East, Central and Southern Africa Health Community

Fostering Regional Cooperation for Better Health

STATE OF HEALTH IN THE ECSA HEALTH COMMUNITY

2ND EDITION

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Acronyms

<5 MR	Under five Mortality Rate
AMO	Assistant Medical Officer
ANC	Antenatal care
ECSA HC	East, Central and Southern Africa Health Community
ECSA HQ	East, Central and Southern Africa Headquarters
CBR	Crude Birth Rate
CDR	Crude Death Rate
CPR	Contraceptive Prevalence Rate
DHS	Demographic and Health Survey
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
HRH	Human Resources for Health
IMR	Infant Mortality Rate
M&E	Monitoring and Evaluation
MNCH	Maternal Neonatal and Child Health
MDG	Millennium Development Goal
MMR	Maternal Mortality Ratio
NMR	Neonatal Mortality Rate
TFR	Total Fertility Rate
UHC	Universal Health Coverage

Acknowledgement

Statement from the Director General

In October 2015, the global community through an elaborate process agreed to undertake a number of actions, which will lead to realization of 17 goals by 2030; the Sustainable Development Goals (SDGs). The realization of the goals is instrumental for human wellbeing as they address, among others, issues of health, equity, environmental sustainability, poverty and human capital development. As a key player in health in the region, the ECSA-HC through its Secretariat will support member countries in the designing and implementations of policies and programmes that will contribute to the realization of the SDGs specific for health, **i.e. ensure healthy lives and promote wellbeing for all at all ages**. The secretariat through its various programmes will also support actions meant to achieve other health-related SDGs targets.

Monitoring and evaluation of progress will be instrumental to ensure that member states are on track, and if not, diagnosing the glitches impeding progress and instituting measures for circumventing the challenges. In addition, periodic comparison of progress across ECSA member states will initiate and catalyse the process of sharing and learning best and promising practices. However, there is need to have a benchmark or baseline against which we can say progress has been or is being made. It is against this background that the Secretariat, in consultation with the member states, and in light of the recent global agreements on SDGs, published this State of Health Report 2015, to provide a baseline on health indicators that we can refer to as a Health Community when assessing progress.

This second edition report of the State of Health in the ECSA-HC brings to light the measurable progress that member states have made in improving the health of the population. For example, most ECSA countries experienced a decline in Neonatal, Infant and Under 5 mortality rates; maternal mortality ratio; and increase in Contraceptive Prevalence Rate. However, these improvements have not been uniform across member states. Some countries have shown stagnation, staggered improvement or even worsening in some health indices, between 2001 and 2015. Also, noticeable in this report, is the inadequate Human Resources for Health in almost all member states with the exception of Mauritius. While the WHO recommends two doctors per 10,000 people, Zambia, Zimbabwe, Tanzania and Uganda have less than one doctor per 10,000 people. In many States, out-of-pocket expenditure on health still contributes more than 30% of Total Health Expenditure. This exposes many households to the risk of catastrophic and impoverishing spending and also

counters efforts to achieve other SDGs targets such as ending poverty and malnutrition. This report also highlights the disparity in health service access and thus the health status between the poor and the better-off segment of the population. Achieving SDGs will therefore necessitate ECSA member states to undertake deliberate efforts to address these inequities.

It is our hope that Member States will find this report a useful baseline for assessing health related SDGs targets in the future. It should also serve to identify better performing peers in particular areas, and stimulate learning and adaptation of best practices from each other. Your Secretariat remains committed to providing the required technical support and the platform for reviewing regional progress.

Prof. Yoswa Dambisya

Executive Summary

INTRODUCTION

The East, Central and Southern African Health Community (ECSA-HC) is a regional inter-governmental health organization formed with the aim to promote regional cooperation among member states namely; Kenya, Lesotho, Malawi, Mauritius, Swaziland, United Republic of Tanzania, Uganda, Zambia and Zimbabwe. The vision of the ECSA Health Community is to be the leader in health programs improvement in East, Central and Southern Africa, which contributes towards attainment of the highest standard of physical, mental and social wellbeing of the people in the member states member states. This is through promotion of experience sharing and best practices and facilitating capacity building.

One of the roles of the ECSA Secretariat is to support member states to monitor and document progress in health services development by collecting, analyzing and facilitating utilization of data for decision making. ECSA Health Community also supports development and dissemination of standard data collection tools to ensure uniformity for the purpose of comparison between states. In line with this role, ECSA Secretariat organized a series of meetings to establish and refine core indicators for monitoring health status in the ECSA member states.

This second edition follows the first edition produced in 2011. The main focus in this edition is to report indicators that will set a baseline in monitoring progress toward achieving Health related SDGs targets.

METHODOLOGY

The indicators developed by the core group and accepted by member states were used in the preparation of this document. Data were obtained from reports by respective Ministries of Health M&E units to ECSA Secretariat. Other sources were used to augment on reports from the respective member countries these included the Demographic Health Surveys and International organizations such as United Nation, the WHO and the World Bank.

This report presents the State of Health in ECSA region with a focus on outcome and impact indicators. A few key input and output indicators including human resources and finance are also reported in order to provide a comprehensive picture. In this edition, the following thematic areas are

reported; demographic and social-economic status of member states; health systems data such as finance and human resource; Reproductive, Maternal, Neonatal and Child Health; Nutrition status among under-five children; Malaria, HIV/AIDS and Tuberculosis.

Data analysis was done on health status by indicator type making comparison between countries. Current status applied data spanning from 2011 to 2015. In addition, trend analysis was done using specific time periods using the following intervals - 2001-03; 2004-6; 2007-10 and 2011-15. Trend analysis was done to depict the path, which individual countries passed through since the declaration of the MDGs in the year 2000. This information is important in projecting future strategies in the post-MDG era with particular focus on Universal Health Coverage

RESULTS

SOCIAL DEMOGRAPHIC CHARACTERISTICS

ECSA States are situated in a geographical area covering about 3.0 million square kilometres with a population of about 170 million people. It is comprised of countries of varying geographical (455 to 946,000 sq. km) and population sizes (87,000 to 47.8 m). The population growth rate in four countries, Zimbabwe, Swaziland, Lesotho and Mauritius was less than 2% which is less than the minimum rate required to maintain the existing population. Life expectancy (LE) at birth ranged from 49.4 years in Lesotho to 74.2 years in Seychelles and Mauritius. The relatively low LE in Swaziland (54 years), Zambia (51.6 years) and Lesotho (49.4 years) is explained by high prevalence of HIV/AIDS.

SOCIAL ECONOMIC STATUS IN THE ECSA REGION

ECSA region is comprised of countries with varying level of economic status; four in the low income, five in the middle income and one in the high income group. The GDP varied widely from 0.43 billion (Seychelles) to 60.9 billion per year (Kenya). The relatively wealthier countries had lower GDP; this is partly contributed by smaller population size. GDP growth rate ranged from 3.1% in Mauritius to 7.0 % in Tanzania

SERVICE COVERAGE

The proportion of children completing primary education ranged between 52.4% in Uganda and 100.0% in Mauritius. Over 90% of enrolled children in Mauritius, Seychelles and Lesotho completed primary education. Use of improved drinking water sources in ECSA countries ranged between 53% in Tanzania and 100% in Mauritius. Over 90% of people in Mauritius and Seychelles had access to improved drinking water sources.

HEALTH FINANCING

Countries that are economically better-off had higher expenditures on health compared to low income countries. Total Health Expenditures (THE) per capita varied from 90 PPP International Dollar in Malawi to 937 PPP International Dollar in Seychelles. Swaziland, Mauritius and Seychelles spent more than 500 PPP International Dollars per capita on health. The three countries recorded a faster increase in expenditure by over 200 PPP International Dollar between 2001 and 2013. The low level of expenditure notwithstanding, Tanzania and Malawi had increase in THE per capita by 320% and 275% respectively

General government expenditure on health per capita ranged between 42 and 862 PPP International Dollars in Kenya and Seychelles, respectively. The governments of Seychelles, Swaziland and Mauritius spent more than 400 PPP International Dollars per capita. Of interest, Malawi and Tanzania increased government spending on health by 329% and 235%, respectively, between 2001 and 2013.

Out-of-pocket expenditure (OOPE), as a proportion of THE, ranged between 2.9% in Seychelles and 46.3% in Mauritius. In Mauritius and East African countries, OOPE contributed to more than 30% of THE, risking catastrophic spending at household level. Interestingly, Lesotho and Malawi reduced OOPE as a percent of THE from over 20% to lower values. Tanzania was able to reduce OOPE from 47% in 2001 to 15% in 2007-09, however, failed to maintain the achievement. External funding as a percent of THE, was consistently high in Malawi (over 60%) and lower in Mauritius and Seychelles (below 10%). Kenya and Lesotho experienced a steady increase in external funding throughout the reporting period.

HEALTH WORKFORCE

The ratio of doctors to population varied between 0.01 per 10,000 (Uganda) and 17 per 10,000 population (Seychelles). While Seychelles and Mauritius had more than 10 doctors per 10,000 people, Zambia, Zimbabwe, Tanzania and Uganda had less than one doctor per 10,000 people. WHO recommends 2 doctors per 10,000 population. Mauritius and Seychelles reported an increase in doctor: population ratio of 5 per 10,000 and 17 per 10,000 respectively between 2004 and 2015. A similar pattern was observed with nurse: population ratio.

MATERNAL, NEONATAL AND CHILD HEALTH CARE

Neonatal Mortality Rate (NMR) varied between 9.1 per 1,000 live-births (Mauritius) to 33 per 1,000 live-births (Swaziland). Apparently, Seychelles had a higher NMR (31%) compared to Uganda (22%). NMR in the lowest quintile was higher compared to the highest quintile in Kenya, Lesotho, Zambia and Zimbabwe with a gap ranging between 7 per 1,000 live-births (Zimbabwe) to 16 per 1,000 live-births (Lesotho). The reverse was noted in Tanzania.

Infant Mortality Rate (IMR) ranged between 11.3 per 1,000 live births in Seychelles and 66 per 1,000 in Malawi. IMR was below 20 per 1,000 in Seychelles (11.3 per 1,000) and Mauritius (12.1 per 1,000). IMR in the lowest quintile was higher compared to the highest quintile in most ECSA member states with a gap ranging between 7 and 28 per 1,000 live-births. There was no significant difference in Malawi and Tanzania.

U5 MR ranged between 13.6 per 1,000 live births (Seychelles) and 119.9 per 1,000 (Swaziland). Seychelles and Mauritius had U5 MR below 20 per 1,000 live-births. U5 MR was higher in lowest compared to highest quintile in all ECSA member states. Between 2001 and 2015 a notable decline in U5 MR was noted in Uganda (152 to 57 per 1,000 live-births) and Zambia (168 to 75 per 1,000 live-births).

MMR ranged from 52 per 100,000 live-births (Mauritius) to 675 per 100,000 live-births (Malawi). MMR was lower than 100 per 100,000 in Lesotho and Mauritius and over 500 per 100,000 in Zimbabwe and Malawi. A substantial decline in MMR was noted between 2004 and 2015 in Zambia (729 to 398 per 100,000), Swaziland (589 to 320 per 100,000) and Malawi (807 to 675 per 100,000).

Between 43.8% (Tanzania) and 100% (Mauritius) of births in ECSA region were attended by skilled personnel. Almost all births in Mauritius and Seychelles were attended to by skilled health workers while in Kenya this was less than

half. Births attended by skilled personnel were substantially lower in the lowest quintile compared to highest quintile. Except for Lesotho and Malawi the percent of birth attended by skilled personnel was about 2-fold or more in ECSA member states.

CPR ranged from 30% in Tanzania and Uganda to 76% in Mauritius. Over half of the women in Mauritius, Zimbabwe, Swaziland and Lesotho had access to modern contraceptive methods. In East African countries, CPR in the highest quintile was 2-fold or more higher compared to lowest quintile. Unmet need for family planning varied widely between 3.3% (Mauritius) and 34% (Uganda).

Measles vaccination coverage ranged between 74% (Kenya) and 100% (Seychelles). The WHO recommends coverage of at least 80%; only Kenya had coverage below the cut-off point.

ANC coverage for first visit was over 90% in most ECSA countries except in Uganda (88%). ANC coverage for at least 4-visits ranged between 41.5% (Uganda) and 98.0% (Mauritius). Coverage for at least 4-visits was 70% and above in Swaziland (76.0%), Lesotho (74.4%), Zimbabwe (70.1%) and Mauritius (98.0%). Coverage for at least 4 visits was below 50% in Malawi and the three East African countries. Coverage declined in most ECSA countries during 2004-15, except in Lesotho.

NUTRITION

Low birth weight ranged between 6% in Kenya and 17% in Mauritius. The lowest quintile has a higher likelihood of having LBW in Lesotho, Malawi and Zambia. During the reporting period, LBW increased substantially in Kenya (3.5% to 6%) and Mauritius (14% to 17%). Stunting ranged from 25.5% (Swaziland) to 47.1% (Malawi).A third or more of under-fives in ECSA countries are stunted except in Zimbabwe (28%).

While a quarter of under-fives in Swaziland (25.5%) and Zimbabwe (27.6%) other member countries had over a third of under-fives stunted. The situation was worse in Malawi, where nearly a half of under-fives (47.1%) were stunted. Children from lowest quintile were more stunted compared to highest quintile and the gap was more than double in Kenya and Lesotho. Wasting among ECSA member countries ranged between 2.0% in Swaziland and 9.7% in Zimbabwe. Children from lowest quintile were more wasted compared to highest quintile and the gap was more than double in Kenya; Malawi and Zimbabwe. The gap was more that 4-fold in Lesotho. Underweight ranged between 1.5% in Swaziland and 21% in Tanzania. Children from lowest quintile

were more than 4-fold more likely to be underweight compared to highest quintile in Kenya and Lesotho.

MALARIA

Malaria mortality rate ranged between 0.003 per 100,000 in Swaziland and 79 per 100,000 in Zambia. There were no malaria related deaths in Mauritius and Seychelles. Malaria incidence ranged from 0.026 per 1,000 in Mauritius to 84.3 per 1,000 in Kenya. The use of ITN among under-fives ranged from 30.4% in Kenya to 84.1% in Malawi. The use was less than half in Kenya and Zambia. Use of ITN among under-fives in the lowest quintile was higher compared to the highest quintile. The gap was substantial in Kenya (22.1%). An increase in the use of ITN in under-fives was noted in all countries except in Kenya that had decline of 22% (52% to 30%). In the period 2004-2015 Uganda and Malawi recorded the highest increase in ITN usage, 41% (44% to 73%) and 69% (15% to 84%), respectively.

HIV/AIDS

Prevalence of HIV ranged between 0.87% (Seychelles) and 32.1% (Swaziland). HIV was comparatively higher in Lesotho (22.9%) and Swaziland (32.1%). A decline in HIV prevalence among adults was reported in most ECSA countries. However, an increase was noted in Swaziland (5.9%; 26.2% to 32.1%) and in Uganda (0.9%; 6.4% to 7.3%).

Access to ARV ranged from 39.7% in Tanzania to 100% in Swaziland. Less than half of the eligible in Tanzania and Mauritius had access to ARV. Access to ART increased in all ECSA countries between 2007and 2015; except in Tanzania, where a decline of 42% (82% to 40%) was noted.

Comprehensive knowledge ranged between 34.3% in Lesotho and 81.0% in Mauritius. Comprehensive knowledge was invariably lower in the lowest compared to highest quintile. A marked decline in comprehensive knowledge was noted in Swaziland (30%; 80%-50%). Condom use at last high-risk sex ranged between 17.2 (Kenya) and 81.9% (Swaziland). While condom use in the last high-risk sex was 80% or more in Lesotho and Swaziland, less than half of the youths used condom in Kenya, Uganda and Zambia. A notable decline in the proportion of condom use was observed in Kenya (22%; 40% to 17%), Uganda (17%; 50% to 33%) and Zimbabwe (5%; 71% to 66%).

TUBERCULOSIS

Deaths due to TB are an indicator of programme failure in the control of the disease. Tuberculosis mortality varied widely from 1.3 per 100,000 (Mauritius) to 400 per 100,000 (Swaziland). There was no death in Seychelles. TB detection rate ranged between 38% (Swaziland) and 87% (Seychelles). Detection rate was lower than half in Swaziland (38%) and Mauritius (49%). A marked increase in TB case detection rate was observed in Malawi (24%; 46%-70%). TB treatment success rate ranged between 70.3% (Uganda) and 100% (Seychelles).

CONCLUSION

The partnership of countries with different geographical and population sizes and economic status, poses a unique opportunity for individual countries to learn from each other. It also serves as an opportunity for the best performing countries to act as models to inspire other countries. Whereas, for some indicators, some economically better-off countries seemed to perform better, this was not consistent to all the indicators. It is expected that countries with better economy will spend more fund per capita on health. With improved resources inputs it is more likely that these countries would have achieved better health outcomes. These findings underscore the fact that resource input is a necessary but not sufficient factor for better health outcomes. Priority setting, commitment and efficiency in implementing selected strategies can make a difference in a country health status irrespective of the level of economic development.

Except for a few mortality indicators people from the lowest wealth quintile had limited access to health care compared to those who were better-off. Through the ECSA HC, there is need to promote equity dimension in monitoring health status among member states. Findings from this report will be useful when advising member states on the course of direction to take in attaining Universal Health Care.

The ECSA HC Secretariat therefore has a role to play in monitoring and evaluation of implementation of the various strategies with a view to supporting member countries on the direction to take through the adaptation of best practices from other member states. Through such support, countries will be able to improve performance and ultimately obtain value for money.

Finally, in the preparation of this report, some important indicators were left out. This was due to either lack of data for the respective indicator from many countries or differences in the indicator definitions. It is the expectation of ECSA HC Secretariat that in the future, member states will report complete data for all the indicators using the agreed indicator definitions.

1.0   INTRODUCTION

1.1   ECSA Background

The East, Central and Southern African Health Community (ECSA-HC) is a regional inter-governmental health organization situated in Arusha, Tanzania. It was formed with a purpose to promote regional cooperation among member states on matters related to health improvement. It comprises of ten member states namely; Kenya, Lesotho, Malawi, Mauritius, Seychelles, Swaziland, United Republic of Tanzania, Uganda, Zambia and Zimbabwe. Of these nine are active members with the exception of Seychelles. ECSA HC started as Commonwealth Regional Health Secretariat for East, Central and Southern Africa Health Community (CRHS-ESCA) in 1974. In 1980 the organization was transformed to ECSA Health Community (ECSA-HC).

The vision of the ECSA Health Community is to be the leader in health in East, Central and Southern Africa, that contributes towards attainment of the highest standard of physical, mental and social wellbeing of the people in the member states. This is aimed to be achieved through promotion of sharing of experience and best practices and also facilitating capacity building through networking and generation of opportunities in the Community.

ECSA HC has seven Programmes and these are the Health Systems and Services Development (HSSD); Monitoring & Evaluation (M &E); Human Resources for Health and Capacity Building (HRH & CD); Family and Reproductive Health (FRH); Food, Security and Nutrition (FSN); HIV/AIDS/TB & ID and Research Information and Advocacy (RIA).

1.2   Role of the ECSA HC in Monitoring and Evaluation

The role of the ECSA Secretariat is to support member states to effectively plan for, implement and evaluate evidence-informed, cost effective and sustainable interventions. In order to achieve this, the ECSA HC Secretariat has been mandated to monitor progress of member states on health issues that have been deliberated by the Ministers of Health of the respective countries.

In all the ECSA member states efforts are being made to strengthen health system performance focusing on universality in health care access of acceptable quality. This calls for effective monitoring and evaluation to indicate progress, identify bottlenecks and support initiations of appropriate solutions. The ECSA HC Secretariat therefore, need to support member states to collect, analyze and utilize data for decision making as well as to develop evidence based policies and programmes. Such support includes developing and

disseminating standard data collection tools that will ensure uniformity for the purpose of making comparison between States.

The decision to establish core indicators for monitoring was made at the Health Ministers Conference held in February 2010 in Uganda. This was followed by the first meeting that brought together Regional Monitoring and Evaluation (M&E) Experts in Harare, Zimbabwe in July 2010. As an output, the meeting came out with core indicators that were adopted by member states. However, due to some inconsistencies in reporting as a result of lack of uniformity in definitions further deliberations were made on the indicators in a series of meetings convened in Mauritius and Zambia to further develop and refine the regional core indicators for monitoring progress. A monitoring and evaluation core group was formed to deliberate on developing regional core indicators agreeable by member states. Member states used the core indicators to report data that enabled ECSA Secretariat to monitor progress in attaining the various resolutions made by the States through Ministerial meetings.

1.3   The State of Health in ECSA Region – Second edition

This is the second edition of the state of health in the ECSA region following the first edition produced in 2011.In addition to reporting indicators used in the first edition, the second edition has applied indicators that have been refined, to ease comparability. The main focus in this edition will be reporting indicators that will set a baseline in monitoring Universal Health Coverage (UHC). UHC has been defined as access of all people to health services of good quality without financial consequence or hardship. The objective of the ECSA HC Secretariat is to continuously support member countries to expand the range of services to her Citizens without necessarily getting them to pay from their pockets.

Several member states are entering an epidemiological transition with infectious diseases occurring at the same time as non-communicable diseases such as injuries, cardiovascular diseases and cancers. The high cost entailed in the treatment of these conditions is exacerbated by the need for tertiary care for most of the complications. The fact that most of these conditions require continuous care further increases the financial risks to individual households where larger proportion of health expenditure is out-of-pocket. Thus, financing of the health sector and equity dimension in reporting the various indicators have been given profound emphasis in the preparation of the second edition.

The year 2015 has also seen ECSA Health Community entering its 40th Anniversary. With this, a need arose to reflect on the achievements and challenges encountered during the implementation of strategies towards

attaining the MDGs and in preparation for the post MDG era. This has been considered in the preparation of the second edition.

1.4   Methodology

The indicators developed by the core group and accepted by member states were used in the preparation of this document. Most of the data used in this document were derived from reports by respective Ministries of Health M&E units to ECSA Secretariat. However, despite the success in reporting data for the second edition from member countries, data on some of the indicators were missing from some of the country reports. In such cases, data from other sources such as the Demographic Health Surveys and International organizations such as United Nation, the WHO and the World Bank were used to augment on reports from the respective member countries. Specific sources of data included the following, in the order of decreasing importance:-

- Demographic health surveys for data on reproductive, maternal, neonatal and child health; Nutrition; malaria and; HIV/AIDS

- National census for population and demographic data

- World Health Organization National Health accounts for data on health expenditures

- World Development Indicators by the World Bank for economic and demographic data

- African Statistical Yearbook for economic and demographic data

- World Health Statistics for economic and non-communicable data

- World Bank Website for various data

- UN data for human resource for health data

- UN Data for data on MDGs

- Global Tuberculosis for TB data

It was agreed during the core group meetings that monitoring by member states needs to encompass processes as well as input indicators, whereas, at regional level the focus should be on outcome and impact indicators. This report presents the State of Health in ECSA region with a focus on outcome and impact indicators in mind. However a few key input and output indicators including human resources and finance are also reported in order to provide a comprehensive picture.

In this edition the following thematic areas are reported; demographic and social-economic status of member states; health systems data such as finance and human resource; Reproductive, Maternal, Neonatal and Child Health; Nutrition status among under-five children; Malaria, HIV/AIDS and Tuberculosis; and non-communicable diseases. Indicators on neglected diseases, health information systems, leadership and governance are not reported in this document due to lack of data in several countries. It is however expected that as the reporting from member states improves, in future, these indicators will be reported.

1.6   Data analysis

In addition to reporting current situation (2013/2014), trend analysis was done to depict the path which individual countries passed through, since the declaration of the MDGs in the year 2000. This information is important in projecting future strategies in the post-MDG era, with particular focus on Universal Health Coverage.

Data analysis was done on health status by indicator type, making comparison between countries. Current status applied data spanning from 2011 to 2015. In addition, trend analysis was done using specific time periods with the following intervals - 2001-03; 2004-6; 2007-10 and 2011-15. Analysis using year intervals was necessitated by the fact country data are not uniformly available for each year. For example, the Demographic Health Surveys are not conducted on the same year across the member states.

Analysis was also done by wealth status for indicators that had data available. Data breakdown by wealth status were invariably obtained from DHS documents. Comparison was done between lowest and 5th wealth quintiles to determine equity with regard to the respective indicator.

1.7   Methodological consideration

Data completeness: Data for some of the indicators in some countries could not be obtained. Efforts were made to fill the gaps on data received from respective Ministry officials. However, some gaps remained thus limiting the scope of analysis for some of the indicators. Analysis was done for a particular indicator if data was obtained from at least five of the member states.

Due to incomplete data for some of the indicators, trend analysis was sometimes done using data that spanned over different periods of time intervals. Thus, interpretation of findings from such analysis would need to be done with some caution. In order to minimize this limitation, trend analysis

was sometimes limited to only two periods i.e. 2007-10 and 2011-15, instead of four periods as reported in the methodology section.

Data accuracy: Where data were not obtained from Ministry officials, efforts were made to fill the gaps using reliable sources such as the DHS and the WHO documents. The use of different sources of information sometimes led to discrepancies that required some efforts to discern the differences for the purpose of consistency. Some data sources provided estimates whose reliability depends on the assumptions made in preparing them. This limitation was partly addressed by limiting comparisons to data from the same source and sometimes leaving out more current data available from particular country in preference to previous year data. For example, when the most recent CPR data for a particular country was facility based while most countries data were from DHS, data from DHS was used even though this was previous year's data.

Data used in the analysis by wealth quintile was obtained from DHS. Hence, sometimes, current data for an indicator from a particular country may appear to be different from the average quoted in the analysis by wealth quintile. This happened when the current data was taken from a source other than DHS.

2.0   STATE OF HEALTH

2.1   SOCIAL DEMOGRAPHIC CHARACTERISTICS

ECSA member states are situated in a geographical area covering about 3.0 million square kilometres with a population of about 166 million people. Tanzania has the largest area (948,000 sq. km.) and the highest population 47.8 million people. Of the ten member states, four have relatively smaller geographical areas ranging between 455 sq. km. (Seychelles) and 30,000 sq. km. (Lesotho) and population size ranging between 87,000 (Seychelles) and 2 million (Lesotho).In total, the four countries are located in an area covering 50,000 sq. km. with a total population of 4.5 million.

Figure 1: The population of ECSA HC member states in 2011-2015

Country	Population
Tanzania	47,800,000
Kenya	38,589,000
Uganda	35,357,000
Malawi	15,300,000
Zambia	15,023,315
Zimbabwe	13,061,239
Lesotho	2,074,000
Mauritius	1,261,000
Swaziland	1,093,000
Seychelles	87,000
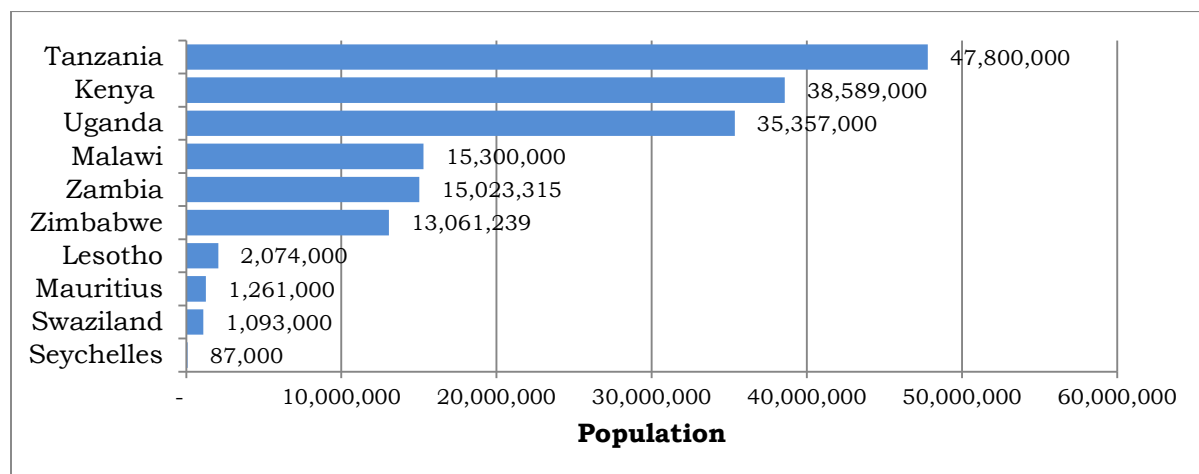
Indicator 1: Annual population growth rate (%)

Population growth rate of a country is a reflection of the number of children born, people who died and in and out migration. Figure 2 shows that population growth rate in member states varied between 0.2% in Mauritius and 3.7% in Zambia. The growth rate in four countries, Zimbabwe, Swaziland, Lesotho and Mauritius was less than 2% which is less than the minimum rate required to maintain the existing population. There is need to understand if such low growth rate is associated with the introduction and successful implementation of favourable population control policies. The four countries are leading in having CPR of 50% and above and unmet needs for family planning of less than 20%.

Figure 2: Growth rate among ECSA member countries in 2011-2015

Country	Percent
Zambia	3.7
Uganda	3.2
Malawi	3.1
Kenya	3.0
Tanzania	2.7
Zimbabwe	1.7
Swaziland	1.4
Lesotho	1.1
Mauritius	0.2
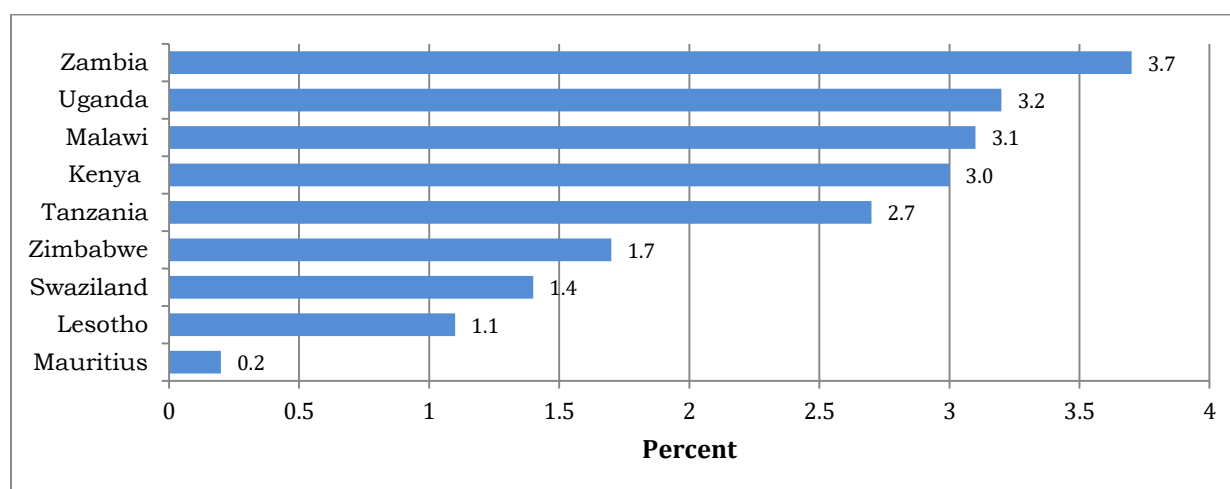
Indicator 2: Crude birth rate (per 1,000 population)

Crude birth rate (CBR) is an indicator of fertility and population growth. CBR in the ECSA countries ranged between 10.9 per 1,000 in Mauritius and 43.7% in Malawi. The relatively smaller and economically better-off countries had also lower CBR.

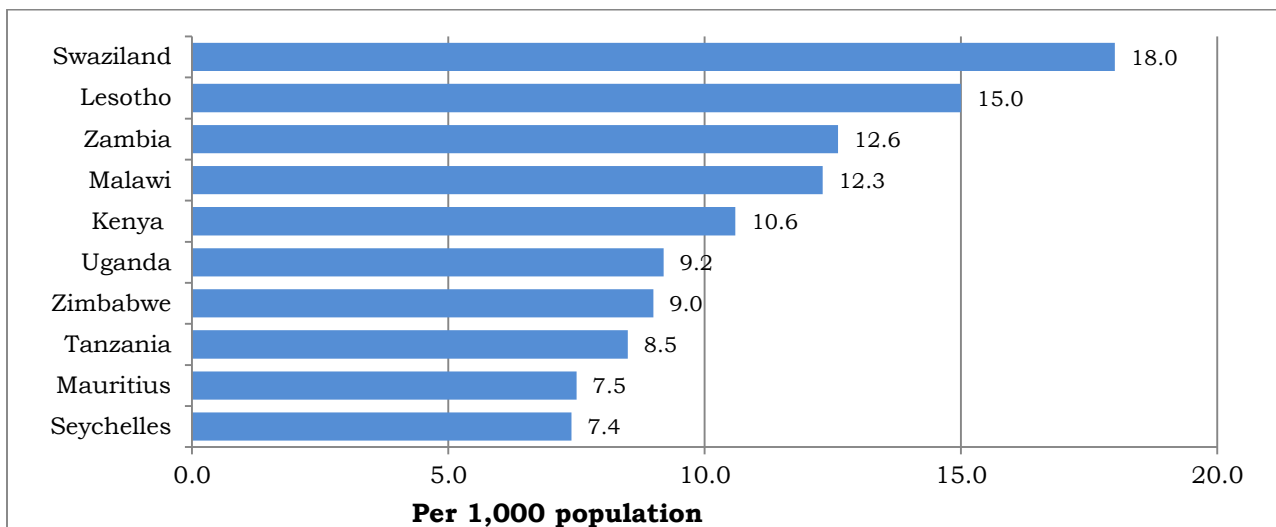**Figure 3: Crude birth rate in ECSA member states in 2011-2015**
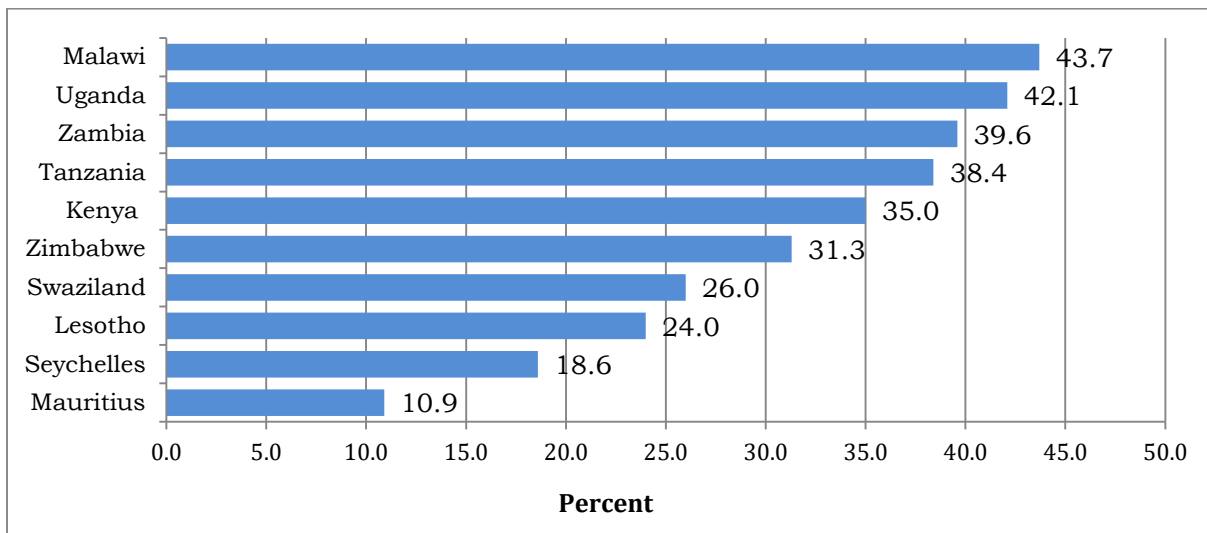
Indicator 3: Crude death rate (per 1,000 population)

Crude Death Rate (CDR) in the ECSA region ranged between 7.4 per 1,000 in Mauritius and 18.0 per 1,000 in Swaziland. CDR was lower than 8% in Mauritius (7.4%) and Seychelles (7.3%).

Figure 4: Crude death rate among ECSA member countries in 2011-2015

Indicator 4: Total fertility rate (%)

Total fertility rate (TFR) is an indicator of the average number of children born by a woman in her reproductive life. It is an indicator used to project population growth. The TFR in the ECSA region ranged from 1.4% in Mauritius to 6.2% in Uganda. Again, the relatively wealthier countries had lower TFR.

Figure 5: Total fertility rate among ECSA member countries in 2011-2015
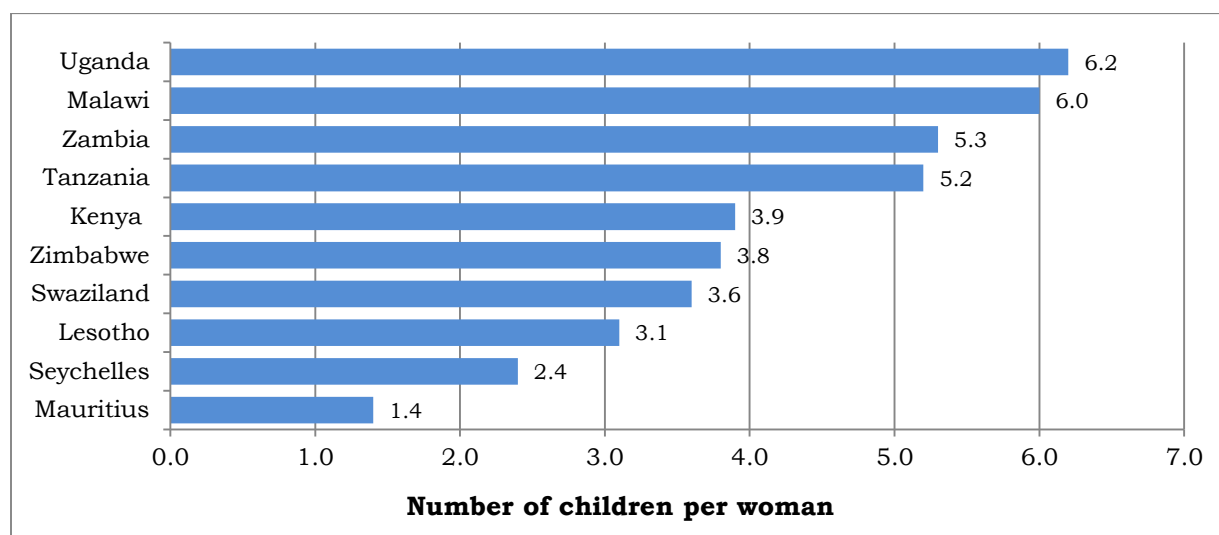
TFR was higher among women of lowest wealth quintile compared to average and the highest quintile in all ECSA member states (Figure 6). The gap between the lowest and highest quintiles ranged between 1.8 in Tanzania and 4.1 in Zambia. The difference was more than 3.0 in all member countries except in Tanzania (1.8) and Zimbabwe (2.7).

Figure 6: Total fertility rate by wealth status, trend 2001-2015
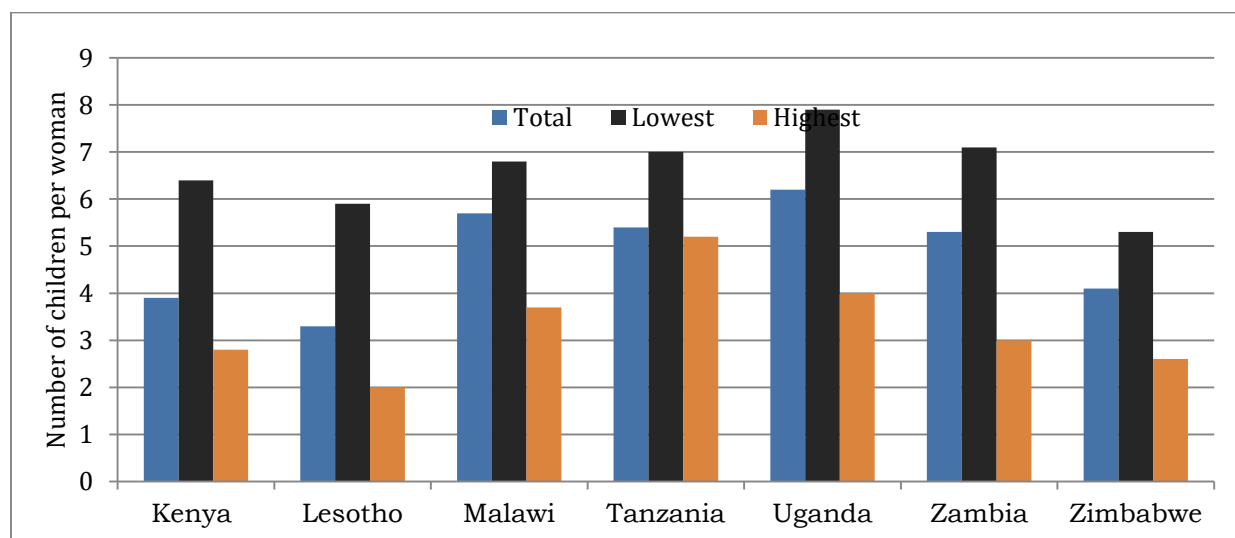
Indicator 5: Life expectancy at birth by (population and by sex)

Life expectancy (LE) at birth is an indicator of the quality of life and health status in a country. LE in ECSA region ranged from 49.4 years in Lesotho to 74.2 years in Mauritius and Seychelles (Figure 7). The relatively low LE in Swaziland and Lesotho is explained by high prevalence of HIV/AIDS in these countries.

Figure 7: Life Expectancy in ECSA member countries in 2011-2015
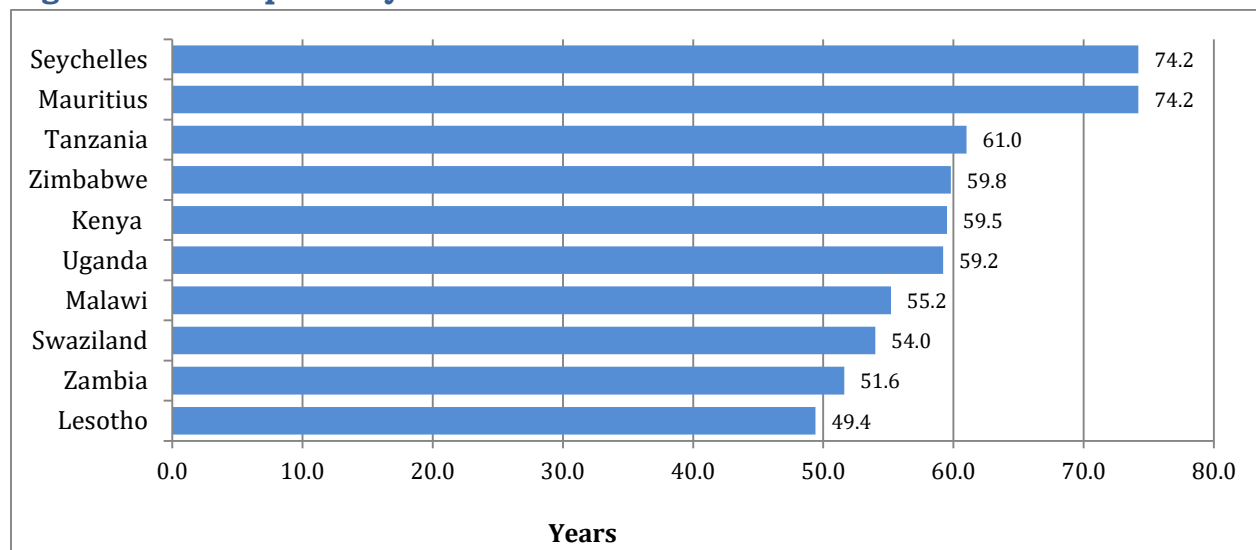
Indicator 6: Population dependency ratio (under 15 and over 65 years)

Population dependency ratio is an indicator of productive population in a country. Dependents are people aged below 15 years and above 64 years. Dependency ration is the number of dependants divided by the number of people aged 15 to 64 expressed in percentage. Dependency ratio in ECSA region ranged from 41% in Mauritius to 103% in Uganda. Dependency ratio was relatively lower in the relatively wealthier countries.

Figure 8: Population dependency ratio in ECSA member country in 2011-2015

Population dependency ratio

Country	Percent
Uganda	103
Zambia	95.4
Malawi	95
Tanzania	94
Kenya	81
Zimbabwe	80
Swaziland	70
Lesotho	68
Seychelles	43
Mauritius	41
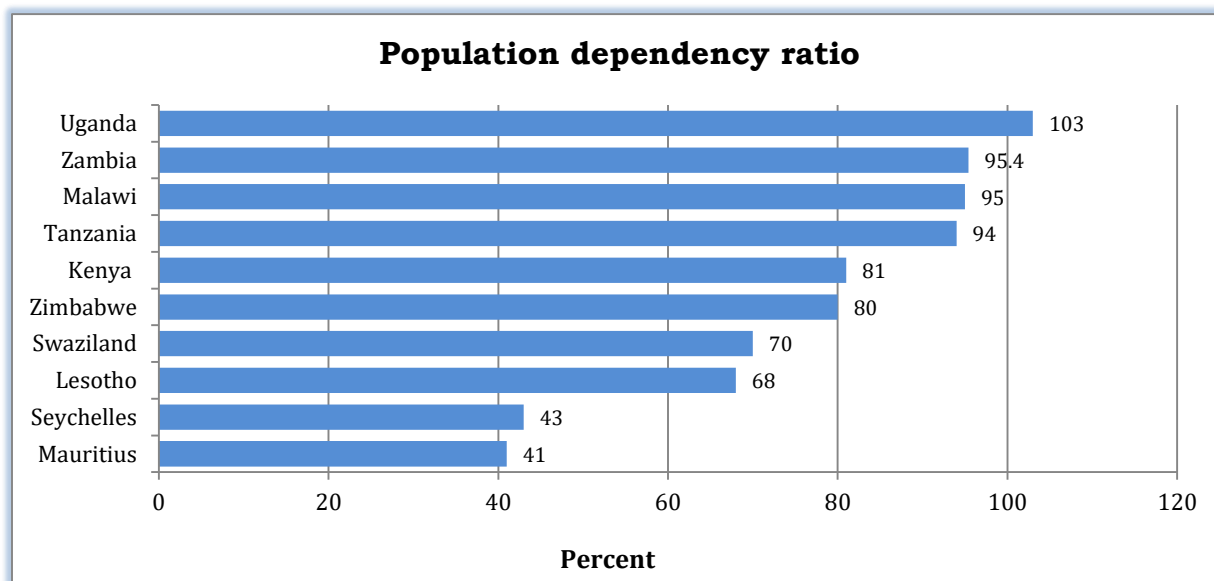
2.2   SOCIAL ECONOMIC STATUS IN THE ECSA REGION

ECSA region is comprised of ten member states, of which nine are active, with varying level of economic status. Recent data from the World Bank classifying countries according to level of income using Gross National Income (GNI) per capita. Countries with GNI per capita off less than USD 1,045 are grouped in the low income; those with GNI per capita between USD 1,045 and UD 12,746 as middle income and those with GNI per capita more than USD 12,746 as high income country. When this criterion is applied, four ECSA member states falls in the low income countries; five in the middle income and one in the high income group (Figure 9).

Figure 9: Classification of ECSA member states in level of income

Country	GNI/Capita	Level of income
Kenya	1260	Middle
Lesotho	1350	Middle
Malawi	250	Low
Mauritius	9710	Middle
Seychelles	13990	High
Swaziland	2700	Middle
Tanzania	930	Low
Uganda	660	Low
Zambia	1760	Middle
Zimbabwe	860	Low

Indicator 7: Gross Domestic Product (GDP) (current US$)

Gross Domestic Product (GDP) is an indicator of economic performance of a respective country. It measures productivity of local institutions. When measured in Purchasing Power Parity (PPP), the indicator accounts for the difference in prices among the various countries. Figure 10 shows that the GDP in ECSA member states varied widely from 0.43 billion in Seychelles to 60.9 billion per year in Kenya.

Figure 10: Gross Domestic Product (current US Dollars)
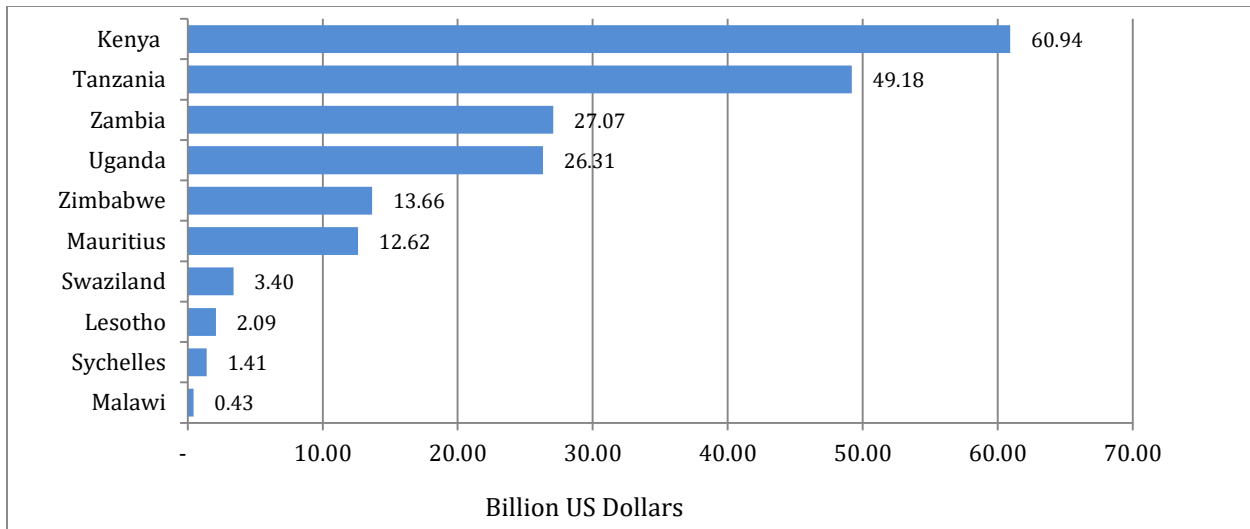
Indicator 8: Gross Domestic Product (GDP) growth rate

GDP growth rate measures economic growth of a country in comparison to the previous year. GDP growth rate in ECSA region ranged from 2.5% in Swaziland to 7.0 % in Tanzania (Figure 11). The relatively wealthier countries had growth rate of less than 4%.

Figure 11: Gross Domestic product growth rate in ECSA region in 2011-2014
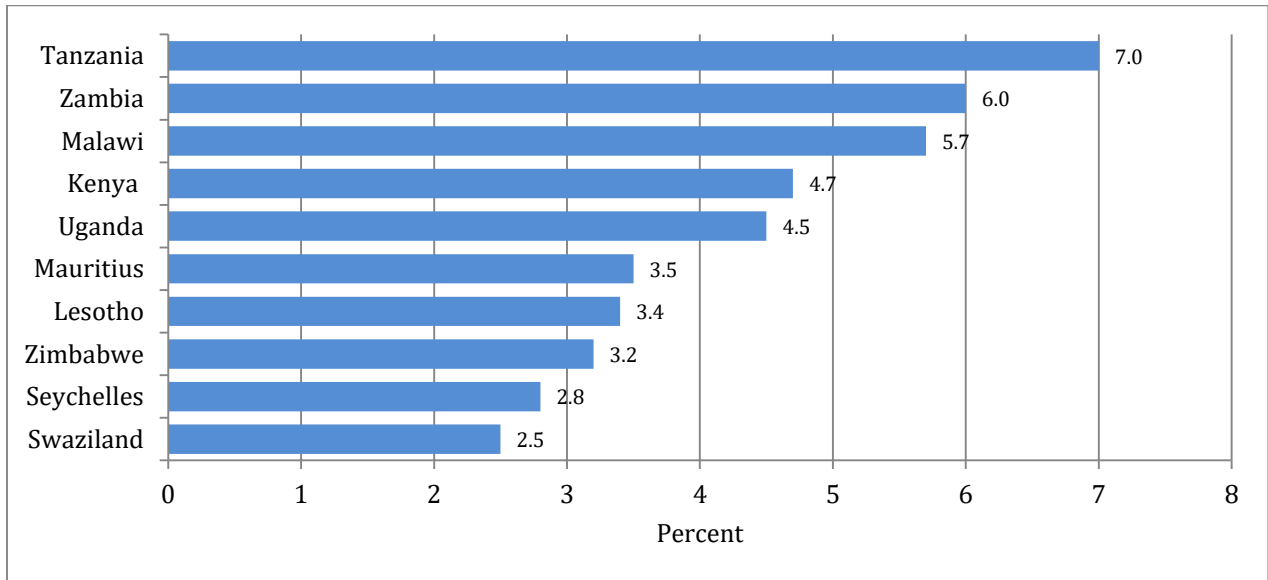
2.3   SERVICE COVERAGE

Indicator 9: Primary school completion rate

The proportion of children completing primary school is a measure of quality of primary level education. The proportion of children completing primary education ranged between 52.4% in Uganda and100.0% in Mauritius. Over 90% of enrolled children in Kenya, Swaziland, Mauritius, Seychelles, Zimbabwe and Lesotho completed primary education. It should be noted that this indicator does not provide a good measure of access to primary level education because the denominator is the numbers that were enrolled in standard one. The indicator excludes children who never enrolled in primary school.

Figure 12: Primary school completion rate in ECSA region in 2011-2014
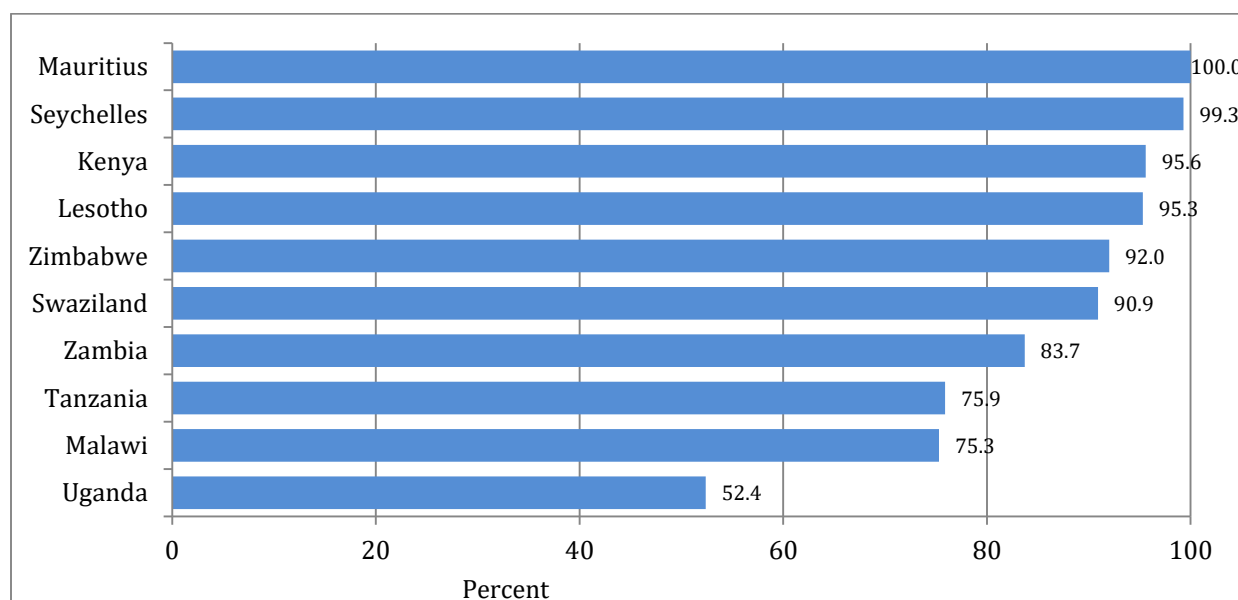
Indicator 10: Use of improved drinking water sources

This indicator measures access to improved drinking water source within 15 minutes of walking. The indicator also reflects access to water as a human right. Use of improved drinking water sources in ECSA countries ranged between 53% in Tanzania and 100% in Mauritius. Over 90% of the people in Mauritius and Seychelles had access to improved drinking water sources. Observations made in this indicator need to be interpreted with caution because reports in some countries did not specify the distance to the water sources.

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Figure 13: Proportion of households within 15 minutes of a safe water supply

| Country	percent
Mauritius	100
Sychelles	96
Malawi	85
Lesotho	82.2
Zimbabwe	80
Uganda	75
Swaziland	74
Zambia	63
Kenya	62
Tanzania	53
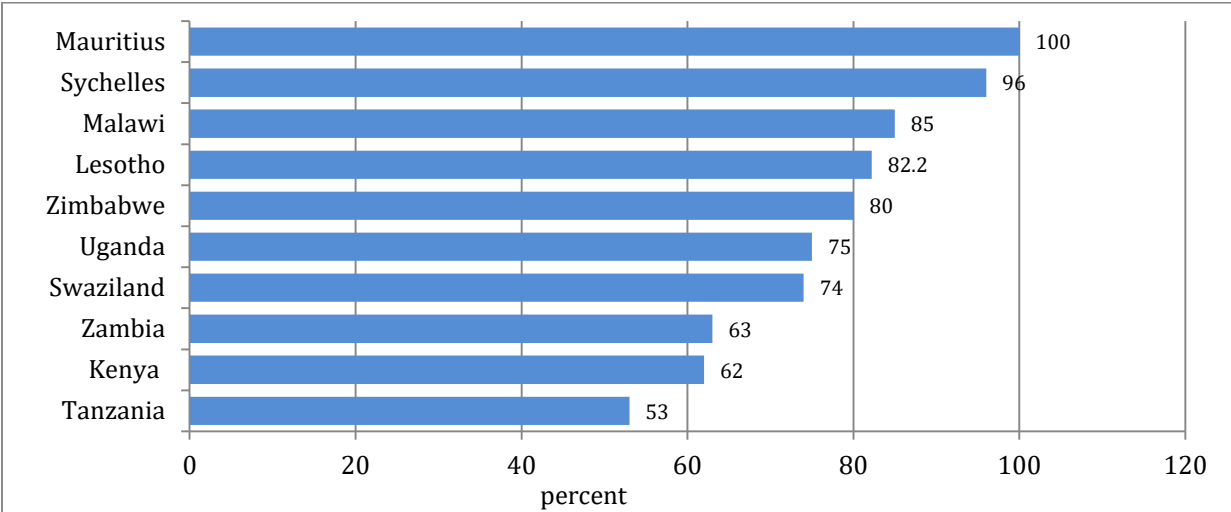
2.4   HEALTH SYSTEM FUNCTIONS

Indicator 11: Total expenditure on health per capita (at PPP international dollar rate)

This indicator includes public and private expenditures on health that measures financing of the health care systems in relation to the population. Total Health Expenditures on health per capita varied from 90 PPP International Dollars in Malawi to dollars 937 PPP International Dollars in Seychelles (Figure 14). In general, countries that are economically better-off had higher expenditures compared to those with low income. With the exception of Lesotho that spent about 300 PPP International Dollars per capita, Swaziland, Mauritius and Seychelles spent more than 500 PPP International Dollars per capita on health (Figure 14).

Figure 14: Total expenditure on health per capita (at PPP international dollar rate)
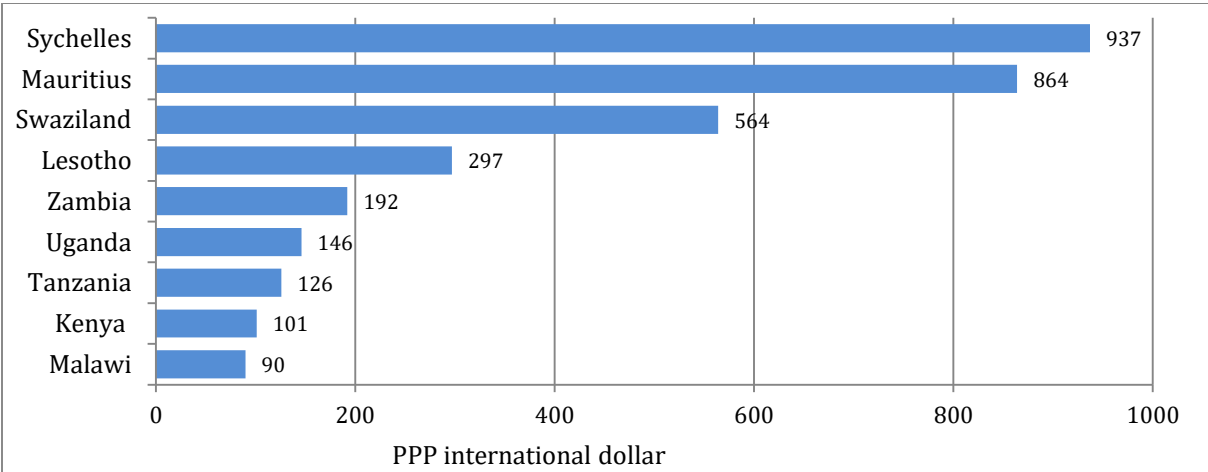
Data missing from Zimbabwe

The three countries with GPD per capita expenditure on health that was more than 500 PPP International Dollar also recorded a faster increase in per capita expenditure on health during the reporting period (Figure 15). During this period the countries experienced an increase of over 200 PPP International Dollar. Whereas, the increase was steady in two of the countries (Mauritius ad Swaziland) the increase was staggering in Seychelles.

Figure 15: Total expenditure on health per capita at PPP International Dollar in ECSA member states in 2001-2013

Total expenditure on health / capita at Purchasing Power Parity (NCU per US$)
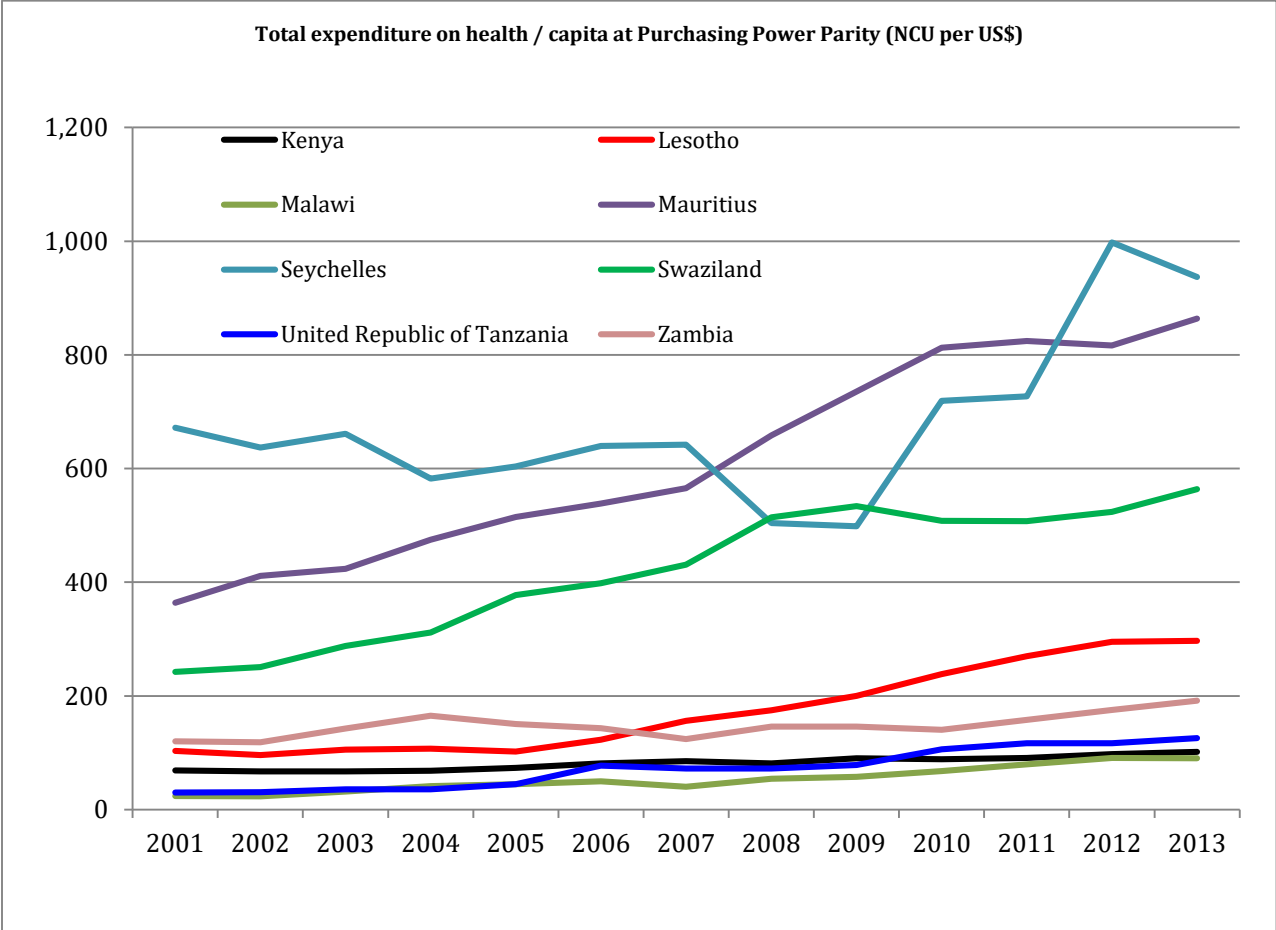
Zambia, Tanzania and Malawi are three countries whose expenditure remained low (below 200 PPP International Dollar) during the reporting period. Interestingly, although Zambia and Lesotho started at the same level in 2001, by 2013 Lesotho was able to increase expenditure by nearly 200 PPP International Dollar. The low level of expenditure notwithstanding, Tanzania and Malawi were able to increase expenditure on health by 320% and 275%, respectively. An increase in expenditure above 100% was also observed in the relatively wealthier countries; Lesotho (187%), Mauritius (138%) and Swaziland (133%).

Indicator 12: General government expenditure on health per capita (at PPP International dollar rate)

General government expenditure on health per capita in the ECSA region ranged between 42 PPP International Dollar in Kenya and 862 PPP International Dollar in Seychelles (Figure 16). While the governments of Seychelles, Swaziland and Mauritius spent more than 400 PPP International

Dollars per capita on health, the governments of Tanzania and Malawi spent less than 50 USD PPP International Dollar per capita. Interestingly, the latter experienced higher increase in expenditure amounting to more than 200 PPP International Dollar during the reporting period, 329% in Malawi and 235% in Tanzania.

Figure 16: General government expenditure on health /capita Purchasing Power Parity

General government expenditure on health / cap Purchasing Power Parity (NCU per US$)
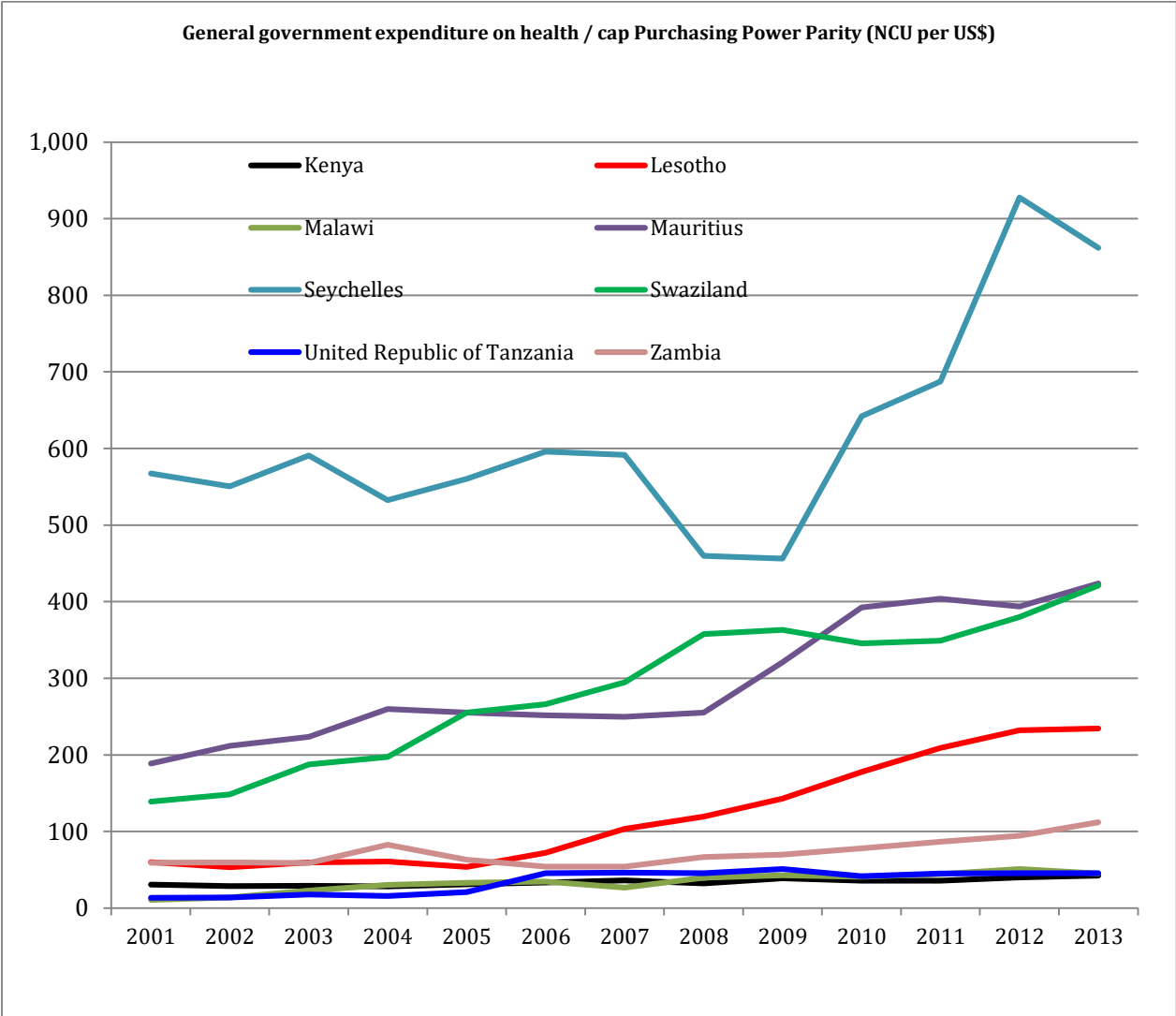
Indicator 14: Total Expenditure on health as percentage of GDP

This indicator measures financing of health care in a country. The indicator provides data on health care funding by public, private and development partners in relation to the GDP (Figure 17). THE as a percent of GDP ranged from 4.0% in Seychelles to 11.5% in Lesotho. Malawi, Swaziland and Tanzania spent more than 7% of their GDP on health. The average for sub-Saharan Africa and Upper Middle Income countries was 5.8% and 6.6%, respectively[1].
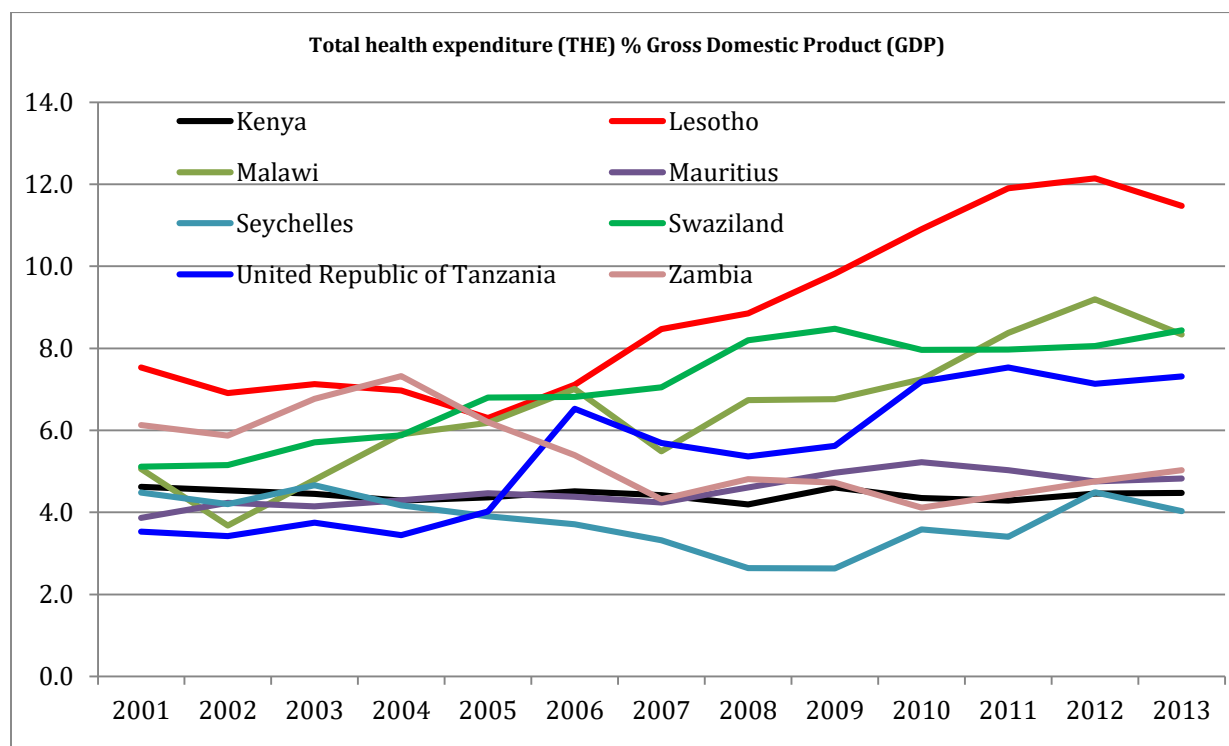
Figure 17: Total Expenditure on Health as % of GDP
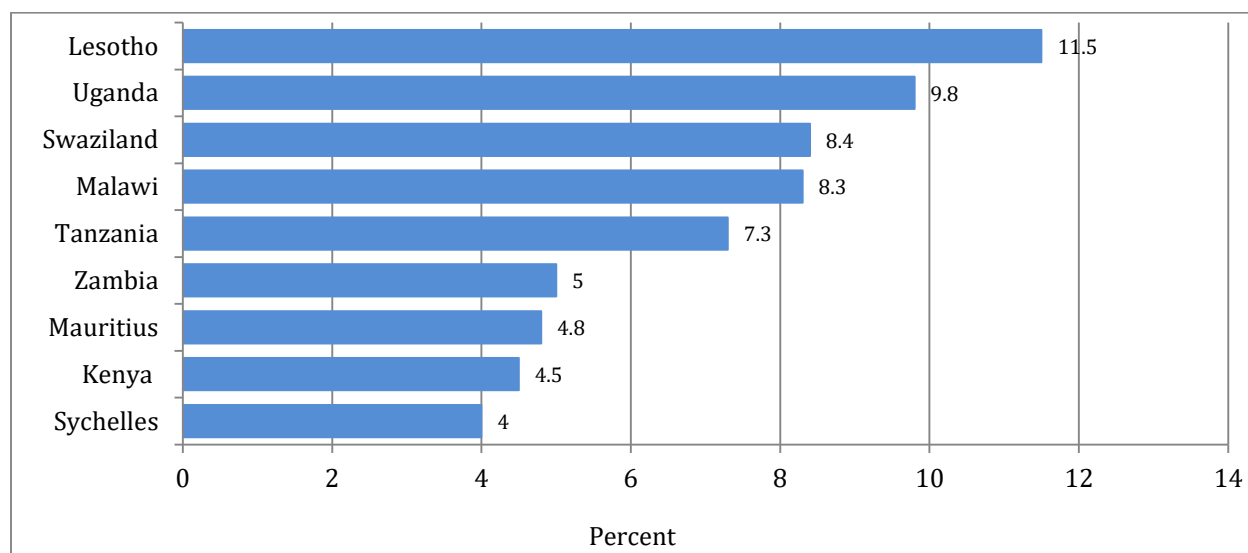
During the reporting period these countries were able to increase expenditure by more than 3%. The increase amounted to over 100% increase in Tanzania. Kenya, Seychelles and Zambia experienced a decline in expenditure as percentage of GDP during the same period.

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[1] ECSA HC 2010. Health Care Financing Profile of East, Central and Southern African Health Community Countries, 1995-2009. page 35

Total health expenditure (THE) % Gross Domestic Product (GDP)

Legend: Kenya, Lesotho, Malawi, Mauritius, Seychelles, Swaziland, United Republic of Tanzania, Zambia

Indicator 15: General government expenditure on health as percent of total expenditure on health

General government expenditure on health can also be expressed as a proportion of total expenditure on health (THE). This indicator is useful in measuring the amount of funding by the government that is part of all the funds directed towards health care. Figure 19 shows that respective government's contribution to the health care funding varied widely between 36.3% in Tanzania and 92.0% Seychelles. It is worth noting that, while the governments of Swaziland, Lesotho and Seychelles contributed more than 60% of the funds spent on health, the governments of East African countries contributed the least. Suffice to note that, this also includes developments partners' contribution to government budget for the health sector.

Figure 19: General government expenditure on health as % of total expenditure on health
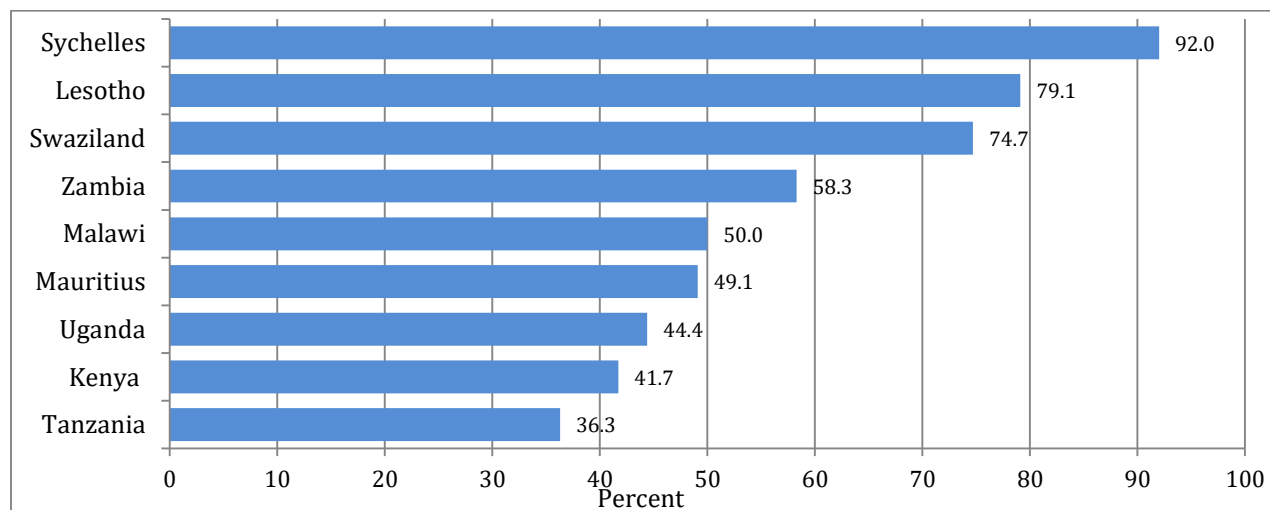
A significant increase in the proportion of government spending on health was noted in Lesotho and Swaziland, 21.0% and 17.3% respectively. The increase may be related to, among others, increasing external support to government response to HIV/AIDS by health development partners. Tanzania, Kenya and Mauritius experienced a decrease of 9.2%, 3.0% and 2.8% respectively during the reporting period.

Figure 20: General government expenditure on health (GGHE) as % of THE
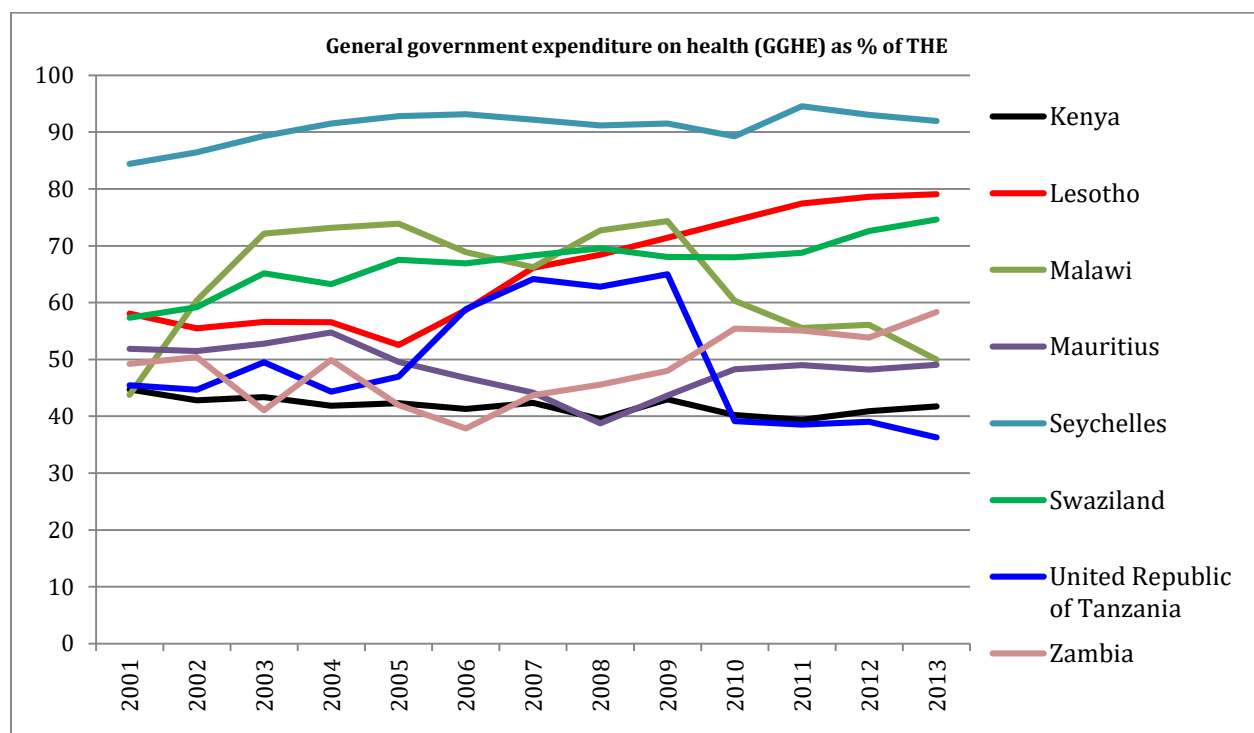
Indicator 16: Out of pocket health expenditure (OOPE) as percentage of total expenditure on health (THE)

The proportion of total health expenditure (THE) paid out of pocket is an indicator that measures the contribution of households on THE. Out-of-pocket spending as a proportion of THE in ECSA region ranged between 2.9% in Seychelles and 46.3%in Mauritius (Figure 21). In Mauritius and East African countries OOPE contributed to more than 30% of THE. The risk of household entering into catastrophic spending becomes high when OOPE as a percent reaches or exceed 15% of THE.[2] Only four countries i.e. Lesotho, Malawi, Swaziland and Seychelles had out-of-pocket expenditure of less than 15%. Further analysis will be required to find reasons for the relatively economically better-off country like Mauritius to have nearly half of its health spending coming from OOPE.

**Figure 21: Out of pocket health expenditure as percentage of total expenditure on health**
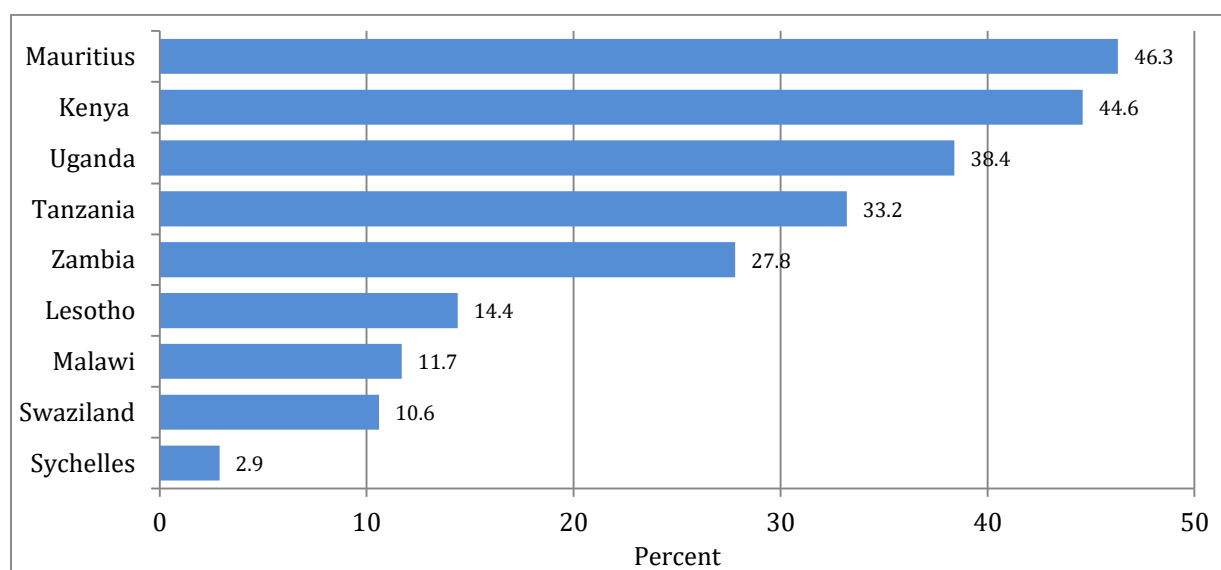
Interestingly, during the reporting period, Lesotho and Malawi were able to reduce OOPE as a percent of THE from over 20% to lower values. While Seychelles was able to reduce OOPE as a percent of THE steadily by 80%, in Mauritius, OOPE increased by 31% during the same period. The reduction of OOPE in Tanzania can be attributed to the introduction and implementation of the two pre-payment schemes, the NHIF and the CHF. However, it will be

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[2]ECSA HC 2010. Health Care Financing Profile of East, Central and Southern African Health Community Countries, 1995-2009. page 14

interesting to learn why this decline could not be sustained after 2007 when the coverage of the pre-payment schemes (NHIF and CHF) was expected to have increased. This information will provide insight that can be useful to countries that have started introducing various forms of pre-payment schemes for health financing.

Figure 22: Out of pocket expenditure as % of THE
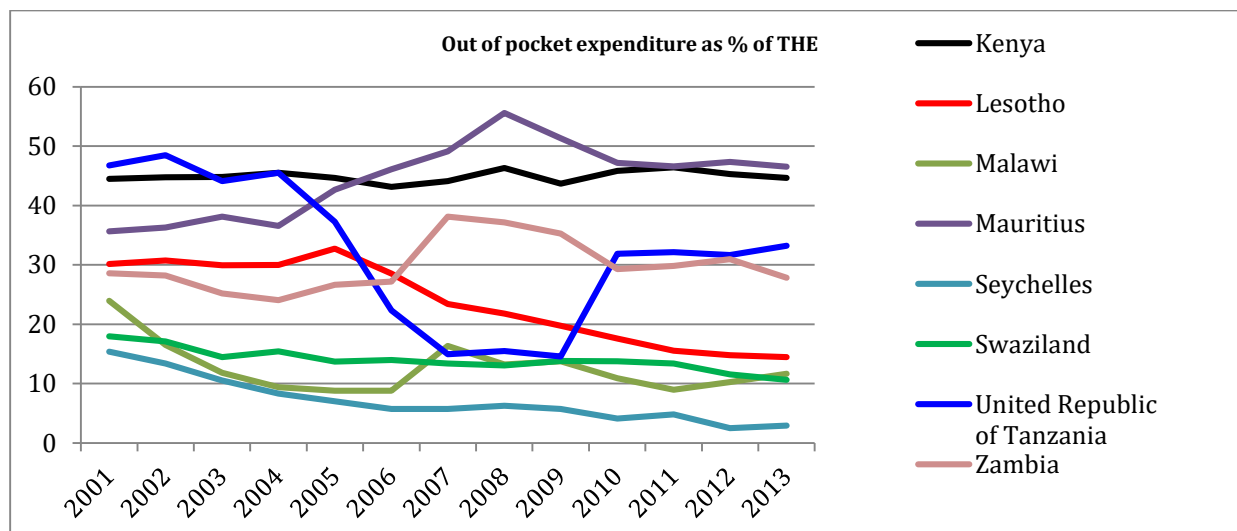
Contribution of donor funding on health expenditure

External funding as a percent of THE was consistently high in Malawi (over 60%) and lower in Mauritius and Seychelles (below 10%). This might serve as an explanation on why despite spending less than USD 50 on health, Malawi was able to maintain OOPE as a percent of THE at a level below 15%. Figure 23 shows that there has been a steady increase in external funding on health in Kenya and Lesotho. This measures contribution of development partners to both the public and private spending on health.

Figure 23: External resources on health as % of THE
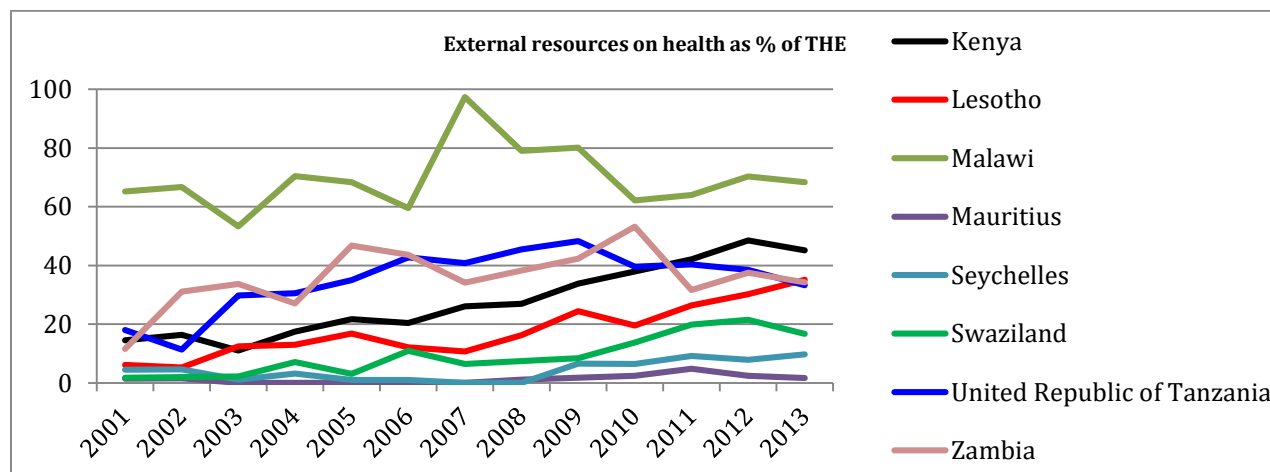
2.5   HEALTH SERVICES

The number of doctors as a proportion of the general population measures staffing situation as one of the main resources in the health system. Figure 24 shows that the ratio of doctors to population varied between 0.01 in Uganda and 17 per 10,000 people in Seychelles. While Seychelles and Mauritius had more than 10 doctors per 10,000 people, Zambia, Zimbabwe, Tanzania and Uganda had less than one doctor per 10,000 people. This is less than the ratio recommended by the WHO (of 2 doctors per 10,000 people).Using this cut-off point, only four ECSA member states have attained the recommended standard. The high number of doctors in Seychelles and Mauritius can be explained by higher economic profile in these countries compared to other member states that is likely to attract doctors' immigration. It was reported that in Mauritius, the great majority of doctors are Mauritians.[3] The country is in the process of exporting doctors to other African countries. Further investigation is needed to understand the nationality of the doctors in Seychelles. In addition, interpretation of this indicator should be done with caution because in some countries, such as Zimbabwe, the register was used as the primary source of data. The register includes doctors working outside the country.

Figure 24: Number of doctors per 10,000 people
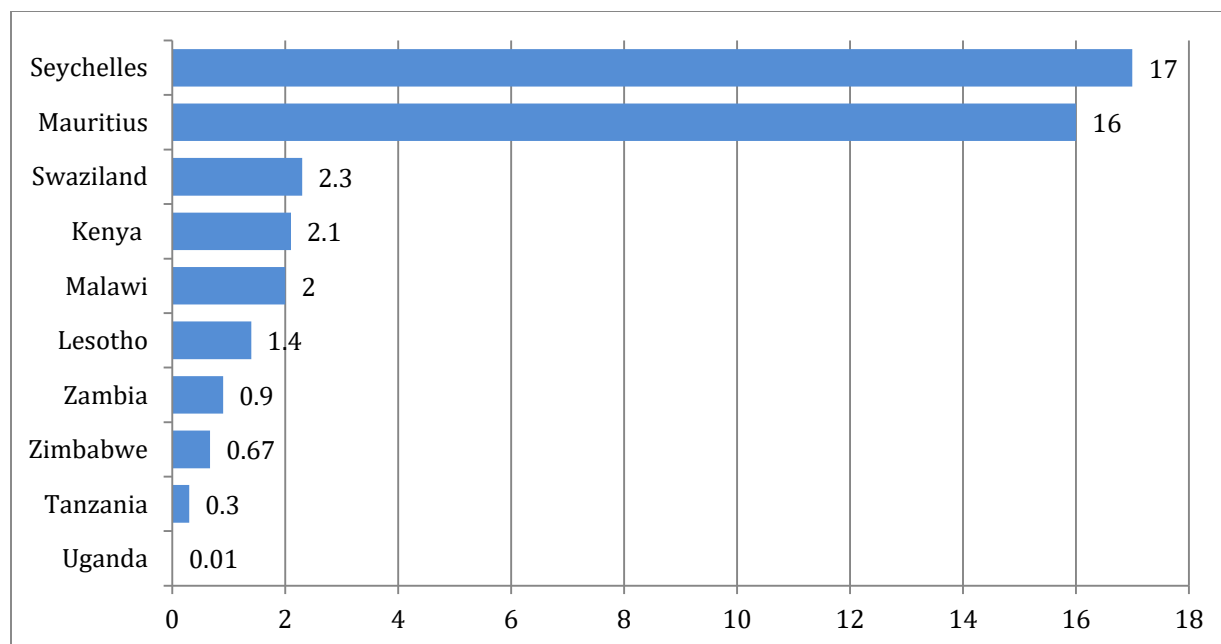
Nearly all ECSA member countries that reported on the number of doctor over time showed an increase in the population doctor ratio between 2004 and 2015. Mauritius and Seychelles observed the largest increase, 5 per 10,000 and 17 per 10,000, respectively during the same period (Figure 25),

It is known that many developing countries depend on clinicians/paramedics trained for the purpose of treating common conditions at dispensary / level one facilities. Thus using the number of graduate doctors who more often serves in urban hospitals might portray the wrong picture especially in countries that still have infectious diseases that can be treated well by lower level clinicians/paramedics. There is need for an indicator that includes these cadres when monitoring adequacy of clinicians in the population.
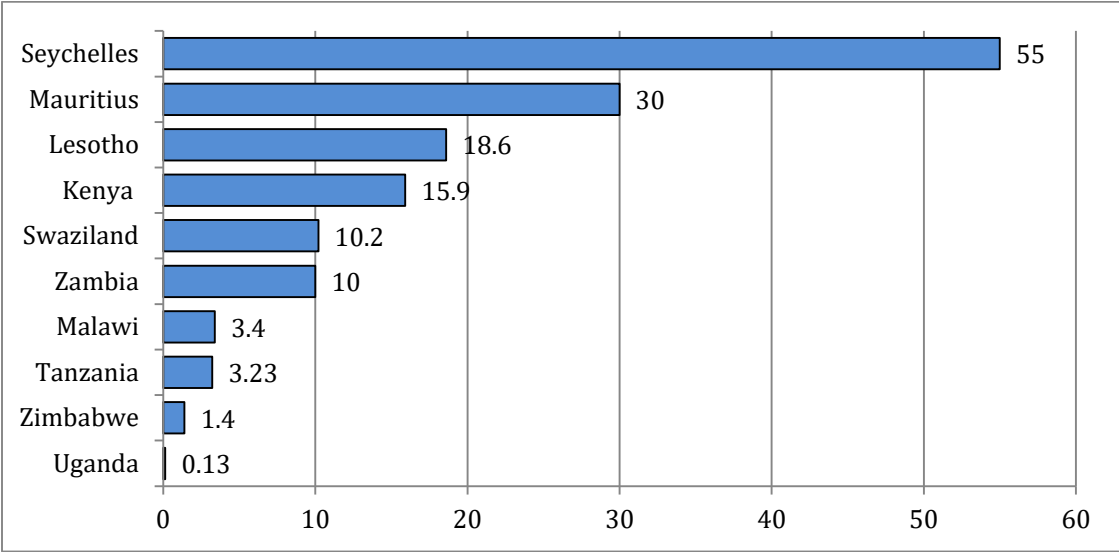
Figure 25: Number of doctors per 10,000 population, trend 2001-2015
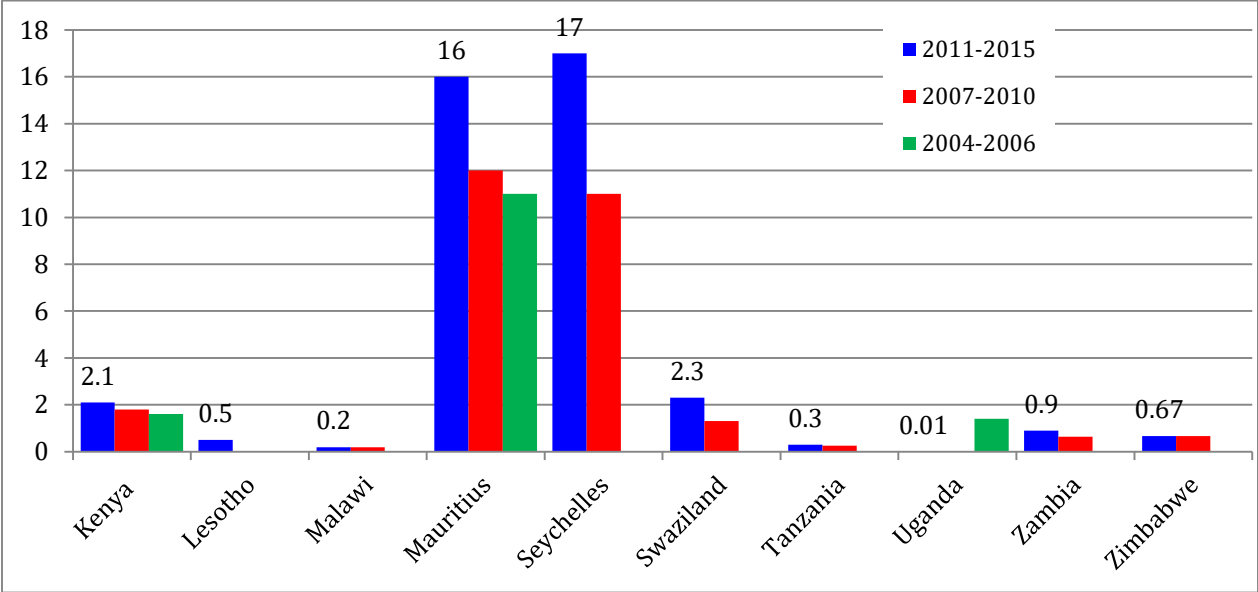
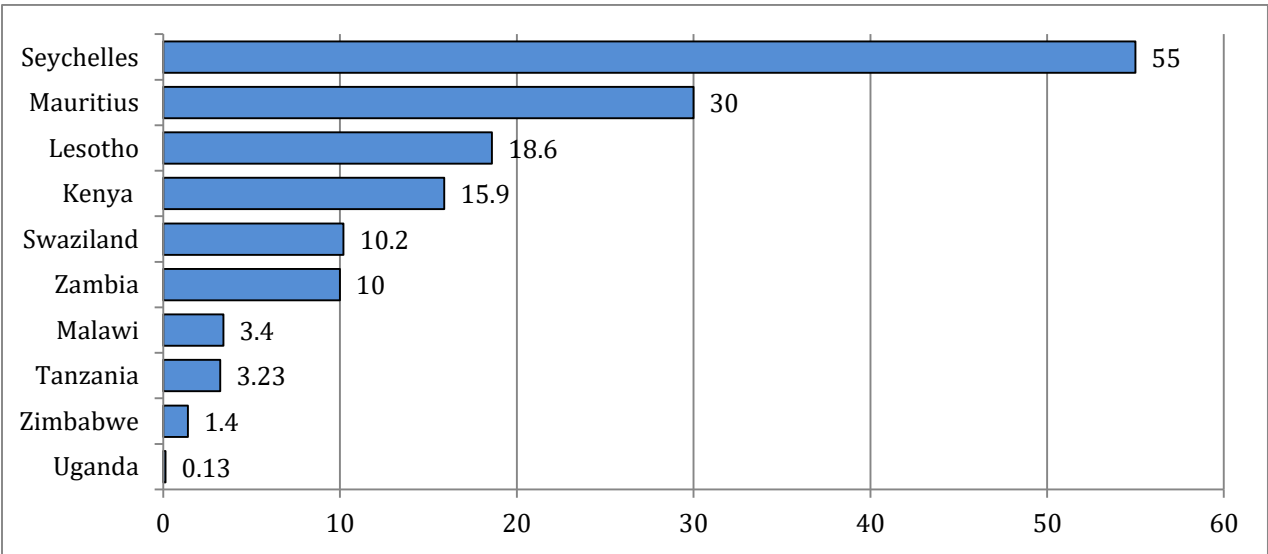## Indicator 23: Number of nurses per 10,000 population

The number of nurses in the population is an indicator of the availability of human resource in a country. Figure 26 shows that the ratio of nurses to population ranged between 0.13 per 10,000 in Uganda and 55 per 10,000 population in Seychelles. Seychelles and Mauritius had the highest nurse population ratio, 55 and 30 per 10,000 population respectively, while Tanzania, Zimbabwe and Uganda had the lowest, 3.2 per 10,000, 1.4 per 10,000 and 0.1 per 10,000 population respectively. The WHO recommends a minimum of 10 nurses per 10,000 population.

Figure 26: Number of nurses per 10,000 population

Country	Value
Seychelles	55
Mauritius	30
Lesotho	18.6
Kenya	15.9
Swaziland	10.2
Zambia	10
Malawi	3.4
Tanzania	3.23
Zimbabwe	1.4
Uganda	0.13

The nurse population ratio in most of the ECSA member states increased in the period 2004-2015.

Figure 27: Number of nurses per 10,000 population, trend 2014-2015

Country	Value
Seychelles	55
Mauritius	30
Lesotho	18.6
Kenya	15.9
Swaziland	10.2
Zambia	10
Malawi	3.4
Tanzania	3.23
Zimbabwe	1.4
Uganda	0.13

Indicator 27: Number of health workers per 10,000 population

The total number of health workers per 10,000 is a reflection of adequacy of trained (skilled) health workers in a country. Figure 28 shows that the total number of health workers per 10,000 ranged between 2.1 per 10,000 in Swaziland and 126 in Seychelles. The ratio of health workers to population in Seychelles and Mauritius is over 50 times that of the third country in the rank. This could partly be attributed to the relatively smaller population sizes in the two countries. It will however be interesting to find out the reasons Swaziland does not have a high ratio despite having smaller population size and being economically better-off than most other ECSA member states.

**Figure 28: Number of health workers per 10,000 population**
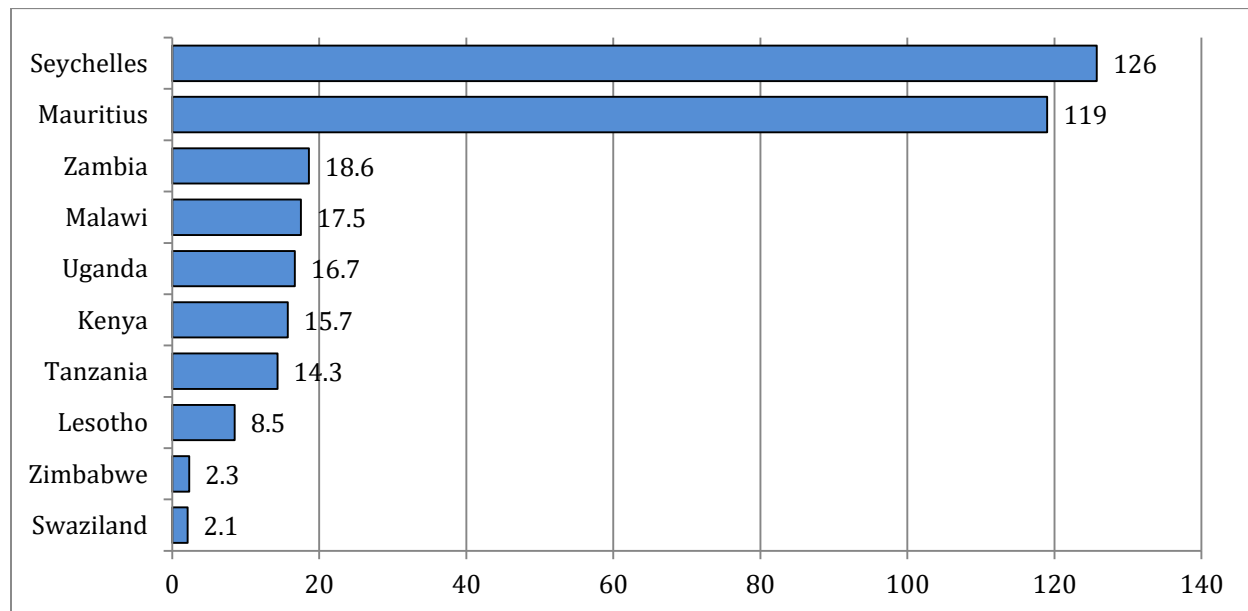
2.6 MATERNAL, NEONATAL AND CHILD HEALTH CARE

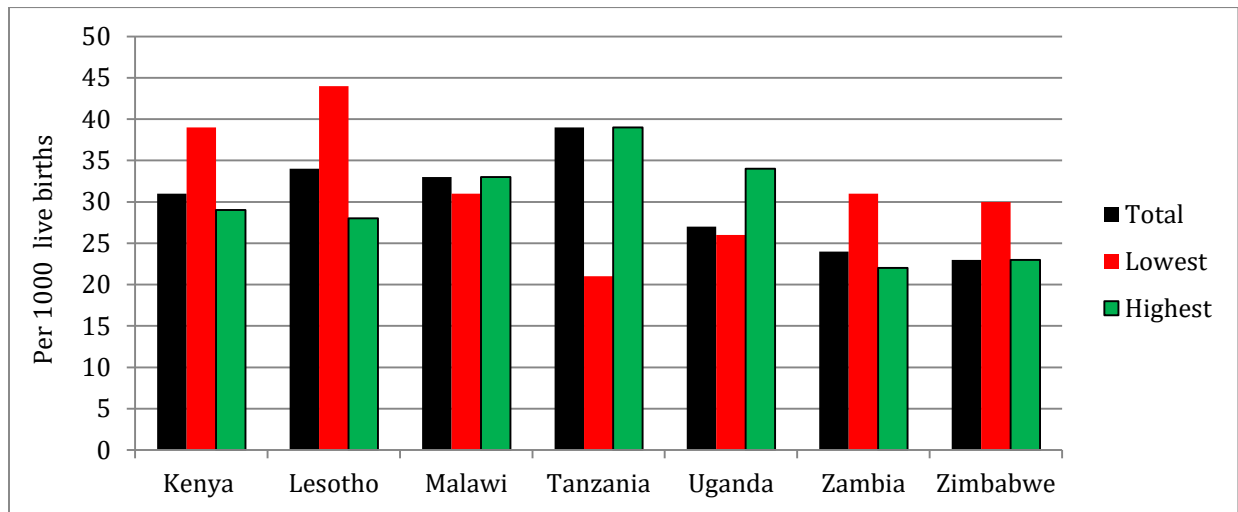### Indicator 30: Neonatal mortality rate

Neonatal Mortality rate (NMR) is the number of deaths during the first 28 completed days of life per 1,000 live births in a year. The indicator is useful in monitoring the quality of care provided to neonates. Figure 29 shows that NMR varied between 9.1 per 1,000 live-births in Mauritius and 33 per 1,000 live-births in Swaziland. Apparently, Seychelles had a higher NMR (31 per 1,000)compared to Uganda (22 per 1,000) while Seychelles is economically better off, with a higher spending on health and higher number of health workers population ratio compared to Uganda. Studies are therefore needed to establish reasons for the resource output discrepancy. It will also be interesting to know why countries that are economically better-off had higher NMR.

**Figure 29: Neonatal mortality rate (per 1,000)**
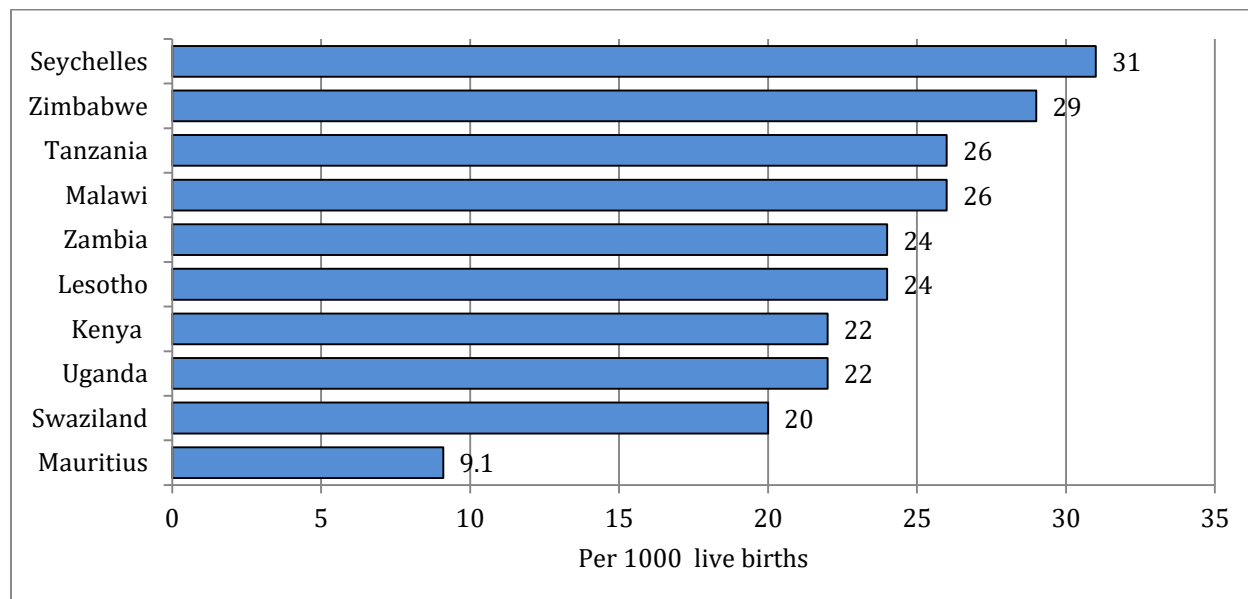
NMR among babies from the lowest wealth quintile was higher than average and the highest quintile in Kenya, Lesotho, Zambia and Zimbabwe with a gap ranging between 7 per 1,000 live-births in Zimbabwe to 16 per 1,000 live-births in Lesotho. On the contrary, NMR was lower in the lowest compared to highest wealth quintile in Malawi, Tanzania and Uganda. The gap was highest in Tanzania (18 per 1,000 live-births).

Figure 30: Neonatal mortality rate (per 1,000) by wealth status

Most ECSA countries experienced a decline in NMR. Whereas, the decline was steady in East African countries, the decline had a staggering pattern in Lesotho, Malawi, Swaziland and Zambia.

**Figure 31: Neonatal mortality rate per 1000 live births trend 2001-2015**
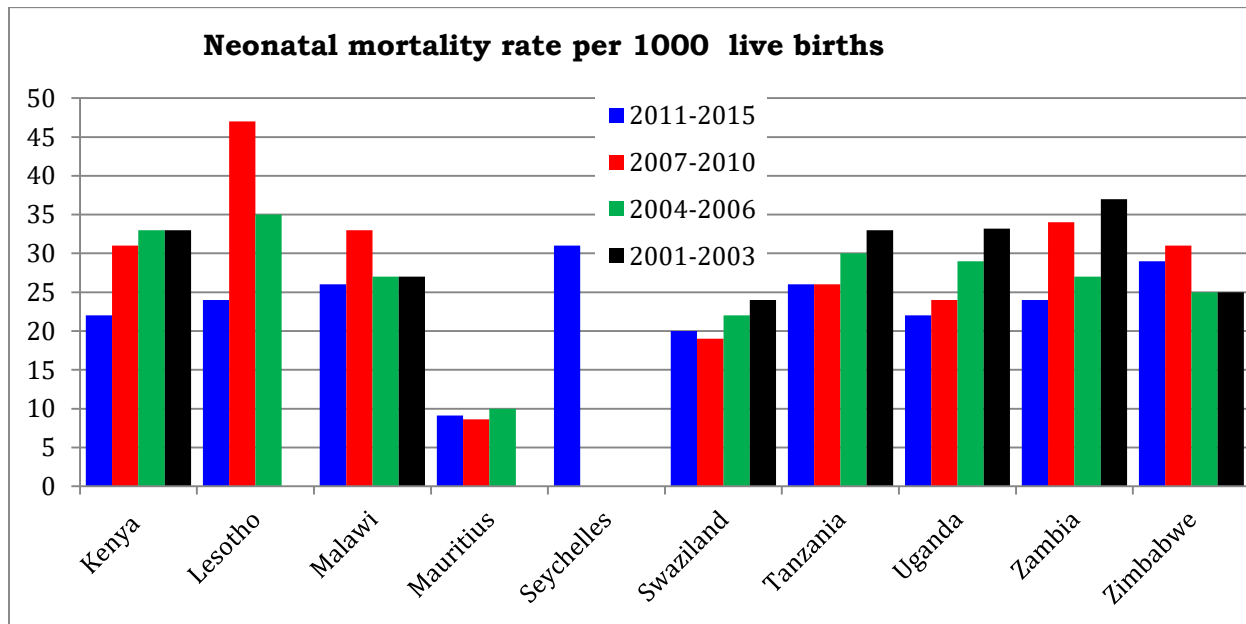
Indicator 31: Infant mortality rate

The number of children dying before the age of one year per 1000 live-births measures child survival. It is also proxy measure of the level of socio economic development. Figure 32 shows that IMR in ECSA region varied widely ranging

between 11.3 per 1,000 in Seychelles and 66.0 per 1,000 in Malawi. Two countries had IMR below 20 per 1,000; these are Seychelles (11.3 per 1,000) and Mauritius (12.1 per 1,000).

**Figure 32: Infant mortality rate in ECSA countries in 2011-2014**
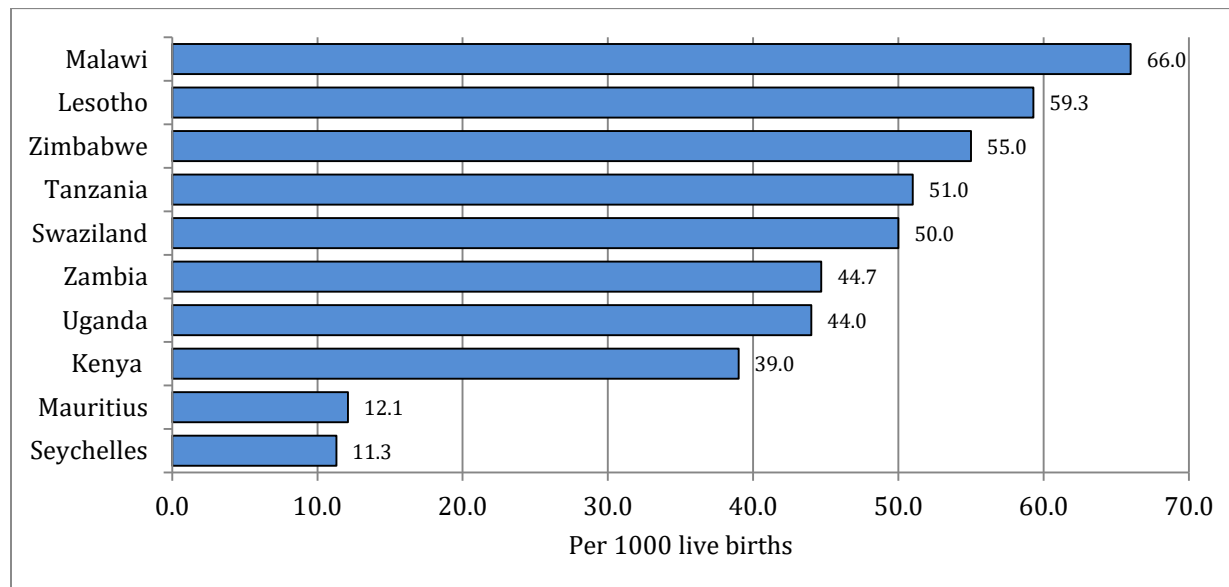
IMR in the lowest quintile was higher compared to the highest quintile with a gap ranging between 7 per 1,000 in Zimbabwe and 28 per 1,000 in Uganda (Figure 33). However, there was no significant difference in IMR between lowest and highest quintile in Malawi and Tanzania.

Figure 33: Infant Mortality Rate by Wealth Quintile
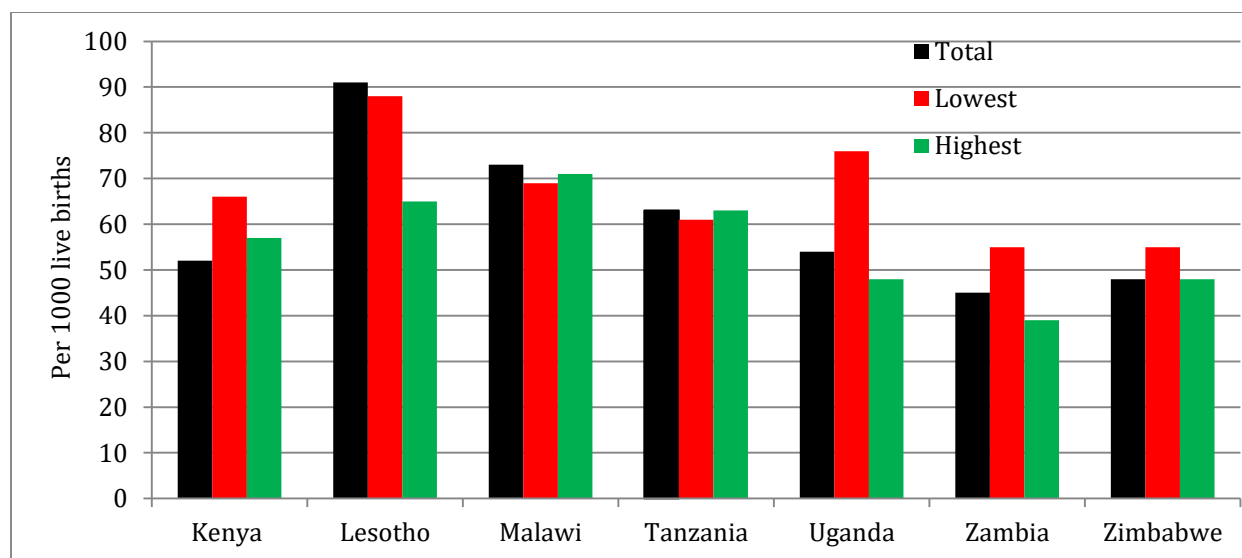
A decline in IMR, similar to that of NMR, was observed in most ECSA countries. A steady decline in IMR was observed in the East African Countries. The highest decline was observed in Zambia (95 to 44 per 1000 live-births) and Uganda (88 to 44 per 1,000 live-births). On the contrary, IMR increased in Zimbabwe (46 to 55 per 1,000 live-births) and in Swaziland (67 to 100 per 1,000 live-births).

Figure 34: Infant mortality rate per 1000 live-births, trend 2001-2015
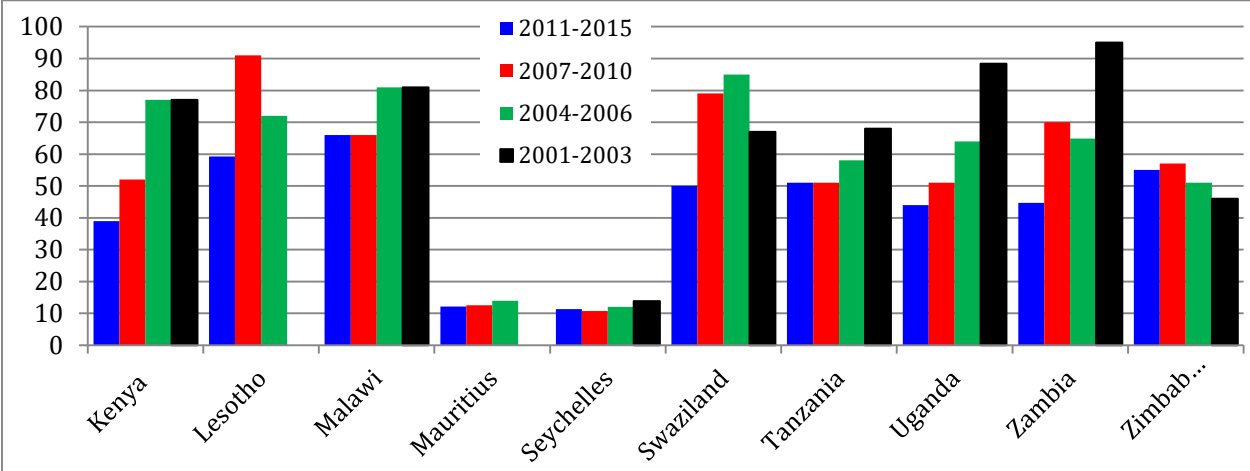

Indicator 32: Under five mortality rate

The number of under five deaths per 1000 live-births measures child health as well as social, economic, environmental and nutritional status of children in a geographical area. Figure 35 shows that U5 MR in the ECSA countries varied widely between 13.6 per 1,000 in Seychelles and 119.9 per 1,000 in Swaziland. Seychelles and Mauritius had U5 MR below 20 per 1,000 live-births, (13.6 per 1,000 and 14.5 per 1,000), respectively.

**Figure 35: Under-five Mortality Rate in ECSA countries**

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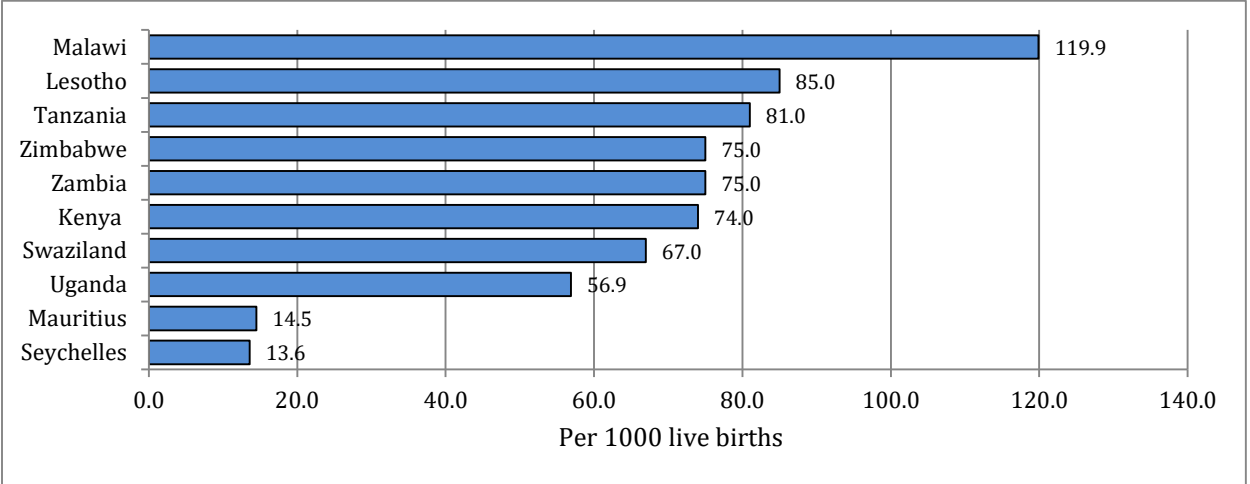
Under-five Mortality Rate was higher among children from lowest compared to highest quintile in all ECSA member states (Figure 36). The gap between lowest and highest quintile ranged between 19 per 1,000 in Tanzania and 51 per 1,000 in Uganda.

Figure 36: Under five Mortality Rate by wealth status
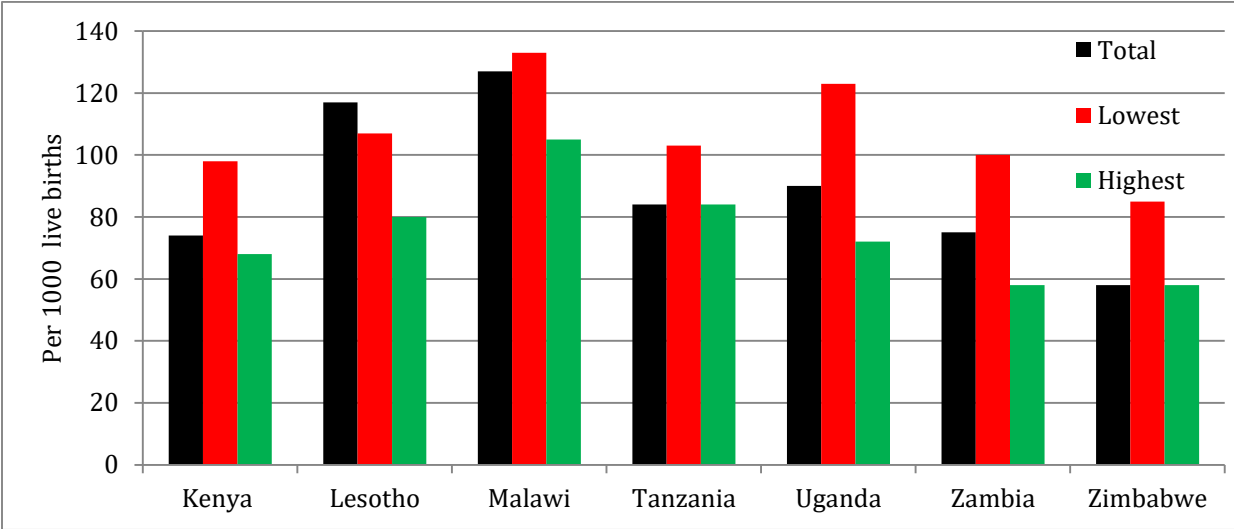
As observed with NMR and IMR, most ECSA member countries experienced a decline in U5 MR during the reporting period (Figure 37). A steady decline was observed in Zambia and the three East African countries. The decline was highest in Uganda (152 to 57 per 1,000 live-births) and Zambia (168 to 75 per 1,000 live-births). A notable increase in U5 MR was observed in Zimbabwe (62 to 75 per 1,000 live-births).

Figure 37: Under five mortality rate per 1000 live births, trend 2001-2015
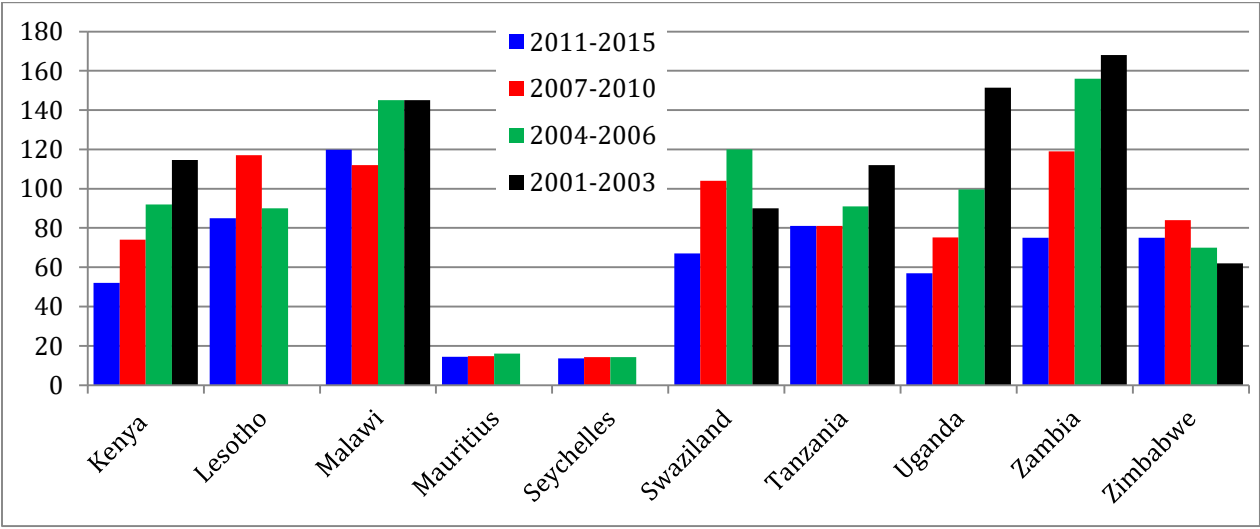
Indicator 33: Maternal Mortality Ratio

The number of women dying due to pregnancy or within 42 days after delivery, as a result of the pregnancy or its complication is a measure of quality of health care offered. The indicator reflects the extent to which health system provides effective services to address pregnancy, delivery and post delivery complications. MMR in the ECSA region in the period 2011-14 ranged from 52 per 100,000 live-births in Mauritius to 675 per 100,000 live-births in Malawi (Figure 38). There was no maternal death that occurred in Seychelles during the reporting period. In addition to Seychelles that reported no death, Lesotho and Mauritius had MMR lower than 100 per 100,000 while Zimbabwe and Malawi had MMR over 500 per 100,000 live-births.

Figure 38: Maternal Mortality Ratio in ECSA countries 2011-2014
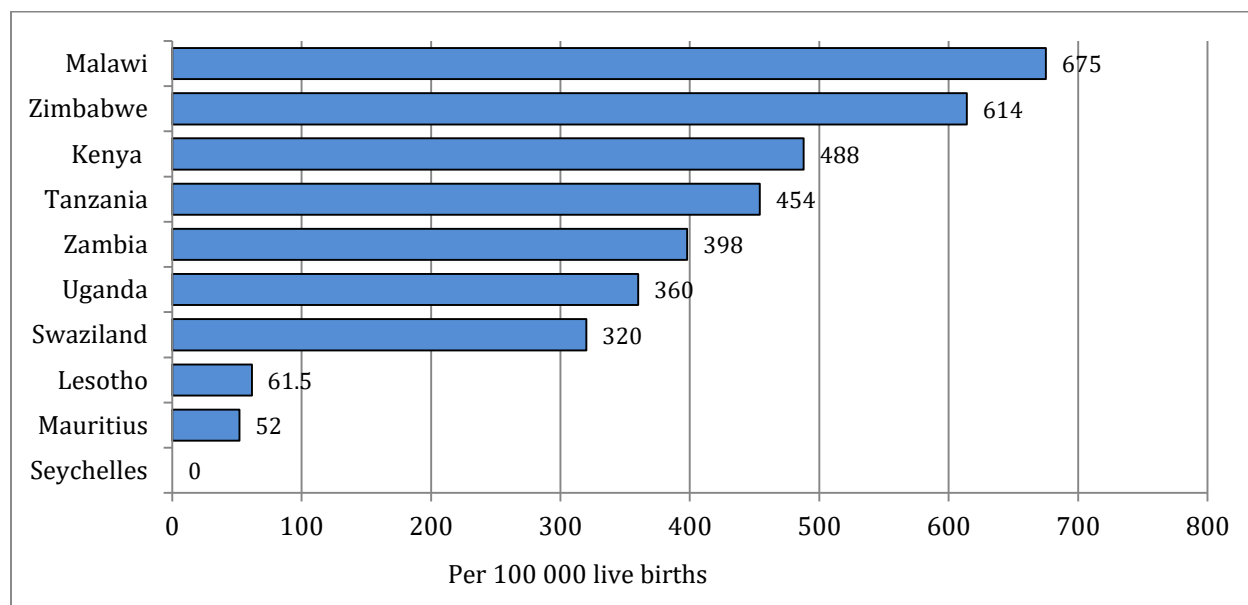
Most of the ECSA member countries experienced a decline in MMR during the period of observation (Figure 39). The decline was highest in Zambia (729 to 398 per 100,000), Swaziland (589 to 320 per 100,000) and Malawi (807 to 675 per 100,000) in the period 2004 to 2015. The decline in Swaziland should however be interpreted with caution owing to the large margin of error due to small sample size. Since maternal death is a rare event, a large sample size is required to obtain an accurate value. It is not surprising to find MMR in Seychelles fluctuates widely due to small population size where a single maternal death represents MMR of 67 per 100,000 live-births. MMR in Kenya showed a slight increase from 414 to 448 per 100,000.

Figure 39: Maternal mortality rate per 100 000 live birth, trend 2001-2015
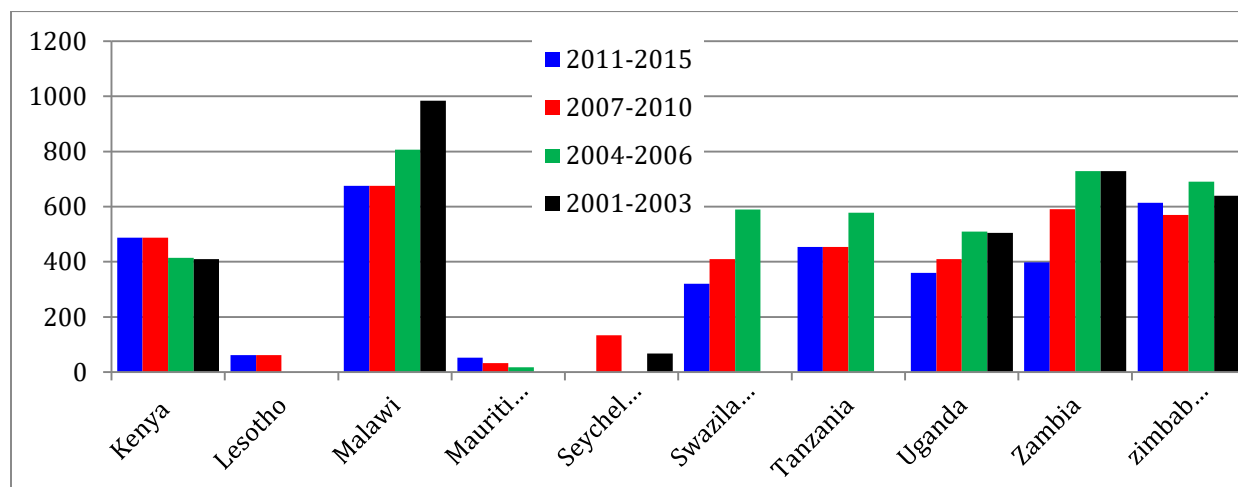
## Indicator 34: Births attended by skilled health personnel (%)

The number of births attended by skilled health personnel as a proportion of live-births is a measure of the extent to which deliveries are handled by appropriate personnel. The indicator measures access to delivery services where complications can be detected prevented and managed. The indicator can also be used as a proxy measure for quality of maternal care in the prevention of maternal deaths. Figure 40 shows that between 57.08% (Uganda) and 100% (Mauritius) births occurring in the ECSA region were attended by skilled personnel. While almost all births in Mauritius and Seychelles were attended by skilled health workers, in Uganda, only about a half of pregnant women were delivered by skilled staff.

Figure 40: Proportion of births attended by skilled health personnel


33
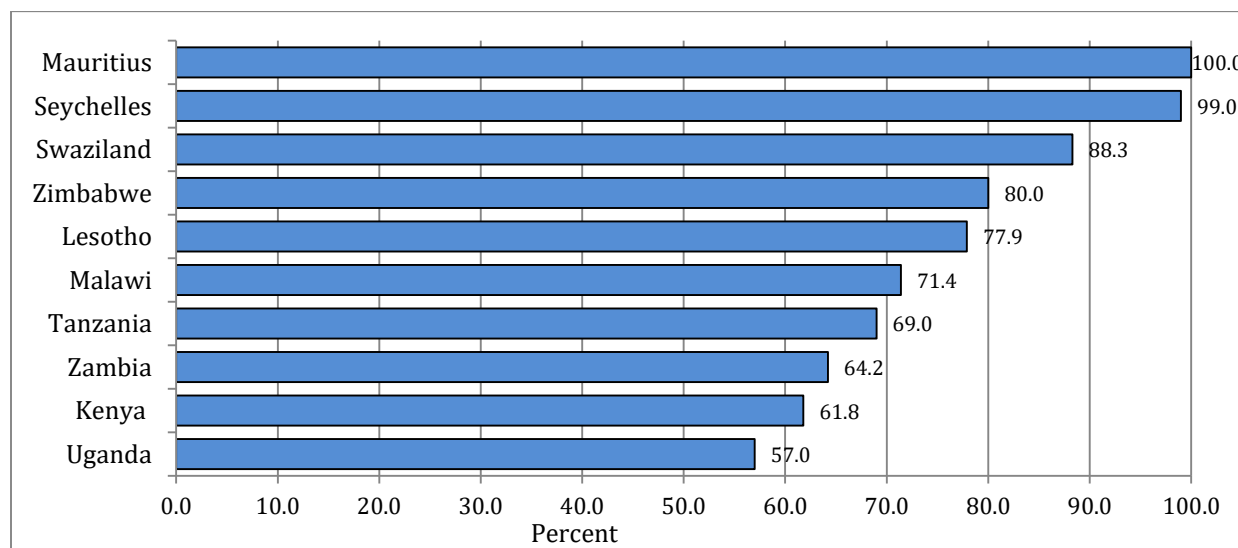
Births attended by skilled health personnel were comparatively fewer among women from the lowest wealth quintile compared to average and the highest quintile in all ECSA member states (Figure 41). The gap between the two quintiles ranged from 25.2% in Malawi to 57.4% in Tanzania. Except for Lesotho and Malawi the percent of birth attended by skilled personnel was about 2-fold or more in ECSA member states.

Figure 41: Proportion of births attended by skilled health personnel by wealth status
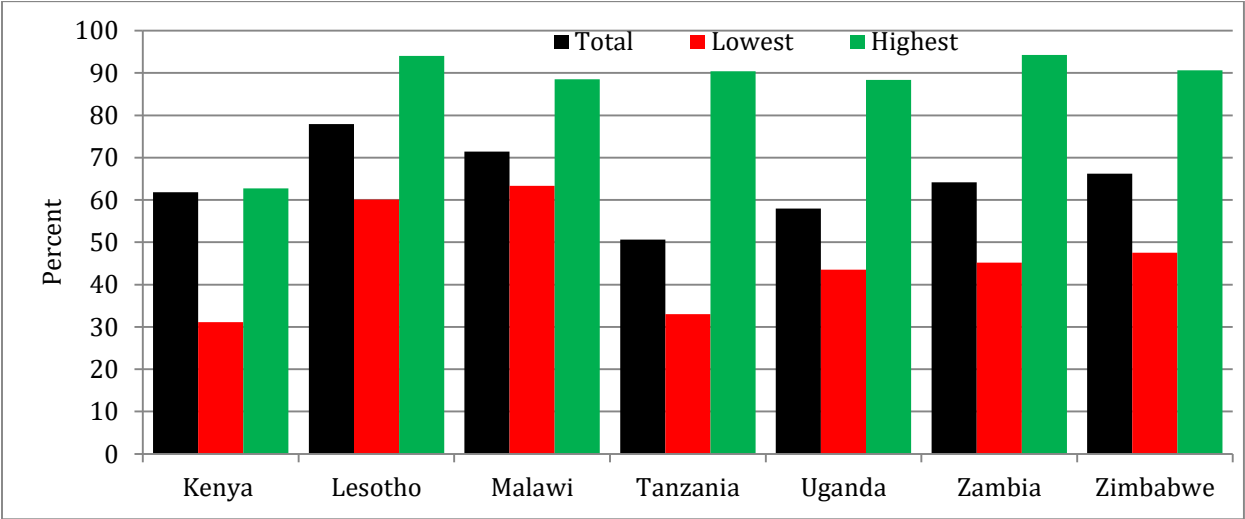
Data from 2004 to 2015shows that there has been an increase in the number of birth attended to by skilled workers in many ECSA countries although in many of them the increase has been staggering (Figure 42).

Figure 42: Births attended by skilled health personnel (%), trend 2001-2015
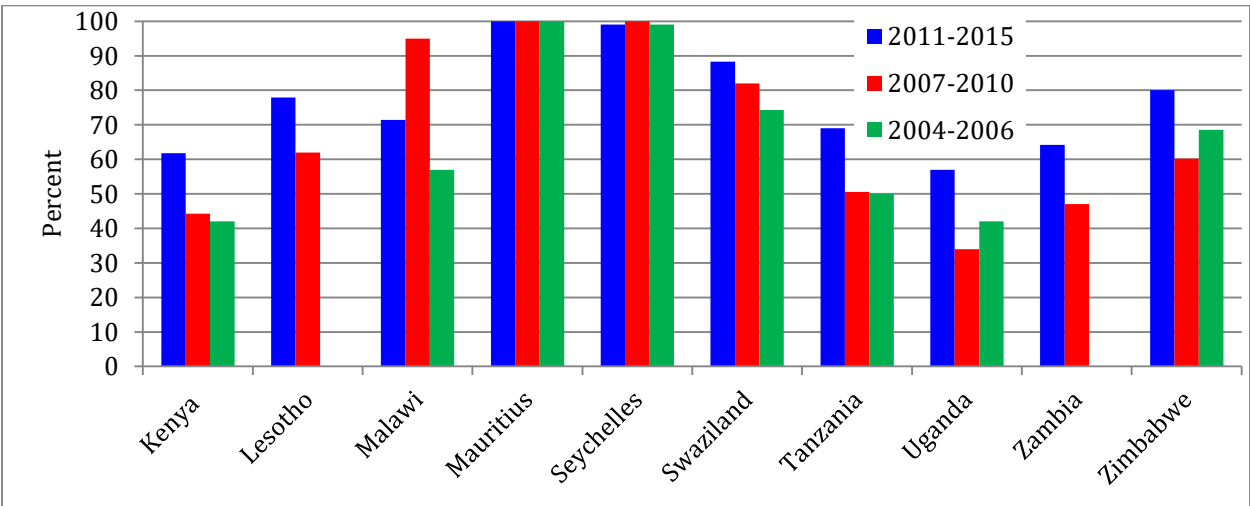
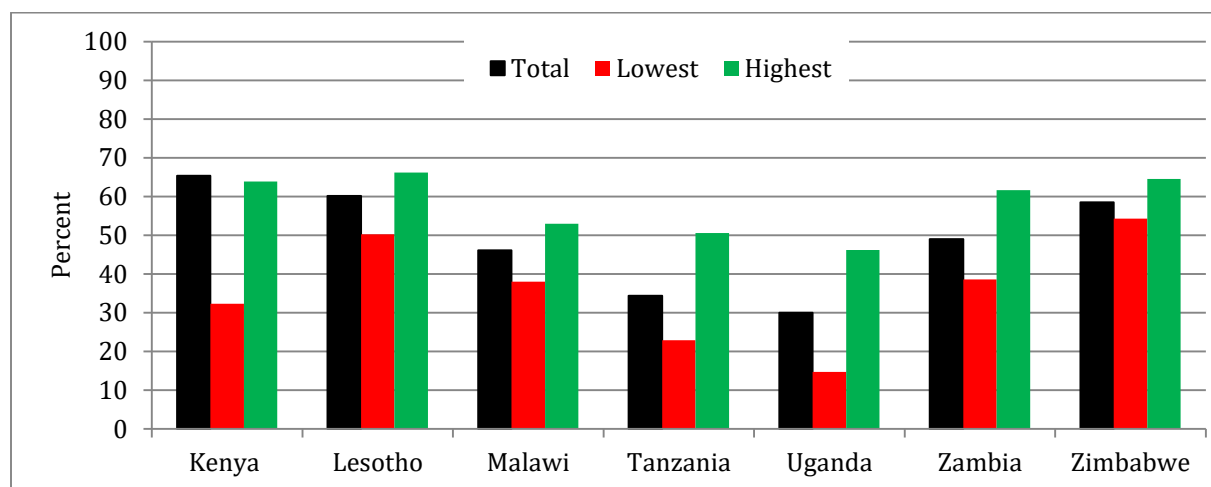*Indicator 35: Contraceptive prevalence rate (%)*

Contraceptive Prevalence Rate (CPR) is an indicator that refers to women of reproductive age who are either married or co-habiting and are using modern contraception. This indicator measures access to contraceptive services related to child and maternal health, HIV/AIDS and gender equity. The indicator also measures the success of family planning programme in a country. Figure 43 shows that coverage of modern CPR in ECSA region ranged from 30% in Tanzania and Uganda to 76% in Mauritius. Over half of the women in Mauritius, Zimbabwe, Swaziland and Lesotho had access to modern contraceptive methods.

Figure 43: Contraceptive prevalence rate (%)
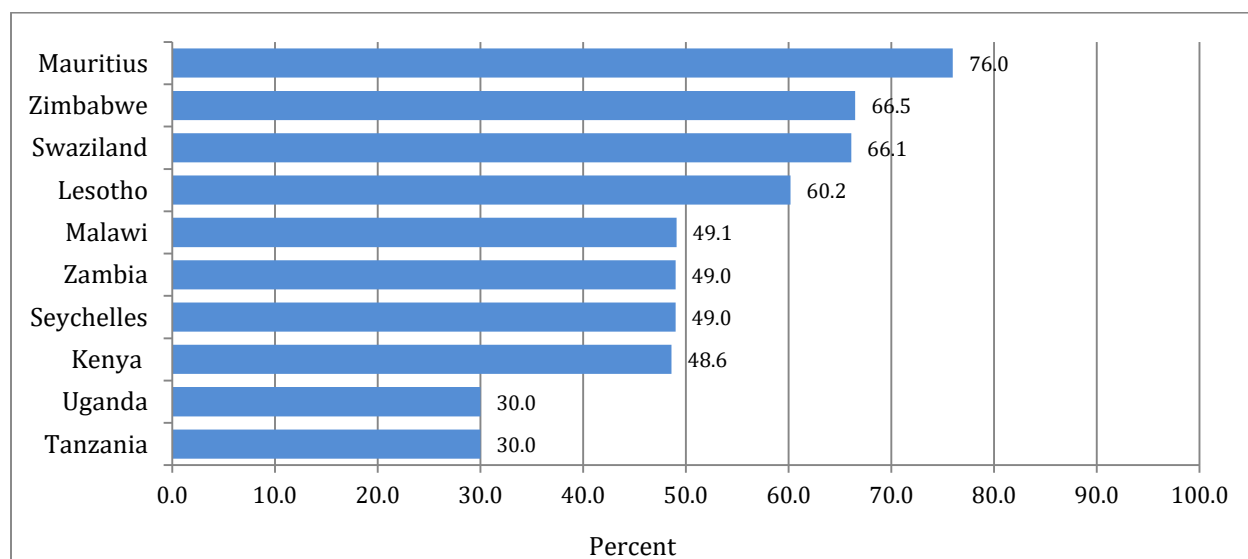
Women in the lowest wealth quintiles were less likely to access contraceptives compared to average and the highest quintile in all ECSA member states (Figure 44). The gap ranged from 15.0% in Malawi to 31.6% in Kenya. Except in Malawi, Lesotho and Zimbabwe, a gap of over 20% was noted in other member states. Access to modern contraceptives was double or more among women in the highest quintile compared the lowest, in Tanzania, Uganda and Kenya.

Figure 44: Contraceptive prevalence rate (%) by wealth status

Most ECSA member countries had an increase in CPR during the reporting period (Figure 45). The increase was steady in most of the countries except for Zimbabwe and Swaziland.

**Figure 45: Contraceptive prevalence (%), trend 2001-2015**
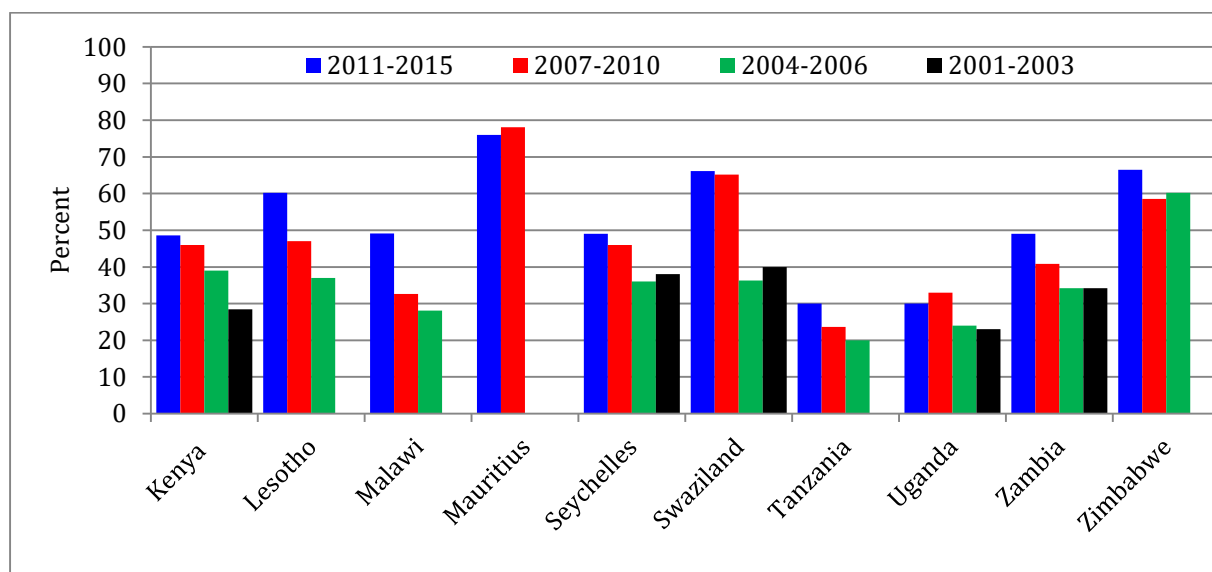
Indicator 40: Unmet need for Family Planning

This indicator measures the number of women who would wish to delay or space their pregnancies but were not found to be on any modern contraceptive. This indicator measures the success of the programme in reaching people in need of family planning services. Unmet need in the ECSA region ranged

between 3.3% in Mauritius and 34% in Uganda (Figure 46). While unmet need in Mauritius was less than 5%, unmet need was quite high (over 20%) among women of reproductive age in Uganda (34.0%), Malawi (26.1%), Kenya (26.0%) and Zambia (21.1%).
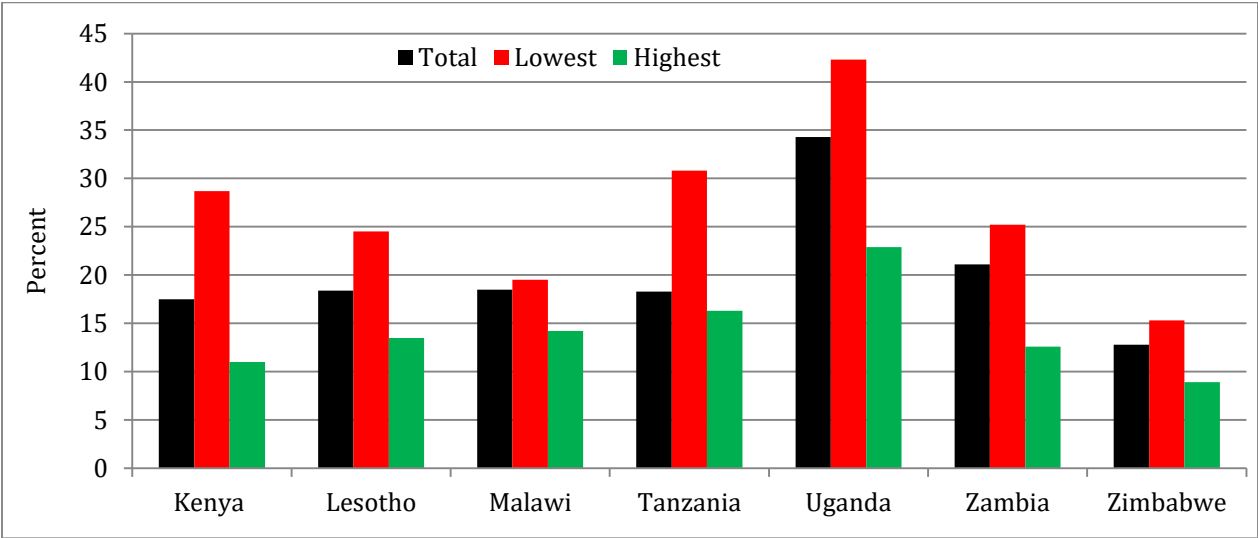
Figure 46: Unmet need for Family Planning
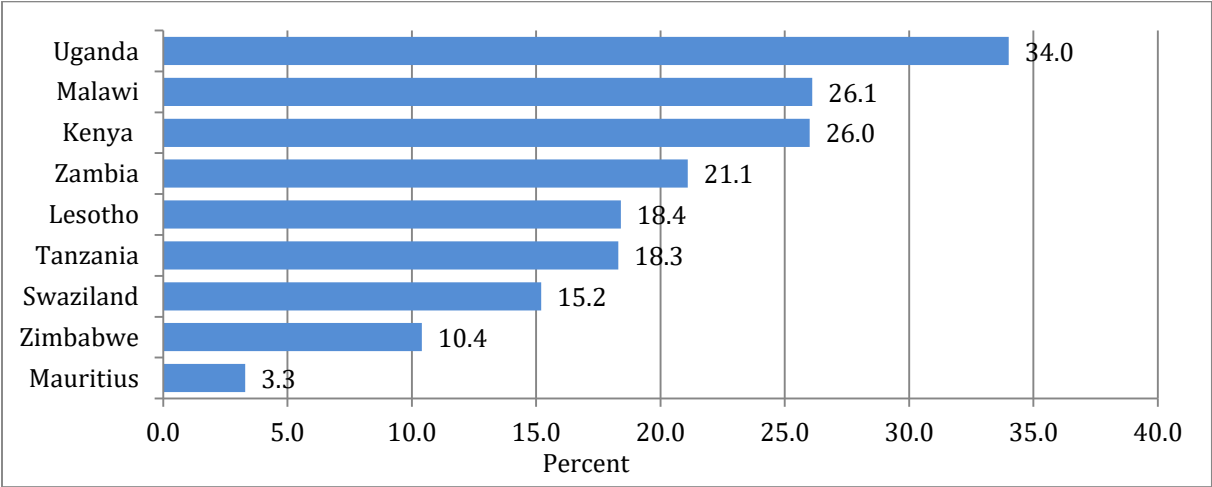


Data not available from Seychelles

Unmet need among women from the lowest wealth quintile was higher than average and highest quintile in all ECSA member states (Figure 47). The gap between lowest and highest quintile ranged between 5.3% in Malawi and 19.4% Uganda. Except for Malawi, the gap was nearly double or more in other ECSA member states

Figure 47: Unmet need for Family Planning by wealth status

The proportion of women with unmet need decreased during the reporting period in most ECSA countries except in Zambia, where unmet need increased from 14% to 21% (Figure 48).

Figure 48: Unmet need for Family Planning, trend 2004-2015
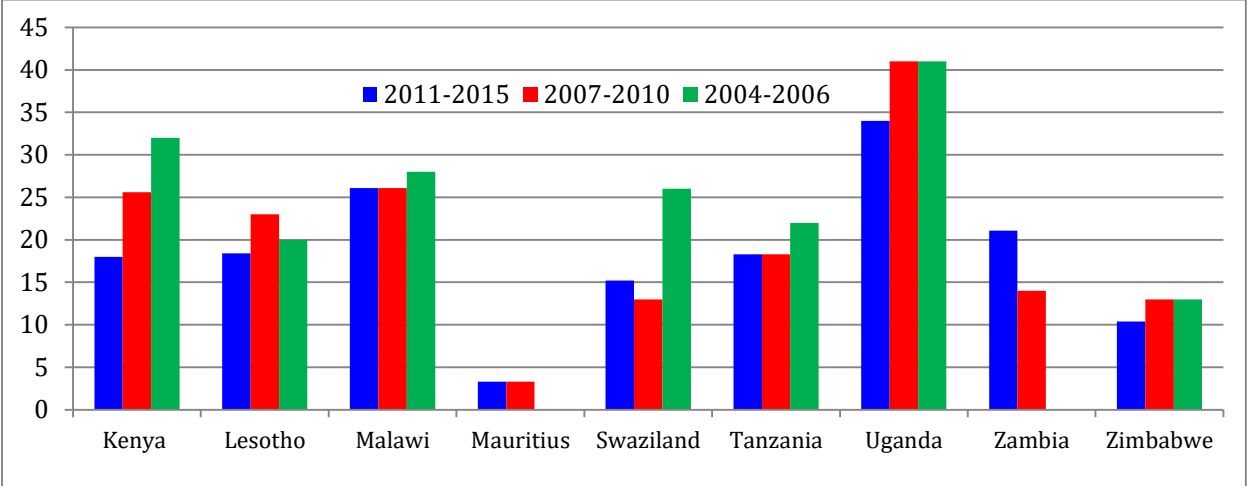
Indicator 41: Adolescent birth rate (below 18 years)(%)

Birth rate among adolescents (18 years and below) is an indicator that measures access to reproductive health among youths with the aim to reduce maternal and infant mortality. Adolescent birth prolongs the reproductive age hence increases fertility. Figure 49 shows that adolescent birth rate ranged between 7.0 per 1,000 in Mauritius and 141.2 per 1,000 in Zambia.

Figure 49: Adolescent birth rate (below 18 years) per 1,000
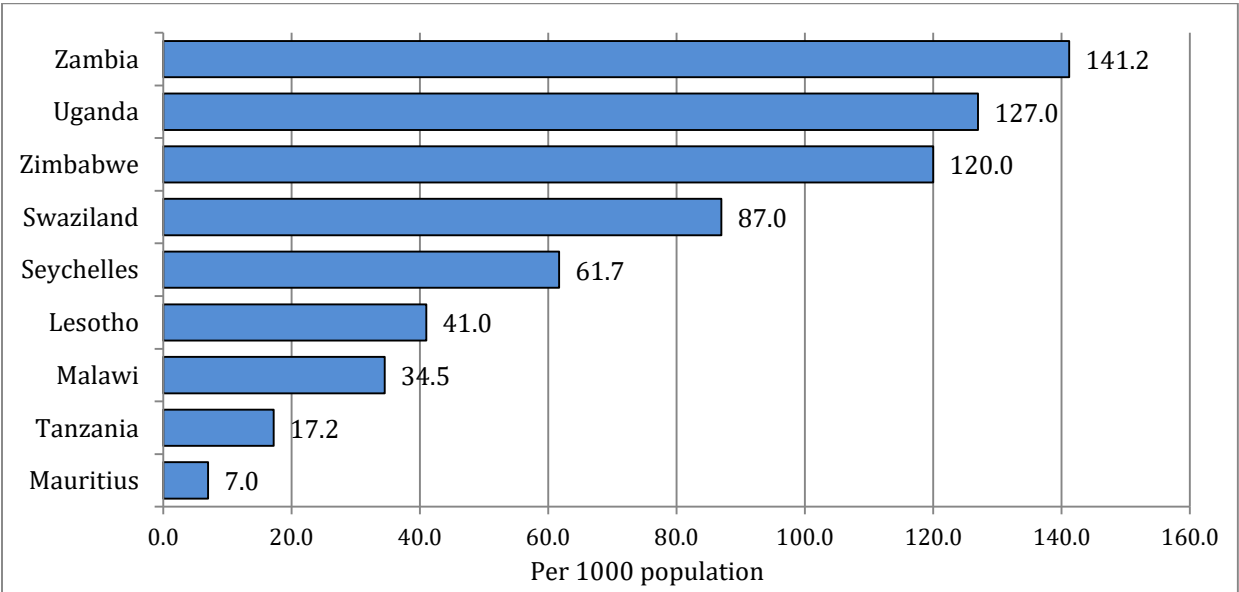
Adolescent birth rate decreased in Lesotho (90 to 41 per 1,000), Malawi (162 to 35 per 1,000) and Uganda (154 to 127 per 1,000) during the reporting period (Figure 50). A steady increase was however observed in Zimbabwe from 99 to 120 per 1,000. Adolescent birth rate also increased from 25% to 87% in Swaziland.

Figure 50: Adolescent birth rate (below 18 years per 1000), trend 2004-2015
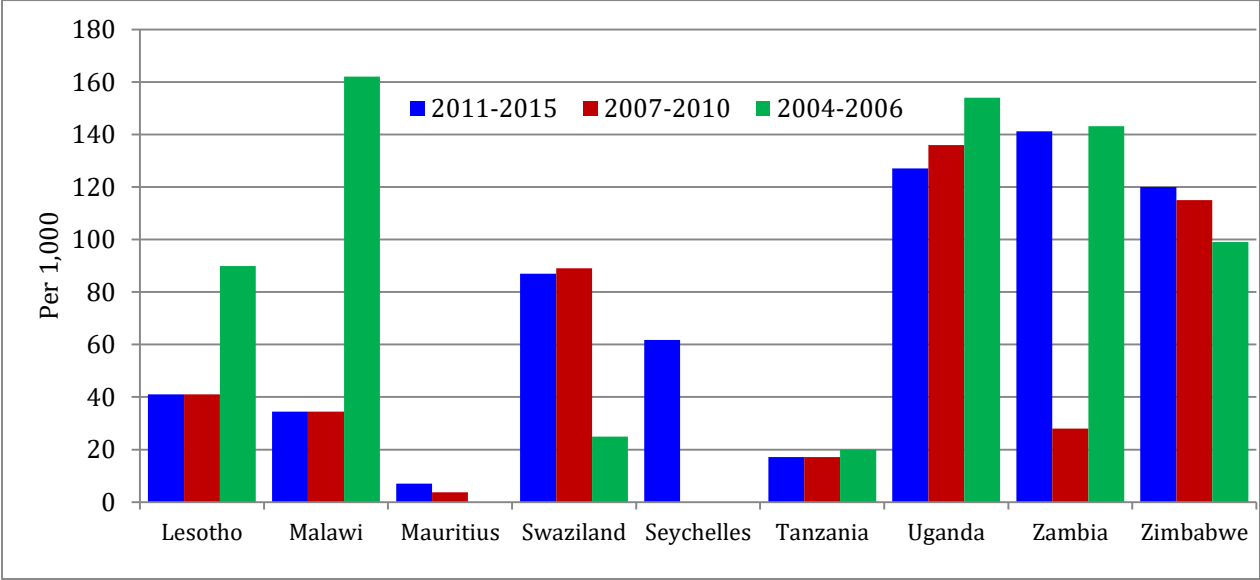
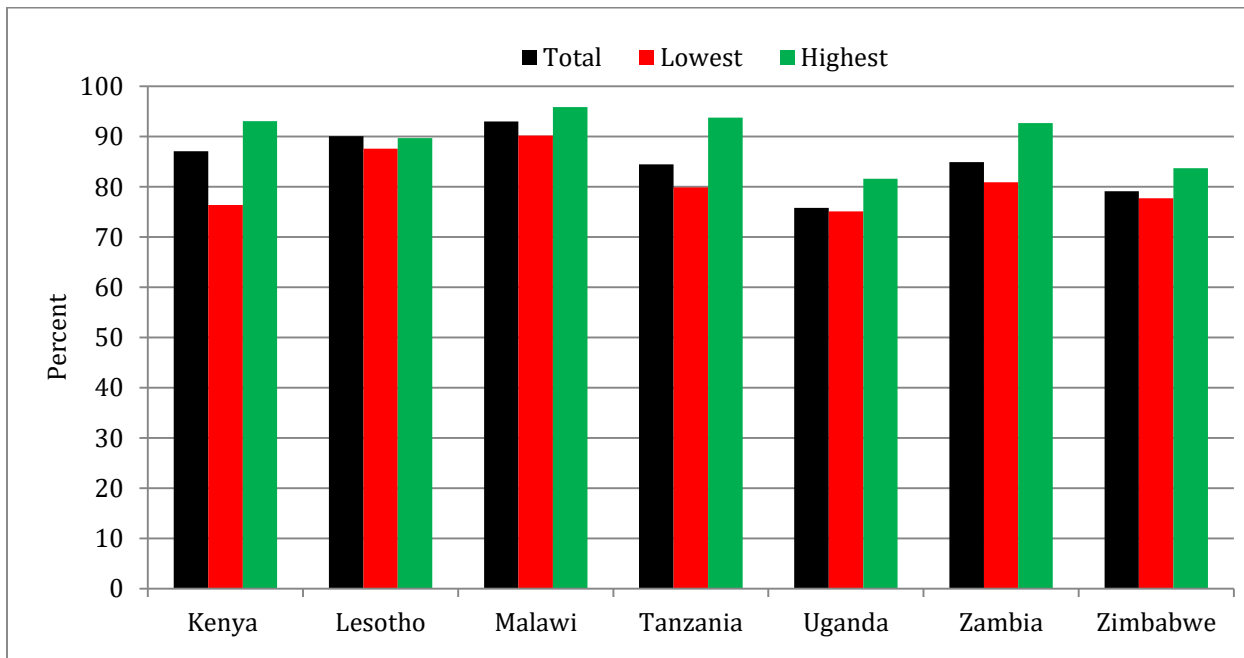### Indicator 37: Measles immunization coverage amongst 1 year olds

The proportion of children immunized against measles before reaching 12 months of age is one of the indicators that measure the efficiency of immunization services in the efforts to eliminate and ultimately eradicate immunizable diseases. The vaccine is given to a child at the age of 9 months. Measles vaccination coverage ranged between 74% in Kenya and 100% in Seychelles (Figure 51). Almost all children in Seychelles and Mauritius were vaccinated against measles by 12 month of age. The WHO recommends that at least 80% of children should be vaccinated against measles by the time they reach 12 months of age. Only Kenya had Measles vaccination coverage rate below 80%.

**Figure 51: Measles immunization coverage in ECSA member countries**
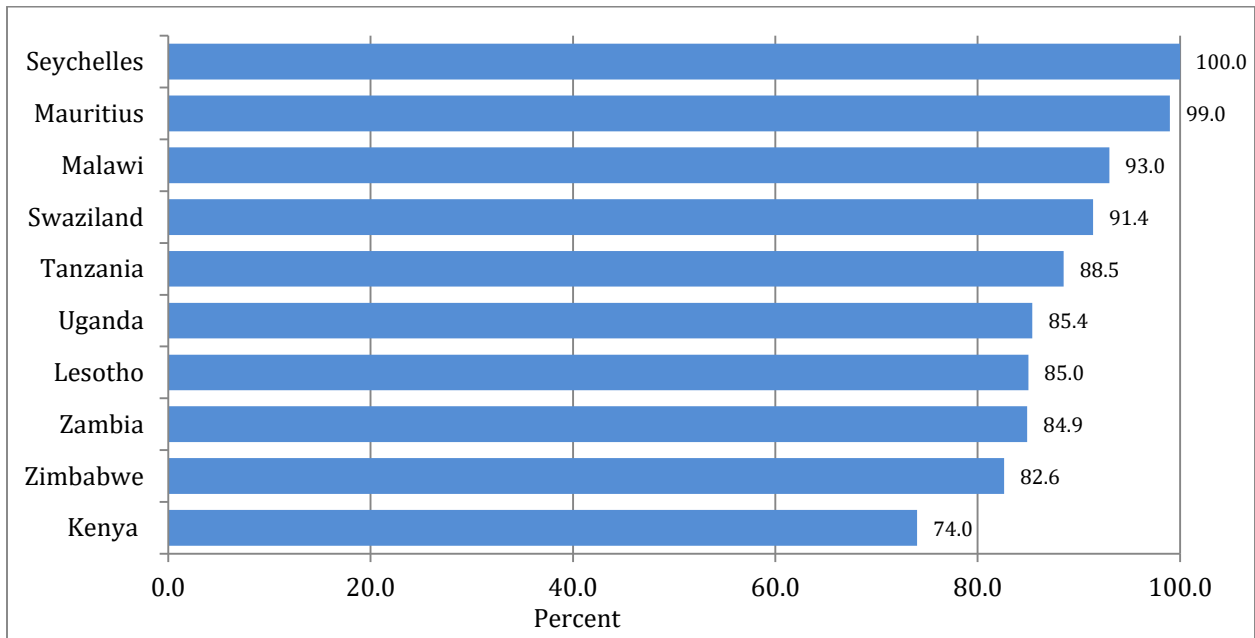
Measles immunization coverage was slightly less among children from the lowest wealth quintile compared to average and highest quintile (Figure 52). The gap between the lowest and highest quintile ranged between 2.1% in Lesotho to 16.7% in Kenya.

Figure 52: Measles immunization coverage by wealth status

Measles vaccination coverage increased in most ECSA countries except in Kenya (79% to 74%) (Figure 53). The highest increase in coverage was observed in Malawi (79% to 93%).

Figure 53: Measles immunization coverage amongst 1 year olds, trend 2004-2015
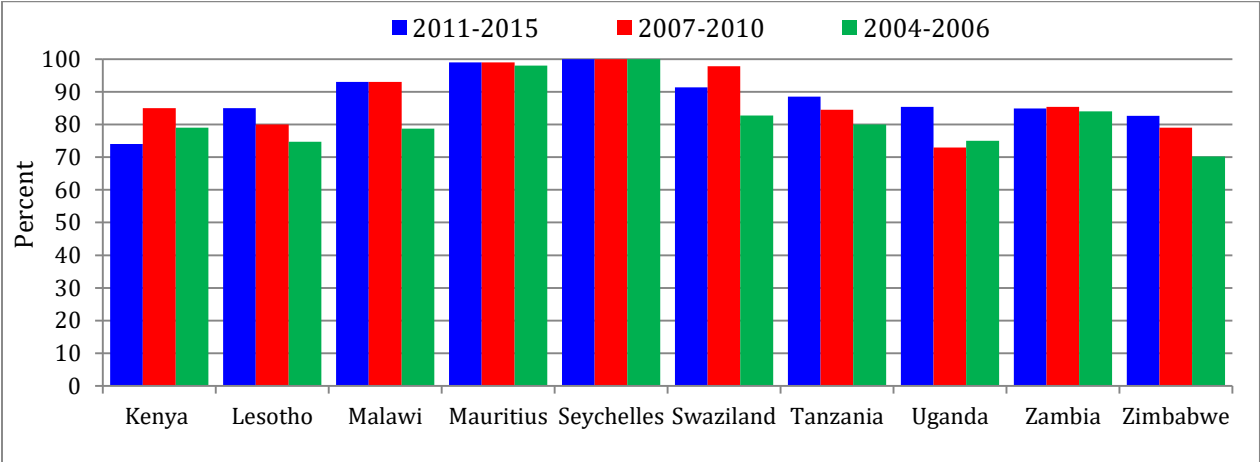
Indicator 38: Antenatal care (ANC) coverage (%) at least one visit

The proportion of pregnant women receiving antenatal care from skilled staff, at least once is an indicator of access and use of ANC services during pregnancy. Figure 54 shows that ANC coverage for the first visit ranged between 88% in Uganda and 100.0% in Mauritius. Coverage of ANC visit was over 90% in all the ECSA countries with the exception of Uganda (88%). The extremely high rate of ANC attendance in ECSA region is window of opportunity for the health systems to reach women for various interventions that targets pregnant women, children and women of reproductive age in general.

Figure 54: Antenatal care (ANC) coverage (%) at least one visit

41
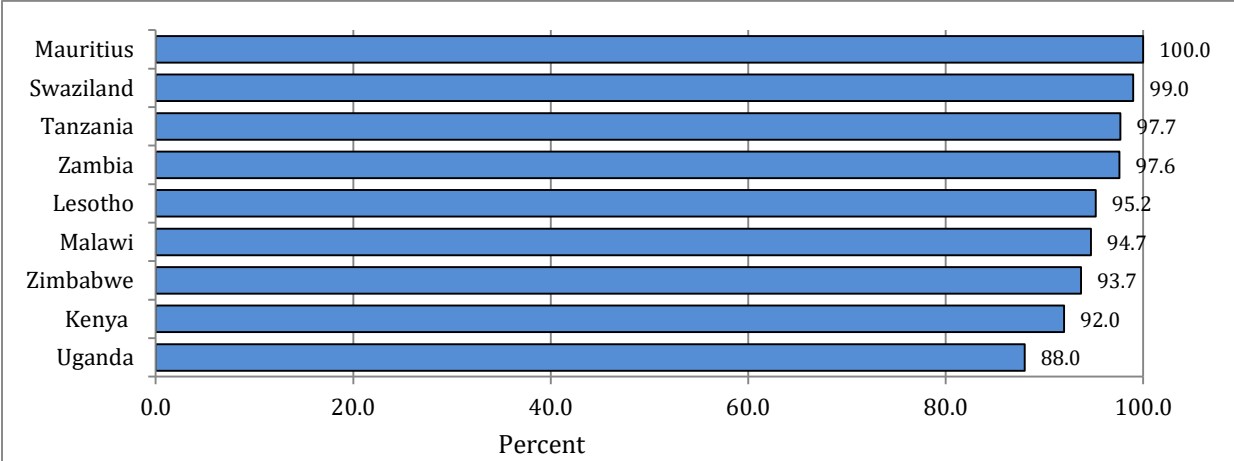
A slight increase in ANC first visit coverage was observed during the reporting period in almost all ECSA countries. Slight decline in attendance was noted in Uganda and Zimbabwe.

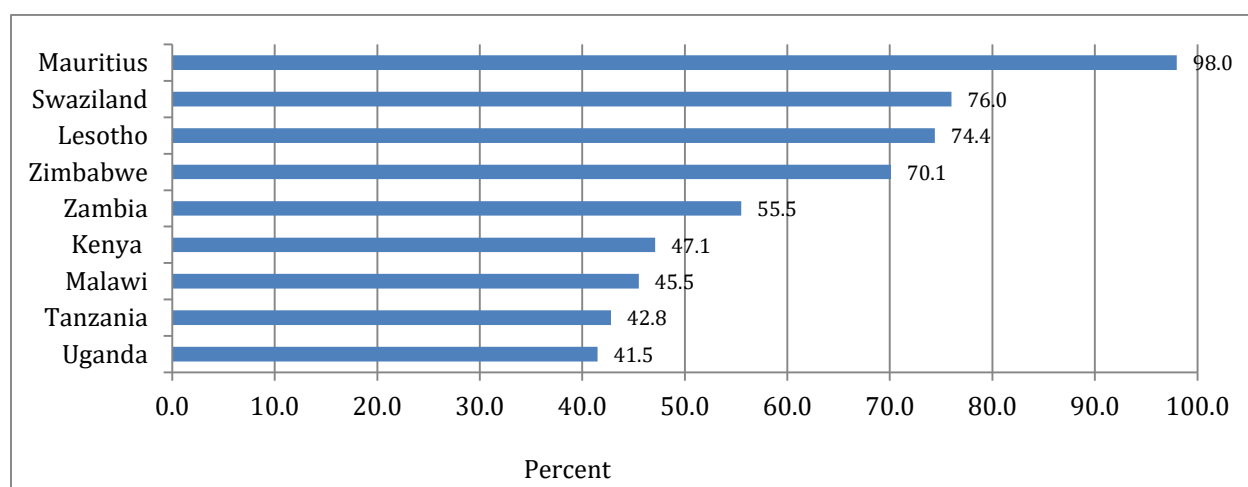**Figure 55: ANC coverage at least one visit (%), trend 2001-2015**
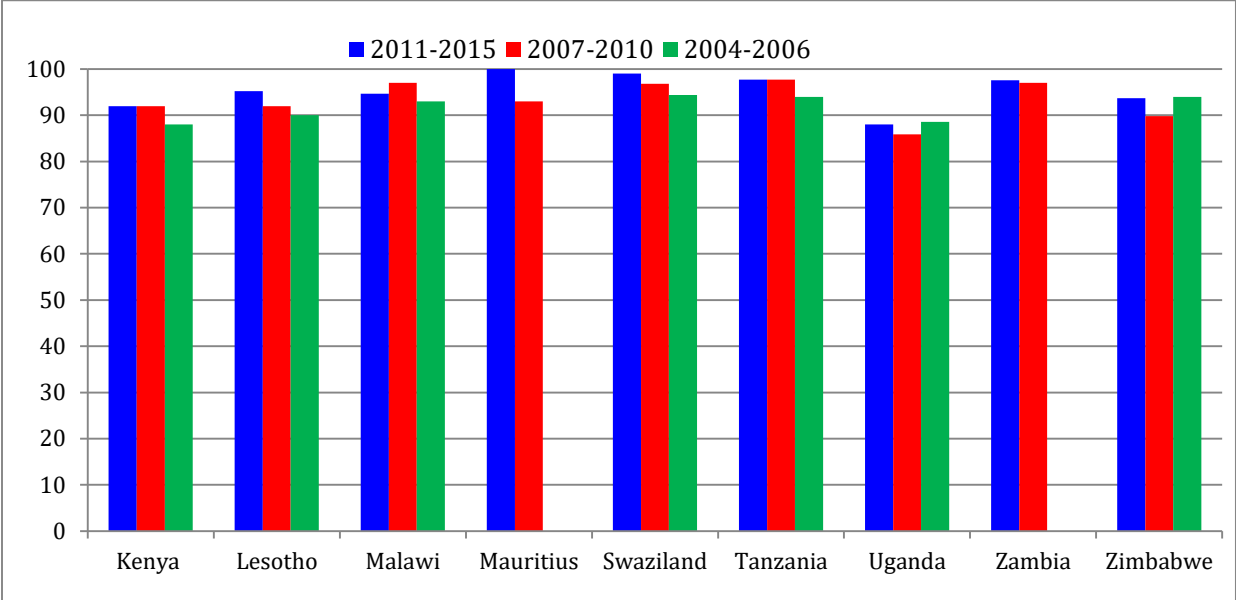
Data not available from Seychelles

### Indicator 39: ANC Coverage (%) at least four visits

The proportion of pregnant women attending ANC for four or more times during pregnancy is an indicator that measures access to complete ANC package and effectiveness of programme in reaching the target population. Figure 56 shows that the proportion of pregnant women attending ANC clinic at least four times during pregnancy ranged between 41.5% in Uganda and 98.0% in Mauritius. Coverage was high (70% and above) in Swaziland (76.0%), Lesotho (74.4%) and Zimbabwe (70.1%) and Mauritius (98.0%). ANC coverage was below 50% in Malawi and the three East African countries.

Figure 56: ANC Coverage at least four visits (%)

The proportion of women attending ANC for four or more times declined in most ECSA countries that reported, except in Lesotho where a slight increase in coverage was observed from 70% to 74%.

**Figure 57: ANC coverage (%) at least four visits, trend 2001-2015**
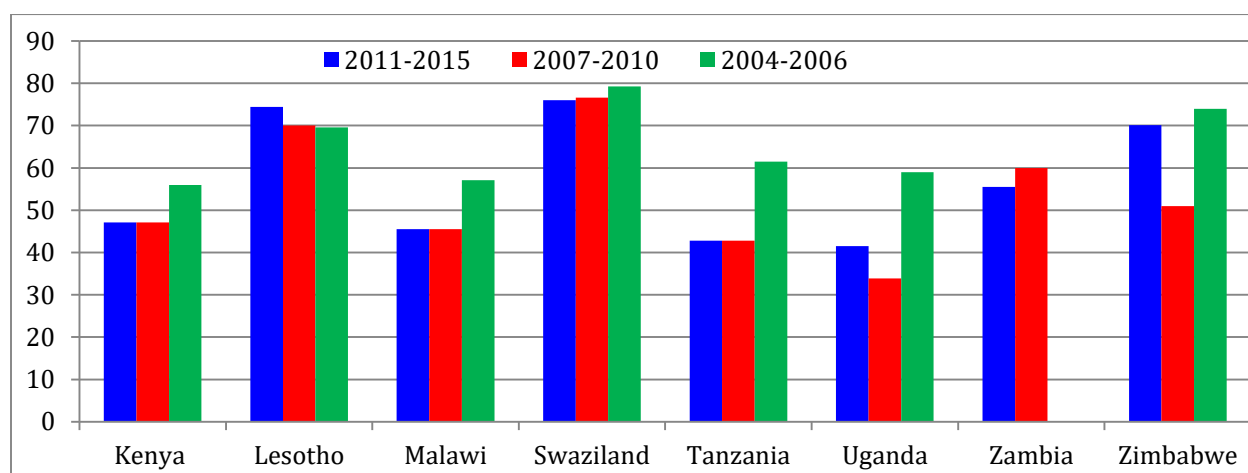
Data for Mauritius and Seychelles not available

2.7   NUTRITION

### *Indicator 45: Low birth weight (%)*

The proportion of babies born less than 2.5 kg is an indicator of maternal malnutrition, illness or poor care during pregnancy. Low birth weight is also an indicator of newborn health. Low birth weight in the ECSA countries ranged between 6% in Kenya and 17% in Mauritius (Figure 58).

Figure 58: Low birth weight in ECSA member states (%)
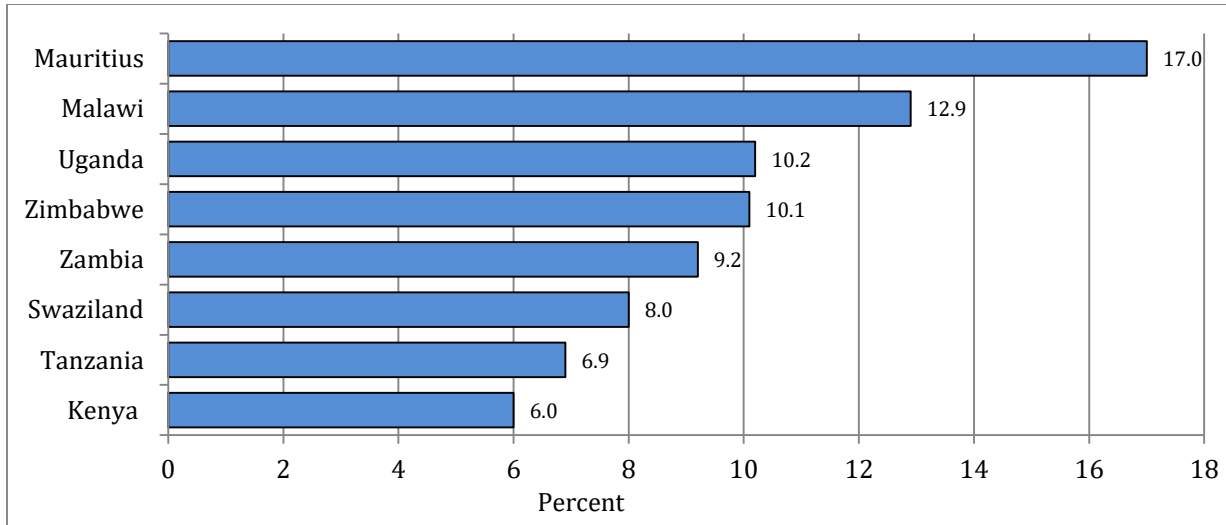
Low birth weight was more prevalent among children from lowest wealth quintile compared to average and highest quintile in Lesotho, Malawi and Zambia. LBW was higher among babies from highest quintile compared to lowest in Kenya, Tanzania and Uganda. However, the gap between lowest and highest quintile in most of the countries was minimal except in Kenya (42%), Lesotho (43%) and Tanzania (44%).
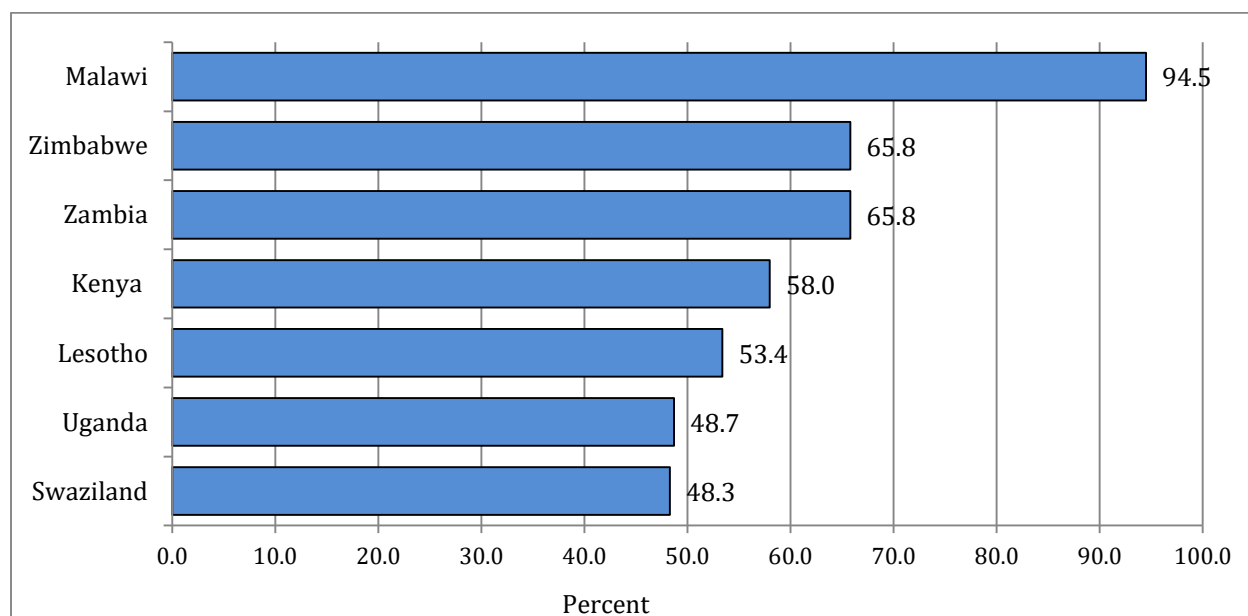
Figure 59: Low birth weight in ECSA member states (%) by wealth status
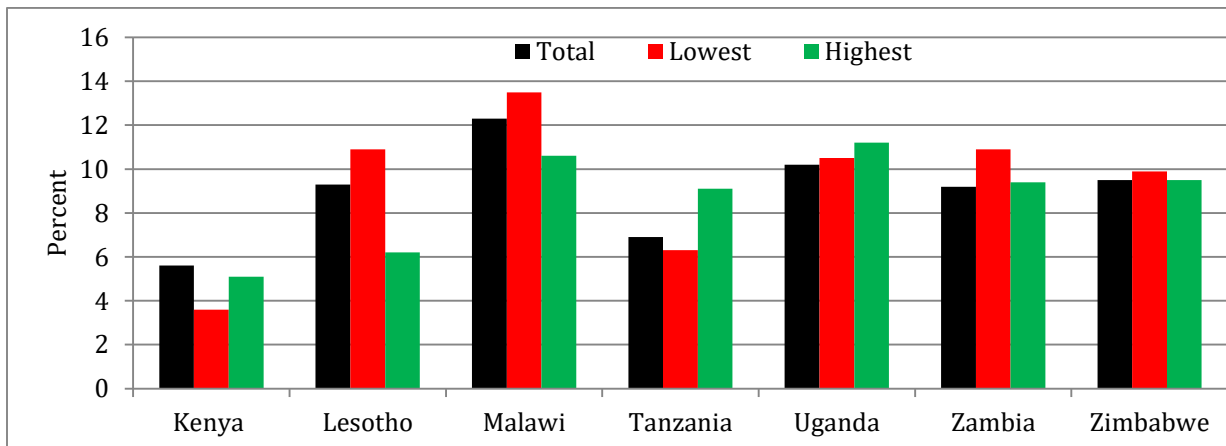
Indicator 46: Early initiation of breastfeeding (within 1 hour after birth)
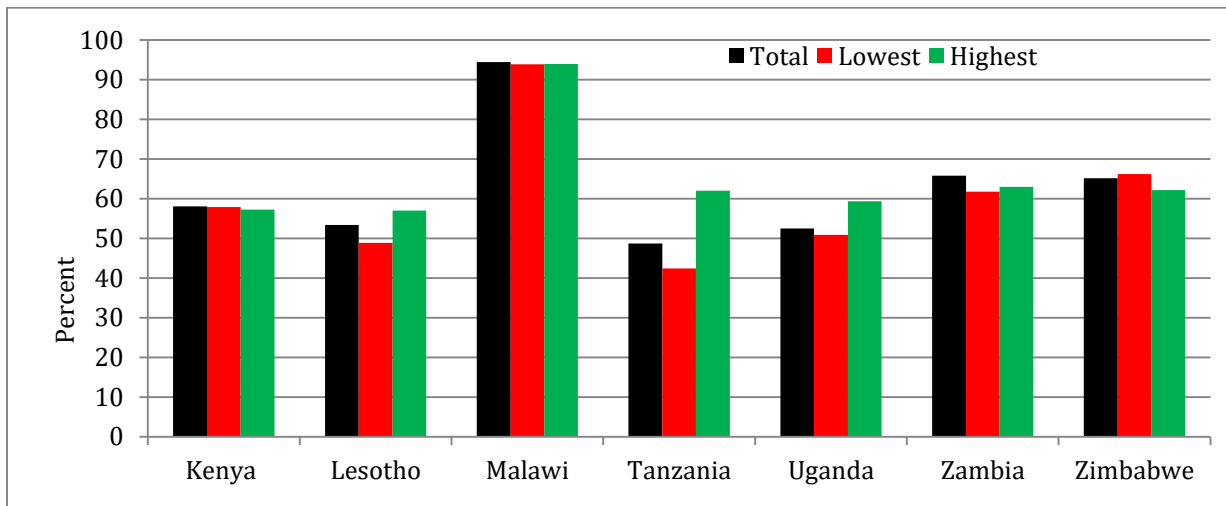
Early initiation of breastfeeding (within 1 hour after birth) among newborns measures nutritional status and child survival. Breastfeeding within one hour after delivery is associated with improved child survival. Early initiation of breastfeeding was very high in Malawi (94.5%) compared to the next country in the rank (Zimbabwe) with a difference of about 30%. On the other side, less than half of babies in Swaziland (48.3%) and Uganda (48.7%) were breastfed within an hour after delivery. Further investigation is needed to understand factors associated with the incredibly high proportion of early initiation of breast-feeding in Malawi. Lessons gained from Malawi can be adapted to improve nutrition of infants in other member countries.

Figure 60: Early initiation of breastfeeding (within 1 hour after birth)

There seems to be no significant difference in early initiation of BF between babies from lowest wealth quintile compared to average highest quintile except in Tanzania where the highest quintile were more likely to embrace early initiation of BF more than the lowest quintile by a difference of 46% (Figure 61).

Figure 61: Early initiation of breastfeeding (within 1 hour after birth) by wealth status

Of the reporting countries, early initiation of breast-feeding was noted to have increased in Kenya (52% to 58%), Malawi (70% to 94.5%), Uganda (42% to 49%) and Zambia (57% to 66%) (Figure 62). A decline in initiation of BF with time was noted in Tanzania (60% to 49%) and Lesotho (63% to 54%).

Figure 62: children with early initiation of breastfeeding (before 1 hour after birth), trend 2004-2015
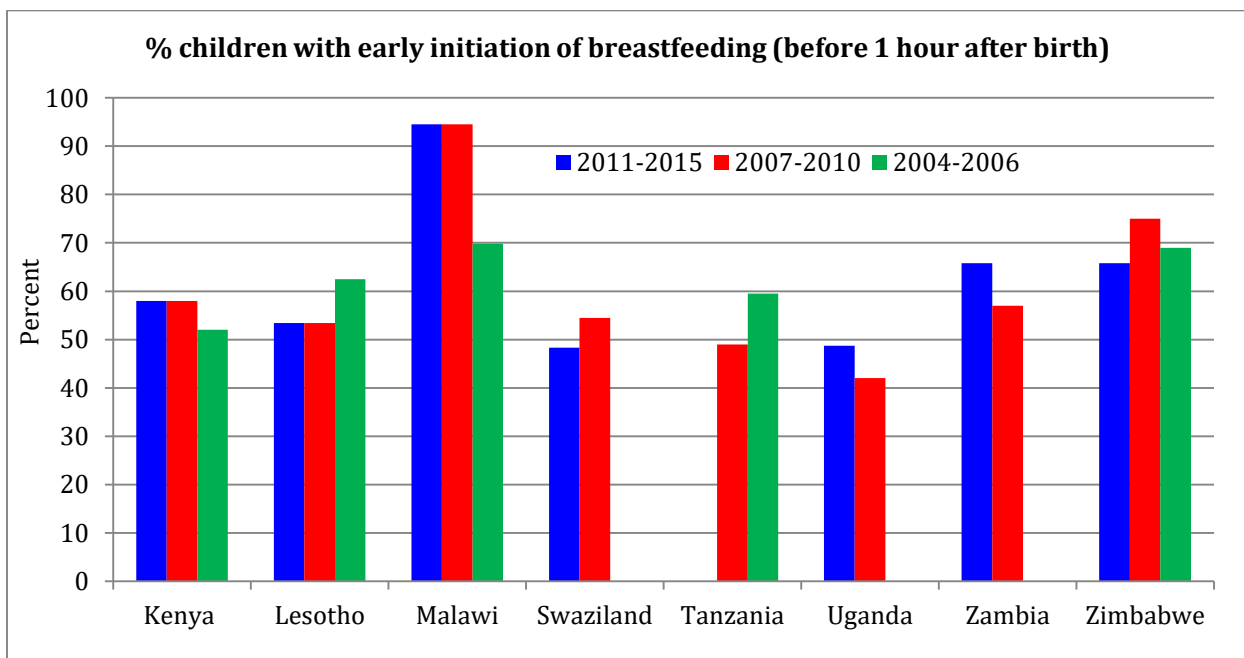
Indicator 47: Exclusive breastfeeding rate

Exclusive breastfeeding is recommended by the WHO and UNICEF for a period of six months from delivery. Exclusive BF mean, taking mother's milk only without plain water, fluids or food. Provision of these fluids is associated with contamination and infection to the baby; and failure of mother to produce milk. The rate of exclusive breast-feeding in the ECSA countries, ranged between 41.0% in Zimbabwe and 70.2% in Malawi. The high rate of exclusive BF in Malawi is consistent with the high rate of early breastfeeding. It is worth establishing if the factors associated with high proportion of early initiation of BF are the same as for exclusive BF.

Figure 63: Proportion of exclusive breastfeeding rate
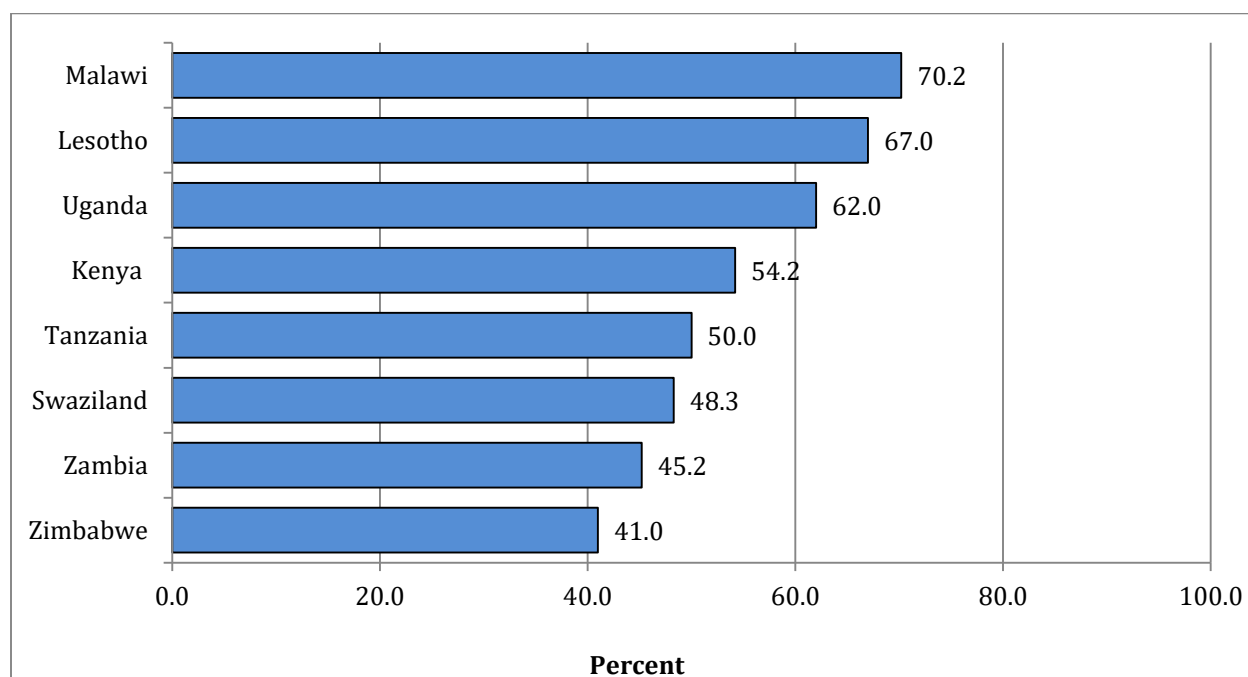
Data not available for Seychelles and Mauritius

Exclusive BF was found to increase during the reporting period in Lesotho (15% to 67%), Kenya (14% to 54%), Tanzania (32% to 50%) and Malawi (53% to 70%) (Figure 64). A decline in exclusive BF was also noted in Zambia (61% to 45%) during the same period.

Figure 64: Infants exclusively breast fed for first 6 months of life, trend 2004-2015

Infants exclusively breast fed for first 6 months of life
(Legend: ■ 2011-2015 ■ 2007-2010 ■ 2004-2006)
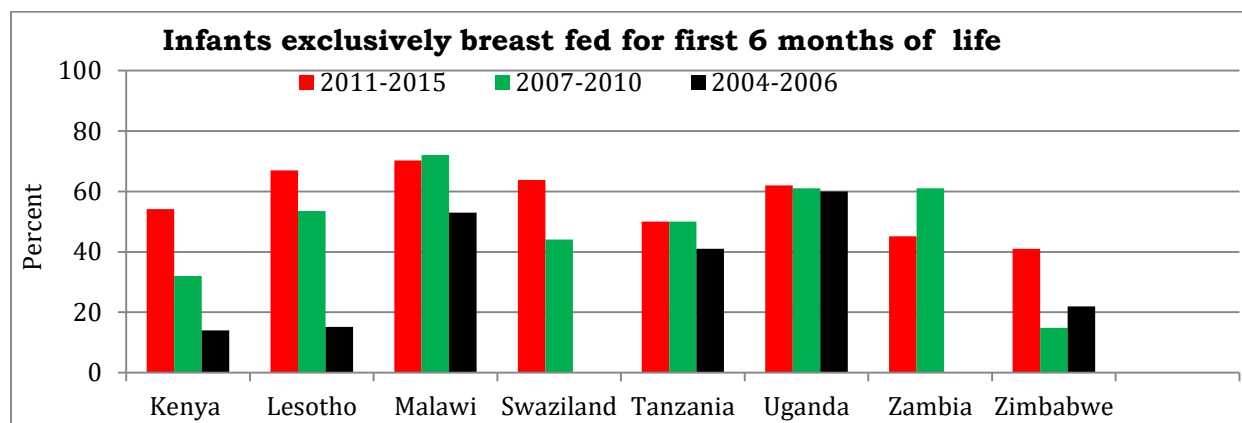
Indicator 48: Stunting prevalence

The number of under-five children with low height for age (-2 SD) is an indicator that measures nutritional status among children as a result of chronic malnutrition. Chronic malnutrition is associated with poor physical development of a child. Figure 65 shows that stunting in ECSA region ranged from 25.5% in Swaziland to 47.1% in Malawi. Except for Swaziland and Zimbabwe that reported about a quarter of the under-five children to be stunted, in other member countries, over a third of them were stunted. The situation was worse in Malawi, where almost half of the under-fives (47.1%) were stunted. It is worth noting that Malawi is leading with high rates of early initiation of BF and exclusive BF. Further review is needed to establish the reasons for economically better-off countries to have a third of the under-five children stunted.

Figure 65: Stunting in ECSA member countries
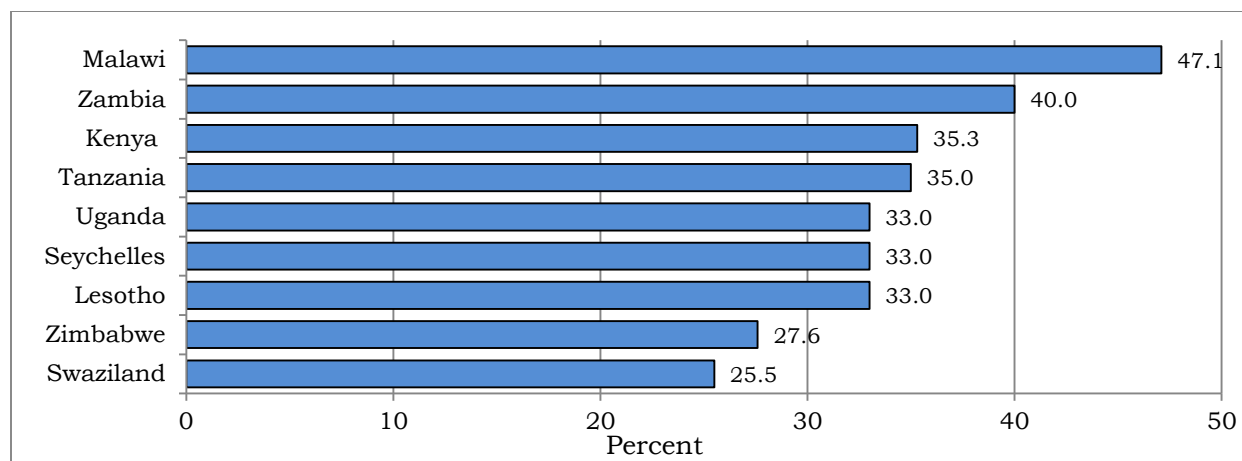
Data not available for Mauritius

Children from the lowest wealth quintile were more likely to be stunted compared to average and highest quintile in all ECSA countries (Figure 66). The gap between the lowest and highest quintile ranged between 13.0% in Zimbabwe and 32.2% Lesotho. The gap was more than double in Kenya (160%) and Lesotho (240%).
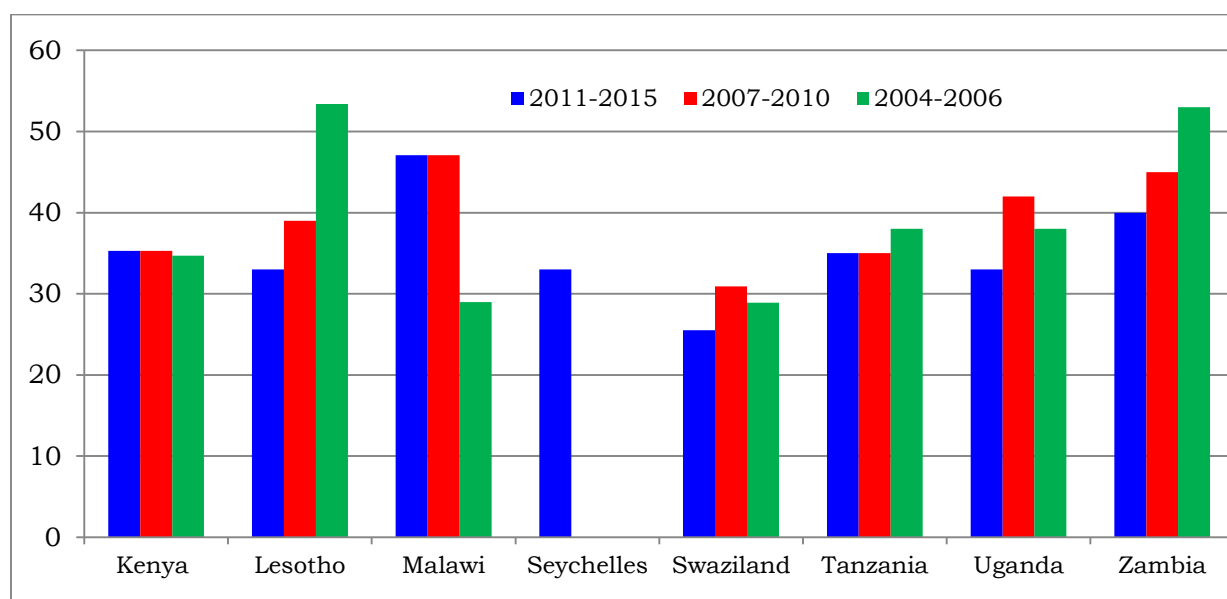
Figure 66: Stunting in ECSA member countries by wealth status
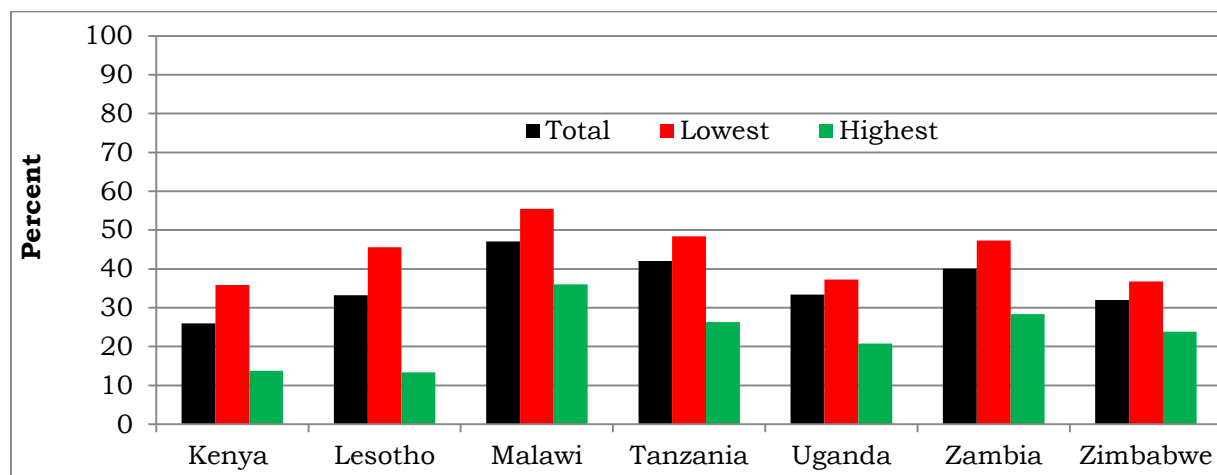
Data not available for Mauritius

The rate of stunting declined with time in several ECSA countries except in Malawi where there was an increase during the period of reporting (Figure 67).

Figure 67: Stunting (low height for age among < 5 years), trend in 2004-2015

Data not available for Mauritius

Indicator 49: Wasting prevalence

This indicator measures the number of children aged <5 years with low weight for Height against the WHO standard (moderate and severe). The indicator measures chronic malnutrition also called growth retardation. Wasting among ECSA member countries ranged between 2.0% in Swaziland and 9.7% in Zimbabwe. Data were not available from Seychelles which is reported to have overweight as the major problem rather than under-nutrition.

Figure 68: Wasting among under-fives in ECSA member countries
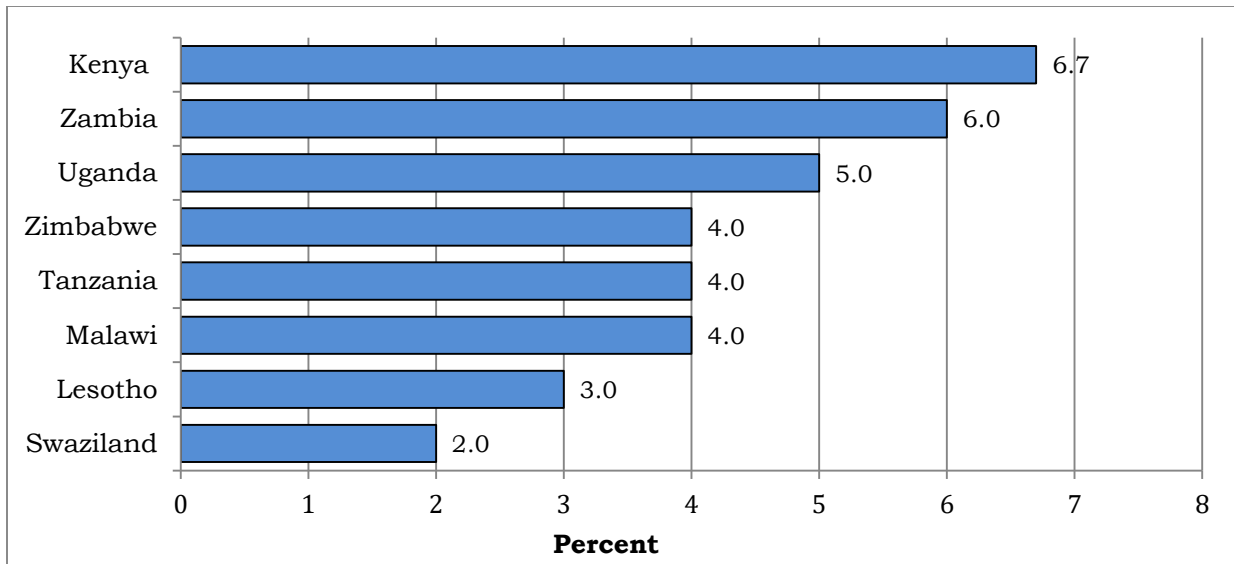
Data not available for Mauritius

The proportion of children wasted was higher among those in lowest wealth quintile compared to average and highest quintile in all countries except in Uganda (Figure 69). The difference ranged between 1.1% in Zambia and 4.8% Kenya. The gap was more than double in Kenya (192%), Lesotho (433%), Malawi (163%) and Zimbabwe (191%).

Figure 69: Wasting among under-fives in ECSA member countries by wealth status
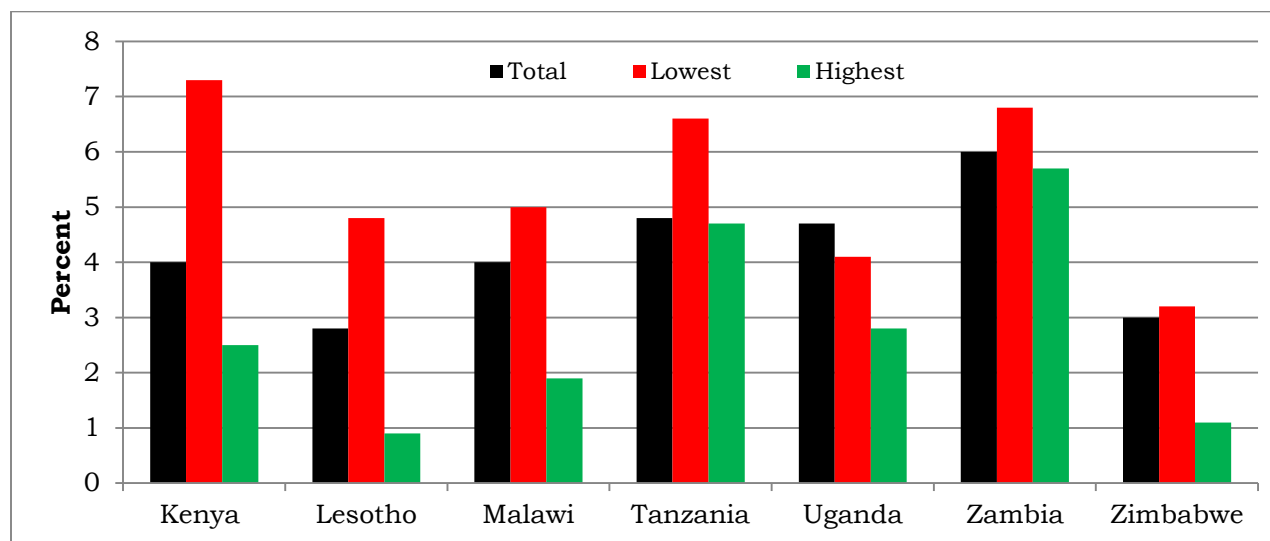
Prevalence of wasting decreased in a number of ECSA countries (Lesotho, Malawi, Swaziland, Zimbabwe and Uganda). However, a slight increase in prevalence of wasting was noted in Kenya and Tanzania.

Figure 70: Wasting (low weight for age among < 5 years), trend 2004-2015
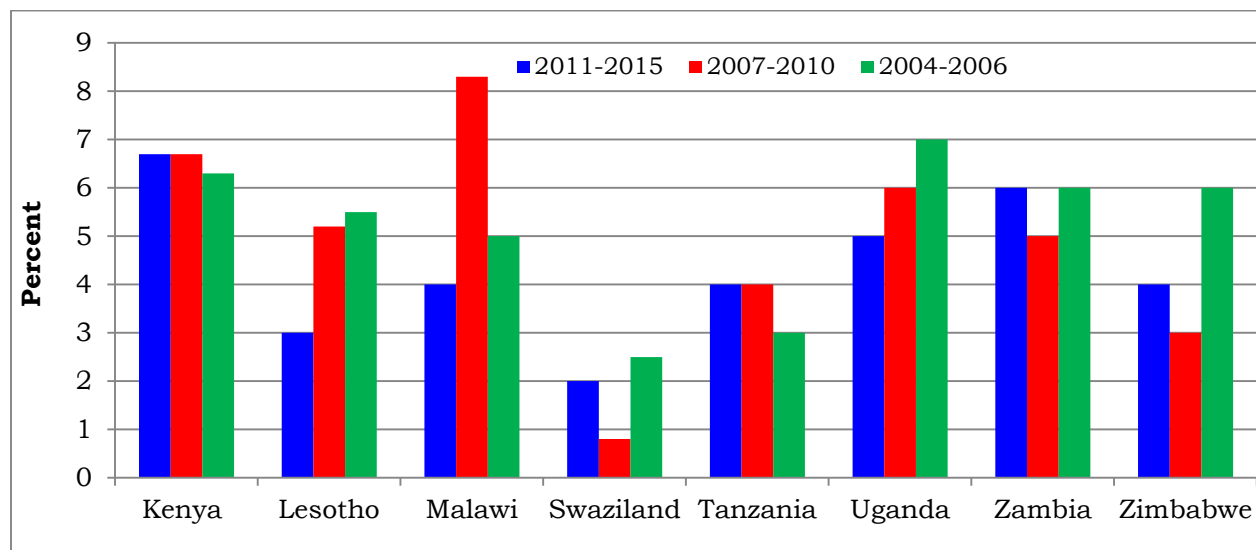
Data not available for Mauritius

Indicator 50: Underweight prevalence

The proportion of under-five children who are underweight (moderate and severe) is a measure of nutritional status. The indicator measures acute malnutrition. Figure 71 shows that underweight ranged between 1.5% in Swaziland and 21% in Tanzania. Less than 10% of the under-fives in Swaziland (5.8%), Zimbabwe (7.7%) and Seychelles (8.6%) were underweight.
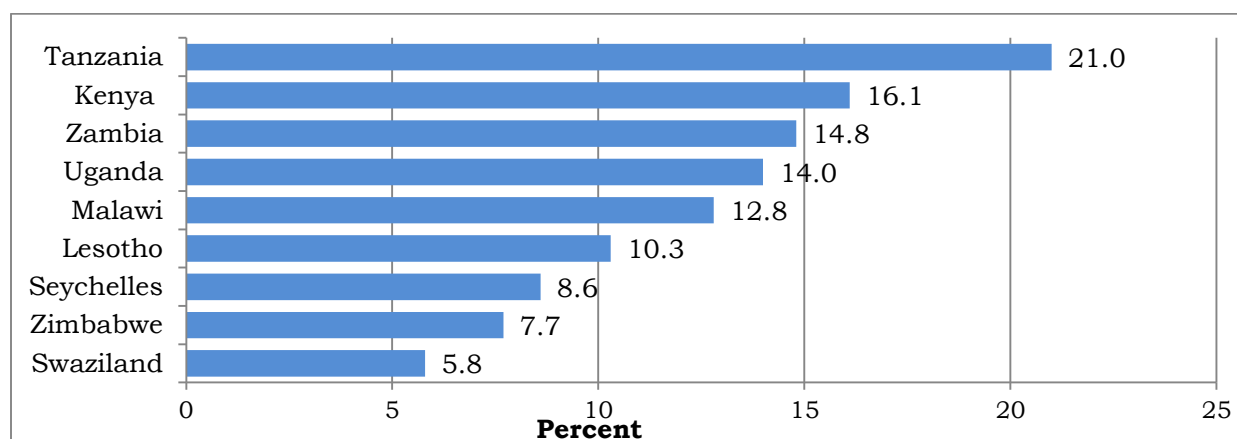
Figure 71: Prevalence of underweight in ECSA member countries

Data not available for Mauritius

Children from lowest quintile were more malnourished compared to highest quintile and the gap was more than double in Kenya and Lesotho.

Children from lowest quintile were more likely to be underweight compared to average and highest quintile in all countries (Figure 72). The gap between the lowest and highest quintile ranged between 6.2% in Zimbabwe and 15.5% in Kenya. The gap was more than double in all the countries and widest in Kenya (4-fold) and Lesotho (4.5 fold).

Figure 72: Prevalence of underweight by wealth status among ECSA member countries
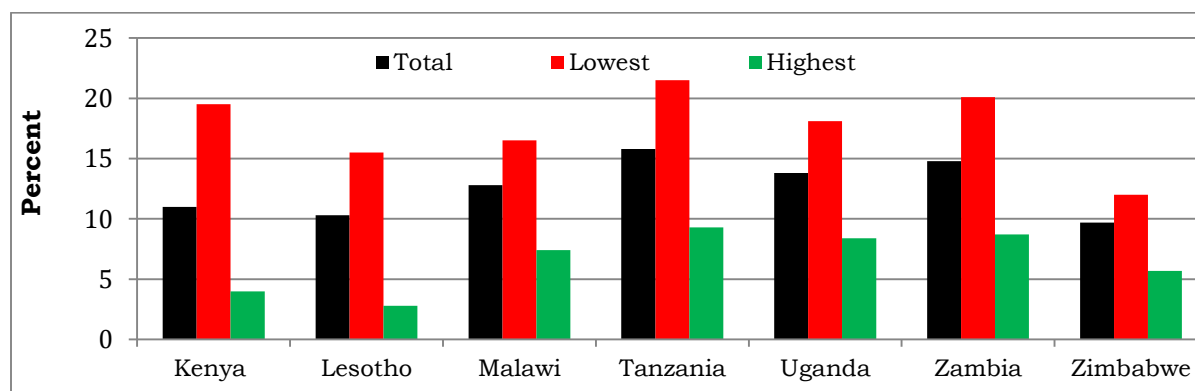
Data not available for Mauritius

The rate of underweight decreased in all the ECSA countries during the reporting period (Figure 73). The decline was staggering in Kenya and Seychelles.

Figure 73: Proportion of children aged <5 years underweight for age, trend 2001-2015

Data not available for Mauritius

2.8   BURDEN OF MALARIA AND PREVENTION/CONTROL

Indicator 55: Malaria mortality rate

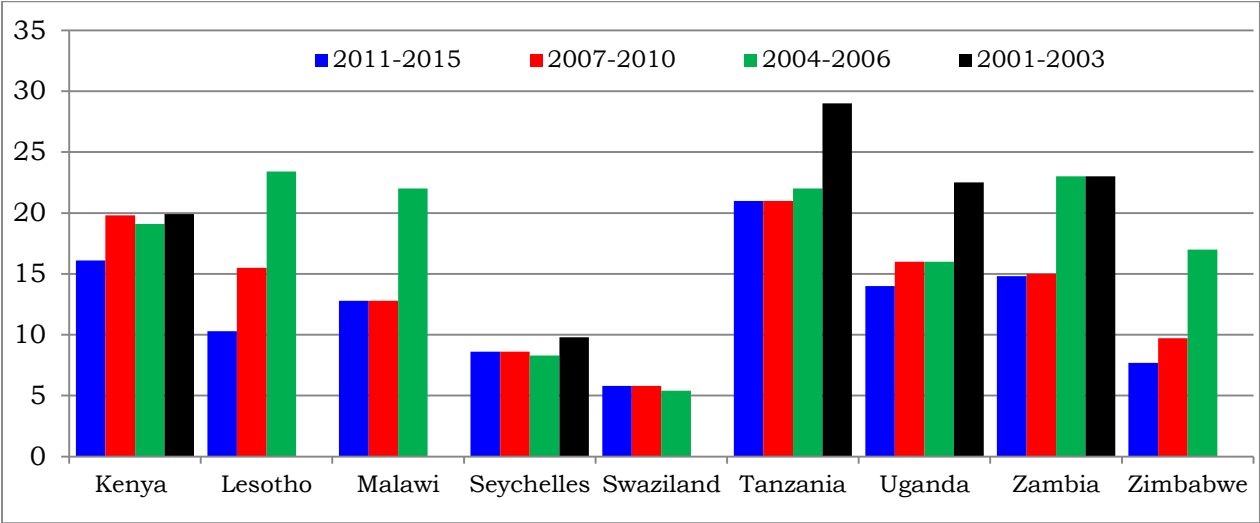The number of people dying from malaria per 100,000 is an indicator of the burden of malaria and also measures performance of the malaria control programme. Figure 74 shows malaria mortality rate ranged between 0.003 per100,000 in Swaziland and 79 per 100,000 in Zambia. There were no malaria deaths reported in Mauritius and Seychelles.

Figure 74: Malaria mortality rate per 100,000 population
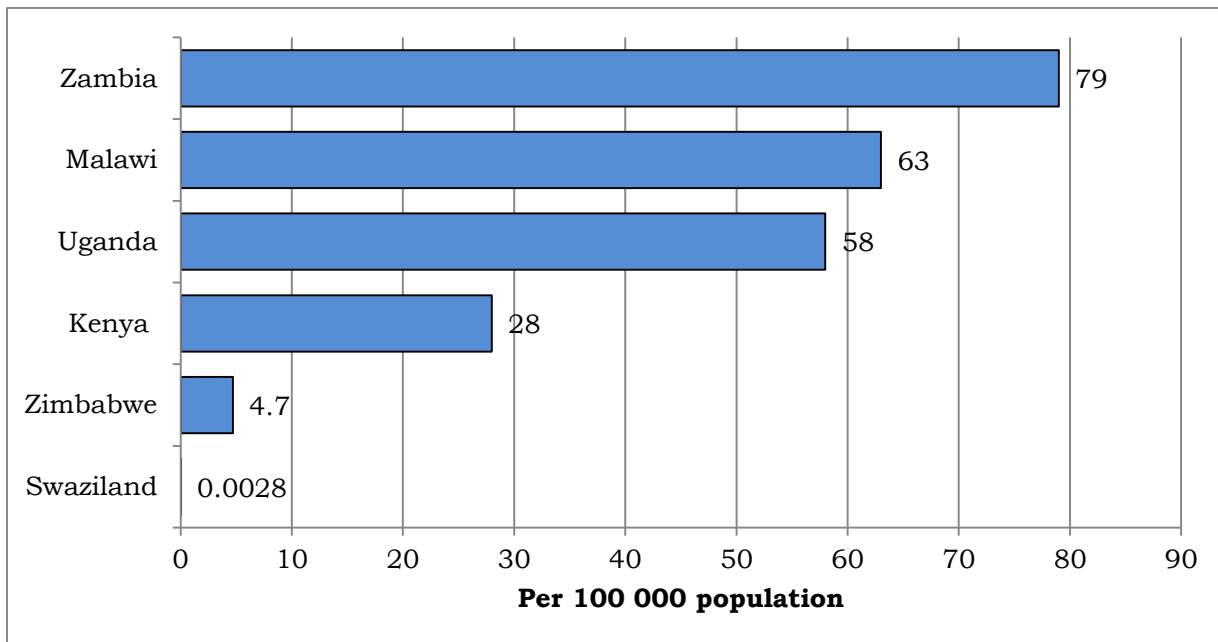
Data not available for Lesotho and Tanzania

Indicator 62: Incidence of malaria per 1000 population

The incidence of malaria per 1,000 of population is an indicator that measures transmission of malaria in the country and effectiveness of the intervention programmes. Figure 75 shows that malaria incidence in ECSA countries ranged from 0.026 per 1,000 in Mauritius to 84.3 per 1,000 in Kenya. The incidence of malaria was less than 10% in Mauritius (0.026%) and Swaziland (1.3%). It should be noted that Mauritius is a malaria-free country. The few reported cases were all imported.

Figure 75: Incidence of malaria in ECSA member states
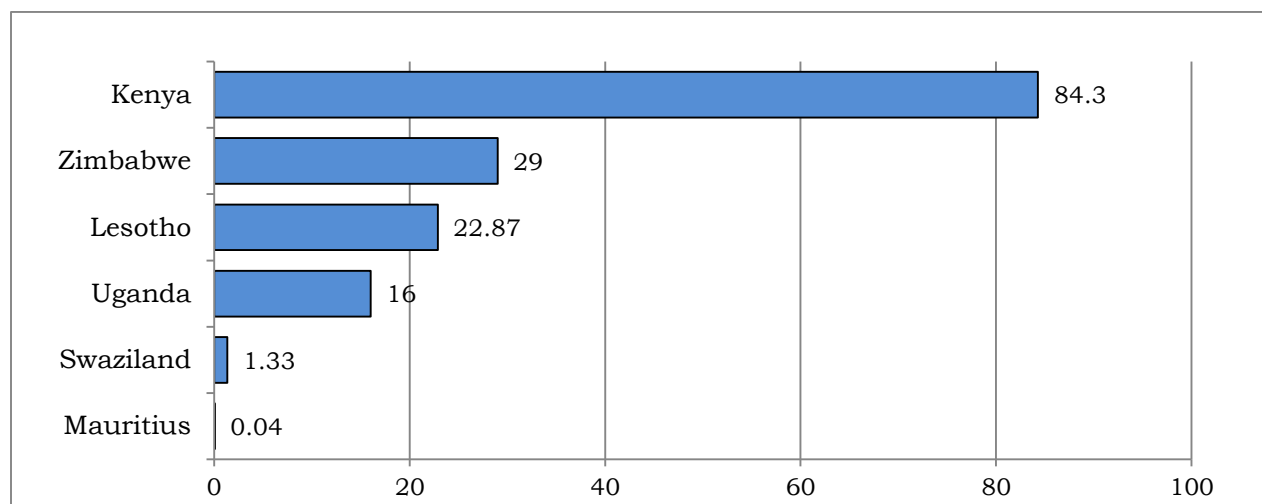
Data from Seychelles not available because had few imported cases. Other missing countries – Zambia, Tanzania and Malawi

Indicator 57: Insecticide Treated Net (ITN) usage among under 5 children

The use of ITN among under-fives is important in reducing malaria burden among under-fives. This is the population that is most at risk of dying from malaria. The use of ITN among under-fives ranged from 30.4% in Kenya to 84.1% in Malawi (Figure 76). Less than half of the under-fives in Kenya and Zambia were reported to sleep under a treated bed-net.

Figure 76: Insecticide Treated Net (ITN) usage among under 5 children
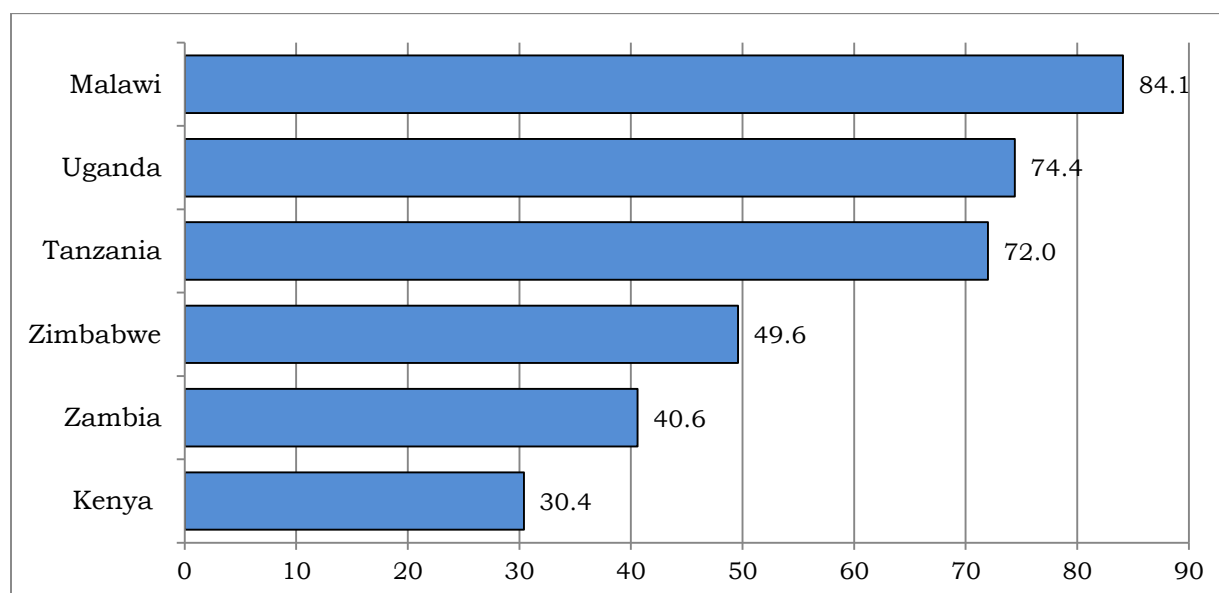
Data not available for – Seychelles, Mauritius and Swaziland and Lesotho because there is no such intervention due to low morbidity

Under-fives from the lowest wealth quintile were less likely to sleep under a treated bed-net compared to the highest quintile in all ECSA member countries (Figure 77). The gap between the lowest and highest quintile ranged between 0.3% in Zambia and 22.1% in Kenya.

Figure 77: Insecticide Treated Net (ITN) usage among under 5 children by wealth status
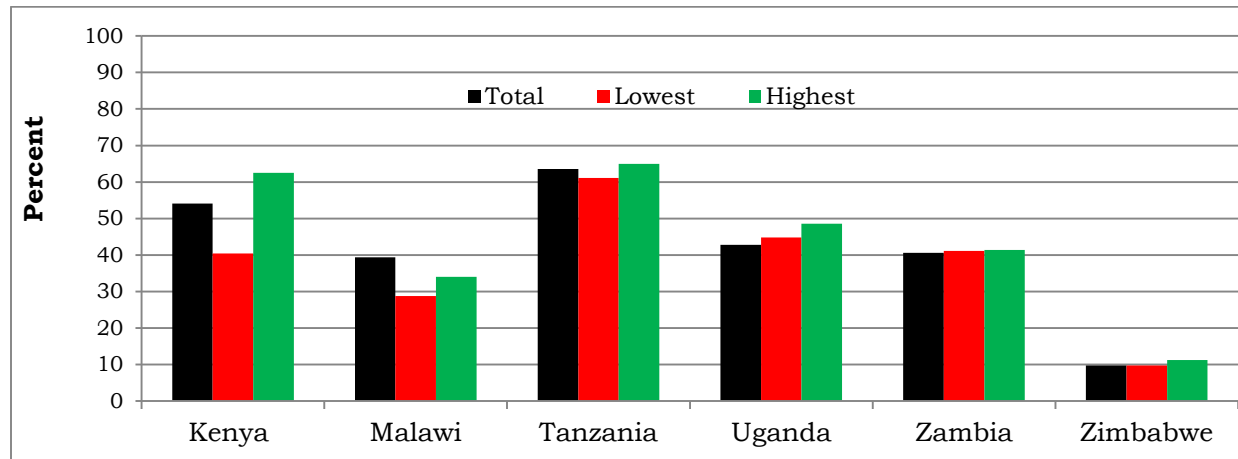
Figure 78 shows the trend on the use of ITN among under-fives from five ECSA countries. Data shows that the use of ITN among under-fives increased during the reporting period in all the countries except in Kenya where there was a declined from 52% in 2004-06 to 30% in 2011-15. Uganda and Malawi recorded the highest increase in the ITN usage among under-fives, 41% (44% to 73%) and 69% (15% to 84%) respectively.

Figure 78: Percent of under-fives sleeping under an ITN, trend 2004-2015
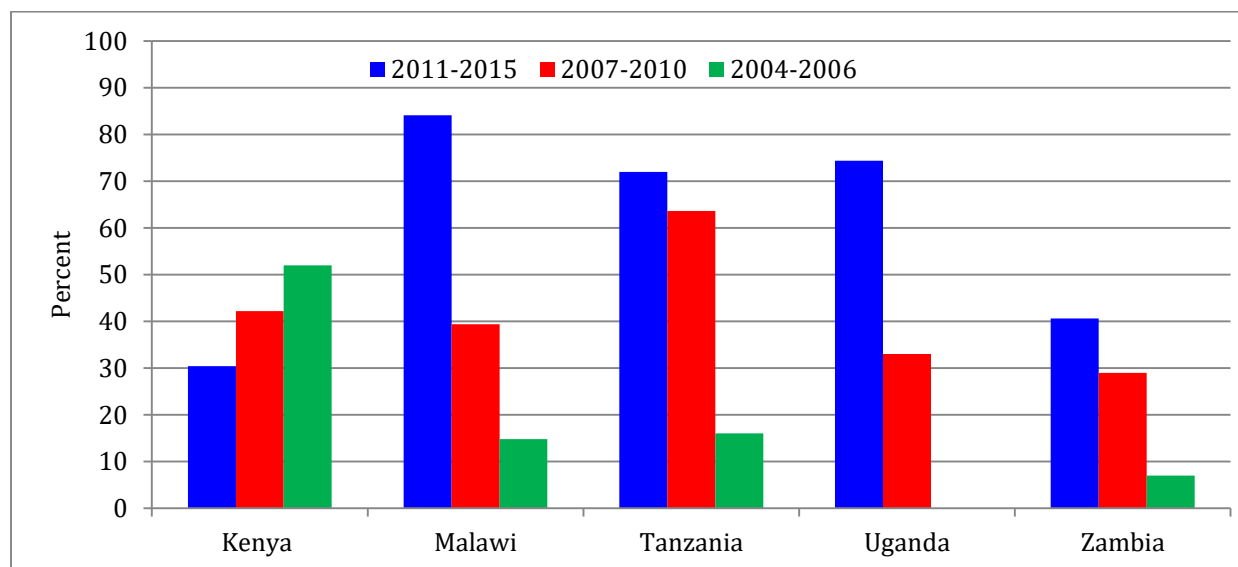
Indicator 58: Insecticide Treated Net (ITN) usage among pregnant women

The use of ITN among pregnant women reduces the burden of malaria in this population group. Malaria in pregnancy is associated with a higher burden of anaemia in pregnancy, poor foetal outcomes including still births and maternal death. The use of ITN among pregnant women in the ECSA countries ranged from 41.0% in Zambia to 75.4 in Uganda (Figure 79). Three quarter of pregnant women in Uganda and Tanzania slept under a treated bed-net.

Figure 79: Percent of pregnant women sleeping under an ITN
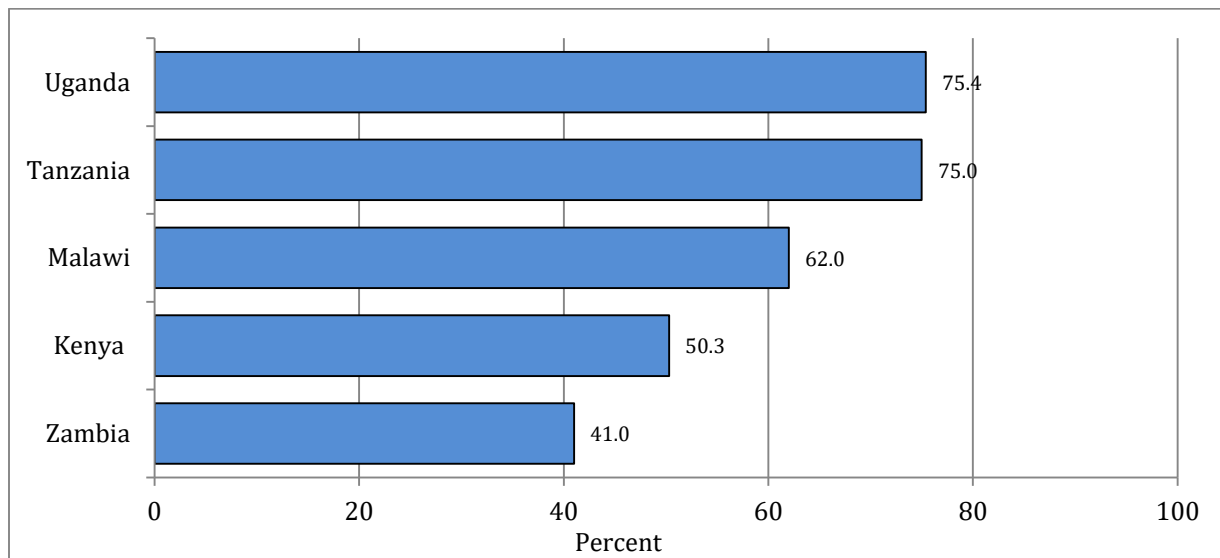
ITN usage among pregnant women was slightly higher in the lowest wealth quintile compared to the highest in all countries except in Malawi (Figure 80). This might be attributed to intervention programme supplying free ITN or through voucher system through ANC clinics in these countries. On the contrary, ITN usage in Malawi was substantially higher (by 26%) among women in the highest quintile compared to lowest. The reasons for the difference in ITN usage pattern noted in Malawi need further review.

Figure 80: Percent of pregnant women sleeping under an ITN by wealth status
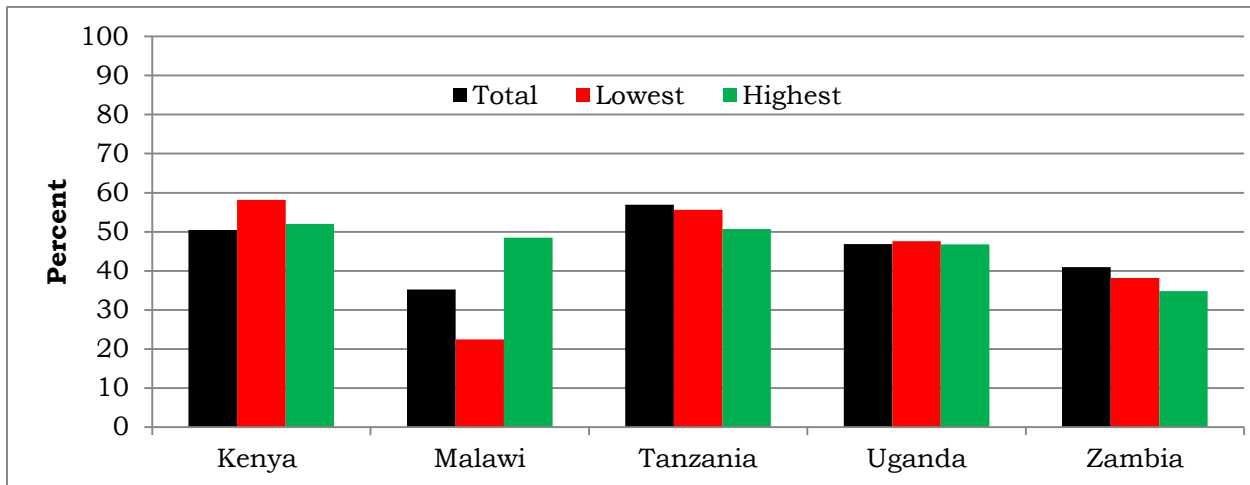
Figure 81 shows the trend in the use of ITN among pregnant women during the period of reporting. There was a notable increase in the ITN usage in all the reporting countries. The highest increase was noted in Tanzania (49%; 26%-75%), Malawi (47%; 15%-62%) and Uganda (31%; 44%-75%).

Figure 81: Proportion of pregnant women sleeping under an ITN, trend 2004-2015
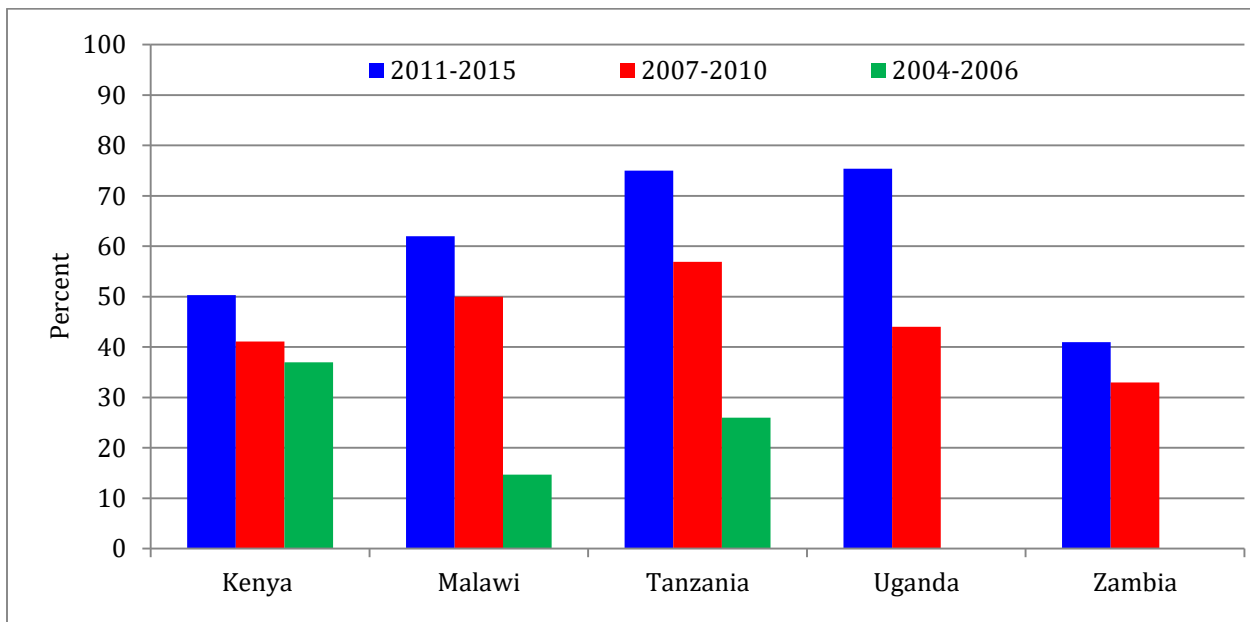
Indicator 59: ITN coverage among households (%)

This indicator provides a picture on the use of ITN in the general population. Figure 82 shows that ownership of ITN among households ranged between 68.0%% in Zambia and 91% in Tanzania. More than 80% of households in East African countries owned an ITN.

Figure 82: ITN coverage among households (%)
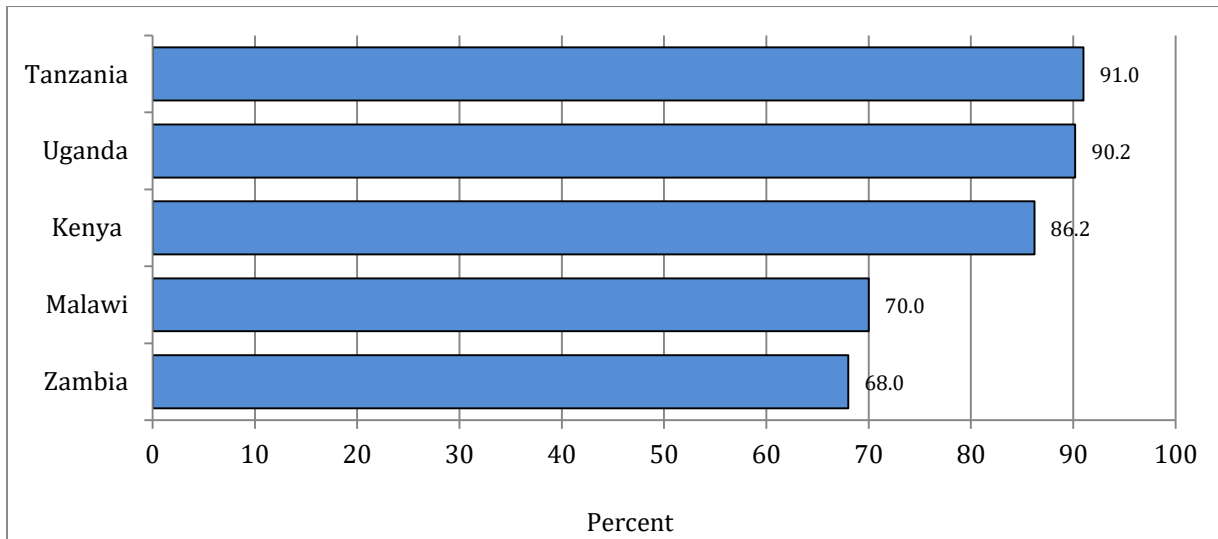
Households from the lowest wealth quintile were less likely to own a treated bed net compared to the average in nearly all the reporting ECSA member states except in Zimbabwe where the reverse was noted (Figure 83). The gap between the lowest and highest quintile ranged from 5% in Zambia to 33% in Malawi.

Figure 83: ITN coverage among households (%) by wealth status
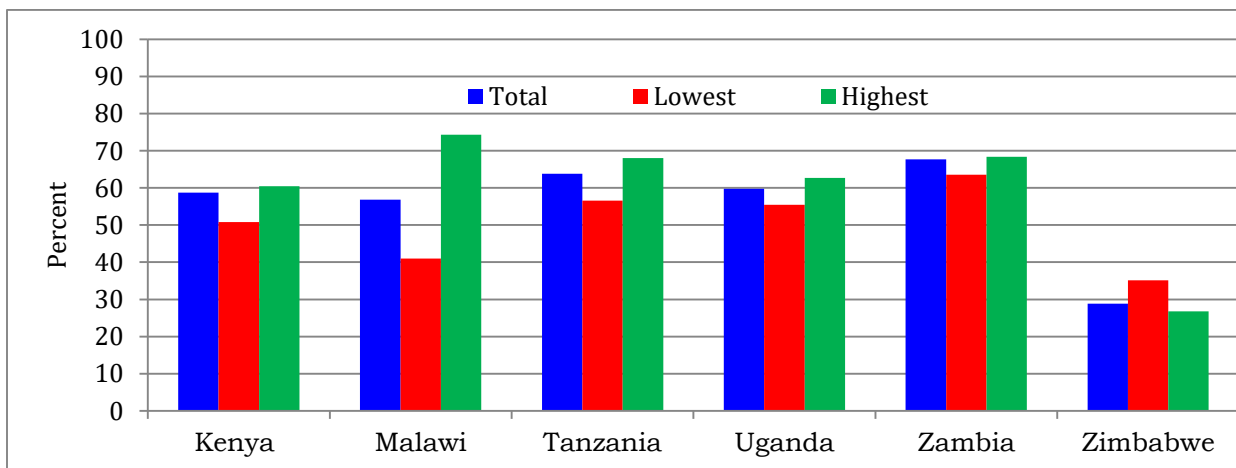
All the reporting ECSA countries showed an increase in the proportion of households owning an ITN (Figure 84). An increase of about 80% was noted in Kenya (6%-86%).

Figure 84: % of households with at least one ITN, trend 2004-2015
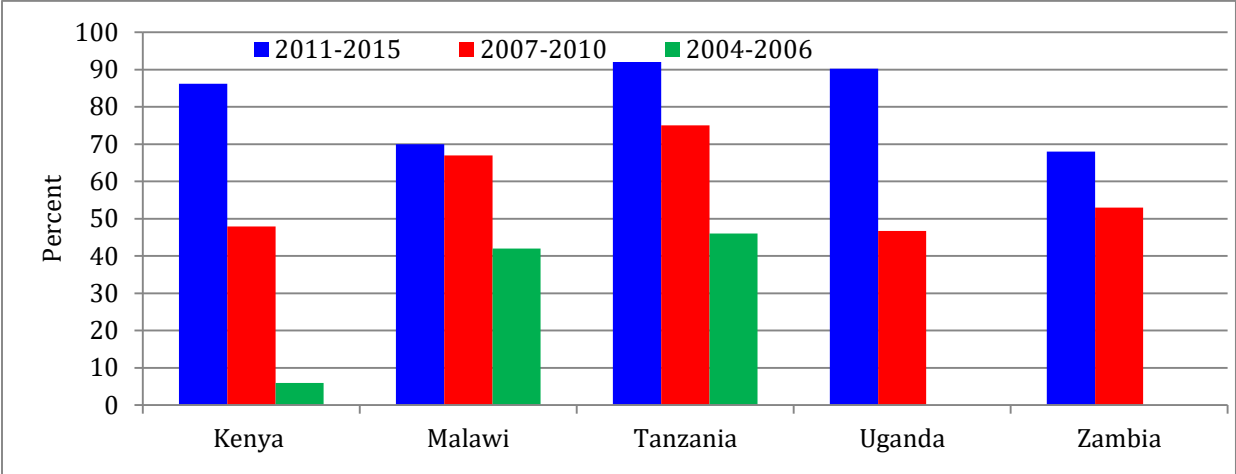
2.9   BURDEN OF HIV/AIDS AND PREVENTION / CONTROL

Indicator 62: HIV prevalence among adults (15-49) years

The proportion of HIV infection among people aged 15-49 years is an indicator that measures the impact of interventions against HIV/AIDS. Figure 85 shows that the prevalence of HIV ranged between 0.87% in Seychelles and 32.1% in Swaziland. The prevalence was quite low in Seychelles and Mauritius. However, the prevalence was high in Lesotho and Swaziland; 22.9% and 32.1%, respectively.

Figure 85: HIV prevalence among adults (15-49) years

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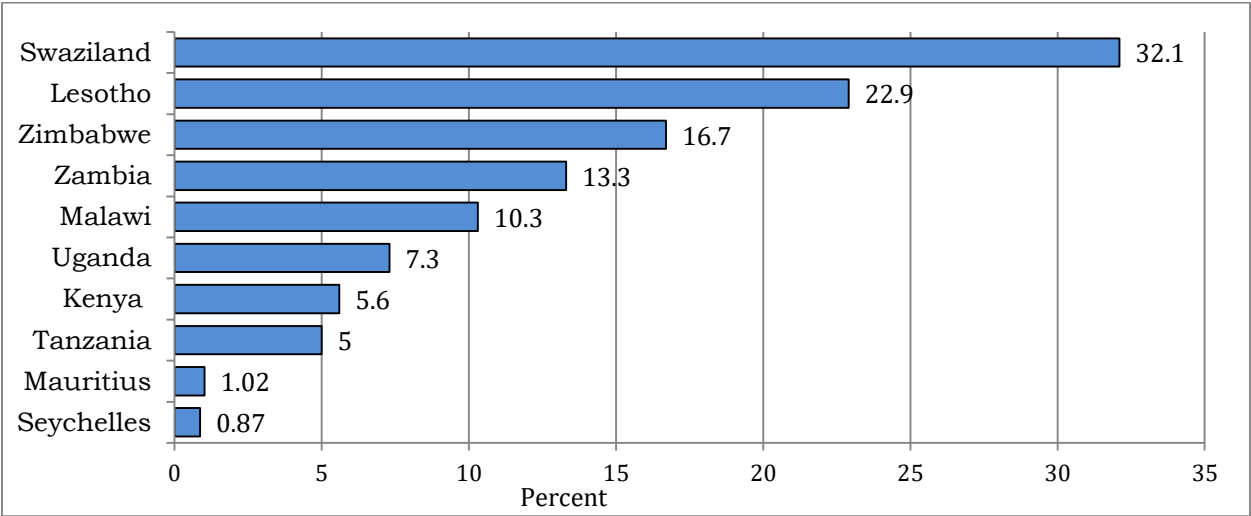
Several ECSA countries reported a decline in HIV prevalence among adults during the reporting period (Figure 86). However, an increase was observed in Swaziland by 5.9% (26.2% to 32.1%) and in Uganda by 0.9% (6.4% to 7.3%).

Figure 86: Adult (15-49) HIV prevalence by country, trend 2004-2015
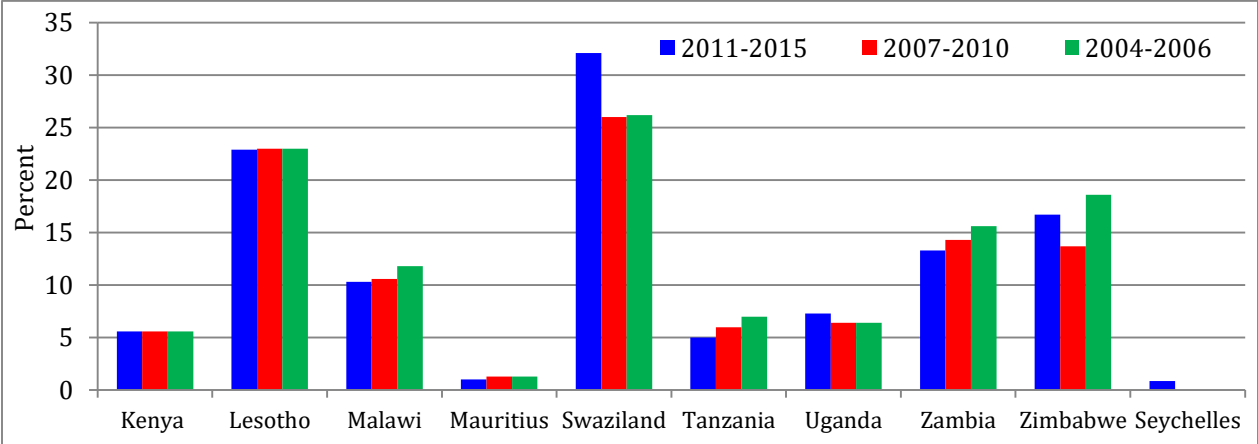
Indicator 64: HIV/AIDS prevalence among pregnant women 15-49 years

The proportion of HIV among pregnant women aged 15-49 is an indicators of burden of disease that also measures programme performance. Figure 87 shows that the prevalence of HIV among pregnant women ranged between 0.87% in Seychelles and 32.1% in Swaziland. Whereas, the prevalence was quite low in Seychelles (0.87%) and Mauritius (1.02%) it was very high in Swaziland (32.1%) and Lesotho (22.9%)

Figure 87: HIV/AIDS prevalence among pregnant women aged 15-24
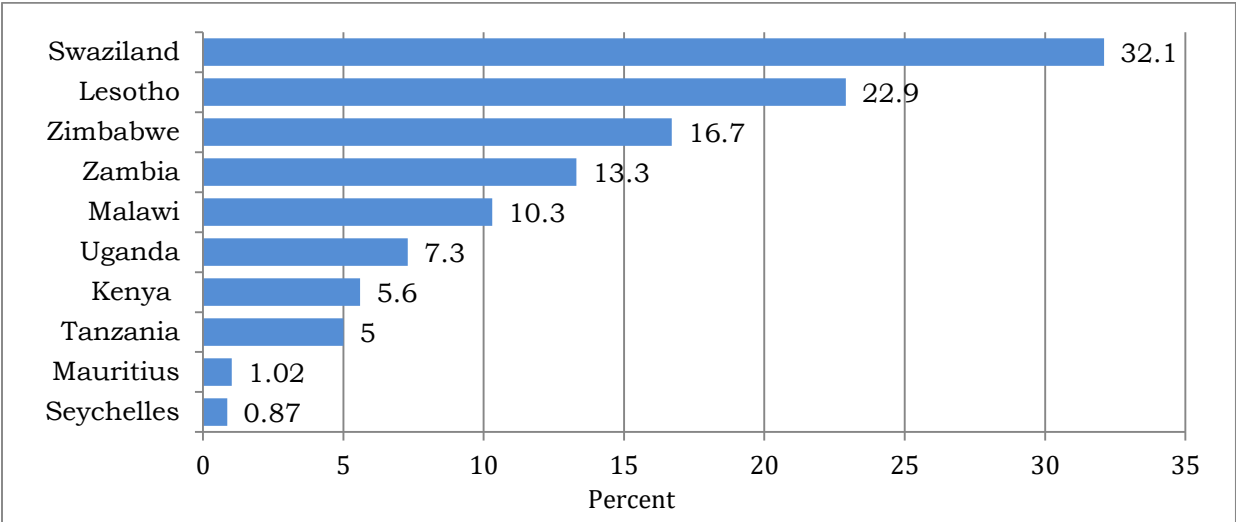
Data from Malawi and Seychelles not available

Indicator 65: Percentage of eligible people living with HIV accessing antiretroviral therapy (ART)

The proportion of people receiving ART among the eligible is an indicator that measures access to care and treatment for AIDS. The proportion of HIV/AIDS patients accessing ARV ranged from 39.7% in Tanzania to 100% in Swaziland (Figure 88). Tanzania and Mauritius were the two countries in which less than half of those eligible received ART while in Swaziland almost all the eligible persons received treatment.

Except for Lesotho and Malawi, all countries with HIV/AIDS prevalence over 10% among adult and or pregnant women had more than 70% of the eligible persons accessing ART; these were Swaziland, Zambia and Zimbabwe. Likewise countries with less than 10% HIV/AIDS had less than 70% of the eligible persons receiving ART; these were Tanzania, Mauritius and Uganda.

Figure 88: Percentage of eligible people living with HIV accessing ARVs
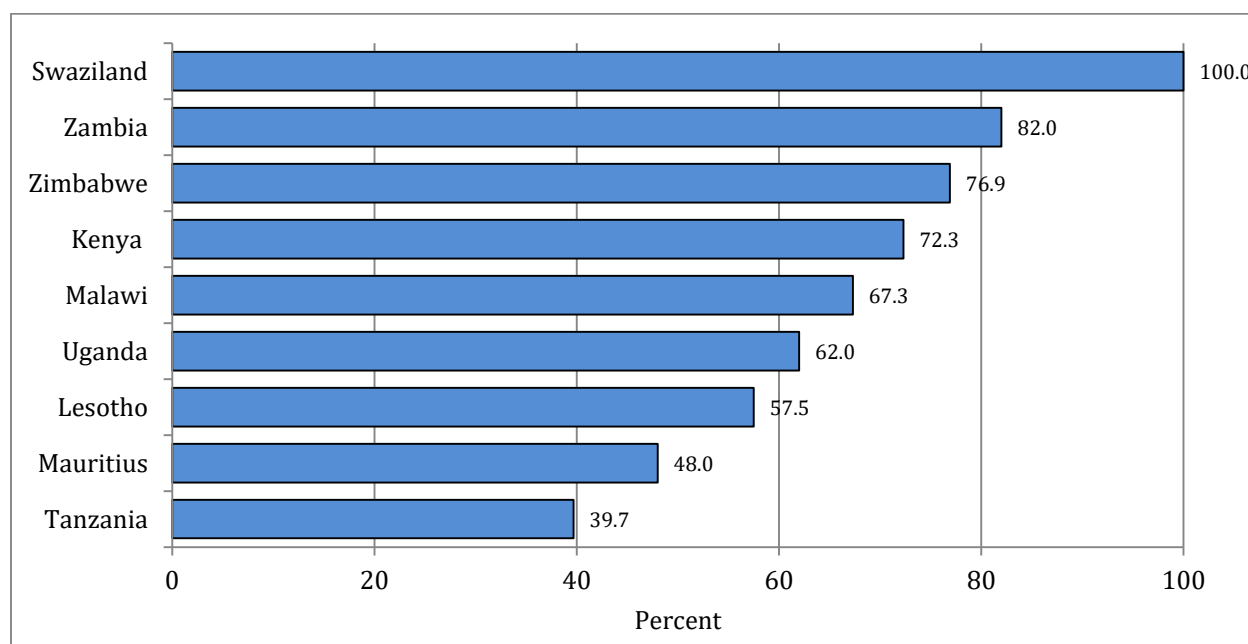
It is worth noting that despite the high total health expenditure per capita, second to Seychelles, the percentage of eligible patients with access to ART in Mauritius was relatively low. While both Swaziland and Lesotho had HIV/AIDS prevalence above 20%, access to ART was universal in the former, while in the latter only about a half of eligible accessed ART.

Access to ART among eligible persons increased in all the ECSA countries during the reporting period, with the exception of Tanzania where a reduction of 42% (82% to 40%) was noted (Figure 89).

Figure 89: Antiretroviral therapy coverage among people with advanced HIV infection (%), trend 2007-2015
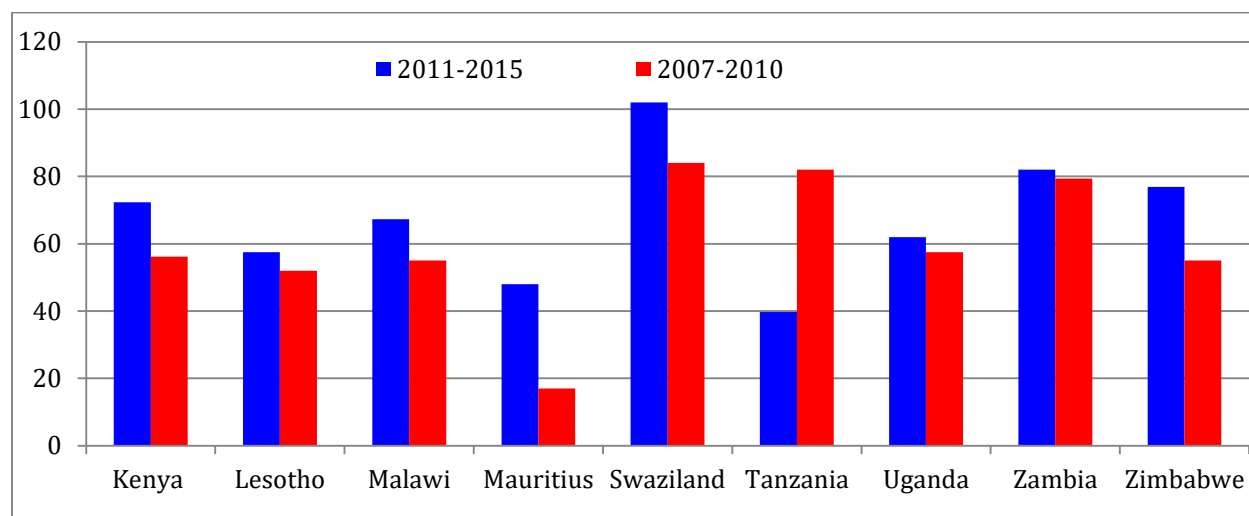
Indicator 68: Comprehensive knowledge of HIV/AIDS prevention among young people aged 15-24 years

This indicator measures the proportion of youth aged 15-24 years with correct knowledge on HIV/AIDS. A person with correct knowledge is the one who could correctly respond to three of a set of four questions on how to avoid HIV infection; and be able to reject the three common misconceptions about HIV transmission. The indicator is important in monitoring progress towards universal knowledge on essential facts about HIV transmission among young people.

The level of comprehensive knowledge in the ECSA region ranged between 34.3% in Lesotho and 81.0% in Mauritius (Figure 90). Over half of the youths had comprehensive knowledge on HIV/AIDS in Mauritius (81%), Kenya (59%) and Zimbabwe (54%). The high level of knowledge among youths in Mauritius corresponds with the low HIV/AIDS prevalence among adults and pregnant women.

Figure 90: Proportion of young people aged 15-24 years with comprehensive knowledge of HIV/AIDS prevention

Country	Percent
Mauritius	81.0
Kenya	59.0
Zimbabwe	54.05
Swaziland	50.0
Malawi	47.65
Zambia	45.7
Tanzania	43.4
Uganda	38.7
Lesotho	34.3
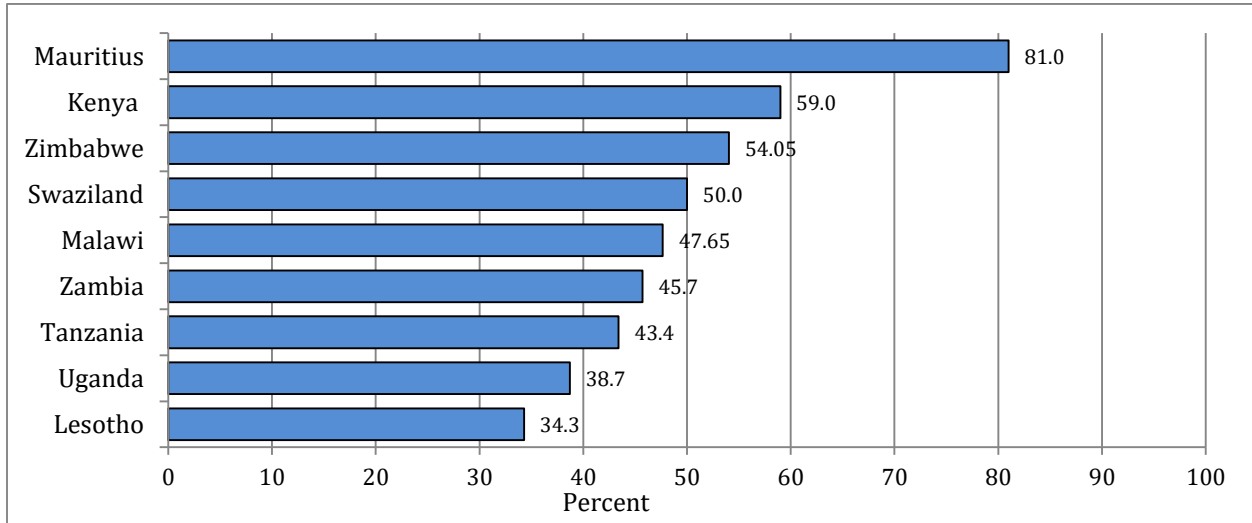
Data not available from Seychelles

Data on comprehensive knowledge on HIV/AIDS by wealth status was only available with a breakdown by sex. Comprehensive correct knowledge was invariably lower among people from the lowest quintiles compared to highest in all ECSA member states for both female and males (Figure 91). The gap among female ranged between 20% in Tanzania and 38% in Kenya; and among males, between 18% in Malawi and 35% in Zambia among male. The gap between lowest and highest quintile was more than 2-fold in Kenya, Zambia and Uganda among females. Among males, only Zambia had a gap of more than 2-fold.

Figure 91: Correct HIV/AIDS knowledge by wealth status
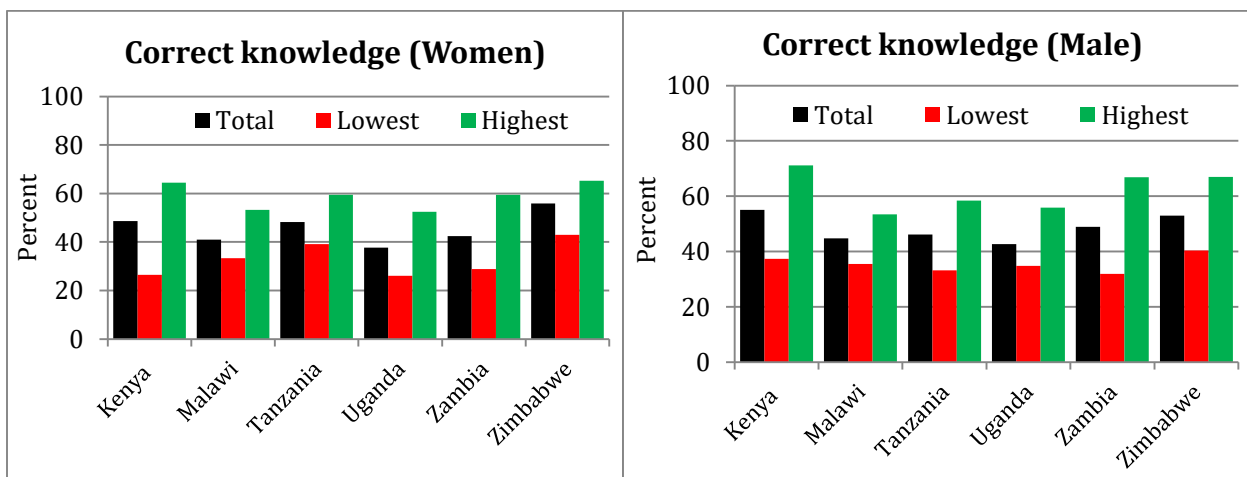
Several ECSA countries reported an increase in the proportion of youths having comprehensive and correct knowledge on HIV/AIDS during the reporting period (Figure 92). However, while a notable decline was noted in Swaziland (30%; 80%-50%) there was a slight decline in Mauritius (4%; 85%-81%) and Tanzania (4%; 47%-43%).

Figure 92: Proportion of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS, trend 2004-2015
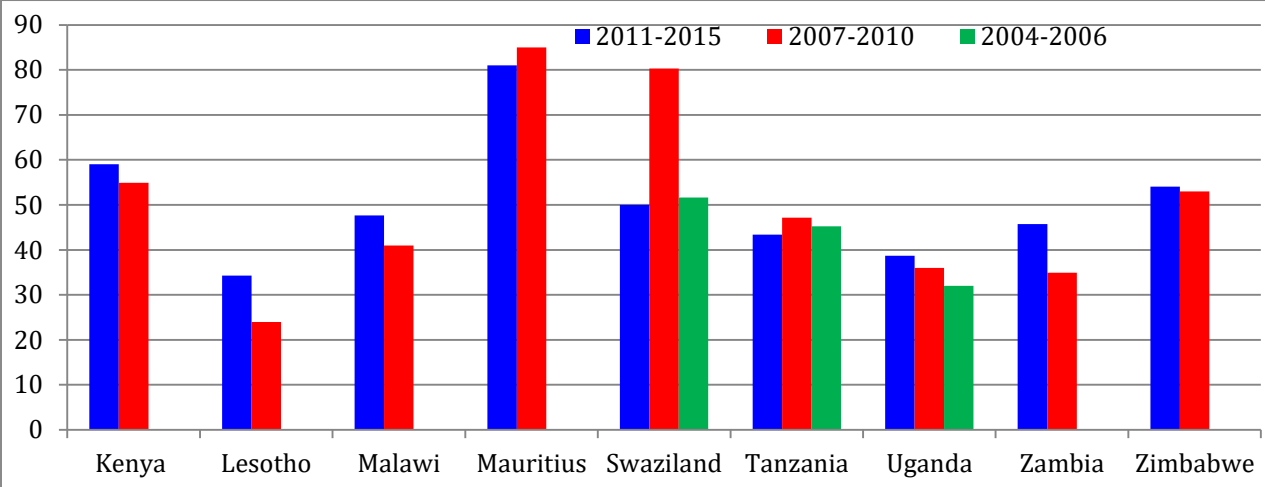
Indicator 69: Condom use at last high-risk sex

The proportion of youths using condom during risky sexual encounter is a measure of the effectiveness of the programme in reducing HIV transmission. The use of condom at last high-risk sex in ECSA countries ranged between 17.2% in Kenya and 81.9% in Swaziland (Figure 93). While condom use at last high-risk sex in Lesotho and Swaziland was 80% and above, it was less than 50% in Kenya, Uganda and Zambia.

Figure 93: Proportion of youths reporting condom use at last high-risk sex
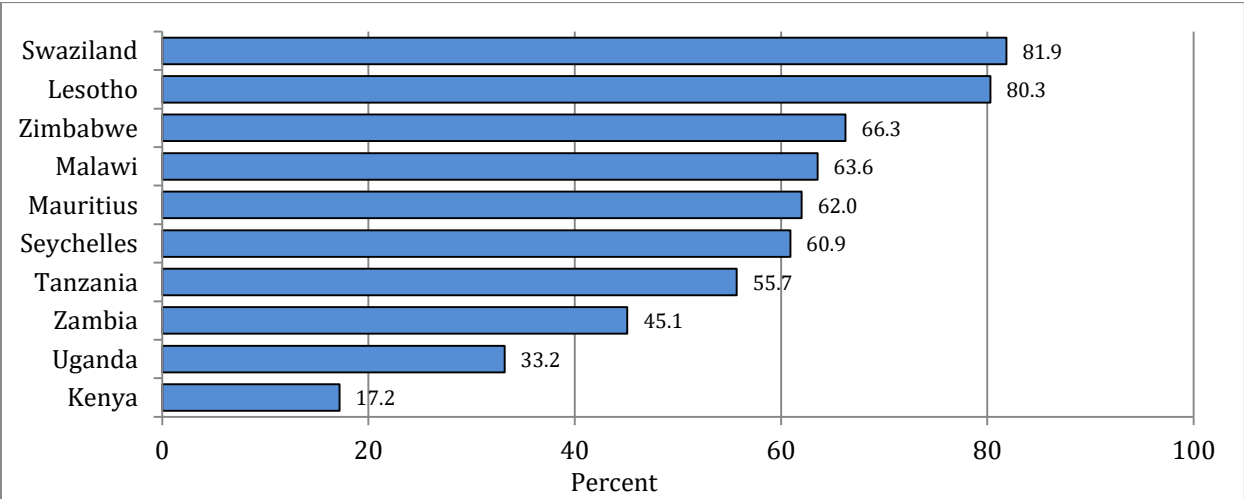
It is worth noting that although the reported condom use was highest in Swaziland and Lesotho the two countries were leading in the prevalence of HIV/AIDS among adult youths.

The proportion of youths reporting use of condom at last high-risk sex increased in many countries during the reporting period (Figure 94). However, a notable decline in the proportion of condom use was observed in Kenya (22%; 40%-17%), Uganda (17%; 50%-33%) and Zimbabwe (5%; 71% - 66%).

Figure 94: Condom use at last high-risk sex, trend 2004-2015
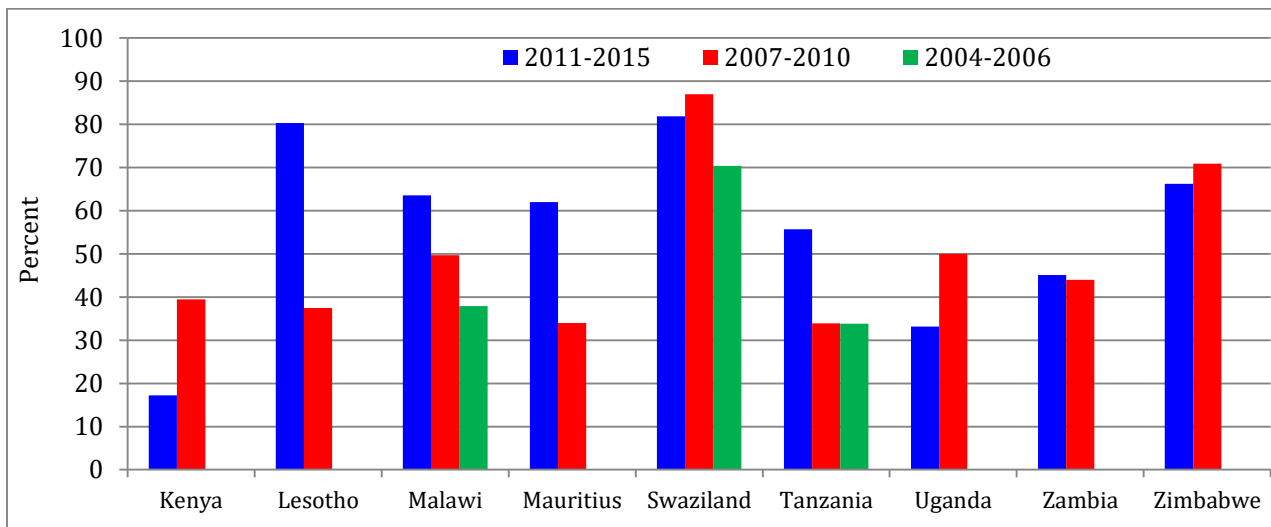
2.10 TUBERCULOSIS

Indicator 71: Tuberculosis (TB) detection rate (%)

The proportion of estimated new smear-positive cases of TB that are detected in one year divided by the annual incidence is an indicator of programme effectiveness (WHO recommended target is 70% by 2005). Early detection of TB cases allows for early commencement of treatment and improve treatment outcome. Figure 95 shows that TB detection rate ranged between 38% in Swaziland and 87% in Seychelles. Detection rate was quite low, below half, in Swaziland (38.0%) and Mauritius (49.0%). It is worth noting that while Swaziland had the lowest case detection rate; it had the highest TB morbidity and mortality. Over-estimation in the number of expected TB cases is cited as a possible reason for low case detection rate in Mauritius.

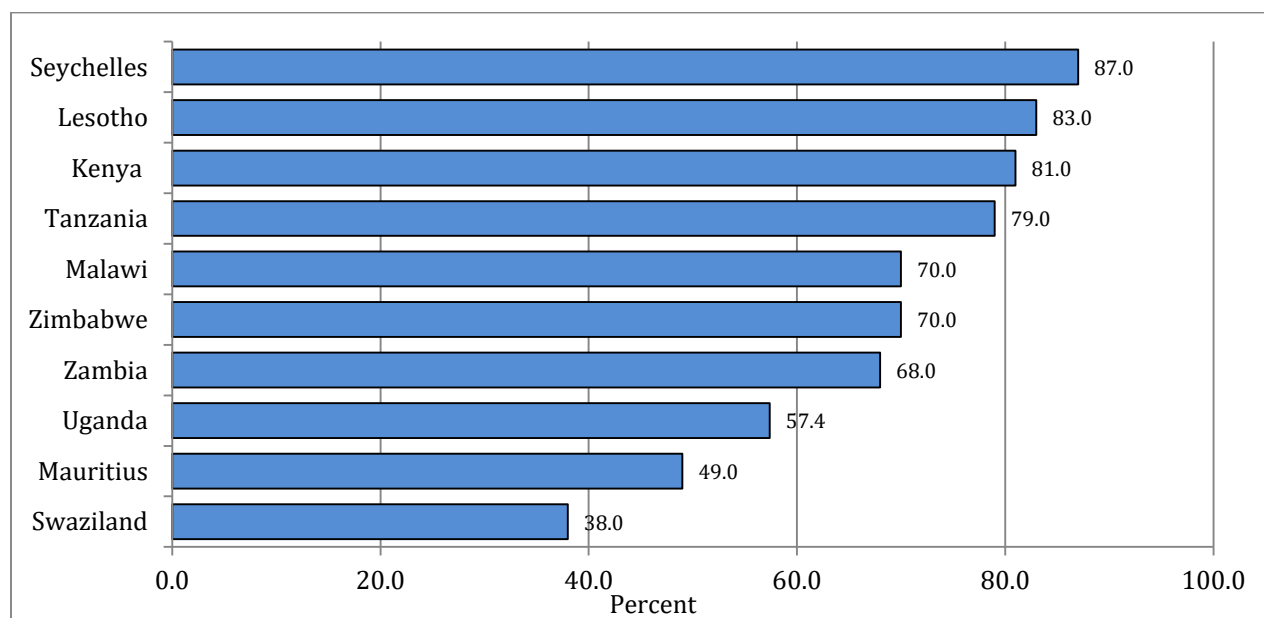**Figure 95: Proportion of Tuberculosis (TB) detection rate (%)**

Indicator 72: TB incidence per 100,000 population

This indicator measures the effectiveness of the control programme. This indicator is sensitive to changes in programme performance thus allowing remedial actions to be taken early. Figure 96 shows that the incidence of TB in the ECSA region varied widely from 11 per 100,000 in Mauritius to 1038 per 100,000 in Swaziland. Whereas, the incidence was quite low in Mauritius and Seychelles it was very high in Swaziland. The rate in Swaziland surpassed that of the second in the rank (Lesotho) by a margin of 408 per 100,000 (65%). The

high incidence in Swaziland is reported to be associated with high prevalence of HIV/AIDS. Swaziland was reported to rank number one in the World in HIV/AIDS and TB burden.[4]

Figure 96: TB incidence per 100,000 population
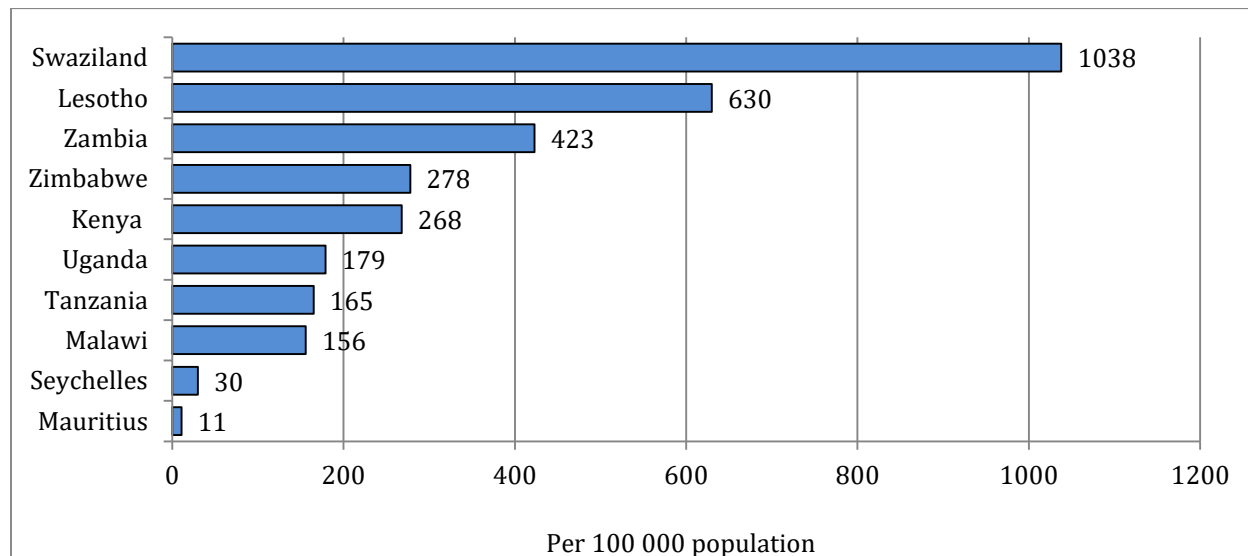
The incidence of TB was observed to decline steadily in almost all of the ECSA member countries (Figure 97). The highest decline was noted in Zimbabwe where the incidence dropped by 502 per 100,000 (780 to 278 per 100,000). It is worth noting that TB case detection rate in Zimbabwe was about twice that in Swaziland, 70% and 38% respectively. The success recorded in Zimbabwe need further review studies so that lessons obtained can be applied in other countries where the burden of TB is high.

Figure 97: TB incidence per 100 000 population, trend 2004-2015

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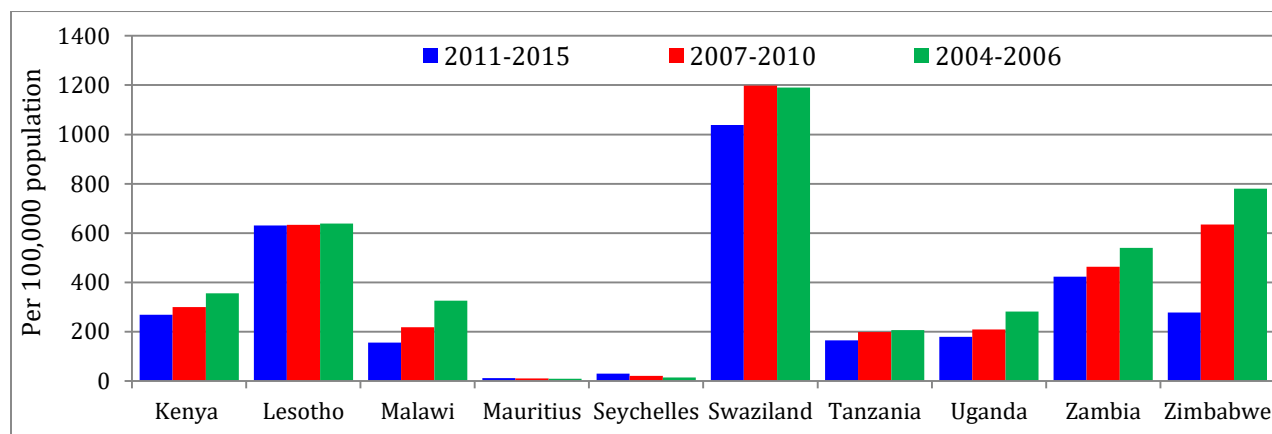
[4]The United Nations Development Assistance Framework (UNDAF) 2011-2015. The Kingdom of Swaziland.Pg 12

Indicator 73: Tuberculosis prevalence per 100,000 population

This indicator depicts the number of cases of tuberculosis (all forms) in a population at a given time. Figure 98 shows that the prevalence of TB varied widely from 20 per 100,000 in Seychelles to 947 per 100,000 in Swaziland. The high prevalence of TB in Swaziland, and Zambia corresponds with the high burden of HIV in the respective countries. However, this was not the case with Lesotho that had HIV/AIDS a prevalence of HIV/AIDS (22.9%) but TB prevalence was less than 50 per 100,000. On the contrary, Uganda had a relatively low HIV/AIDS prevalence (7.3%) yet it has a high TB prevalence ranking the second in the ECSA region.

Figure 98: Tuberculosis prevalence per 100,000 population
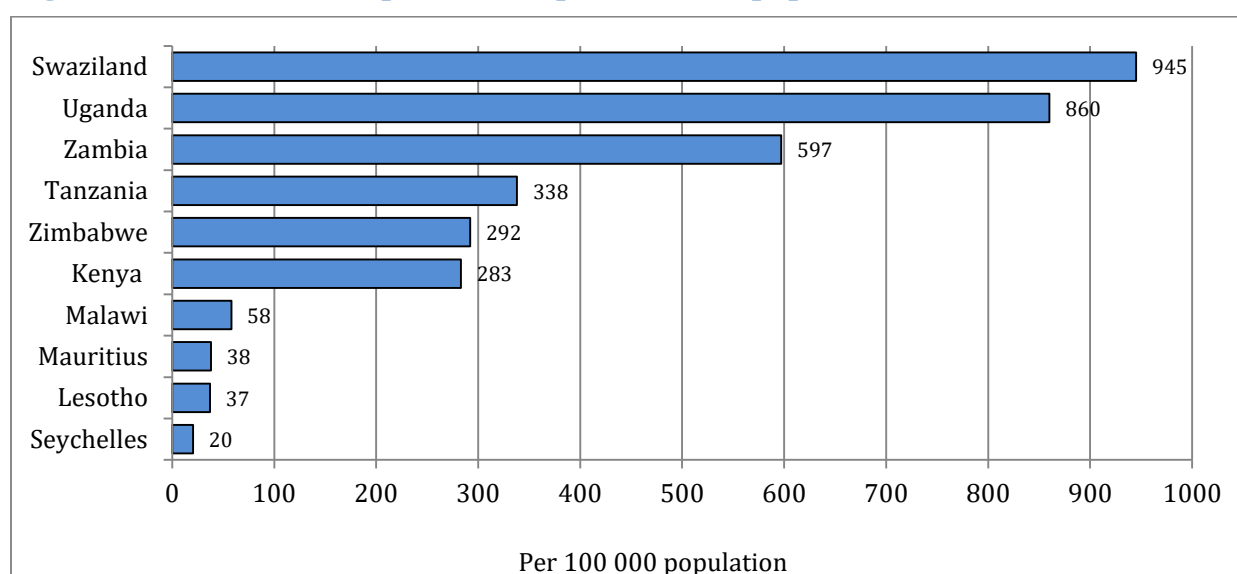
The prevalence of TB declined during the reporting period in almost all the member countries (Figure 99). A tremendous drop in prevalence was noted in Lesotho (531 per 100,000; 538-37 per 100,000) and Zimbabwe (422 per 100,000; 714 to 292 per 100,000). However, Tanzania and Uganda experienced an increase in TB prevalence by 203 per 100,000 (135-338 per 100,000) and 724 per 100,000 (136 to 860 per 100,000) respectively, in the same period.

Figure 99: Tuberculosis prevalence per 100 000 population, trend 2007-2015
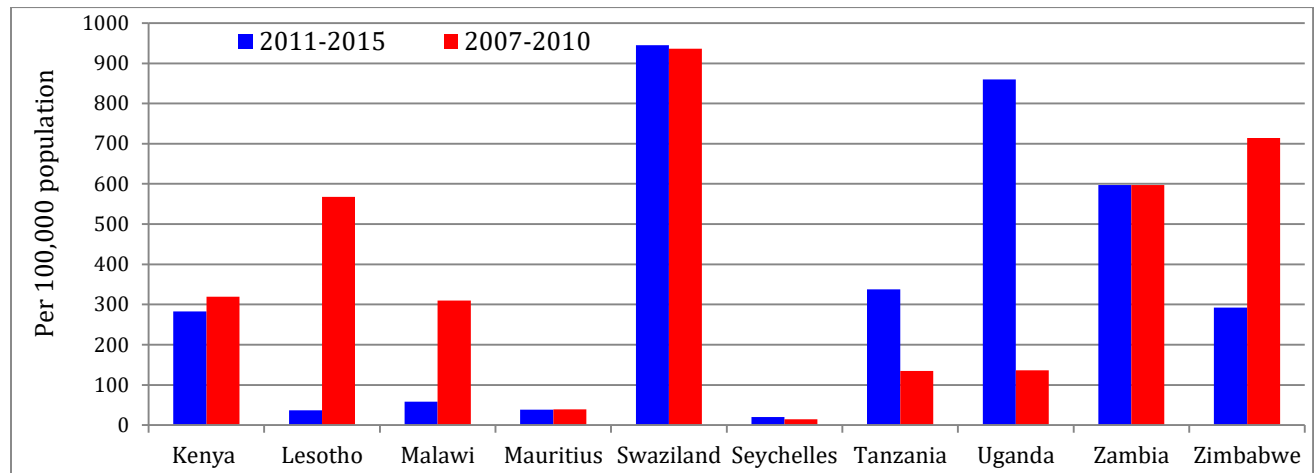
Indicator 75: Tuberculosis Treatment success under DOTS

This is the proportion of new-smear positive TB cases registered for treatment who get cured or complete treatment. WHO recommended 85% by 2005. This indicator measures the capacity of the programme to ensure correct treatment is provided to detected cases. Provision of treatment through DOTS reduces the chances of non-adherence to treatment hence the risk to drug resistance, a major challenge in the treatment and control of TB. Successful treatment of TB cases also reduces the reservoir of infection. Figure 100 shows that TB success rate ranged between 70.3%in Uganda and 100% in Seychelles.

Figure 100: Tuberculosis Treatment success under DOTS
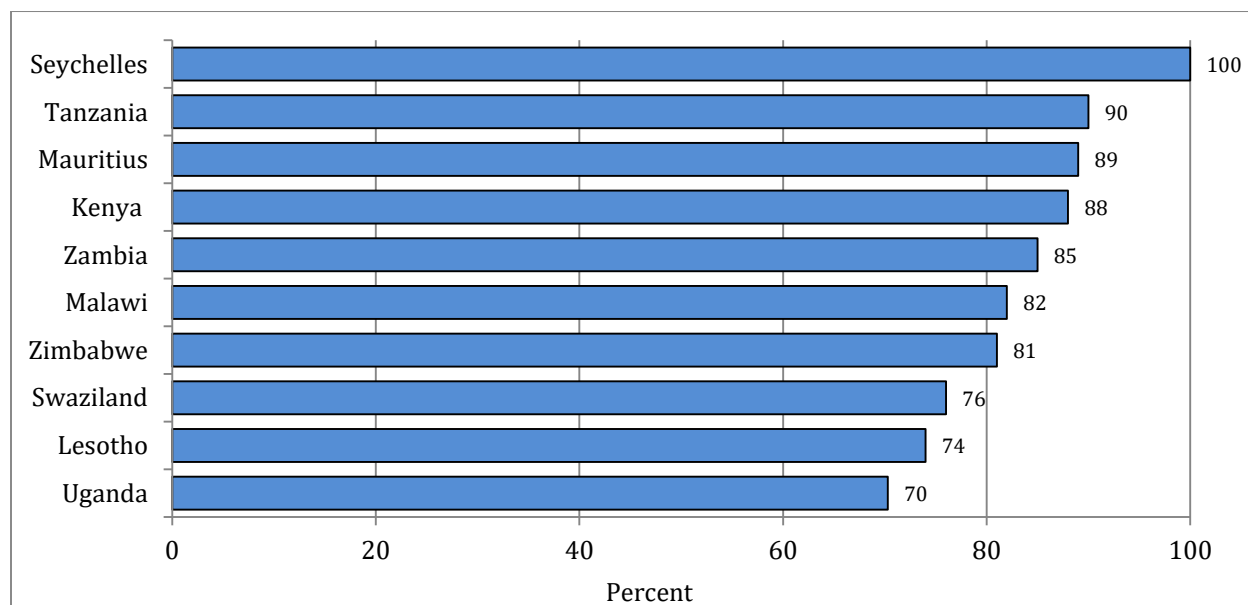
Most ECSA countries had an increase in the TB treatment success rate where an increase of 21% was recorded in Zimbabwe (60% to 81%) and Swaziland (58% to 79%). However, treatment success rate declined by 5% and 3% in Uganda and Mauritius, respectively.

Figure 101: Tuberculosis treatment success under DOTS (%), trend 2004-2015
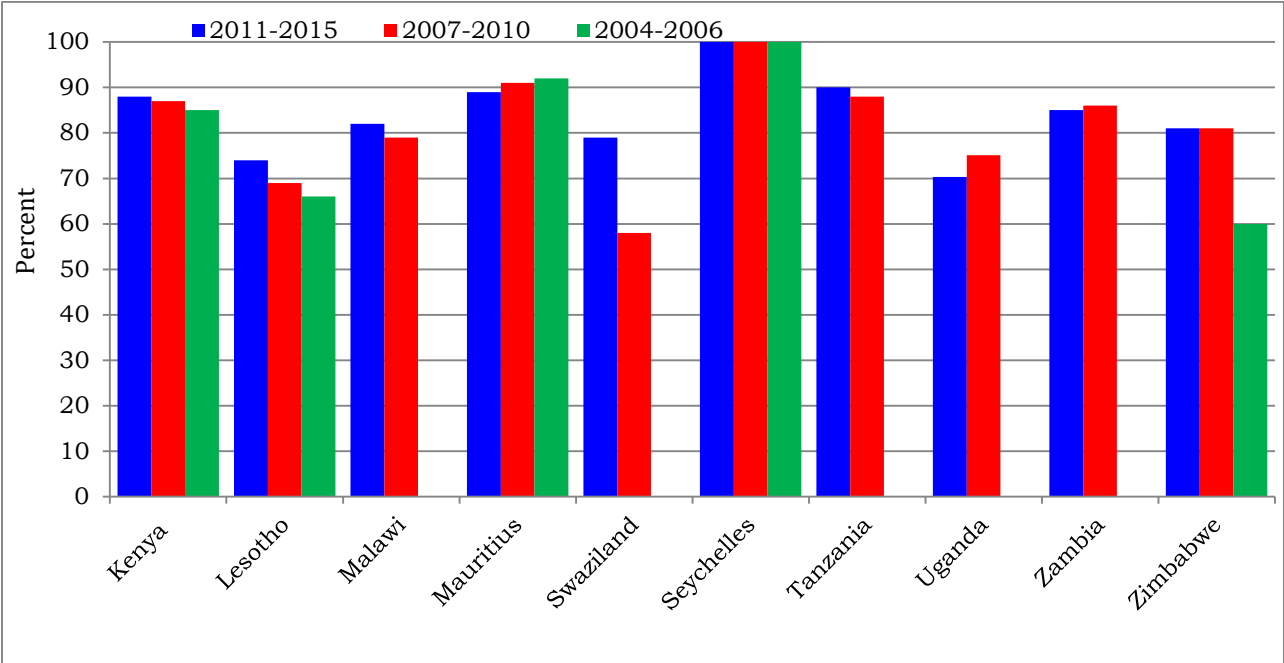
Indicator 76: Tuberculosis mortality rate per 100,000 population

Deaths due to TB are an indicator of programme inadequacies in the control of the disease. Mortality due to tuberculosis varied widely from 1.3 per 100,000 in Mauritius to 400 per 100,000 in Swaziland (Figure 102). There was no death due to TB reported from Seychelles during the period 2011-15. Mortality rate was quite high in Swaziland where the rate was four-fold higher compared to the next country in the rank (Uganda).

Figure 102: Tuberculosis mortality rate per 100,000 population
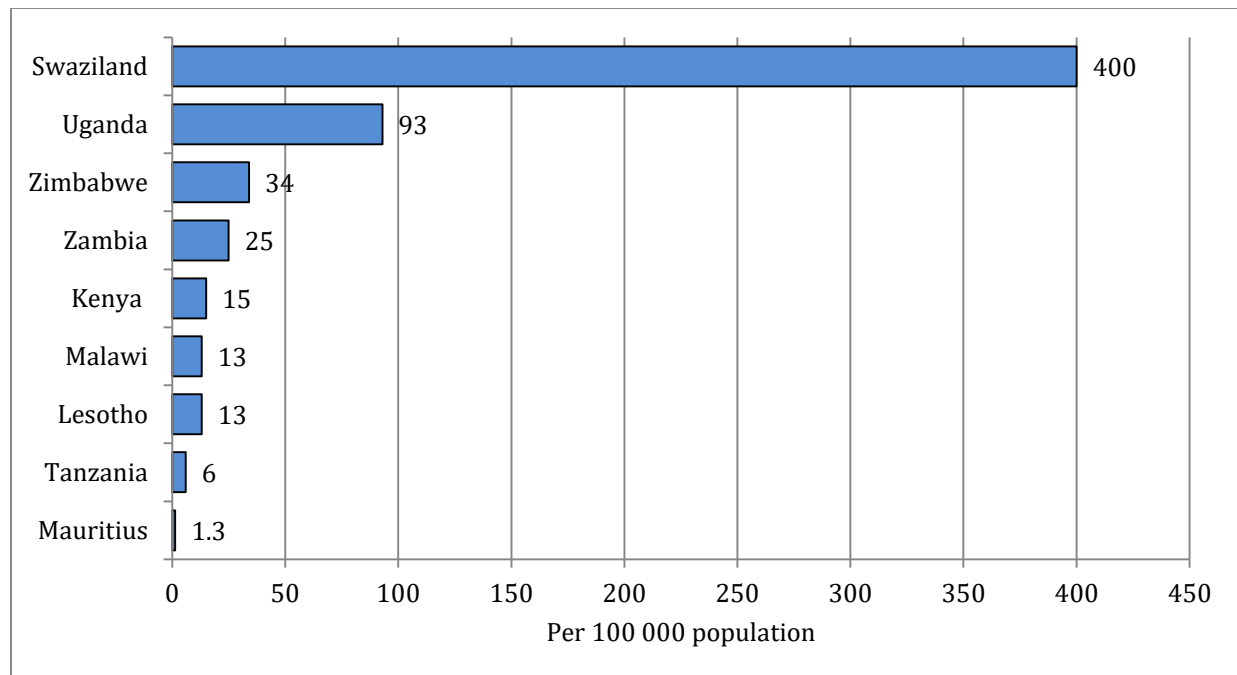
3.0   CONCLUSION

The partnership of countries with different geographical and population sizes and economic status, pose a unique opportunity for individual countries to learn from each other. It also serves as an opportunity for the best performing countries to act as models to inspire others. Whereas, for some indicators, some economically better-off countries seemed to perform better, this was not consistent to all the indicators. It is expected that countries with better economy will spend more fund per capita on health. With improved resources inputs, it is more likely that these countries would have achieved better health outcomes. These findings underscore the fact that resource input is a necessity but not sufficient factor for better health outcomes. Priority setting, commitment and efficiency in implementing selected strategies can make a difference in a country health status irrespective of the level of economic development.

ECSA-HC Secretariat will support and promote equity dimension in the monitoring of access and health status in the member states. In this report, deliberate efforts were made to highlight the equity dimension in healthcare access and outcome. Except for a few mortality indicators, people from the lowest wealth quintile had limited access to health care compared to those who were better-off. Inequity in health care access and outcome detailed in this report should serve as catalyst for member states re-strategize and deliberately institute interventions geared towards closing such gaps in line with the various regional and global commitments that have been made by the countries. This will be particularly important if the ECSA member states are to achieve the SDGs targets, particularly those related to SDG 3 and especially target 3.8 on UHC.

The ECSA HC Secretariat will continue to play a role in monitoring and evaluation of implementation of the various strategies with a view to supporting member countries on the direction to take through the adaptation of best practices from other member states. Through such support, countries will be able to improve performance and ultimately obtain value for money.

Finally, in the preparation of this report, some important indicators were left out. This was due to either lack of data for the respective indicator from many countries or differences in the indicator definitions. It is the expectation of ECSA HC Secretariat that in the future, member states will report complete data for all the indicators using the agreed indicator definitions.

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