
Social Profit Network



Dr. Govindappa Venkataswamy

Dr. Govindappa Venkataswamy is revolutionizing healthcare in the developing world. Dr. V, as he is affectionately known, opened Aravind eye hospital in 1976 with the mission of eradicating needless blindness. His hospital—now a successful eye care system and the single largest provider of eye surgery in the world—has plans to expand throughout developing countries. Aravind is creating a new model for eye care that addresses the fact that 45 million people in the world are blind and 90 percent of them live in developing countries. In India alone, 12 million people are blind and 2–3 million are added every year—80 percent of them due to cataract, a curable disease. Since it opened, Aravind Eye Hospital has given sight to more than 2 million people.



In the twenty-five years since its beginning, Aravind has transitioned from an 11 bed hospital to a broad spectrum of eye care services that includes:

- 5 hospital sites in Madurai, Theni, Tirunelveli, Coimbatore, and Pondicherry
- Aurolab, an ocular products manufacturing facility
- Aravind Tele-ophthalmology Network, which has become a global online resource for Aravind and the entire field of ophthalmology
- Lions Aravind Institute of Community Ophthalmology (LAICO), which focuses on promoting self-sustainable eye care services through teaching, training, research, and consultancy
- Aravind Medical Research Foundation
- Rotary Aravind International Eye Bank

Most companies focus on selling to the rich and superrich—consumers who earn \$50,000 or more. They struggle to find ways to service the billions of customers who earn \$2,000 per year or less. With Aravind, Dr. V. has developed a model that can be applied to thousands of products and services, potentially speeding vast change in the developing world.

SPN, Dr.V, and Seva

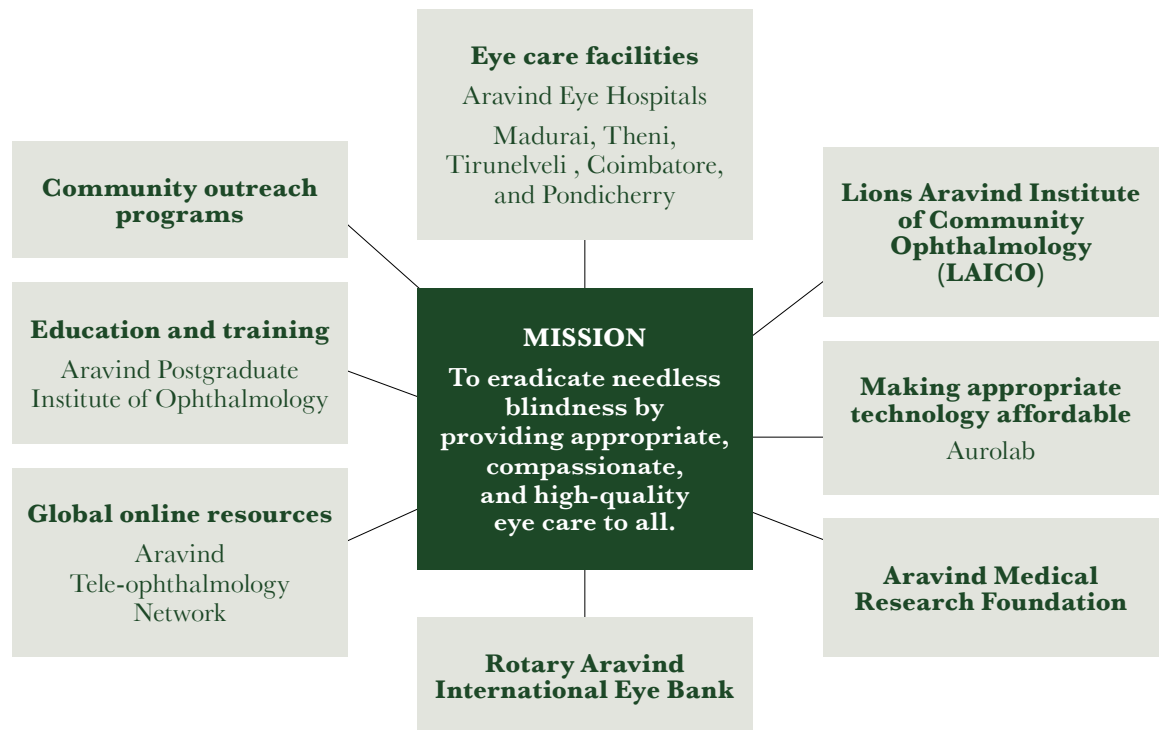
For more than 25 years, Aravind has worked closely with Seva Foundation in Berkeley, California, to develop and refine sustainable models for eye care. Aravind, Seva, and the Center for Innovation in Eye Care, a new Seva initiative, will collaborate to radically expand the impact of Dr. V.'s work.



Dr. V.'s background

- Born in a small village in South India
- Holds a B.A. in chemistry from American College in Madurai (1938)
- Obtained his M.D. from Stanley Medical College in Madras in 1944 and a Doctor of Ophthalmology at the Government Ophthalmic Hospital in Madras in 1951
- In 1956, he was appointed head of the department of ophthalmology at the Government Madurai Medical College, and head eye surgeon at the Government Erskine Hospital in Madurai
- Performed 100,000 successful eye surgeries
- Pioneered the concept of eye camps and safe highly effective techniques, which have become models for blindness prevention and treatment programs worldwide
- Upon retiring from government service in 1976, at the mandatory government retirement age of 58, he established the Aravind Eye Hospital. Under his leadership, Aravind has become the largest eye care training and research center in the world. To date, more than 1.8 million eye surgeries have been performed and more than 16.1 million patients have benefited from services rendered.

Aravind Eye Care System





Hospitals

Today, Aravind Eye Hospitals have over 3,500 beds. Of these, more than 70 percent have been earmarked for free care to poor patients. Aravind operates under the notion of compassionate capitalism: With good management and a highly efficient fee system, the nonprofit hospital is able to operate with a 40 percent margin. This is despite the fact that 7 patients out of 10 pay nothing, or close to nothing, and the hospital does not depend on donations. This economically self-sustaining model is based on generating enough revenue from 30 percent of the patients to cover the costs of the providing free or low-cost eye care to the majority. In creating this model, Dr. V has constantly cut costs, increased efficiencies, and built his market.

It costs Aravind about \$15 to conduct a cataract operation. It costs hospitals in the United States about \$1,650. One way Aravind reduces costs is by using ophthalmic paramedical staff to do all the preparatory and postoperative work on each patient, allowing ophthalmologists to perform an increased number of surgeries. Each ophthalmic surgeon has two tables, which allows a surgeon to perform one 10- to 20-minute operation, then swivel around to do the next. Post-op patients are wheeled out and new patients wheeled in.

When Dr. V. opened the first free hospital with 100 beds in 1979 and started active outreach through eye camps in remote areas, he did not realize the magnitude of the need. Aravind currently delivers services for 1.3 million outpatient visits, 200,000 surgeries, and over 1,500 screening eye camps annually.

Aravind now offers a full set of treatments at its various facilities, including cataract and general ophthalmology, retinal disorders, neuro-ophthalmology (damage to the optic nerve), corneal eye diseases, glaucoma, uvea diseases, oculoplasty, refractive surgery,

pediatric ophthalmology, and vision rehabilitation. In addition, Aravind has support services like Ocular Microbiology, Biochemistry, Radiology and patient counseling.

Community Outreach programs

An integral part of Aravind's services to combat blindness is its community outreach program: free eye camps. These screening camps, conducted every day, provide basic eye care services to distant rural populations, followed by necessary treatment or surgery at either the camp or base hospital. Teams of doctors work closely with community leaders and service providers to organize camps and get the word out. It is not uncommon to find thousands of people lined up in a village with a population that is normally less than 100. Children carry parents and grandparents for miles over challenging, high-altitude terrain so that they can receive care.

Other outreach programs include:

- A community-based program that rehabilitates the incurably blind by teaching them skills in orientation, mobility, and the activities of daily living.
- A school eye-health screening program trains teachers from participating schools to identify children with visual impairments. Besides learning the anatomy and physiology of the eye, teachers are trained to measure visual acuity and to identify signs of squint and vitamin A deficiency.



Education and training

To speed their work to eradicate blindness, Dr. V has made human resources and professional development a core competency. In fact, about 10 percent of all ophthalmologists in India/Nepal/Bangladesh have undergone some form of training at Aravind. To that end, Aravind offers the following education and training programs:

- A postgraduate residency training program in ophthalmology
- Fellowship training programs for subspecialties of ophthalmology
- Intensive training for intraocular lens microsurgery, diagnosis and management of glaucoma, and diabetic retinopathy management
- Certificate courses in ophthalmic assistance
- Hospital administration, housekeeping, instrument maintenance, dietary services, and other support staff training to foster effective hospital management skills

Research programs

The combination of high clinical load, extensive community participation, and access to a large network of eye hospitals provides an excellent arena for conducting clinical, social, and health systems research. Aravind Medical Research Foundation coordinates numerous research needs at Aravind Eye Hospital, including:

- Laboratory-based research in genetics, immunology, and microbiology
- Hospital-based randomized clinical trials to evaluate surgical techniques and drug therapies
- Community-based research to assess preventative measures to blindness, such as vitamin A supplementation and the role other antioxidants play in cataract prevention

- Studies on how population, economic, and health systems affect cataract intervention efforts
- Studies that evaluate the effectiveness of providing eye care infrastructure and services
- Qualitative research to ascertain barriers to accessing eye care services

Lions Aravind Institute of Community Ophthalmology (LAICO)

LAICO was established in 1992 with the support of the Lions Club International SightFirst and SEVA Sight programs. LAICO is Asia's first training facility for blindness-prevention workers from India and other parts of the world. Its mission is to contribute to the global prevention of blindness by building the capacity of other eye care programs.

In essence, LAICO trains healthcare and managerial personnel to develop, implement, and manage efficient and economically sustainable eye care programs. The organization currently works with over 165 hospitals in India, Bangladesh, Nepal, Indonesia, Cambodia, and Africa. Their work has helped to double the volume of service of several participating facilities, while improving their quality and financial viability.

In addition to its training programs, LAICO is also involved in policy advocacy and international symposiums on blindness and ophthalmology.

It is through LAICO's work that Aravind's powerful model for creating high-quality, economically sustainable eye care programs can be spread throughout the world; in particular, the developing world, where it is needed most.

Aravind Tele-ophthalmology Network (ATN)

ATN, launched in 2002, is a web-based system designed to:

- Train and educate eye care professionals around the world through virtual classrooms
- Link all Aravind Centers so that they can share best practices and resources more easily
- Create a common online resource for ophthalmology

ATN also plans to develop and distribute affordable, adaptable software for tele-ophthalmology to enable eye care professionals to work remotely. As part of that effort, Aravind is collaborating with the Indian Space Research Organization (ISRO) to deploy remote mobile screening and extended tertiary eye care to rural villages.

Aurolab

Dr. V., Aravind, and David Green (see our case study on David Green) established Aurolab, an intraocular lens manufacturing facility, to bring down the total cost of cataract surgery. This achievement was made with support from Seva and several groups.

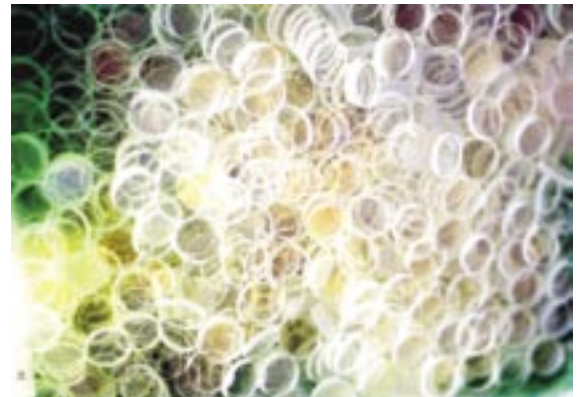
Prior to Aurolab, intraocular lenses had to be imported from the United States, at a cost of about \$40 per lens. Aurolab now makes them available for \$3 to 8. Aurolab is now one of the world's largest producers of intraocular lenses with 7 percent market share, selling 600,000-plus units per year to 120 countries.

Aurolab, since its founding, has diversified into manufacturing suture needles, ocular pharmaceuticals, and spectacle lenses.

Rotary Aravind International Eye Bank

The eye bank was established in 1998 and is one of four eye banks in India that are affiliated with the International Federation of Eye Banks. It provides a sustainable solution to corneal blindness, which affects more than two million people in India. Services include:

- Education and outreach
- Cornea collection, preservation, evaluation, and distribution
- Corneal research
- Corneal surgical training





Working with SEVA and Social Profit Network to develop economically self-sustaining eye care systems worldwide

Dr. V, his staff at Aravind Eye Care System, and Social Profit Network (SPN) are working with SEVA Foundation to proliferate sustainable eye care systems throughout the developing world.

SEVA, which is the Sanskrit word for “service,” was created in 1978 by a team of people who helped to eradicate small pox as part of the World Health Organization’s small-pox campaign. They founded SEVA to tackle major health problems, making blindness prevention and cure their initial focus.

Since then, SEVA has become a major force in the eradication of blindness, supporting eye care projects and hospitals that have restored sight to more than two million blind people through low cost or free surgery and public health ophthalmology. Seva programs build partnerships with locally trained personnel who plan and manage direct services in India, Nepal, Tibet, Cambodia, Bangladesh, and Tanzania.

The Center for Innovation in Eye Care

Hosted by the Seva Foundation, the Center for Innovation in Eye Care is a global action network of eye health organizations and affiliated professionals who seek to reduce avoidable blindness through sustainable programs. The center is positioned to target strategic issues vital to the success of the World Health Organization campaign: Vision 2020—The Right to Sight. Between now and the year 2020, this campaign

aims to save the sight of 100 million people who otherwise would go blind and to put in place the systems to maintain services at the required levels around the world.

The center’s Sustainability Project takes on the entrepreneurial challenge of teaching international donors and programs to go beyond “service” development and move toward “sustainability” development. Currently, few programs are setting themselves up to thrive when initial donations are gone.

The center’s Sustainability Project strengthens all aspects of sustainability—quality services, management systems, leadership—with a focus on financial sustainability. This refocusing requires a significant change in how service programs and their financial

**Are you in earnest? Seize this very minute;
What you can do, or dream, you begin it;
Boldness hath genius, power, and magic in it.
Only engage, and then the mind grows heated.
Begin; and then the work will be completed.**

—Goethe

supporters plan and act. Therefore, the project is growing to involve international organizations and local programs that can help make sustainability a goal.

Aravind is a central resource, guide, and catalyst for the development of this initiative. Key to our work is strengthening regional training and consultation centers in other parts of South Asia, Africa, and Latin America that work with all levels of personnel, from grassroots traditional healers to ministers of health. The short-term impact will be higher-volume services that reach people in desperate need. The long-term result will be resilient sustainable services that prevent millions more people each year from going blind and staying blind.

SPN and Dr. V

- Dr. V. recently joined SPN through our relationship with David Green, one of SPN's founding social entrepreneurs.
- SPN recognizes the tremendous need for sustainable eye care systems in the developing world. In order to speed the proliferation of sustainable eye care, SPN has recently begun supporting both the Aravind Eye Care System and the Center for Innovation in Eye Care.
- SPN is working with David Green and Dr. V. to obtain funding that will enable Aravind Eye Care System to scale beyond its current capacity. Aravind is currently economically self-sustaining, but needs an injection of funding so it can scale its services more quickly.
- SPN fundraising will provide instrumental support to the Center for Innovation in Eye Care as it links professional and technical resources with Aravind to strengthen sustainability transfer worldwide.