

# South West Province Eye Care Programme, Cameroon

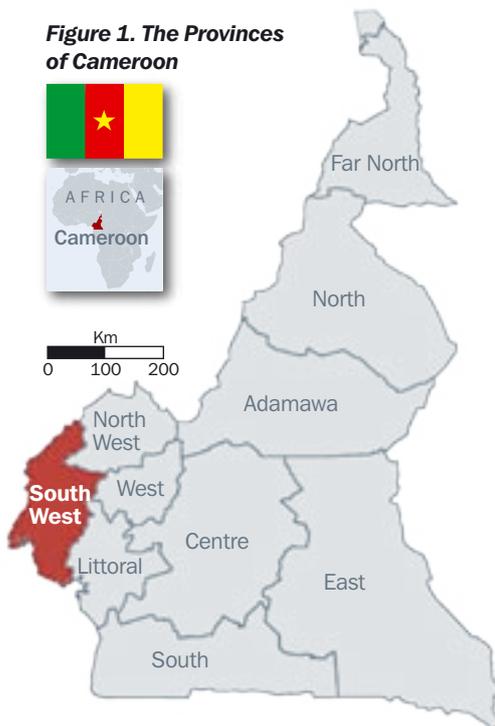


**Joseph Enyegue Oye**  
Ophthalmologist, Coordinator  
of the South West Eye Care  
Project, Cameroon.

## Situation analysis

The South West Province of Cameroon is one of two English speaking provinces, much of which is situated in the equatorial rainforest. Most of the estimated 1.2 million inhabitants live in rural areas. The main occupation is agriculture for subsistence and employment in agro-industrial estates.

**Figure 1. The Provinces of Cameroon**



## Human resources for eye care

Before the South West Provincial Eye Care Programme (SWPECP) started in July 2001, there was no resident ophthalmologist or specialist eye care worker in government hospitals. The eye unit in the provincial hospital in Limbe, which had obsolete equipment, was visited weekly by a part-time optometrist and subsequently a part-time ophthalmologist. Surgical eye care services were delivered by itinerant eye care teams based in Mission Hospitals (Mbingo Baptist Hospital and Acha Tugi Presbyterian Hospital) in the neighbouring North Province. The teams referred all the surgical cases to their base hospitals over 300 km away (about seven hours drive). No national or provincial survey on blindness had been conducted. There was no national prevention of blindness plan or coordinator.

## Planning stage

In November 2000 a meeting was organised to draw up a VISION 2020 compliant provincial eye care plan. Stakeholders from

the Ministry of Public Health (MoPH) national and provincial level, SSI, churches, professionals and the community were represented.

WHO projections, demographic and MoPH primary health care (PHC) data were used for needs assessment and planning. A mapping exercise was conducted to ensure comprehensive geographical coverage of the entire province. During the mapping exercise, it became known that the Baptist Church had advanced plans to establish an eye unit in Mutengene, about 10km (15 minutes drive) away from the Limbe eye unit.

A five-year VISION 2020 plan (2001–2006) was developed and is being implemented by the Government with SSI support, based on a Memorandum of Understanding between the two parties.

## What is in the plan?

### Disease control

Cataract, refractive errors and childhood blindness are the main priorities for disease control, alongside onchocerciasis, which is addressed through the Community Directed Treatment with Ivermectin Programme (CDTI). Trachoma is not endemic in the area.

The two functioning government eye units and the Baptist Eye Unit all perform cataract surgery. The eye unit in Kumba will perform cataract surgery when fully operational by late 2005. However, the Cataract Surgical Rate (CSR) remains very low. In 2004 only about 261 cataract operations were performed by the Baptist and Limbe Eye Unit, giving a CSR of 218. A study conducted in a rural area of the province<sup>1</sup> found a Cataract Surgical Coverage (CSC) of 15.5% for eyes and 21.7% for persons. The same study found that 33.3% of people did not have their cataract operated because they lacked awareness and 30.8% because of cost. In order to increase the CSR, we plan to train Community Directed Distributors of Ivermectin (CDDs) in case-finding and referral, intensify Information Education and Communication (IEC) and reduce transport costs to patients from remote areas.

Refractive error services are delivered through refraction at base hospital and on outreach. School screening is a routine activity. In 2005, two optical workshops will be set up in Mamfe and Limbe eye units, and a third one later in Kumba. There was little information and expertise on optical services at the time the plan was drawn up so the optical services component was not originally included. A new proposal for optical services (annexed to the original) was developed.

CDDs have been trained to detect blind children and refer them to the nearest

health centre which will, in turn, refer to the nearest eye unit. However, there is no paediatric ophthalmology centre in Cameroon at present. Children needing surgery are referred to tertiary hospitals where services are out of reach for the majority of families.

### Research

A survey was conducted in the rural area of the province in 2004<sup>1</sup>. A similar survey is planned for the urban area to complete the picture of the prevalence and causes of blindness and visual impairment, and of cataract surgical services in the province.

### Human resource development

The programme has trained two ophthalmologists for Mamfe and Kumba respectively. The project coordinator works as an ophthalmologist at the Limbe eye unit and has been joined by another ophthalmologist posted by the government. The Baptist Church Health Centre in Mutengene recruited an ophthalmologist to run their centre. In total, there are five ophthalmologists in the province, one of whom also acts as project coordinator. Five ophthalmologists for this population size, a luxury by African standards, was facilitated by the appointment of an ophthalmologist by the Baptist Church Health Centre in Mutengene, and the government's decision to transfer another ophthalmologist to the provincial hospital in Limbe.

A full time optometrist was contracted by the Provincial Delegation of Health to develop the refractive services. A contract refractionist, trained at a Train-The-Trainers Course run by the International Centre for Eye Care Education (ICEE) in South Africa, assists him. A two-month refractionist training course was started in the programme in April 2005 to meet the need for refraction personnel in all eye units.

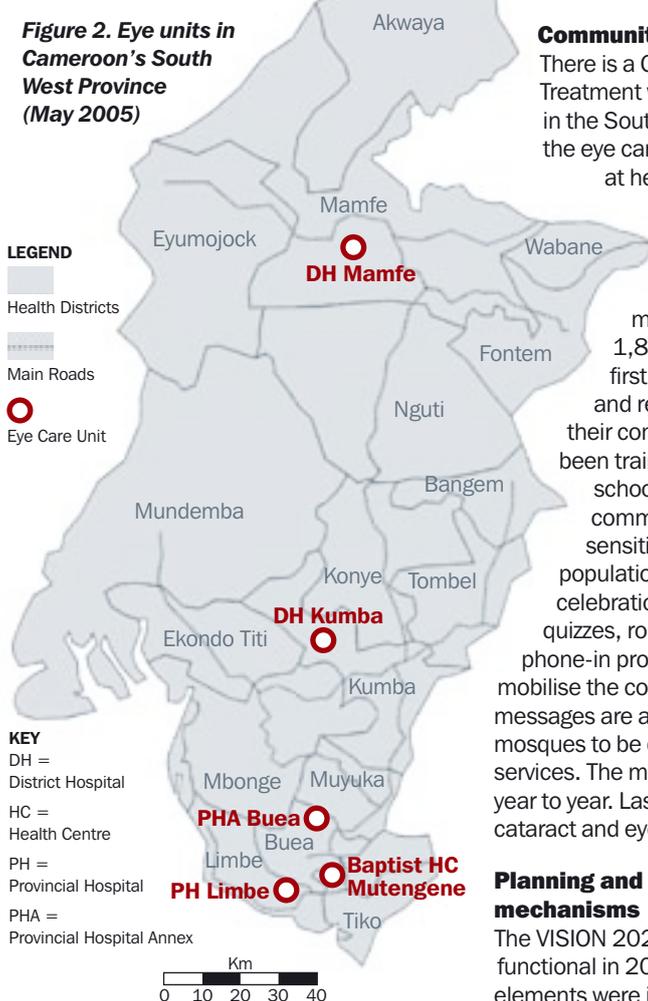
Eleven people have been trained as ophthalmic nurses and are working in the government eye units. They were trained in West Africa as there is no in-country training for specialised eye workers. Four additional ophthalmic nurses, each paired with a refractionist, will be trained and posted in the most remote health districts. The posting of ophthalmic nurses and refractionists in remote government district hospitals was not in the initial plan but it was realised that some remote areas would not feel the impact of the project unless there were eye nurses posted closer to the population there. Funds for this were identified from the existing plan's budget, thanks to budget flexibility. Over 150 integrated eye workers (general doctors,

general nurses, a paediatrician, midwives and health managers) have been trained in eye care by ophthalmologists and ophthalmic nurses.

### Infrastructure

The Cameroon health structure divides the country into health provinces (e.g. South West Province) which are sub-divided into health districts (e.g. Kumba, Mamfe). Each health district has a district hospital. The province has a provincial hospital that is the referral hospital for district hospitals. In the South West Province, a second provincial hospital was created recently in Buea. The eye units in the provincial hospital Limbe, the Baptist Church Health Centre in Mutengene, the district hospital in Mamfe and the district hospital in Kumba (to start later in the year) provide secondary level eye care services. Tertiary eye services (retinal detachment surgery, diabetic retinopathy laser photocoagulation, paediatric surgery, etc) are not provided by any of the eye units in the South West Province. The eye unit in the provincial hospital Annex Buea (newly created) will also provide secondary level eye care, but not major ocular surgery (cataract, etc.) because it is staffed with an eye nurse only. All eye units are in existing health facilities providing general health care. Apart from the Mutengene Eye Unit, which is a Baptist Church institution, all other eye units are within government health facilities.

**Figure 2. Eye units in Cameroon's South West Province (May 2005)**



At the planning stage, the VISION 2020 standard list of equipment had not been developed. There was a list of minimum necessary equipment proposed by the West African College of Surgeons. This list was adapted to the programme's needs.

Each of the eye units (except Buea) has a full range of equipment, instruments, consumables and drugs to deliver secondary eye care services. They have one slit lamp each, one operating microscope, a dedicated theatre, at least three cataract surgical sets each, and diagnosis and refraction instruments. None of the eye units has a working visual field analyser (other than the Bjerrum's Screen), or biometry equipment. Limbe, Mamfe and Kumba will have vehicles for outreach by the end of the year. There are teaching materials (teaching aids, slides and manuals) in Limbe, Mamfe and Kumba.

Sight Savers International provided equipment and initial stocks of drugs and consumables. SSI also supported infrastructure development (refurbishment of existing building in MoH facilities to transform them into eye units), training of all cadres of staff and running of the eye care project office. Additionally, SSI supports monitoring/supervision and coordination meetings. The MoH contributes to infrastructure, personnel salaries, furniture and utility costs. The project is integrated in the MoH structure at all levels.

### Community approach

There is a Community Directed Treatment with Ivermectin programme in the South West Province, with which the eye care programme is integrated at health district level. In 2003, 434 Community Directed Distributors of Ivermectin and other community members were trained to measure visual acuity. Over 1,800 CDDs were trained in the first quarter of 2005 to identify and refer cases of blindness in their community. Teachers have been trained to screen over 18,000 school children. These community-based eye workers sensitise and mobilise the population. During World Sight Day celebrations, radio interviews, quizzes, round table discussions, and phone-in programmes inform and mobilise the community. Health education messages are also sent to churches and mosques to be delivered during religious services. The message contents vary from year to year. Last year, the focus was on cataract and eye diseases in the elderly.

### Planning and coordinating mechanisms

The VISION 2020 committee became functional in 2004, after most programme elements were in place. The committee,

which meets twice a year, includes representatives of all stakeholders in eye care, rehabilitation and education in the province. It is the forum for planning and coordination of all provincial eye services. There is a VISION 2020 task force that is a smaller sub-set of the committee in charge of technical issues. The task force meets four times a year. The project coordinator is the executive secretary of both the committee and the task force.

### Challenges, constraints and lessons learnt

The low CSR in the province is the main challenge. The programme is working to bridge the gap between the cataract services provided by health facilities and cataract patients in the community. Key learning points from our experience are summarised in the box below.

#### Key learning points from the district level VISION 2020 experience in Cameroon

- Early mapping and early involvement of all the stakeholders avoids duplication of effort. VISION 2020 committees are a good avenue for coordination of all eye care activities.
- Optical services should be part of all VISION 2020 plans from the outset. Needs for optical services constitute a substantial part of the eye care needs of the population. Furthermore, optical services generate funds that can be used to sustain eye care services in general.
- It takes more than human resources, infrastructure and technology to make an impact on the eye health of a population. Potential barriers to service uptake and strategies to overcome them deserve equal consideration at the planning stage.
- It is feasible to train general health practitioners and community members to deliver eye health services. More people could be effectively reached in a limited period of time and with little additional input.

#### References

1. Enyegue Oye J. Prevalence and causes of blindness and visual impairment in Muyuka, a rural health district of the South West Province, Cameroon. MSc CEH Dissertation, London School of Hygiene and Tropical Medicine, 2004.

#### Acknowledgements

Sight Savers International and their country representative in Cameroon, Dr Rosa Befidi-Mengue, have been instrumental to the programme development. The government, through the Ministry of Public Health, took the necessary actions to implement a VISION 2020 plan at provincial level.