

Syracuse University

Maxwell School of Citizenship and Public Affairs
Program for the Advancement of Research on Conflict and Collaboration

VFAN – A Sustainable and Collaborative Initiative to Improve the Livelihoods of Underprivileged Communities in Conflict Countries: The Rwandan Experience

TEACHING NOTE

Executive Summary

Eye care in developed countries is available and accessible to all citizens. However, primary eye care situation is a cause of serious concern in the third world countries where the health care resources available with the government are scarce and the people are not economically equipped to meet their basic eye care needs.

Thirty four percent of the population of Rwanda, a country emerging from decades of conflict and genocide in the 1990s, suffered from some type of eyesight related problems, which could range between weak eyesight and preventable blindness including cataracts, uncorrected refractive error, or corneal disorder. The visual challenges had crippled the people of Rwanda in general and the coffee bean sorters in particular, as a majority of Rwandans were dependent on coffee bean sorting, which required excellent eyesight.

This case was written by K.B.S. Kumar and Indu Perepu of IBS Center for Management Research (ICMR). It was the winning case in E-PARCC's 2018-19 **Glenda E. and Alice D. Wright Prize Fund for Conflict and Collaboration Case Studies in International Development**. The case is intended for classroom discussion and not to suggest either effective or ineffective responses to the situation depicted. It may be copied as many times as needed, provided that the authors and E-PARCC are given full credit. E-PARCC is a project of the Collaborative Governance Initiative, [Program for the Advancement of Research on Conflict and Collaboration](#) – a research, teaching and practice center within Syracuse University's Maxwell School of Citizenship and Public Affairs.

Poor vision was observed had an adverse impact on work quality, health and over-all development of Rwandans. With workers over 45 years of age suffering eyesight challenges, the families were compelled to pull their kids out of the schools and engage them at the coffee farms to win bread for the home. As the children did not get to finish their education, they continued to be engaged in menial jobs and were stuck in the vicious circle of perpetual poverty and adverse health. Visual impairment was the main cause of several direct and indirect losses like the loss in productivity and hence income; the opportunity cost of dedicated assistance to people with vision impairment; abstained education opportunities; the cost of accidents and injuries due to visual impairment; decline in quality of life; and deadweight loss.

This case brings to focus the eye care scenario in Rwanda, where the government, trying to take the country from a conflict-stricken nation to a developing county, came up with Vision 2020, of which health care was one of the primary objectives.

The health ministry of Rwanda entered into public-private partnership with the-UK based voluntary organization called Vision for a Nation (VFAN) along with others and addressed the issue of primary eye care. The case discusses at length how the Rwandan government identified public policy issues in general and primary eye care in particular for a public-private intervention. The case details Rwandan government's experience of strategic collaboration with the partners towards conceiving the methods of developing and implementing solutions to these problems.

VFAN's approach towards addressing Rwandan primary eye care challenges demonstrates the innovative management approaches and the strategic thinking of social leaders towards improving the delivery of primary eye care in Rwanda. VFAN's intervention illustrates various examples of innovation including product innovation, service innovation, and the innovation in designing and implementing the primary eye care program and establishing a sustainable system around Rwandan primary eye care.

The case details the critical role that VFAN played towards conceptualizing, implementation, and evaluation of the eye care program and elaborates on VFAN's methods of transparent and accountable interventions through training programs, curriculum implementation, personal counseling of the patients, expert advocacy to the government, and attaining cost leadership through innovation. The case presents the collaborative and consensus building approach of the Rwandan government and VFAN and other stakeholders towards bridging the economic divide by making public services affordable, replicable, scalable and hence sustainable.

Learning Objectives:

The key objectives of this case are:

- Identify how government development programs are designed to address problems in post-conflict countries and set development goals for such countries.
- Understand what public-private partnerships are and how they can be used to improve the delivery of public services.
- Assess the role of social organizations in design, implementation, and evaluation of sustainable development programs in countries going through a transition.
- Analyze if development interventions make an economic impact on the society.

Theory Application:

Some relevant theories are:

1. Public Policy Programs in transition and conflict countries
2. Public-Private Partnership
3. Development interventions
4. Delivery of public services through partnerships
5. Improving livelihoods
6. Collaborative methods towards overcoming societal divisions
7. Cost-Benefit Analysis; Cost Leadership

Research Methods / Data Sources

The research methods used include various sources of information like interviews of the protagonist and related websites, published articles, research papers, and book chapters from various secondary sources.

Pre-reading material

The students can be asked to go through the articles/material suggested below before they attend the discussion:

1. [“Developing National Sustainable Development Strategies in Post-Conflict Countries.”](#) June 2011. United Nations Department of Economic and Social Affairs Division for Sustainable Development.
2. [“Public-Private Partnerships \(PPP\): How can PPPs help deliver better services?”](#) (Video) World Bank Group- Open Learning Campus.
3. Ceptureanu, Sebastian Ion, Eduard Gabriel Ceptureanu, Cristian Eugen Luchian, and Iuliana Luchian/ 2018. [Community Based Programs Sustainability. A Multidimensional Analysis of Sustainability Factors.](#)
4. Poskitt, Adele and Mathilde Dufranc. April 2011. [“Civil Society Organisations in Situations of Conflict,”](#) CIVICUS.

5. White, Howard and David A. Raitzer. 2017. *Impact Evaluation of Development Interventions: A Practical Guide*. Manila, Phillipines: Asian Development Bank. December 2017.

Teaching Plan

This case is rich in content and can be used to teach different topics in detail. Depending on the time available and the audience (graduates/executives) and the course in which the case is being taught, the instructor can follow different strategies.

As the case is exhaustive, it needs to be taught in a session that spans around 120 – 130 minutes. However, some of the questions mentioned can be deliberated in shorter sessions also. For example, in one of the sessions, we used the case only to teach the public-private partnership model and the elements that make it successful. This was covered in a session spanning one hour. While teaching the postgraduate students, we used it in two separate sessions (with a gap of a few days). In the first session, we discussed the impact of conflict on the society in detail and the challenges governments faced in post-conflict societies to bring back normalcy. The second session was about the interventions and collaborations that can be used to improve the livelihoods of people in these countries and improve the delivery of public services.

Suggested Teaching Approach

This teaching approach is for a session spanning 120 minutes. As mentioned earlier, a few of the questions can be discussed as per the requirement of the faculty.

We began the case discussion by asking the students to put themselves in the shoes of the protagonist in the case and appraise the situation of primary eye care in Rwanda. We asked the students to list the questions that would have arisen in their minds before they moved toward the solution. The students listed various questions like:

- What had led to the conditions in Rwanda?
- What is public policy?
- Role of ethical principles in the formulation and execution of public policy.
- How should public policy programs be designed and implemented in the transition and conflict countries in the developing world?
- Ethical aspects of social welfare programs.
- What is a public-private partnership?
- What are the essentials of an effective public-private partnership?
- How innovation plays a role in implementing public policy programs successfully?

The students' responses around the questions started off an ice-breaking discussion. A 10-15 minute discussion set the context for the case. As the case was country-centric, we allowed the students, through the discussion, to understand the context and think as a policymaker. By the end of the discussion, the students had got well into the context. They

had become sensitized to the issue discussed in the case (Rwandan Primary Eye Care program) and were conditioned to think like a character in the scenario.

We then divided the class into 5 groups of 7 students each and asked each group to list the possible challenges in the primary eye care in Rwanda. We gave the groups about 10 minutes to come up with answers. In their response, they listed several factors like the economic situation, political situation, and resource scarcity.

We then asked the students to list possible solutions for the issues. The students came up with solutions like clear vision by the government to address the issue, visionary public policies, strong leadership in government, effective public-private partnerships, innovative solutions, and expert collaborating partners.

The issues and the suggested solutions were noted on the whiteboard. The students were allowed to debate and arrive at a consensus to identify the most pressing concern and to suggest the most recommended solution. While the resource deficit, absence of collaborative solutions and the lack of innovative initiatives were considered the most pressing concerns, the active participation of government, strategic partners, social entrepreneurs, and non-governmental organizations was identified as the most recommended solution. The discussion set the context for the case and we could smoothly transition to discussing the case questions.

Board Plan	
Why is primary eye-care unavailable? <ul style="list-style-type: none">• Lack of resources• Cost of service• Lack of innovative solutions• Lack of vision• Absence of strategic collaborations	Solution: <ul style="list-style-type: none">• Visionary public policies• Strategic collaborations• Innovative solutions• Cost-effective strategies• Strong monitoring and persistent implementation until accomplishment.
Most Pressing Concerns	
<ul style="list-style-type: none">• Poverty; Resource scarcity; Lack of vision; lack of effective public policies	
Best Solution	
<ul style="list-style-type: none">• Strategic collaborations; Public-Private Partnerships; Innovative solutions	

Discussion Questions:

(The instructor can add more questions, based on the course the case is being used in. The questions given below are just a few points of discussion.)

1. Design and describe an approach for the Rwandan government to successfully achieve the objectives of Vision 2020 program.
2. Evaluate the effectiveness of the Public-Private Partnership model that led to the success of VFAN Program.
3. Analyze and evaluate the hallmarks of excellence demonstrated by VFAN as a social organization, in creating sustainable systems.
4. Analyze the Cost-Benefit components in the VFAN program.

Analysis:

For Learning Objective “Identify how government development programs are designed to address problems in post-conflict countries and set development goals for such countries” the following question can be used.

- 1. Design and describe an approach for the Rwandan government to successfully achieve the objectives of Vision 2020 program.**

Vision 2020 was an ambitious program for the Rwandan government. After the devastating experiences of the 1994-genocide, Rwandan society and economy had become paralyzed. Vision 2020 had focused on some critical aspects of national interest like good governance, skilled human capital, education for all, health care, modern infrastructure, information technology infrastructure, the vibrant private sector, and agriculture.

Board Plan – Question 1	
Rwandan Government's initiatives	Learning Insights
• The government came up with a vision 2020 program that encompassed several priority areas including the human resources, and health care.	• Visionary leadership
• The vision program elaborated the nation's economic goals.	• A strategic approach towards achieving goals
• Conceptualized various methods, approaches, and initiatives towards achieving the goals of the vision 2020 program.	• Planning and Implementation of the vision.
• Identified the potential Strategic partners.	• Strategic partnerships and collaborative approach

The implementation of Vision 2020 strongly held onto the necessity to achieve the aspirations of the Rwandan people, by markedly transforming the economy, turning the country into a middle-income country and parting away with extreme poverty.

The prevailing macroeconomic challenges stemmed from both internal and external imbalances. Rwandan economy was significantly dependent on sizeable aid and reflected a huge trade balance deficit. Vision 2020's goals aim for an annual average real GDP growth of 11.5 percent, along with a sustained improvement in the external trade balance, higher investments and savings, and a stronger financial sector.

The real GDP was expected to grow on average by 11.5 percent per year, and agriculture expected to grow by at least 8.5 percent. The industry is expected to grow by 14 percent on average. The services would be expected to continue to grow by 13.5 percent.

The critical stakeholders towards the implementation and success of Vision 2020 include the state, the private sector, civil society, NGOs, decentralized authorities, grassroots communities, faith-based organizations and development partners. The Cabinet and the National Steering Committee (Ministers and Governors) lead the vision 2020 program of Rwanda.

Successful achievement of Vision 2020 may ask for increased investments, mobilization of substantial financial resources, active participation from the public sector, the private sector and the donor community, expansion of domestic investments, a stronger financial sector to finance necessary investments, and reduction in the reliance on foreign aid.

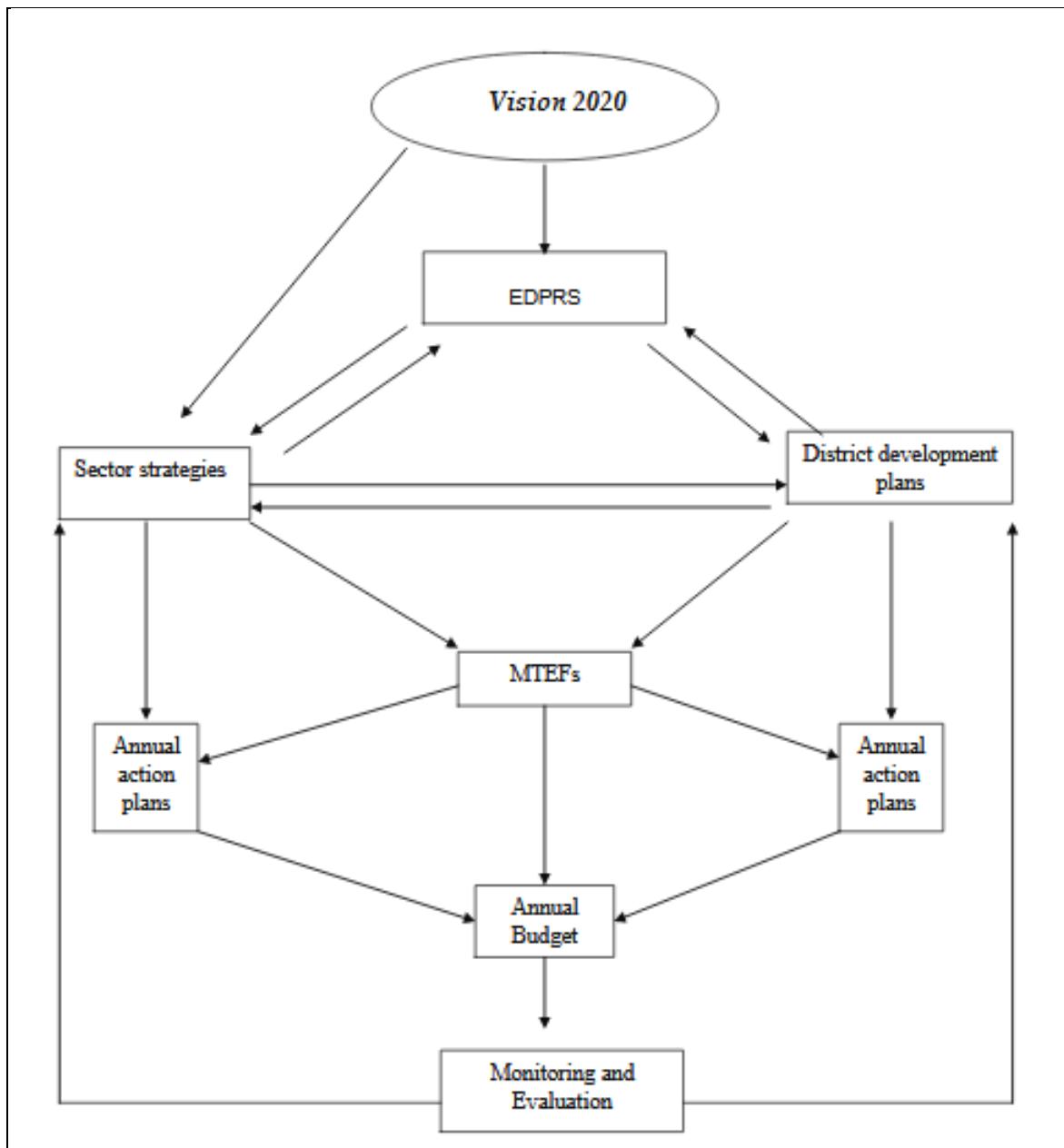
Smooth implementation of Vision 2020 and achievement of the goals described above, needed to be supported with a planning process. The goals could be split into long term and medium term and short term, so that the measurement and evaluation of the progress becomes easier. Therefore, the long-term aspirations of the Vision will translate into medium-term Economic Development and Poverty Reduction Strategies (EDPRS) at the national level.

The EDPRS can be operationalized through the sector strategies and district development plans. The sector strategies and district development plans are implemented through the Medium-Term Expenditure Framework (MTEF). The government budgets and aids stimulate the Public Investment Programs (PIP) of the agencies and translate into concrete action plans. The poverty reduction achieved through the MTEF will be monitored and will be fed back into the elaboration of sector and district plans.

In order to achieve the targets set out, the government bodies and the authorities concerned will have to streamline planning processes so that the Vision is translated into implementable plans, with strong linkages between set priorities and the allocation of resources. If these resources can be efficiently allocated through the planning process, the goals set in this Vision will become attainable.

The Ministry will specifically need to:

- Coordinate all the activities related to the implementation of the Vision 2020.
- Mobilize and allocate resources to Vision 2020 priority areas.
- Support the planning organs and other institutions in charge of the program.
- Ensure that sector strategic plans and district developments plans are prepared.
- Link the plans to the Medium-Term Expenditure Framework and annual budgets.
- Establishment of a monitoring and evaluation framework.
- Regularly report to Cabinet the status of achievement of the program.
- Evaluate the causal factors of the failure (if any).
- Note the learning insights.
- Improve the future course.
- (The instructor can discuss the various components of the Rwanda government's ambitious program of Vision 2020. The faculty can divide the class into several groups and engage each group to discuss one aspect of the program like the macroeconomic challenges the country faces; stakeholders who can participate and their role; essentials for effective implementation of the Vision 2020 program; a framework for successful achievement of Vision 2020).
- The learning objective “Understand what public-private partnerships are and how they can be used to improve the delivery of public services” can be achieved by discussing the following question.



Source: Vision 2020, Government of Rwanda

2. Evaluate the effectiveness of the Public-Private Partnership model that led to the success of VFAN Program.

Definition: A public-private partnership is a contractual arrangement between a public agency (federal, state or local) and a private sector entity. Through this agreement, the skills and assets of each sector (public and private) are shared in delivering a service or facility for the use of the general public.

Board Plan – Question 2	
Public-Private Partnership (PPP) Implementation	Learning Insights
<ul style="list-style-type: none"> The government entered into a public-private partnership agreement with VFAN and other voluntary organizations. 	<ul style="list-style-type: none"> Strategic partnerships and collaborative approach
<ul style="list-style-type: none"> The stakeholders identified the challenges, came up with potential solutions, framed the methods and approaches to overcome the challenges. 	<ul style="list-style-type: none"> Due Diligence; groundwork; brainstorming; leadership
<ul style="list-style-type: none"> The strategic partners identified the key goals of the collaboration 	<ul style="list-style-type: none"> Visioning; Goal identification; Planning
<ul style="list-style-type: none"> The stakeholders identified the main objectives, principles, appropriate methods of delivery and methods towards successful implementation of PPPs. 	<ul style="list-style-type: none"> Policy understanding; collaborative thinking; strategic thinking

The main objectives of the PPP program are:

- To increase the financing available
- To improve value for money
- To create incentives for good work
- To ensure timely completion and efficient operation
- To encourage innovation
- To improve the sustainability
- To improve accountability in public expenditure
- Encourage private sector investment
- Respond to strategic priorities, project-specific requirements and market conditions
- Clearly articulate and measure accountability for risk and outcomes
- Adopting a partnership approach to managing long-term PPP contracts.

In PPP models innovation plays a major role. It is important that the processes for delivering a PPP project evolve and adapt to the changing requirements. Innovative models, approaches, frameworks, and methods make the PPP projects successful.

In choosing the most appropriate method of delivery, key issues to be considered include:

- **Value for money:** Value for money is paramount and achieving the best value for money outcome should be the key consideration at all stages of a project. Value for money is a combination of the service outcome to be delivered by the private sector, together with the degree of risk transfer and financial implications for government.
- **Public interest:** As with all projects, this involves considering whether the proposed approach is in the public interest. Each government will have its own methods for considering public interest matters.
- **Long-term sustainability:** Consider the ability of the approach to respond flexibly to change over time, and the ability to manage the contract to achieve sustained high performance.
- **Sufficient scale and long-term nature.** The project represents a major capital investment with long-term requirements. The value could include bundling together a small number of similar projects. In determining whether the scale of a project is sufficient, the size of transaction costs to government of procuring the project as a PPP should be considered.
- **Measurable outputs:** The nature of the services enables output specifications and a performance-based contract.
- **Asset utilization:** Reducing costs to government through potential third-party utilization and through more efficient design to meet performance (e.g. service delivery) specifications.
- **Competitive process:** A competitive market exists and the PPP projects must strive for competitive processes to encourage the private party to develop innovative means of service delivery while meeting government cost and service objectives.
- **Public interest:** Considering public interest requires ensuring that the agendas of PPP are transparent and is in the best interest of the public and the nation.
- **Output- oriented projects:** PPP projects should focus on the specification of what services are to be delivered rather than how they should be delivered in order to maximize the opportunity for innovation. Performance measures should be established to ensure that the required services are delivered in accordance with the output specification.
- **Transparency:** Transparency and openness are hallmark indicators of successful PPP. PPPs projects must cater information on the use of government resources to Parliaments, taxpayers, and other stakeholders. There should be an emphasis on transparency and disclosure of the rationale, processes, and outcomes, acknowledging the need to protect commercial confidentiality where appropriate. Regular logbooks, periodic reports, user-friendly Project Summary can help explain PPP commercial arrangements and demonstrates transparency.
- **Accountability:** Stakeholders participating in the PPP are responsible for the delivery of their outputs. The conduct of the public sector should always be such that

confidence in the probity of the partnership model and the way in which it is implemented can be maintained at all times.

Effective and successful PPP projects are identified by sound cost-benefit analysis and efforts towards reducing costs and enhancing welfare benefits.

Appropriate pricing, transfer of risks, delivering high-quality and cost-effective services, transparent fiscal accounting, and reporting standards are few other desirable practices of a PPP project.

The main problem that Rwandans faced was the absence of facilities to address the problem of avoidable blindness, and vision problems in the country. This was more pronounced in the coffee sector, where the beans had to be handpicked and this called for perfect eyesight.

After the age of 45, many workers developed long sightedness, which could be corrected with a pair of glasses. But these were not easily available, as the problem was neither diagnosed, nor were any corrective measures available.

As a majority of the population still lived in poverty, it was not economically viable for many Rwandans to get their eyes medically treated. Only 23% of the patients had access to the vision assessment. Moreover, by 2006, Rwanda had only 14 eye care specialists to take care of its population of more than 9 million. Thus, the need of the hour was a nation-wide social initiative to reach out to the needy Rwandans and address their eyesight challenges.

The government entered into a PPP with VFAN in 2011 in a bid to provide primary eye care to its citizens. This was done as a part of the health care initiatives of Vision 2020.

Examining VFAN in the wake of the facts discussed above:

- **Focus on the end result** – the VFAN project was clear about the end result it had to achieve right from the time it entered into a partnership with the Ministry of Health. It wanted to make the primary eye care accessible to all the people in Rwanda. VFAN's intervention strategy was around a three-tier procedure that included prevention, early intervention, and referral for cataract and other surgeries.
- **High-performance standards** – From the inception, the project focused on achieving high-performance standards. It trained nurses in a three-day course of eye care to address the primary eye care issues, and address those eye related ailments that can be cured with simple procedures like eye drops and glasses. To provide high standard it trained the nurses and to ensure that it is spread all across the country, thought the outreach program.
- **Sustainable and long term focus** – VFAN created all the necessary infrastructure and procedures to ensure that the program can continue to run. The health centers were set up in all the districts with attached pharmacies where glasses were available.

VFAN planned to exit from the country in 2018, after which the responsibility of continuing the program will be with the government. With all the procedures in place, the intervention became replicable and sustainable. Even in terms of cost, it became sustainable, as the people were charged for the glasses and the same money was used to provide eye care free for the poorest of the poor in the country.

- **Quality service and low cost** – A pair of glasses were made available at just \$ 1.50. VFAN also brought in its innovative adjustable glasses that were made by its associate firm Adlens. These could be used for a long time. The service VFAN provided was of very high quality and helped in addressing the issues that were troubling the Rwandan government and its people for a long time.
- **Address issues like health and safety** - the VFAN and Ministry of Health partnership was able to address one of the major concerns of the people of Rwanda. With more than 34% of the population reporting eye-related problems, the impact was huge not only on the people but also on the economy as the productivity of the people reduced. It also had long-term impact as families were driven into a vicious circle of poverty as children were removed from school to work, as the older people had vision problems and could not do their job effectively. The VFAN intervention addressed this important issue by screening almost all the people in the country and finding solutions for their vision-related problems.
- **Innovative** - The VFAN partnership with the government was powered by an innovative approach to build a sustainable local primary eye care services model and integrate it into Rwanda's mainstream healthcare system. After seeing that there is a dearth of trained eye care professionals in the country, VFAN developed a comprehensive three-day course to train nurses in primary eye care. This course was highly appreciated and was adopted by the World Bank to implement in other developing countries. From time to time VFAN made adjustments to its plans to ensure the reach of the program, one such adjustment was the outreach program where nurses visited all the 15,000 villages in the country.
- **Value for Money** – The program which was funded by The United Kingdom's Department for International Development, UBS Optimus Foundation, and the Chen Yet-Sen Family Foundation, was able to achieve the targets at a very low cost. The glasses were provided to the very poor free of cost and for the others at a nominal price.
- **Public Interest** – The intervention was of public interest as it benefited scores of people in the country. Many people rejoined the workforce and their economic standard improved. Ultimately the country also stood to benefit as the productivity losses were minimized.

The faculty can kick start the discussion around the question by defining public-private partnership. After sharing a clear understanding of PPP, the faculty can pose various questions in the Rwandan context and engaging the groups to come up with various observations, opinions, and analyses. The groups can be asked to examine VFAN in

Rwanda as a PPP program and the benefits derived out of it. They can even deliberate on its efficiency.

The learning objective, “Assess the role of social organizations in the design, implementation, and evaluation of sustainable development programs in countries going through a transition” can be dealt with through the following question.

3. Analyze and evaluate the hallmarks of excellence demonstrated by VFAN as a social organization, in creating sustainable systems.

Board Plan – Question 3	
Hallmark's of Excellence	Learning Insights
<ul style="list-style-type: none">• VFAN demonstrated its excellence by empathizing with the Rwandan scenario and suggesting the potential solution to address the challenges.	<ul style="list-style-type: none">• Leadership and Problem-solving culture are the prime components of public-private solutions
<ul style="list-style-type: none">• VFAN demonstrated its innovative approach in several initiatives like the revenue generation through spectacles, administering the training course to the nurses, etc.	<ul style="list-style-type: none">• Innovative culture; Strategic thinking are essentials of social interventions
<ul style="list-style-type: none">• VFAN emphasized on creating and establishing sustainable solutions which were economic, innovative, replicable and scalable.	<ul style="list-style-type: none">• Sustainable solutions= Scalability+ replicability + innovative solutions

The Hallmarks of Excellence are used to assess the range of attributes a charity must be able to demonstrate, they include:



Source: <https://charityawards.co.uk/how-to-win/>

Outcomes and effectiveness

Clear and effective outcomes are essential in a social initiative. A social initiative must answer the following questions through its intervention:

- How many people have you helped?
- How can you now show that their lives are better thanks to your intervention?
- Can you show that evidence not just over one year, but over several?

In the case of VFAN in Rwanda, there were clear indications that all the people in the country have been screened and it reached all the 15,000 villages. By 2015, VFAN conducted 500,000 screenings – with 260,000 eye drops, 80,000 referrals and provided 65,000 pairs of glasses. The program had administered about 200,000 vision assessments all over Rwanda.

Value for money

The PPP projects must answer a few questions like:

- Whether the project is effective and efficient?
- Are outcomes delivered at a reasonable rate of return?
- Value for Money is about striking the best balance between the “four E’s” – economy, efficiency, effectiveness, and equity. It is a way of thinking about using resources well.

VFAN’s intervention in Rwanda was highly effective and efficient. In a short span of time, it made a huge difference to the lives of scores of Rwandans. It was also highly effective in addressing the problem of avoidable blindness and increasing the employment and productivity of Rwandans. All the four E’s were addressed successfully and all the resources available were used optimally.

Innovation

- PPP projects must dare to innovate even if it means treading where no one has ventured before.
- Innovation plays a vital role in PPP projects. PPP projects need to encourage scientific advancement and innovations for the benefit of society.
- Emphasis on outputs also encourages innovation to take place by motivating the private partner to develop new methods and approaches for project delivery that meets requirements at lower costs.

VFAN brought in several innovations in its partnership with the Rwandan health ministry. In the process it had ventured into those areas where no other PPP project ventured before. Considering each challenge to be an opportunity, it went on to innovate new ways of providing primary eye care in the country. There was a severe dearth of the trained human resources to deliver the primary eye care service. To address the situation VFAN came up with an innovative three-day training course about delivering primary eye care. The training was initially provided to existing health center nurses. Then VFAN established healthcare

centers, with the required equipment. Finding that it was not reaching the targets, after one year, it tweaked the program, and arranged for the nurses to visit all the villages, thus reaching the people all across the country.

VFAN also extended the scope of its intervention by distributing a pair of its innovative adjustable glasses, with the help of its associate firm Adlens. In three years, over 18,000 pairs of adjustable glasses were distributed among Rwandans.

VFAN's program played a critical role in successfully building a sustainable, affordable and replicable nationwide eye care service, which was effectively integrated into the mainstream public health system. VFAN's intervention made Rwanda the first emerging country in the world to provide its entire population affordable eye care.

Sustainability

- Improving sustainability performance in developing projects is an important strategy for pursuing the mission of sustainable development.
- Improving sustainability performance for PPP projects can contribute significantly to the mission of sustainable construction.
- An increasing number of researchers have appealed for sustainability performance appraisal on PPP-type projects as an instrument for striking the trade-off among economic, social and environmental performance criteria in examining project feasibility.

The project had a positive impact on the people of Rwanda. It had improved their economic condition by helping them rejoin the workforce. Many people who needed help due to poor vision were able to regain their vision after the intervention. Prior to this intervention, people had to travel several kilometers and use their meager resources to consult a doctor. Many times they could not afford a pair of glasses as they had spent all their money on traveling. This intervention by VFAN helped them access eye care in their own villages. Overall the quality of life improved and the productivity of people also increased.

Replicability and scalability

- Analysis of scalability, replicability, and implementation conditions of the sustainable concept.
- Scalability is the ability of a system, network or process to accommodate the growth in demand by increasing respectively its size, scope or range.
- Replicability is the ability of a system, network or process to be duplicated in another location or time. Replication

This intervention was not only scalable but also replicable. Starting with one part of Rwanda initially, it was scaled up to reach the other parts within no time. The model was also highly replicable and VFAN planned to take it to other African countries and other developing countries, which faced problems with primary eye care.

Best practice

- Exceptional leadership and people development
- The diversity of viewpoints and approaches in management and governance
- Demonstrable accountability and transparency
- Collaboration and partnership with other bodies
- Beneficiary representation and involvement in service delivery
- Best use of volunteers
- Excellence in communications
- Learning and development as a result of feedback and evidence

The venture was a collaboration of VFAN and the Ministry of Health of Rwanda and several other like-minded organizations. The intervention developed several people through training, in the form of nurses, health center employees, those who worked in the pharmacies and also the sales force. It took feedback from time to time and changed the program in order to reach out to people better.

Faculty here has ample space to trigger a discussion among the students. The faculty can divide the class into so many groups, as many hallmarks we have discussed here. The faculty can ask each group to elaborate as to how VFAN demonstrated each of the hallmarks and sum up their presentations by explaining the best practices that VFAN demonstrated as a strategic partner to the Rwandan government.

This following question will help in discussing the objective “Analyze if development interventions make an economic impact on the society”

Analyze the Cost-Benefit components in the VFAN program

Board Plan – Question 4	
Cost-Benefit Analysis	Learning Insights
• VFAN gained a firm grip on the costs of the program.	• Cost leadership
• VFAN consistently took an account of the costs that the interventions took and the benefits that the program promised.	• Cost-Benefit Analysis
• VFAN's innovative solutions, empathetic approach, strategic thinking helped in making the benefits outweigh the costs and making the program a sustainable solution.	• Sustainable systems can be established through cost leadership, innovative solutions.

Key Findings: Rwanda - Benefits and Costs

- Disability is a cause and a consequence of poverty and inequality. People with disabilities and their families including the blind or visually impaired are more likely to experience economic and social disadvantage which include unemployment, isolation and discrimination, food insecurity, poor housing, inadequate access to health care, safe water and sanitation, and they are less likely to attend school.
- The total cost of eye disorders to Rwanda in terms of productivity loss to the national economy is estimated at \$60 million per year.
- The average productivity gains envisaged for patients tested and provided with glasses are estimated at 10% where the 2013 GDP per capita is \$6392. This is considered a conservative estimate of the productivity gains.
- The estimated net cost of the VFAN program to deliver eye tests and corrective glasses, dispense medication and provide referrals for hospital care over the period 2015- 2017 of the program is budgeted to be \$2.02 million per year - a figure which includes both the direct cost of the VFAN work and an estimate of the nursing staff costs to the Rwandan Ministry of Health.
- The net cost of \$2.02 million per year is small in relation to the potential productivity gains that could be generated through the provision of corrective eyeglasses alone.
- The additional benefits to individuals in terms of improved quality of life, enhanced educational opportunities and reduction in accidents and injuries add further value although this has not been quantified in monetary terms.

The burden of visual impairment:

- The loss in **productivity** (and hence income)
- Opportunity cost
- Reduced education opportunities
- Cost of **accidents and injuries** through poor vision,
- Costs in terms of **quality of life**,
- Economic deadweight loss
- 98% of sighted people were economically active, only 62% with low vision and 21% of blind people were engaged economically.

The VFAN Primary Eye Care Service

- After three years, during which time the nursing curriculum was tested and the training rolled out, first to existing health center nurses and then to nurses in training, the program has demonstrated its potential to reach a large percentage of the population.
- The program includes a series of awareness raising initiatives to ensure that knowledge about the eye care service becomes widespread and people are encouraged to use it.

- This is considered an essential part of ensuring the success of the program as research has shown that lack of education about the need for and availability of care means that use of the service would not be maintained.
- To better understand the value of the primary eye care service established by VFAN, it is possible to look at the breakdown of services provided by the service as it was operating. The figures given in the table below are based on the breakdown of performance achieved in 2014.

Projected breakdown of treatment/outcomes from health centre eye examinations

2015 – 2017

Action	Number (out of projected 1.25m eye examinations)	Percentage of examinations
Prevention / No treatment	260,684	21%
Dispensing of Medication	626,203	50%
Dispensing of Eyeglasses	178,009	14%
Referral to Hospitals	243,851	20%
TOTAL	1,307,544	105%

An evaluation of the Primary Eye Care service based on Uncorrected Refractive Error

Age bands with prevalence in the age group 11-20 is 3%, ages 21-45, 10%, and over the age of 45, 70%. On this basis, the total cost of Uncorrected Refractive Error in Rwanda is estimated at 60 million lost economic productivity per year.

Program Costs

- The average annual net cost of the program over the period 2015 - 2017 is around \$2.02 million.
- This income is estimated to be \$56,250 per annum during the period 2015 - 2017.
- These program costs compare extremely favorably with the estimate of the gains of the program relating to productivity.

Costs of VFAN- Rwandan Ministry of Healthy – Primary Eye Care Program

Costs for VFAN

- Costs of establishing and running an organization in Rwanda to provide training
- Liaising with the Ministry of Health
- Monitoring and evaluating the work.
- Publicize and advertise the primary care eye service across the country

Costs of eyeglasses for distribution

- Provision of eyeglasses for those people who need them.
- 95% require low-cost reading glasses and 5% will receive adjustable glasses.
- \$0.46 per pair of reading glasses; \$4.00 per unit for adjustable glasses.

Cost of nurses

- 30 minutes per person seen.
- Salaries based on nursing seniority.

Income

- Recipients of glasses are required to pay approx. \$1.50 per pair
- 80% of people pay for their spectacles.
- The proceeds from the sale go towards the Government's "Eye Care Revolving Fund," The calculations of the costs of the primary care-based eye care program show that the program is extremely worthwhile in relation to the conservative baseline estimates of productivity gains that would result were avoidable visual impairment be eliminated.
- The net cost of the program at around \$2.02 million per annum
- Productivity gains: approximately \$60 per person with Uncorrected Refractive Error
- The additional gains through prevention of non-Uncorrected Refractive Error eye disease, enhanced educational opportunities, quality of life and health and safety only add to the value.

The faculty can engage the various groups to gather and analyze the costs and benefits from the case and present their stand as to the intervention is worth taking ahead or not.

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