SAMBURU COUNTY

Child Survival and its Determinants

1.General Profile

| Year	2009	2019
Total population*	223,947	310,327
Female of childbearing age (15-49)**	43,440	59,843
population under five years**	46,390	55,042
Urban population*	-	39,483
Population with primary school education*	-	85,136
Average rainfall (mm)***	589	717

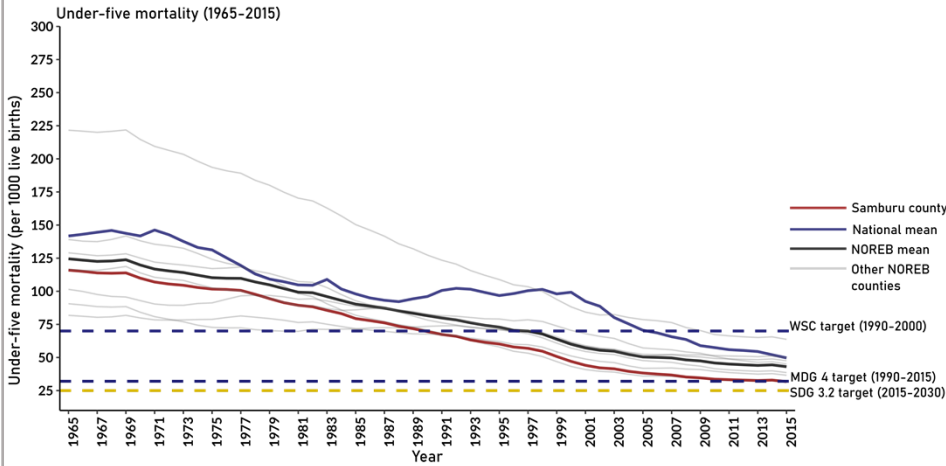Data Sources: * KNBS 2009 & 2019 KNPHC, **World Pop, *** Kenya Meteorological Department

2.Under-five mortality (U5M), 1965-2015

2.1 U5M (per 1000 live births)
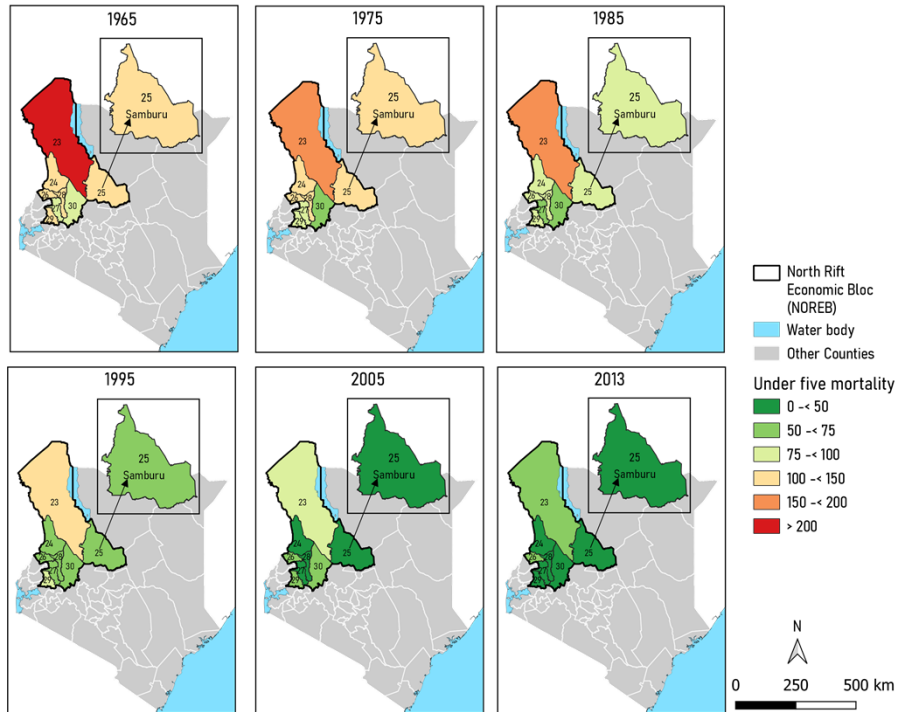
Mean U5M per 1000 live births in Samburu and NOREB every 10 years between 1965 and 2013.

2.2 Trends in U5M and progress towards achieving global targets

U5M trends in Samburu, relative to the national mean, NOREB mean and progress in meeting global U5M reduction targets set during World Summit for Children (WSC), the Millennium Development Goal (MDG) 4 and the Sustainable Development Goal (SDG) 3.2.

Percentage change in the mean U5M.
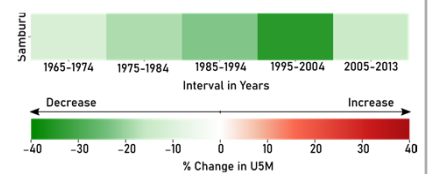
3. Determinants of Child Survival , 1993-2014

3.1 Child Factors

a). Breast feeding indicators: 1993 and 2014
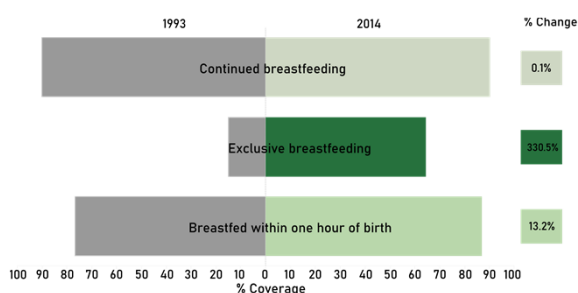
Coverage of breast feeding indicators, and the percentage change between 1993 and 2014. Green indicates an improvement. The darker the green the greater the improvement.

b). Malnutrition indicators: 1993 and 2014
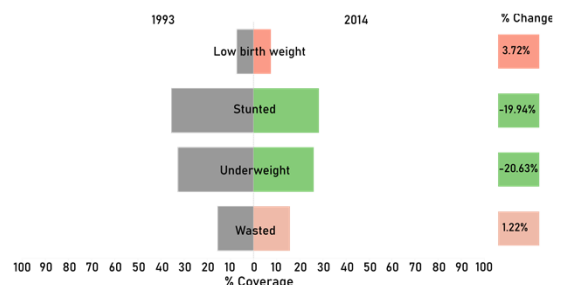
Coverage of malnutrition indicators, and the percentage change between 1993 and 2014. Red indicates deterioration and green an improvement.

3.2 Maternal factors

Comparing maternal factors in 1993 and 2014.

Birth interval 79.20% → 81.33% Birth interval
Low parity 56.51% → 67.01% Low parity
Female-headed household 36.67% → 41.84% Female-headed household
Maternal literacy 20.88% → 31.19% Maternal education / 30.45% Maternal literacy
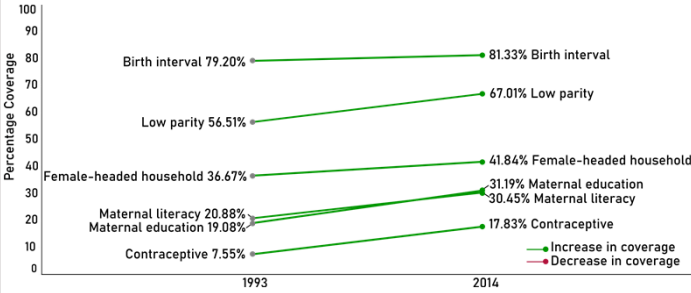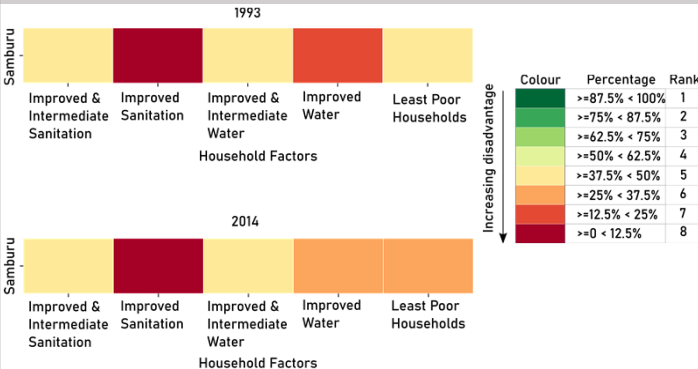Maternal education 19.08%
Contraceptive 7.55% → 17.83% Contraceptive

— Increase in coverage
— Decrease in coverage

Note: **Birth interval** - the proportion of children with a preceding or succeeding birth interval > 24 months.
Low parity-the proportion of women aged,<30 years with less than 3 or aged >29 years with less than 5 children
Maternal education - The proportion of mothers (15-49 years) who had greater than primary education at the time of the survey.
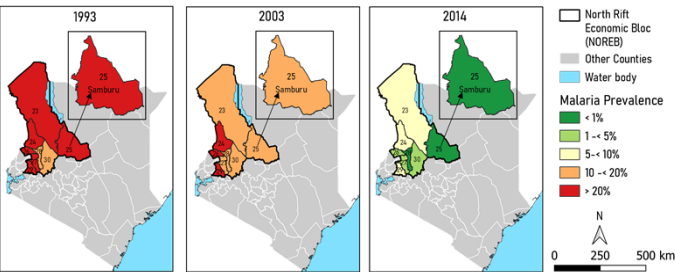
3.4 Household factors

1993 — Samburu

Improved & Intermediate Sanitation | Improved Sanitation | Improved & Intermediate Water | Improved Water | Least Poor Households

Household Factors

Colour	Percentage	Rank
	>=87.5% < 100%	1
	>=75% < 87.5%	2
	>=62.5% < 75%	3
	>=50% < 62.5%	4
	>=37.5% < 50%	5
	>=25% < 37.5%	6
	>=12.5% < 25%	7
	>=0 < 12.5%	8

Increasing disadvantage

2014 — Samburu

Improved & Intermediate Sanitation | Improved Sanitation | Improved & Intermediate Water | Improved Water | Least Poor Households

Household Factors

Note: **Improved sanitation** - proportion of households who have access to flush toilet facilities.
Improved and intermediate sanitation have access to any form of a toilet facility.
Improved water is the proportion of households who have access to piped water for drinking.
Improved and intermediate have access to either piped or boreholes/wells water for drinking.
Least poor households - proportion of households considered not poor comprising of the 1st, 2nd and 3rd quintiles of the wealth index.

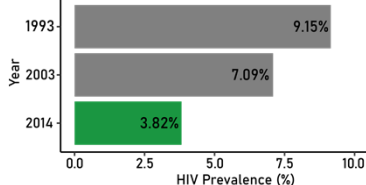## 3.6 Infections

3.6.1 Malaria Prevalence

North Rift Economic Bloc (NOREB)
Other Counties
Water body

Malaria Prevalence
< 1%
1 -< 5%
5-< 10%
10 -< 20%
> 20%

0   250   500 km

Malaria prevalence in Samburu and other NOREB counties.

3.6.2 HIV Prevalence

1993 — 9.15%
2003 — 7.09%
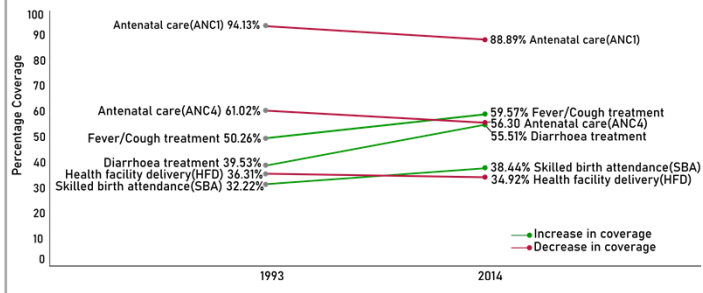2014 — 3.82%

HIV Prevalence (%)

Rift Valley province HIV Prevalence (NACC Kenya) in 1993,2003 and 2014.

3.3 Health Care Utilization

Comparing health care utilization coverage in 1993 and 2014.

Antenatal care(ANC1) 94.13% → 88.89% Antenatal care(ANC1)
Antenatal care(ANC4) 61.02% → 59.57% Fever/Cough treatment
Fever/Cough treatment 50.26% → 56.30 Antenatal care(ANC4) / 55.51% Diarrhoea treatment
Diarrhoea treatment 39.53% → 38.44% Skilled birth attendance(SBA)
Health facility delivery(HFD) 36.31% → 34.92% Health facility delivery(HFD)
Skilled birth attendance(SBA) 32.22%

— Increase in coverage
— Decrease in coverage

3.5 Health Interventions

Coverage of child and maternal health interventions in 1993, 2003 and 2014. Dark green indicates high coverage and red low coverage.

Decreasing Coverage

Samburu Health Interventions, 1993
- Polio3 Vaccine 93.27
- BCG Vaccine 95.89
- DPT3 Vaccine 91.92
- ORS 31.24
- TT2 50.51
- Fully immunised 75.72
- Measles Vaccine 82.3

Factors that were either not monitored or had not been rolled out by 1993 (IPTp1,IPTp2,Iron Supplements, Vitamin A-mothers, Vitamin A-children, Antimalarial and Child-ITN)

% Coverage
100 / 80 / 60 / 40 / 20 / 0

Samburu Health Interventions, 2003
- DPT3 Vaccine 77.33
- Polio3 Vaccine 76.95
- BCG Vaccine 87.1
- Measles Vaccine 69.21
- Fully immunised 51.48
- TT2 46.73
- Iron Supplements 35.32
- VitaminA-child 30.42
- VitaminA-mother 13.15
- Antimalarial 8.29
- IPTp1 6.04
- Child_ITN 3.16
- IPTp2 2.18
- ORS 30.28

Samburu Health Interventions, 2014
- Polio3 Vaccine 92.66
- DPT3 Vaccine 89.67
- BCG Vaccine 96.1
- Measles Vaccine 78.73
- Fully immunise 73.29
- VitaminA-child 71.54
- Iron Supplements 62.08
- VitaminA-mother 47.55
- ORS 46.57
- TT2 45.79
- Child_ITN 18.x
- IPTp1 15.33
- Antimalarial 9.7
- IPTp2 7.46

Note:TT2-Two doses of tetanus toxoid Injection
IPTp-Intermittent preventive treatment in pregnancy
ORS - Oral rehydration salts use
DPT3 -3rd dose of diphtheria–tetanus–pertussis vaccine
Polio3 – 3rd dose of polio vaccine
Child_ITN - Insecticide treated bed nets use by children

Key Messages

➢ Samburu maintained a U5M rate lower than the regional and national mean across the years and even achieving reduction rates >30% between 1995 and 2004. The rate was at 32.91 per 1000 live birth by 2014, the second-lowest in NOREB and third lowest in the country.
➢ A significant reduction in HIV and Malaria prevalence was observed between 2003 and 2014. In addition, Samburu was one of the few NOREB counties that reduced malaria transmission rate to below 1%, even though malaria intervention coverage remained much lower than most counties.
➢ The proportion of wasted and low birth weight children slightly increased, but other nutritional indicators alongside breastfeeding practices improved.
➢ Notably, the prevalence for longer birth intervals and low parity increased between 1993 and 2014 despite the fact that the proportion of educated and literate mothers remained low, as did the use of contraceptives.
➢ Samburu was the only county that saw a decline in the health facility deliveries in addition to antenatal care. Furthermore, the proportion of women attended by skilled personnel at birth was one of the Region's lowest.
➢ Vaccination coverage was among the lowest in NOREB, even after improving from a drop observed between 1993 and 2003.
➢ There was no significant progress towards improving access to clean water and sanitation. While most counties had an increase in the proportion of least poor households, the proportion in Samburu decreased from 41% to 35%.