



The Republic of Seychelles

**EPI COMPREHENSIVE
MULTI- YEAR PLAN (cMYP)**

2008 - 2012

December 2007



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Executive Summary

The immunization programme in Seychelles has successfully maintained a high-level of performance over the past decade. Several achievements have been attained including sustainability of immunization coverage above 99% for all antigens, absence of mortality due to vaccine preventable diseases (VPDs), 100% procurement of vaccines and injection materials by the Government and attainment of polio certification level indicators with acceptance of the country documentation by the Africa Regional Certification Commission in October 2006. The high level of commitment by the Government and its people, the stable macro economic environment allowing for availability of free and accessible child health services to all people, active follow up and tracing of EPI target groups to ensure maximum coverage, a high literacy rate, access to the media and information, and the absence of cultural or religious obstacles to immunization, have all contributed to the success of the immunization programme and health sector in general. The delivery of immunization services is integrated with other child survival interventions. It is therefore not surprising that with these achievements and conducive environment, the country has already achieved the health-related and other Millennium Development Goals.

However, sustaining high immunization coverage, prevention of the risk of importation of VPDs particularly in view of the numerous tourists visiting the country, delayed introduction of new vaccines and injection safety technologies, and foreign exchange fluctuations resulting in high procurement costs are among the challenges and areas of concern of the programme currently and in the future.

The EPI Multi Year Plan 2008-2012 has been developed through a consultative process and is based on priorities in the National Strategic Framework 2006-2016, as well as the Global Immunization Vision and Strategy (GIVS) 2006-2015 and the Africa Regional Strategic Plan 2006-2010. Over the next 5 years, the Immunization Programme will aim to maintain 100% coverage for all antigens, maintain polio-free status, introduce *haemophilis influenzae* type B vaccine in pentavalent vaccine formulation while exploring possibilities for other new vaccines, introduce auto disable syringes for improvement of injection safety and waste management, and advocate for group procurement of vaccines in a bid to reduce on the expenditure on vaccines, among other priorities. Advocacy at all levels to ensure

sustainability of the investments in the programme and of the achievements will continue, and finalization of the EPI Policy will be done to define the operational framework of the programme and incorporate any advancements planned. The total cost of the programme in the planning period (2008-2012) is approximately \$500,000 which translates into \$100,000 per annum. When secure funds are considered, the gap was \$227,000 which represents 46% of the total need. When both secure and probable funds are taken into account, there is no financial gap.

1. INTRODUCTION

1.1 Country Profile

The Republic of Seychelles comprises 115 islands in the Indian Ocean. Out of this number, only 22 are inhabited. It is situated between 4 and 9 degrees south of the equator and between 45 and 56 degrees east, covering an exclusive economic zone of more than 1.3 million square kilometres. The largest island is Mahe where 90% of the country population lives and where the capital city, Victoria, is located. Three other islands of major economic importance and have health facilities are Praslin and La Digue and Silhouette.

The socio-economic indicators since achieving independence in 1976 are among the best in Sub-Saharan Africa. Nevertheless, Seychelles, as a tiny island country, is not exempted from the socio-economic problems faced by the Small Island Developing States (SIDS). Seychelles is a multiparty democratic small state where national unity, pride and aspirations override ideological and economic differences.

The 2007 mid-year population of Seychelles was estimated at 82,032. The population is characterised by a slow growth rate, low births, low mortality and external migration. The number of births has shown a decline from 1,837 in 1971 to 1,467 by 2006. The total fertility rate has also decreased from 2.7 in 1990 to 2.1 births per woman in 2000 and fell below replacement level and by 2005 it was 2.2. Good family planning programmes, economic improvement, free primary and early secondary education, free health and increase in family planning participation have contributed to low fertility rate. The crude death rate continued to decrease with slight fluctuation from 7.8 in 1990 to 6.8 in 2000 and then to 7.8 in 2006.

1.2 Macro economic situation

Seychelles is characterised by its small land area, population, remoteness from major markets and limited natural resources, which leads to a heavy reliance on external resources linked to tourism, consumer products and capital input. The island's narrow resource base and other vulnerabilities as a SIDS have resulted in a heavy dependence on external financial flows for its economic and social development. Since the mid-1990's the

Seychelles ranked as an upper-middle-income country by UNDP with per capita income of approximately US\$ 8,000 in 2005, the highest in Sub-Saharan Africa. Seychelles is ranked 47th according to the Human Development Index Report (2006); the key social development indicators of the country are comparable to those of developed countries. Investment in human development has been an essential element of all policies and National Development Plans (NDP) and in February 2007, Seychelles launched its first National Population Policy for Sustainable Development.

The overall economic performance of Seychelles has been modest in recent years, with 4% GDP growth recorded in 2000. Despite being classified as an upper-middle income country, Seychelles has encountered overall macroeconomic management issues that have affected the economic development of the country. According to the Human Development Report 2003, Official Development Assistance, which used to be an important source of development financing, decreased from 10.1% of GNI in 1990 to 2.4% in 2001. This sharp decline in development and technical assistance placed undue financial constraint on the government's budget and development efforts at a time corresponding with a real slow down of the economy. This forced the Government to launch a Macro Economic Reform Programme (MERP) in 2005. One of the measures of the reform was the implementation of the Goods and Services Tax commonly called the GST. The prices of a great number of commodities and services were increased by a 12% GST; the same applies to all imported goods in the country. Six months after the introduction of the GST, the average inflation rate increased to 3.3% reflecting a 6.7% rise above the previous year's rate. The annual inflation rate for the year 2002 was 0.2%.

The government of Seychelles is continuously investing in public utilities to meet the growing demand of the population as well as industries. The 2002 Population and Housing Census established that the percentage of Seychelles households with access to piped water, electricity and flushed toilets were 86.9%, 97.1% and 87.5% respectively. The country has ensured the provision of universal access to education and health services. Access to safe drinking water and sanitation for all, which have contributed to poverty alleviation, social integration generally led to a high standard of living. Seychelles has attained universal primary education and boys and girls enjoy free primary education and equal access to education from 3 and half years to 16 years of age. The provision of health

and education services has been given top priority with expenditure in these sectors in 2004 representing 3.9% and 5.4% GDP respectively. Table 1.1 outlines the key socio-economic indicators.

Table 1.1: Economic indicators, Seychelles, 2002-2006

Indicator	%				
	2002	2003	2004	2005	2006
GDP US\$ million (market price)	696	706	700	724	771
GDP per capita US\$ (market price)	8,319	8,524	8,485	8,743	9,108
Total health expenditure as a % of Total Public Expenditure	18.4	19.2	19.5	22.6	20.4
Total HRH expenditure as a % of National Health Budget		0.92	0.61	0.27	0.28
Total health expenditure US\$ million	25.1	29.6	28.7	33.3	35.4
Total Govt expenditure in health as a % of National Health Budget	7.9	9.7	10.4	9.3	10.5
Total health expenditure as a % of GDP	3.6	4.2	4.1	4.6	4.6
Inflation rate	0.2	3.3	3.9	0.9	-0.4

1.3 Health Financing

The main sources of financing for the health programme in Seychelles are government and social security contribution of working people. User-fees, which contribute a very small proportion of the total health budget, are paid only by short-term visitors such as tourists. The total health budget for Seychelles in 2007 was RS196, 000,000 (\$24.2 million). This shows that Seychelles spend the highest per capita on health than any of its neighbours.

1.3 National Health System

The State recognizes the right of every citizen to protection of health and to the enjoyment of the highest attainable standards of physical and mental health¹. Traditionally, Seychelles has adopted a tier system for its health care delivery. The national health system operates on three main levels of care:

1. Primary/ community care
2. Secondary care at hospital and specialized facilities
3. Tertiary care which includes overseas treatment.

¹ Article 29, Constitution of the Republic of Seychelles

Access to primary care is free at the point of use as prescribed by the constitution of the country. Health care is financed by the following ways:

- General taxation (80%)
- Donor funds (15%)
- User fees (5%)

Since the government's policy on health was formulated in 1976, the Seychelles has made considerable progress in achieving basic health indicators. Access to and utilization of health services are among the best in the world. Approximately 14.6% of the regular national health budget in 2007 was spent on health. Seychelles has already achieved most of the Millennium Development Goals for Africa.

Seychelles has a comprehensive health structure, which comprises of 1 central referral hospital, 3 cottage hospitals, 1 rehabilitative hospital, 1 mental hospital, 1 youth health centre and 16 district health centres located throughout the country with a decentralized system of providing basic health services in the community. Government funded services are free of charge to every citizen and are complemented by private health services. In 2005, life expectancy at birth was 71.9 (67.4 for male and 77.1 for females) and infant mortality rate was 9.5 per 1,000 live births. The whole population has access to basic health care. The longest time it takes to access health care by vehicle is 15 minutes and 45 minutes on foot. In 2006, the under-5 mortality rate was estimated at 10.91 per 1,000 live births; the crude death rate was 7.84 per 1,000 population and Maternal Mortality Rate was 65.1 per 100,000 live births (2005). Table 1.2 outlines the national demographic and socio economic indicators for Seychelles.

Table 1.2: Demographic and socioeconomic indicators, Seychelles

Indicator	Year	Value
Total population (mid year)	2007	85,461
Population growth rate (%)	2004	1.0173
Total Fertility Rate	2005	2.20
Sex ratio (per 100 females)	2003	91
Age distribution (%)		
0 – 14	2006	23.8
14 – 64	2006	68.4
65 and over	2006	6.1
Infant Mortality Rate (per 1,000 live births)	2006	9.54
Under 5 Mortality Rate (per 1,000 children live births)	2006	10.91
Maternal Mortality Ratio (per 100,000 live births)	2005	65.1
Crude Death Rate (per 1,000 population)	2006	7.84
Life expectancy at birth (years)	2005	71.9
Adult literacy rate (%)	2005	96
GNP per capita (US\$)	2006	9,108
Human Development Index (rank)	2006	47

The Ministry of Health has developed a Strategic Framework for 2006-2016 with the following Vision, Mission and Corporate Motto:

Vision:

All people in Seychelles to attain the highest possible level of physical, social, mental and spiritual well being, free from disease or infirmity.

Mission:

Our purpose is health for all people in Seychelles, by all people in Seychelles.

Corporate Motto:

Health for all, health by all.

Among the several targets set in the National Strategic Framework is to maintain 100% coverage for all vaccine preventable diseases.

1.3.1 Seychelles Expanded Programme on Immunization

The immunization programme in Seychelles was initiated in 1808 with small pox vaccination. Thereafter, it expanded to include other antigens over the years such as BCG, OPV, MMR, DT, DPT, hepatitis B, ATT and yellow fever.

The EPI programme is integrated with the Child Health Programme and falls within the Division of Community Health. Figure 1 illustrates the organogram of the Department of Health and Health Services Authority.

EPI is one of the key elements of the Child Health Services offered by the Seychelles Ministry of Health. The Child Health and EPI programmes are closely linked to other programmes and services within the Ministry of Health such as Maternal Health services, School Health Programmes etc. The main activities undertaken within the programmes immunization, growth monitoring, nutrition surveillance, development assessment, post natal assessment, hearing assessment, home visiting, health education/ promotion, counselling, referral services, follow up care, monitoring and evaluation.

The Child Health/EPI programmes are offered in all the 16 government health facilities on Mahe, Praslin, La Digue and Silhouette islands and also in 6 satellite clinics on a part-time basis. The programs are staffed by nurses/ midwives with support of other members of the District Health Team. Immunization services are offered in other Ministry of Health units such as Maternity, Casualty Department, Hemodialysis Unit, Occupational Health Unit and CDCU. The EPI Manager provides support and assistance to those respective units as well so as to ensure that recommended standards are maintained.

During 2005, the Ministry of Health and Social Services took on the full responsibility for procurement and management of vaccines and other equipment (previously handled by a private firm). This is likely to result in significant reductions in the cost of vaccines compared to the prices paid through the private provider. To ensure that good quality, safe and effective vaccines are purchased, only WHO pre- qualified vaccines are purchased. The vaccine procurement cycle is illustrated in Figure 2.

Immunization Objectives

The objectives of immunization programme in Seychelles are to:

1. Sustain the commitment and action at all levels for the implementation of EPI
2. Ensure that all children and women of childbearing age in Seychelles are eligible for good quality vaccines
3. Administer safe and efficient vaccines to prevent vaccine preventable diseases
4. Promote technically sound, basic immunization procedures according to international standards and norms already adapted to the Seychelles condition.

The immunization schedule and the target population of the programme are illustrated in tables 1.3 and 1.4.

Figure 1: ORGANISATIONAL CHART OF DEPARTMENT OF HEALTH and HEALTH SERVICE AUTHORITY

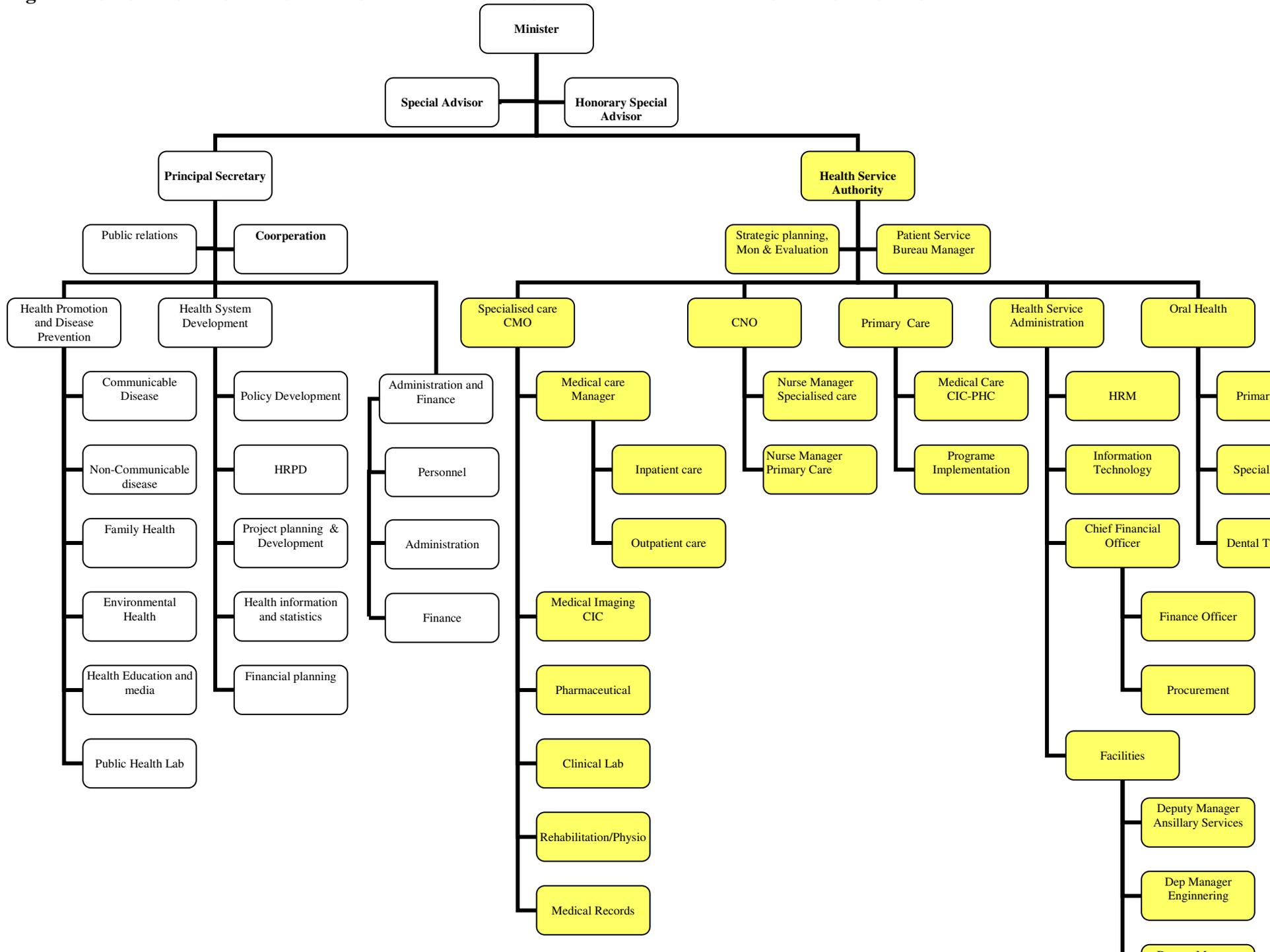


Figure 2: Vaccine Procurement cycle, Seychelles

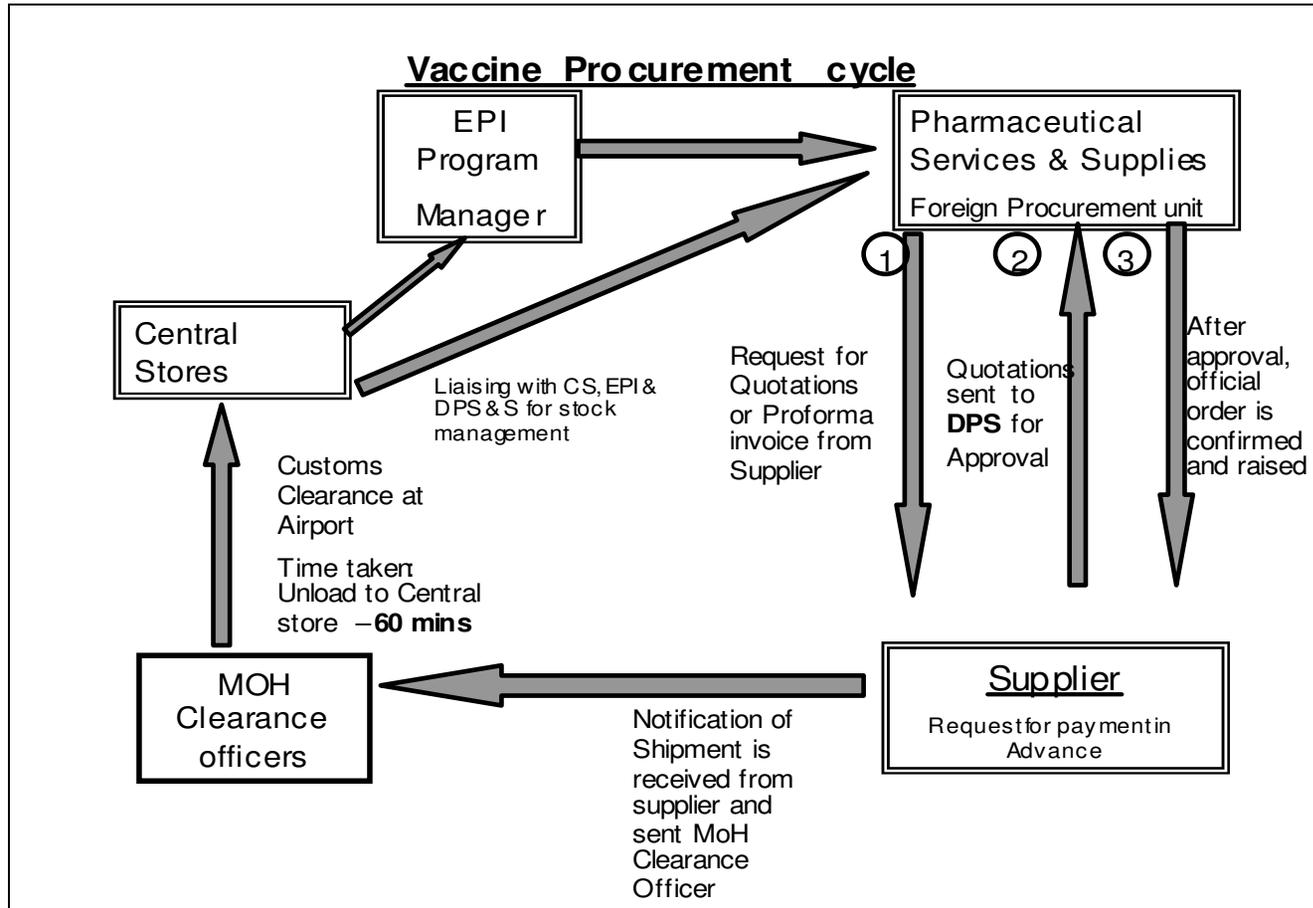


Table 1.3: Immunization Schedule, Seychelles

Vaccine	Age of administration
BCG	Birth; 6 years old
DPT	3, 4, 5 and 18 months
OPV	3, 4, 5 and 18 months; 6 and 15 years old
Hepatitis B	3, 4, 9 months
Yellow Fever	12 months
Measles Mumps and Rubella (MMR)	15 months and 6 years
DT	6 years
ATT	15 years and 25 years+

Table 1.4: Baseline and future annual targets, Seychelles, 2006-2012

	2006	2008	2009	2010	2011	2012
Total population	84,600	86,315	87,178	88,050	88,931	89,820
Births (1.8%)	1,467	1,554	1,569	1,585	1,601	1,617
Surviving infants (1.7%)	1,453	1,536	1,551	1,567	1,582	1,598
Pregnant women (2.4%)	1,913	2,041	2,062	2,082	2,103	2,124
BCG coverage	100%	100%	100%	100%	100%	100%
OPV3	100%	100%	100%	100%	100%	100%
DPT-HepB3	100%	100%	100%	100%	100%	100%
HepB3	100%	100%	100%	100%	100%	100%
MMR	100%	100%	100%	100%	100%	100%
TT2+ (Pregnant)	100%	100%	100%	100%	100%	100%

2. SITUATION ANALYSIS

Seychelles benefited from several reviews of the various components of its EPI from 2002-2006. Some of these are:

- EPI Review 2003
- Vaccine management assessment, 2006
- Vaccine procurement assessment, 2006
- National cold chain inventory, 2006

The major achievements include:

- Sustainability of immunization coverage above 99% for all antigens.
- Absence of mortality associated with VPDs.
- 100% procurement of vaccines and injection materials by the Government of Seychelles.
- Attainment of polio certification level indicators with acceptance of country documentation by the Africa Regional Certification Commission in October 2006.

The key contributing factors to the successful programme are the availability of free and accessible child health services to all people, active follow up and tracing of EPI target groups, high literacy rate, access to the media and an absence of cultural or religious obstacles to immunization.

Tables 2.1.1-2.1.3 outline the situation analysis by indicators selected for each immunization system component and by accelerated disease control initiatives. Table 2.2 provides a summary of the strengths and weaknesses by system component.

TABLE 2.1: SITUATIONAL ANALYSIS BY DISEASE CONTROL INITIATIVES, SEYCHELLES, 2002-2007

Table 2.1.1: Situational Analysis by Disease Control Initiatives, Seychelles, 2002-2007

Component	Indicators	National					
		2002	2003	2004	2005	2006	2007
Polio	OPV3 coverage	100%	100%	100%	100%	100%	100%
	Proportion of health facilities with OPV3 coverage \geq 80%	100%	100%	100%	100%	100%	100%
	No of AFP cases detected	0	0	0	1	0	0
	No of confirmed wild polio virus cases	0	0	0	0	0	0
	Stool adequacy rate	0	0	0	100%	0	0
MNT	TT2+ coverage (pregnant women)	100%	100%	100%	100%	100%	100%
	Percentage of children protected at birth	100%	100%	100%	100%	100%	100%
	No of neonatal tetanus cases reported	0	0	0	0	0	0
	Proportion of health facilities reporting > 1 case per 1,000 live births	0	0	0	0	0	0
	SIA conducted	No	No	No	No	No	No
Measles	Measles coverage	100%	100%	100%	100%	100%	100%
	Proportion of health facilities with measles coverage \geq 90%	100%	100%	100%	100%	100%	100%
	No of outbreaks reported	0	0	0	0	0	0
	No of suspected measles cases reported	0	1	0	0	24	1
	No of confirmed measles cases	0	0	0	0	10	1
	Number of confirmed measles deaths	0	0	0	0	0	0

Table 2.1.2: Situational Analysis by EPI System Components, Seychelles, 2002-2007

Component	Indicators	National					
		2002	2003	2004	2005	2006	2007
Service delivery	National DPT3 coverage	100%	100%	100%	100%	100%	100%
	Proportion of health facilities with DPT3 coverage \geq 80%	100%	100%	100%	100%	100%	100%
	National DPT1-3 drop out rate	<1%	<1%	<1%	<1%	<1%	<1%
	Proportion of health facilities with DPT1-3 drop out rate \leq 10%	100%	100%	100%	100%	100%	100%
	BCG coverage	100%	100%	100%	100%	100%	100%
	DT coverage	100%	100%	100%	100%	100%	100%
	HepB3 coverage	100%	100%	100%	99.7%	100%	99.28%
	Yellow fever	100%	100%	100%	100%	100%	100%
Vaccine supply, quality and logistics	National stock out of vaccines reported	ND	ND	Yes (DTP, OPV, HepB, Yellow Fever, TT; 1 month)	Yes (ATT 3 months)	Yes (ATT 1 month)	Yes (DT 1 month)
	Proportion of district using AD syringes	0	0	0	0	0	0
	WHO pre-qualified vaccine purchased	Yes	Yes	Yes	Yes	Yes	Yes
	Regular maintenance of cold chain equipment	Yes	Yes	Yes	Yes	Yes	Yes
	Proportion of health facilities with functioning cold chain	100%	100%	100%	100%	100%	100%
	Proportion of health facilities with vaccine wastage monitoring system	100%	100%	100%	100%	100%	100%
Advocacy and communication	Availability of a communication plan at national level	No	No	Yes	Yes	Yes	Yes
	Advocacy meeting held with policy makers	ND	ND	Yes	No	No	No
Surveillance	Completeness of reporting at national level	92.3%	92.6%	92.6%	96.3%	ND	ND
	Timeliness of district reporting to national level	ND	ND	ND	ND	ND	ND

Component	Indicator			National			
		2002	2003	2004	2005	2006	2007
Programme management	Number of ICC meetings held	0	0	0	0	0	0
Human resource capacity	Doctor population ratio	1:685	1:685	1:685	1:685	1:685	1:685
	Nurse population ratio	1:195	1:195	1:195	1:195	1:195	1:195
Sustainable financing	Percentage of total routine vaccine spending financed using government funds	100%	100%	100%	100%	100%	100%
	Percentage of total cold chain equipment financed using government funds	0%	0%	0%	0%	0%	25%
	Budget line for vaccine	Yes, SR400,000 (vaccines only)	Yes, SR450,000 (vaccines only)	Yes, SR500,000 (vaccines only)	Yes, SR250,000 (vaccines only)	Yes, SR250,000 (vaccines only)	Yes, SR250,000 (vaccines only)

2.2 STRENGTHS AND WEAKNESSES BY EPI SYSTEM COMPONENTS, SEYCHELLES, 2002-2007

Table 2.2.1: Strengths and weaknesses by EPI system components, Seychelles, 2002-2007

Component	Strengths	Weaknesses
Service delivery	<ul style="list-style-type: none"> All births are registered 	<ul style="list-style-type: none"> Delayed introduction of new vaccines (Hib, Meningococcal vaccines)
	<ul style="list-style-type: none"> Compulsory primary and early secondary education with school health programme in place 	<ul style="list-style-type: none"> Some school drop outs who do not complete the immunization schedule.
	<ul style="list-style-type: none"> Sustained high coverage over the past decade 	
	<ul style="list-style-type: none"> Well-planned vaccination schedule from birth to adulthood 	
	<ul style="list-style-type: none"> Good accessibility to health facilities 	
	<ul style="list-style-type: none"> High political commitment 	
	<ul style="list-style-type: none"> Tracing system for dropouts 	
	<ul style="list-style-type: none"> Good communication (phone, internet etc.) 	
	<ul style="list-style-type: none"> Commitment of parents towards EPI programme 	
Vaccine supply, quality and logistics	<ul style="list-style-type: none"> EPI services integrated with child health, family planning, school health and preventive/ promotion services such as use of bed nets, breast feeding 	
	<ul style="list-style-type: none"> Vaccine forecasts consistently done at central level 	<ul style="list-style-type: none"> Stock out of vaccines in 3 out of the last 6 years
	<ul style="list-style-type: none"> Only WHO pre-qualified vaccines are provided 	<ul style="list-style-type: none"> Delayed availability of Foreign exchange for procurement of vaccines and fluctuations in rates
	<ul style="list-style-type: none"> Contingency plan at the central level for power failure 	<ul style="list-style-type: none"> No back-up generators in all 12 health facilities where frequent power failure occurs
	<ul style="list-style-type: none"> WHO standard vaccine fridges are used for cold chain 	<ul style="list-style-type: none"> No focal person for vaccines management at Central Medical Stores (CMS)
	<ul style="list-style-type: none"> Good cold chain monitoring system & regular maintenance 	<ul style="list-style-type: none"> Poorly defined contract with suppliers
	<ul style="list-style-type: none"> Adequate cold storage facilities at all peripheral facilities 	<ul style="list-style-type: none"> Inadequate storage capacity at the CMS
	<ul style="list-style-type: none"> Multi-Dose Vial Policy (MDVP) in place 	<ul style="list-style-type: none"> No VVM for some vaccines
	<ul style="list-style-type: none"> Availability of transport for EPI 	<ul style="list-style-type: none"> AD syringes not adopted
	<ul style="list-style-type: none"> Adequate cold boxes, safety boxes, freezer indicators 	<ul style="list-style-type: none"> No cold chain replacement plan
	<ul style="list-style-type: none"> Incinerators and other waste disposal equipment available 	<ul style="list-style-type: none"> Inadequate utilization of guidelines on waste disposal
		<ul style="list-style-type: none"> Advance payment request by suppliers
		<ul style="list-style-type: none"> Inadequate monitoring and management of AEFI
	<ul style="list-style-type: none"> No vaccine utilization monitoring data analyzed at national level 	

Component	Strengths	Weaknesses
Advocacy and Communication	<ul style="list-style-type: none"> Integrated communication plan in place 	<ul style="list-style-type: none"> Inadequate sensitization and follow-up of the general public
	<ul style="list-style-type: none"> Advocacy representative at management level 	<ul style="list-style-type: none"> Limited budget for advocacy and communication
	<ul style="list-style-type: none"> Easy access to media 	
	<ul style="list-style-type: none"> Good communication and dissemination system 	
Disease Surveillance	<ul style="list-style-type: none"> IDSR guidelines and standards widely disseminated 	<ul style="list-style-type: none"> Timeliness of reports not always measure
	<ul style="list-style-type: none"> Established IDSR committee 	<ul style="list-style-type: none"> Some private practitioners not reporting at all
	<ul style="list-style-type: none"> IDSR training conducted at all levels 	<ul style="list-style-type: none"> Turnover of trained health workers necessitating refresher training on IDSR
	<ul style="list-style-type: none"> Well-established reporting system for VPD at all health facilities 	<ul style="list-style-type: none"> Laboratory confirmation of tests not available locally for certain EPI diseases
	<ul style="list-style-type: none"> Regular surveillance supervision visits (every 2 months) to all health facilities 	<ul style="list-style-type: none"> Zero weekly/ monthly reporting of target diseases not done by some units
	<ul style="list-style-type: none"> Over 90% completeness of reports since 2002 	<ul style="list-style-type: none"> Delayed routine reports from some health facilities
Programme Management	<p><u>Monitoring and evaluation</u></p> <ul style="list-style-type: none"> Regular quarterly and annual reporting system by health facilities 	<ul style="list-style-type: none"> No existing Inter-Agency Coordinating Committee or Committee to regularly review EPI progress EPI Policy not finalised
	<p><u>Supervision</u></p> <ul style="list-style-type: none"> Supervision plan and check lists available at national level 	<ul style="list-style-type: none"> Supervision conducted only twice a year from central level
	<ul style="list-style-type: none"> Regular supervision conducted at health facilities 	<ul style="list-style-type: none"> Weak supervision at health centre level.
	<ul style="list-style-type: none"> Good commitment of health workers to EPI 	<ul style="list-style-type: none"> Under staffing of programme at central level (Data Clerk and Logistician)
	<ul style="list-style-type: none"> Adequately trained and equipped health workers 	<ul style="list-style-type: none"> No orientation programme foreign health workers
Human Resource Capacity	<ul style="list-style-type: none"> On-going Continuous Professional Development (CPD) training programme 	
	<ul style="list-style-type: none"> EPI module included in basic nurse training 	
	<ul style="list-style-type: none"> 8 managers participated in AFRO Mid Level Management (MLM) training including 2 Nurse Tutors 	
	<ul style="list-style-type: none"> EPI manager participated in EPI Managers' meeting 	
	<ul style="list-style-type: none"> 100% vaccines and injection materials financing by government 	<ul style="list-style-type: none"> Some reliance on WHO for cold chain equipment procurement
	<ul style="list-style-type: none"> Budget line for vaccines 	<ul style="list-style-type: none"> No separate budget line for EPI injection materials and other consumables
Sustainable Financing		<ul style="list-style-type: none"> Vaccines and injection materials/ consumables for EPI purchased separately

Table 2.2.2: Strengths and weaknesses by Accelerated Disease Control Initiatives, Seychelles, 2002-2007

Component	Strengths	Weaknesses
Accelerated Disease Control	Polio eradication <ul style="list-style-type: none"> ▪ Polio standard certification indicators attained and maintained ▪ No confirmed wild polio virus case 	
	Measles control <ul style="list-style-type: none"> ▪ High routine measles vaccine coverage with no associated mortality ▪ Minimal or no confirmed measles cases over the past 8 years 	
	Neonatal tetanus elimination <ul style="list-style-type: none"> ▪ TT school programme ongoing ▪ High percentage of neonates protected at birth 	

3. NATIONAL PRIORITIES, OBJECTIVES AND MILESTONES, SEYCHELLES 2008-2012

Table 3.1 National Priorities, Objectives and Milestones, Seychelles 2008-2012

Description of problem or national priority	Programme objective	Targets and Milestones	Regional and global goals	Order of priority (By Objective)
Service delivery Maintaining high immunization coverage	To attain and maintain 100% coverage for all EPI vaccines by 2012	2008-2012: 100% coverage for all antigens	By 2010 or sooner, all countries will have routine immunization coverage at 90% nationally with at least 80% coverage in every district (GIVS 2005) Reduce child mortality by two-thirds between 1990 and 2015 (MDG 4)	1
Delayed introduction of Hib vaccine	To introduce Hib vaccine (pentavalent formulation) into the national immunization schedule by 2009	2008: Finalise the process of introducing Hib vaccine by following up the proposal sent to Senior Management Committee (SMC) 2009: Finalize preparations and resource mobilization for Hib/ pentavalent vaccine introduction; Introduce vaccine	By 2009, 50% of countries will report trends in hepatocellular carcinoma based on cancer registries (AFRO) By 2009, 50% of countries will report results of hepatitis B sero epidemiological studies (AFRO)	1
New vaccines introduction	To explore possibilities for future new vaccine introduction by 2012	2011: Identify possible new vaccines for introduction 2012: Establish disease burden of diseases for upcoming potential new vaccines		2

Description of problem or national priority	Programme objective	Targets and Milestones	Regional and global goals	Order of priority (By Objective)
<p><u>Accelerated disease control initiatives</u> Maintain polio-free status</p>	<p>To maintain polio-free status and certification-standard surveillance indicators by 2012</p> <p>To maintain 0% mortality due to measles and neonatal tetanus</p>	<p>2008-2012: Maintain 100% OPV3, MMR and DPT coverage and surveillance performance indicators</p>	<p>By 2009, the process of independent certification of polio-free status will lead to full regional certification (AFRO)</p> <p>By 2010 or earlier, mortality due to measles will have been reduced by 90% compared to the 2000 level (GIVS)</p> <p>By 2009, at least 80% of countries will achieve NNT incidence rate of less than 1 case per 1,000 live births in all districts</p>	<p>1</p>
<p><u>Vaccine supply, quality and Logistics</u> VVM only available on some vaccines</p>	<p>To ensure that all vaccines procured have VVM available by 2008</p>	<p>2008: All vaccines with VVM 2008: maintain cold chain equipment</p>		<p>2</p>
<p>Occasional stock out of vaccines</p>	<p>To strengthen vaccine management at central level</p>	<p>2008: Establish position of Logistician at national level for EPI</p> <p>2009: Recruit and train a Logistician on stock management software</p>		<p>2</p>
<p>No contract with vaccine suppliers</p>	<p>To develop a well-defined contract with</p>	<p>2008: Discussions held with suppliers</p>		<p>1</p>

Description of problem or national priority	Programme objective	Targets and Milestones	Regional and global goals	Order of priority (By Objective)
	vaccine suppliers by 2009	2009: Finalize contracts and implement		
Inadequate storage space at the Central Medical Stores (CMS)	To expand storage facilities at central level by 2010	2010: Extension of CMS completed		2
No back up power supply in all peripheral health facilities	To install back-up generators in all health facilities by 2010	2009: Purchase and install generators in 4 health facilities 2010: Purchase and install generators in 6 health facilities 2011: Purchase and install generators in an additional 6 facilities		2
<u>Injection safety and waste management</u> AD syringes for EPI not yet introduced in Seychelles	To improve injection safety and waste management practices by 2010	2008: Sensitize policy makers on the need for ADs 2009: Obtain funding for ADs as a separate budget line 2009: Purchase and introduce ADs into EPI	By 2009, all countries will adopt and implement technologies for safe disposal and destruction of injection materials and other sharps (AFRO)	2
Inadequate understanding and utilization of waste disposal guidelines	To review, disseminate and utilize WHO guidelines on waste disposal	2008: Review and adapt guidelines 2009: Disseminate and implement guidelines		1

Description of problem or national priority	Programme objective	Targets and Milestones	Regional and global goals	Order of priority (By Objective)
<u>Advocacy and communication</u> Inadequate sensitization and follow up of the general public	To review, update and implement the EPI component of the national communication plan by 2012	2008: Consultative meetings with stakeholders to determine needs 2009: Update, disseminate and implement EPI communication plan 2012: Evaluate communication plan		2
High prices for vaccine supplies due to low demand	To advocate for group procurement of vaccines with self-procuring countries in the sub-region by 2012	2009: Initiate discussions with relevant decision makers 2012: Finalize agreements on group procurement with other countries		2
<u>Surveillance</u> Unavailability of some laboratory confirmation tests locally	To introduce and sustain antigen tests locally by 2012	2010: Train laboratory personnel 2011: Upgrade facilities 2012: Introduce selected tests locally	By 2009, all at-risk countries will have capacity for lab diagnosis of Yellow Fever	2
Disease surveillance operating at less than full capacity	To establish a timely and prompt reporting, response and action system on morbidity/mortality and AEFI by 2008	2008: 100% completeness and at least 80% timely reporting especially for VPDs by new residents	By 2009, all countries will report cases of AEFI from all districts By 2007, all countries will achieve at least 2 cases of AFP notification per 100,000 (AFRO) By 2009, all countries will have established case-based surveillance for neonatal tetanus	1

Description of problem or national priority	Programme objective	Targets and Milestones	Regional and global goals	Order of priority (By Objective)
<u>Program Management</u> a)Policy, Planning and Management Lack of EPI policy b)Monitoring and evaluation Incompleteness and lack of data on timeliness of reporting for all diseases including VPDs	To finalize the EPI Policy by 2008	2008: Establish a committee to finalize the EPI Policy; Finalize and disseminate the policy		1
	To increase and sustain routine reporting of diseases from all reporting sites by 2012	2008: All staff oriented on reporting 2008-2012: Supportive supervisory visits conducted		2
<u>Sustainable Financing</u> Donor dependence for purchase of cold chain equipment	To gradually take up the cold chain equipment budget by 2009	2008: Cold chain replacement plan available 2009: Cold chain replacement plan financed from government resources	By 2009, countries will be contributing at least 30% of annual vaccines purchase costs	2
<u>Human Resources Capacity</u> Lack of multi-skilled human professionals involved in EPI	To train supportive and other staff on EPI by 2012	2008: Develop a training plan which identifies personnel to be trained; Conduct training workshops 2010: Refresher training for all staff		2
Understaffing of EPI at national level	To establish and recruit positions of Logistician and Data Clerk	2008: Establish positions 2009: Recruit and train Logistician and Data Clerk		2
Unavailability of an Epidemiologist	To train and retain at least 1 Epidemiologist at the central level by 2009	2009: Availability of an Epidemiologist by 2009		2

4. STRATEGIES, KEY ACTIVITIES AND TIMELINE, SEYCHELLES 2008-2012

Table 4.1: Strategies, Key activities and Timeline, Seychelles 2008-2012

Programme objective	Strategies	Key Activities	2008	2009	2010	2011	2012
<u>Service Delivery</u> To attain and maintain 100% coverage for all EPI vaccines by 2012	Advocacy and social mobilization	Production of BCC materials					
	Defaulter tracing	Follow up defaulters by telephone					
		Conduct home visits					
		Involve social workers in following up defaulters					
<u>New vaccine introduction</u> To introduce Hib vaccine (pentavalent formulation) into the national immunization schedule by 2009	Finalize the introduction of Hib vaccine in the national immunization schedule	Follow up approval of proposal for introduction					
		Establish a working group					
		Assess implications of new vaccine introduction on immunization schedule					
		Purchase vaccines and injection materials					
		Review monitoring tools					
	Assess storage and cold chain capacity	Vaccine storage and management assessment					
	Resource mobilization	Advocate for additional resources from the Government					
	Capacity building	Training of staff on new vaccines					
	Advocacy	Sensitize public and disseminate BCC materials					
Intensify surveillance system for Hib Meningitis	Monitor trends of Hib Meningitis using the existing sites						
To establish burden of disease for possible future introduction	Operational research	Identify the potential vaccines for new introduction					
		Initiate research and cost-effectiveness studies					
	Surveillance	Establish surveillance system for identified diseases					

Programme objective	Strategies	Key Activities	2008	2009	2010	2011	2012
<u>Accelerated disease control</u> To maintain polio-free status and certification-standard surveillance indicators	Strengthen monitoring and supervision	Expand surveillance system to include routine screening all children entering the country for vaccination status					
		Regular supervision of health facilities					
To maintain 0% mortality due to measles and neonatal tetanus	Maintain high immunization coverage for measles and neonatal tetanus	Ensure and sustain routine EPI service delivery to all target age groups					
<u>Vaccine supply, quality and logistics</u> To ensure that all vaccines procured have VVM available by 2008	Universal use of VVM	Procure vaccines with VVM for future use					
		Sustain and monitor use of VMM					
To install back-up power supply in all peripheral health facilities by 2010	Use of generators	Purchase and install 4 generators					
		Purchase and install 6 additional generators					
		Purchase and install 6 additional generators					
		Purchase spare parts and consumables					
To strengthen vaccine management at all levels	Strengthen logistics management	Establish a post of Logistician and recruit at EPI programme level					
		Train Logistician in stock management					
		Purchase computer and accessories for stock management					
To develop a well-defined contract with vaccine suppliers by 2009	Advocate with Procurement Committee	Consensus meetings with relevant stakeholders					
		Finalize contract					

Programme objective	Strategies	Key Activities	2008	2009	2010	2011	2012
To expand storage facilities at central level by 2010	Construction	Initiate and finalize construction of stores					
		Equip expanded stores with cold chain facilities					
<u>Injection safety and waste management</u> To improve injection safety and waste management practices by 2010	Advocacy for introduction of ADs	Prepare rationale for ADs introduction					
		Sensitisation of key stakeholders on benefits of ADs					
		Advocate for separate budget line for ADs					
		Sensitize public					
	Resource mobilization	Request for adequate budget for ADs					
	Capacity building	Train health workers on use of ADs					
		Provide orientation to health workers on AEFI monitoring and management					
	Maintain cold chain equipment and improve waste disposal practices	Replace and maintain cold chain equipment					
		Review and update waste management guidelines					
		Disseminate and implement guidelines on waste disposal					

Programme objective	Strategies	Key Activities	2008	2009	2010	2011	2012
<u>Advocacy and communication</u> To review, update and implement the EPI component of the national communication plan by 2012	Advocacy	Consensus meetings with stakeholders including NGOs					
		Review of integrated plan to incorporate and update EPI component					
		Production and dissemination of BCC materials					
		Conduct integrated health promotion activities e.g. childrens' day					
	Resource mobilization	Request for budget for social mobilization					
To advocate for group procurement of vaccines with self-procuring countries in the sub-region by 2012	Advocacy	Develop proposal for group procurement					
		Hold consultations with potential partners					
		Sensitize and advocate with Procurement Committee					
<u>Surveillance</u> To expand and sustain local laboratory capacity for antigen testing by 2012	Capacity building	Assess cost effectiveness of local testing					
		Train appropriate personnel					
		Equip the laboratories and initiate testing					

Programme objective	Strategies	Key Activities	2008	2009	2010	2011	2012
Program Management a) Policy, Planning and Management To finalize the EPI Policy by 2009	Consultations and in-depth discussions	Revive the task team to finalize policy					
		Incorporate switch to pentavalent vaccine formulation					
		Share draft policy with all stakeholders					
		Finalize and follow up approval process					
		Disseminate and implement policy					
b) Monitoring and evaluation To increase and sustain the completeness and timeliness of routine reporting of diseases from all reporting sites by 2012	Sensitization	Conduct orientation of health workers in importance of timely and complete reporting					
	Integrated supervision	Conduct supervisory visits at health facility level every 2 months with other Child and Maternal Health Programs					
		Establish supervisory visits by trained EPI Nurses					
	Feedback	Establish a task team including key partners to regularly meet and review progress in performance and obstacles					
Sustainable Financing To gradually take up the cold chain equipment budget by Government by 2009	Advocacy at high-level of MoH and Ministry of Finance	Prepare cold chain replacement plan and annual budget for cold chain equipment from cMYP					
		Present and discuss budget with decision-makers; procurement of equipment					

Programme objective	Strategies	Key Activities	2008	2009	2010	2011	2012
Human Resources Capacity To train supportive and other staff on EPI by 2012	Resource mobilization	Obtain approval for training plan					
		Present budget and request for funds for training					
	Capacity building	Orientation of drivers, Environmental Health Staff, Central Medical Stores and other relevant staff on handling of vaccines					
		Conduct joint/ integrated training programmes for health workers					
To establish and recruit positions of Logistician and Data Clerk	Advocacy	Define job descriptions					
		Advocate for establishment of identified positions					
	Resource mobilization	Mobilize resources from Government to sustain the established posts					
		Recruit and train Logistician and Data Clerk					
To train and retain at least 1 Epidemiologist at the central level by 2009	Capacity building	Support training of identified Epidemiologist					
		Deploy Epidemiologist in the MoH					

5. COSTING AND FINANCING OF MULTI YEAR PLAN

5.1 Costing and Financing Methodology

The costing of this cMYP for Seychelles is based on the priorities set out in the programmatic section of the plan (section 3). A situation analysis was conducted identifying the strengths and weaknesses of the programme, leading to the setting of national objectives and priorities for the period 2008-2012. The national objectives have been linked with those of the 10 year Health Sector Strategic Framework (2006-2016), which starts in 2006 and expires few years after the duration of the cMYP. The costing was done using the standard cMYP costing tool version 3.1.

Seychelles is one of the countries with very good health statistics including immunization data. Therefore, the baseline data on expenditure on cold chain, transport and personnel were readily available from routine statistics. Coverage and wastage targets for 2008-2012 were obtained from previous reports, WHO-UNICEF Joint Reporting Forms (JRF). The EPI Manager, Pharmacy Technician, Transport Coordinator, Purchasing Manager, Laboratory Technician, and other personnel, helped in filling some of the data gaps on coverage, vaccine management, cold chain, logistics and distribution and in some cases prices and costs. However, since EPI is one of several health services provided at the health facilities, and the fact that EPI does not add any incremental cost to the building use, no emphasis was placed in getting accurate data for this aspect of costing.

Standard programme inputs such as vaccines, injection materials and cold chain equipment were costed using the prices Seychelles pays as a self-procuring country. This is because all the EPI supplies in Seychelles are purchased through Government. Operational costs for routine and supplementary immunization activities were based on past expenditure. SIAs have not been costed because with coverage of above 98% for all antigens, this method of increasing coverage was found not to be necessary in the setting. The staff cost was based on the integrated government pay scale available in the 2007 national budget and the allowances were obtained from staff members themselves.

The financing information was obtained from past expenditures of the Government and the only Immunization partner in the country, WHO.

The future costing and financing for the EPI programme (2008-2012) are in line with the National Health Strategic Plan and aligned with the budgeting period, which takes place every April.

The future cMYP costing is based on the following assumptions:

- Increase and maintenance of coverage for traditional vaccines
- Reduction of dropout rate
- Reduction of vaccine wastage
- Phasing out of DTP and HepB at the end of 2008
- Introduction of pentavalent vaccine (DTP-HepB-Hib) in 2009

5.2 Cost analysis

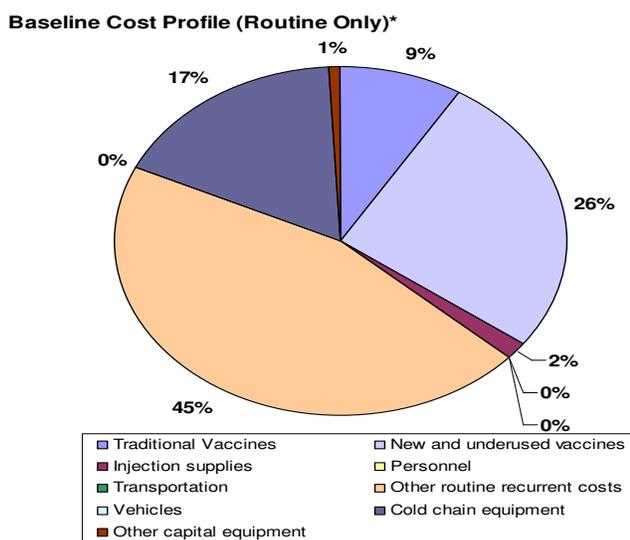
The total cost of immunization programme in Seychelles in the baseline year of 2006 was approximately \$88,000. This represents the cost for routine activities only as Seychelles with its high coverage of 98% for all antigens did not need any supplemental immunization activities. The cost per capita was \$1. The cost of fully immunized child, which is measured through DTP3 was 54.6% in the baseline year. This represents a high proportion compared to other countries. However, the island terrain of the country could explain the reason for the high figure. The rest of the routine indicators are as indicated in the Table 5.1. The total cost of immunization in Seychelles including shared cost was \$184,108 with the shared costs accounting for 52% of this total. The shared cost represents the cost of common staff who also conducts EPI activities at mainly health facility level. These include the EPI Manager, Director of Support Services who also support Polio Surveillance activities, Laboratory staff and about 37 nurses at the various health facilities.

Table 5.1 Funding Gaps and Selected Indicators (Immunization Specific Costs), Seychelles cMYP

Baseline Indicators	2006
Total Immunization Expenditures	\$87,705
Campaigns	
Routine Immunization only	\$87,705
per capita	\$1.0
per DTP3 child	\$54.6
% Vaccines and supplies	36.7%
% National funding	71.3%
% Total health expenditures	0.2%
% Gov. health expenditures	0.2%
% GDP	0.01%
Total Shared Costs	\$96,403
% Shared health systems cost	52%
TOTAL	\$184,108

The cost profile of the immunization programme in Seychelles shows that 45% of the total cost went to other routine current costs followed by New and Underused vaccines (HepB) (26%), cold chain equipment (17%) and traditional vaccines (9%). The rest comprises ‘other cold chain equipment’ and injection materials. From the above, it is clear that the two main cost drivers of the EPI in Seychelles in 2006 were other routine costs and New and Underused vaccines. The details of the costs apportionment in percentages are shown in Figure 3.

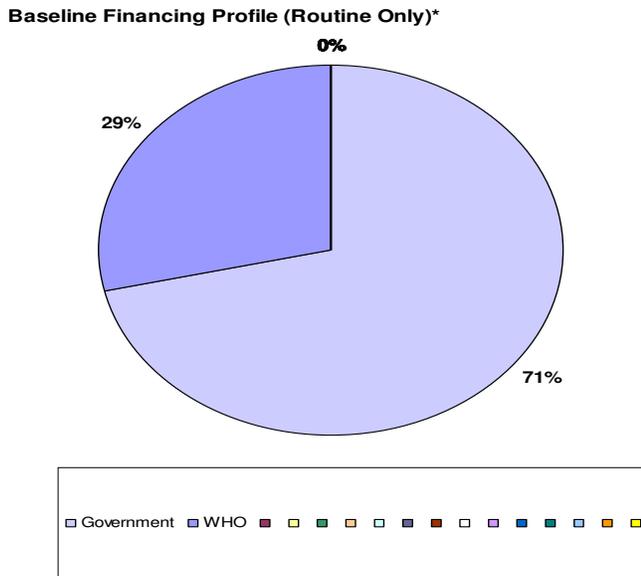
Figure 3: Baseline Cost Profile, Seychelles, 2006



5.3 Baseline Financing Profile

Seychelles is one of the few countries in Africa that relies on its own resources to finance immunization programme. The only immunization partner in the country is WHO that provides catalytic funding for polio surveillance including provision of an IDSR vehicle and purchase of cold chain equipment. Figure 4 shows that the Government of Seychelles financed 71% of the immunization budget with the remaining 29% provided by WHO.

Figure 4: Baseline Financing Profile, Seychelles, 2006



5.4 Future Resource Requirements

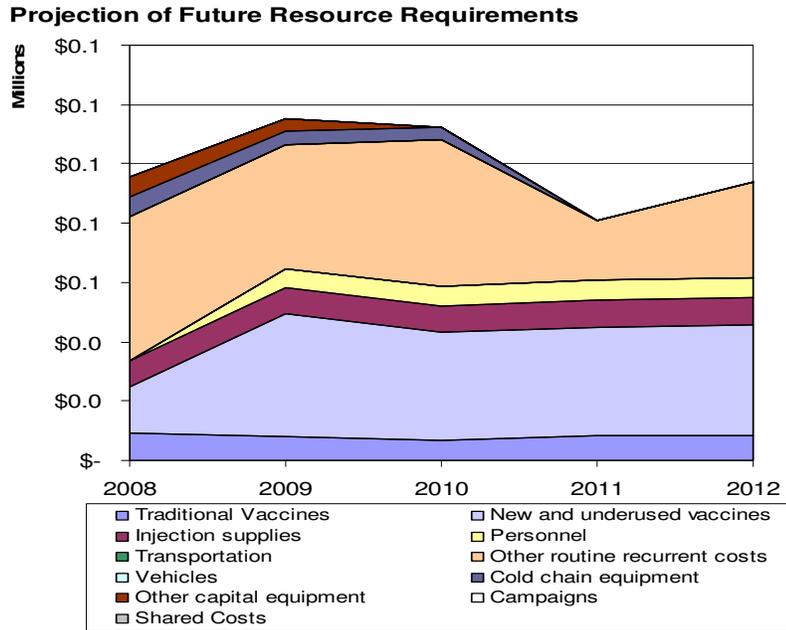
The total resource requirements of the immunization programme for the planning period (2008-2012) is approximately half a million (\$498,399) United States Dollars as shown in Table 5.2. The requirement translates into an average of \$100,000 per annum for the programme. The resource requirement in terms of per capita expenditure represents only \$1 per person per annum. The range for a fully immunized child is \$48-\$69 with the lowest being the cost in 2011 and the highest in 2009. This could be mainly explained by the proposed introduction of pentavalent vaccine in 2009 which will cost \$41,000 in the first year of introduction. Out of the total resource requirement for the planning period, vaccines and supplies represent an average of 51% with a range of 35%-67%. The lowest represent the proportion in 2008 and the highest in 2011. However, with the transfer of vaccine purchasing to the Central Medical Stores (CMS), it is anticipated that the prices will fall leading to savings in vaccine purchasing cost. It must be emphasised that the vaccine costs were estimated based on mainly the prices the government pays to private suppliers.

Table 5.2 Resource Requirements, Financing and Gaps*, Seychelles, 2008-2012

	2008	2009	2010	2011	2012	2008 - 2012
Total Resource Requirements	\$95,714	\$115,431	\$112,538	\$81,027	\$93,689	\$498,399
Annual growth rate	8%	17%	-3%	-39%	14%	
Total Resource Requirements (Routine only)	\$95,714	\$115,431	\$112,538	\$81,027	\$93,689	\$498,399
per capita	\$1.1	\$1.3	\$1.2	\$0.9	\$1.0	\$1.1
per DTP targeted child	\$58.2	\$69.4	\$66.9	\$47.6	\$54.4	\$59.2
% Vaccines and supplies	35%	51%	46%	67%	59%	51%
Total Secured Financing	\$47,195	\$57,585	\$57,351	\$71,027	\$38,393	\$271,551
Government	\$47,195	\$57,585	\$57,351	\$71,027	\$38,393	\$271,551
WHO						
Funding Gap (with secured funds only)	\$48,519	\$57,846	\$55,187	\$10,000	\$55,296	\$226,848
% of Total Needs	51%	50%	49%	12%	59%	46%
Total Probable Financing	\$48,519	\$57,847	\$55,186	\$10,000	\$55,296	\$226,848
Government	\$38,519	\$47,847	\$45,186		\$45,296	\$176,848
WHO	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000
Funding Gap (with secured & probable funds)	\$0	-\$1	\$1	\$0	\$0	\$0
% of Total Needs	0%	0%	0%	0%	0%	0%

From Table 5.2 and Figure 5, the total resource requirement for EPI increased from 2008 to a peak in 2009 and then stabilised at the same level in 2010 before decreasing to the level in 2011. It increases slightly in 2012. With the introduction of pentavalent vaccine, the main cost drivers are New and Underused vaccines and other recurrent resources. The cold chain requirements in terms of equipment have steadily increased until after the introduction of pentavalent and then dropped. However, as shown in Figure 5, the increase has been very minimal. The main reason is that the introduction of pentavalent will mean withdrawing both DTP and HepB from the vaccine schedule thereby leading to minimal increase if any in the cold chain capacity.

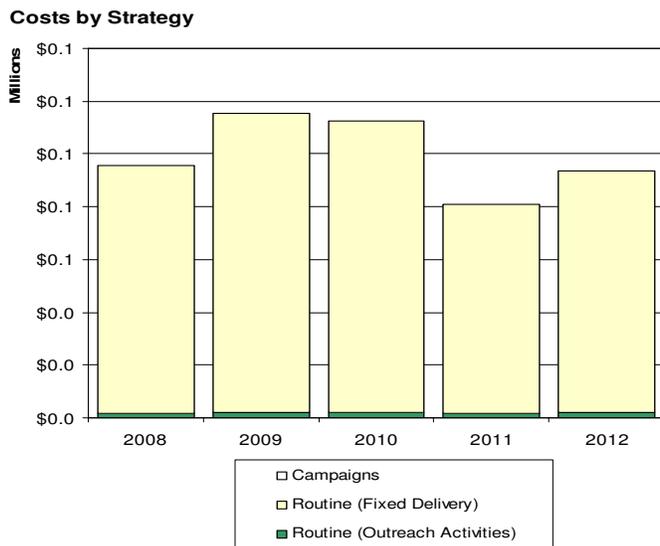
Figure 5: Projection of Future Resource Requirements, Seychelles, 2008-2012



5.5 Cost by strategy

In terms of immunization strategies, only Fixed and Outreach are used as the two main ways of delivery immunization services to the population. As shown in Figure 6, the bulk of the programme is delivered through fixed strategy and only a small proportion through five outreach sites. A total 2% of health staff is spent in outreach activities.

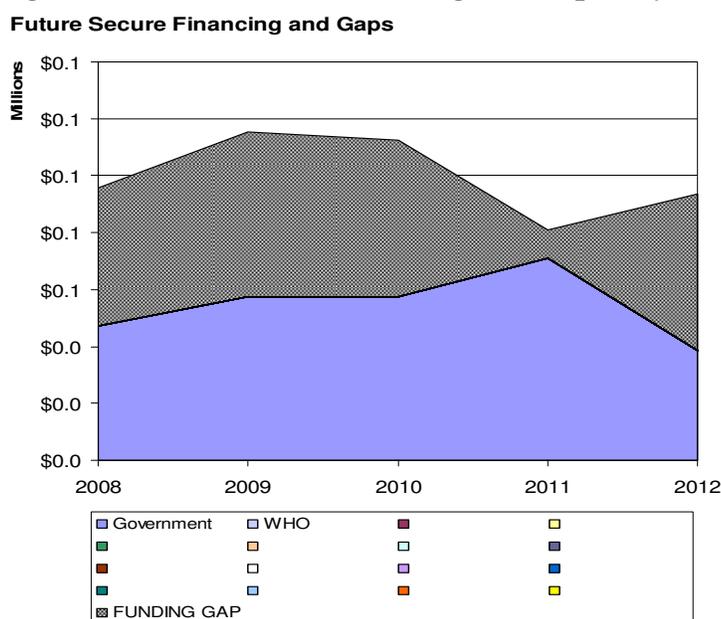
Figure 6: Costs by Strategy, Seychelles, 2008-2012



5.6 Secure Funding

Out of the total immunization resources required from 2008-2011, approximately \$272,000 have been secured while the rest is categorised under probable funding. By taking only secure funding into account, the average funding gap represents 46% of the total funding requirement for the planning period. The funding gap range is 12-59 with the lowest in 2011 and the highest in 2012. The details of the gaps by considering only secure funding are shown in Figure 7.

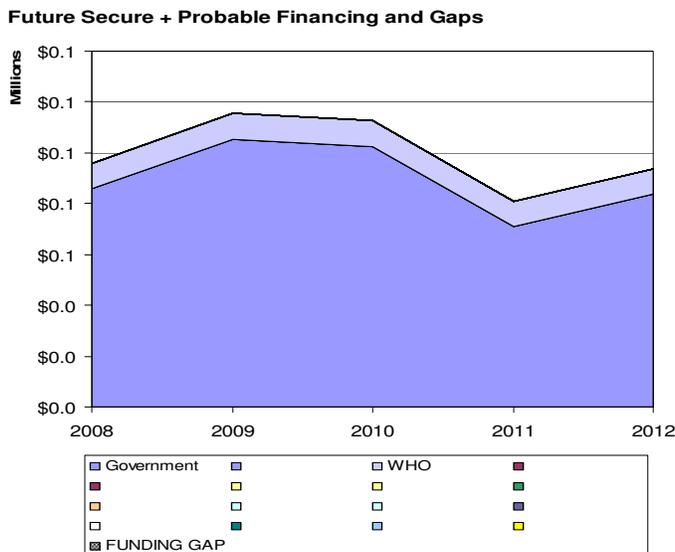
Figure 7: Future Secure Financing and Gaps, Seychelles, 2008-2012



5.7 Secure and Probable Funding

Probable funding falls into two categories. The first represents new lines of funding not directly paid for previously by the government to support immunization. The second is the WHO funding to support immunization in Seychelles which is pegged at \$10,000 per annum. WHO support to countries mainly depends on the amount of overall donor funds the organisation is able to generate. By taking both the secure and probable funding into account, the funding gaps with secure and probable funding is zero because there is clear evidence that government of Seychelles could fully financed its immunization programme with less difficulty. With an annual health budget of \$24.2 million in 2007, an average EPI resource requirement of \$100,000 represents only 0.4% of the total health budget.

Figure 8: Future Secure and Probable Financing and Gaps, Seychelles, 2008-2012



5.8 Scenario building

In order to inform policy decision-makers on the financial implication of introducing pentavalent vaccine, the costs of introduction and maintaining the status quo were compared as shown in Table 5.3. The incremental cost to vaccine cost was found to be around \$82,000 for four years. This means an average additional expenditure per annum of about \$20,000. The detail comparison of the two scenarios are shown in Table 5.3

Table 5.3 Scenario Building, Seychelles, 2008-2012

Resource Requirements, Financing and Gaps*	2008	2009	2010	2011	2012	2008 - 2012
Total Resource Requirements (Pentavalent)	95,714	115,431	112,538	81,027	93,689	498,399
Total Resource Requirements (Status quo)	95,714	91,203	93,529	61,795	74,232	416,473
GAP	0	24,228	19,009	19,232	19,457	81,926

6. Annual Work Plan, Seychelles, 2008

Objectives	Activity	Indicator	Person responsible	Time frame	Total Budget	Source of Funding		
						Govt	Partners	GAP
Service Delivery To attain and maintain 100% coverage for all EPI vaccines by 2012	Production and dissemination of BCC materials	Availability of BCC materials in health facilities	Health Promotion Manager	Jan-Dec	4,000	4,000		0
	Follow up defaulters by telephone	100% coverage for all antigens	EPI Nurses	Jan-Dec	0			0
	Conduct home visits to immunize defaulters	„	EPI Nurses	Jan-Dec	1,500	1,500		0
	Involve social workers in following up defaulters	„	EPI Nurses	Jan-Dec	0			0
New vaccine introduction To introduce Hib vaccine (pentavalent formulation) into the national immunization schedule by 2009	Follow up approval of the proposal to MoH for new vaccine introduction	MoH approval obtained	Director Community Health	Jan	0			0
	Advocate for additional resources from the Government	Resources for new vaccine available	Director Community Health	Jan	0			0
	Establish a working group to oversee the new vaccine introduction	Working group in place	EPI Manager	February	0			0
	Assess implications of new vaccine introduction on the immunization schedule	Number of meetings of working group	EPI Manager	Feb-Mar	477	477		0
	Conduct a vaccine storage and management assessment	Assessment report available	EPI Manager	June	3,000	3,000		0
	Review and revise monitoring tools	Updated monitoring tools available	Statistician	June	1,000	1,000		0
	Purchase vaccines and injection materials	No stock outs of vaccines and injection materials reported	Director Drugs and Supplies	Mar	33,274	33,724		0
Accelerated disease control	Expand the surveillance system to include routine	Screening of children at immigration points	Environmental Health Officer	Oct	16,728	6,728	10,000	0

Objectives	Activity	Indicator	Person responsible	Time frame	Total Budget	Source of Funding			
						Govt	Partners	GAP	
To sustain polio, measles and MNT surveillance performance	screening for all children entering the country for vaccination status	initiated							
	Regular supervision of health facilities	Number of supervisory visits conducted	EPI Manager	Jan-Dec	5,000	5,000		0	
<u>Vaccine supply, quality and logistics</u>	Procure vaccines with VVM for future use	Number of vaccines with VVM	Director Drugs & Supplies	Mar-Dec	0			0	
	To ensure that all vaccines procured have VVM available by 2008	Sustain and monitor the use of VMM	EPI Manager	Mar-Dec	0			0	
To develop a well-defined contract with vaccine suppliers by 2009	Conduct consensus meetings with relevant stakeholders	Number of meetings held	Director Drugs & Supplies	Jan	2,000	2,000		0	
<u>Injection safety and waste management</u>	Prepare rationale for ADs introduction	Rationale available	EPI Manager	Aug	0			0	
	To improve injection safety and waste management practices by 2010	Sensitisation of key stakeholders on benefits of ADs	Number of sensitization meetings held	Sept	0			0	
		Replace and maintain cold chain equipment	Number functioning cold chain equipment in place	EPI/Maintenance unit	Jan-Dec	13,107	13,107		0
		Advocate for separate and adequate budget line for ADs	Separate budget line for ADs	Director Community Health	Aug	0			0
		Review, update and disseminate waste management guidelines	Waste management guidelines reviewed and disseminated	Environmental Officer	Jan-Mar	1,000	1,000		0
<u>Advocacy and communication</u>	Consensus meetings with stakeholders including NGOs	Number of meetings held	Health Promotion Manager	Jan-Dec	2,000	2,000		0	
To review, update and									

Objectives	Activity	Indicator	Person responsible	Time frame	Total Budget	Source of Funding		
						Govt	Partners	GAP
implement the EPI component of the national communication plan	Review of integrated plan to incorporate and update EPI component	EPI component updated in integrated communication plan	Health Promotion Manager	Jan-Mar	1,500	1,500		0
	Conduct integrated health promotion activities e.g. Childrens' Day	Children's Day conducted	Health Promotion Manager	June	3,548	3,548		0
Program Management a)Policy, Planning and Management To finalize the EPI Policy by 2009	Revive the task team to finalize policy	Task team in place	EPI Manager	February	2,040	2,040		0
	Incorporate switch to pentavalent vaccine formulation in the policy	New vaccine formulation included in the EPI policy	EPI Manager	Feb-Mar	0			0
	Share draft policy with all stakeholders		EPI Manager	Mar	1,800	1,800		0
	Finalize and follow up approval process		EPI Manager	Apr	0			0
	Disseminate and implement policy	Policy disseminated	EPI Manager	Apr-Dec	2,000	2,000		0
b)Monitoring and evaluation To increase and sustain the completeness and timeliness of routine reporting of diseases from all reporting sites by 2012	Conduct orientation of health workers on importance of timely and complete reporting	Number of orientation meetings held	Statistician		1,800	1,800		0
	Conduct supervisory visits at health facility level every 2 months with other Child and Maternal Health Programs	Number of supervisory visits held	EPI Manager and IDSR Team	Jan-Dec	2,500	2,500		0
	Establish supervisory visits by trained EPI Nurses	Number of supervisory visits conducted by trained EPI Nurses	EPI Trained Nurses	Jan-Dec	0	0		0

Objectives	Activity	Indicator	Person responsible	Time frame	Total Budget	Source of Funding		
						Govt	Partners	GAP
	Establish a task team including key partners to regularly meet and review progress in performance and obstacles	Task team in place	Director Community Health	Jan-Dec	500	500		0
<u>Sustainable Financing</u> To gradually take up the cold chain equipment budget by Government by 2009	Compile annual budget for cold chain equipment from cMYP	Annual budget for equipment and maintenance available	EPI Manager	Sept	2,000	2,000		0
	Present and discuss budget with decision-makers		EPI Manager	Sept-Oct	0	0		0
<u>Surveillance</u> To expand and sustain local laboratory capacity for antigen testing by 2012	Assess cost effectiveness of local laboratory testing	Cost effectiveness report available	Director Public Laboratory	June	800	800		0
<u>Human Resources Capacity</u> To train supportive and other staff on EPI by 2012	Obtain approval for training plan	Approval obtained	EPI Manager	Apr	0	0		0
	Present budget and request for funds for training	Funds for training available	EPI Manager	May	0	0		0
	Orientation of drivers, Environmental Health Staff, Central Medical Stores and other relevant staff on handling of vaccines	Number of orientation sessions conducted	EPI Manager	July	3,600	3,600		0
To establish positions of Logistician and Data Clerk	Define the job descriptions and advocate for establishment of positions	Approval for establishment of posts obtained	EPI Manager	Mar - June	0	0		0

7. CONCLUSION AND RECOMMENDATION

This concludes the comprehensive Multi-Year Plan for the EPI of Seychelles. The process of producing the cMYP has been beneficial to the management of EPI in highlighting key areas where sustained effort is needed in 2008 and beyond to further improve the EPI programme. The EPI through the Directorate of Community Health will submit this plan to the Senior Management of MoH Seychelles to secure the additional resources needed for the introduction of the pentavalent vaccine as well as for the smooth functioning of the EPI in general. It seeks commitments from the WHO to support the efforts to enhance the effectiveness of the EPI which impacts directly, on the reduction of child mortality, and improvement of the health of the target population. The management of EPI is committed to the improvement of the service delivery. This single aim is reflected in the efforts of all our personnel on a daily basis. We will strive to achieve the goals set. We thank the Senior Management for their past support and we look forward to their continued support in the achievement of the objectives set out in the cMYP of Seychelles 2008-2012.