

From Disparity to Dignity:

[बिभेद बाट सम्मान तर्फ]

A Narrative of Nepal's Health Systems on Equity

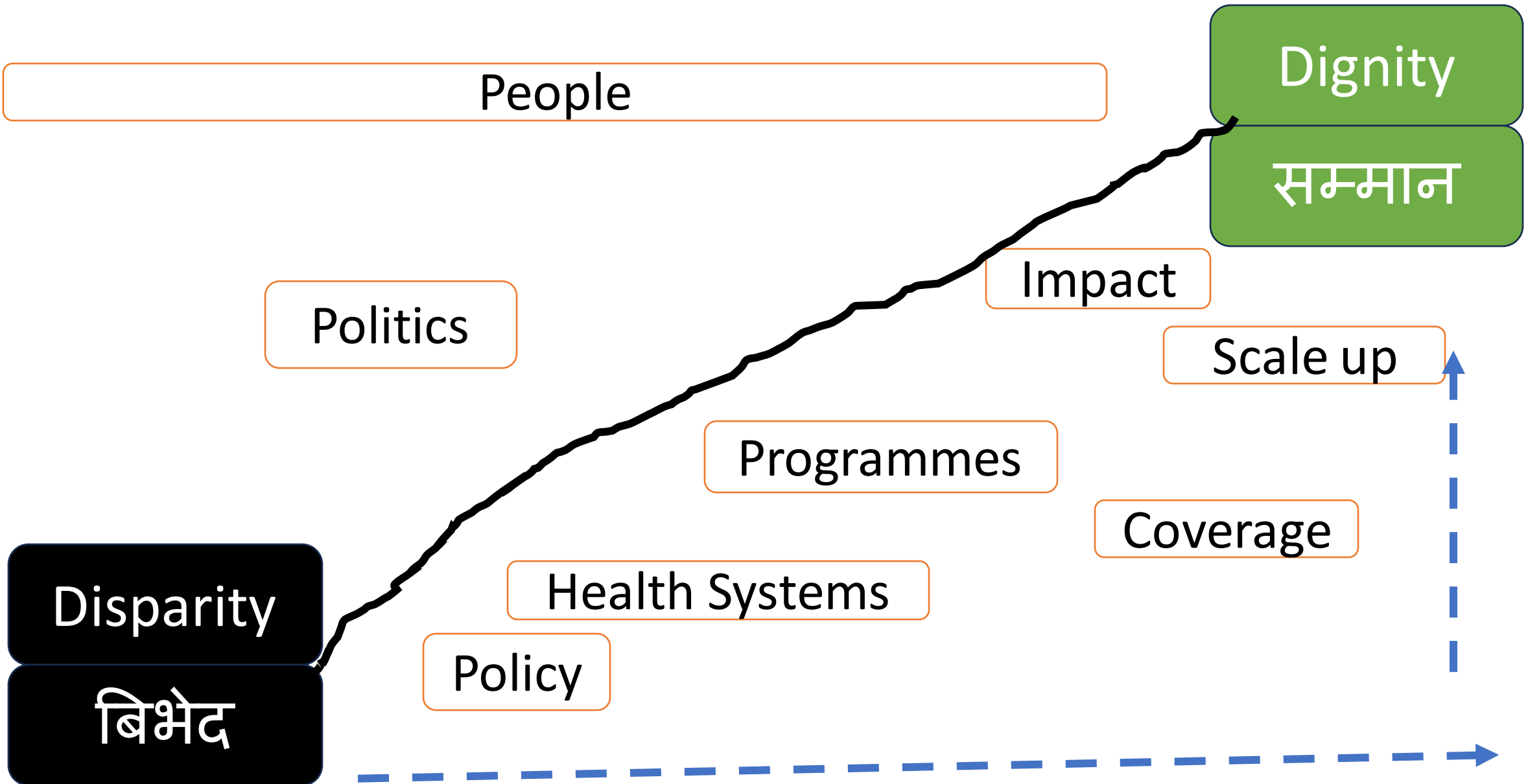
नेपालको स्वास्थ्य प्रणालीमा समता - एक कथन

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People

Dignity
सम्मान

Politics

Impact

Scale up

Programmes

Coverage

Disparity

बिभेद

Health Systems

Policy



1985

1990

1995

2000

2005

2010

2015

2020

2025

2030

2035

1991

प्रमुख राजनीतिक दलहरू

Election 2008

राजनीतिक दल

एचआईभी एड्सको बढ्दो प्रकोप रोक्न पूर्व सतर्कता, रोकथाम र उपचारको व्यवस्था गर्न राज्यले विशेष ध्यान दिनेछ ।

1. न्यून आय भएका जनता खासगरी ग्रामीण र दुर्गम भेगका जनता, बालबालिका र महिलाले सहजै स्वास्थ्य सेवा प्राप्त गर्न सक्ने गरी सरकारी अस्पतालको सञ्जाल र गुणस्तरीय सेवा, स्वास्थ्य विमा सुनिश्चित गर्नु राज्यको दायित्व हुनेछ ।

राजनीतिक दल

1. स्वास्थ्यलाई सबैको मौलिक अधिकारका रूपमा स्थापित गरिनेछ र सबैका लागि स्वास्थ्य को अवधारणा कार्यान्वयन गरिनेछ । सबैलाई आधारभूत स्वास्थ्यसेवा निःशुल्क उपलब्ध गराइनेछ ।
2. प्रत्येक गाउँ विकास समितिमा कम्तिमा पनि एउटा एलोपेथिक स्वास्थ्य चौकि, आयुर्वेदिक चिकित्सा केन्द्र र प्राकृतिक चिकित्सा केन्द्र स्थापना गर्ने कार्यक्रम संचालन गरिनेछ ।

Election 2013

राजनीतिक दल सबैलाई भरपर्दो, गुणस्तरीय र सुलभ स्वास्थ्य सेवा" भन्ने मूल लक्ष्यका साथ नेपाली कांग्रेसको स्वास्थ्य क्षेत्रका कार्यक्रम संचालित हुनेछन् ।

1. नेपालको भूभागभित्र बसोवास गर्ने कुनैपनि नेपालीको उपचार हुनसक्ने रोगले अकालमा मृत्यु नहोस् भन्ने स्वास्थ्य नीतिको मूल लक्ष्य हुनेछ ।
2. मातृ मृत्युदर शून्यमा झार्ने: मातृत्व संरक्षणको पूर्ण दायित्व राज्यले लिने र विकट क्षेत्रमा एयर एम्बुलेन्सको समेत व्यवस्था गरी सुत्केरी आमाहरूको संरक्षण गर्ने ।
3. आधारभूत स्वास्थ्य सेवालाई नागरिकको मौलिक हकका रूपमा ग्यारेन्टी गर्ने ।
4. पिछडिएका क्षेत्र र सामाजिक संरक्षणको घेराबाट बाहिर परेका आम जनतालाई सामाजिक सहायताका कार्यक्रमबाट राहत दिने ।

राजनीतिक दल

सम्पूर्ण नेपालीका लागि प्रमुख ५० वटा रोगको स्वास्थ्य बिमा गरिनेछ ।

1. दलितलाई निःशुल्क स्वास्थ्य सेवाको व्यवस्था गरिनेछ ।
2. सबै बालबालिकाहरूलाई पोषण, शिक्षा, स्वास्थ्य र सामाजिक सुरक्षाको हक हुनेछ ।

Election 2022

राजनीतिक दल

स्वास्थ्य बिमित हुने संख्या १००%
1. बाल कपोषण (पुङ्कोपना) २०%

राजनीतिक दल

निजी, सहकारी तथा सामुदायिक क्षेत्रसँगको पहल, समन्वय र सहकार्यमा निर्मित अस्पतालद्वारा सुलभ र गुणस्तरीय स्वास्थ्य सेवा उपलब्ध हुने कुरा सुनिश्चित गर्ने ।

1. प्रत्येक नागरिकको अनिवार्य स्वास्थ्य विमा गर्ने, जेष्ठ नागरिक, विपन्न, दलित, एकल महिला र अपाङ्गता सहितका व्यक्तिको स्वास्थ्य विमा निशुल्क गर्ने,

राजनीतिक दल

स्वास्थ्य क्षेत्रको सेवालाई जनमैत्री, वैज्ञानिक र प्रभावकारी बनाउन एकीकृत राष्ट्रिय स्वास्थ्य गुरुयोजना बनाई लागु गरिने छ ।

1. मूलकको स्वास्थ्य सेवाको गुणस्तर वृद्धि र विशिष्टीकृत स्वास्थ्य सेवाको उपलब्धताबाट नेपाली नागरिक उपचारका लागि विदेश जानु नपर्ने र विदेशी नागरिक समेत उपचारका लागि नेपाल आउने वातावरण निर्माण गरिने छ ।

रा राजनीतिक दल

पक्षघात भएका, अपाङ्ग तथा वृद्धहरूका लागि घरमै स्वास्थ्य सेवा

1. आकस्मिक मेडिकल उपचार तथा प्रसब ऐन बनाउने र आकस्मिक विभागमा आउने कुनै पनि विरामी वा गर्भवती महिलालाई शुल्क तिर्न क्षमताको मतबल नराखी अनिवार्य स्वास्थ्य उपचार गर्ने ।

दलहरूको
चुनावी
घोषणापत्रमा
स्वास्थ्य

Policy and Power

Extending Basic Primary Health Services up to the village level.

Addresses disparities in healthcare, assuring gender sensitivity and equitable community access to quality healthcare services.

Strengthening maternity care including family planning services at all levels of the health care delivery system.

The plan was developed around four pillars focusing on overall development- high and sustainable growth, human development, social inclusion, and improved governance.

Decentralized delivery of essential health services, expanding partnership with private sector and strengthening overall sector management.

The payment to women was graduated: NPR 1500 in Mountain; NPR 1000 in Hill; and NPR 500 in Terai areas to reflect the higher costs in remoter areas.

35 free medicines, with district hospital services covered for: poor, ultra poor, female health volunteers, seniors 60+, helpless, disabled.

National Health Policy 1991

Second Long-Term Health Plan 1997

Safe Motherhood Policy 1998

The Tenth Plan 2003

Agenda for Reform 2004

Maternity Incentive scheme 2005

Free Health Care Policy 2006

Disparity to Dignity

PHCRD Established 2009

Aama Programme 2009

National Health Policy 2014

National Strategy for Reaching the Unreached 2016

National Health Policy 2019

Climate Change Policy 2019

GESI Strategy 2023

Equitable access of target groups in health services, internalize GESI into institutional mechanisms to empower target groups.

Enhance climate change adaptation capacity of persons, families, groups and communities vulnerable to, and at risk of climate change.

Aligned with federal structure and constitution for free basic and emergency healthcare access.

Reducing health and nutrition inequalities and contributing toward Universal Health Coverage in Nepal.

Ensure equitable, accountable health systems for all citizens' access to quality care, upholding health as a human right.

Provision was added to provide reimbursement to health facilities and any costs associated with delivery services were removed.

Expand coverage of primary health services, focusing on disadvantaged and unreached populations.

539/100,000 live births (MMR) - '96

9% Institutional Delivery (2001)

17% Institutional Delivery (2006)

281/100,000 live births (MMR) - 2006

79.3% Institutional Delivery (2022)

151/100,000 live births (MMR) - 2022

239/100,000 live births (MMR) - 2016

35.3% Institutional Delivery (2011)

"Nepal's policy environment and healthcare has evolved in the last 30 years, improving access but facing persistent challenges, leading to varied health outcomes."

COVID-19 Pandemic

Federal Structure

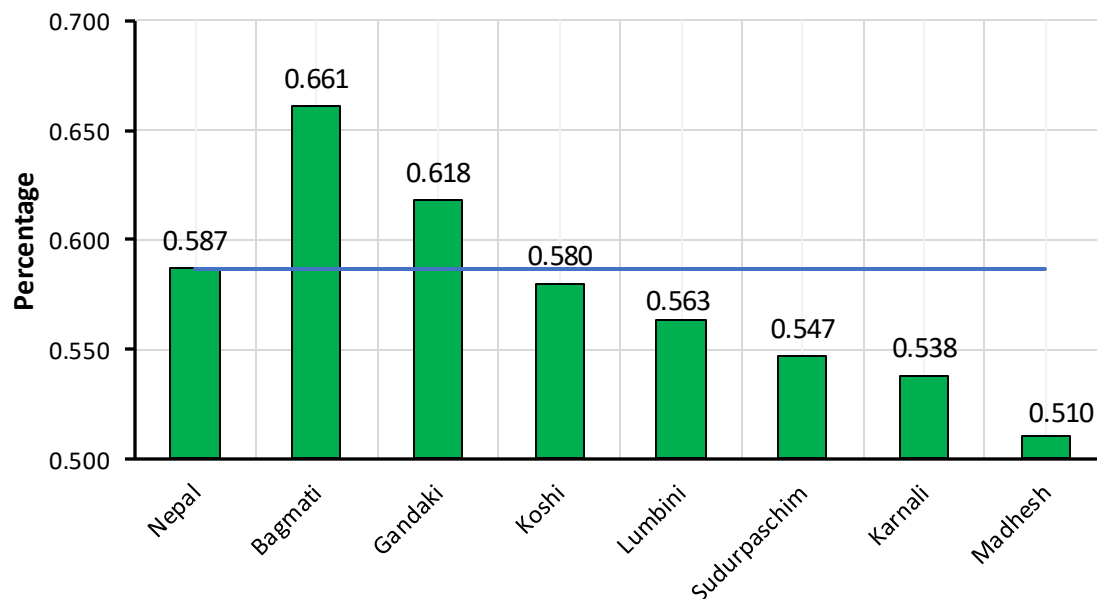
Constitution of Nepal 2015

Health Systems
Health Interventions
Health Gains

Disparities in demographic distribution

Characteristics	Koshi	Madhesh	Bagmati	Gandaki	Lumbini	Karnali	Sudur- Paschim	Nepal
Total population	4961412 (17%)	6114600 (21%)	6116866 (21%)	2466427 (8.5%)	5122078 (17.6%)	1688412 (5.8%)	2694783 (9.2%)	29164578 (100%)
Sex ratio	95.0	100.6	99.4	90.4	92.0	95.3	89.5	95.6
Household size	4.2	5.3	3.9	3.7	4.5	4.6	4.7	4.4
Population density(people per sq km)	192	633	301	115	230	60	138	198
Annual population growth rate (%)	0.86	1.19	0.97	0.25	1.24	0.7	0.52	0.92

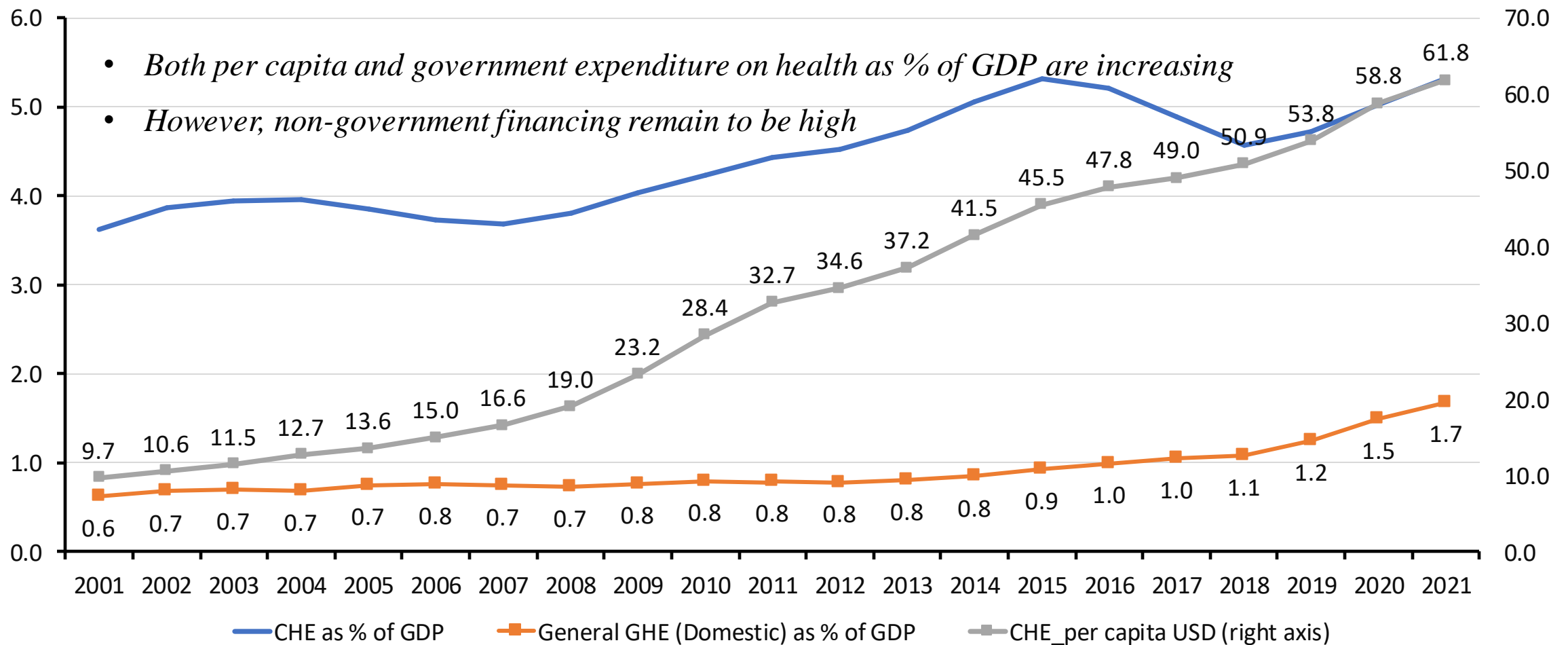
HDI Index (Nepal Human Development Report 2020)



- Population distribution and composition reveal unequal distribution across the nation.
- Human development status also varies within the same country during the same era.

Trend of health expenditure in Nepal: as percent of GDP and per capita USD (3-year rolling average)

Trend of health expenditure in Nepal: as percent of GDP and per capita USD (3-year rolling average)



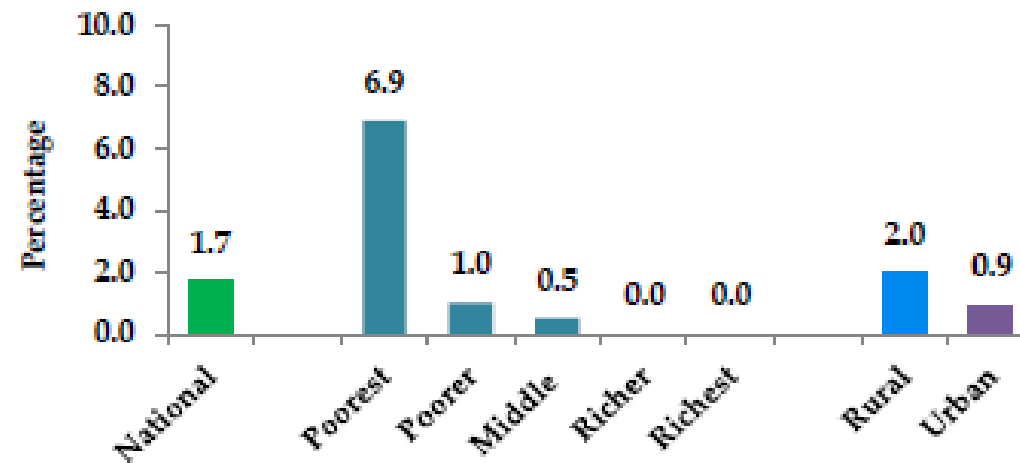
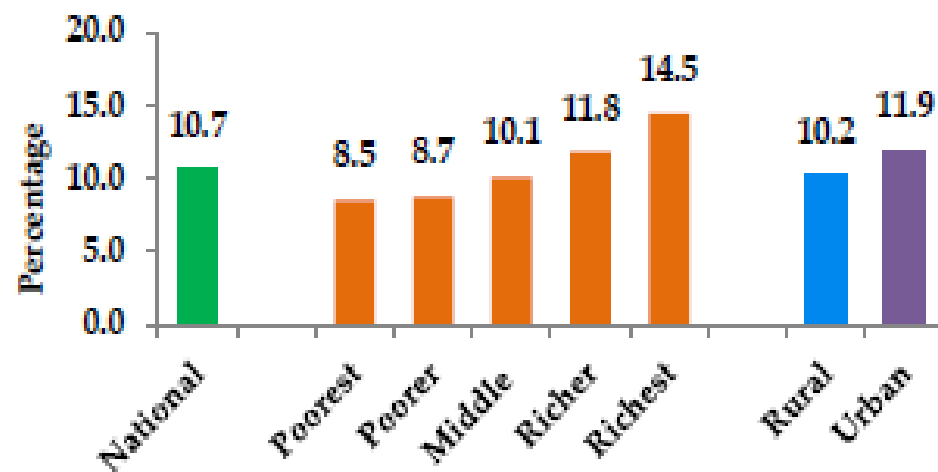
Data Source: WHO database.

Incidence of catastrophic expenditure and impoverishment due to OOP spending

Incidence of catastrophic household OOPs on health, 2014/15

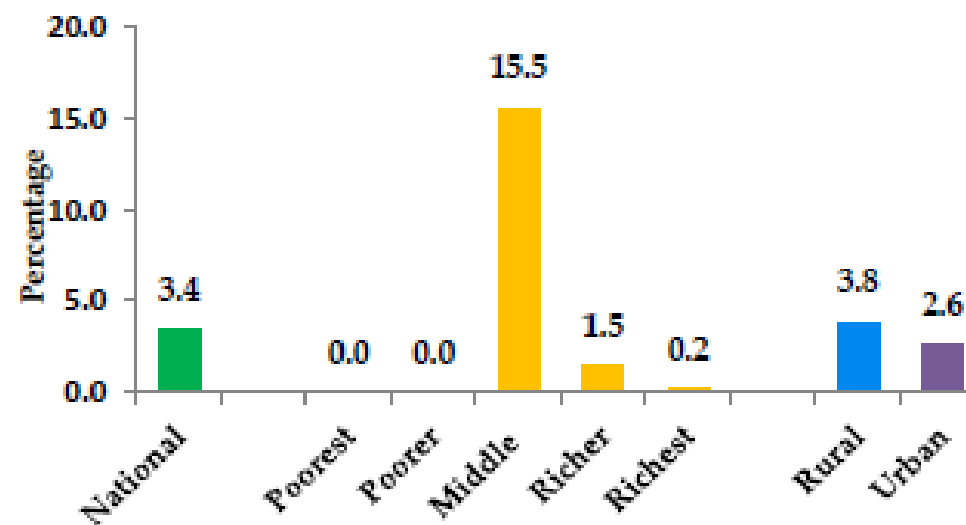
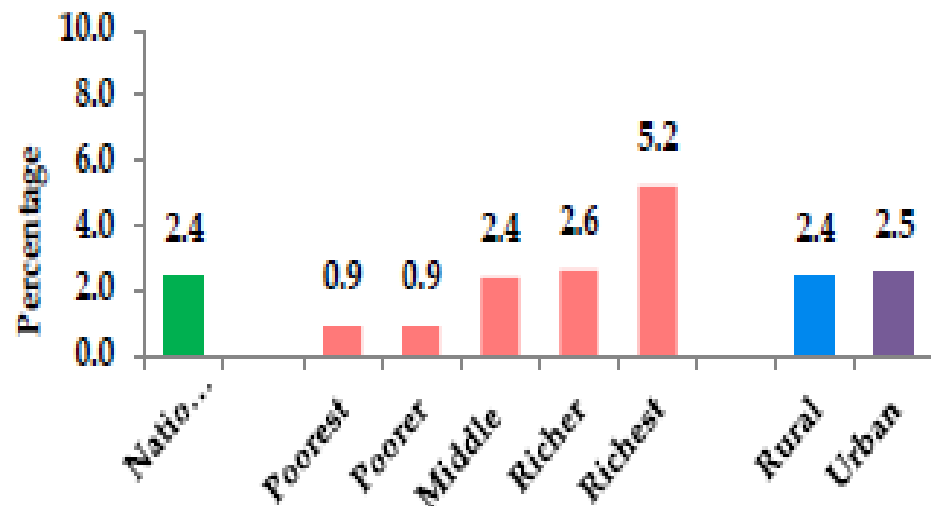
Impoverishment due to household OOPs on health, 2014/15

10% threshold, 2014/15



At 3.10 Int \$, 2014/15

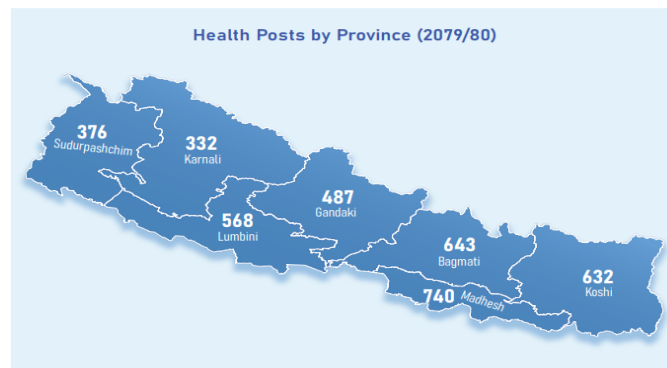
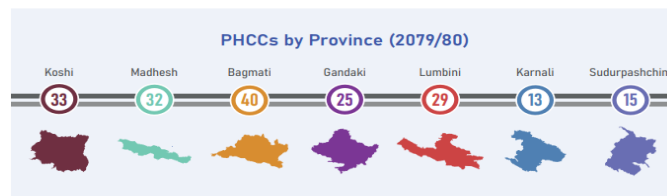
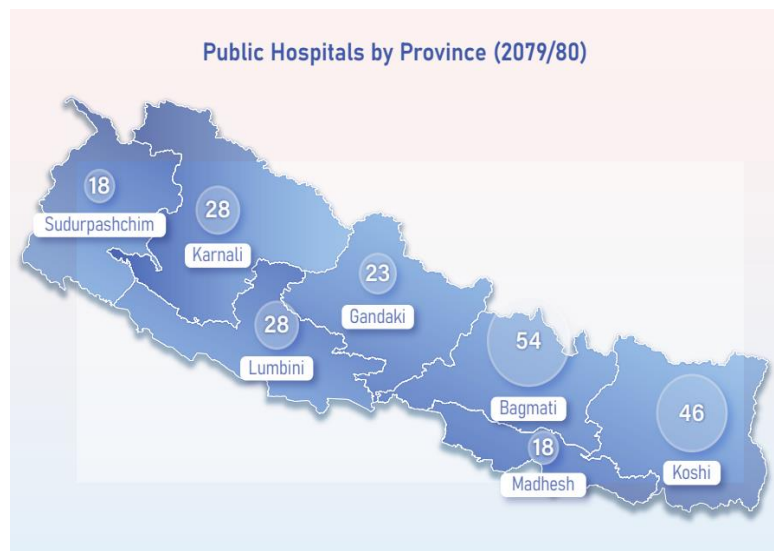
25% threshold, 2014/15



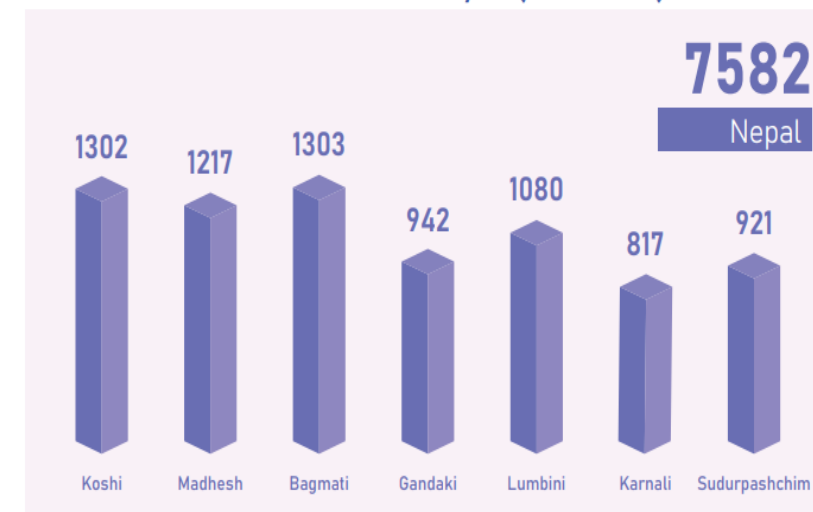
At 1.90 per day Int \$, 2014/15

Source: WHO, 2017: Financial protection in the South-East Asia region: determinants and policy implications.

Distribution of health institutions



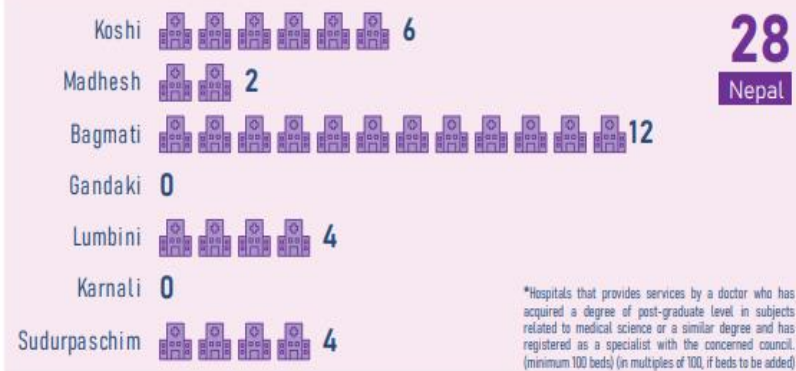
Basic Health Service Centers 2079/80 (in number)



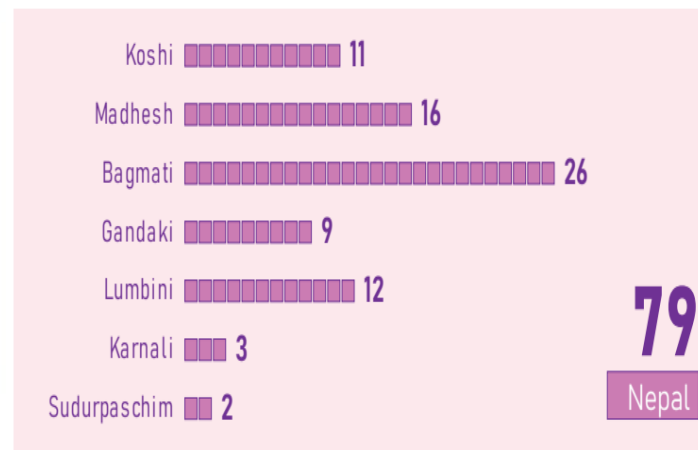
	Koshi	Madhesh	Bagmati	Gandaki	Lumbini	Karnali	Sudur- Paschim	Nepal
Number of public Hospitals (per 1,000,000 population)	9.3	2.9	8.8	9.3	5.5	16.6	6.7	7.4
Number of PHCCs (per 1,000,000 population)	6.7	5.2	6.5	10.1	5.7	7.7	5.6	6.4
Number of Health post (per 100,000 population)	12.7	12.1	10.5	19.7	11.1	19.7	14.0	13.0
Number of BHSC (per 100,000 population)	26.2	19.7	21.3	38.2	21.1	48.4	34.2	26.0

Distribution of health facilities

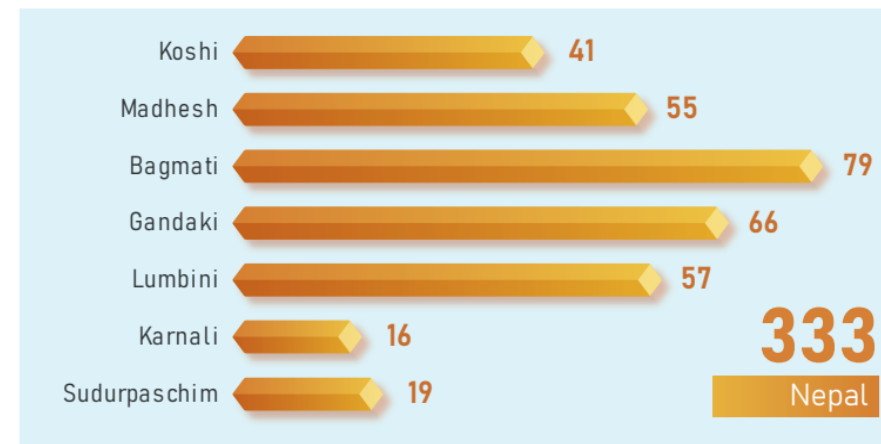
Specialized Hospitals* (100 beds and Above) 2079/80 (in number)



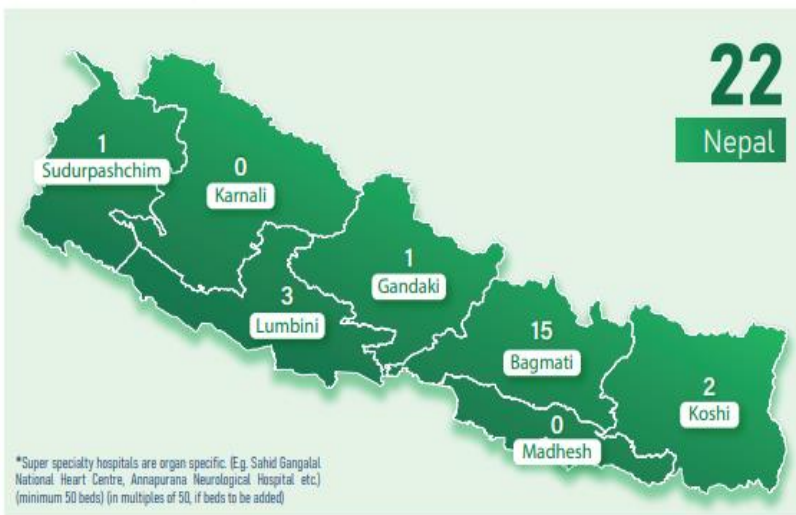
General Hospitals (100 - 300 Beds) 2079/80 (in number)



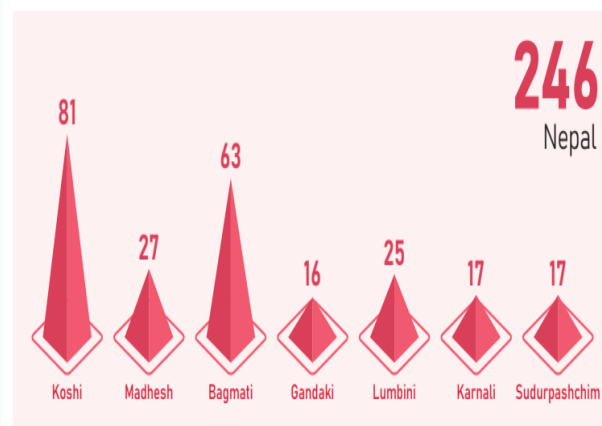
General Hospitals (25 - 50 Beds) 2079/80 (in number)



Super Speciality Hospitals* (50+ Beds) 2079/80 (in number)



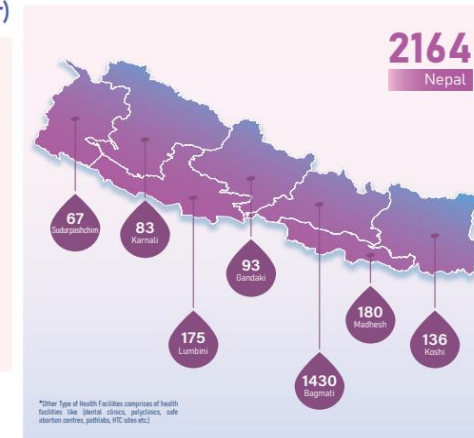
Basic Hospitals (5 - 15 Beds) 2079/80 (in number)



Academy and Teaching Hospital (300+ Beds) 2079/80 (in number)



Other Type of Health Facilities* (in number)



Health human resource

Percentages of MoHP Sanctioned Posts Filled by Provider Category, Facility Type and Province

Background characteristics	Consultants	Physicians/general practitioners	Medical officers	Nurses	Paramedics *	All providers**
Province						
Koshi	23.4	50	33.3	73.3	67.5	65.2
Madhesh	34	44.4	65.9	62.3	85.2	82.7
Bagmati	77.2	50	71.8	88.6	83.5	82.6
Gandaki	52.1	37.5	36.6	57	59.2	57.2
Lumbini	48.8	33.3	32.4	53.2	73.6	68.8
Karnali	0	0	23.8	58.6	71.8	69.7
Sudurpaschim	16.7	12.5	32.8	69.9	68.8	65.5
Total	53.9	37.9	53.2	74.3	75.7	73.4

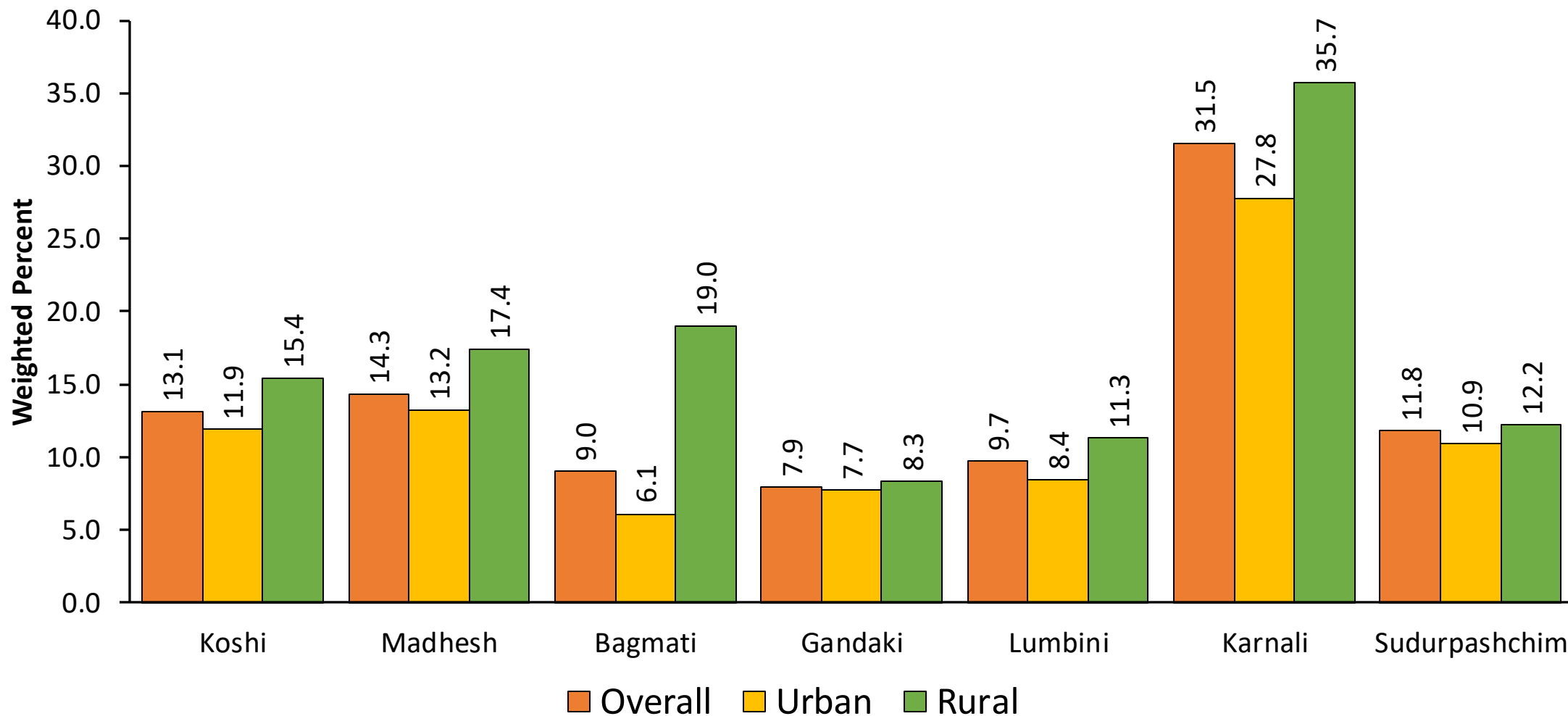
Source: NHFS 2021

- Deployment on sanctioned posts is lower in Karnali, Sudurpaschim province
- Consultants and general practitioners are vacant in the sanctioned position at Karnali.

Source: DoHS Annual Report 2079/80

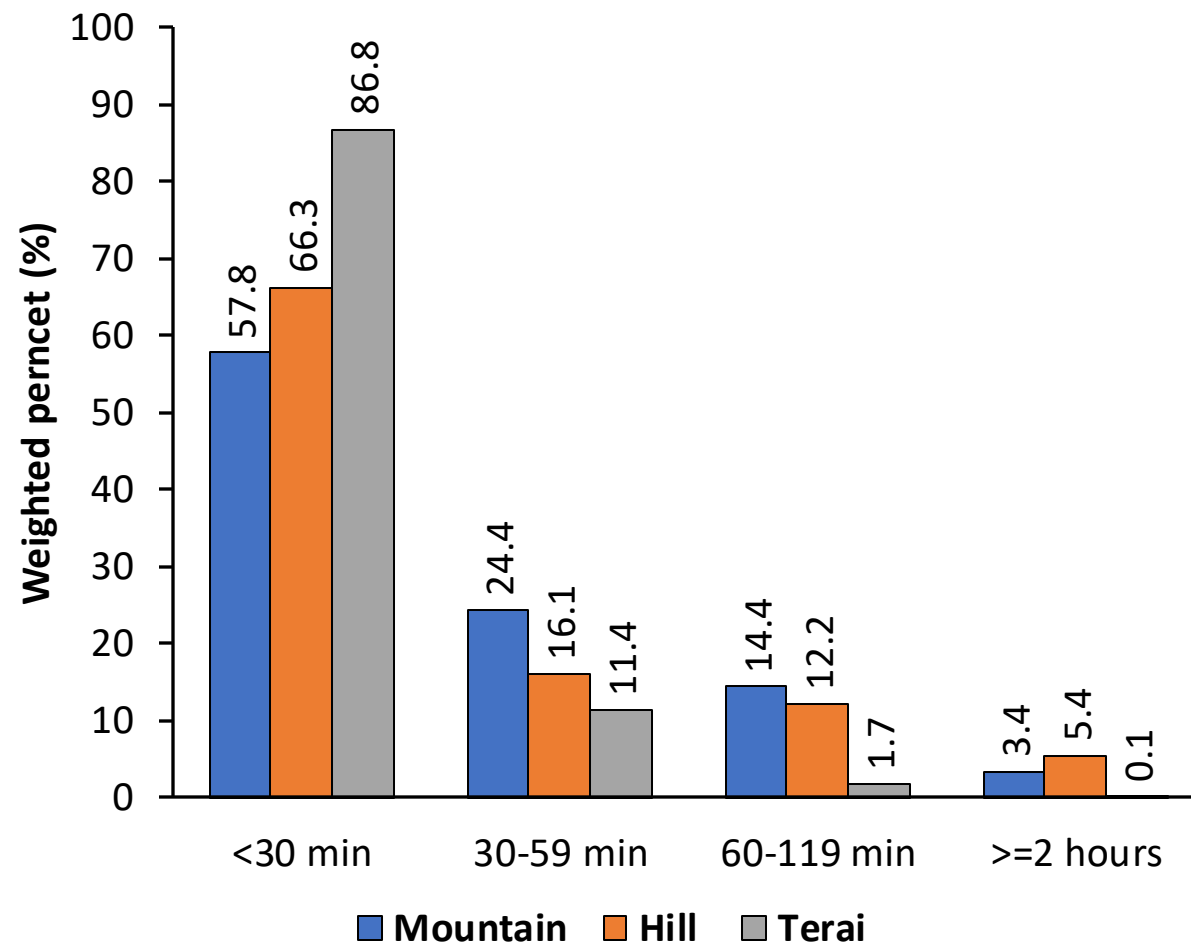
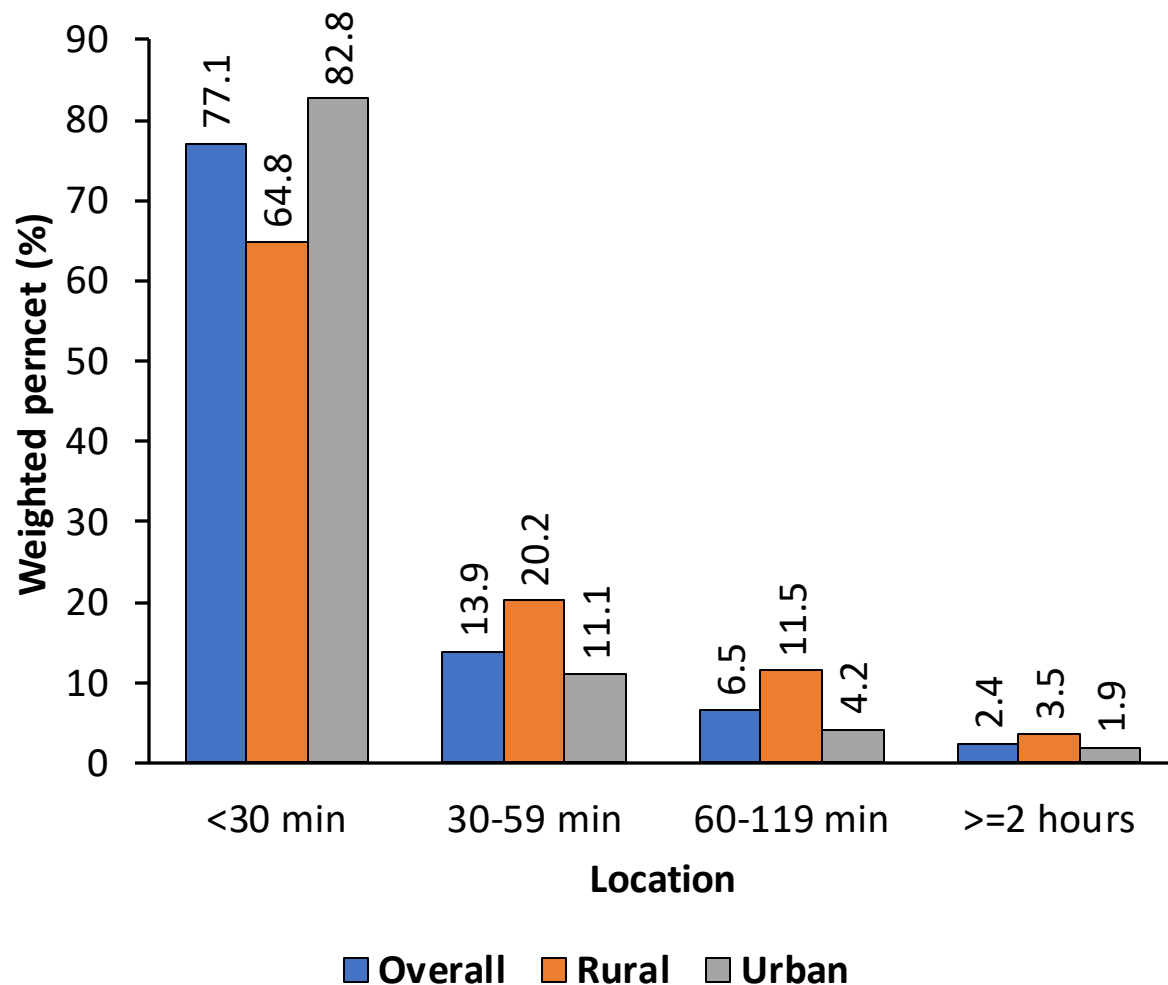
Food insecurity in Nepal

Moderate to severe food insecurity by province



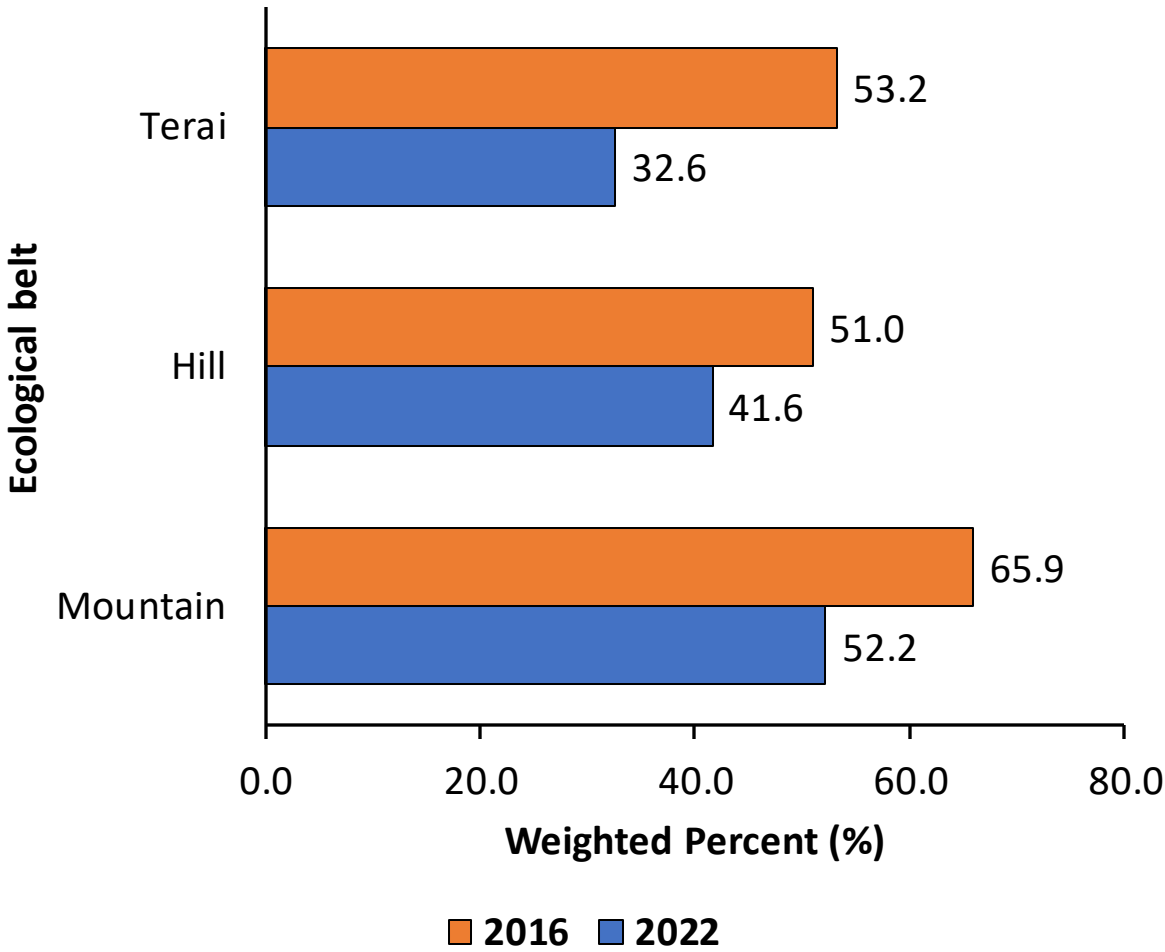
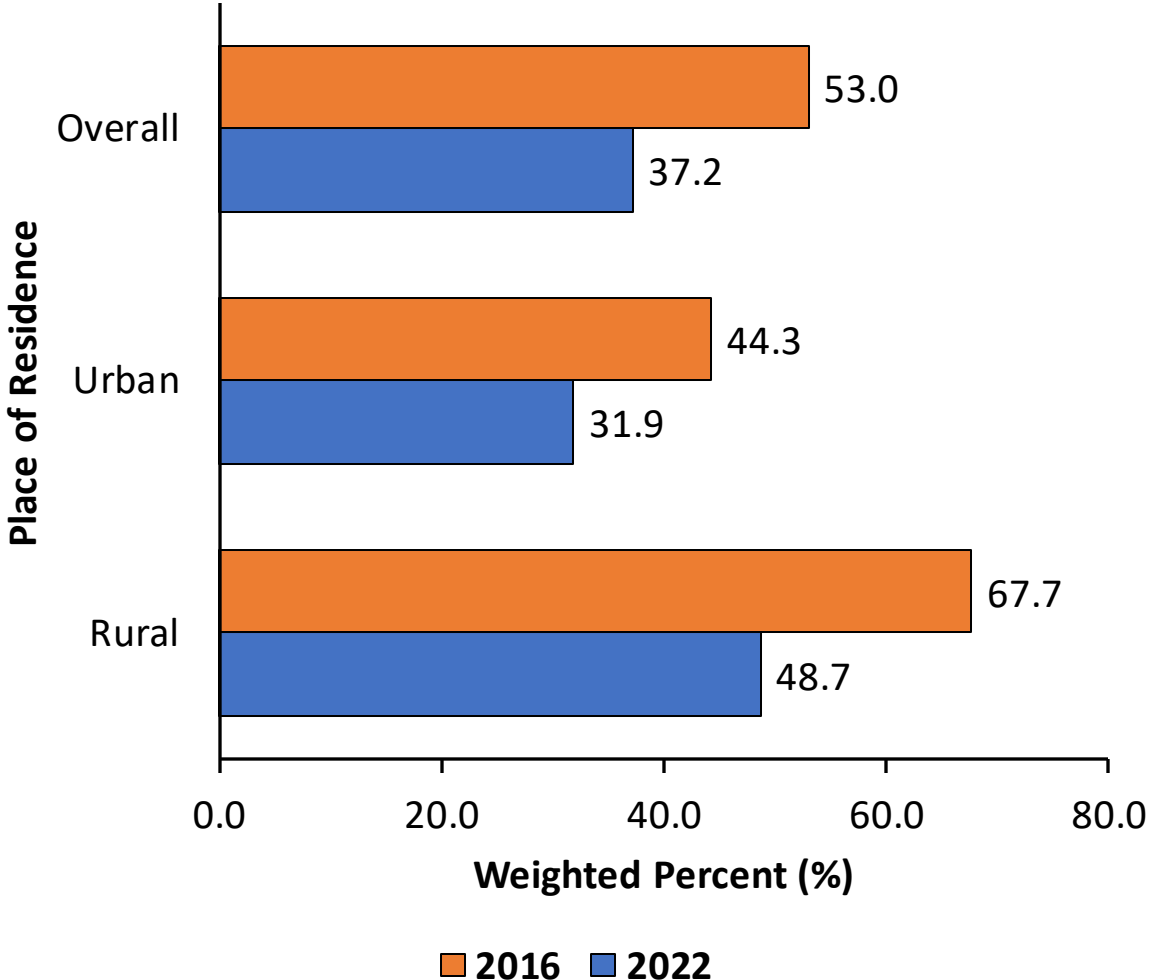
Source: Further analysis of NDHS 2022

Distance to nearest HF is still a problem



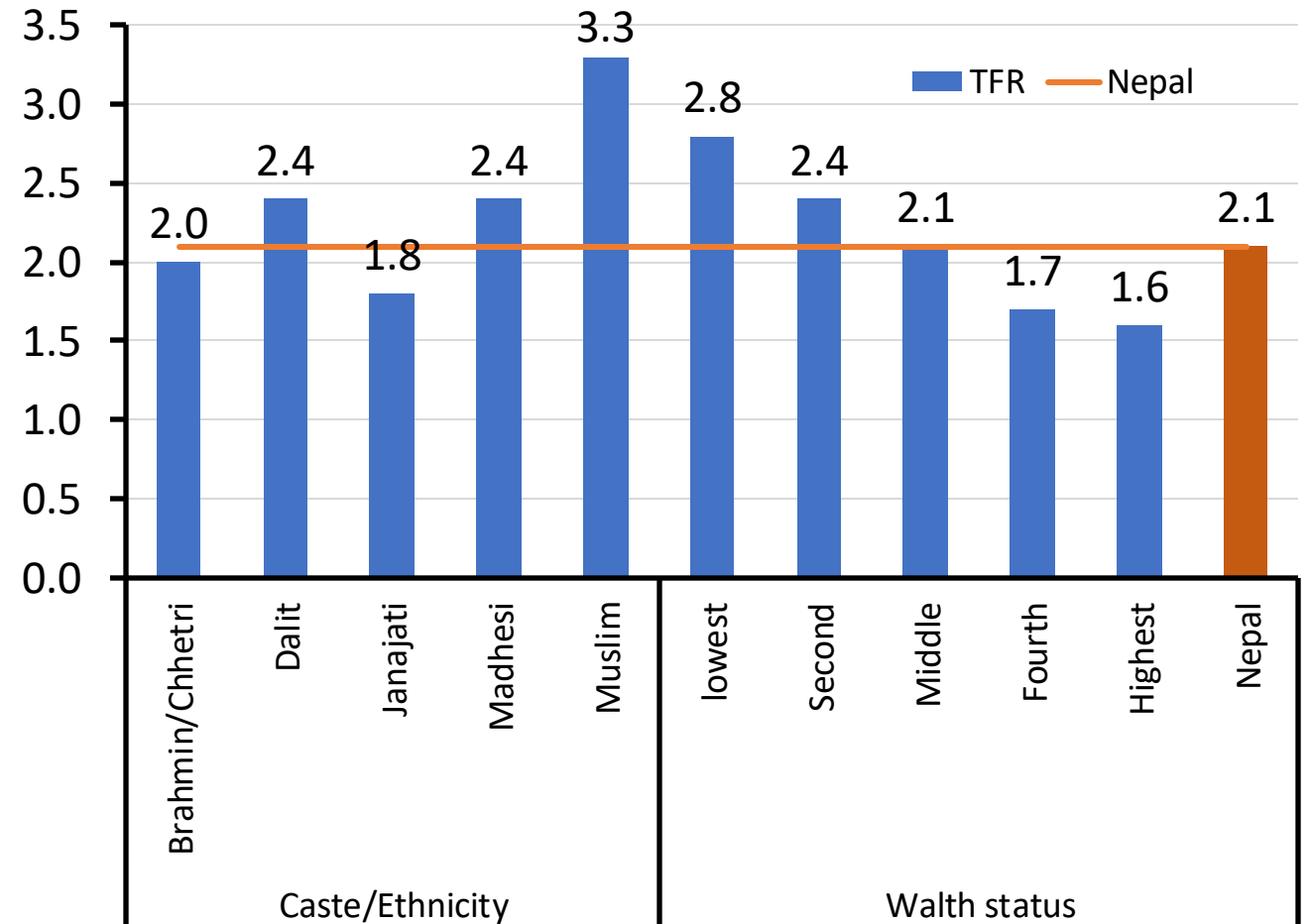
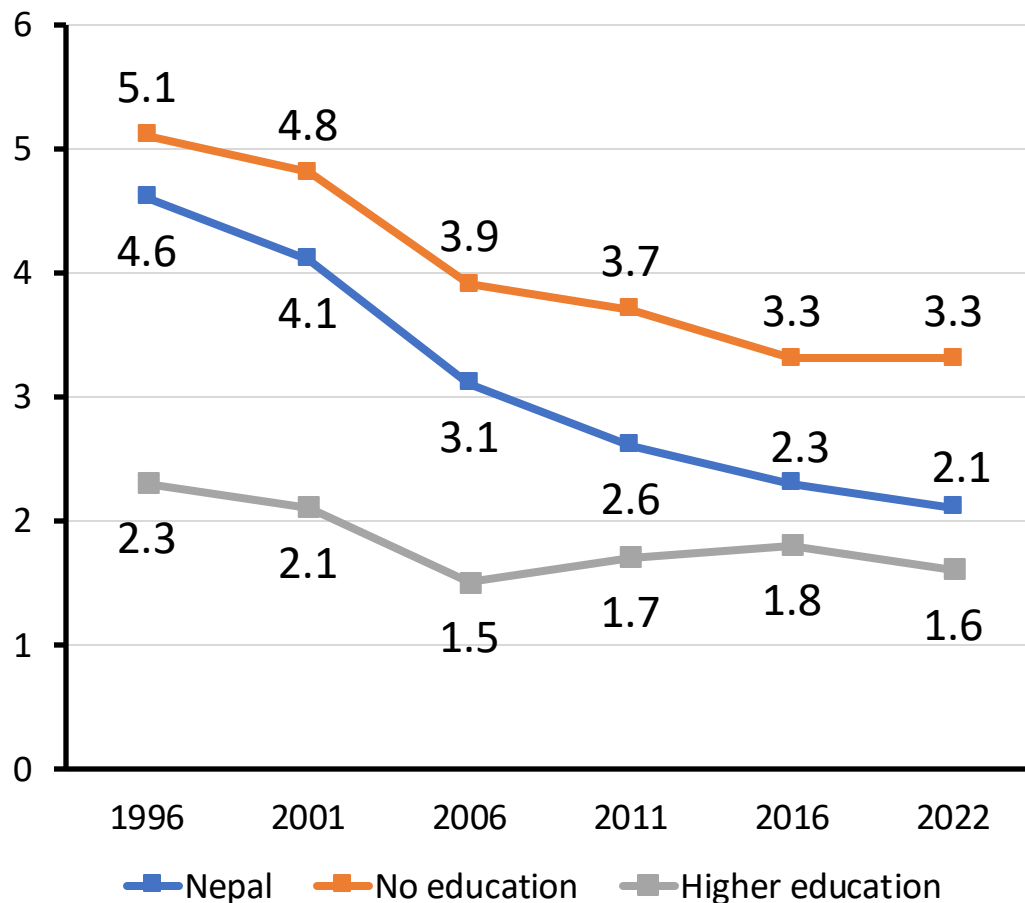
Source: Further analysis of NDHS 2022

Distance to HF as perceived barrier among reproductive aged women



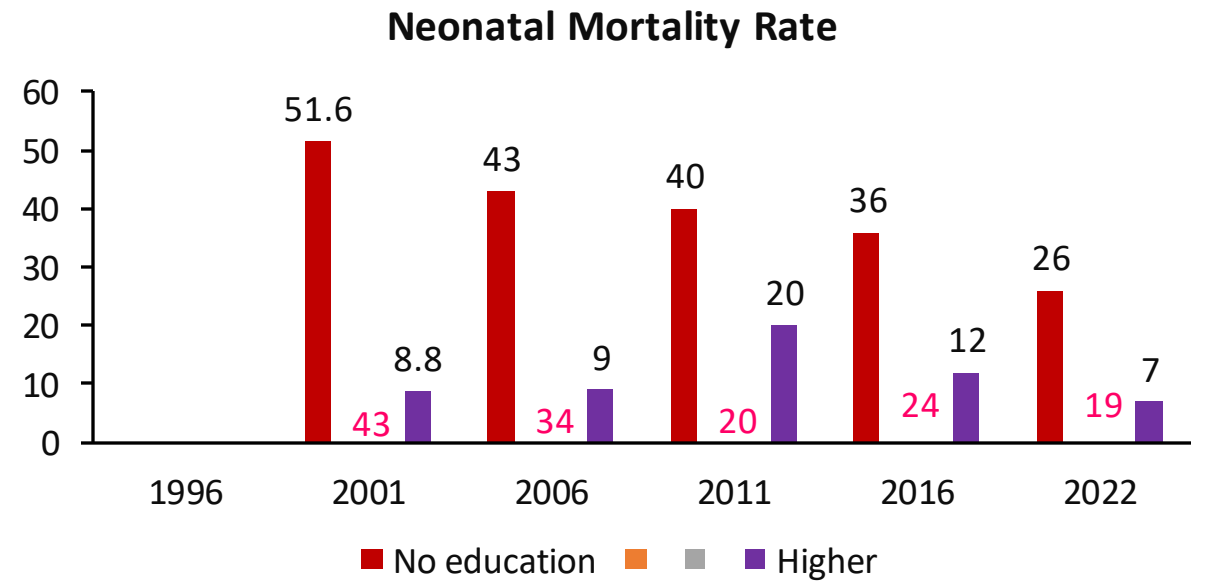
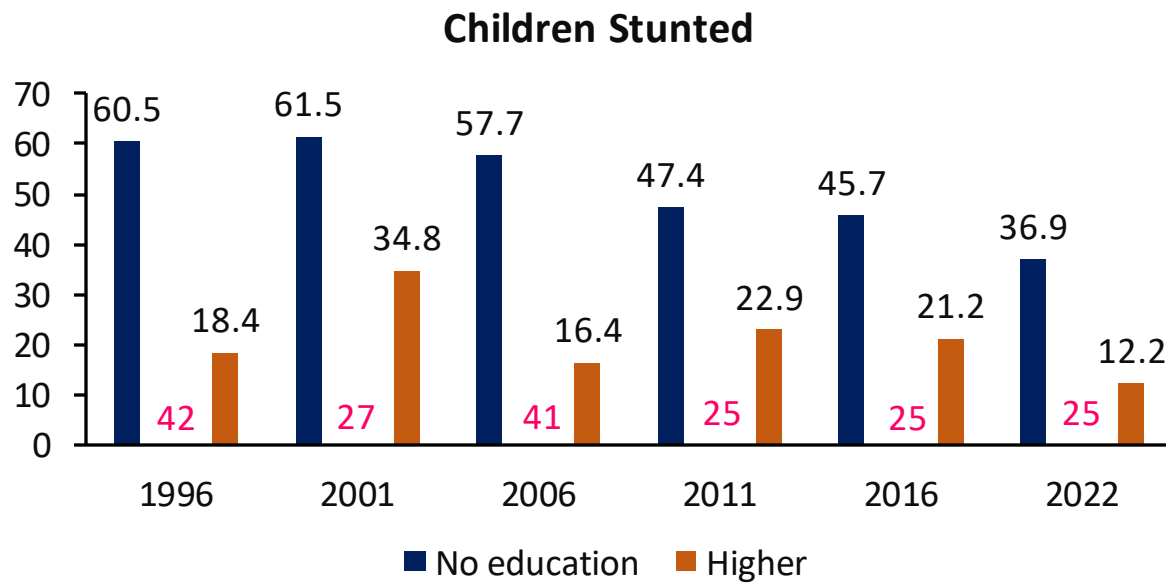
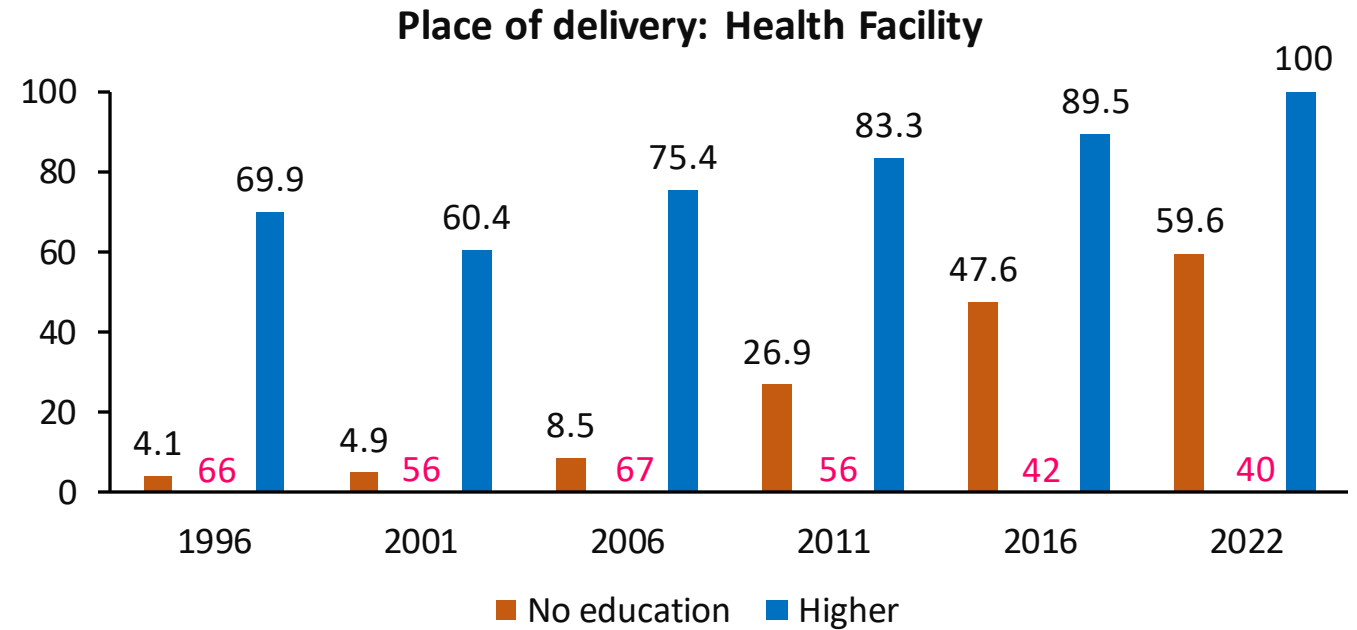
Source: Further analysis of NDHS 2022

Total Fertility Rate



Nepal has successfully reduced the fertility rate from 4.6 in 1996 to 2.1 in 2022. However, there are disparities between educated and non-educated, Muslims and other caste, and families with the lowest wealth status compared to the wealthiest.

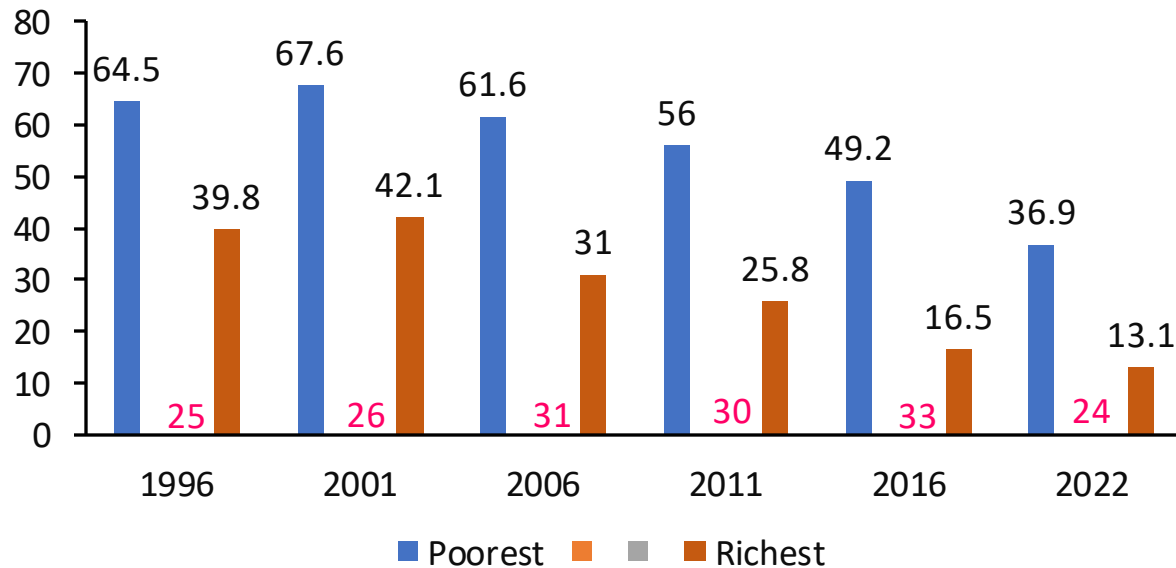
Prevalence between no educated and higher educated groups



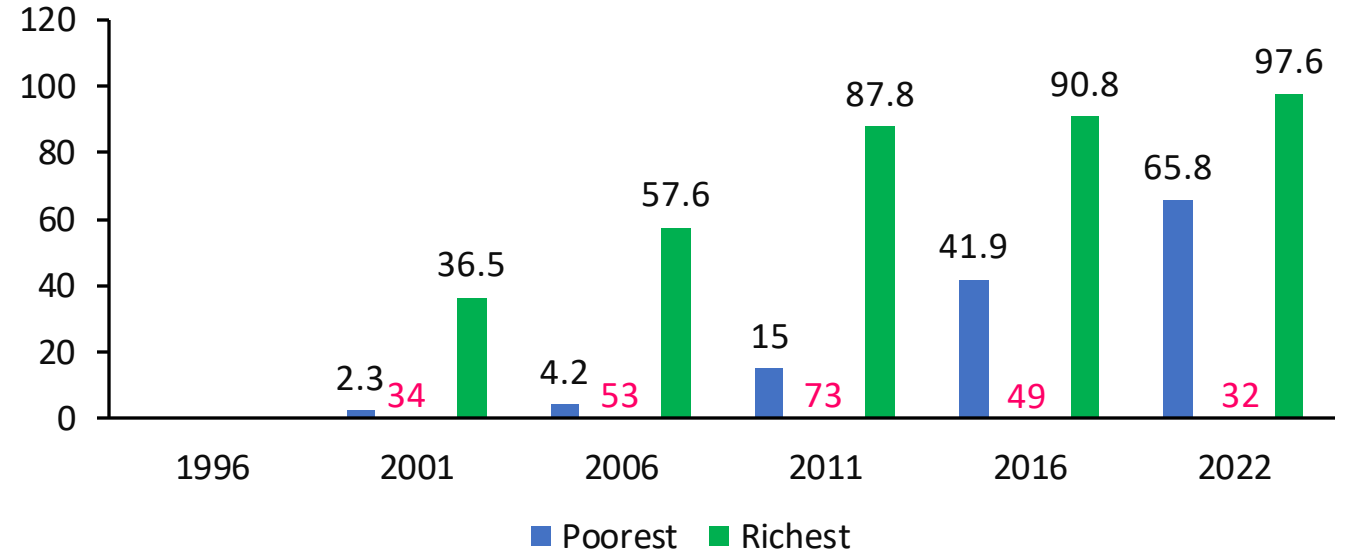
Source: Further analysis of NDHS 2022

Prevalence between poorest and richest groups

Children Stunted (%)



Place of delivery: Health Facility (%)



Neonatal Mortality



Source: Further analysis of NDHS 2022

4 or more ANC visits



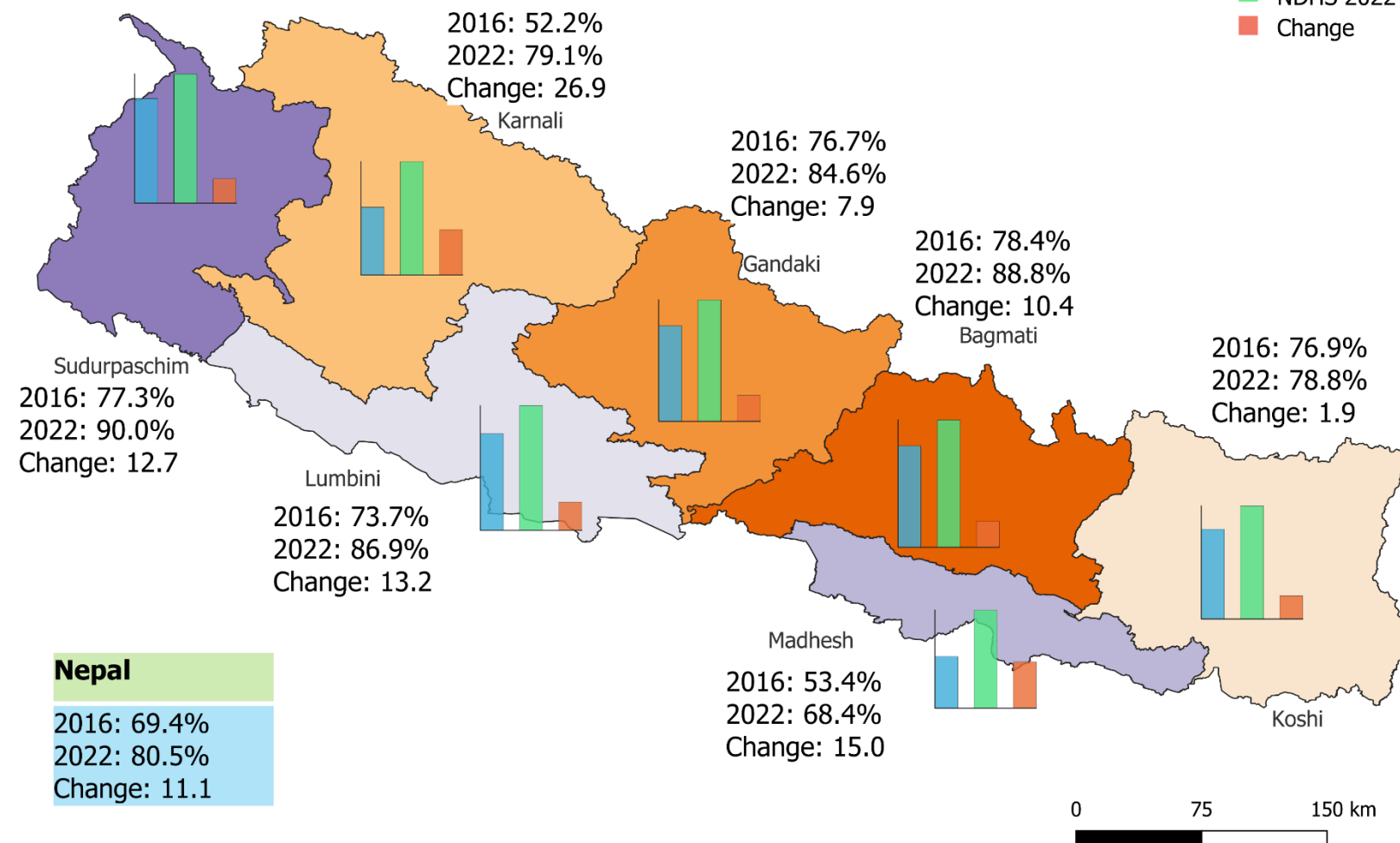
Legend

- NDHS 2016
- NDHS 2022
- Change

Year	Lowest	Highest	Gap
2016	Karnali (52.2%)	Bagmati (78.4%)	26.2
2022	Madhesh (68.4%)	Sudurpaschim (90.0%)	21.6

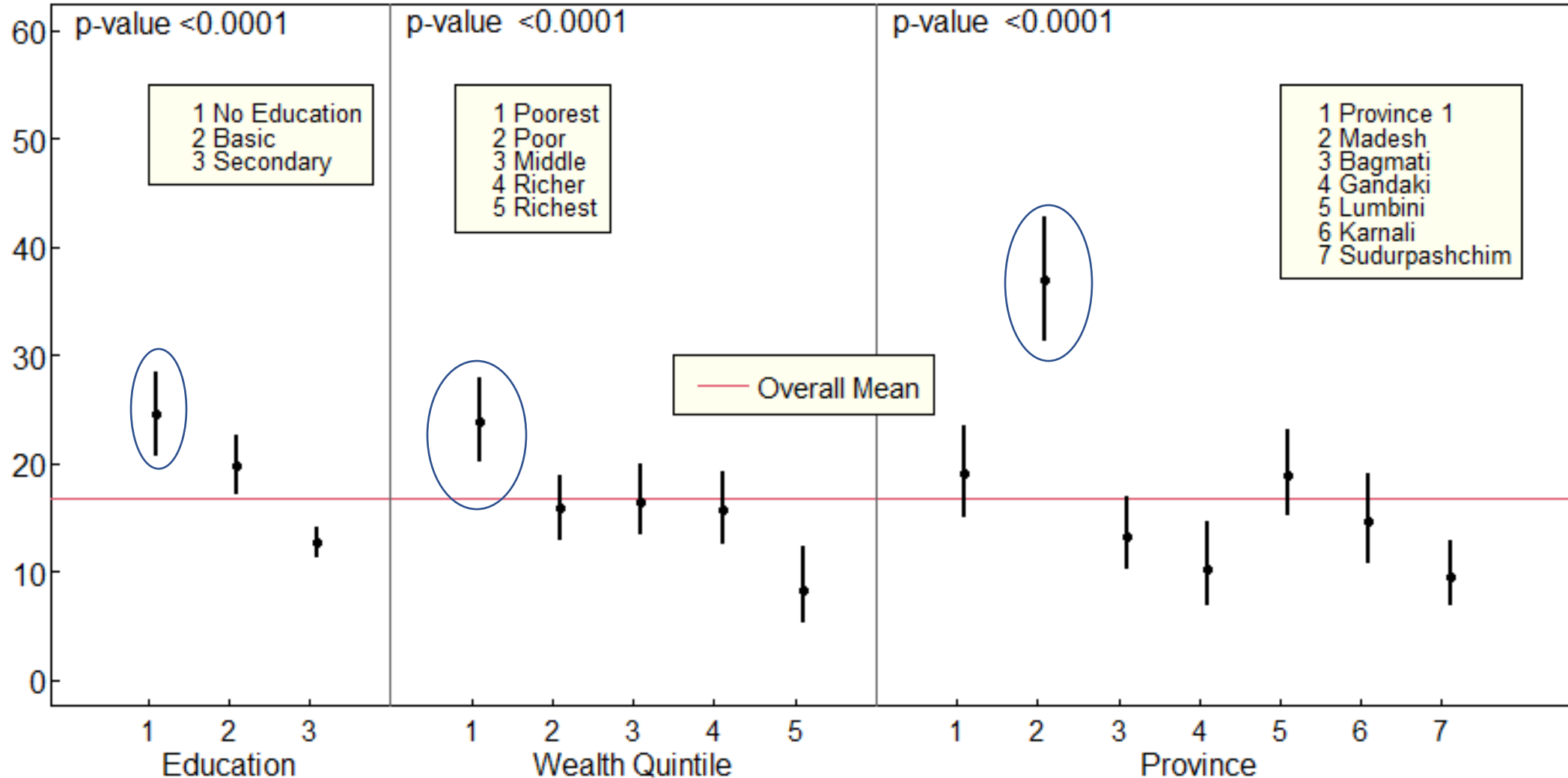
Between 2016 and 2022

- Sudurpaschim has the highest 4+ANC visits in 2022 while Bagmati province had the highest 4+ANC visits in 2016
- Karnali province has the highest increase in 4+ANC visits with an increase of 26.9 percent points between 2016 and 2022



Social Determinants associated with ANC Dropout in multivariate logistic regression

Proportion of ANC Drop out



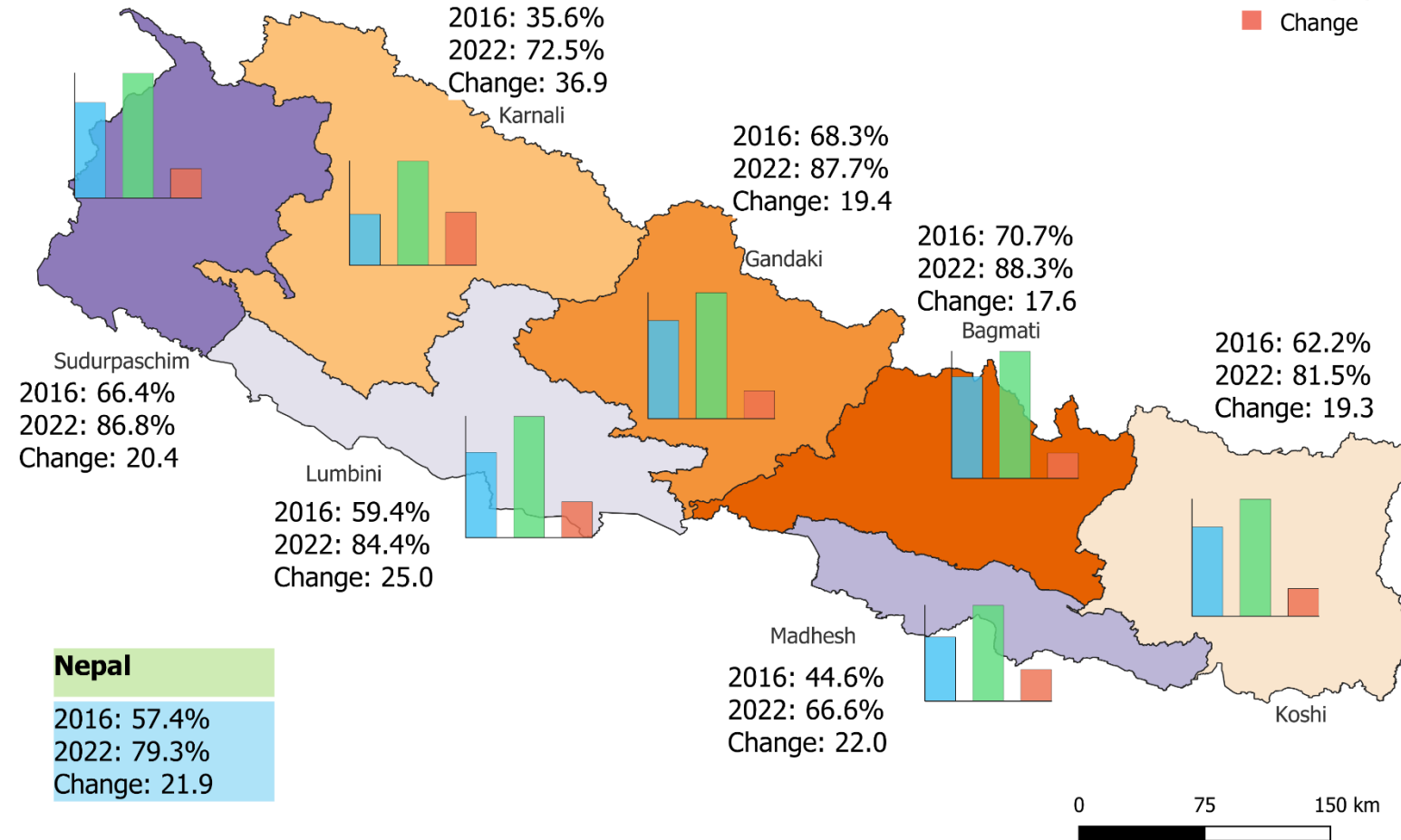
Institutional delivery



Legend

- NDHS 2016
- NDHS 2022
- Change

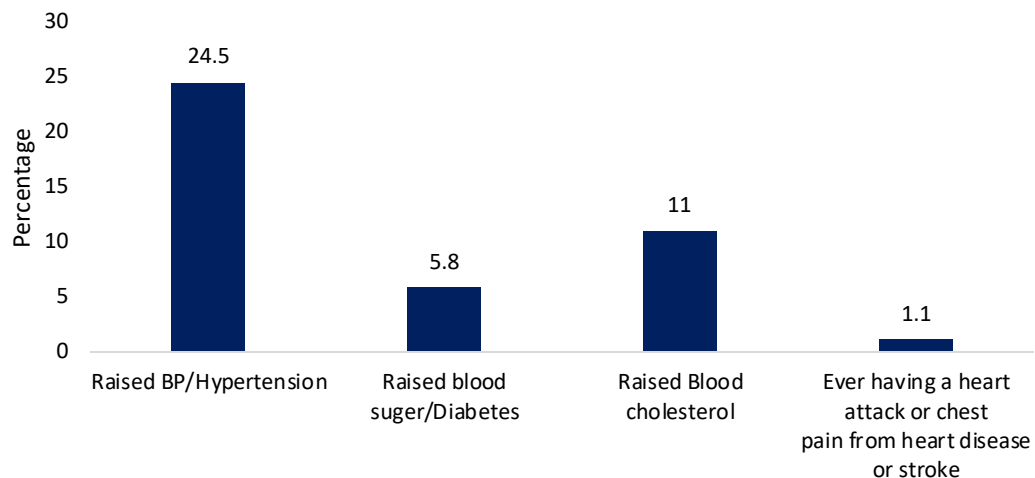
Year	Lowest	Highest	Gap
2016	Karnali (35.6%)	Bagmati (70.7%)	35.1
2022	Madhesh (66.6%)	Bagmati (88.3%)	21.7



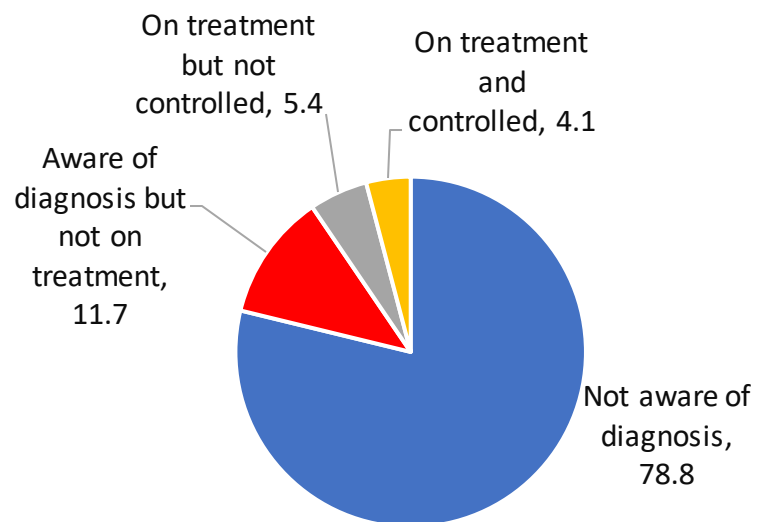
- Overall, there has been an increase in the percentage of pregnant women delivering in health facilities from 57.4% in 2016 to 79.3% in 2022.
- The highest change occurred in Karnali province, where percentage of pregnant women delivering in health facilities increased by 36.9% per year.
- The lowest change occurred in the Bagmati province with only 3.2% increase.

Non-communicable disease

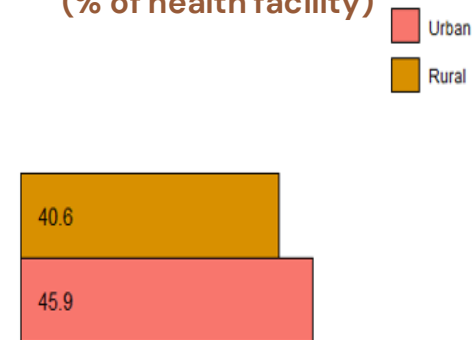
Non communicable disease in key indicators in Nepal



Treatment seeking status: Among those with raised BP

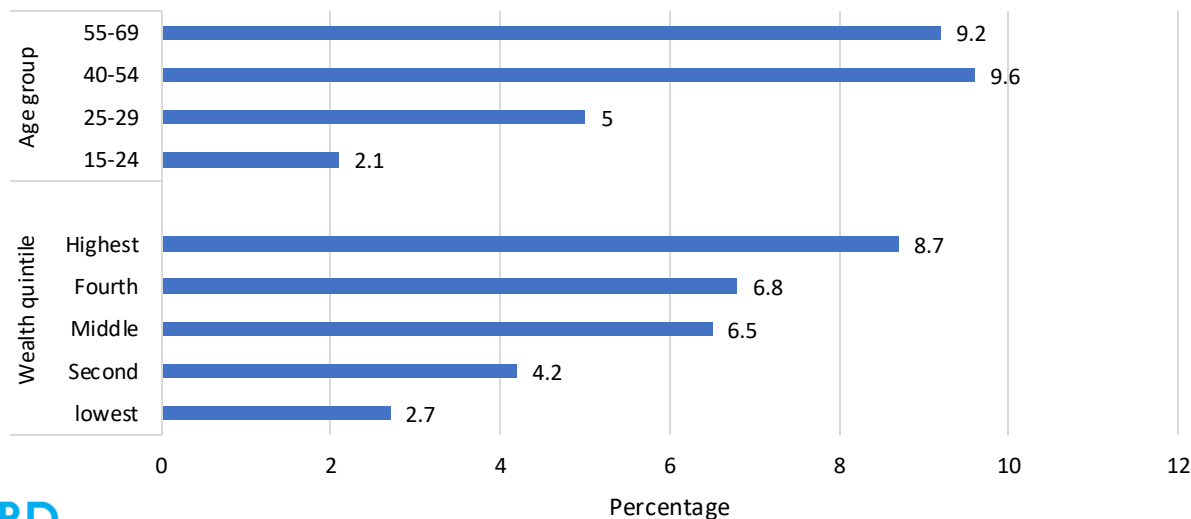


Readiness for Diabetes Services (% of health facility)



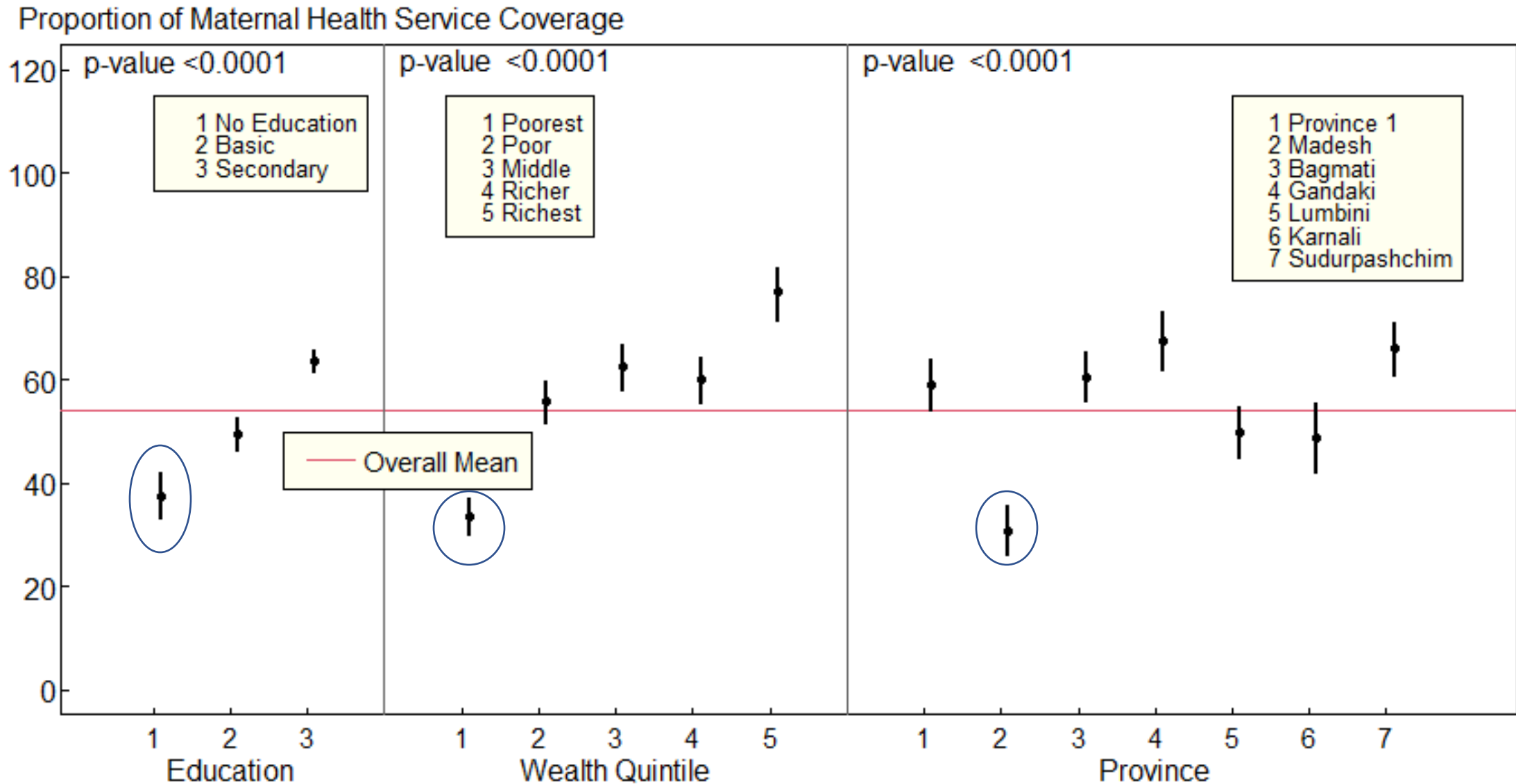
Source: NHFS 2021

Prevalence of raised blood sugar/Diabetes by age and wealth

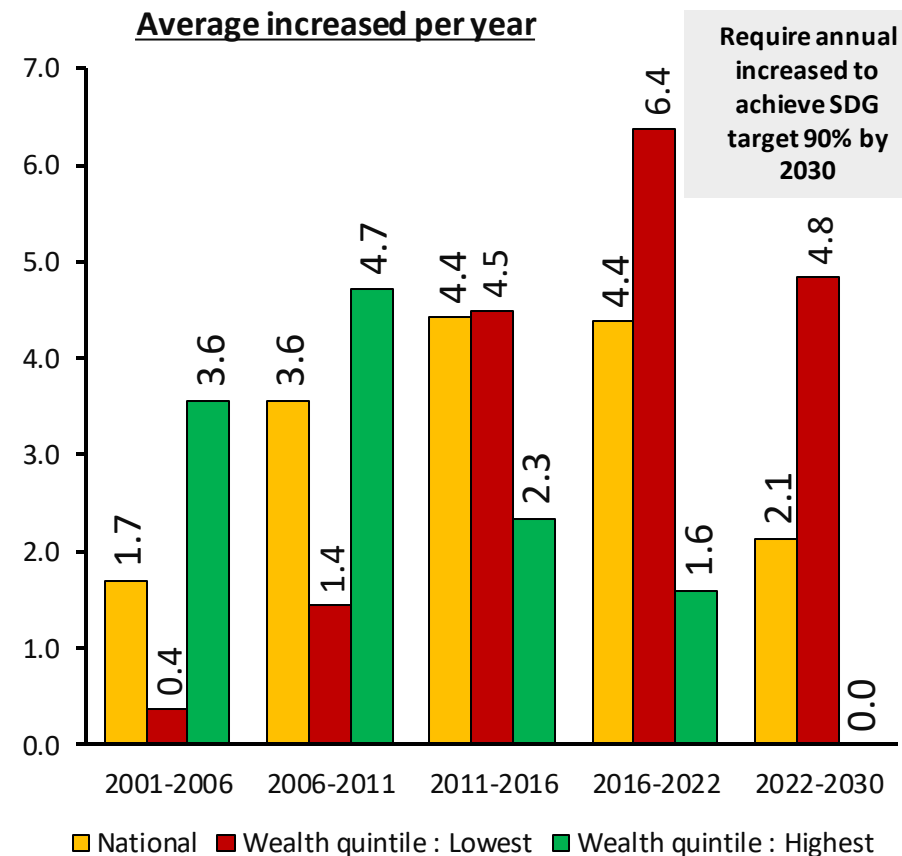
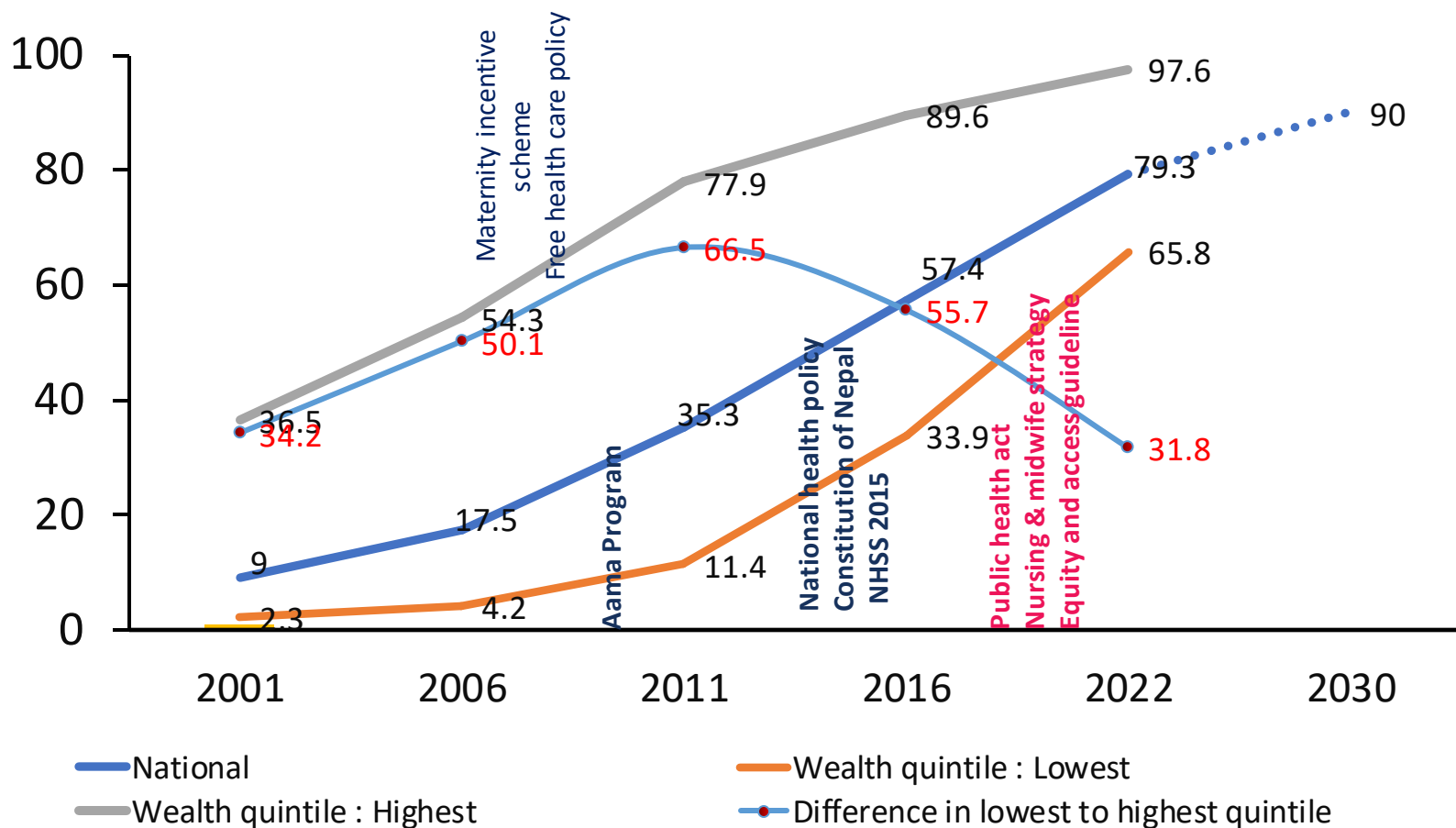


- The prevalence of hypertension is 24.5% in Nepal
- 5.8% people are suffering from raised blood sugar/diabetes
- Every one in ten people has raised blood cholesterol situation
- 79 % people with hypertension were not about of diagnosis and about 12% were aware but no on treatment
- The prevalence of diabetes among the higher age citizen questions the healthily ageing
- Population from highest wealth quintile were more vulnerable for diabetes
- Service readiness is poor for diabetes service in rural areas

Social Determinants associated with Maternal Health Service Coverage in multivariate logistic regression

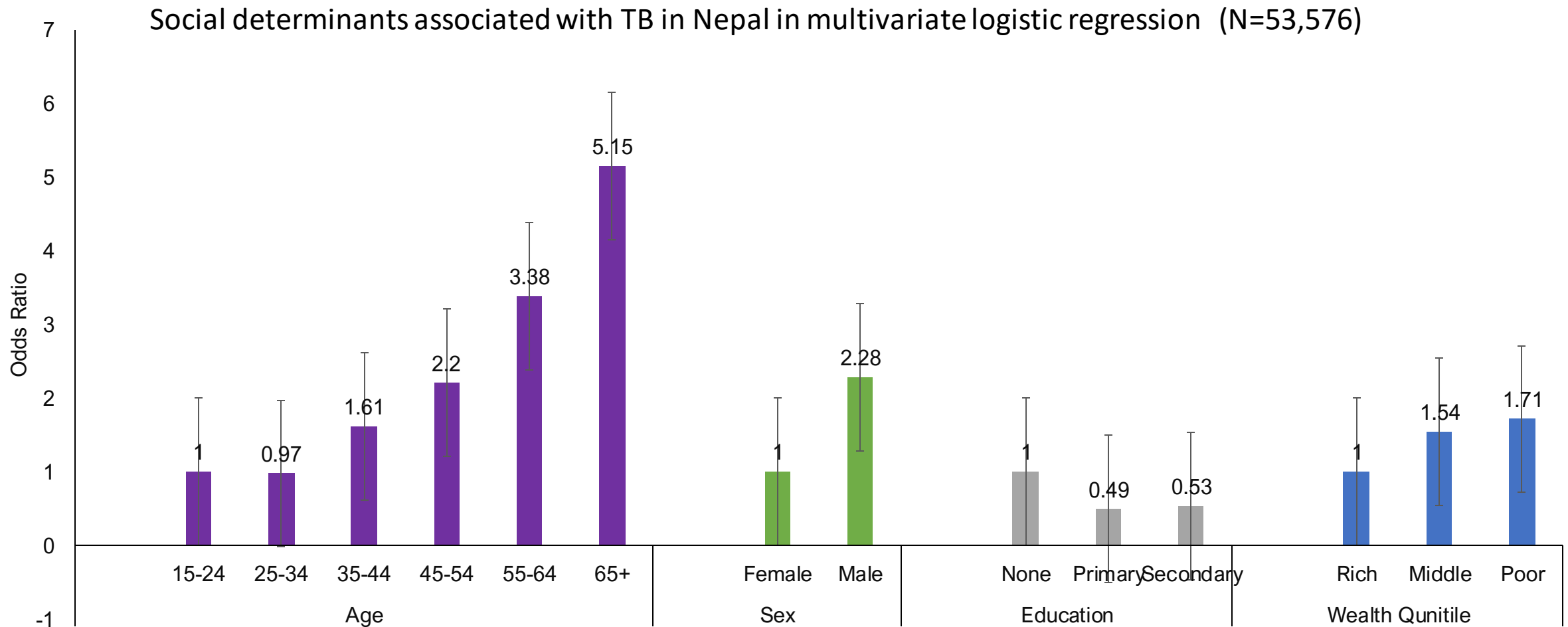


Institutional Delivery



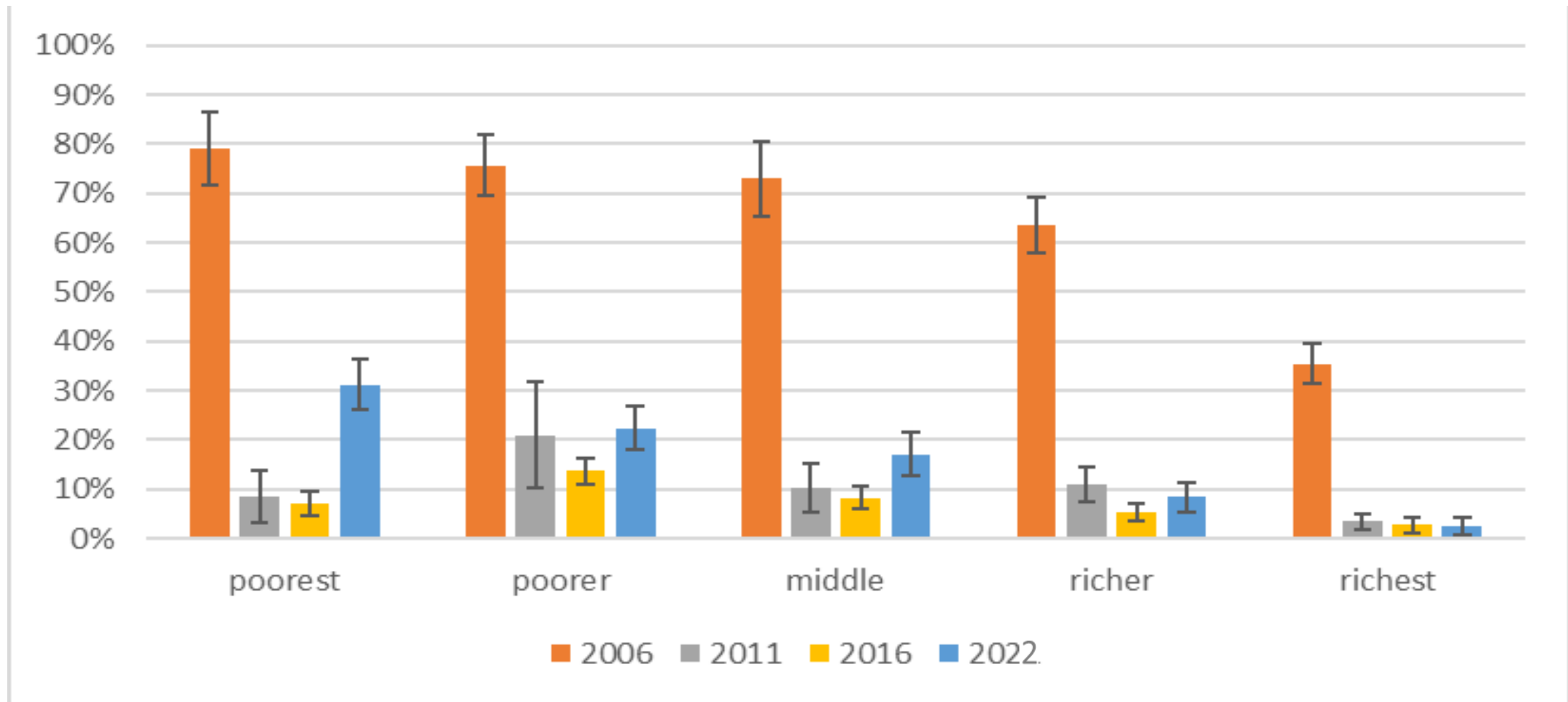
Institutional delivery is showing an increasing trend; however, there is a gap between the poorest and richest groups. A yearly increase of about 5% is necessary for the poorest to reach the SDG target by 2030

Differences on Tuberculosis Status



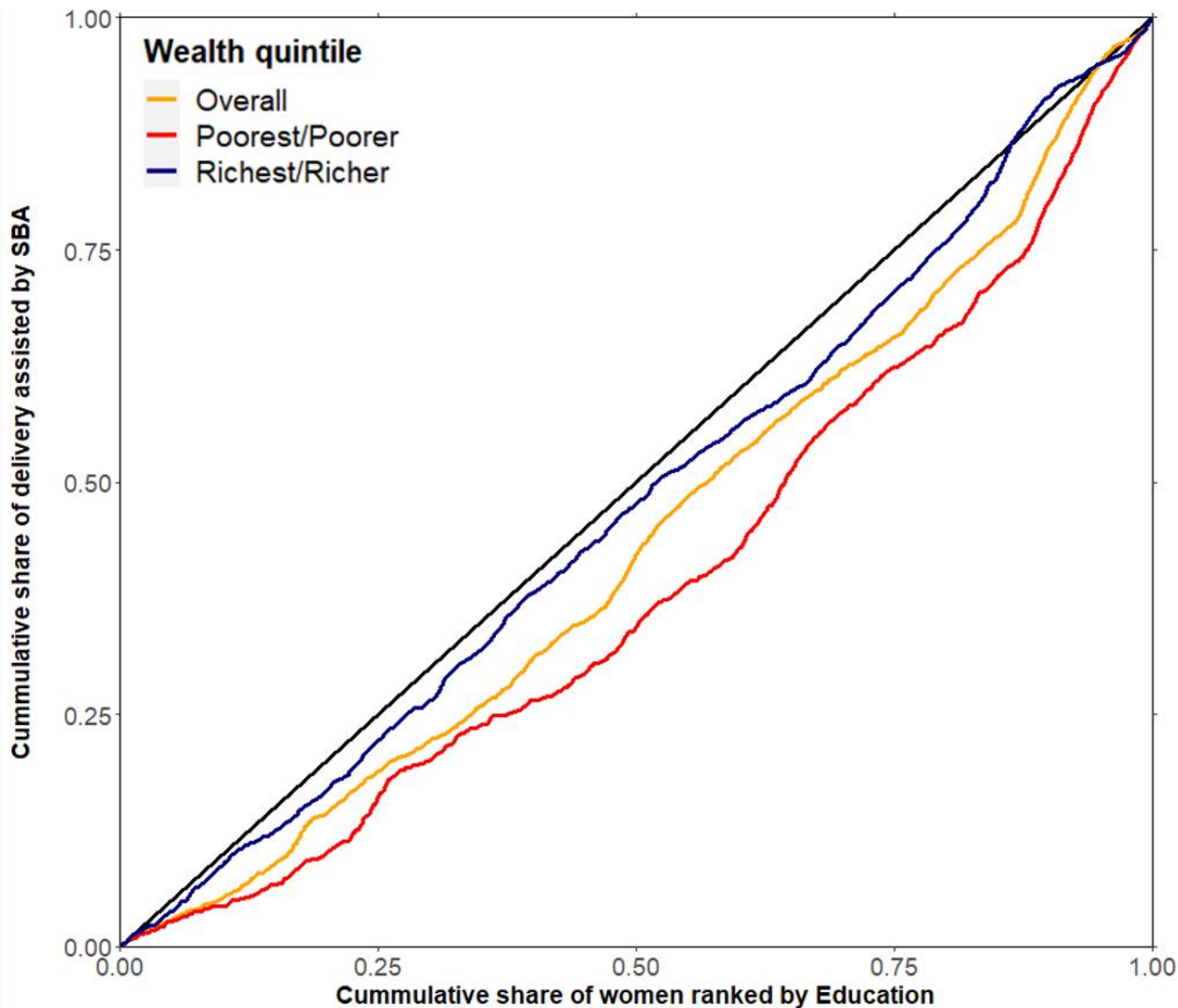
- Tuberculosis prevalence is higher in the older age population
- Male are more likely to sufferer from TB and poor are more vulnerable for TB

Crisis also hits the poorest: delivery at home increased in between 2016-22: within COVID-19 era



Sharp decline in home delivery over the period; however, it was adversely impacted during COVID-19 period. The impact is highest for the poorest segment

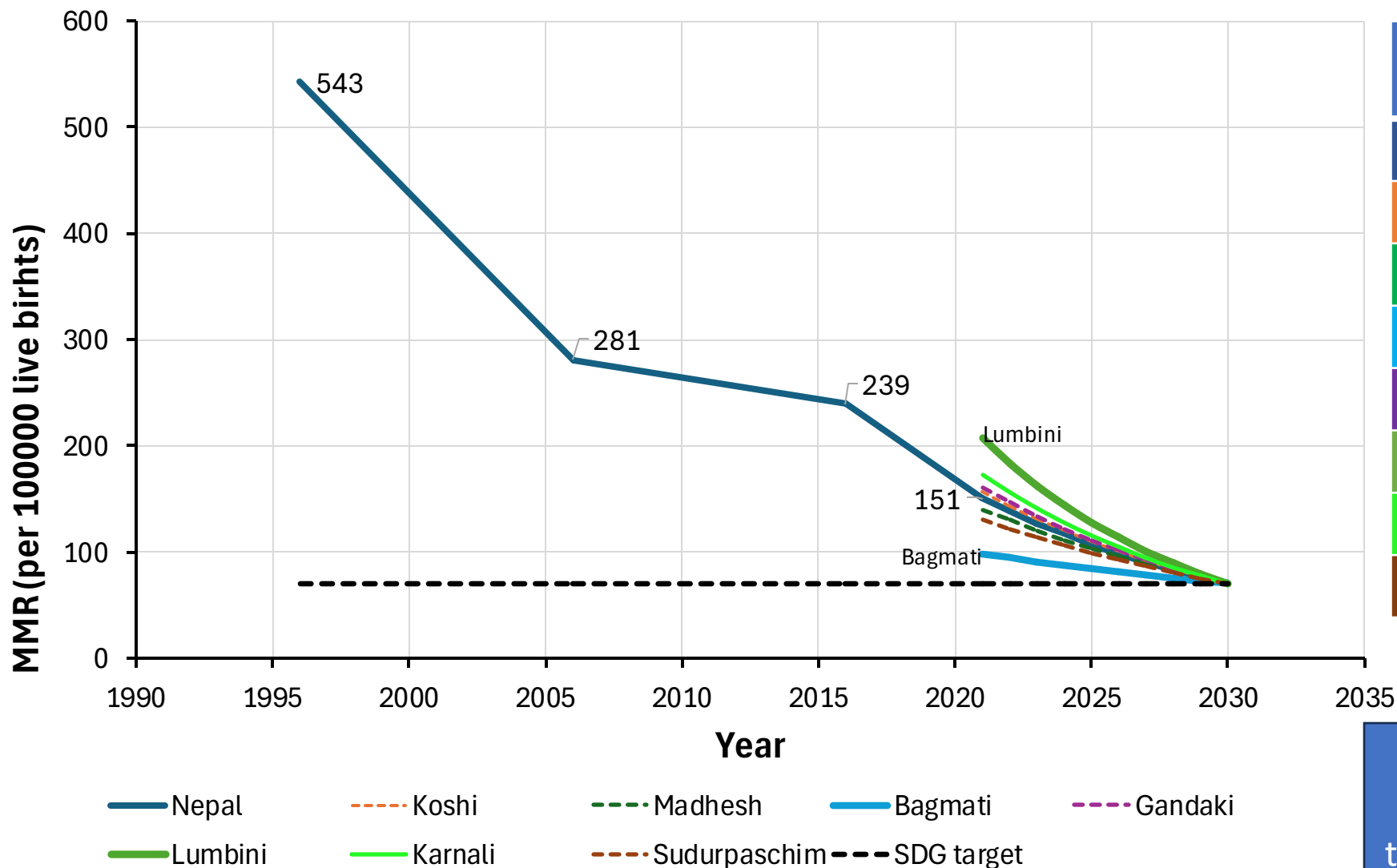
Inequalities in delivery assisted by SBA (Nepal)



Among poorest wealth quintiles, SBA delivery is more concentrated towards educated

Among richer/richest wealth quintiles, SBA delivery is concentrated towards educated but less concentrated compared to poorest/poorer wealth quintiles

Maternal mortality ratio (per 100000 live births)

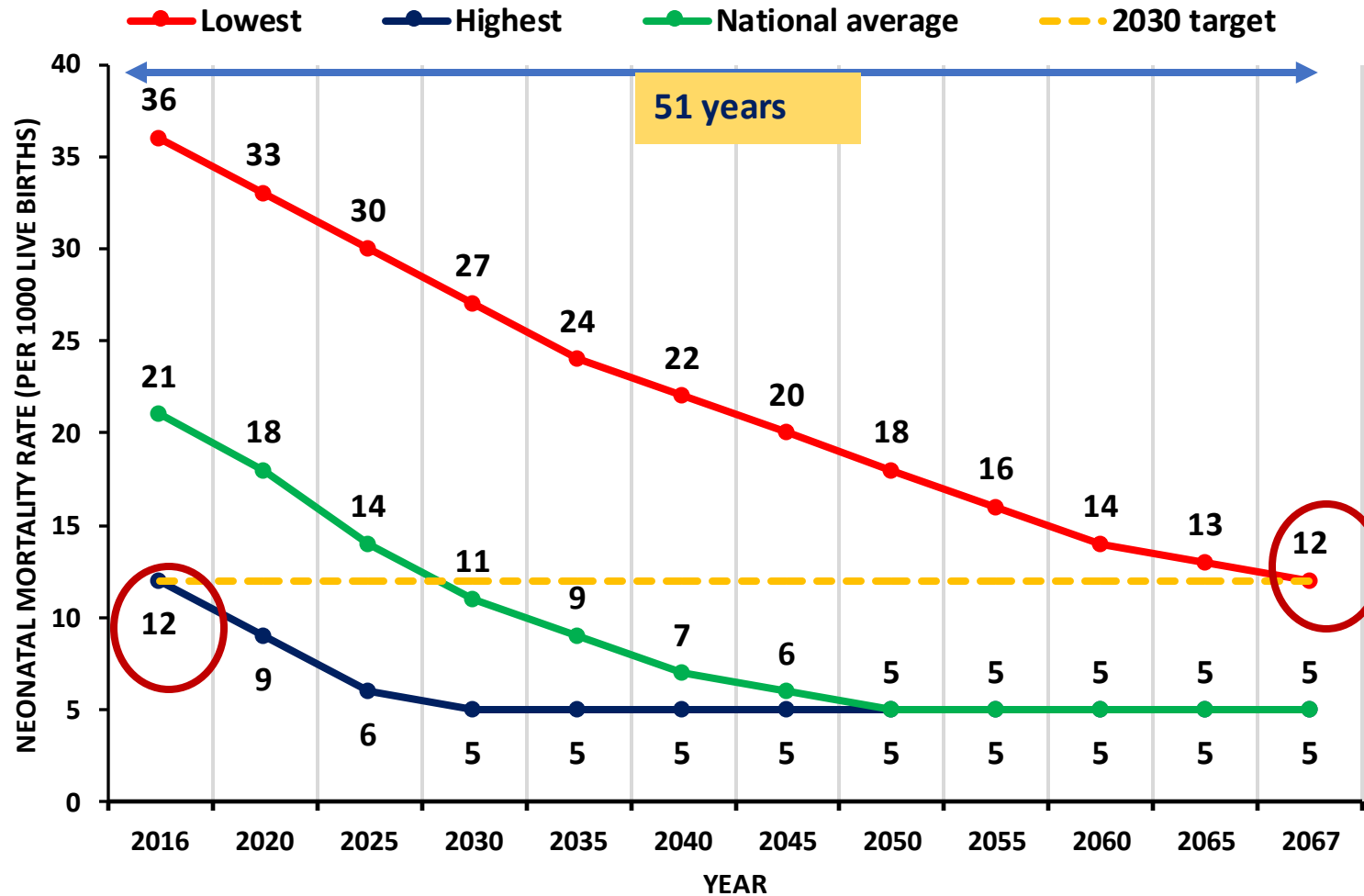


Location	Required Annual rate of reduction to reach SDG
Nepal	-8.2
Koshi	-8.6
Madhesh	-7.4
Bagmati	-3.7
Gandaki	-8.8
Lumbini	-11.3
Karnali	-9.5
Sudurpashchim	-6.6

Lumbini province has to provide more effort to achieve 2030 SDG target compared to other provinces.

Trend and Pattern on Key Health Impact Indicators

Neonatal mortality rates



Source: NDHS 1996-2022

Interpretation based on Kc A, Jha AK, Shrestha MP, Zhou H, Gurung A, Thapa J, Budhathoki SS. Trends for neonatal deaths in Nepal (2001–2016) to project progress towards the SDG target in 2030, and risk factor analyses to focus action. *Maternal and Child Health Journal*. 2020 Feb;24(1):5-14.

Local level wise maternal mortality

Province-wise MMR

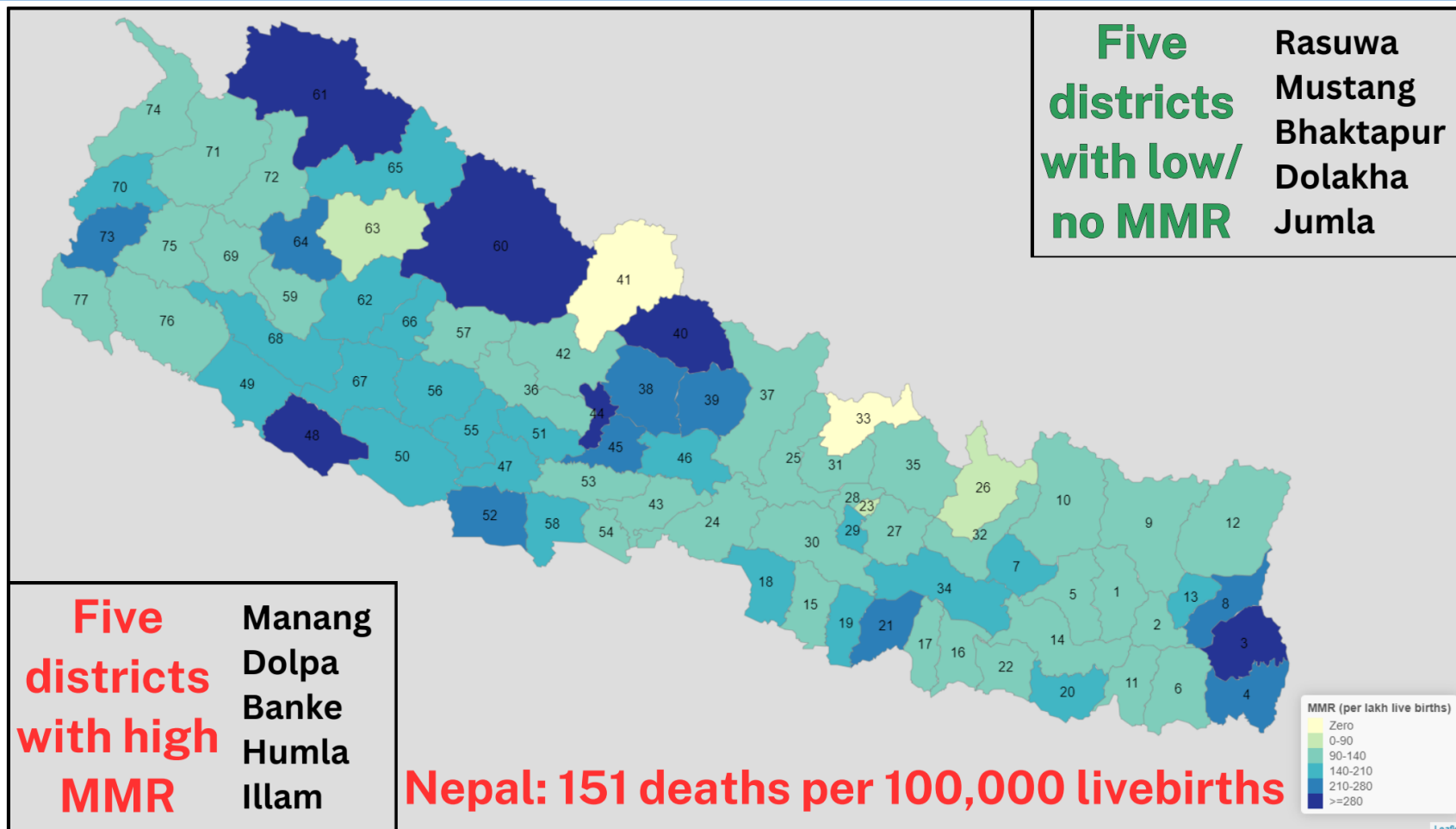
Bagmati	98
Sudurpashchim	130
Madhesh	140
Koshi	157
Gandaki	161
Karnali	172
Lumbini	207

MMR is highest in Lumbini and lowest in Bagmati



46.7% of districts have MMR greater than or equal to 140

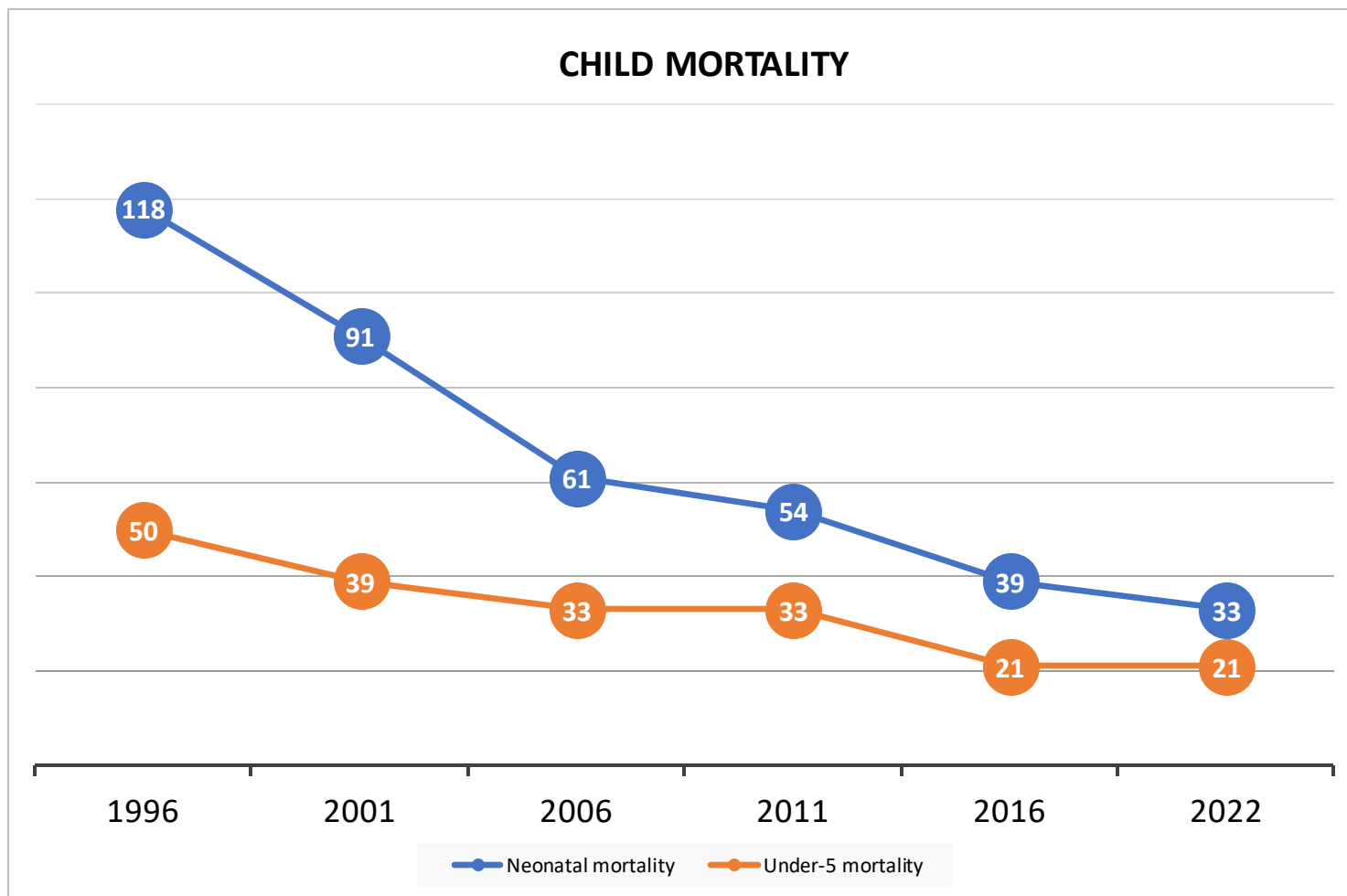
7.8% of districts have MMR greater than or equal to 280



1: Bhojpur, 2: Dhankuta, 3: Ilam, 4: Jhapa, 5: Khotang, 6: Morang, 7: Okhaldhunga, 8: Panchthar, 9: Shankhuwasabha, 10: Solukhumbu, 11: Sunsari, 12: Taplejung, 13: Terhathum, 14: Udayapur, 15: Bara, 16: Dhanusha, 17: Mahottari, 18: Parsa, 19: Rautahat, 20: Saptari, 21: Sarlahi, 22: Siraha, 23: Bhaktapur, 24: Chitawan, 25: Dhading, 26: Dolakha, 27: Kavrepalanchowk, 28: Kathmandu, 29: Lalitpur, 30: Makawanpur, 31: Nuwakot, 32: Ramechhap, 33: Rasuwa, 34: Sindhuli, 35: Sindhupalchowk, 36: Baglung, 37: Gorkha, 38: Kaski, 39: Lamjung, 40: Manang, 41: Mustang, 42: Myagdi, 43: Nawalparasi (Bardghat Susta East), 44: Parnat, 45: Shyanja, 46: Tanahu, 47: Arghakhanchi, 48: Banke, 49: Bardiya, 50: Dang, 51: Gulmi, 52: Kapilbastu, 53: Palpa, 54: Nawalparasi (Bardghat Susta West), 55: Pyuthan, 56: Rolpa, 57: Rukum East, 58: Rupandehi, 59: Dailekh, 60: Dolpa, 61: Humla, 62: Jajarkot, 63: Jumla, 64: Kalikot, 65: Mugu, 66: Rukum West, 67: Salyan, 68: Surkhet, 69: Achhaam, 70: Baitadi, 71: Bajhang, 72: Bajura, 73: Dadeldhura, 74: Darchula, 75: Doti, 76: Kailali, 77: Kanchanpur

Source: CENSUS 2021

Disparities in child mortality



Child mortality	SDG target 2030	C-ARR	R-ARR
NMR	12	-3.3	-6.8
U5MR	25	-4.8	-3.4

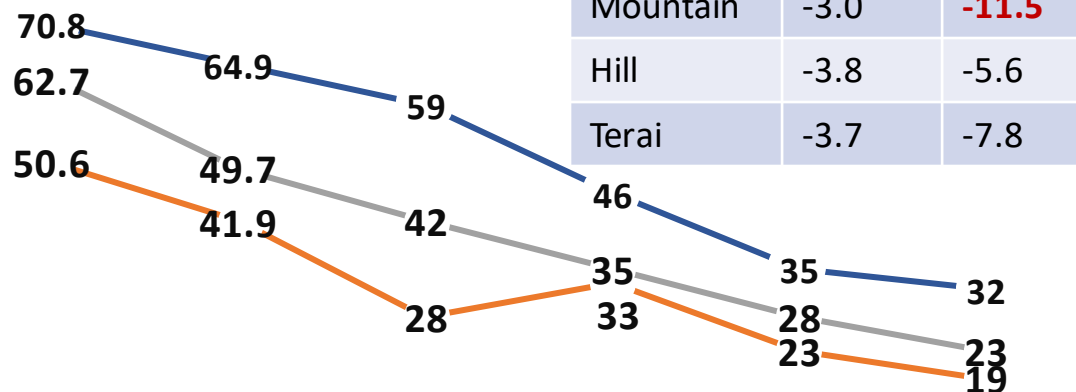
C-ARR: Current Annual Rate of Reduction
 R-ARR: Required Annual Rate of Reduction

- Under-5 mortality is reducing but in the last 10 years, neonatal mortality couldn't reduce from 21.

Disparities in child mortality

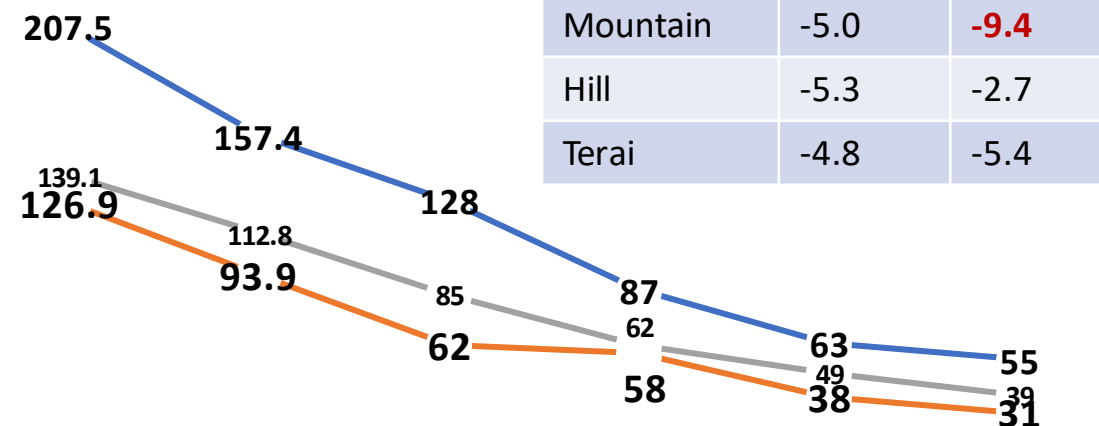
NEONATAL MORTALITY
(NEONATAL MORTALITY RATES FOR THE 10-YEAR PERIOD)

Region	C-ARR	R-ARR
Mountain	-3.0	-11.5
Hill	-3.8	-5.6
Terai	-3.7	-7.8



UNDER-5 MORTALITY
(UNDER-5 MORTALITY RATES FOR THE 10-YEAR PERIOD)

Region	C-ARR	R-ARR
Mountain	-5.0	-9.4
Hill	-5.3	-2.7
Terai	-4.8	-5.4



- Mountain - Hill - Terai

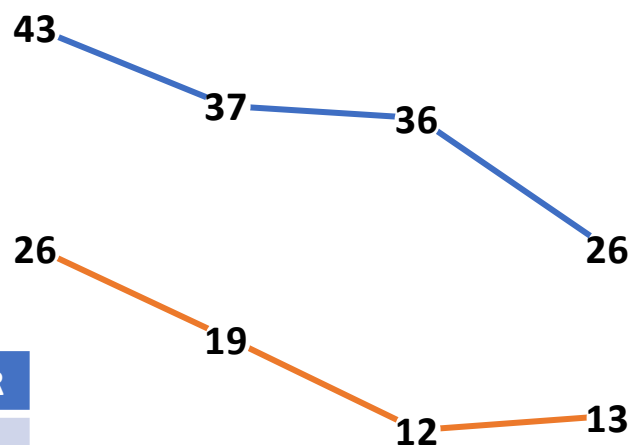
- Mountain - Hill - Terai

- Neonatal mortality is reduced but the rate is still remarkably higher for mountain region. The trend was similar for the under-5 mortality rate as well.
- Different accelerated intervention is required to reach the SDG target by 2030

C-ARR: Current Annual Rate of Reduction
R-ARR: Required Annual Rate of Reduction

Disparities in child mortality

NEONATAL MORTALITY
(NEONATAL MORTALITY RATES FOR THE 10-YEAR PERIOD)

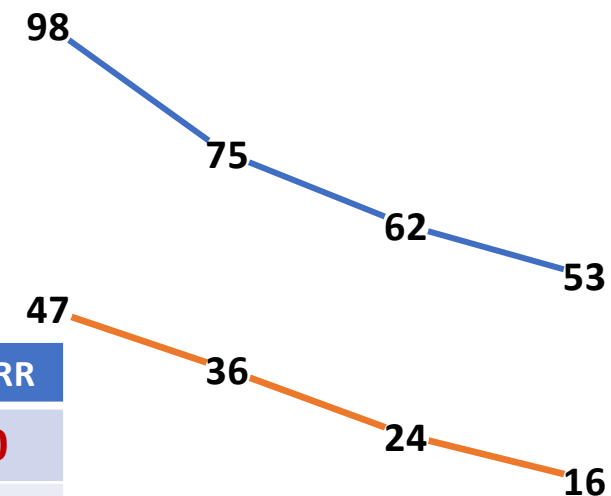


Wealth	C-ARR	R-ARR
Poorest	-4.2	-9.2
Richest	-3.1	-1.0

1996 2001 2006 2011 2016 2022

- -Poorest - -Richest

UNDER-5 MORTALITY
(UNDER-5 MORTALITY RATES FOR THE 10-YEAR PERIOD)



Wealth	C-ARR	R-ARR
Poorest	-3.8	-9.0
Richest	-6.5	-

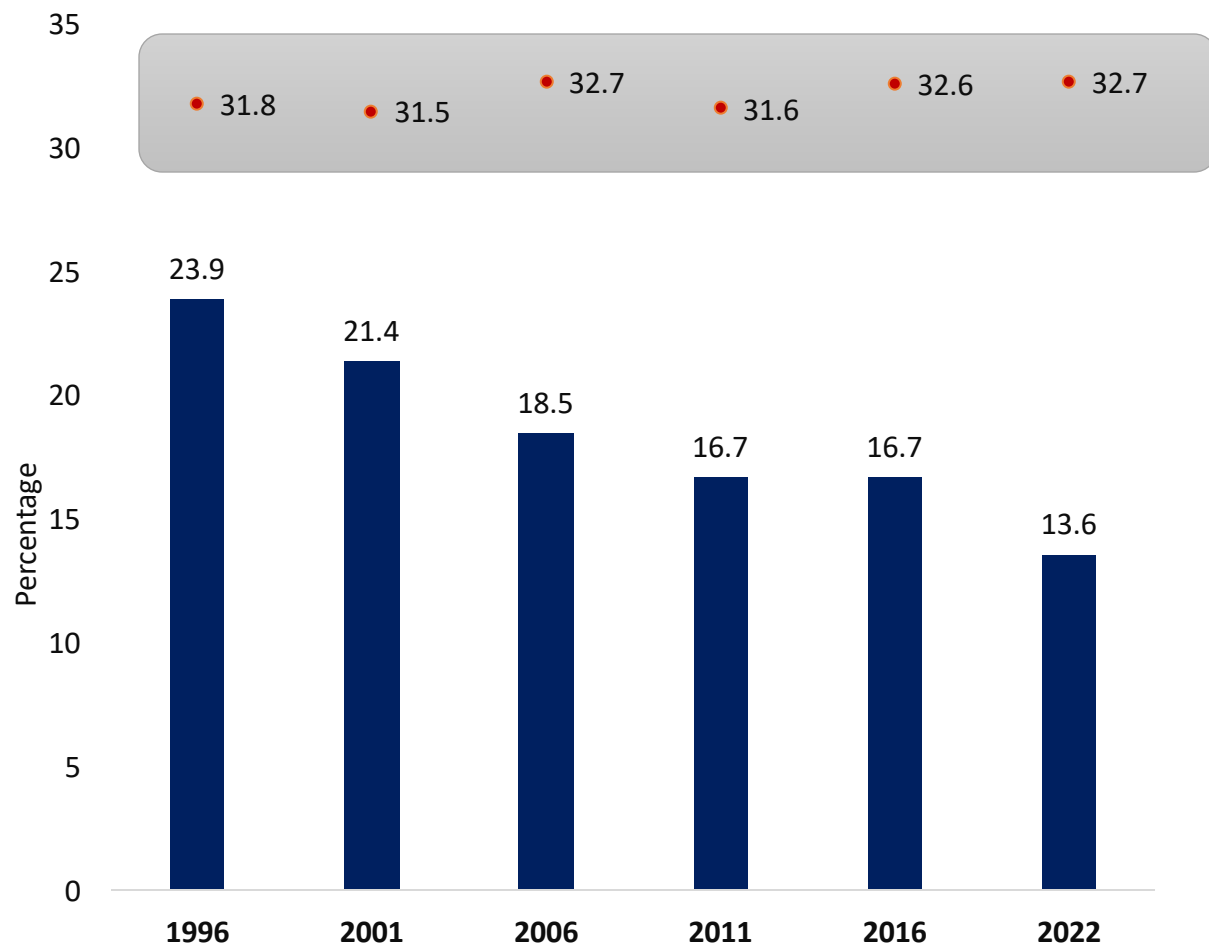
1996 2001 2006 2011 2016 2022

- -Poorest - -Richest

- Neonatal mortality is reduced but the rate is still remarkably higher for the poorest group. The trend was similar for the under-5 mortality rate as well.
- Different accelerated intervention is required to reach the SDG target by 2030

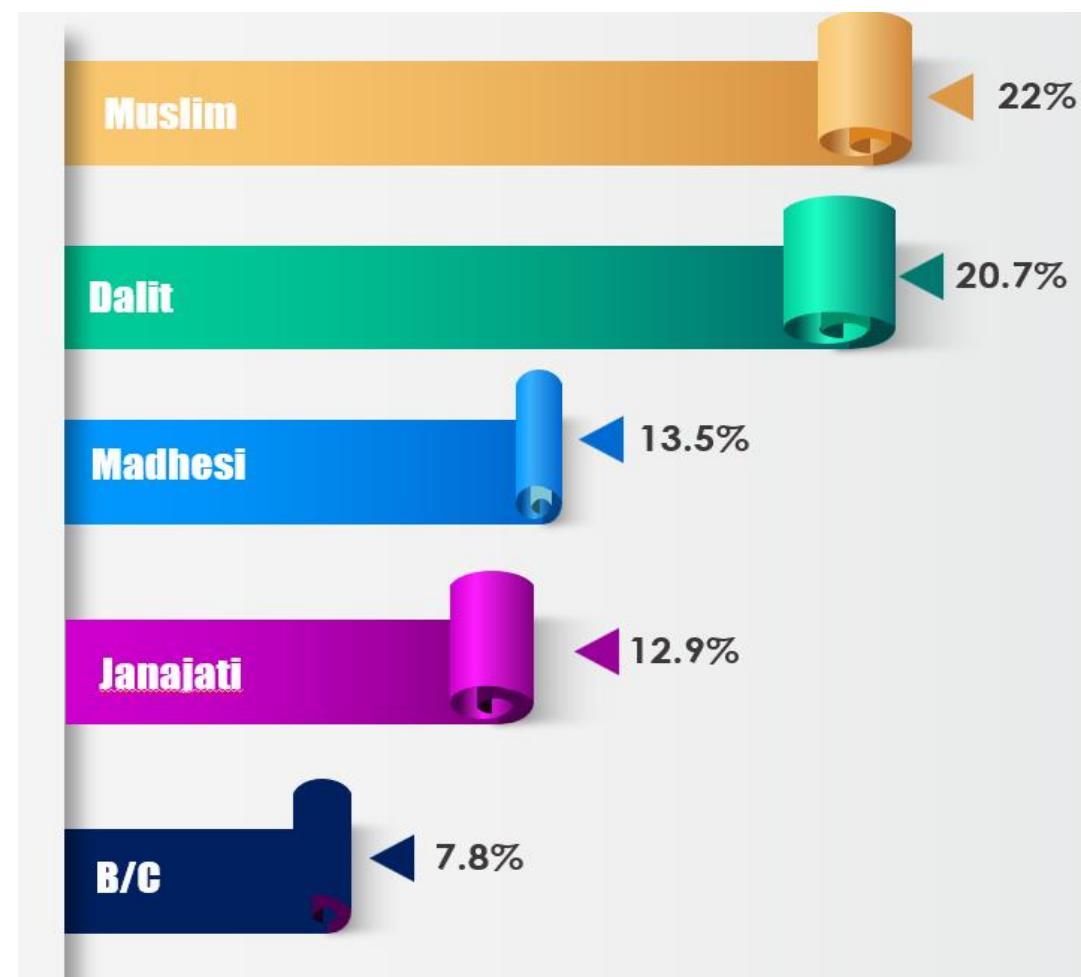
Teenage child-bearing: education and caste

% of women 15-19 who have begun child-bearing



Source: NDHS 1996-2022

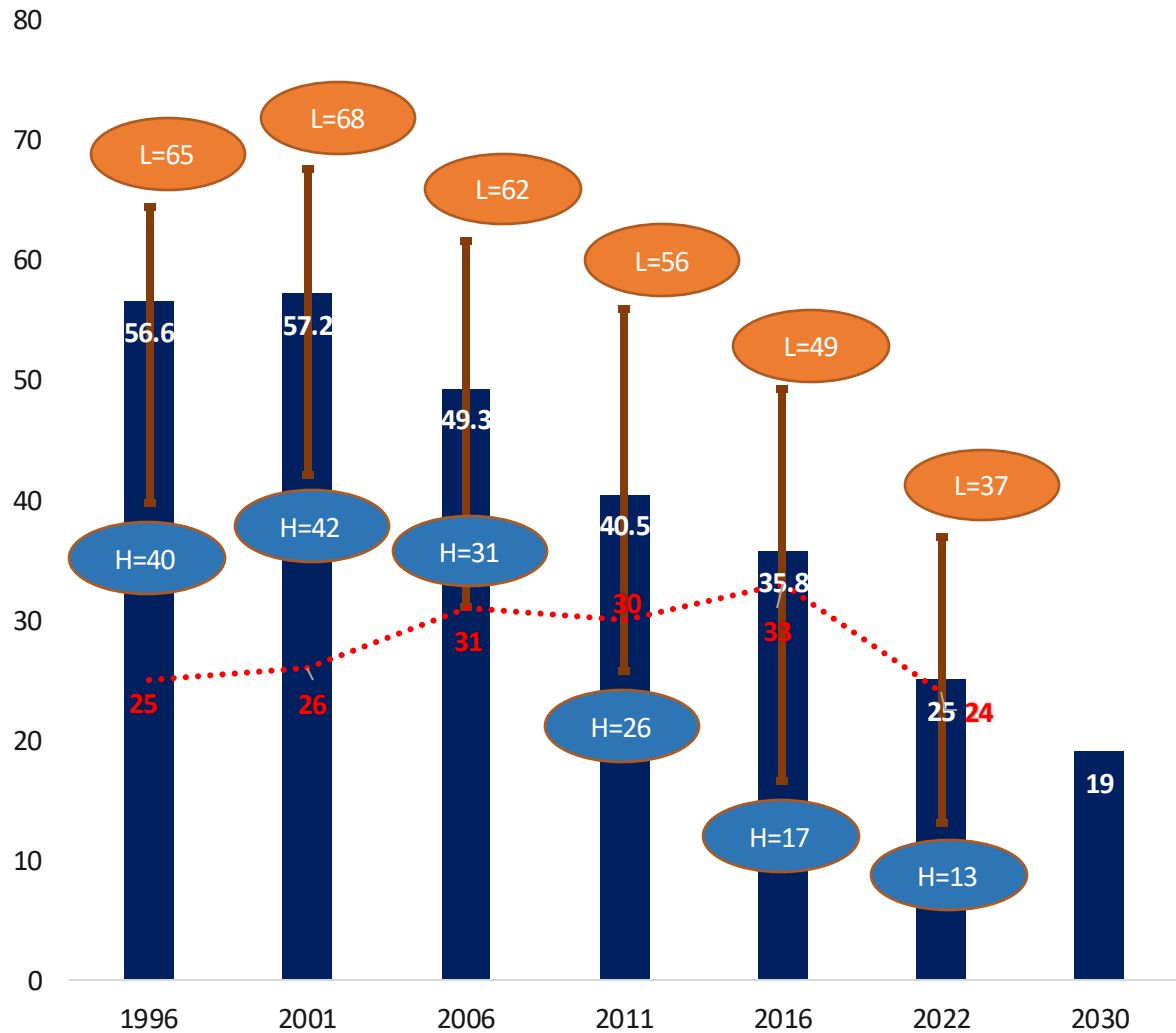
■ National ● No education



% of women 15-19 who have begun child-bearing by caste group in NDHS 2022

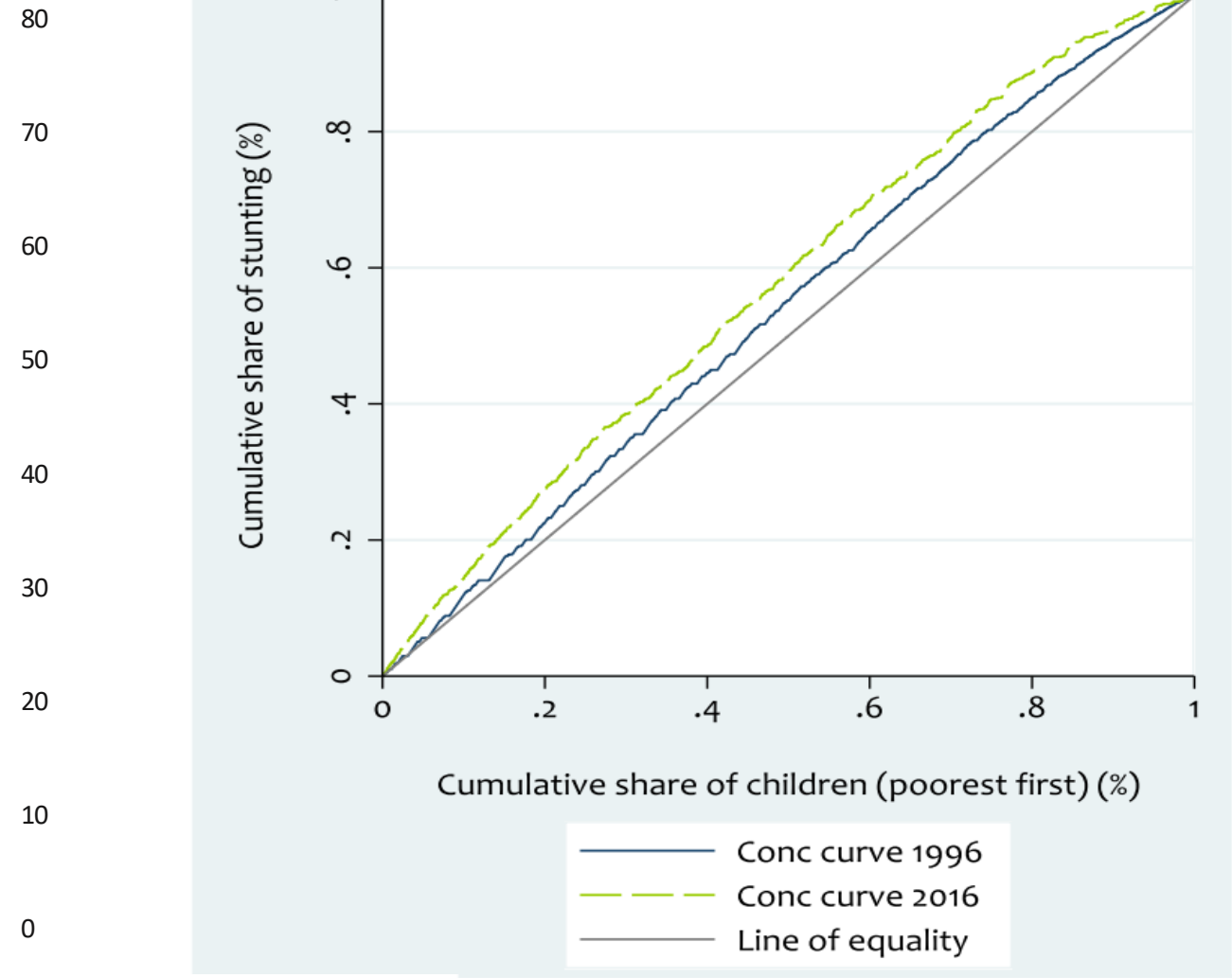
B/C=Brahmin/Chhetri

Inequalities in Nutrition



... = percentage difference between highest and lowest quintile, L= lowest quintile, H=highest quintile

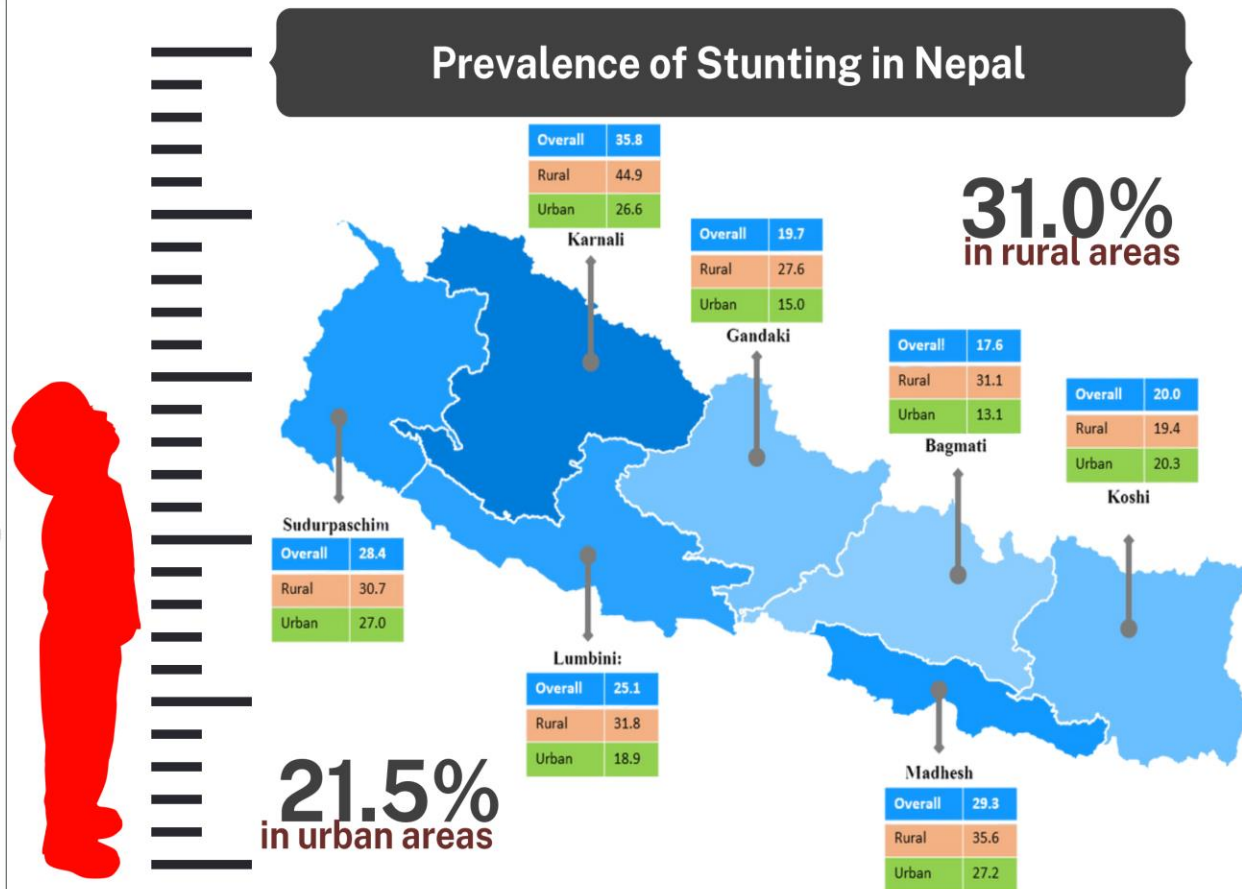
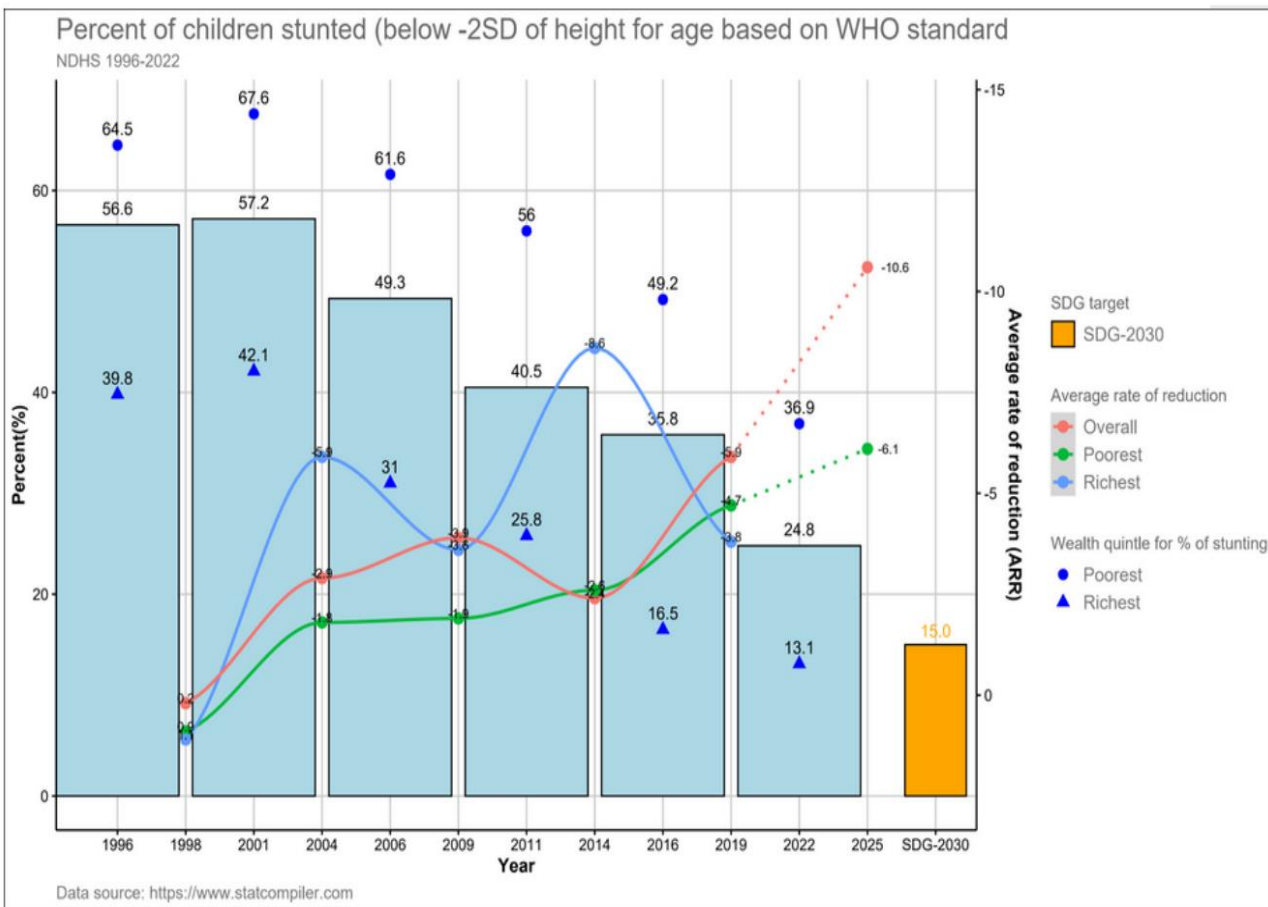
Source: NDHS 1996-2022



Concentration curve for stunting, 1996 and 2016 (Weighted N: - 1996: 3703; 2016: 2421)

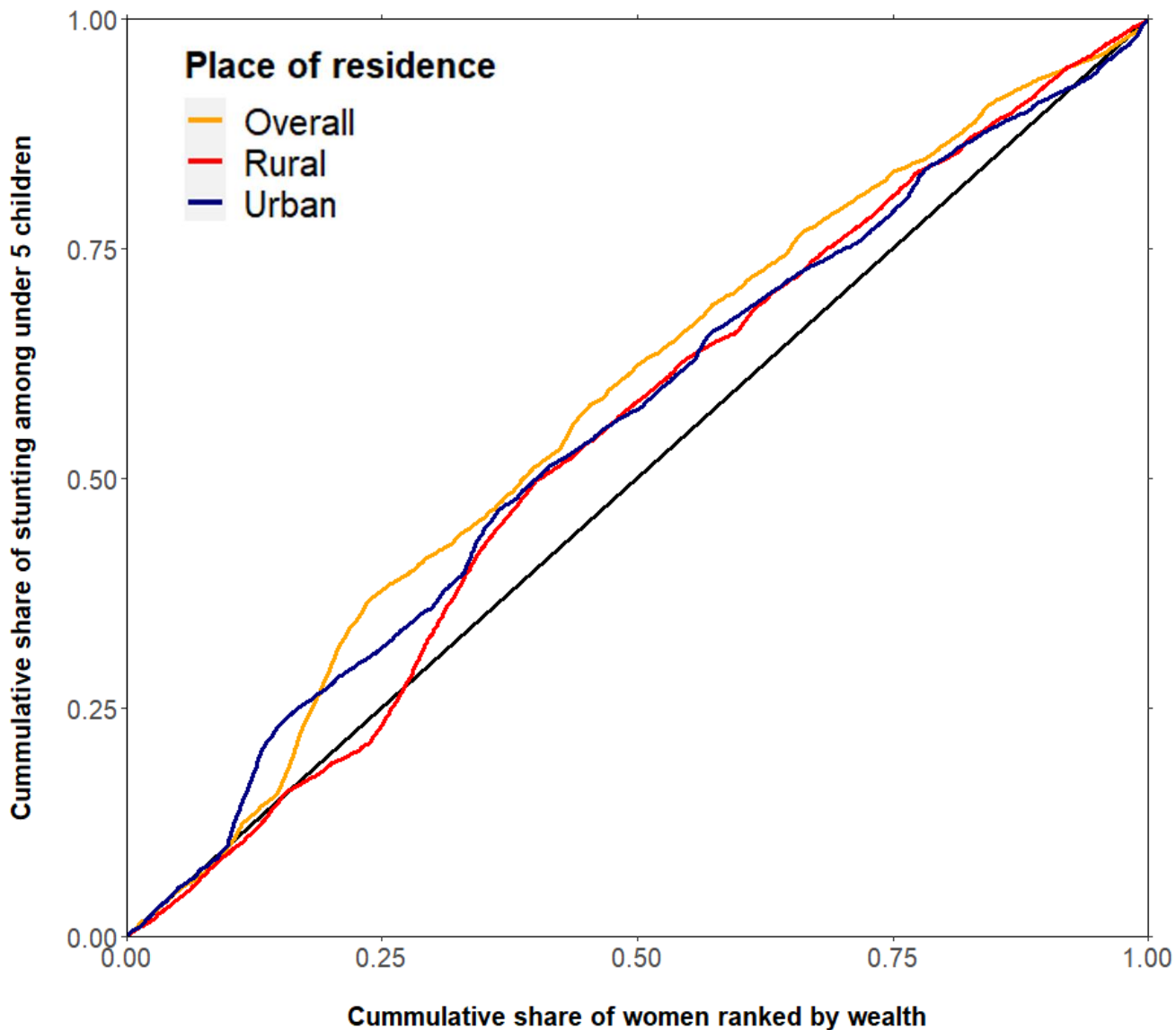
Source: Angdembe, M.R., Dulal, B.P., Bhattarai, K. *et al.* Trends and predictors of inequality in childhood stunting in Nepal from 1996 to 2016. *Int J Equity Health* 18, 42 (2019). <https://doi.org/10.1186/s12939-019-0944-z>

Disparities in child nutrition



- Child Stunting are decreasing in Nepal, but a significant and accelerated reduction is necessary for the poorest groups to meet the SDG target by 2030.
- Disparities in stunting between rural and urban areas persist throughout the country.

Inequalities in child nutrition



Concentration index

Overall: -0.037

Rural: -0.017

Urban: -0.037

Stunting among under 5 children are concentrated towards poor wealth quintiles in both rural and urban area

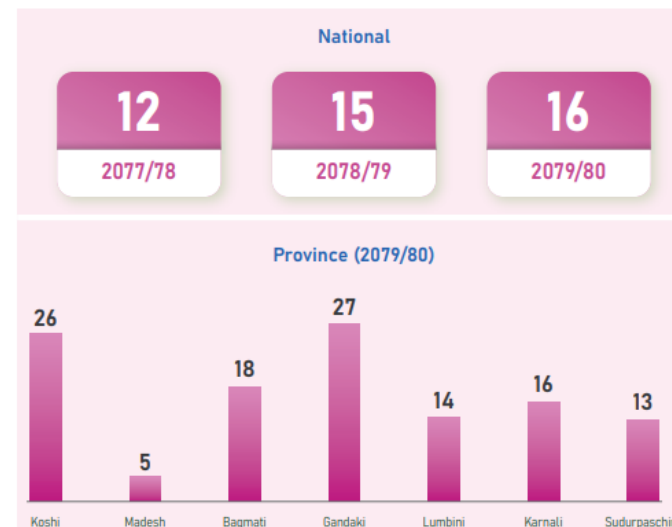
Compared to rural area, urban area showed higher concentration of stunting among under 5 children in poor wealth quintiles

Health Insurance

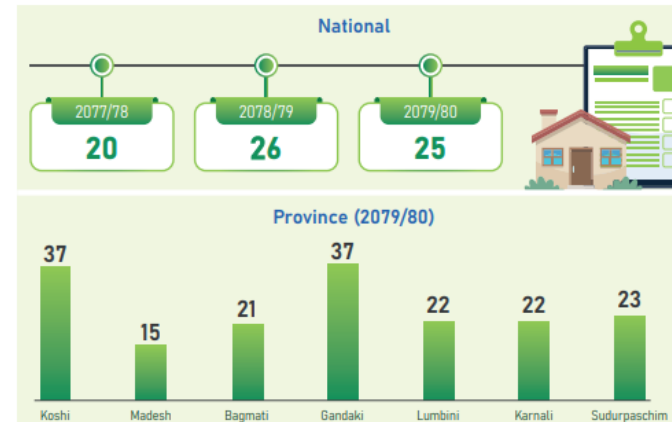
- Approximately one-fourth of households are covered by the HI scheme.
- The proportion is lowest in Madhesh.
- The renewal rate in HI is increasing.
- Specific interventions are needed to address unequal coverage and enhance enrollment rates.

Health Insurance Coverage

Population Coverage (%)



Household Coverage (%)



Renewable Rate (%)



Service Utilization (%)

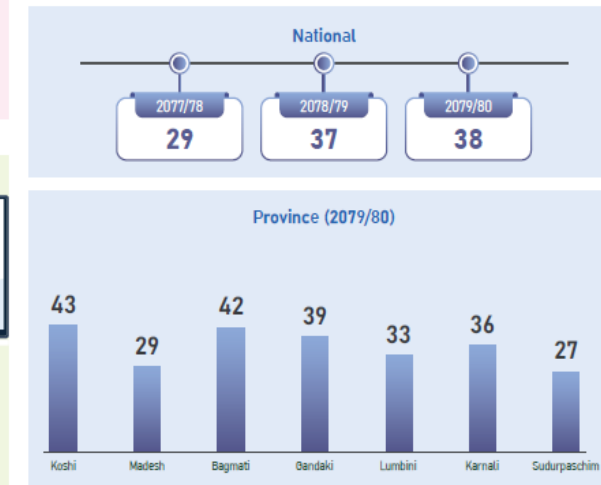
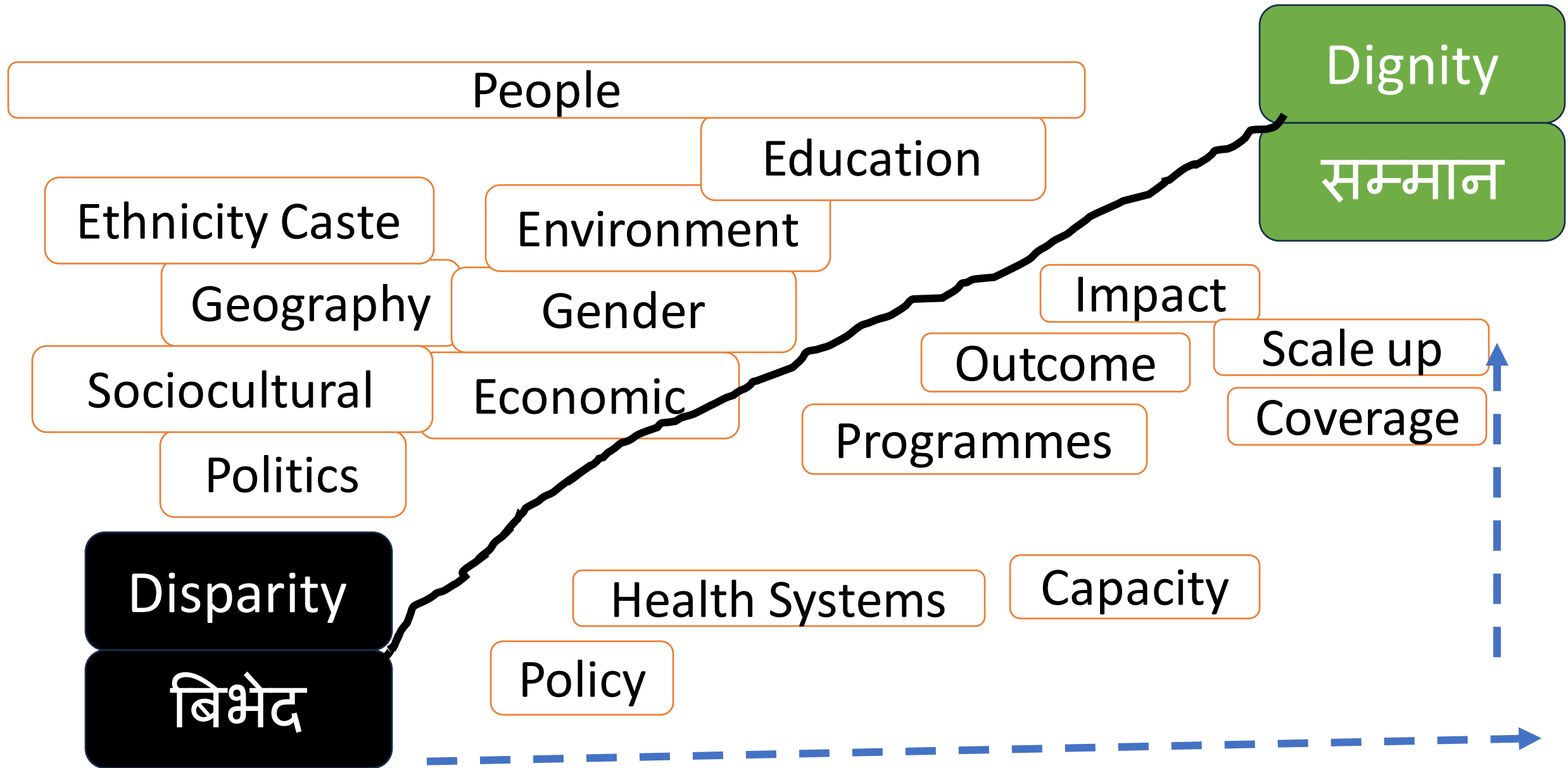


Figure 24.3 Renewal rate and service utilization of HI in FY 2077/78-79/80

Source: IMIS/HIB

Key points

- Political commitment – progressive in nature
- Policy – increasing realization
- Health systems – progressive towards higher gains
- Health outcome – inequitable gains
- Interventions – yet to mainstreamed towards equitable gains



Thank you!



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