

Sida's Health Support to Angola 2000–2002

**Pia Karlsson
Staffan Salmonsson
Kenneth Challis**

**Department for Democracy and
Social Development**

Sida's Health Support to Angola 2000–2002

**Pia Karlsson
Staffan Salmonsson
Kenneth Challis**

Sida Evaluation 03/19

**Department for Democracy
and Social Development**

This report is part of *Sida Evaluations*, a series comprising evaluations of Swedish development assistance. Sida's other series concerned with evaluations, *Sida Studies in Evaluation*, concerns methodologically oriented studies commissioned by Sida. Both series are administered by the Department for Evaluation and Internal Audit, an independent department reporting directly to Sida's Board of Directors.

Reports may be ordered from:

Infocenter, Sida
S-105 25 Stockholm
Telephone: (+46) (0)8 506 423 80
Telefax: (+46) (0)8 506 423 52
E-mail: info@sida.se

Reports are also available to download at:

<http://www.sida.se>

Authors: Pia Karlsson, Staffan Salmonsson, Kenneth Challis

The views and interpretations expressed in this report are the authors' and do not necessarily reflect those of the Swedish International Development Cooperation Agency, Sida.

Sida Evaluation 03/19
Commissioned by Sida, Department for Democracy and Social Development

Copyright: Sida and the authors

Registration No.: 2002-3449
Date of Final Report: March 2003
Printed by Elanders Novum
Art. no. SIDA2891en
ISBN 91-586-8527-8
ISSN 1401-0402

SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY

Address: S-105 25 Stockholm, Sweden. Office: Sveavägen 20, Stockholm
Telephone: +46 (0)8-698 50 00. Telefax: +46 (0)8-20 88 64
Telegram: sida stockholm. Postgiro: 1 56 34-9
E-mail: info@sida.se. Homepage: <http://www.sida.se>

Table of Contents

Executive Summary	1
1 Programme Context.....	4
1.1 The Luanda context	4
1.2 Background of the health support	4
1.3 The present health programme	5
1.3.1 Maternal health	5
1.3.2 The midwifery school	6
1.3.3 The child health programme	6
1.3.4 The Sida support	7
2 Methodology.....	8
2.1 Purpose and scope of the evaluation	8
2.2 Methods	9
2.3 Limitations	9
3 Findings	10
3.1 Maternal health.....	10
3.1.1 Objectives, purposes, and results - planned and achieved	10
3.1.2 Changes during the period	15
3.1.3 CAOL	19
3.1.4 The midwifery school	20
3.1.5 Conclusion	21
3.2 Child Health	22
3.2.1 Objectives, purposes, and results - planned and achieved	22
3.2.2 Changes during the period	24
3.2.4 CAPEL	26
3.2.5 The vaccination programme	27
3.2.6 Conclusion	31
3.3 The Sida Support.....	32
3.3.1 Suggestions of the 1999 evaluation	32
3.3.2 Components of the Sida support	32
3.3.3 Conclusion	36
4 Conclusions	37
5 Recommendations	42
Annex 1: Terms of Reference	44
Annex 2: References	47
Annex 3: Persons Interviewed	49
Annex 4: Health Facilities visited in Luanda	50
Annex 5: Health Programmes	51
Annex 6: Fatality rate at University Maternity Lucrecia Paím 2002	55
Annex 7: Number of Children (under one) Vaccinated per Province during 2001	56
Annex 8: Some Findings and Reflections on the Private Health Sector in Luanda	57

Abbreviations and Definitions

AIDS	Acquired Immunodeficiency Syndrome
ANC	AnteNatal Clinic
CAOL	Coordenação do Atendimento Obstétrico da Província de Luanda
CAPEL	Coordenação da Assistência Pediátrica em Luanda
CEP	Curso Especializada de Parteiras
DPSL	Delegação/Direção Provincial em Luanda
EPI	Expanded Programme of Immunisation
HIV	Human Immunodeficiency Virus
IMCI	Integrated Management of Childhood Illness
IUFD	Intrauterine fetal death
LFA	Logical framework Approach
LTA	Long-term adviser
MCH	Mother and Child Health
MLP	Maternidade Lucrecia Paim
MMRi	Maternal mortality ratio-institutional
NGO	Non Governmental Organistaion
PAV	Programma Alargado de Vacinação
PNM	Perinatal mortality
PU	Peripheral Unit
RPR	Rapid plasma reagin
SFH	Symphysis-fundus height
Sida	Swedish International Development Cooperation Agency
STA	Short-term Adviser
STD	Sexually Transmitted Disease
TBA	Traditional Birth Attendant
TOR	Terms of reference
UNFPA/FNUAP	UN Population Fund
UNICEF	UN International Children's Fund
VDRL	Venereal disease research laboratory
WHO	World Health Organisation

Definitions

Antenatal	The period of pregnancy from conception to onset of labour
MMR	Number of maternal deaths per 100,000 live births (ratio)
PNM	Number of stillbirths after 28 weeks of pregnancy, and deaths of newborns during the first 7 days of extrauterine life

Executive Summary

Sida has commissioned Institute of Public Management to carry out the evaluation. The team consisted of Pia Karlsson, Staffan Salmonsson and Kenneth Challis.

The current Sida support to the maternal health programme in Luanda was initiated in 1991. The support to the child health programme started in 1998; child health had, however, also previously received Sida funding by support to the national Expanded Programme of Immunisation. The goal of the mother and child health programme is to reduce the mother and the child morbimortality. The strategy has been a decentralisation approach with peripheral clinics and transferrals of complicated cases to central, well equipped referral hospitals. To reduce maternal mortality qualified institutional care is necessary while child mortality can be decreased by preventive measures.

Sida has supported construction and rehabilitation of maternity and paediatric hospitals in the capital and peripheral clinics in the peripheral districts of the Luanda province. Hospitals and clinics have received drugs, material and equipment, transport and radio communication and continuous education to health staff. Personnel of the maternal health programme have received salary supplements. Long term as well as short term technical advisers have all the time assisted the programme activities. Since 1998, Sida has also financed a midwifery school. Two organisations have been created within the Health Delegation in Luanda: CAOL (*Coordenação do Atendimento Obstétrico da Província da Luanda*) and CAPEL (*Coordenação da Assistência Pediátrica em Luanda*) to coordinate the maternal and the child health care, respectively.

The present evaluation covers the period June 2000 – December 2002. The main purpose was to assess the present programme in terms of long-term sustainability and bring suggestions to be used in the preparation of the next phase of Sida support to the health programme. In accordance to ToR the following key issues have been focussed:

- ***The achievement of objectives and results as described in project documents, the realism of objectives and the use of indicators.***

The maternal health programme, the child health programme and the midwifery school have produced separate annual work plans and reports. In general, the documents are structured and informative. The work plans are extensive, and often confusing in the (mis)use of objectives, purposes, expected results, indicators, priorities and strategies. Whether objectives and purposes have been achieved is not reported. The expected results are often unrealistic, which is one reason for non achievements. Quality is often expected to improve but it is not defined how. Indicators appear, but not directly related to objectives or results. The plans can hardly be used as instruments for the management of the programmes.

- ***Improvements / changes in terms of the quality of the provided health care***

The number of deliveries at peripheral units has steadily increased; nevertheless, the delivery facilities are much underutilised. Around 70% of all women still prefer to give birth at home. Taking the extreme population increase into account, the proportion of institutional deliveries has decreased. The maternal mortality at peripheral clinics is low, which indicates correct transferral management.

The number of prenatal consultations have increased annually. Mothers are rarely vaccinated against tetanus and control of HIV and syphilis are not included in the clinic routines. The family planning consultations have decreased the past years, the reason is unclear. A new service, contraceptives for adolescents has become a success.

At the district, provincial and national maternity hospitals around 80% are normal deliveries, which means that the referral system does not work. The maternities at central levels are overutilised.

The illegal fee system (*gasosas*) is a serious problem and seems to be frequent everywhere.

CAOL has been instrumental in turning a heavily centralised, clinical system into a decentralised system with a clear public health approach. To avoid the tendency of becoming a “system in the system” CAOL needs to integrate into existing health structures.

The child health programme has contributed to increased access, proven by a steady increase of consultations at the peripheral and central clinics and hospitals with paediatric services. The core of the CAPEL strategy is the Integrated Management of Childhood Illness (IMCI). However, results are too premature to assess considering the “infancy” of the CAPEL.

44 “specialised midwives” have graduated after completion of the 18 months course. The training is too exclusive and too expensive for the Angolan context and has hardly any possibility to sustain in its present form.

- ***Impact of the support to the national maternity hospital, Maternidade Lucrecia Paím.***

The institutional mortality rate at the national maternity Lucrecia Paím, remains at the same high level as when the programme started. Mortality due to eclampsia is controlled but deaths due to other causes – haemorrhage, septicaemia, malaria – remain extremely high. Audits are seldom performed. The national maternity hospital is well equipped and does not depend on the financial support from Sida.

- ***Impact and cost effective of the national immunisation programme, particularly the division of resources between routine and campaign vaccinations.***

The vaccination coverage remains unacceptably low. During the past two years the incidence of poliomyelitis has been drastically reduced. Access to immunization has increased but drop out rate remains high. Neonatal tetanus cases are frequent. Targeted campaigns and out-reached immunization is justified and is complementary to routine vaccinations in the Angolan context.

- ***Effectiveness of salary supplements***

The salary supplements have played a crucial role for the development of the programmes. Today, the “incentives” have become unjust and have to a great extent already phased out automatically. Increased salaries do not make this incentive as necessary as before.

- ***Impact of long-term and short terms advisers in capacity building***

There is evaluation on the impact of the capacity building activities available but a fair guess, confirmed by interviews, is that the technical advisers have likely contributed to the widely recognised improvement of staff performance. Today, technical assistance is mainly needed at the management level. A successful change is the replacement of the obstetrician by a public health specialist. Midwifery competence is preferably provided by short term advisers. The economist/administrator is mainly occupied with “internal” administration and should, if possible, be more active in direct competence development of the Angolan administrators.

Three major problems have been identified:

- 80% of all women deliver at home and the proportion of women that give birth outside health institutions is increasing.

- The institutional maternal mortality (MMRi) remains high and no significant changes since the initiation of the project has occurred.
- Infant and under-5 mortality rates are extremely high and the causes of death are due to preventable diseases, which do not require any sophisticated clinical care.

and possible solutions:

- Involve the mothers. The evaluation found that even if the access to institutional deliveries has improved the clinics are surprisingly under-utilised. Very little information is available about why this is the case. The programme needs to seriously look into the attitudes of mothers. Why are the pregnant women reluctant to use the service provided? What is the role of traditional birth attendants at community level? What are the attitudes and practices? Do other factors like staff performance, security, lack of transport or other unknown factors play a role?
- Encourage staff at the health institutions. Salary levels and other incentives will probably play an even more important role in the future given the increased cost of living in Luanda. Training and emphasis on “best-practice” and norms are equally important.
- Continue to address the specific causes of maternal mortality. The impact of improved case management of eclampsia is evident. There is a need to further strengthen the delivery wards with blood laboratory and adequate equipment for safe practice. Preventive treatment of malaria and hepatitis-B should be on top of the list. Last but not least training and clinical audits are important.
- Implementation of a referral system is urgently needed. Without a strict referral system the hospitals will continue to be overloaded by “normal” deliveries, as is the case today.
- Vaccination of children and pregnant women is a priority. Coordination between routine vaccination and campaign/outreached activities will benefit the programme.
- The present informal fee system has to be abolished.

A sustainable programme?

The positive experience of the decentralised **structure** of the maternal and child health care is acknowledged and has potential to sustain. The investments in staff training has produced reasonably well trained and skilled staff, and the existing technical competence is a base for a sustainable programme. The main threat is in regards to **financial** sustainability. In the present peace it is imperative that the Angolan government spend resources on health care. Increase of the governmental financial inputs is decisive for success of the programme.

1 Programme Context

1.1 The Luanda context

The security situation in Angola and in Luanda has improved considerably after the peace agreement in April 2002. The risk for emerging hostilities is not over but a short visit gives impression of hope and new confidence for the future. One of the main constraints is however, the unprecedented and uncontrolled population growth. The constant influx of internally displaced people during the past decade has more than doubled the total population of Luanda. The estimated population is now over 4.5 million as compared to two million in 1991. The estimated population growth in Luanda has been 15% per year. Not surprisingly, the enormous population increase has entailed social and economic problems with criminality and prostitution as some results. Children and women are the main victims. The existing health system has not seen any significant increase and a large proportion of the population lives in the city fringes with no access to clean water and basic sanitation – not to mention basic social service and health care.

On the other hand, it is obvious that Luanda also accommodates a wealthy middle class; the intensive traffic with quite a number of luxury cars, restaurants and night clubs bear witness. The exploding private sector, not least in the health area is other evidence.¹

The most common disease and the most common cause of death among all children, women and men of all ages in Luanda is malaria. For pregnant women malaria presents a severe threat as the susceptibility during pregnancy increases. Besides malaria, the most common causes for maternal mortality is haemorrhage, eclamsia, and septicæmia.

172 out of 1000 children below one year die in Angola, one of the highest figures in the world. Most causes of death are preventable: malaria, acute respiratory infections (ARI), diarrhoea, measles and neonatal tetanus.

1.2 Background of the health support

To reduce the dramatically high maternal mortality in the country – at times estimated to 2400/100.000 – was the initial justification for the project. The real figure was never and is still not known as only less than half of all deliveries take place at institutions. The *institutional* maternal mortality (MMRi) was just as alarming, by the start of the project in 1991 calculated to 1010/100 000. Solution of the problem was to be found in organisational changes: reducing the number of normal deliveries at the hospitals by increasing the access to delivery units in the peripheral municipalities of the province and by establishing a functioning referral system with transferences of high risk and complicated cases from the periphery to district, provincial and national levels. Included in the initial strategy was training of traditional births attendants (TBA) to achieve safer home deliveries – a component that later was abandoned. Prenatal service and family planning were other strategies and these components have by time been further reinforced.

During the nineties new peripheral clinics were constructed or delivery wards were added to existing health centres while others were upgraded and renovated. The central national hospital, Maternidade Lucrecia Paím, the provincial hospital Augusto N'Gangula and the district hospitals Cajueiros and

¹ Recently, one of the daily newspapers published the names of the richest individuals of Angola; more than 50 individuals were pointed out as USD billionaires. Many belong to the top leadership of the country.

Kilamba Kiaxi received equipment, material and medicines. An intensive care unit at the hospital Lucrecia Paím has drastically reduced the mortality in eclampsia. A transportation system, with ambulances and radio communication, was established.

More than one thousand, maybe as many as two thousand health personnel have received training in antenatal care and risk screening, antenatal high risk service, delivery assistance and family planning at seminars and workshops; many have also participated in study visits and conferences, within and outside the country. In 1998, a school for midwives started, with a course duration of 18 months. So far 44 “specialised midwives” have graduated.

CAOL (*Coordenação do Atendimento Obstétrico da Província da Luanda*) was created in 1990 to coordinate the programme. It is a provincial body within the Health Delegation of Luanda.

Several long term advisers have been supporting the programme since its beginning and a number of short term consultants/advisers have monitored and evaluated, trained and guided the Angolan partners.

Since 1991, Sida has provided salary supplements to all staff involved in the maternal health programme.

In 1998, CAPEL (*Coordenação da Assistência Pediátrica em Luanda*) was founded as a pendant to CAOL and a support to the child health programme was initiated. The child mortality rate was – and is – no less horrifying than the maternal mortality. Sweden had since long supported the Extended Programme on Immunisation (EPI), in Angola well known as PAV (*Programa Alargado da Vacinação*) through UNICEF.

The rationale behind the child health initiative was to strengthen the paediatric care in Luanda. Until 1998, the health system in Luanda provided 24 hours paediatric care only at the central paediatric hospital. In that respect the situation regarding paediatric care was very similar to that on maternal care before the CAOL initiative in 1990, i.e. a very centralized and overloaded central hospital and poor health service at the peripheral health centres.

1.3 The present health programme

The present support, limited to the Luanda province, has two components: maternal health and child health. The vaccination support is today mainly channelled through UNICEF and the consolidated UN appeal but also through the CAPEL organisation.

1.3.1 Maternal health

1.3.1.1 Objectives, expected results, activities

Generally, although shifting, the objective has been to reduce the institutional maternal mortality rate, MMRi. Expected results are e.g. increased deliveries of complicated nature at the referral hospitals and increased number of normal deliveries at the peripheral units. A better identification of high risk cases is one expected result from increased number of prenatal consultations. Family planning services and detection of sexually transmitted diseases (STD) are expected to reduce morbimortality and promote safer sex.

Training of staff, establishing norms and codes of conduct, supervision, and salary supplements are means and activities that aim at improving the quality of the programme.

A regular provision of material and equipment is also expected to enhance the quality.

1.3.1.2 Institutions

In Luanda, there are two district hospitals with maternity care services, Cajuerios and Kilamba Kiaxi, one provincial hospital, Augusto N'Gangula and a national maternity hospital, Maternidade Lucrecia Paím, which serve as referral levels, but also receive patients directly. The national maternity, a University Hospital, has previously received considerable Swedish support; the last years only a minor contribution to medicines, material, equipment, training and salary supplements. The district and provincial hospitals have been reconstructed and furnished with material, drugs and equipments, staff training as well as salary supplements to all personnel.

In addition, the maternal health programme includes 15 peripheral delivery units, constructed and equipped with financial support from Sida, situated in the nine municipalities of the Luanda province and located in existing health centres. Besides delivery rooms (with on average ten beds) there are sections for family planning, vaccinations, prenatal and postnatal consultations, and laboratories with equipment and trained technicians. Eleven peripheral units have contraceptive counselling to adolescents.

Each peripheral unit is supposed to have at least one ambulance to be used exclusively for referral to central hospitals. By means of radio communication the ambulance staff is enabled to keep in contact with the clinics and hospitals.

Personnel at all levels receive salary supplements of various amounts from Sida and next to all have received some form of training.

1.3.1.3 CAOL

CAOL, the co-ordinating body for the maternal health programme in Luanda province is responsible for collecting and analysing statistics, elaborating plans and reports, organising continuous education, elaborating norms and codes of conduct and supervising the activities. 15 supervisors are employed and are responsible to the CAOL coordinator. They visit the peripheral units on a regular basis for support and control. CAOL staff also deals with procurement, distribution, storage and administration of medical supplies to the health care units.

CAOL and the maternal health programme are supported by long term technical advisers, a medical doctor specialised in public health, a midwife and an economist/administrator.

1.3.2 The midwifery school

Since its initiation in 1998, 44 “specialist midwives” have graduated after the 18 months course. At present, there are two parallel courses with a total of 50 students, who are recruited from some ten different provinces. The previously graduated students are back on duty and are followed up by the teachers of the school. The school has four full time teachers and employ a number of specialists from the hospitals and the university as part time lecturers. The school is situated in the premises of a nursery school outside Luanda and is well equipped with modern furniture and education material. The school teachers have received continuous education every year, including study visits abroad. All staff has salary supplements.

1.3.3 The child health programme

1.3.3.1 Objectives, expected results, activities

Similarly, the objectives for the child health programme vary; from reduction of child mortality, to improved child health and to improved child health care. Recently, the focus has been on the main childhood diseases, i.e. measles, acute respiratory infections, acute diarrhoea, meningitis, malnutrition and malaria. By establishing a number of paediatric units in connection to the maternal peripheral

clinics, by training the staff and concentrating on immunisation the expected result is a reduction of child illness and death in the above mentioned diseases. A core component of the programme is to implement the integrated management of childhood illness, IMCI.

1.3.3.2 Institutions

There is one provincial paediatric hospital in Luanda, *Hospital Pediátrico em Luanda* and at the provincial hospital Augusto N'Gangula a paediatric department is under construction. In ten of the fifteen peripheral units paediatric service is available 24 hours.

In addition to the curative care the peripheral units offer preventive interventions, e.g. immunisations, growth monitoring, and nutritional education.

1.3.3.3 CAPEL

CAPEL is the coordinating body of the child health programme and is, similarly to CAOL, responsible for elaborating plans and reports, collecting statistics, organising continuous education and supervising the activities. Supervisors are employed and are responsible to the CAPEL coordinator. They visit the peripheral units on a regular basis for support and control. CAPEL is also but to a less extent supported by long term technical advisers.

1.3.4 The Sida support

Sida's financial support is provided to:

- Salary supplements to staff members of the maternal health programme
- Education activities to health personnel
- Construction of peripheral maternity and paediatric clinics
- Reconstruction of district and provincial hospitals with maternity and paediatric services
- Drugs, material and equipment to maternity and paediatric hospitals and peripheral clinics
- Transport and communication
- Long term technical assistance
- Short term technical assistance
- The midwifery school: salary supplements, equipment and material, training of staff, running costs.

The long term and short term advisers are contracted by the Swedish company InDevelop.

2 Methodology

2.1 Purpose and scope of the evaluation

Sweden has supported the health sector in Angola since 1977. The maternal health programme in the province of Luanda has been supported since 1988. A decision by the Swedish government in 1999 changed the character of the support – from development co-operation to a more limited support based on humanitarian justifications due to in the prevailing emergency situation in Luanda. Currently, the assistance consists of support to maternal and child health in Luanda province, support to a mid-wifery school and to the national immunisation programme. The present agreement terminates in December 2003 and the present evaluation is to be used in the preparation of Sida’s interventions in the health sector after 2003.

According to terms of reference it is expected that a new country strategy will allow for a continuation of the Sida support to the health sector in Angola and that the evaluation, being conducted in the new context of the peace process, “shall specifically analyze the possibilities to change the current health programmes based on humanitarian aspects into a long-term sustainable cooperation”.

However, less than a week before the evaluation mission got started Sida’s Board decided that the new country strategy for Angola should include a phasing out of the Swedish support during the coming three to four years. Therefore, as agreed with Sida’s Programme Officer in Stockholm the evaluation does not discuss any new direction of the Swedish and Angolan cooperation but is limited to a general discussion of the possibilities for a *sustainable health programme*².

The following specific issues were set out in the ToR:

- 1) Objectives and results as described in the documents:
 - has the project contributed to the overall objectives?
 - have the project objectives been achieved?
 - have the expected results been achieved?
 - are they realistic?
 - do indicators measure the results?
- 2) Assessment of improvements/changes in terms of quality of the provided health care
- 3) Impact of short term and long term advisers in terms of capacity building
- 4) The immunisation programme: cost effectiveness, impact, division of resources between routine vaccinations and campaigns, continuous support?
- 5) Assessment of the effectiveness of the salary supplements
- 6) The national maternity ward, Maternidade Lucrecia Paím: impact, continuous support?
- 7) Lessons learned and suggestions

The evaluation was to cover the period June 2000 – December 2002. The complete terms of reference are found in annex 1.

² When writing the report the decision of the Swedish Government was not known to the evaluation team.

2.2 Methods

The information in this report is partly based on a desk study of programme documents, i.e. annual work plans and reports of the three programme components during 2000–2003 and other documents related to the programme, such as country strategies, agreements, evaluations, policies etc. A reference list is attached (annex 2).

Moreover, a number of interviews have been conducted, e.g. with programme staff at various levels in Luanda, beneficiaries of the programme, Sida personnel in Angola and in Sweden, technical advisers as well as other persons outside the programme, with information about the health situation or health support in Luanda. Semi-structured interviews have been used. All people met are listed in annex 3.

The team visited Luanda during two weeks in January 21– February 4 and paid visits to the four hospitals in the city, to four peripheral units and to the midwifery school. The sites are listed in annex 4.

2.3 Limitations

The present assessment of effectiveness and impact of various interventions does not claim to have the profundity and breadth of a scientific report; it is not possible for an evaluation carried out in a few weeks. No doubt, there is more to be said and certainly, each issue can be presented from various perspectives. However, within the given restrictions, the evaluation has consciously attempted to get as broad and varied information as possible and has made great efforts to critically evaluate and interpret the provided information.

The main limitation is the fact that the beneficiaries of the programme, the mothers and the children, do not seem to have any voice in programme; very little information is available about the views and demands of the main target group. This implies a serious limitation for the evaluation although a few interviews with mothers visiting the health centres were conducted. But it can be stated (as in the programme evaluation of 1999) that women's experiences are not known and women's needs have been *assumed* by the programme designers. This is likely a result of the *clinical* approach the programme too long has suffered from.

There is much of quantity information in the programme reports and other documents of the health sector. For obvious reasons, the available data must be regarded as quite insecure. Many figures and much statistics are based on estimates. With due respect to the difficult circumstances the reliability of statistical information cannot be considered as fully credible.

3 Findings

3.1 Maternal health

3.1.1 Objectives, purposes, and results – planned and achieved

3.1.1.1 A review of plans and reports

The structure of plans and reports

The annual work plans have two parts and follow a certain structure with some LFA characteristics. The first part describes the planned activities in current text and the second part includes a table, called plan of operations. The *Introduction* describes the province of Luanda, its geographical size and location and its continuously increasing population. It includes information about the present number of health facilities at various levels. A list of *Priorities* comes next (except in 2001 plan) before the objectives and expected results are introduced. The set priorities are: i) to sensitize the population to use the health service, ii) to train the staff so as to provide quality services and (in 2003 plan) iii) to improve supervision and management of the programme.

After the priorities follow *Overall Objective*, *Specific Objective(s)*, and *Expected Results*. Thereafter (except in 2001) is inserted a list of *Strategies*, for example “strengthen staff capacity”, “guarantee a communication system”, “consolidate an integrated management”. Such a list has another appearance in the plan for 2003, then as a chapter with a number of described “problems”, “strategies” and “expected results”. Examples of strategies are “provide information, education and communication to the population”, “collaboration with PAV”, “opening of four new wards”. The expected results in this part do not coincide with the expected results in operational plan. A list of *indicators* follow suite (except for 2001 and 2003) with few, but some relations to objectives or expected results. Finally, the plans predict some constraints and difficulties and describes how the programme will be monitored and evaluated. The last page is a budget summary.

Consequently, the plans are elaborated around a reasonably good structure. However, there is often lack of coherence between the objectives at different levels and between expected results and objectives, i.e. it is often difficult to understand how the results will contribute to the achievement of the specific objective.

The plan of operations describes in a table the expected results, activities, responsible person, participants, time period, budget and financier. Also here it is hard to see how certain activities will lead to the expected results. The budget is not complete; governmental inputs are listed but not calculated, for example.

The LFA concept is only used partially and may therefore contribute to more confusion than clarity. It is difficult to understand why setting of priorities and elaboration of strategies are done; in a proper LFA plan none would be needed – they would be integrated in the structure with goals, purposes, results, activities, inputs and indicators. Elaboration of annual work plans does not exclude problem analysis and selection of strategies, on the contrary, but the work plan would certainly be more useful if such exercises resulted in a more logical planning. The present annual plans are very extensive, and are hardly a tool to use in continuous work planning during the year that follows – are plans only made to satisfy the requirement of the donor?

Regarding the annual reports for 2000 and 2001 and the biannual report for 2002 it is not easy to find whether objectives and results have been achieved as the reports do not follow the structure of the

plans; new subcomponents are introduced in the reports and even new objectives in one case. None of the reports discuss achievements of objectives but all informs about and reflects around the results.

(A tentative translation of overall objectives, purposes and expected results for 2000–2002 are attached, annex 5)

- **Overall (or development or long term) objective – GOAL:**

states the long term (5–10 years) social and/or economic benefits to which the project/programme will contribute (LFA)

It goes without saying that the overall objective should remain the same for many years, unless there is a remarkable change of circumstances and conditions of the project. In the four plans during the studied period the development objective has changed with every new plan. In the plan for year 2000 (which includes also the child health programme) the stated objective is to contribute to improved health for the children in the Luanda province. The 2001 plan has no long term objective at all. In 2002, the objective is to contribute to the reduction of institutional maternity rate and in 2003 it is to contribute to the reduction of institutional maternal and antenatal morbidity and mortality in the Luanda province.

In the initial project plan of 1991–1995 the long term objective was to reduce the MMRi to 400/100.000; in the subsequent plans no specific figure has been mentioned but the overall objective has always been to reduce the institutional maternal mortality rate (MMRi), in some annual plans also the morbidity. Why the objective is different in every annual plan of 2000–2003 has not been found. Whether the programme has contributed to the achievement of the development objective is not commented in any report.

- **Project (or specific or immediate) objective – PURPOSE**

states the goal the programme/project intends to achieve within 1–4 year – should be specific, measurable, accurate, realistic and time bound – preferably only one (LFA)

The plan for 2000 has two specific objectives; the one for child health is reported below. For the maternal health programme the previous development objective – to reduce the MMRi – has here become specific, and is a reduction by 25% to be achieved by December 2001, a two years perspective; the rate is calculated from the 1999 level. Unfortunately, the MMRi of 1999 is not communicated. Why the development objective has become a specific objective is not explained. The report written in 2001 does not inform whether this specific objective was achieved.

The plan for 2001 has the same specific objective but is to be reached six months later, in June 2002. There is no information about the present rate level, or about any achievements in the year 2000. That the time frame is extended indicates that positive experiences are few. In the report the following year nothing is mentioned in relation to the reduction of MMRi.

A new format is introduced in the plan of 2002. A long list of specific objectives is presented, divided into the subcomponents of the maternal health programme. With the exception of a few words the same specific objectives appear in the 2003 plan, indicating that none has been achieved? The biannual report for the first six months of 2002 has no references to the specific objectives.

The confusion with regards to overall and specific objectives is obvious. The long list of specific objectives distracts things even more and makes the distinction between immediate objectives and expected results difficult to sustain. “To improve the quality” – an often mentioned objective is hardly neither measurable, nor specific; the programme would have lots to gain by identifying “quality” in the various areas.

- **Expected results (or outcomes)**

services or goods that the project/programme will be responsible for or can guarantee to deliver within the timeframe of the plan (LFA)

The annual plan for 2000 expects many results to be achieved only by the end of 2001. Quality is often expected to increase or improve but quality is not defined.

The plan for 2001 is with a few exceptions a copy of the plan for 2000 but has added six months to achieve the results. An most important change from the previous plan is that the peripheral deliveries should increase not from 65.000 as in the year 2000 but from 30.000 and are expected to reach 60.000 by June 2002. If this is due to misunderstanding or miscalculation or something else is not explained. In the 2002 plan the peripheral deliveries are expected to reach 40.000.

The 2002 plan has tried to concretise the specific objectives into measurable expected results but too often the objectives and the results are identical; this is the case particularly when quality aspects are involved. Another problem is that 2002 plan as well as the other plans does not make references to the previous ones, or to monitorings, evaluations or reports. In the plan for 2000, for example, the prenatal consultations were expected to reach 200.000 by the end of year 2001 while they are supposed to reach 180.000 in the plan for 2002.

The lack of realism in calculating expected results is obvious. It seems as the project writers are not aware of that the project should **guarantee** that the planned results should be realised; probably this is one reason for the confusion.

The reports discuss achievements of each result separately, mostly in an honest and reflective way, trying to explain failures and non-accomplishments as well as good examples. Normally, results described in quantifiable terms are far too high while more vague expectations also are reported quite vaguely. Progress is reported with regards to number of consultations, prenatal as well as for family planning, with regards to number of peripheral deliveries and inauguration of new peripheral units, but the results are generally far less than planned for. Failures are reported with regards to the number of post-delivery consultations, number of normal deliveries at referral units and the MMRi, which still presents no significant change.

- **Activities**

are means to achieve the objectives, address the causes and thereby achieve the results (LFA)

To discuss the activities are beyond the scope of the present evaluation, but observations point also here to certain confusion.

- **Inputs**

are resources such as technical expertise, equipment, premises, funds, and time (LFA).

The plans include a summary budget in the first part and a more elaborated one in the second operational part. However, the budget is far from the detailed budget a programme manager would need.

- **Indicators**

are objectively verifiable measures for objectives and results and answers the questions:

- *for whom (target group)?*
- *what (implementation)?*
- *how much (quantity)?*
- *how good (quality)?*

- *when (period of time)?*
- *where (geographical area)?(LFA)*

The 2000 plan includes a list of indicators for the two programmes, maternal and child health, but not specifically related to objectives or results. Examples are: percentage of trained staff members, percentage of centres with 12 supervisory visits per year, percentage of staff members who speak a foreign language, average number of consultations per pregnant woman, and number of deliveries at peripheral units.

In the 2002 plan the indicators are related to the different areas, prenatal consultations, family planning, etc. and include quantitative indicators. Sometimes it seems as the indicators are constructed as a response to the result without any consideration of its value. It is hard to understand for example how the “percentage of sick people correctly diagnosed and treated” can be an objectively measurable indicator.

- **Risk analysis** and
- **Assumptions**

are not included in the plans.

Summing up, a review of plans and documents show that the overall objective, presented as reduction of the MMRi, has not been achieved. The reports do not inform whether specific objectives have been achieved but information is provided about each expected result. Indicators are few and poorly developed.

Generally, according to the documents, there is annual progress in relation to increased number of peripheral maternal units, increased number of peripheral deliveries, increased number of pre-natal consultations, increased visits at the adolescent clinic – but progress is far slower than expected. Still, no progress is reported with regards to the total MMRi, and still the referral system does not work.

The plans and reports do have a certain structure but present difficult reading and can hardly be used as instruments in programme management. Much more competence is needed among all staff responsible for planning and reporting, preferably according to the LFA format.

3.1.1.2 *Field evidence*

Based on our field visits to the peripheral maternity units and the hospitals, we noted no signs of overcrowding, with the exception of a few rooms at the MLP. The staff was available and in place. The overall impression was that the facilities were clean and relatively well-organized. There was well-functioning supply of both water and electricity³.

All the visited peripheral maternity units had sufficient medical supplies, although sphygmomanometer was lacking in one place. The number of births were recorded and the partogram was used. The radio communication system was functioning, but problems with transfers and transports were notable; ambulances did not always function. For instance, the ambulances at the health centres at Ilha and Hojo Ya Henda had been out of service for months. Before a midwife is able to transfer a patient, she has to call the nearby hospitals to find out whether they have an ambulance in use, and if the doctor is available.

The heavily overpopulated areas surrounding the clinics were suffering from appalling sanitary condition: abundance of garbage floating around, contaminated ditches and stagnant pools of water. The cholera risk is obvious.

³ Kassequel had no electricity.

Regarding illegal patient fees (*gasosas*) practically all staff at all the various institutions denied that this practice was in use, although it was clear that it existed in all facilities. It may be not practiced everywhere at all times; some midwives emphasized that it was not in place in their workplace, and many are aware that they can lose their jobs if caught with *gasosas*. However, here are some of the current prices as informed by some patients:

- | | |
|---------------------------------|---------------------|
| 1) Entry to antenatal care/card | 100 kw ⁴ |
| 2) Antenatal consultation | 150 kw |
| 3) Bloodtest | 150 kw |
| 4) Vaccination | 20 kw |

Evidently, it happens that the publicly employed midwives, on request of the patient, assist in home deliveries. How common such practice was not possible to assess. “Traditional” midwives⁵ are still active, and some clinic midwives maintain contacts with them (TBAs are generally elderly women and are highly respected in Angolan society). Approximately 80% of deliveries take place at home. None of the maternal clinics had any patients in the delivery rooms at our visit; all beds were empty.

The number of prenatal consultations has increased considerably, but the number of visits to the family planning unit has declined, a fact for which no explanation was provided.

Generally, staff was satisfied with CAOL. The continuous education organised by CAOL and the supervisors were appreciated. Through CAOL medicines and materials have been supplied to the hospitals and clinics and through CAOL incentives are received. Complaints about the decreased sum (from 100 USD to 20 USD per month) were common.

The hospitals Augusto N’Grangula, Cajueiros och Kilamba Kiaxi have units for eclampsia patients, with supervision as well as the possibility to place MgSO₄ intravenously and blood pressure medicine. These appeared to be working well. A problem was the unavailability of doctors. Augusto N’Ganguala is a hospital with only obstetric and gynaecology facilities while the others are general district hospitals with 24-hour emergency services. Few staff members were on duty when the evaluation team visited the hospitals. All three hospitals informed that they rarely needed to transfer patients to MLP. Within the hospitals there was also a antenatal care and family planning sections. There was readiness for urgent Caesarean section – that is, if there was a doctor available to carry it out.

At the maternidade Lucrecia Paím the wards were refurbished, the staff was present, the ward for eclampsia was functioning; it was relatively clean and there was a good supply of medicines and adequate equipment. However, the autoclave had not been working for several years. The elevators in the hospital were modern and functioning. Electricity and water supply worked well. A maternal death audit was not in place at the time of our visit, but had been carried out occasionally in the past. Normal births represented about 80% of all deliveries. Eclampsia as a cause of death has been reduced quite substantially. However, MMRi is still around 2000/100.000 living born within the hospital. Around 10% are transferred from other hospitals. The occurrence of *gasosas* is denied.

The hospital gets support from a number of different donors, but more important is the direct financing from the Ministry of Finance, i.e. not as previously from the Ministry of Health. This measure seems to have improved the possibilities for investments and the acquisition of materials; regular salary payments had become a routine. The most qualified midwives remain on duty, but the gynaecologists

⁴ Kw = kwansa, 100 kw = 15 SEK, January 2003

⁵ TBA = Tradition Birth Attendant

are increasingly moving towards the private clinics in Luanda for better working conditions and higher salaries.

Some wards were overcrowded. Approximately 10–12 caesarean sections were carried out every day. There were approximately 100 deliveries per 24 hours.

Generally, the doctors only work 4–5 hours per day, the rest of the time there are only emergency doctors on call. Around half of the doctors at MLP are foreigners. *Gasosas* are denied, but evidence suggests that the practice is widespread.

Midwives and doctors are very familiar with CAOL and appreciate its contribution, particularly the incentive program. The overall impression is that MLP is no longer dependent on Sida's financial support.

3.1.2 Changes during the period

3.1.2.1 Suggestions from the 1999 evaluation

As suggested, the health care at primary level has been strengthened during the period : three more peripheral maternities have opened. The suspected underutilisation has unfortunately been confirmed in the present evaluation. The delivery rooms are not frequented in parity with the capacity and a large majority of all mothers still deliver at home.

The transferral system has continued, but has hardly been improved. Some ambulances do not work. Too many normal pregnancies are attended at the central maternities without a formal referral. This inadequate referral system continues to be one of the main constraints of the maternal health care in the Luanda province.

In addition to the eclamsia unit at MLP it was suggested to introduce such intensive care also at the hospital Augusto N'Gangula. This has been realised, and moreover, at the district hospitals (Kilamba Kiayi and Cajueiros) eclamsia units have been established too.

Services that were suggested to be “decisively supported” were blood transfusion services and supply of essential drugs, a suggestion that has won approval. Statistics on maternal mortality ratio (MMR) should include case fatality rates for each maternal death cause, a suggestion which has been successfully implemented at MLP. It goes without saying, that there is a need to implement the use of case fatality rates at all peripheral maternity units and at all hospitals in Luanda.

The Ministry of Health was requested to take on the responsibility for the national maternity Lucrecia Paím (MLP) to keep a reasonable quality of care and to pay the staff adequate salaries. At MLP the successfully implemented rehabilitation has been financed directly by the Ministry of Finance – an approach which seems to have been very beneficial. The MLP staff is better paid than health staff at other health units⁶.

One of the most important suggestions of the 1999 evaluation was that much more efforts must be done to reach all the women who do not use the maternal health services. It was seen as urgently needed to collect and analyze information about the reasons for the underutilisation. No study of this kind has been implemented. That still some 70–80% of all pregnant women do not utilise or do not have access to maternal health care, implying that the program does not reach the most vulnerable group, is another serious constraint. The temporary solutions to meet the need of displaced women suggested in 1999, has not, to our knowledge, been implemented either.

⁶ An example: a MLP midwife has a salary that is three times higher (24 000 Kwanza = approx. SEK 3 600/month) than a midwife at a peripheral maternity.

The strong Swedish involvement has continued as suggested. CAOL's functions as coordinating body has been restored and the contacts with the Health Delegation of the Province of Luanda have been strengthened. However, the suggestion to investigate the possibilities to channel support through NGOs has not been done. Any particular efforts to involve the civil society have not been made. Women's groups and organisations are only occasionally contacted. The reasons for this neglect have not been found.

The salary supplements were suggested to be gradually phased out. No decision on phasing out has been taken but a gradual phasing out for the staff majority has nevertheless taken place mainly as a result of more and more staff sharing the same "supplementary amount". Inflation has also had an effect on the importance of the salary supplement.

The technical assistance was suggested to include a midwife with research experience and an economist/controller as long-term advisers and an obstetrician for short-term visits. The implementing agency InDelevop contracted three long term advisers; the first recruited doctor was however, rejected without explanation by Sida at the Swedish Embassy in Luanda. This delayed the completion of the team but finally, after six months, a public health doctor was recruited. To employ a public health specialist instead of an obstetrician seems to be a correct choice.

The regular seminars headed by short term advisers were seen as relevant also for coming years; to evaluate the outcome indicators of impact were suggested. The latter has not been developed. Seminars have continued but not to the planned extent.

The logistical efforts of keeping records of supplies and attaining sufficient materials were suggested to rest with the CAOL group. Still this work to a large extent is executed by the long-term advisers, by the economist and the midwife.

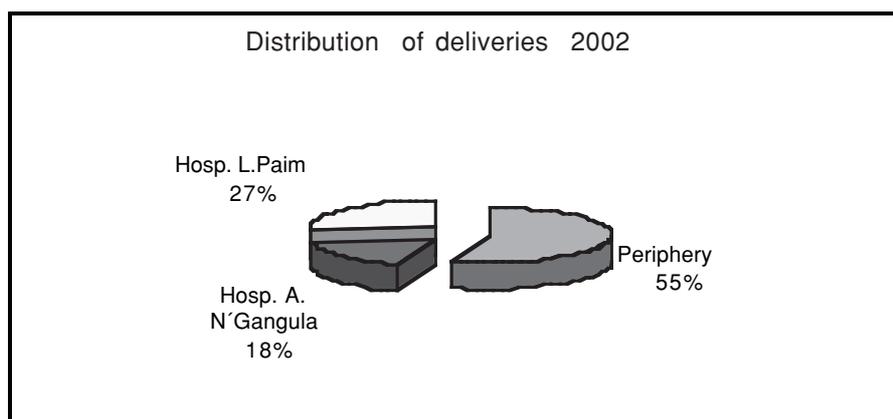
In 1999, studies of pregnancies, deliveries and family planning practices were suggested to be supported. This was partially implemented and various studies have been presented at the annual seminars. No doubt, they are worthwhile to continue and will contribute to the improvement of maternal health care in Angola.

In sum: many suggestions of the 1999 evaluation has been implemented, such as increased Angolan responsibility for the national maternity, introduction of case fatality rate and restoration of the coordination body, CAOL, but the main problems remain unchanged: the extreme MMRi and the fact that the large majority of women remain outside the system. The suggestions to ameliorate the situation, e.g. functioning transferral systems and efforts to involve the most vulnerable women have not been tried.

3.1.2.2 Major achievements and major constraints

The most impressive breakthrough in relation to maternal health care in Angola is the decentralisation of institutional maternal care. The successful implementation of this initiative deserves all respect. The decentralisation endeavours have continued during the studied period. There are now 33 antenatal clinics in Luanda province and the number of peripheral delivery wards has increased to 15. The number of consultations and institutional deliveries has increased considerably. In 1999, the reported number of institutional deliveries at peripheral clinics was 55.992 as compared to 82.250 in 2002, which represents an increase of approximately 50%.

The program has contributed by making significant investments, not only in buildings and equipment, but also in staff training. Continuous education and supervision have contributed to enhanced staff performance. The staff appears to be more committed and motivated compared to information in



previous reports. An important contribution to the delivery care is the introduction and use of partogram. It is now widely used in a correct way and is supervised by the CAOL supervisors.

The data available on institutional the maternal mortality ratio (MMR-i) suggests that there might be an overall decrease in Luanda during the previous four years. In 1999 the reported MMR-i in the whole province was 834 maternal deaths per 1000 live births. The same figure had dropped to 688 in 2002 suggesting a decreased by 18%. However, in 2001 it was 883 and in 2000, 742, which contradicts a decreasing trend.

The corresponding information from the referral hospitals are presented in the table below. The MMR-i at Lucrecia Paim continue to be high and at the same high level registered 1989 when the CAOL programme was initiated.

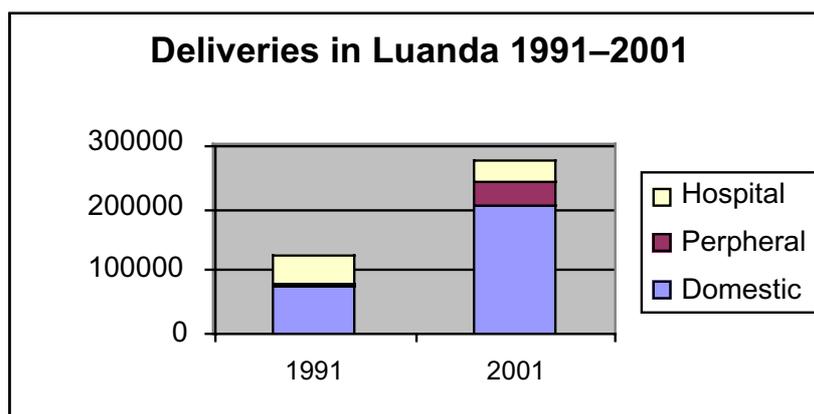
Table 3:1 Institutional maternal mortality ratio at the for referral hospitals in Luanda

	1999	2000	2001	2002
Total in Luanda province	834	742	883	688
Hospital Lucrecia Paim	2,046	1,787	1,934	1,778
Hospital Augusto N'Gangula	950	1,176	1,097	773
Hospital Kilamba Kiaxi	100	15	37	453
Hospital Cajueiros	0	45	270	381

With regards to prenatal consultations per pregnancy the average is today 2.6. Why the number of prenatal consultations has increased by 29.1% since 2000 but family planning consultations have decreased by 8.9% is not known. Departments for adolescents have been established in collaboration with UNFPA regarding STD consultations, including tests for HIV and syphilis, antenatal clinic services and family planning consultations. 53 000 consultations occurred in 2000 the number has increased considerably since then. There are now eleven adolescent centres altogether.

About 15% of the of the pregnant women at the antenatal clinics are classified as high-risk pregnancy – a percentage, which, in our opinion, is accurate. The transferral of complicated and high risk cases seems to be relevant, proven also by the fact that the MMRi is very low at the peripheral maternity units.

The graph below is an attempt to illustrate the fact that, based on estimated data and the increase in peripheral deliveries, the proportion of institutional deliveries has decreased and represents today only approximately 30% of total deliveries. A reason is found in the enormous population increase – from 2.6 million in 1997 to 4.8 million in 2002.



The peripheral maternity units are under-utilised; 5–15 deliveries take place per day. The capacity is more than double, confirmed also by staff at all levels. On the other hand there is still a heavy pressure of normal deliveries on the referral hospitals where the percentage of normal deliveries is about 80%. In other words, the referral hospitals are over-utilised by normal deliveries. The referral system, which exists on paper, does not work. At the national maternity hospital the MMR oscillates around 2000. The establishment of special eclampsia units has reduced mortality from 40% in 1989 to approximately 10% today. The overall MMR is however still unacceptably high. The audits of maternal death still needs to be improved. The main causes of maternal deaths at MLP in 2002 were haemorrhage, sepsis, illegal abortions⁷, eclampsia, hepatitis and malaria.

The Caesarean sectio ratio is about 10% at the hospitals, and the percentage of vacuum extraction is about 1.5%. Episiotomy, where it is registered is about 26%. All sectios are performed by general anaesthesia and the Cohen⁸ incision has not yet been introduced.

There is only one blood bank, which is located at a laboratory outside the hospitals. This is a serious constraint of the obstetric care.

The HIV epidemic is another potential threat to public health efforts in general and to maternal health in particular. The prevalence of HIV in the fertile population is not known, but was estimated to be approximately 4% in 1998. A recent survey indicates that the prevalence has doubled in four years. There is no HIV testing within the antenatal care. At MLP a plan for monitoring HIV exists. No treatment programmes to reduce mother to child transmission are in use.

Neither syphilis is tested⁹. Syphilis contributes to perinatal mortality (PMR) but is also a co-factor to HIV and malaria. Syphilis is not tested in the antenatal care. There are screening methods and treatment for syphilis, which are cost-effective and are easy to perform by a midwife at the antenatal care units.

The informal with fee system (*gasosas*) at different levels may be a reason for the low utilisation of the maternal health care. Women without means cannot afford these extra fees. Access to the health centres, which, in theory, should be free of charge has become restricted for the poorest segments of the population.

⁷ Abortions are illegal in Angola.

⁸ Cohen incision is nowadays used worldwide as a more simple and cost effective method for Caesarean sectio with less bleeding and infections.

⁹ The prevalence of syphilis in Southern Africa is about 10%.

Participation of woman associations or community organisations is a rare phenomenon in the maternal health care.

In sum: The peripheral maternity units are under-utilised. The referral hospitals, particularly MLP and A. N'Gangula) are over-utilised by normal deliveries. The referral system does not work. MMRi at the hospitals is unacceptably high. There are no screening tests for HIV and syphilis within the antenatal care. There are no blood banks. There is a notable lack of community involvement.

(Annex 6: Fatality rates at Maternidade Lucrecia Paím)

3.1.3 CAOL

3.1.3.1 Major achievements and major constraints

CAOL is today recognised as a co-ordination body for the integration of maternal health care and for quality assurance of the maternal health care in Luanda province. During the last two years CAOL has elaborated a computerised statistical register for maternal care, three more peripheral maternity units, more adolescent consultations, more daily supervisors at the maternity wards, more institutional deliveries, new eclampsia wards, guaranteed supplies of the basic medicine and material, staff incentives etc.

The continuous education program for the maternal care personnel has continued as previously with regular seminars. The improvements with regards to elaborating norms and clinical guidelines for all levels in the referral system, adopting best practices, etc have continued.

The CAOL organisation seems stable and is at least to some extent integrated in the health delegation of the province of Luanda (DPSL).

The indicators used in the programme documents are to a great extent *impact* oriented. In the case of Maternal Mortality rates it has on the one hand been difficult to monitor and on the other hand no significant change has been registered. Given the difficult and complex nature of these indicators in Luanda it is not realistic to assume that the programme can have any impact in the foreseeable future. *Process* indicators like number of antenatal visits, case-fatality rates, number of institutional deliveries and overall access to health services are more important and useful in monitoring programme achievements.

The low utilization of the peripheral maternity is difficult to comprehend. The evaluation team could not find a good explanation to this paradox. It was evident from some interviews with mothers at the health centres that there is a lack of confidence. Mothers still feel more comfortable when giving birth at home. There must be a shortcoming in the programme that somehow the target group is not using the service provided in spite of access. Maybe the "ownership" of the programme has to be put in the hands of the mother.

In that context the role of traditional birth attendant was also discussed. Based on the WHO recommendation for a safer delivery the focus is exclusively on institutional deliveries. For a foreseeable future the number of peripheral maternity units in the Luanda province will not be sufficient. The conclusion from this evaluation indicates that it is not enough to just build new maternity ward. More knowledge about how the deliveries outside the maternities are assisted is needed and perhaps the traditional birth attendants can be instrumental in encouraging mothers to use the maternity wards.

The role of the supervisor was discussed at different levels. The programme has an impressive cadre of trained supervisors. The system can be justified and seems to work well but at the same time represents a top-down thinking. The supervisors serve the headquarter rather than the health centre. At some of

the health centres we visited the attitude was that the supervisors came to collect information and to control. The purpose was interpreted as more of a “fault-finding” mission than an integral part of the health centre activities.

There seems to be a growing gap between the referral hospitals and CAOL this was most evident at the Lucrecia Paím hospital. There is need to re-establish the necessary link between primary care level and the referral level. Efforts need to be taken to bridge the gap between the two levels.

In spite of the strong programme emphasis on integration and coordination another area of concern is the low vaccination coverage against tetanus. Mother attending the antenatal clinics are not vaccinated. None of the centres visited administered tetanus toxoid at the antenatal consultation but referred the mother to the vaccination unit. This is a missed opportunity and explains the low vaccination coverage and high incidence of neonatal tetanus.

3.1.4 The midwifery school

3.1.4.1 Objectives, purposes, and results – planned and achieved

The plans for the midwifery schools are quite simple documents, 1-2 pages with “explanatory notes” to the following operational plan, also consisting of a few pages. No objectives are specified but expected results appear, for example the following from the plan of 2000 and 2001: maintenance of the installations (including lodging of students), training of staff, and students’ participation in the course. The plan of operations also includes activities, time periods, responsible staff, and costs.

The plan for 2000 is obviously written after the first course had been completed in March¹⁰ 2000. It does not draw any conclusions regarding change of curriculum or methodology for the next course, due to begin in June 2000. The report of the year 2000 informs about a delayed start, only in October had it been possible to solve the problems related to “communication with the provinces”. The remaining time was then used for a study visit to Mexico. It is also reported that a seminar for four clinical lecturers was cancelled – such was not planned however. The report informs generally about the implemented course in general, and satisfaction regarding the outcome is reported. Although the new course was delayed by four months the budget is, according to the documents, utilised to 98 per cent. However, in the plan of 2001 28.000 USD is transferred from 2000 and is *inter alia* to be used for evaluation of the first course (5000 USD), a meeting with the graduated midwives (10.0000 USD) and acquisition of material for the library (8000 USD). According to the report only the purchase of library material was fully implemented, an activity which included a trip to Brazil. The 2001 report also gives information about four trainees who failed in an examination and were subsequently sent back.

The operational plan for 2002 is more elaborated than the previous ones, and the expected results have increased to eight; however, still they represent more areas or subcomponents of the project than results. Positive is that MoH covers some of the costs in the budget, particularly for staff salaries but also to some extent for lodging of students, English courses and some material. A new course is due to start, which means that parts of the year around 50 students will be trained in two parallel courses. Staff upgrading takes a fair share of the budget, study visits to Mozambique and participation in an international congress in Vienna are planned. In the biannual report of 2002, most of the planned activities are about to or have already been implemented. The course curriculum seems to be the same.

A continuous development can be discerned in the plan for 2003; new expected results or rather areas of intervention, are introduced, e.g. a new project regarding HIV/Aids education to school children and adolescents.

¹⁰ The graduation costs amounted to 10.000 USD

In sum, the planning and reporting documents of the midwifery school are of poor quality and can hardly be of use as instruments for managing the school. There are no objectives, no results, no indicators, and the activities seem to be listed quite randomly. By reading the documents it is consequently difficult to assess whether the school has achieved any objectives or results. The reports give general information about graduated students and new intakes, about curricular activities, planned seminars and study visits, but seldom provide any discussion or analysis about the outcome. The reports do, however, give quite detailed information about planned costs and also about spent resources, something that is lacking in the documents of the maternal and child health programmes.

3.1.4.2 Major achievements and major constraints

The school has “produced” 44 well-trained midwives. The course has been recognised by the Ministry of Health as the official training school for the specialisation in midwifery. The Ministry of Health has also contributed financially to the school, albeit with relatively small amounts.

A praiseworthy initiative and one of the major tasks in the training is the emphasise on ethical aspects in midwifery. The curriculum is very ambitious with considerable theoretical parts with the ambition to promote the status of the midwifery. The salaries for the trained midwives are 24.000 kw¹¹ a month, which is three times the salary of an ordinary midwife.

The present training can not in any way meet the demand for trained midwives. Even if this never was the intention when the school was created, there is a lack of long-term plans for the school where the school is put in a context. Consequently there is a risk that the school becomes an “island of perfection”.

Even if it is too early to assess the school performance it seems costly from a developing world perspective. In addition, the school is at present completely donor dependent. Both high cost and donor dependency are negative factors in a development context for sustainability and partnership.

The lack of adjacent clinical facilities is a major shortcoming. “hands-on” training is essential in a midwifery school. It is difficult to envisage a midwifery school without clinical practice on site. The students now have to leave the school for clinical training. This is probably both costly and difficult to supervise.

The project documents are of poor quality.

3.1.5 Conclusion

The maternal health programme in Luanda, coordinated by CAOL has influenced all levels within the maternal care. The clinical focus has changed in favour of a public health approach.

The concept of decentralised care has won respect and acceptance and the expansion of peripheral delivery clinics have contributed to increased access to institutional deliveries. The problem is that a majority of the pregnant women does not utilise the services.

Complicated and high risk cases are transferred to central hospitals. The transferral system does not work in the other end: in the referral hospitals 80% are normal deliveries. The peripheral units are underutilised while the referral hospitals are overutilised.

The MMRi is low at the peripheral levels while it remains unacceptably high at the hospitals.

Prenatal consultations have steadily increased. Visits to the family planning sections have decreased. Reasons are unknown.

¹¹ 100 kw (kwansa) = 15 SEK

Staff performance seems to have improved, possibly as a result of intensive training and supervision. The role of CAOL supervisors seems unclear and may need reassessment.

The target group, the mothers and the pregnant women are not involved and have, as beneficiaries of the programme, little influence. The answer to the low utilisation of peripheral clinics rests assumingly with them

CAOL runs the risk to establishing a structure of its own; integration into existing health structures is recommended.

3.2 Child health

3.2.1 Objectives, purposes, and results – planned and achieved

3.2.1.1 A review of plans and reports

The plans of the child health programme have the same structure as the maternal health programme. The plan for 2000 also gives a background of this programme and its achievements since the initiation in 1998. The plans also include priorities and strategies. The plan for 2003 represents a great improvement, but still objectives and results are not always specific, measurable, accurate, realistic and time bound, and the chosen indicators are not objectively verifiable. There is however, an interesting discussion about principal problems in the child health programme.

The reports are generally very ambitious and include lots of information, not only in relation to objectives and results. For each expected result there is a report – or an attempt to report. When an expected result is vaguely described in plan it cannot be easy to report stringently; nevertheless the same vague result is expected in next year's plan and is later again reported in the same imprecise way. Many tables and graphs are presented but they are usually not commented or analysed. However, the reports include useful information and the SWOT¹² analyses, reflections and discussions are commendable contributions.

• Overall (or development or long term) objective – GOAL

In the plan for 2000 and 2001 the overall goal is to contribute to improved health of children living in the Luanda province; the following year the goal is to contribute to a reduction of the maternal and child mortality in Luanda. For 2003 it is changed again, now the overall objective is to contribute to the improvement of care provided to children in Luanda. Overall objectives are not commented in the annual reports.

• Project (or specific or immediate) objective – PURPOSE

The plans for 2000 and 2001 have as specific objective to reduce the institutional child mortality caused by malaria, acute respiratory infections, malnutrition, and meningitis by 50% from 1999 level in December 2001. Unfortunately, the 1999 level is not communicated.

In the plan for 2002 there are three specific objectives, all quite vague and hardly measurable (e.g. to guarantee treatment and increase the competence) while the four specific objectives of 2003 are slightly better, but somewhat unrealistic (e.g. double the vaccination coverage in one year). The reason for the change of specific objectives is not communicated, neither is there any information about achievements.

¹² Strengths, Weaknesses, Opportunities, Threats

- **Expected results (or outcomes)**

The child health programme suffers from the same problem as the maternal health programme, i.e. the expected results appear more as a list of *desiderata* than as specific, concrete and realistic results, possible to measure and to be achieved by the programme (unless conditions beyond reach of the programme distort the implementation). Quality is often to be improved also in the child health programme but is seldom defined; new issues are brought up in new plans but not followed up, and the same results are expected year after year. The sub-components change with every new plan, which makes them difficult to compare, and assumingly, difficult to use for evaluating progress. In the operational plan for 2003 there is one expected *result* for each *activity* and not the contrary, a fatal misunderstanding, which must be confusing and make the planning quite complicated.

Also in the child health programme the expectations are far too high why many results have not yet been achieved.

- **Indicators**

Indicators, mainly quantitative are listed in the 2003 plan but not related to specific results or objectives.

Summing up, the plans and reports of the child health programme are too extensive, confusing and exhausting to read and can hardly be used as efficient instruments in the work and the in management of the programme. A clear LFA structure is needed.

The objectives and expected results of the child health programme are found in three main areas: i) establishing paediatric services, including staff training; ii) reduction of child mortality; and iii) follow up of newborns, including immunisation. Neonatal mortality has not yet decreased. A number of paediatric units have been established and considerable investment in staff training has occurred. The follow up of newborns, as well as the vaccination coverage has increased but not at all as expected. Progress towards integrated child care and integration of mother and child health care is noticeable.

3.2.1.2 *Field evidence*

The paediatric hospital in Luanda (HPL) is the national paediatric referral hospital and also the university hospital. The hospital facilities have been renovated and upgraded during the past two years. The hospital is well equipped. According to the hospital director, the government contribution has increased considerably during the past two years, i.e. not the budget allocation but the budget “execution” has increased. There has also been a considerable salary increase and today the average salary for a nurse is in the region of 200-250 US\$ as compared to only 25-30 US\$ five years ago. The hospital now receives funds directly from the Ministry of Finance and this has improved the financial management of the hospitals. In a third world comparison, the hospital is well-equipped and has good hygiene. The immediate impression of the hospital is that the out-patient section and the wards are clean and well organized without signs of overcrowding. All beds had clean bed linens and the hospital has its own catering service providing meals to the patients. In all the wards visited the parents were allowed to stay with the children. The staffing situation was considered adequate and was confirmed during the brief visit at the different wards. The visit did not allow for any in-depth analysis of the staff competence.

The demand for blood transfusions are high and during the malaria peak season there are between 15-20 children with severe anaemia admitted daily that needs transfusion. The present capacity for blood transfusions is inadequate and there is no blood bank at the hospital. Only one centre in Luanda exists where blood-transfusion can be given in a safe way. This has been recognized as a primary concern and is receiving donor support from Sweden.

Two peripheral health centres with paediatric care were visited without prior notice. At the Terra Nova health centre we found a fairly well organized health centre. The child health service was organized with an out-patient section with primary health care. In addition, there was a separate unit for vaccination that is described more in detail below. Furthermore, there was a separate nutrition section that treated malnourished children; a ward with seven beds where severe cases could be admitted was included. On the day of the visit there were two children admitted. The health centre had a laboratory with capacity to analyse blood for malaria and some blood chemistry. The Terra Nova health centre was well staffed and had a stable supply of water and electricity with a back-up generator that was operational in case of power-cuts.

Similarly, the evaluation team visited the health centre in Maianga district (Kassequel). The situation at Kassequel was more “chaotic”. The health centre was without electricity since more than one week and the back-up generator was not working due to lack of maintenance and a missing spare-part. The waiting area was crowded with patients and the health staff seemed to struggle to cope with the workload. The outpatient section for children had very little resources and medicines were lacking. At Kassequel, the health centre was organized in separate sections similar to the Terra Nova centre but less efficient. No patient children were admitted and the laboratory facilities were less equipped. There was one doctor employed but he/she was not there. Normally the doctor was at the health centre only part of the morning.

Both health centres had one Toyota ambulance that looked well used but apparently in running condition.

Based on impressions from two field visits during the evaluation the vaccination programme seems to be well equipped with modern cold-chain equipment. Refrigerators were working and had alternative energy sources (kerosene-burners). The stock of vaccines was also adequate and cold-chain monitors were in place and temperature monitoring was done on a daily basis. The staffing situation was adequate and their knowledge and practices regarding contraindications were good. At one centre however the electricity was out since more than a week and the back-up generator was also out of order. The refrigerator was warm and vaccines had to be collected from the provincial store and mothers had to wait for their vaccinations.

The evaluation team visited the provincial hospital Augusto N´Gangula at two occasions. The hospital director was not interested in our mission. He claimed that the hospital had not received a single dollar from the Swedish government during the past two years and consequently did not see any purpose for our visit. The hospital is the main referral maternity hospital in Luanda and has been renovated recently with Swedish assistance. A paediatric ward is close to completion and with that in place the hospital will provide 24-hour paediatric care. The hospital had a striking security. In order to enter the premises all visitors had to pass through a gate with uniformed guards. Also inside the hospital there were plenty of uniformed guards. Judging from the outside the hospital looked almost sophisticated, very clean and well organized.

3.2.2 Changes during the period

3.2.2.1 Major achievements and major constraints

The access to health care for children in Luanda has increased. The network of hospitals and health centres has been reinforced. In addition to the paediatric hospital in Luanda there are now two district hospitals (Kilamba Kiayi and Cajueiros) with 24 hours service. A paediatric ward is under construction at the provincial hospital Augusto N´Gangula. During the past two years two more health centres have been added to the previous 25 and one more health post has been built making it a total of 26.

A quantitative objective is to increase the paediatric services at the health centres and reduce the patients at the hospitals. The following table shows data from the provincial health authorities. Since the child health programme still is in its infancy it is probably too early to see any definite changes and it is also important to take into consideration that the constant increase of the population in Luanda have had an impact on the number of children seeking care at the facilities. The table below reflects the reported patient visits to the different health facilities in Luanda as presented in the 2003 plan. It is not clear what age-group it is referring to but the assumption is that it is the paediatric patients. From these figures a considerable increase in the number of visits at the periphery (health centres and district hospitals) is seen and is an important achievement.

Table 3:2 Reported consultations at health centres and hospitals in Luanda.

Health units	1999	2000	2001	2002*
Health centres	104.595	117.551	165.399	193.000
Paediatric hospital (HPL)	76.765	85.420	88.206	94.000
Hospital Cajueiros (Distr. hosp.)	6.420	20.871	20.417	29.000
Hospital Kilama Kiaxi	11.773	23.485	22.427	33.000

*Projected figures based on the first six months.

Another major achievement that can be seen is the reduction in number of patient referrals from the district hospitals. At Cajueiros hospital the number of patient referrals has dropped from 448 in 1999 to 116 in 2001; this in spite of a considerable increase in patient visits and admissions. The same pattern can be seen at the Kilaba Kiaxi hospital.

Based on available reports on childhood mortality and morbidity in Luanda no reduction in childhood mortality or morbidity can be seen. On the contrary, the reported cases and deaths from the most common childhood diseases have increased. This might very well be a reflection of the general increase in the population. Under the existing circumstances a decrease is not to be expected. The reported under-five mortality rate is still one of the highest in Africa and the most recent estimate from Luanda is 274 deaths/1000 births. Similarly, the infant mortality rate is estimated to be 172.

Table 3:3 Causes of death among children in Luanda.

Diseases	2001		2002	
	Cases	Deaths	Cases	Deaths
Malaria	161.042	2.446	183.720	2.937
Acute Resp. Infect.	55.627	505	69.783	495
Diarrhoeal Diseases	48.960	442	53.681	335
Measles	n/a	179	n/a	200
Neonatal Tetanus	72	10	158	125

(Source: Report from Direccção Nacional de Saúde Pública)

Malaria continues to be the main cause of illness and death among children in Luanda. Both reported cases and deaths have increased, an indication of an alarming endemic situation. There are no effective malaria control programmes and with an increasing population the transmission is on a steady increase.

Acute respiratory infections are the second largest killer and cause of disease. In this group many complications to measles and malnutrition are hidden.

Diarrhoeal diseases are very common and listed as the third cause of illness and deaths. Mortality is caused by severe dehydration.

Measles is still endemic in Luanda and according to the available data it is the number four killer of children. In a draft report from the Ministry of Health there are signs of a decrease after increased immunization coverage in the whole country but data from Luanda cannot confirm that positive trend. According to UNICEF representatives in Luanda there are reports indicating that measles still is the third cause of under-five mortality in the country as a whole.

Finally, the number of neonatal tetanus is alarming and continues to be an important cause of child death among infants.

Summing up, all the listed childhood diseases above are closely related to poverty, lack of clean water and basic sanitation and to some extent lack of adequate health care. An emphasis on improved case management and more and better clinical facilities are important factors to reduce mortality but most of the above diseases are preventable. With an overall objective to reduce childhood mortality and morbidity the emphasis must be on a primary health care with priority given to combat poverty and preventive interventions such as vaccinations, clean provision of clean water and sanitation.

3.2.4 CAPEL

3.2.4.1 Major achievements and major constraints

CAPEL was an initiative at the provincial level in Luanda in 1997. It was started with the intention to improve the child health services at health institutions. In the programme documents it is emphasised that the main objective is to create a more decentralized paediatric health service. Before 1997, the university paediatric hospital was the only paediatric clinic with 24-hours service. This situation was similar to that of maternal health before the CAOL programme was initiated in 1991. The idea behind CAPEL was to strengthen the peripheral clinical facilities in Luanda. During the period this evaluation covers a considerable progress has been made. A paediatric ward is near completion at the provincial maternity hospital Augusto N'Gangula and the two district hospitals Kilamba Kiaxi and Cajueiros have established 24-hours paediatric service and in-patient facilities. According to programme documents there exists at least one health centre with 24-hour service, in each of the nine districts in Luanda. These centres are defined as "referral" centres.

The CAPEL initiative is a logical step forward. Mother and child health are linked and inseparable from each other. An integrated approach including both the mother and the child is necessary to achieve the overall objective of reducing maternal and child morbidity and mortality. The global programme for Integrated Management of Childhood Illness (IMCI) can be described as the central strategy in the CAPEL project. The IMCI documents and manuals have been translated into Portuguese and several courses led by Brazilian consultants have been carried out.

Table 3:4 Reported child consultations at Health Centres and hospitals in Luanda.

Health units	1999	2000	2001	2002*
Health Centres	104.595	117.551	165.399	193.000
Paediatric Hospital (HPL)	76.765	85.420	88.206	94.000
Hospital Cajueiros (Distr. Hosp.)	6.420	20.871	20.417	29.000
Hospital Kilama Kiaxi	11.773	23.485	22.427	33.000

*Projected figures based on the first six months.

The CAPEL programme is closely linked to the paediatric hospital and focus has been on improved paediatric care. Several training courses for clinical staff have been carried out using the concept of Integrated Management of Childhood illness (IMCI). The IMCI training modules have been produced in Portuguese in Brazil and are now widely spread and accepted at all levels. The IMCI approach tries to integrate the different child health programmes and is a "horizontal" force in a previously vertical system.

The CAPEL initiative has contributed to the improvement of child care at the peripheral health units and thus decreased the burden on the HPL. When comparing the maternal health programme with the child health programme it is obvious that the child health component has to have a much more preventive strategy. There is a risk that too many resources are put on improving clinical practice. The present CAPEL project is still in its infancy and is therefore difficult to assess. Much of the activities are still at the central level and CAPEL can be described as an “umbrella” organization for already existing programmes. There seems to be a risk that the CAPEL programme structure is developed as a “parallel” structure and consequently only adds another vertical component to the list of existing programmes such as EPI, nutrition, essential drugs programme, diarrhoea disease control, etc

An interesting finding from the “field visits” was that most of the health-workers had a very vague knowledge about CAPEL. Everyone we asked was, however well aware of what CAOL stood for as well as the programme on immunization (PAV). A couple of health workers carried a shirt with the CAPEL label but were not aware of what the abbreviation stood for. The fact that CAPEL provided lunch for the staff at the out-patient ward was however well known.

With the dramatic increase of the population in Luanda it is obvious that both curative and preventive health services are insufficient. The heavily centralized health system within only one paediatric hospital needs to change toward a more primary health care oriented structure.

The table above shows that there has not been any significant decrease in number of visits at the central hospital. There is however reason to believe that without the improved capacity at the peripheral level the paediatric hospital would have seen a dramatic increase in patients. It was however clear from the many discussions with health workers that there is no effective referral system in Luanda. This is a similar problem as seen in the maternal health care. The majority of patients at the paediatric hospital seek care directly without a prior contact at the primary level. This is accepted and no referral form is required when seeking care at the paediatric hospital.

Another constraint in the child health programme is that there seems to be a heavy emphasis in the programme on curative care and upgrading of health care facilities and clinical practice. Given the fact that the five main causes of childhood illness and deaths are diseases that can be prevented with relatively cost-effective measures there should be a stronger emphasis on a public health approach in the programme. This is a main difference between the maternal health programme since a reduction in maternal deaths to a great extent requires a good clinical setting.

3.2.5 The vaccination programme

The EPI is currently being implemented as a nationwide programme with its headquarters at the Ministry of Health. The programme has institutions in all 18 Angolan provinces and covers children in all accessible areas. Only 91 of the 164 municipalities in Angola, however, have routine immunization services. The areas with no routine immunization services are only reached with targeted vaccination campaigns.

The Swedish support has mainly been channeled through UNICEF. From December 2001 to September 2002 the total contribution was USD 595,054. Sida has continued to give financial support to the vaccination programme by funds directly to UNICEF.

It was proven difficult to find reliable data on immunization coverage. The programme objective is to vaccinate children against tuberculosis, diphtheria, tetanus, whooping cough, polio, measles and yellow fever before they reach the age of 1 year.

The present immunization schedule is as follows:

At Birth: BCG (tuberculosis) and polio vaccines, Oral Polio Vaccine (OPV), first dose at birth is called OPV-0

At 2 months: First dose of diphtheria, whooping cough and tetanus (DPT-1) and the OPV-1

At 3 months: Second dose of diphtheria, whooping cough and tetanus (DPT-2) and the OPV-2

At 6 months: Third dose of diphtheria, whooping cough and tetanus (DPT-3) and the OPV-3

At 9 months: Measles and yellow fever

The vaccination programme also includes vaccination of pregnant women against tetanus.

3.2.3.1 Major achievements and major constraints

Immunization coverage data comes from two sources, *routine reporting* and *surveys*. The routine information originates from registration on simple tally-sheets at the vaccination site. Based on the aggregated data at the provincial level, immunization coverage is calculated, by dividing the total vaccinations by the estimated target population, children < 1 year. The table below shows that vaccination coverage for the first doses has increased during the last year indicating an improved routine system and reasonable access. No survey at provincial level has been carried out during recent years.

Table 3:5 Immunization coverage. Percentage of children <1 year in Luanda vaccinated according to routine report.

Vaccine	1998	1999	2000	2001	2002
BCG/OPV-0	62	46	46	87	91
DTP 3/POV-3	45	47	38	50	50
Measles	38	38	33	61	48
T.T. 2	29	34	29	30	25

The data presented are the official figures from the provincial health authorities. One variable that the data is based on is the estimated target population. In Luanda the official figure is that 4,3% of the total population is under one year of age. The total population in Luanda is not known since no census has been performed since 1991. If the total population is 4,5 million the target population would be approximately 190.000. In most documents reviewed the figure is lower (116.000-123.000).

The data on tetanus toxoid (TT) coverage has to be interpreted with caution. The coverage figure is supposed to indicate the percentage of pregnant women given two doses of tetanus toxoid. In some reports the figure for Luanda is over 72% where other reports suggest figures below 20%. The data presented are the official figures from the national level.

In addition to the routine vaccinations there have been several targeted campaigns during the past two years. The main focus has been on polio vaccination of children under five. In a report from EPI, polio campaigns managed to vaccinate 83% of all children under five in 2000 and 95% in 2001. Consequently, the polio campaigns have been very successful.

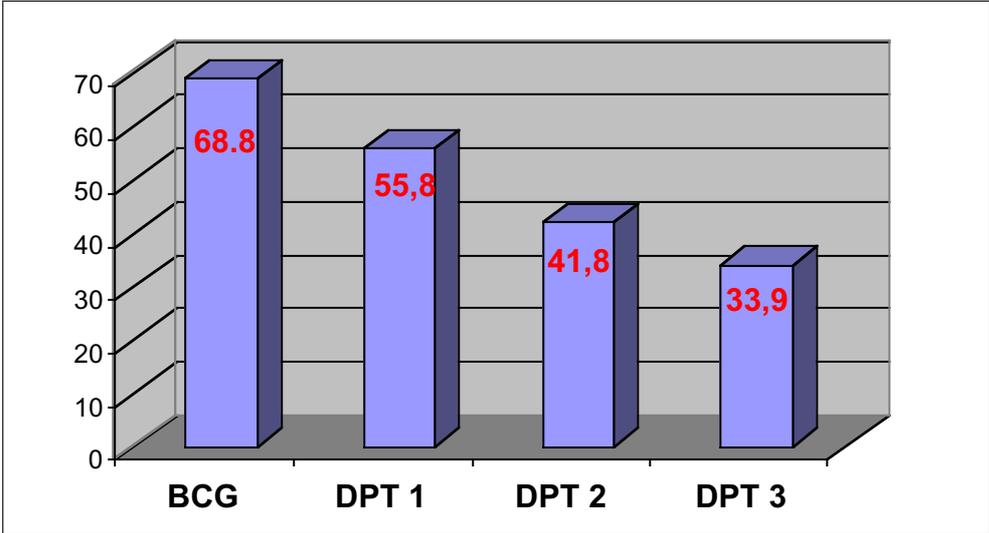
The data presented in Table 3:5 indicates that “access” to vaccination is relatively good. If the data is correct approximately 90% of eligible children was vaccinated (2001-2002) with the first dose of BCG at birth. This would be an indicator of access and use of the service.

Immunization coverage increased in 2001 in relation to the values registered in the previous year. Current levels remain low, however, which is partly due to weak management of the EPI programme. The information presented above also shows that immunization coverage in Luanda remains low and a vaccination coverage *survey* that was carried out in 2001 in the whole country (Multiple indicator

Survey, MICS) confirms low coverage as a main constraint. The result in relation to immunization coverage is presented in the graph below.

A coverage survey is done using a simplified 30-cluster random sampling technique and gives a fairly accurate picture of the immunization coverage in a population. Coverage surveys are justified in a situation like Luanda where population data are unreliable and/or routine reporting is incomplete.

Figure 3:2 Percentage of Children aged 12-23 months vaccinated against preventable diseases. Angola, 2001

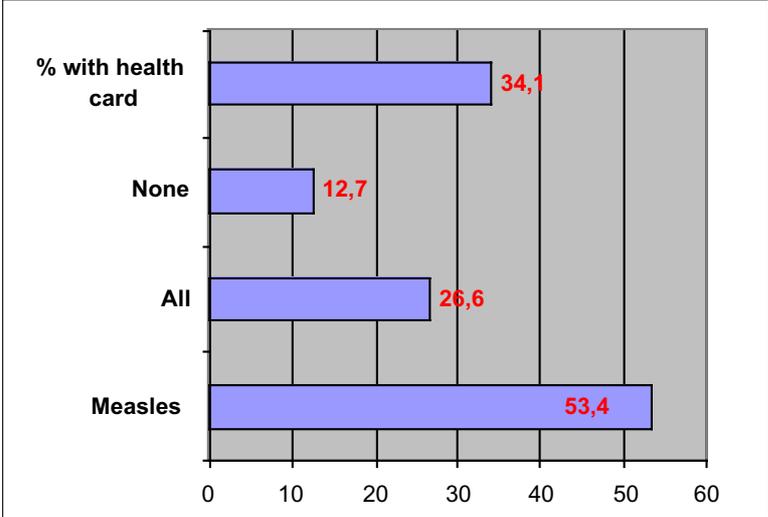


Source: Multiple Indicator Cluster Survey (MICS) 2001 – UNICEF, National Institute of Statistics (INE)

The information from this survey shows that only 26,6% of eligible children received all the vaccines, 12,7% had not been vaccinated at all even if 34,1% had received the health card. 63,4% was vaccinated against measles.

The next graph illustrates that even if 68% received the BCG vaccine at birth only 39,9% was given the third dose of DPT. This is a “quality indicator” for the programme suggesting that even if children are given vaccinations the programme fails to complete the necessary vaccinations, leaving the child with incomplete protections. Subsequently, the drop out rate is high.

Figure 2 – Selected Immunization Indicators for Children aged 12- 23 months



Source: Multiple Indicators Coverage survey (MICS 2001)

According to the MoH *administrative data* a total of 355.674 under one year were vaccinated in the country. However, only 41% received three doses of DPT3 (EPI coverage key indicator) and the drop out rate of almost 28% meaning that only one of every three children that started the immunization program was protected against diphtheria, tetanus and whooping cough. (For details on coverage and quality by provinces see table 6 in annex 7).

The Swedish support to the national immunization programme (EPI) was discontinued as of 2001 and instead the support was given to the provincial child health initiative, CAPEL. The support to UNICEF was not changed. The reason for this decision is not documented. The evaluation team had the impression that there is a lack of confidence in the EPI management and the Swedish donors hoped that a support to CAPEL would somehow improve immunization performance in Luanda. The actual immunization activities in Luanda has, however still been executed by EPI and the role of CAPEL has not in any sense replaced EPI. The role of CAPEL has been more a coordinating and integrating role in the Luanda province where the emphasis has been on integration of existing immunization activities in the routine services at the peripheral health centers and the pediatric hospital.

3.2.3.2. Routine Vaccination and Campaigns

The impact of the immunization campaigns was discussed at length with many representatives from the Ministry of Health, the donor community and health workers at different levels. There is a growing concern from many donors that campaigns will have a devastating effect on the routine service. The argument is that campaigns have a short-term impact and is not sustainable in the long run.

During several years there has been an emphasis on vaccination campaigns and National Immunization Days (NIDs). This has been a part of the global polio eradication initiative and has been considered a controversial approach from the people who advocates routine and integrated strategies. The polio eradication campaign in Angola has, no doubt, been successful and during the past year not one case of poliomyelitis was reported. In 1999 there were more than 1000 cases reported.

There are both pros and cons in this debate and this is an attempt to summarize the different arguments that the evaluation team encountered.

Table 3:4 Pros and cons with regards to vaccination campaigns

Arguments in favor of campaigns	Arguments against campaigns
Good and quick results	Expensive
Reaches remote areas	Draws resources from routine vaccination
Demonstrated impact on polio and measles	Short term results/"vertical"
"Investment" in routine system	Not sustainable

In addition, it was obvious from our many discussions that both donors (UNICEF and WHO) and programme managers had a more "realistic" or pragmatic approach to this controversy. In "reality" the choice between campaigns and routine is in many instances theoretical since donor funds are often conditional.

The argument against campaigns is that it draws attention and resources from the routine immunization. This is difficult to verify and it could very well be the opposite. The campaigns can mobilize the community and serve as a catalyst to further strengthen the integrated vaccination activities and other primary health care components.

The polio campaigns have as the ultimate goal to eradicate the polio transmission and in the end eliminate the virus and consequently the need for vaccination. The role model is the successful small-pox campaign during the seventies. This is a global effort and will naturally, if it is successful, give huge health-economic gains.

There seems to be a general consensus from most agencies involved in immunization activities that campaigns can never replace routine vaccination. The emphasis on measles immunization campaigns is an interesting effort to use campaigns as an integral part of a routine immunization program. The emphasis on measles is justified since measles still is a major killer in Angola. Approximately 36,000 children die every year from measles infection making it the second cause of death among children under five. The measles vaccine requires a functioning cold-chain and supply of syringes and needles. The present emphasis on measles campaigns is therefore more directly beneficial to the routine delivery service and is directly linked to an improvement and strengthening of the routine vaccination services at the health centers and hospitals.

There is also another important distinction between the polio and measles campaign strategies. The polio strategy is easier to implement since the vaccine is given as drops and relatively easy to handle. The planned measles campaigns require a well functioning routine system and a reliable cold-chain. The planned measles campaign in Angola will cost approximately 7 million USD. More than half of that cost will be spent on reinforcing the existing vaccination system with improved cold chain and strengthening the health centers capacity to carry out “out-reached” vaccination activities.

Finally, there were also several arguments in favor of campaigns using examples from neighboring countries in southern Africa where the measles campaign has been successful and almost eliminated measles morbidity and mortality.

Nobody we spoke to argued that campaigns could substitute the routine vaccination. The routine vaccination is the backbone and has to be maintained. There seems to be a strong consensus that there is no conflict of interest between routine vaccination and campaigns as long as the strategy is to use both.

To sum: Vaccination is one of the most cost-effective interventions in public health. Effective and relatively cheap vaccines are available and a national immunization programme has to be one of the corner stones in a child health programme. Vaccination coverage remains unacceptably low in Angola and has to increase to have a public health impact. During the past two years immunization coverage has increased and especially the emphasis on campaigns has drastically reduced the incidence of poliomyelitis and to some extent measles. Access to immunization has increased but drop-out rate remains high indicating a weakness of in programme management. Reported cases of neonatal tetanus are high and vaccination of pregnant women has been neglected by both the maternal health programme and EPI. The rationale behind the inclusion of yellow-fever vaccination in the routine schedule is questionable and from a public health perspective it would be more justified to vaccinate children against Hepatitis-B.

The introduction of targeted campaigns and out-reached immunization is justified. There is a risk that it draws attention and resources from the routine vaccinations but in the Angolan context this concern has been recognized and the benefit from adding campaigns overshadows the risk.

3.2.6 Conclusion

The child health programme and CAPEL is still in its “infancy”. Much of the programme strategies are still on the planning stage and any impact is probably too early to evaluate. The initiative is commendable and a logical step forward. Mother and child health are inseparable. The most common childhood diseases in Angola are preventable and closely related to poverty. To reduce childhood mortality and morbidity the emphasis must be on a primary health care with priority given to preventive interventions such as vaccinations, provision of clean water and sanitation. The child health programme has successfully introduced the IMCI approach and the close collaboration with the paediatric hospital has evidently improved the paediatric care and improved access and clinical skills at many

health centres. The CAPEL initiative represents a “horizontal” force between the different “vertical” programmes and put the child in focus.

The vaccination programme has been successful with regards to the eradication of polio and has experienced a slight increase of coverage the last years. However, the low coverage is the main problem as well as the high drop out rate after the first vaccinations at birth. Routine and campaign vaccinations are complementary. The neglect to immunise pregnant women against tetanus has unacceptable consequences.

3.3 The Sida support

3.3.1 Suggestions of the 1999 evaluation

The evaluation of the maternal health programme carried out in 1999 by Lillemor Brodin-Andersson and Hans Wessel suggests “a continuous support to improve women’s and children’s health” due to the emergency situation in Luanda and in spite of the impossibility to have a development co-operation with institutional building, partnership and sustainability. Sida is suggested to continue the direct contacts with the Health Delegation of the Luanda Province – otherwise the investments into the maternal health care programme would “certainly get lost”.

The evaluation suggests strengthening of the two ends of the care level, i.e. a strong emphasis on the neighbourhood level to reach all women who did not have access to maternal care and reinforcement of the capacity at the central national maternity in order to reduce the still unchanged MMRi.

The evaluators suggested a gradual phasing out of the salary supplements. Regarding technical assistance it was suggested that an economist and a midwife with research experience should be contracted as long term advisers and an obstetrician should pay regular short term visits “for analyses of collected statistics”. Moreover, periodic seminars as well as participation in international conferences should be supported. The evaluation was not explicit with regards to other kinds of Sida support, e.g. construction of buildings, equipments and material, transportation and vehicles. The conclusion is that a “strong, active Swedish involvement is needed”.

As suggested, Sida continued its support of the health program but not all recommendations were implemented. The support to the central maternity Lucrecia Paím has rather been reduced but an eclamsia unit has been established at Augusto N’Gangula hospital as well as at the two district hospitals. The expansion of peripheral units has continued, and the collaboration with the Health Delegation in Luanda has been strengthened. Contrary to the suggestion, the salary supplements have remained. There are still three long term advisors, an administrator, a midwife and a public health doctor. Short term advisors still frequent Luanda regularly for seminars and research discussions.

3.3.2 Components of the Sida support

3.3.2.1 Collaboration at provincial level

In 1999, the Swedish government decided to leave the since long on-going development co-operation with Angola. The unstable situation due to the long war and the economic situation made it necessary to change the forms for co-operation. Only humanitarian reasons could justify continuous support and the country strategy for 1999–2001 confirms a support to health care with a humanitarian approach, focused on primary and secondary levels of mother and child health in the Luanda province.

During the current period, the collaboration between Sida and the Health Delegation in Luanda and the coordinating bodies CAOL and CAPEL has been reinforced. A co-operation at national level with dialogue and partnership had of course had its particular value but the fact that the Swedish govern-

ment has supported only one province – albeit with a third of the country’s population – has also had advantages. It has allowed for a better focus, a stronger concentration of allocated resources and has probably implied better control. Likely, the close co-operation between the parties has actually strengthened a partnership, which has benefited the development of the programme.

A potential risk may be that provincial cooperation jeopardises national development. However, the achievements of this programme have been acknowledged at national level and by other provinces and there are clear signs that the decentralised health care and the referral system, the benchmarks of the programme, will be copied elsewhere.

3.3.2.2 Target group

As previously reported, a majority of the pregnant women in the Luanda province do not benefit from the programme services. Most women do *not* attend a delivery room to give birth to and the preventive health care for children does *not* reach the majority of children. Most likely, the poorest and most vulnerable groups are not included in the programme. The reasons are not known, but a fair guess is that the answer is to be found in poor economical conditions as well as in cultural traditions. However, it is urgent to find means to address those most in need; a first step would be to find out the underlying causes.

3.3.2.3 Salary supplements

It is obvious that the Swedish and the Angolan parties have different views on this issue. From a Swedish perspective it entails a principle: a country’s public staff should not be paid by another country’s government. Moreover, it is not a sustainable system. The Angolan part cannot disregard the fact that people are needy, that a governmental employee cannot make the ends meet with the poor salary s/he gets. In addition, it is feared that the health staff would leave for other occupations in case the supplements cease. The fact that the supplements are paid in dollars make them extra valuable.

No doubt, the salary supplements have played a significant role for motivating and keeping the increasingly skilled staff. Initially, the supplement represented in fact the salary while the minimal salary rather was the supplement, corresponding to 10–20% of the supplement. It is likely, that without the “incentives” the programme had not attained its present achievements. It has not been possible to find out whether all donors practice this system as is argued by some or if Sida is the only one, or one among few. The information varies with the informant.

The total budget (annually around 100 000 USD) for salary supplements has remained the same, which has implied that the more personnel have been included in the scheme the more are those who share and the smaller the supplement has become. In fact, a gradual phasing out has been going on since several years.

The system has become quite unjust. The managers of the programme receive the same amount today as when the programme started and have not participated in the sharing. Today, the programme staff receives anything from 0 USD to 250 USD. Staff of the CAPEL programme does not get any supplements at all.

During the last years the salary levels have increased considerably, particularly in 2002 the publicly employed staff experienced almost a doubling. Therefore, the supplements no longer have the significance they once had and now is the time for a gradual phasing out, starting with the high levels.

3.3.2.4 Medicines, material and equipment, transports, and vehicles.

All kinds of medicines and material for preventive as well as for curative maternal health care are financed by Sida, from stethoscopes to contraceptives and bed sheets for all the units, in the periphery

as well as in the provincial and district hospitals. This is also the case for all kinds of equipment; hospitals, peripheral units and offices are equipped with desks and education materials, internet subscriptions and information pamphlets. Sida also finances gasoline and maintenance of vehicles; and new vehicles for transportation or for ambulance services are purchased. The child health programme is also a great receiver but not only from Sida.

Against this background it is reasonable to question the sustainability. Would the programme collapse if Sida withdraw its financial support to consumables and running costs? An immediate stop would certainly have some undesirable effects but a gradual decrease could rather be advantageous for the sustainability of the programme. The various units and hospitals are at present reasonably well equipped and now, when there is peace in the country, the government is expected to take responsibility for the maintenance, consumables and running costs of the health care services.

3.3.2.5 *Technical assistance*

Since the mid-nineties long term advisers have been contracted, usually for 2-3 years: an economist or administrator, a midwife and a medical doctor, until recently always an obstetrician or gynaecologist. Since the year 2000, the obstetrician has been replaced by a public health specialist. A number of seminars with short term consultants/advisers have occurred during the period. The costs for advisers amount to around 30% of total cost for the programmes.

Neither evaluation, nor any impact study of the technical assistance is available, which makes the task of evaluating the impact of the capacity building somewhat difficult.

The role of the advisers has probably shifted along with the development of the programme. Initially, the role was presumably more of gap filling while today, with the Angolan staff comparatively well trained the role is literally advisory, a role, which is not easy to define nor to play. (The role of the counterpart is not easy either!) To maintain a continuous dialogue on reasons for technical assistance is important: *why* is technical advice needed? The content of the technical advice is as important: *what* is needed in terms of technical assistance? Of no less significance is the question regarding methods: *how* is the technical assistance to be provided? Technical assistance is expensive – and for best cost efficiency the questions: *to whom?* and *by whom?* are essential.

The set up of advisers has been more or less the same since the early nineties, a fact that may indicate that continuous assessments of the needs and evaluations of the outcomes have not taken place. What to learn and what to develop are not to be one-sidedly decided by the providing part; everyone agrees that the receiver should have a say, preferably a decisive say, in the elaboration of competence plans. However, it is not always easy to be aware of what the missing knowledge and skills consist of. Competence development is not only a question of learning new technical things; competence development is also about making priorities among options, seeking knowledge and information from various sources, critically analysing sources, etc. and, not least, *reflecting* on information, knowledge and experience. With increasingly skilled staff, such competence development becomes increasingly important.

A technical adviser has a complicated, not to say a delicate role. To support but not take over. To criticise but not complain. To encourage but not fawn for. To work as equals and not superior and subordinates. To advise and not give orders. The list can be made much longer but the few examples indicate the direction and indicate the difficulties. The methodology of technical assistance is an issue of pedagogy as well as of attitudes and personality. Communication about methodology issues – *roles* – between advisers and counterparts is essential and should be a vivid component throughout the support. That such sharing takes place is also the responsibility of the contracting company.

Having no assessments of the impact of capacity building efforts interviews with counterparts and receivers are the main sources of information for the evaluation. No voice has expressed hard criticism on the advisers of the current period (2000–2002); on the contrary, much praise was distributed. The impression the evaluation team got from observing staff performance was that they were very often engaged and motivated as well as skilled and knowledgeable. This finding indicates that the technical assistance has contributed to enhancing the health staff capacity.

It is the impression of the evaluation team that the managing staff of the programmes, i.e. the directors and coordinators, today is enabled to take responsibility for technical competence development of personnel at lower levels. To be maximally effective the support in terms of technical assistance should be directed mainly to the management levels and be supportive in areas such planning, budgeting and reporting, collecting and analysing statistics, procurement, distribution, logistics and administration. Technical advisers should have competence and experience of the health sector.

The employment of a public health specialist seems to be very beneficial for the programme considering its decentralised as well as integrated primary health approach. A focus on management support is presumably facilitated by an adviser specialised in public health, and a public health specialist is useful for both programmes.

The midwife's support has mainly been directed to the maternal health programme through the coordinator and through the supervisors. An unreasonably big share of the midwife's time has been spent on procurement and purchase of medicines, material and equipment to the hospitals and peripheral units. To use a midwife's competence for such work is absurd. Her advice may be needed but the purchasing belongs to an administrator or logistician, preferably from the Angolan administration. The programme coordinators need assistance in the field of management rather than in midwifery speciality and competence development of supervisors can be done through more cost efficient ways than by a long term midwife adviser. How great the needs may be, it is not cost-effective that another major duty of the midwife specialist is to accompany the individual supervisors on field trips.

All agree that there is still need for specialists in obstetrics, gynaecology, midwifery and paediatrics but such support is more beneficiary to provide as short term advisers, visiting the programme, monitoring and evaluating, lecturing and guiding in research activities. The 2003 plan for such advisory support is relevant and varied.

A needs assessment of competence development followed by the elaboration of a plan of longer duration for capacity building of staff at mid and top level would imply a systematic upgrading in various areas of competence.

3.3.2.6 Continuous upgrading of staff

Besides seminars with short term consultants financial support has been provided to workshops, study visits and conferences at a number of occasions and for health staff at all levels. How much these activities have contributed to developing competence is impossible to judge but evidence is unanimous that staff performance has improved considerably the last years.

3.3.2.7 The midwifery school

The support to the midwifery school is also a form of technical assistance. By financing the training of "specialised midwives" Sida has contributed to increase the technical knowledge of the students and also to a great extent of the staff at the school. However, considering the high cost per student – around 20.000 USD per graduated student – and considering that the entire costs are covered by Sida, except staff salaries and other minor governmental contributions, this component has a very small chance to survive once the Sida support ends.

No doubt, the need for qualified midwives is huge in the country and no doubt, the midwife profession deserves to be upgraded but nevertheless the current school appears to be too sophisticated and not adapted to the current situation. Simple arithmetic shows that decades if not centuries will pass until Angolan women will have access to these exclusive specialised midwives. For example, systematised training and upgrading on site interchanged with theoretical modules would allow for more cost-effective and more reality-adjusted education, which would be more beneficial for the Angolan women of today and tomorrow.

3.3.3 Conclusion

The Sida support, justified by humanitarian reasons in the emergency situation in the province of Luanda has had clear developmental characteristics and the cooperation with the provincial health authorities has developed into something similar to a partnership.

The decentralised approach for maternal and child health care has now been acknowledged, integration of maternal and child health is well under way, heavy investments in competence development and, to some extent, institutional building are components of a developmental approach.

As yet, the programme does not reach the most vulnerable groups.

The salary supplements have to a great extent been phased out automatically. Today it has become quite unjust and has less significance in relation to salaries.

Sida is still the main provider of equipment and material supplies to hospitals and clinics, with the exception of Maternidade Lucrecia Paím. In the new peace situation the Angolan government is expected to be able to increasingly take over the provision of drugs, material and equipment to all health facilities.

The technical advisers have likely contributed to the improved staff performance; evidence is however, not available in the form of evaluations or impact studies. The set up of the technical assistance teams seems to have become a routine; evaluations, discussions and reflections on, for example, needs, methods, contents and target group have not occurred in any systematised way according to our information. No competence plan has yet been elaborated. The midwife's competence is not utilised adequately. Procurement, distribution and administration of drugs, material and equipment are now the responsibility of a Swedish adviser but should gradually be handed over to the Angolan party. The 2003 plan for contributions by short term consultants/advisers/trainers seems relevant. A long term plan for such inputs would be beneficial.

The midwifery school is too exclusive and too expensive for Angolan conditions and has no possibility to sustain in its present form.

4 Conclusions

With the peace agreement in Angola there is new hope for a peaceful future development in the country. The problems are enormous, not least in the capital of Luanda, which, due to a huge influx of internally displaced persons today harbours a third of the population. The strains on the environment, physically as well as socially, are tremendous. Poverty indicators are at the bottom and as always, women and children are those who suffer most.

Simultaneously, there is a growing wealth among certain population segments, very visible in Luanda as luxury cars and mansions, extravagant restaurants and five star hotels. The private sectors have as never before experienced an explosive development. This is true also for the health sector. (For some reflections see annex 8).

Maternal and child health has had Swedish support since the early eighties. The present programmes were initiated primarily as a response to the extremely high maternal mortality and developed a strategy with decentralised maternal health care and a transferral system. During the present agreement, which covers the period July 2000 – December 2003, the cooperation has changed into a support with humanitarian approach in the emergency situation of the Luanda province.

The decentralisation strategy has been successful insofar as the number of peripheral deliveries steadily has increased; however, the delivery facilities are much underutilised. A majority of women, some 70%, still prefers to give birth at home. Taking the extreme population increase into account, the proportion of institutional deliveries has decreased the last years. The maternal mortality at peripheral clinics is low, which indicates a functioning referral system from this end.

At the receiving end, i.e. at the referral hospitals the system does not work adequately. At the district, provincial and national maternity hospitals around 80% are normal deliveries. The maternities at central levels are overutilised. The institutional mortality rate at the national maternity *Lucrecia Paím*, remains at the same high level as when the programme started. Mortality due to eclampsia is somewhat better but deaths due to other causes – haemorrhage, septicaemia, and malaria – remain extremely high. Audits are seldom performed. The national maternity hospital is well equipped and does not depend on the financial support from Sida.

The frequency of prenatal consultations display a steadily increase. Mothers are rarely vaccinated against tetanus. Control of HIV and syphilis are not included in the clinic routines. The family planning consultations have decreased the past years, the reason is unclear. A new service, contraceptives for adolescents is in place at eleven peripheral clinics and has become a success.

Personnel performance appears good and many staff members seem committed and motivated. Training in seminars and workshops, assistance from supervisors and support from technical advisers have likely contributed to the improved performance. The role of supervisors seems unclear, however.

The illegal fee system (*gasosas*) is a serious problem and seems to be frequent everywhere. The consequences are not clear but may be an important factor for the underutilisation of the peripheral clinics.

CAOL (*Coordenação do Atendimento Obstétrico da Província da Luanda*) has been instrumental in initiating the change from a heavily centralised, clinical system into a decentralised system with a clear public health approach. CAOL is responsible for improving the quality of the programme by supervision and training of staff, establishing norms and codes of conduct, collecting statistics, etc. The salary supplements are regarded as a motivational means. The link between CAOL and the national maternity

seems to weaken, something that may danger a continuous development. To avoid the tendency of becoming a “system in the system” there is a need to integrate CAOL into existing health structures.

The main problem, remaining since the programme initiation, is the non-involvement of the major beneficiaries: the pregnant women and the mothers. Their interests, problems and needs are still not known. The local communities, including women’s organisations and the traditional births attendants, TBAs, have very little influence on the programme activities.

Support to child health has likewise been a Sida concern since the 1980s, mainly as a support to the EPI programme. In 1998, by the creation of CAPEL (*Coordenação da Assistência Pediátrica em Luanda*) support to the child health programme begun. The initiative is commendable and a logical step forward. The child mortality rate is terrifying and has solutions mainly of *preventive* character. Malaria, respiratory infections, diarrhoea, neonatal tetanus and measles are avoidable but poverty-related illnesses; with clean water and basic sanitation and an effective immunisation programme the child morbidity and mortality can be reduced considerably. The child health programme has contributed to increased access, proven by a steady increase of consultations at the peripheral and central health clinics and hospitals with paediatric services. The CAPEL initiative represents a “horizontal” force between the different “vertical” programmes and has put the child in focus.

The vaccination coverage remains unacceptably low in Angola and has to increase to have a public health impact. During the past two years the incidence of poliomyelitis has been drastically reduced. Access to immunization has increased but drop out rate remains high. Neonatal tetanus cases are frequent – and vaccination of pregnant women has been neglected. To vaccinate children against hepatitis-B is more justifiable than yellow fever vaccination.

The introduction of targeted campaigns and out-reached immunization is justified. There is a risk that it draws attention and resources from the routine vaccinations but in the Angolan context this concern has been recognized and the benefit from adding campaigns overshadows the risk.

The core of the CAPEL strategy is the Integrated Management of Childhood Illness (IMCI); However, results are too premature to assess considering the “infancy” of the CAPEL organisation. Commendable is the achievement of the new paediatric wards at the hospitals in the capital of Luanda.

It may be that there is a too strong emphasis on curative, clinical care in the child health programme considering that most of the childhood diseases are of preventive character.

As CAOL, CAPEL runs the risk of developing a parallel structure. An integrated mother and child health strategy, which is integrated into the existing health structures, in this case, the Health Delegation of Luanda, is worth discussing.

The midwifery school in Luanda, inaugurated in 1998, has graduated 44 “specialised midwives” after completion of the 18 months course. The school has been recognised by the Ministry of Health. At present two parallel courses are running with around 50 students. The education cost for a specialised midwife is around 20.000 USD, which makes the education too exclusive and too expensive for the Angolan context and has hardly any possibility to sustain in its present form. The school lacks proper “hands-on training”. A great problem, besides the high costs, is the lack of a long term strategy.

All three components, the maternal and the child health programme and the midwifery school have produced annual work plans and reports. The documents are structured and informative and provide interesting discussions; the documents of the midwifery school are however, of poor quality. The work plans are extensive, even exhausting, and often confusing in the (mis)use of objectives, purposes, expected results, indicators, priorities and strategies. With the present appearance the plans can hardly be

used as instruments for the management of the programmes. Whether objectives and purposes have been achieved is not reported. The expected results are often unrealistic, which is one reason for non achievement. Quality is often expected to improve but it is not defined how. Indicators appear, but not directly relate to objectives or results.

More training is required for the programme management in how to elaborate plans and reports (including analysis of statistics) and how to use the documents in daily work – and not only for the satisfaction of the donor.

The Sida support has some clear developmental signs: it has contributed to institution building, it has supported the development of a decentralised health care system, including referrals and has financed the heavy investments in education and training.

Controversial is however, the indication that the support has not reached the most vulnerable groups, the poorest women and children. Problematic is also the fact that those who do benefit have no influence on the programme.

Similarly, a serious problem is the fact that a great share of programme activities depend on Sida support; other donors are few, and more grave is that contributions from the Angolan government are scarce. With the arrival of peace a dedicated governmental commitment is expected.

The salary supplements are unjust (programme staff receive anything from 0 USD to 250 USD) and has to a great extent already phased out. The increased salaries do not make this incentive as necessary as before.

The support of construction and rehabilitation of peripheral, district and provincial clinics and hospitals with maternal and paediatric services and the provision of equipment, transport and radio communication have produced a relatively well functioning health care service for mothers and children. The supply of drugs and other consumables have been an essential part of the programme but should in the new political situation be an Angolan concern.

Numerous staff members have benefited from the Sida supported education activities. This training, together with the technical assistance provided by the long term and short term technical advisers have likely contributed to the notable change in staff performance and behaviour, at least when compared to information of previous reports.

There is no evaluation or study available on the impact of the capacity building activities conducted by the technical advisers. Technical assistance is mainly needed at the management level; training of lower staff categories is now carried out by Angolan staff but needs occasionally reinforcement by short term consultants. The obstetrician/gynaecologist is now replaced by a public health specialist, a change that seems profitable for the programme. The midwife has to spend almost half of the time on procurement of drugs and consumables for the programmes, a task that should rather belong to the Angolan party. The midwife's accompany in supervision is not cost effective; in general, midwifery competence would preferably be provided by short term advisers. The economist/administrator is mainly occupied with "internal" administration and should, if possible, be more active in direct competence development of the Angolan administrators.

Competence plans, based on needs assessment are still missing.

Together with some of the stakeholders of the programme (where the most important, the mothers and the children were missing, though) the evaluation team summarised the main problems and possible solutions as follows:

The three major problems are:

- 80% of all women deliver at home and the proportion of women that give birth outside health institutions is increasing.
- The institutional maternal mortality (MMR_i) remains high and it is doubtful whether any significant changes have occurred.
- Infant and under-5 mortality rates are extremely high and the causes of death are due to preventable diseases, which do not require any sophisticated clinical care.

What to do?

- Involve the mothers. The evaluation found that even if the access to institutional deliveries has improved the clinics are surprisingly under-utilised. Very little information is available about why this is the case. The programme needs to seriously look into the attitudes of mothers. Why are the pregnant women reluctant to use the service provided? What is the role of traditional birth attendants at community level? What are the attitudes and practices? Do other factors like staff performance, security, lack of transport or other unknown factors play a role?
- Encourage staff at the health institutions. Salary levels and other incentives will probably play an even more important role in the future given the increased cost of living in Luanda. Training and emphasis on “best-practice” and norms are equally important.
- Continue to address the specific causes of maternal mortality. The impact of improved case management of eclampsia is evident. There is a need to further strengthen the delivery wards with use of blood bank and adequate equipment for safe practice. Preventive treatment of malaria and hepatitis-B should be on top of the list. Last but not least training and clinical audits are important.
- Implementation of a referral system is urgently needed. Without a strict referral system the hospitals will continue to be overloaded by “normal” deliveries, as is the case today.
- Vaccination of children and pregnant women is a priority. Coordination between routine vaccination and campaign/outreached activities will benefit the programme.
- The present informal fee system has to be abolished.

A sustainable programme?

Sustainability can in the present context be discussed from different perspectives. The maternal health care has got a two-tiered and decentralised **structure**. At the one end the central, qualified care for the few complicated cases. At the other end the peripheral care with delivery assistance and pre- and postnatal consultations for the many normal pregnancies. And in between there is the transferral system. This structure is established and acknowledged and has potential to sustain. The coordinating bodies – CAOL and CAPEL – have been essential in the decentralisation process and have still a role to play for an integration process of mother and child health care. Similarly, integration into existing structures should be planned for.

Investments in staff training may also contribute to a sustainable programme. The **technical competence** has increased considerably by in-service training and continuous education, which implies a base for a good care. The witnessed improvement of staff performance may well be evidence of a sustainable change. There is a big question mark regarding the sustainability of the midwifery school, which, if any impact is intended should be reassessed with regards to long term strategy, including length of training, number of graduates and practical training opportunities. Last but not least, the costs for the school should be reviewed.

The **financial** sustainability is not completely ruled out. The governmental inputs, mainly salaries are not insignificant and in the present peace situation it is imperative for the government to spend resources on health care. Increase of the governmental financial inputs is decisive for a success of the programme.

5 Recommendations

Community based studies/interviews concerning the maternal health care quality are needed. In such studies the most vulnerable groups should be in focus.

Strategies must be developed on how to involve women and community organisations in the maternal care health system

Parallel to a continuous expansion of peripheral maternity clinics priority should be given to an independent investigation of the factors behind the underutilisation of peripheral maternities.

A referral system must be implemented. The responsible (directors of the hospitals MLP and N'Gangula) are suggested to decide that only women in "emergency situation" and high-risk pregnancy are eligible for admission at referral hospitals. Normal pregnancies are consequently asked to deliver at their peripheral maternity unit¹³.

The indicators used to monitor the maternal health care should be more process oriented. Peri-natal mortality rate and case fatality rates on all levels are more relevant than mortality rates.

Of particular concern to combat the maternal mortality are the establishment of blood banks with laboratory support: The suggestion is to implement blood banks on a large scale all over the province and for the future all over Angola.

It is strongly recommended to implement regular maternal deaths audits at the maternity hospitals. Caesarean section techniques need to be improved

Specific strategies on how to address the disease specific causes of maternal deaths needs special attention. Malaria as the number one killer of young pregnant women, the emerging HIV-epidemic, hepatitis-B and syphilis are perhaps the most important diseases and needs special attention.

Furthermore, the symphysis-fundus height diagram is suggested to be introduced as an integral part of antenatal screening.

Administration of tetanus toxoid vaccine should be done at the antenatal clinic.

In order to bridge the emerging gap between the MLP and the peripheral maternity units and CAOL a feasible strategy could be to designate a well-respected senior Angolan obstetrician with a specific mission. She/he could be instrumental in maternal death audits and develop strategies to combat the high MMR-i. Such senior obstetrician should also be responsible for elaborating a functioning transferal system.

Sida is recommended to phase out the support to the maternity Lucrecia Paím.

The complex issue on abortion should be addressed and somehow included in the maternal health programme context.

The reasons for the decrease in family planning consultations should be investigated and addressed.

¹³ The mentioned referral system was sharply introduced at University Maternity Hospital in Maputo Mozambique. After 3 weeks the problem with overcrowded delivery wards was sorted out in favour for those who really needed the highest obstetric care level

A review of the midwifery school is suggested, a review that takes into account the country's needs for trained midwives in a short and long term perspective; a review that reassesses the chosen strategy and assesses the cost efficiency of the present training. Strategies for improved practical training, "hands on" at near by maternities, preferably at MLP and N'Gangula are needed. According to received information, an evaluation of the school is planned in 2003.

The role of the traditional birth attendants (TBA) should be explored in the present context.

The numbers of obstetricians/doctors in Angola will for the foreseeable future be inadequate. An interesting approach to this dilemma would – in a longer perspective – be to create an education for "Técnicos de cirurgia"¹⁴ at the midwifery school. Such training programme has the objective to create a cadre of skilled medical staff who can perform caesarean section and has been proven a cost effective solution to compensate for the shortage of doctors.

The child health programme needs further emphasise on preventive care. Projects in cooperation with health and other authorities as well as with local communities could be one way to combat some of the environmental, economic and social causes behind malaria, respiratory infections and diarrhoea, the great child killers.

Vaccination coverage has to increase and the drop out rate must be addressed. Pregnant women must be vaccinated against neonatal tetanus. To immunise children against hepatitis-B is more justifiable than yellow fever vaccination. Targeted campaigns and routine vaccination should be planned so as to become complementary.

The IMCI approach is a viable approach and strongly recommended to be continued.

There is a need to discuss and plan how to achieve an integration of the two coordinating bodies, CAOL and CAPEL into an inseparable mother **and** child health programme. To avoid becoming a parallel structure it is recommended to plan for how an integration into the official MCH (*Saúde Materna Infantil*) structures should be implemented.

The role of supervisors needs special attention. A strategy aiming at finding the best use of competent staff is suggested

Extensive training is needed for the management levels of the programmes in planning, budgeting and reporting, collecting and analysing statistics, procurement, administration and distribution of drugs, material and equipment, etc. It is recommended to use LFA.

Focus of the technical assistance should be on health management issues. In addition, short term consultants/advisers are needed for seminars and assessments. Long term competence plans should be elaborated.

The salary supplements should be completely phased out during 2003.

The illegal fee system must be abolished and noticeable consequences for those who accept *gasosas* must be introduced also in practice.

The Angolan Government is strongly recommended to take over the responsibility for the country's mother and child health programme. Possibly, the national level would benefit from technical assistance to e.g. develop health policies and health management systems.

¹⁴ This education of assistant medical officers successfully implemented in Mozambique, Tanzania and Malawi. The concept could easily be copied from Mozambique.

Annex 1

Draft Terms of Reference for the Evaluation of Sida's Health support to Angola July 2000 – June 2002

1 Background

Sweden has been involved in the health sector in Angola since 1977, and during this whole period the country has been in a situation of varying degrees of civil war. The nature of the support has changed over time and during the latest phase the focus has been narrowed down to support to maternal and child health in the Luanda Province, support to a midwifery school and to the national immunisation programme. The main rationale behind the programme during this phase has been humanitarian, and hence its focus has been on service delivery rather than more long-term objectives such as health systems development.

The programme has been extended more or less in its present form until 31 December 2003. It is expected that the new country strategy for Angola, which enters into force January 2003, will allow for a continuation of activities in the health sector in Angola. There is however a need to adapt any new programme to the changing political and policy environment in Angola following the cease fire agreement of 4 April 2002 and the ensuing peace process. The proposed evaluation should be seen in this context, and will be used during the preparation of Sida's interventions in the health sector beyond 2003.

It is also worth noting that the maternal and child health sub-components have specifically asked for an evaluation, and consequently welcome it as a tool for improving the quality of their operations.

2 Purpose and Scope of the Evaluation

As part of the preparation for a new agreement for Angola for the period 2004-2005 (when the next country strategy expires), an evaluation of the co-operation for the period July 2000 – June 2002 has been agreed. The evaluation will include all the sub-components of the current programme, i.e. maternal health, child health, the midwifery school and the support via the national immunisation programme.

The evaluation shall specifically analyze possibilities to change the current health programmes based on humanitarian aspects into a long-term sustainable cooperation.

3 The Assignment (issues to be covered in the evaluation)

3.1 Issues to be analysed

a) Objectives and results according to indicators described in the project document and developed during the course of the project:

- Has the project contributed to the overall objectives
- Have the project objectives been achieved
- Have the expected results been achieved

The evaluation should also include an opinion on how realistic the objectives were and to what extent the chosen indicators actually measure the results of the project. To the extent possible, the evaluation should assess improvements/changes in terms of the quality of health care provided.

- b) The evaluation should analyse the impact of the long and short-term advisors in terms of capacity building.
- c) The evaluation should analyse the impact and cost effectiveness of the national immunisation programme (Programa Alargada de Vacinação), and pay particular attention to the division of resources between routine vaccinations and campaigns. It should furthermore give a recommendation about whether or not to include this component in future design.
- d) The evaluation should assess the effectiveness of the salary supplements that have been paid to health personnel at all levels in the programme.
- e) Particular attention should be paid to the impact of Swedish support to the national maternity ward, Maternidade Lucretia Paim, and assess whether it should be included in future design.
- f) Lessons learned and suggestions that can be valuable in preparing a new programme for Angola.

3.2 Sources

- The programme co-ordinators and other personnel
- Project documents
- Operational plans
- Quarterly, semi-annual and annual reports
- Minutes from quarterly and annual meetings
- Other reports and studies

4 Methodology, Evaluation Team and Time Schedule

After preparation and collection of relevant documents from Sida, the main part of the evaluation will be conducted in situ in Angola. This includes interviews with present actors in the project. The list of persons to be interviewed shall be discussed with the local partners.

4.1 Evaluation Team

The consultancy team shall possess expertise in public health, obstetrics/midwifery, health systems and health service delivery. All members of the team should be Portuguese speaking.

The Consultant is encouraged to include local consultant(s) in the assignment.

4.2 Time Schedule

The assignment can commence as soon as the contract has been signed. The field visits are tentatively scheduled for November.

The total number of consultancy weeks is expected to be between 8–10.

The tender shall include a proposal on the number of weeks in Sweden and in Angola that the Consultant expects to use for the assignment.

Before leaving Angola, the evaluation team shall present preliminary findings for comments and discussions in a meeting with the heads of all the sub-components, the Ministry of Health and Sida representatives.

5 Reporting

The evaluation report shall be written in English and should not exceed 40 pages, excluding annexes. The Embassy will subsequently have the report translated to Portuguese. Format and outline of the report shall follow the guidelines in *Sida Evaluation Report – a Standardised Format* (pls see Annex 1). The draft report shall be submitted to Sida electronically and in three hard copies (air/surface mailed or delivered) no later than 15 January 2003. Within three weeks of receiving Sida's comments on the draft report, a final version shall be submitted to Sida, again electronically and in three hard copies. The evaluation report must be presented in a way that enables publication without further editing. Subject to Decision by Sida, the report will be published in the series *Sida Evaluations*.

The evaluation assignment includes the completion of *Sida Evaluations Data Work Sheet* (Annex 2), including an *Evaluation Abstract* (final section, G) as defined and required by DAC. The completed data worksheet shall be submitted to Sida along with the final version of the report. Failing a completed Data Worksheet, the report cannot be processed.

Annex 2

References

- Bergström, A. (1988) *Mödrars hälsa i Angola*
- Bulletin of WHO, (2002) *The impact of the Global Polio Eradication initiative on the financing of routine immunization: Case studies.*
- Brolin Andersson, L. (1999) *The maternal health programme in Angola A review of documents 1988–1999*
- Brolin Andersson, L & Wessel, H (1999) *The Maternal Health Programme in Angola An assessment of the programme during 1988–1999*
- CEP (2000) *Plano de Actividades e Orcamento ao ano 2000 Curso de Especializacao de Parteiros*
- CEP (2001) *Relatório Annual Actividades realizadas no ano 2000 Curso de Especializacao de Parteiros*
- CEP (2001) *Plano Operacional Referente aos meses de Janeiro à Dezembro de 2001*
- CEP (2002) *Relatório das Actividades realizadas de Janeiro à Dezembro 2001 Curso de Especializacao de Parteiros*
- CEP (2002) *Plano de Actividades e Orcamento ao ano 2002 Curso de Especializacao de Parteiros*
- CEP (2002) *Relatório preliminar das actividades realizadas durante o 1º semestre do ano 2002 Curso de Especializacao de Parteiros*
- CEP (2002) *Proposta do Plano Operacional referent aos meses de Janeior a Dezembro de 2003 Curso de Especializacao de Parteiros*
- DPSL (2000) *Plano Operacional de Saúde Materno–Infantil 2000*
- DPSL (2000) *Plano Operacional de Saúde Materna Infantil biénio 2000–2001*
- DPSL (2001) *CAOL Relatório de Actividades 2000*
- DPSL (2001) *CAPEL Relatório de Actividades Ano 2000*
- DPSL (2002) *Relatório Anual de Saúde Materna Próvincia de Luanda 2001*
- DPSL (2002) *CAPEL Relatório Anual 2001*
- DPSL (2001) *Plano Operacional do Programa de Saúde Materna CAOL 2002*
- DPSL (2002) *Plano Operacional 2002 Programa de Saúde Infantil*
- DPSL (2002) *Relatório do 1º semestre do Programa de Saúde Materna/CAOL/2002*
- DPSL (2002) *Relatório de Actividades durante o 1º semestre 2002 Programa de Saúde Infantil*
- DPSL (2002) *Plano Operacional do Programa D Saúde Materna/CAOL Ano 2003*
- DPSL (2002) *Plano Operacional de Saúde Infantil 2003*
- Flynn, F. (2002) *Slutrapport*
- GP/DEP/V. N’Zima (1999) *Luanda Documento do projecto de cooperacao Asdi ao Sector da Saúde 2000–2001*
- InDevelop (2002) *Report Consultancy service to Angolan–Sedish cooperation on maternal and child health in Luanda, Angola*

- Johansson, C. (2002) *Slutrapport*
- Reinius, S. (1991) *Slutrapport*
- Sida (1997) *A Gender Perspective in the Health Sector*
- Sida (1999) *Investing for future generations, HIV/AIDS*
- Sida (2000) *Beslut om insatsstöd: Bedömningspromemoria 1 april 2000–31 mars 2002*
- Sida (2000) *Beslut om insatsstöd: Terms of Reference (Technical Assistance) 1 april 2000 – 31 mars 2002*
- Sida (2000) *Towards Gender Equality in Angola*
- Sida (2001) *Beslut om insatsstöd 1 juli 2002 – 31 december 2003*
- Sida (2001) *Tackling Turmoil of Transition An evaluation of lessons from the Vietnam–Sweden Health Cooperation 1994 to 2000*
- Sida (2002) *Förslag till landstrategi Angola 2003–2005*
- Sida (2002) *Health is Wealth Sida's policy for Health and Development*
- Sida (2002) *The Logical Framework Approach*
- Snoder, K. (2002) *Slutrapport*
- Utrikesdepartementet (1999) *Landstrategi Angola 1 januari 1999–31 december 2001*
- Vinyals, L. (2002) *O Financiamento Público dos Sectores Sociais em Angola UN, Angola*

Annex 3

Persons interviewed in Sweden, Luanda and by phone, January–February 2003

Bernt Andersson, Programme Officer, Sida, Stockholm
Dr Pier Paolo Balladelli, WHO Representative Angola
Harriet Bengtsson, First Secretary, Embassy of Sweden, Luanda
Staffan Bergström, Professor, Head of ICHAR and Short term Adviser
Dr Bernadino, Director, Paediatric Hospital
Kerstin Bertilsson, former technical adviser
Maj Billing, technical adviser, (LTA)
Cathy Bowl, USAID
Dr Paulo Campos, Professor, CAOL
Dr Oscar Castilho, Programme Officer, UNICEF
Raul Feio, Programme Officer, EU
Dr Fergal Flynn, former technical adviser (LTA), InDevelop
Engracia de Freitas, Director, Midwifery School
Anna Graham, Programme Officer, InDevelop
Dr Nkanga K Guimarães, project assistant, UNICEF
Dr Victor Nzima, Gabinete do Plano, MoH
Kent Jönsson, technical adviser, (LTA)
Anna Karin Karlsson, Medical Advisor InDevelop
Dr Vitor Lara, Programme Officer, UNICEF
Dr Maria Isabel Massocolo Neves, Programme Coordinator, CAOL
Dr Miraldina, Obstetrician Maternidade Lucrecia Paím
Dr Domingo Mpembele, Director Maternidade Lucrecia Paím
Dr Isilda Maria S. Neves, Programme Coordinator, CAPEL
Staffan Reinius, former technical adviser (LTA)
Kristina Snoder, former technical adviser (LTA)
Dr. Roland Strand, former technical adviser (LTA)
Dr Fátima Valente, PAV
Dr Vita Vemba, DPSL
Anders Wikman, Director, InDevelop
Jaakko Yrjö-Koskinen, technical adviser, (LTA)

In addition:

health personnel of all categories at the hospitals and clinics as well as at CAOL and CAPEL and visiting mothers at the health centres.

Annex 4

Health facilities visited in Luanda January–February 2003

- Health Centre Ilha
- Health Centre Hojo Ya Henda
- University Maternity Lucrecia Paim
- Provincial hospital Augusto N'Gangula
- District hospital Cajueros
- District hospital Kilamba Kiaxa
- Health Centre Terra Nova
- Health Centre Kassequel
- University Hospital of Paediatrics

Annex 5

Maternal Health Programme

Development objective in annual plans

Year Development objective	
2000	To contribute to improved health for children in Luanda
2001	–
2002	To contribute to the reduction of MMRi in Luanda
2003	To contribute to the reduction of MMRi and postnatal morbidity and mortality in Luanda

Specific objectives in annual plans

Year Specific objective	
2000	To reduce the MMRi by 25 % from the 1999 level by December 2001
2001	To reduce the MMRi by 25 % from the 1999 level by June 2002
2002	<p>Prenatal consultations:</p> <ul style="list-style-type: none"> – Increase the coverage of 1st consultations (prenatal) – Improve the quality of pregnancy assistance and follow up, including early detection of high risk cases <p>Family planning:</p> <ul style="list-style-type: none"> – Increase the coverage of new cases in family planning – Improve the quality of FP consultations <p>Increase the detection and active search for STS</p> <p>Peripheral delivery wards:</p> <ul style="list-style-type: none"> – Increase the coverage of deliveries at first levels – Guarantee the adherence to assistance norms in peripheral units <p>Improve early detection of delivery complications and correct transferral to referral units</p> <p>Maternity A. N'Gangula:</p> <ul style="list-style-type: none"> – Increase the percentage of complicated deliveries – Reduce the case fatality rate caused by obstetric complications <p>Hospitals Cajuerios and Kilamba Kiaxi:</p> <ul style="list-style-type: none"> – Improve the functioning at the first referral levels – Reduce the case fatality rate caused by obstetric complications <p>Improve the referral system and feedback</p> <p>Upgrading:</p> <ul style="list-style-type: none"> – Improve staff capacity by upgrading training. – Guarantee the existence of assistance norms at all health units by upgrading training <p>Coordination and Administration:</p> <ul style="list-style-type: none"> – Improve the functioning of maternal information system in all municipalities and at provincial level – Improve the referral system and feedback – Promote the integration of and the quality increase of reproductive health at all levels
2003	As above

Expected results in annual plans

Annual plan	2000	2001	2002	2003
Family planning	<p>FP consultations increased from 83.000 to 123.000</p> <p>Improved quality consultations</p> <p>Aids/STD/after delivery consultations integrated in FP</p> <p>Reproductive health services for adolescents in all municipalities</p>	<p>lbid</p> <p>lbid</p> <p>lbid</p> <p>Reproductive health services for adolescents in 7 municipalities</p>	<p>New clients increased to 50.000 and new users to 4,0</p> <p>lbid</p> <p>STD/HIV/Aids consultations are functioning</p> <p>RH services in 9 municipalities</p>	<p>New clients increased to 35.000–40.000</p> <p>lbid</p> <p>ITS consultations functioning in all units</p> <p>Increase the use of RHS services by 10 %</p>
Prenatal consultations	<p>First consultations increased to 200.000</p> <p>Prenatal consultations with quality</p>	<p>lbid</p> <p>lbid</p>	<p>First consultations increased to 180.000</p> <p>Increased quality consultations, 3,2 per pregnant woman</p> <p>Increase high risk consultations to 17% in all municipalities</p>	<p>Increase from 180.000 to 206.000</p> <p>Improve the quality with regards to identification of high risk cases</p> <p>Increase from 15% to 20%</p>
Peripheral delivery units	<p>Wards increased from 11 to 13¹</p> <p>Deliveries increased from 65.000 to 90.000¹</p> <p>Service to mother and child according to norms</p>	<p>lbid</p> <p>Increased from 30.000 to 60.000 by June 2002</p> <p>lbid</p>	<p>From 14 to 17</p> <p>Increased to 40.000</p> <p>lbid and reduction of episiotmia rate from 21% to 10%</p> <p>Increase staff competence</p>	<p>Increase by four</p> <p>Not mentioned</p> <p>The quality care of newborn is improved</p> <p>Not mentioned</p> <p>Increased knowledge among the population about risk signs</p> <p>Midwives removes placenta, apply ventosas and curetagem</p> <p>Needs are identified to create blood banks in 2 units</p> <p>Quality of communication between units improved</p> <p>Transferral capacity improved</p>

¹ In June 2002

Expected results, cont

Annual plan	2000	2001	2002	2003
Maternity N'Gangula	<p>The maternal mortality due to malaria, haemorrhage, toxæmia and septicaemia reduced by 25%</p> <p>Normal deliveries reduced to 80 % from 1999 levels December 2001</p>	<p>lbid</p> <p>lbid</p>	<p>Reduced by 15% from 2001 level</p> <p>Normal deliveries increased to 22 %</p> <p>The rate of episiotomies reduced to 10%</p>	<p>Reduced by 15% from 2002 level</p> <p>Increased to 22% from 2002 levels</p> <p>Reduced to 10%</p>
Hospitals Cajueiros and Kilamba Kiayi	<p>Wards turned into first levels maternities</p>	<p>lbid</p> <p>Increase staff competence</p>	<p>lbid</p> <p>Case fatality rate due to malaria, haemorrhage, eclamsia and septicaemia reduced fr 2001 level</p> <p>95% of the patients correctly diagnosed and treated</p>	<p>lbid</p> <p>Reduced from 2002 level</p> <p>Not mentioned</p>
Coordination and administration	<p>Coordination structure created and functioning</p>	<p>lbid</p>	<p>Referral system, feedback and maternal information system are functioning adequately</p>	<p>Administrative system adequately functioning</p> <p>lbid</p>
Continuous upgrading	<p>Staff with capacity to provide integrated service to the woman</p>	<p>lbid</p>	<p>All units have the norms spread, fixed and used</p> <p>80% of midwives fill in the partogram correctly</p>	<p>lbid</p>

Child health programme

Specific objectives Plan 2002

Specific objective	To be achieved
To guarantee treatment in the municipal hospitals of acute respiratory diseases, acute diarrhoea, malnutrition and meningitis	2002?
Increase the follow up of children below one year to 70%	2002?
Increase the competence at peripheral level by developing the paediatric section.	2002?

Specific objectives Plan 2003

Specific objective	To be achieved
To reduce the institutional child mortality caused by malaria, ARD, AD, meningitis and severe malnutrition	2005
Integrate newborns consultations with after-delivery consultations in PUs	2003?
Increase the vaccination coverage to 60% re. DTP3, polio 3, measles and yellow fever	2005
Increase to 100% coverage vaccination against BCG and polio 0 and to 95% and polio 3, measles and yellow fever for children born in PUs	2003?

Annex 6

Fatality rate at University Maternity Lucrecia Paím, Luanda, Angola 2002

Maternal death - cause	Number	%
<i>Direct obstetric cause</i>	200	53
Haemorrhage prenatalt	30	8
Haemorrhage postnatalt	32	9
Sepsis	25	7
Abort clandestine	26	7
Toxaemia without eclampsia	3	1
Toxaemia with eclampsia	43	11
Rupture of Uterus	13	4
Other direct obstetric causes	25	7
<i>Indirect obstetric cause</i>	174	47
Hepatitis	50	13
Malaria	77	21
Other Infectious diseases	17	5
Other pathology	30	8
<i>Total number of maternal death</i>	374	100
<i>Maternal mortality ratio</i>	1800	

Annex 7

Number of Children (under one) Vaccinated per Province during 2001

Province	Target Population (children under 1)	N° doses DTP1 administered	N° doses DTP3 administered	% of children with DTP3 Drop out Rate	DTP1-DTP3/ DPT1 (%)
BENGO	10,042	5,206	3,651	36	29
BENGUELA	104,998	22,093	22,858	22	N/A
BIE	41,872	12,464	5,419	13	57
CABINDA	20,233	6,086	3,985	20	35
CUNENE	12,542	10,040	5,439	43	46
HUAMBO	32,610	27,952	13,853	42	50
HUILA	54,513	24,531	18,259	33	26
KUANDO KUBANGO	15,220	4,141	2,528	17	39
KUANZA NORTE	15,998	6,783	10,159	64	N/A
KUANZA SUL	24,400	10,884	7,385	30	32
LUANDA	155,934	167,387	122,873	79	27
LUNDA NORTE	19,119	9,944	9,027	47	9
LUNDA SUL	9,898	6,492	4,980	50	23
MALANGE	20,018	12,644	7,926	40	37
MOXICO	13,774	7,356	2,659	19	63
NAMIBE	6,329	4,970	3,489	55	30
UIGE	53,064	12,522	9,704	18	23
ZAIRE	9,350	4,179	2,913	31	30
TOTAL	619,915	355,674	257,107	41	28

Source: EPI Administrative Data, MoH - Angola. 2001

Annex 8

Some findings and reflections on the private health sector in Luanda.

During the evaluation team visit in Luanda it became evident that the private sector in Luanda is expanding, not least in the health sector, and consequently plays a role in the health system already today. It will probably continue to play a role in the future. One senior doctor described the situation as an explosion of private clinics, a complete anarchy that is threatening the public sector. With only a few exceptions all doctors and nurses we met devoted 4-6 hours per day to work at the public hospital and health centre and the rest either at their own private practice or at other private clinics. One senior doctor said that he had devoted 20 years of his professional life to the government with very little pay and now he had had enough and wanted to devote the rest of his time to make some money. Most people with money choose a private alternative.

It was difficult to find what the government policy is on this drain of resources from the public sector but there seems to be a very liberal attitude to private establishments.

The evaluation team made ad hoc visits to two private clinics in central Luanda. It was not difficult to find since there are plenty. One clinic was located in a residential area in a rebuilt home. The clinic had 13 beds and had 13 patients admitted. The outpatient clinic had a laboratory and a pharmacy. A consultation was approximately 5 USD and for admission the charge was 150 USD. In addition they charged for laboratory analyses, consumables and medication. The second clinic was a more upgraded and sophisticated hospital own by a Cuban doctor. It had 24 hour service and 28 beds. It also had a fully equipped operation theatre and maternity ward. A consultation was 40 USD and had to be paid in foreign currency. The out-patient clinic was crowded and from a quick assessment most patients were Angolans.

At the first clinic we were given a directory listing all private clinics in Luanda that were "approved" by the Ministry of Health. The total was over 100 clinics. In addition there are many informal private health centres in the city.

Recent Sida Evaluations

- 03/09:03 Contract-financed Technical Co-operation and Local Ownership: Guatemala Country Study Report**
João Guimarães, Guillermo Lathrop, Mayra Palencia
Department for Evaluation and Internal Audit
- 03/09:04 Contract-financed Technical Co-operation and Local Ownership: Lithuania Country Study Report**
João Guimarães, Raymond Apthorpe, Peter de Valk, Algis Dobravolskas
Department for Evaluation and Internal Audit
- 03/09:05 Contract-financed Technical Co-operation and Local Ownership: Mongolia Country Study Report**
Nils Öström, Max Spoor, Tsagaach Geleg
Department for Evaluation and Internal Audit
- 03/09:06 Contract-financed Technical Co-operation and Local Ownership: Ukraine Country Study Report**
João Guimarães, Raymond Apthorpe, Oleksander Stegny
Department for Evaluation and Internal Audit
- 03/10 Fideicomiso para el Desarrollo Local en Guatemala: Evaluación de avances y resultados**
Roberto Samayoa, Ingrid Faulhaber, Nils Öström, Karin Dahlström
Department for Infrastructure and Economic Co-operation
- 03/11 Development Co-operation between Sweden and the Baltic States in the Field of Prison and Probation**
Andrew Barclay, Claes Sandgren
Department for Central and Eastern Europe
- 03/12 Three Decades of Swedish Support to the Tanzanian Forest Sector**
Marko Katila, Paula J. Williams, Romanus Ishengoma, Saada Juma.
Department for Natural Resources and Environment
- 03/13 Completion of a Success Story or an Opportunity Lost?: An evaluation of the Soil and Water Conservation Programme in Arusha Region (SCAPA)**
Thorsten Celander, Kallunde P. Sibuga, H. Bohela Lunogelo
Department for Natural Resources and Environment
- 03/14 Promotion of the Swedish Participation in EU Phare-twinning**
Paul Dixelius, Peter Haglund
Department for Central and Eastern Europe
- 03/15 Swedish-Polish Co-operation in the Field of Tax Administration 1998-2002: Final Report**
Martin Schmidt, Peter Gisle
Department for Central and Eastern Europe
- 03/16 Swedish Support to Mashambanzou Care Trust**
Onward S. Mandebvu, Miriam Matinenga, Farai Siyachitema-Maruzza, Francis Nyandoro
Department for Africa
- 03/17 National Railway (NRZ of Zimbabwe's HIV/AIDS Prevention Program**
Hope Chigudu, Wilfred Ncube Tichagwa, Virginia Phiri
Department for Africa
- 03/18 Rural Development and the Private Sector in Sub-Saharan Africa: Sida's experiences and approaches in the 1990s**
Kjell Havnevik, Mats Härsmar, Emil Sandström
Department for Evaluation and Internal Audit

Sida Evaluations may be ordered from:

Infocenter, Sida
S-105 25 Stockholm
Phone: +46 (0)8 506 423 80
Fax: +46 (0)8 506 423 52
info@sida.se

A complete backlist of earlier evaluation reports may be ordered from:

Sida, UTV, S-105 25 Stockholm
Phone: +46 (0)8 698 51 63
Fax: +46 (0)8 698 56 10
Homepage:<http://www.sida.se>



SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
S-105 25 Stockholm, Sweden
Tel: +46 (0)8-698 50 00. Fax: +46 (0)8-20 88 64
Telegram: sida stockholm. Postgiro: 1 56 34-9
E-mail: info@sida.se. Homepage: <http://www.sida.se>