population, combining high quality care with social outreach to ensure that the most vulnerable are not left unattended. The organization has seen exponential growth particularly in the last 10 years with a steady increase in coverage. The following three milestones stand out as some of the most significant in this journey:

- Shift in grant focus from the Christoffel Blindenmission Foundation in 1995. The decision to stop receiving funds to pay for salaries and fixed costs and to divert funds to new infrastructure projects was key in enabling Asembis to grow in capacity and therefore be self sustainable, generating enough return to be able to continue to invest in growth.
- Nomination of Rebecca Villalobos as an Ashoka Fellow in 2002. This enabled Rebecca to travel and visit other similar projects which was a significant contribution to the social strategy of the organization, inspired by the Israeli education model which then became a core element of Asembis' social program.
- The strategy to start working with partner organizations to offer them credit to provide health services for their employees and families in 2009 was another major milestone as the current 900 partnerships now provide 30% of the organizations revenue.

Challenges for growth

The first key challenge for Asembis is the growth of competition in the optometry and ophthalmology sector in Costa Rica. The retail opticians market reached 48.6 million USD in 2014 with a growth of 97% compared to 2009 according to Euromonitor International. This is a concern for Asembis as 60% of their market is within this sector. Greater competition is likely to mean prices are driven down which could affect Asembis' capacity for making profit to subsidize the social programs.

The second major challenge is to maintain the quality of service during the national and international expansion. In the case of Nicaragua the concern from Asembis' social program staff is how to ensure the new team in another country take both the procedures as well as the values of the organization in an efficient way, without taking resources from the local Costa Rican team.

Contribution to social innovation and systemic change

Asembis has revolutionized the health care system in Costa Rica, where previously service was inaccessible for a large part of the population, both low income and middle income classes. Now that Asembis serves 65% of the population this can be considered a major contribution to systemic change. As a consequence the cost of glasses has been drastically reduced in the country, from 150 USD in 1991 to 4 USD in 2016. The governmental support in terms of education across schools for eye-testing and the integration of services from Asembis in the social security system is also evidence for the influence the organization has made, and finally in many rural areas Asembis continues to be the sole provider of medical assistance.