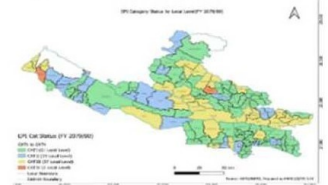
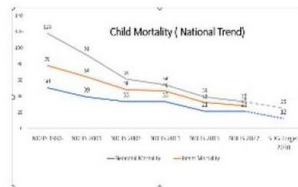
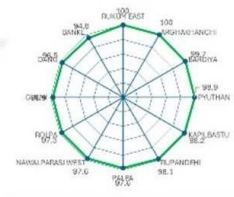
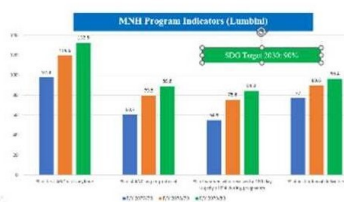
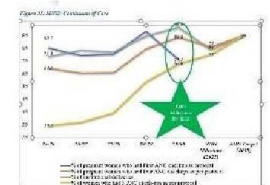




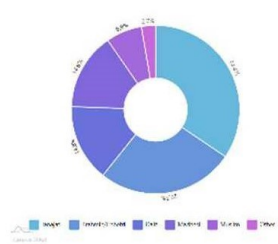
Reporting rate on time (FY 2079/80)



Indicator	SDG Target	National	Lumbini
MMR	70	151**	207**
Under 5 Mortality Rate	20/1000 live birth	33*	41*
Infant mortality rate		28*	34*
Neonatal Mortality Rate	12/1000 live birth	21*	24*
Institutional delivery	90	79*	84.4*
% of deliveries assisted by SBA	90	63.2*	67.2*
CPR modern method	60	43*	43*
Unmet need	0	21*	21*
TFR	2.1	2.1*	1.9*



2079/80



# Annual Health Report

## Health Directorate, Lumbini Province

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# **ANNUAL HEALTH REPORT**

## **Fiscal Year 2079/80**



**Lumbini Province Government**  
**Ministry of Health**

**Health Directorate**

**Deukhuri (Rapti Valley), Dang, Nepal**

**Email: [hd@lumbini.gov.np](mailto:hd@lumbini.gov.np)**

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## Message from Hon'ble Minister of Ministry of Health

The province government is committed to provide highest quality of health services to all people within the province. The Ministry is determined to achieve ambitions of the constitution of Nepal 2072 in achieving universal health coverage together with all stakeholders including public, private, and non-governmental sectors. I am pleased to note that several outstanding achievements have been made in health sector in past decades. The health outcomes achieved so far are the results of joint effort of all the ministry and health sector stakeholders.



I am pleased to know that Health Directorate Lumbini Province is bringing out the annual report of fiscal year 2079/080 as a comprehensive document based on annual performance of all components of health care delivery system, implemented by the districts and local level government. In addition, this report provides detailed and up to date information with analysis of trend and patterns within the province.

I am hopeful that, this annual report of Health Directorate, Lumbini will be useful for all districts, local government, and respective stakeholders for the purpose of planning, and programming to strengthen existing system by addressing the problems, gaps identified while planning, implementation, and evaluation of the programs. It will be helpful for the improvement of the overall health status of people in Lumbini.

I congratulate all the team involved for preparation of this report and acknowledge to those who took responsibility for the improvement of the health system in Lumbini.

Date: - 11<sup>th</sup> December 2023

.....  
**Mr. Raju Khanal**  
**Honorable Minister**  
**Ministry of Health**





## Message from Health Secretary of Ministry of Health

This is my great pleasure to present the sixth Annual Health Report of the Health Directorate for the fiscal year **2079/80**. This report is one of the outcomes of the performance reviews conducted at local levels, district and province and summarizes the annual performance of all the components related to health care delivery system. This progress report also reflects evidence-based planning at all levels. In my opinion, the evidence highlighted in this report are instrumental for developing and implementing evidence-based program in the upcoming days.



The Ministry of Health is committed to achieve the goal of universal health coverage through implemented the National Health Policy 2076, National Health Sector Strategy, Provincial Health Policy 2077, First Five-Year Plan (2076/77-2080/81) and other national and provincial policies. I am pleased to share that the Lumbini Province has made several noticeable accomplishments in health sector that helped to meet the goals outline in federal and provincial policy papers. This report will provide the status of the priority indicators listed in the periodic plans, NHSSP-IP, and Sustainable Development Goals to comprehend the achievements made so far.

I appreciate the efforts made by the Health Directorate, other provincial institutions, and all the initiatives of the health offices as well as those of its institutions, local governments, External development partners and non-government organizations. Each section of the report presented background, status of the major indicators, new initiatives, lesson learnt, issues, challenges suggest way forward for the effective delivery of health services. I am sure that the data outlined in the annual report would role in important in planning and implementing evidence-based program in the days to come.

I appreciate the efforts made by the FCHVS working in the communities and all type of health care providers of this province. They deserve our sincere gratitude since without their efforts, we would not have been able to accomplish and sustain the success that we did.

Finally, I extend my sincere thanks and congratulation to the Health Directorate, Lumbini Province and other concerned personnel who contributed to this report.

Date: - 11<sup>th</sup> December 2023

.....  
**Dr. Janardan Panthi**  
Secretary  
Ministry of Health



## Acknowledgement from Director of Health Directorate

It gives me great pleasure to present the sixth annual report of the Health Directorate, Lumbini Province for the FY 2079/080. The report covers the brief background of the program, all the major activities and results, innovative, best practices, lesson learnt including recommendations to improve the delivery of the health service at province and local levels. The report also covers the progress of the activities performed by private health institutions and external development partners.



To achieve universal health coverage, the Health Directorate of the MoH is dedicated to translating the aspiration of the Constitution of Nepal, 2072, National Health Policy 2076, Nepal Health Sector Strategy, Provincial Health Policy 2077, and five-year plan. The NHSS-RF and SDG indicators are progressing positively in the province, and we have to sustain and made further progress to cross the target in coming years. The information presented in this report are yielded from a variety of source, including the annual review held at various levels, the Disease Surveillance system, eLMIS, IHMIS, EWARS, MPDSR, Hsopitals/HP MSS, Household survey, monitoring reports and other sources. The information generated in this report give us a clear picture of the status of our health system and provides opportunity to identify new areas or shift our attention to already –existing ones. If firmly recommended all the policy makers and program manager to use the information generated in this report to guide our planning and decision at all levels.

I sincerely appreciate the Honorable Minister Raju Khanal, Ministry of Health, for his inspiring leadership and guidance. I also would like to express my gratitude to Dr. Janardan Panthi, Secretary of the Ministry of health, for his leadership and support in advancing the health care delivery system of the province. I am grateful to our health workers across all the districts and municipalities within the province that have been working day and night, all year round to provide quality of health services at our facilities. My appreciation also goes to Female Community Health Volunteers for their efforts in promoting of health activities and raising public awareness in community levels. Furthermore, I take this opportunity to thanks various external development partners, non-governmental organizations, and the private sector for their important contributions in advancing the health sector performance of this province.

I would like to extend my gratitude to all the Statistical Officers, focal persons of the program, and entire Health Directorate' Family for joining hands as team to deliver best result throughout the year. I would like to express my gratitude to all the EDPs who are working closely with Health Directorate; UNICEF, WHO, NHSSP, UNFPA, NSI, USAID/CARE Nepal, USAID/ARH, Ipas Nepal and other partners for their important contributions to enhance the performance of the health sector in Lumbini Province.

Finally, I appreciate the annual report development team of the MoH, Health Directorate, PHLMC, PHTC, PPHL and EDPs for their meticulous effort to bring out this report. I hope, this report will be useful document for the Federal Government, Provincial Government, Local Government and other academic institutions, and researchers and supporting organizations.

Date: - 11<sup>th</sup> December 2023



**Dr. Binod Kumar Giri**  
Director



## Abbreviations and Acronyms

AHIMS: Ayurveda Information Management System	LLG: Local Level Government
APP: Annual Procurement Plan	LMIS: Management Information System
ART: Antiretroviral Therapy	LPEP: Leprosy Post-Exposure Prophylaxis
ASRH: Adolescent Sexual and Reproductive Health	MAM: Moderate Acute Malnutrition
AWPB: Annual Workplan and Budget	MDG: Millennium Development Goals
CAPP: Consolidated Procurement Plan	MICS: Multiple Indicator Cluster Survey
CCEOP: Cold Chain Equipment Optimization Platform	MHM: Menstrual Hygiene Management
CLT: Community led testing.	MIYCN: Maternal Infant and Young Child Nutrition
cMYP: Comprehensive Multi Year Plan	MoHP: Ministry of Health and Population
CNSI: Comprehensive Nutrition Specific Intervention	MNP: Multiple Micronutrient Powder
DHF: Dengue Hemorrhagic Fever	MoSD: Ministry of Social Development
DHIS2: District Health Information System 2	MPDSR: Maternal Perinatal Death Surveillance and Response
DoHS: Department of Health Services	MSM: Men Who have Sex with Men
DSS: Dengue Shock Syndrome	MSNP: Multi-sector Nutrition Plan
DTS: Dried Tube Specimen	MSS: Minimum Service Standard
EDP: External Development Partners	NCDR: New Case Detection Rate
EHS: Extended Health Service	NDHS: Nepal Demographic and Health Survey
eLMIS: Logistic Management Information System	NEQAS: National External Quality Assurance Scheme
EOHC: Emergency Obstetric and Newborn Care	NHSS: Nepal Health Sector Strategy
EPI: Expanded Program on Immunization	NIP: National Immunization Program
EQA: External Quality Assessment	NMICS: Nepal Multiple Indicator Cluster Survey
EWARS: Early Warning and Reporting System	NRH: Nutrition Rehabilitation Home
FAST: Find cases Actively, Separate safely and Treat effectively	OST: Opioid Substitution Therapy
FCHV: Female Community Health Volunteer	PHC/ORC: Primary Health Care Outreach Clinic
FSW: Female Sex Workers	PHLMC: Province Health Logistic Management Centre
FWD: Family Welfare Division	PMTCT: Prevention of Mothers to Child Transmission of HIV
GBV: Gender Based Violence	PNC: Postnatal Care
HD: Health Directorate	PPHL: Provincial Public Health Laboratory
HDC: Hospital Development Committee	PWID: People who Inject Drugs
HER: Electronic Health Record	RDQA: Routine Data Quality Assessment
HMIS: Health Management Information System	SUN: Scaling-up Nutrition
HMISP: Hospital Management Strengthening Program	SBA: Skilled Birth Attendance
ICU: Intensive Care Unit	SNCU: Special New-born Care Unit
IMAM: Integrated Management of Acute Malnutrition	STD: Sexually Transmitted Diseases
IMNMP: Intensification of Maternal and Neonatal Micronutrient Program	SDGs: Sustainable Development Goals
IVM: Integrated Vector Management	SSU: Social Service Unit
LARC: Long-acting Reversible Contraceptiv	TIMS: Training information Management System
	VPD: Vaccine Preventable Diseases

### Health Service Coverage Fact Sheet

Program Indicators	Province Level			FY 2079/080 by District												National Target 2030
	FY 2077/078	FY 2078/079	FY 2079/080	Rukum East	Rolpa	Pyuthan	Gulmi	Arghakhanchi	Palpa	Nawalparasi West	Rupandehi	Kapilbastu	Dang	Banka	Bardiya	
<b>Reporting Status</b>																
HMIS reporting status of basic health facilities*	100	100	100	100	100	100	100	100	100	99	100	100	100	100	100	100
HMIS on-time reporting status of basic health facilities*	83	98	98	100	97	99	97	100	98	98	98	98	97	95	100	100
HMIS annual reporting status of province-level hospitals**	99	99	90	100	100	100	100	100	100	98	96	100	99	70	100	100
HMIS on-time reporting status of province- level hospitals**	52	78	66	100	90	100	100	100	99	90	75	83	47	43	97	100
HMIS self-reporting (reporting by HF's themselves) status- as of Ashad	34	68	77	93	86	93	68	61	61	72	85	56	78	86	93	
<b>Immunization Program</b>																
BCG coverage	94	103	103	98	84	78	74	75	110	78	143	84	103	122	90	
DPT-HepB-Hib3 coverage	94	97	98	98	87	80	98	99	82	100	108	92	102	105	92	>95%
MR2 coverage (12-23 months)	94	99	94	95	86	84	101	98	82	97	103	90	91	99	86	
Dropout rate DPT-Hep B-Hib 1 vs MR2	6	0.18	5	5	4	-3	0	4	4	2	2	3	11	9	8	
Percentage of pregnant women who received TD2 and TD2+	68	74	74	74	63	57	63	57	58	74	84	74	70	90	71	
<b>Nutrition Program</b>																
Percentage of children aged 0-23 months registered for Growth Monitoring (GM)	77	92	69	78	49	46	53	53	68	51	91	75	75	71	56	100
Average number of visits among children aged 0-23 months registered for GM	4	4	9	5	14	10	16	9	16	10	8	6	6	6	9	
Percentage of pregnant women who received 180 tablets of Iron	55	76	84	64	65	57	76	62	108	90	132	67	69	80	69	
Percentage of postpartum mothers who received vitamin A supplements	64	98	96	93	99	99	100	101	100	106	101	105	81	88	101	

Program Indicators	Province Level			FY 2079/080 by District												National Target 2030
	FY 2077/078	FY 2078/079	FY 2079/080	Rukum East	Rolpa	Pyuthan	Gulmi	Arghakhanchi	Palpa	Navalparasi West	Rupandehi	Kapilbastu	Dang	Banke	Bardiya	
<b>Integrated Management of neonatal and Childhood Illness</b>																
Incidence of pneumonia (per 1000)	22	29	27	127	89	59	33	38	43	13	14	5	28	25	24	
Percentage of pneumonia cases treated with antibiotics	122	100	100	100	100	101	105	100	100	101	97	100	100	100	101	100
Incidence of diarrhea (per 1,000)	357	347	111	334	208	146	130	113	101	89	80	116	88	107	99	
Percentage of children under 5 with diarrhea treated with ORS and zinc	97	99	99	99	100	100	101	110	100	99	100	95	100	99	99	100
<b>Safe Motherhood (%)</b>																
Percentage of pregnant women who attended first ANC visit (any time)	98	120	133	94	91	81	123	82	140	127	204	110	128	135	108	
Percentage of pregnant women who attended four ANC visits as per protocol <sup>+</sup>	61	80	35	60	49	37	63	37	39	35	46	18	18	31	39	90
Percentage of institutional deliveries <sup>+</sup>	80	94	96	76	67	72	55	46	105	43	159	58	84	168	61	90
Percentage of deliveries conducted by skilled birth attendant <sup>+</sup>	77	90	93	75	47	61	52	46	104	41	158	54	83	165	58	90
Percentage of mothers who had three PNC check-ups as per protocol <sup>+</sup>	29	54	68	72	67	55	74	54	63	72	113	33	48	60	82	90
<b>Family Planning (%)</b>																
Contraceptive Prevalence Rate (unadjusted) among WRA	31	32	25	25	33	42	18	32	28	22	22	22	22	17	39	60
FP method new acceptor as % of MWRA	15	12	13	21	15	16	12	16	12	10	14	13	12	11	13	
<b>FCHV Program</b>																
Mothers' group meeting held (%)	86	95	98	100	98	97	99	98	99	100	99	92	99	95	97	100
<b>Malaria and Kala-azar Program</b>																
Malaria annual parasite incidence (per 1000 population in high-risk districts)	0.04	0.08	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Malaria indigenous cases	7	7	1	0	0	0	0	0	0	0	0	0	0	1	0	

Program Indicators	Province Level			FY 2079/080 by District												National Target 2030
	FY 2077/078	FY 2078/079	FY 2079/080	Rukum East	Rolpa	Pyuthan	Gulmi	Arghakhanchi	Palpa	Navalparasi West	Rupandehi	Kapilbastu	Dang	Banke	Bardiya	
Percentage of Plasmodium Falciparum (PF) cases in high-risk districts	29	36	38		0	0	0	0	60	25	50	15	20	40	50	
Number of Kala-azar cases in risk district	41	69	54	0	0	0	0	0	9	0	17	0	0	28	0	
<b>Tuberculosis</b>																
Case notification rate/100,000 population	114	157	148	90	120	149	104	124	135	120	153	130	188	179	145	
Treatment success rate	90	91	93	93	94	92	94	95	90	92	92	90	96	93	94	
TB mortality rate	4	5	3	2	3	4	4	2	7	4	3	4	3	3	3	
<b>Leprosy</b>																
New case detection rate (NCDR) per 100,000 population	10	11	11	3	2	5	3	2	5	18	12	24	4	13	8	
Prevalence of Leprosy per 10,000 population	1.1	1.1	1.1	0.3	0.2	0.5	0.3	0.2	0.5	1.8	1.2	2.4	0.4	1.3	0.8	
<b>HIV/AIDS and STI</b>																
Number of new positive cases	473	659	439	0	1	21	15	7	29	34	163	49	40	47	33	
Currently on ART	3850	4325	4598	0	46	129	199	132	341	317	1748	561	394	556	175	
<b>Curative Services</b>																
% of OPD new visit among total popln.	82	95	77	77	68	76	100	100	122	69	97	54	59	69	70	
Percentage of population utilizing emergency services at hospitals	6	7	5	1	2	2	3	4	9	3	9	2	5	8	2	
Percentage of population utilizing inpatients services at hospitals	4	5	5	1	1	2	1	4	8	1	10	1	4	10	1	
Bed occupancy rate	46	54	56	19	33	54	50	94	40	25	75	54	25	48	46	
Average length of stay in hospital	4.2	4.2	4.1	2.0	1.7	2.7	2.1	2.4	5.2	1.7	5.1	2.7	1.7	3.7	3.0	
Hospital deaths	4172	3401	1351	1	4	4	3	3	79	5	443	21	96	688	4	

Note: \*based on reporting status dataset \*\*based of hospital summary dataset

## Summary of Nepal Health Facility Survey Findings

NHSS RF Indicators		Lumbini province		National 2021
		2015	2021	
Percentage of health facilities with no stock-out of tracer drugs		1.0	0.4	1.3
Percentage of sanctioned posts filled	Consultants	75.9	48.8	53.9
	Physicians/general practitioners	50.0	33.3	37.9
	Medical officers	48.2	32.4	53.2
	Nurses	70.5	53.2	74.3
	Paramedics	77.8	73.6	75.7
Percentage of health facilities receiving tracer commodities within less than 2 weeks of placing the order		75.0	95.2	86.4
Percentage of health facilities complying with good storage practices for medicines		69.0	37.0	32.2
Percentage of health facilities meeting minimum standards of quality of care at point of delivery		0.3	0.0	0.6
Percentage of clients provided with quality services as per national standards	IMNCI services	26.1	35.1	
	Antenatal care	10.5	10.2	6.3
	Family Planning	12.3	32.6	20.5
Percentage of providers observed complying with service delivery standard protocols/guidelines for tracer services	IMNCI services	1.9	0.1	0.7
	Antenatal care	0.0	2.1	1.0
	Family Planning	1.1	1.9	1.2
Percentage of health facilities with capacity to provide selected laboratory services as per standards		13.3	11.9	17.9
Percentage of health facilities segregating health care waste at the time of collection		87.9	89.3	86.5
Percentage of health facilities safely disposing of health care waste		80.6	54.5	52.4
Percentage of clients who received basic health services free of cost	Child treatment	92.3	92.6	86.6
	Antenatal care	83.2	77.0	82.2
	Family Planning	98.1	98.4	96.6
Percentage of health facilities providing all basic health services by level		63.1	83.9	74.6
Percentage of public hospitals with their own pharmacy services			66.5	86.6
Percentage of health posts with laboratory services		11.3	90.6	66.1

## Executive Summary

This annual report highlights the major progress of health programs, particularly over the Fiscal Year 2079/080, summarizes best practices and new initiatives, issues/challenges and set out the recommendations for the next year.

### Family Welfare:

**Immunization:** At provincial level, coverage for DPT-Hep B-Hib1 has increased from 98 % in FY 2078/79 to 99 % in FY2079/080. However, the coverage for BCG coverage (94%), MR1 (96%), and PCV3 (96%), Td2+ (74%) has remain sustained in this FY 2079/80 compared to previous FY 2078/79. But the number of receiving a second dose of MR2 vaccine declined from 99 % to 94 %. which remained below the target 95 percent. The coverage for JE is now 94 %. The fully immunized coverage of children is 94 percent at province level. In terms of accessibility and utilization of immunization service categorization, 9 out of 12 districts are in category I, 1 district in Cat II, 2 districts are in Cat III. A total of 490935 children (>99% coverage) aged 6 months to below 15 years were immunized against Measles and Rubella during this ORI campaign in FY 2079/80. Similarly, successfully, series of COVID-19 vaccination campaign for booster dose. A total of 2541 children were tracked across the province, and mainstramed them into routine immunization service through the full immunization strategy/household survey, Total 34020 hygiene promotion sessions were conducted across the province. According to VPD surveillance, 350 Measles positive cases were reported, and 6 JE positive cases recorded in Lumbini Province, in 2023. In the area of cold chain management, an inventory was updated (out of 398 cold chain equipment, 333 are functional and 58 are non-functional, and 7 equipment needs to its repairment).

**Nutrition:** Proportion of children aged 0-23 months who were enrolled for growth monitoring decreased to 69% (FY 2089/80) from 92% (FY 2078/79). Among the children registered for growth monitoring, 2.5% were classified as underweight. Percentage of newborns with low birth weight (2.5 kg) has stagnated at 13% since previous year. Overall, 32 new OTC centers were established in FY 2079/80 and admitted MAM cases decreased from 3625 (FY 2078/79) to 1525 (FY 2079/80). Almost 61% of children aged 0-6 months were exclusively breastfed, and 68% of children aged 6-8 months received complementary foods. At the provincial level, compliance of taking 180 tablets throughout the pregnancy is 84%, while 87% of postpartum women received a 45-day supply of IFA. Coverage of children aged 6-23 months who received at least one cycle (60 Sachets) of Baal Vita is 49%, while compliance (number of children who received three cycles-180 Sachets) is 7%. In 29 local levels, 80 schools have school nurses who help with the school health and nutrition program.

**IMNCI:** Incidence of Diarrhoea (among under 5 children) in the province was 323 in fiscal year 2079/80, being highest in Rukum East (661) and lowest in Palpa (193). Overwhelming majority of these cases (94%) were treated with ORS and Zinc. The incidence of Pneumonia was 36.2 per 1000 children under the age of five, which has fallen dramatically (from 43.1 per 1000 in FY 2078-79). Health workers identified no falciparum malaria cases, 36 non-falciparum malaria cases; 16

very severe febrile disease cases; 91 measles cases; 14225 ear infection cases; 1691 severe malnutrition cases and 323 anemia cases among children under five years of age in FY 2079/80.

**Safe Motherhood:** Overall, four ANC visits as per protocol increased from 80% to 89%, institutional delivery increased from 94% to 96%, Skilled Birth Attendant (SBA) and Skilled Health Professional (SHP) delivery from 90% to 93%, and PNC visit as per protocol increased from 54% to 68% over the past two years. In total, 32 out of 109 local levels had reported zero-home delivery, in contrast to 13 local levels in this fiscal year. The province initiated free USG service to poor/destitute pregnant women in Provincial and district level hospitals and pregnant women benefitted through this service.

**Family Planning:** Implant (31%) occupies the largest proportion of contraceptive method mix among all current users followed by Depo and Sterilization (19 % and 18%) respectively. Almost 5% of women who have given birth have accepted FP methods in the post-partum period. However, Rolpa had the highest proportion of PP-FP users (18.5%).

**Safe Abortion:** In total, 174 health facilities provided safe abortion services in the Lumbini Province. 3 out of 109 local levels (3%) have zero abortion services in FY 2079/80. Similarly, 79% of the women who underwent abortion utilized a post-abortion contraception in FY 2079/80.

#### **Disease Control:**

**Tuberculosis:** TB Case Notification Rate decreased from 157/lakh in FY 2078/79 to 148/lakh in FY 2079/80 (decreased by 9), and success rate increased to 93% in FY 2079/80 from 91% in FY 2078/79. The province maintained the Treatment Success Rate (TSR) as per National Strategic targets of TSR of at least 90%. This year, TB mortality rate slightly decreased to 3.3% than previous fiscal year (4.8% in FY 2078/79). In total, 155 DR-TB cases were holding by Lumbini province, and overall DR -TB treatment success rate is 78%.

**Malaria:** Confirmed malaria cases increased from 153 to 181 in the last two-years. The proportion of Plasmodium Falciparum (PF) infection decreased and accounted for 30.9% (in 2079/80) from 35.9% (2078/79). The annual parasite incidence (API) increased to 1.95 in this fiscal year (against 0.08 in FY 2078/79) in risk districts. No cases of indigenous P. Falciparum cases were reported in this fiscal year, whereas number of indigenous P. Vivax cases increased from 95 (in FY 2078/79) to 108 (in FY 2079/80) in the province.

**HIV/AIDS and STI:** In total, 203116 cases were tested with HIV in FY 2079/80, which is in increasing trend compared to previous fiscal year. The number of HIV positive cases decreased from 659 (in FY 2078/79) to 439 (in FY 2079/80). Nevertheless, the number of HIV positive pregnant women slightly increased from 16 to 17 in last two fiscal years. In the province, a total of 4,598 People Living with HIV (PLHIV) are currently on Anti-retroviral Treatment (ART) in FY 2079/80. According to the recording, the number of PLHIV has increased (4598) in this fiscal year compared to previous fiscal year (4,325).

**Kalaazar:** Total 24 Kala-azar cases were reported in FY 2079/80 in Lumbini Province. Of the reported cases, Rupandehi district has the highest number of cases 17 whereas there were 6 cases

in Palpa. However, there was one case reported from the Gulmi District. No cases reported from remaining districts.

**Lymphatic Filariasis:** A total of 13 new cases of Lymphatic Filariasis were identified in FY 2079/80 in Lumbini Province. Out of the total reported cases, 5 cases diagnosed and confirmed in both districts Rupandehi & Kapilbastu respectively (HMIS OPD morbidity reporting).

**Leprosy:** Leprosy prevalence rate is in decreasing trend while analyzing from FY 2073/74 to FY2079/80 (i.e., decreased from 1.5 to 1.1 per 10,000 population). However, this rate is above the cut-off point of 1 case per 10,000 set by WHO to indicate the elimination of Leprosy as a public health problem. In total, 565 new Leprosy cases were detected this year in the province, with highest case detection in Kapilbastu district (168 new cases). The proportion of grade-2 disability among new cases of the province decreased from 7.7 in FY 2078/79 to 5.1 in FY 2079/80.

### **Social Security and Other Public Health Program:**

**OCMC:** Overall, 3378 persons were served by OCMCs across the province, a trend that has been expanding for the past three years. In FY 2079/80, the OCMC at Pyuthan Hospital offered the most services, while Palpa Hospital provided the least.

**Social Service Unit:** In FY 2079/80, SSU provided free health care services to 21,267 ultra-poor, poor, senior citizens, disabled, and victims of GBV, FCHVs, and others. It is distinctly higher than in the preceding fiscal year in most hospitals. Lumbini Provincial Hospital has offered free services to the highest number of beneficiaries (7702) from the SSU, whereas Rampur Hospital served the least (51).

**Home Based Treatment to Citizens above 70 Years of Age:** Total 80,365 citizens used the services in FY 2079/80. By district, Gulmi has the highest utilization (13,214), while Bardiya account the lowest (739).

**Medical Treatment of Deprived Citizens:** Total of 4033 benefited with the financial relief. Majority of them belonged to having disease related to cancer (2189) followed by heart disease (1365) and Sikel Cell Anemia (260). Majority of them were from Rupandehi (873) and least from Rukum East (32).

### **Hospital Service Strengthening:**

All the province-level hospitals have been upgraded to 50 bedded hospitals (with HR) with the provision of eye, dental, ENT, physiotherapy, and 24 hours laboratory, Pharmacy and USG services. Lumbini Provincial Hospital is the second largest hospital providing maternity services (12,275 cases in FY 2079/80) in the country and first hospital outside the valley. Four hospitals are from Lumbini province with Bardiya hospital standing at topmost position with the overall score of 95%. As a part of Hospital service strengthening, procurement of MRI machine, operation of burn ward and Cath lab (Lumbini provincial), procurement of CT Scan machine (Bhim hospital), endoscopy service (Pyuthan hospital), dialysis service (Rapti Provincial, Lumbini Provincial) were done this year. Further, Sickle cell and thalassemia disease diagnosis and counselling centers were established in eight government hospitals of six Terai districts. Overall,

number of patients who received OPD, Indoor and emergency services increased drastically as compared to previous fiscal years owing to the increased quality of hospital services and improvement in reporting status.

### **Ayurveda and Alternative Medicine:**

In FY 2079/80, a total of 50, 6166 new patients received Ayurveda services, which is a significant increment as compared with previous fiscal years. In FY 2078/79, the Lumbini province has established Ayurved Health Centre in Nawalparasi and Rukum East. The province has also expanded surgical service in Provincial Ayurveda Hospital Bijauri where patients has been receiving services.

### **Support Program:**

**Health Budget:** The allocation of budget in health sector is being increased with advancement of fiscal years. While comparing health budget from FY 075/76 to 079/80, the budget is increased by two folds (final budget in health sector- 10.75 of total budget in FY 2079/80). By provincial authorities, Ayurveda Chikitsalaya has highest financial progress and PHTC has at least progress among nine provincial entities.

**Formulation of Policy Documents:** The province has developed operation and management guideline on province health partnership (2078), provincial health special remedial financial support guideline (2078), operation procedure on specialist doctor mobilization of provincial hospital and medical college, 2078 and provincial antimicrobial resistance action plan, 2078.

**Health Information Management:** Lumbini Province achieved 100% reporting rate in Fiscal Year 2079/80 and achieved the national target of 100% reporting by 2030. The province achieved 98% timely reporting in this fiscal year, which is a significant improvement as compared with previous fiscal years. Also, there is a significant improvement in the online reporting of HMIS reports from health facilities in all 12 districts.

**Health Training:** The PHTC organized 47 different training and trained 1548 health works in FY 2079/80. As a part of training site strengthening, the Training Centre, in this fiscal year, approved Rapti Provincial Hospital for SBA and Implant training as well as Lumbini Provincial Hospital for Implant training. The Biomedical Management Unit in Devdaha is designed for capacity building of human resources well as maintenance service for biomedical equipment. At least one training was conducted in each training site for sustainability and strengthening the site.

**Laboratory:** In FY 2079/080, the key activities performed by Provincial Public Health laboratory included laboratory-based surveillance of Influenza, diagnosis of SARS CoV2RT-PCR, assessment survey of Kala-azar, RT-PCR integrated test for influenza (A & B) and Quality control of microscopic TB and implemented the HIV Dried Tube Specimen (DTS) in External Quality Assessment System. The PPHL conducted various capacity building activities (TB microscopy, GeneXpert operation and maintenance, Malaria RDT testing, biosafety and biosecurity, laboratory quality management system) and supplied laboratory reagents (TB, Malaria) and equipment to health facilities. As a best practice, PPHL also installed microscopic examination center in hard-to-reach rural municipalities of province.

**Health Logistic Management:** More than twenty-eight procurements have been placed by PHLMC in FY 2079/080. Specifically, PHLMC procured medicine and essential commodities, machinery, and equipment (e.g, portable USG machine, digital x-ray, patient monitor, SNCU/NICU equipment, Minilab /Vasectomy set, NCD equipment), strengthened storage practice (e.g., warehouse building and walking cooler installation in vaccine store, ensured good storage practices and ensured effective vaccine management) and also ensured the effective procurement and assurance of availability of the medicine in the province.

## **Summary of Provincial Policies and Plans**

### **Province Health Policy 2077**

The province government has endorsed a Provincial Health Policy 2077 (cabinet decision: 2077/02/02 BS) to ensure the fundamental right to health as stipulated in the constitution of Nepal. The health policy envisions to achieve “Healthy and Happy Citizens for a Prosperous Province”. The provincial health policy consists of six guiding principles, 24 policy statements and 126 strategies.

#### **Guiding principles:**

- Universal access to quality healthcare,
- Intergovernmental and multi-sectoral participation, coordination, and cooperation,
- Equitable health service based on social justice,
- Ensure sufficient investment and adequate utilization,
- Commitment to good governance, accountability, and professional conduct,
- Innovation and creativity in health service.

#### **Vision:**

- Healthy and happy citizens for a prosperous province

#### **Mission:**

- Ensure the fundamental right of the citizens to stay healthy.

#### **Goal:**

- Improve the health status of citizen by increasing access to quality health service through strengthened health system.

#### **Objectives of the provincial health policy:**

- Ensure an efficient and effective health care system.
- Enhance access to services to all citizens of the province, who can get easy, accessible, simple, and quality health services from all levels.
- Create an enabling environment to promote healthy lifestyles, change behavior and upset the factors that adversely affect health.
- Provide effective and uninterrupted health service delivery in case of emergencies and disasters.
- Inter-governmental, community and multilateral coordination, partnership, and cooperation in health service management, as well as cooperation with the private and non-governmental sector as needed.
- Make health services responsive to the people by promoting good governance, accountability, and responsibility.
- Increase investment in the health sector and reduce the proportion of personal expenses due to health problems.

**Policy statements:**

1. Ensure basic and emergency health services, free of cost from all levels of health institutions in the province (6 strategies)
2. Increase equitable access through strengthening specialists and specialized health services (10 strategies)
3. Provide necessary infrastructure, medicines, medicinal materials, tools, equipment, and diagnostic services for the quality health service delivery (10 strategies)
4. Produce, distribute, mobilize, and manage the skilled health manpower to strengthen health service delivery (9 strategies)
5. Effectively provide basic, specialist and specialized health services relating to the Ayurveda and other traditional, natural medicine, yoga, and other alternative medicine existing in the province (6 strategies)
6. Develop provincial standard based on minimum service standards and national medical standards to deliver the delivery of quality health services (3 strategies)
7. Increase the access and utilization of quality health services for socially, economically, geographically, gender, religiously and culturally backward community (6 strategies)
8. Ensure the safe maternal and reproductive health rights of adolescents and women (8 strategies)
9. Provide promotive, preventive, curative, rehabilitative and palliative health services for the prevention and management of non-communicable diseases (5 strategies)
10. Ensure the favorable environment by providing health education and information for healthy positive behavior change (6 strategies)
11. Formulate and implement urban health promotion plan to manage health problems arising from increasing urbanization (3 strategies)
12. Promotion and consumption of healthy foods to improve nutritional status and perform necessary coordination to increase production and access (6 strategies)
13. Perform multilateral cooperation to minimize and respond to possible health effects and epidemics during disasters or disasters (5 strategies)
14. Minimize and manage the adverse effects of environment on health (6 strategies)
15. Institutionalizing the progress and achievements made in health sector, emphasize on necessary coordination and cooperation to achieve more achievements (2 strategies)
16. Ensure the occupational health and safety of workers working in various workplaces (4 strategies)
17. Collaborate with public, community and private sectors to increase access and utilization of health services (4 strategies)
18. Promote study and research works and use the acquired findings to develop and implement the health programs and strategies (3 strategies)
19. Develop the more robust and technology-friendly integrated health information system for developing fact-based plans and effective management of health services (5 strategies)

20. Made health sector a people-oriented and result-oriented through maintaining good governance (6 strategies)
21. Effective prevention, control and management of communicable diseases, insect-borne diseases, animal-borne diseases and sickle cell anemia, thalassemia in selected places and communities and diseases that can enter through open borders (4 strategies)
22. Strengthen the social security scheme and reduce the personal expenditure in health care through increasing investment in the health sector (4 strategies)
23. Promote health tourism within the province by emphasizing the health protection of people coming to and from the province (2 strategies)
24. Formulate and implement health service program based on demographic situation and analysis (4 strategies)

### **First Five-Year Plan (2076/77 – 2080/81)**

The First Five-Year Plan of Provincial Planning Commission is developed based on the Constitution of Nepal, National Long-term Vision 2100, 15<sup>th</sup> Plan, Sustainable Development Goals and policies and program of province government and set to achieve “prosperous province: Happy citizen”. In the health sector, the plan envisions to develop healthy and strong citizen by providing access to quality healthcare for all. The goal, objectives, strategies and expected outcomes set by the plan in health sector mentioned hereunder:

#### **Goal:**

- Provide quality health services to all citizens easily.

#### **Objectives:**

- Ensure equitable access to basic health services.
- Make easy access of people to quality promotive, preventive, and curative services.
- Minimize risk factors in the field of public health promotion.

#### **Strategies:**

- Expand access to basic health services and improve qualitatively.
- Increase the capacity of hospitals, including quality curative services, and provide specialized health services at province.
- Adopt and promote alternative methods of health treatment.
- Conduct public awareness campaign related to health.
- Arrange for the availability of quality and nutritious food in the market.

#### **Expected outcomes:**

- Achieved health-related sustainable development goals through increasing easy access to health services.
- Established Trauma center.
- Provided specialized health services through provincial hospitals.

## Chapter 1: Introduction

### 1.1 Background

Every year, the provincial annual health review meeting is being organized to analyze results and develop strategic action points to be prioritized in the coming year. Because the review meeting is a joint event to review the progress of the overall health sector, support from the EDPs, as well as contributions from non-governmental sectors, are also reviewed. To review the annual progress of the fiscal year (FY) 2079/080 and to harmonize support in health sector, the Health Directorate of the Lumbini Province organized the provincial annual health review meeting in Ghorahi, Dang from Kartik 20-22, 2080. The following were the objectives of the provincial annual health review for the fiscal year 2079/080:


- Jointly review the annual health sector progress of Lumbini province,
- Ensure that all the stakeholders have a common understanding of achievements, issues, and bottlenecks in the health sector.
- Identify the strategic priority areas based on existing issues and bottlenecks that need to be addressed.
- Agree on the strategic actions to be included in the next year's work plan and budget.

In this review meeting, 235 participants were attended including the Honorable Minister of Ministry of Health (MoH) Lumbini Province, Honorable Minister of Ministry of Finance, Lumbini Province, the vice president of province planning commission of Lumbini Province, the secretary of MoH, representatives from the federal MoHP and the Department of Health Services (DoHS), local levels, hospitals, EDPs, health professionals, media personnel, and other stakeholders in the health sector. Reflections from the federal MoHP, MoH, Health Directorate, Province Health Training Centre, Province Health Logistic Management Centre (PHLMC), medical colleges, Health Insurance Board, and EDPs were shared during the review. Province-level institutions in each district (Health Office, Hospital and Ayurved) presented their progress, issues/bottlenecks, and potential action areas for the current and coming fiscal years.

The preparation of this annual progress report covers the municipal, hospital and district- level annual performance reviews, as well as the provincial annual performance review. This annual report summarizes the annual progress and achievements of the province in fiscal year 2079/80 and report covers the following areas:

- Policy statements, including objectives, strategies, goals, and major activities achievements of the health programs.
- Performance status of major indicators.
- Problems, issues, constraints, and recommendations on improving performance and achieving targets.
- Information on the contribution of other provincial counterparts, as well as External Development Partners and stakeholders.
- New initiatives and best practices.

After successful completion of the Annual Review meeting, the secretary of Ministry of Health, Lumbini Province announced the '**GHORAHİ DECLARATION**' as follows:



लुम्बिनी प्रदेश सरकार

**स्वास्थ्य मन्त्रालय**

सामी उपत्यका (देउखुरी), नेपाल

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**घोराही घोषणापत्र -२०८०**

(प्रदेश स्तरीय वार्षिक समिक्षा २०७९/०८०)

लुम्बिनी प्रदेशको आ.व.२०७९/०८० को स्वास्थ्य कार्यक्रमहरूको वार्षिक समिक्षा, विभिन्न अध्ययन तथा अनुसन्धानहरूको निष्कर्षको आधारमा, यस प्रदेशमा मातृ तथा नवजातशिशु मृत्युदर उच्च रहेको, महिला तथा बालबालिकाहरूको पोषणको अवस्था कमजोर रहेको, डेंगु, मलेरिया, कुष्ठरोग जस्ता सार्ने रोगहरू र नसर्ने रोगहरूको दरमा समेत वृद्धि भईरहेको र समय समयमा देखिने महामारीको अवस्थालाई मध्यनजर गर्दै चालु तथा आगामी आर्थिक वर्षमा उक्त समस्याहरूलाई उच्च प्राथमिकतामा राखी सम्बोधन गर्न हामी सरकारी, गैह्र सरकारी र निजी क्षेत्र लगायत स्वास्थ्य क्षेत्रमा कार्य गर्ने सम्पूर्ण सरोकारवालाहरू बीच तपसिल बमोजिमका बुँदाहरू कार्यान्वयन गर्न प्रतिबद्ध रहेको घोषणा गर्दछौं।

१. महिला तथा बालबालिकाहरूको स्वास्थ्य तथा पोषणको अवस्थामा सुधार, मातृ तथा नवजातशिशु मृत्युदर कम गर्न प्रदेशस्तरीय रोडम्याप तयार गरी समुदाय स्तरसम्म विशेष कार्यक्रमहरू लक्षित वर्ग र भुगोलमा सञ्चालन गरिने छ।
२. क्षयरोग, कुष्ठरोग, डेंगु, कालाजार, मलेरिया जस्ता सार्ने रोगहरूको खोजपडताल तथा व्यवस्थापनलाई प्रभावकारी बनाईने छ।
३. नसर्ने रोग रोकथाम तथा मानसिक स्वास्थ्य प्रवर्धन गर्न समुदाय स्तरसम्म विभिन्न सर्भेक्षण, अध्ययन, स्वस्थजीवनशैली, भान्सा सुधार लगायतका कार्यक्रमलाई अभियानमूलक ढङ्गाट अझ प्रभावकारी बनाई लागू गरिने छ।
४. स्वास्थ्य प्रणाली सुदृढीकरणका लागि नविनतम विचार, योजना र अनुसन्धान कार्यका लागि मातहतका कार्यालयहरूलाई प्रोत्साहन गरिने छ।
५. विपद् उत्थानशील स्वास्थ्य प्रणाली बनाउन विपद् पूर्वतयारी तथा प्रतिकार्य योजना बनाई प्रभावकारी रूपमा कार्यान्वयन गर्ने र प्रदेश तथा जिल्ला स्तरमा अत्यावश्यक औषधीका साथै स्वास्थ्यजन्य औजार उपकरणहरूको बफर स्टकको व्यवस्था गरिने छ।
६. दिगो विकासका लक्ष्य हासिल गर्न मातहतका कार्यालयहरूको अर्थपूर्ण सहभागितामा वार्षिक नीति तथा कार्यक्रम, योजना, बजेट विनियोजन, प्रभावकारी कार्यान्वयन, अनुगमन मूल्याङ्कन र पृष्ठपोषण गर्ने व्यवस्था मिलाईने छ।
७. समतामूलक र गुणस्तरीय स्वास्थ्य सेवा प्रदान गर्ने प्रदेश सरकारको अभियानलाई सफल बनाउन अस्पतालहरूमा विशिष्टीकृत सेवाहरूको सुनिश्चितता, स्वास्थ्यकर्मीहरूको क्षमता अभिवृद्धि र प्रयोगशाला सेवा सुदृढीकरण गर्न सरोकारवाला निकायहरूसँग बहुपक्षीय सहकार्य र समन्वय गरिने छ।

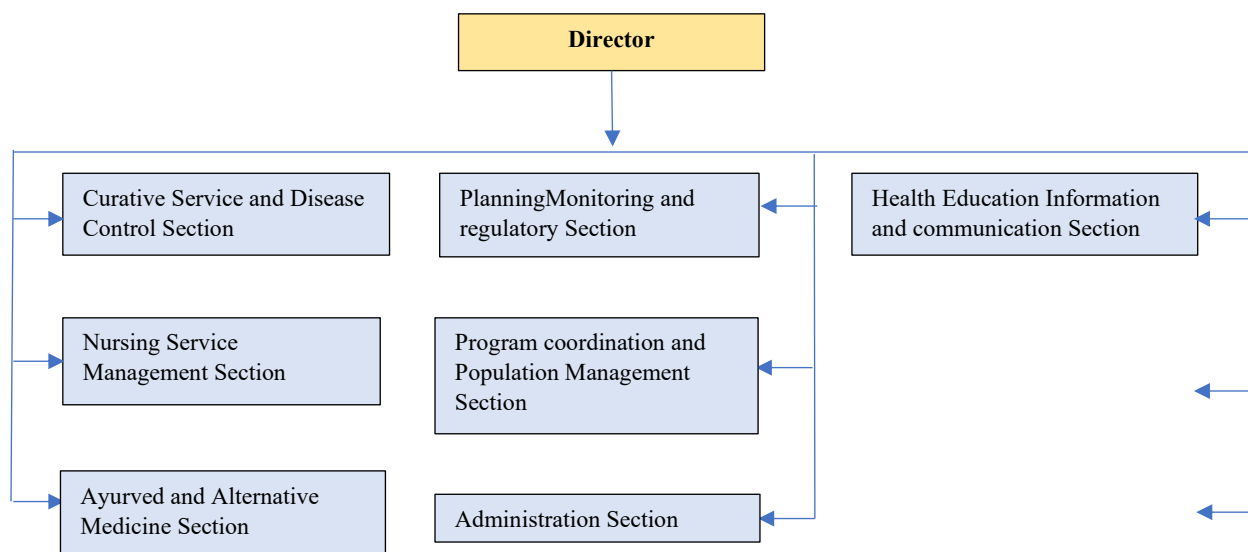
हस्ताक्षर:

इति सम्बत २०८० कार्तिक २२ गते

## 1.2 Organizational Structure of Health Directorate

Health Directorate was established on 17<sup>th</sup> July 2018 (Shrwan 1, 2075) under the then ministry of Social Development for the coordination with the health division of that ministry to support for formulating health policy, plan and implementing them through 12 Health offices, 13 Hospitals and 13 Ayurveda health center and Chikitsalaye. Now the Health directorate is under the ministry of Health of Lumbini province

*Figure 1.1.1: Organogram of Health Directorate*



**Major functions of the Directorate are:**

- Ensure effective implementation of public health programs in the province.
- To maintain institutional memory regarding health-related work and to work at the departmental level of the Ministry of Health:
- Coordinate with the health departments under the Ministry of Social Development of Lumbini Province to support the formulation of regional health policies, strategies, and program plans, and implement regional health programs through the 12 health offices, 13 Ayurvedic health institutions, and 13 hospitals within the province.
- Provide necessary information and other technical support to the Ministry for translating regional short-term and long-term health service policies and plans.
- Facilitate the monitoring, evaluation, and assessment of the 12 health offices, 13 Ayurvedic health institutions, and 13 hospitals. These institutions review their programs, make improvement plans, and submit them to the Ministry.
- Institutionalize information systems in the health sector, such as HMIS/ LMIS, at the provincial level.
- Facilitate the implementation of health programs at the provincial and local levels according to national and provincial policies and strategies.
- Conduct provincial public health surveillance.
- Manage health emergencies and disasters in the health sector.
- Lead various departments involved in public health.
- Issue guidelines for the production and management of quality and skilled nursing manpower.

**1.5 Health Service Delivery Outlets**

In the Lumbini Province, there are 3 federal hospitals, 13 province-level hospitals and 19 local level hospitals. In the Province, 28 primary Health Care Centers and 563 health posts provide basic health care services to the communities, 449 of which are birthing centers. To improve access and utilization of health care services, the province operates 138 urban health centers, 167 community

health units, 304 basic health service centers, 1942 PHC/ORCs, and 2965 immunization clinics. Similarly, 8982 FCHVs are being mobilized to promote and prevent public health.

*Table 1.1.1: Service Outlets within the Province*

Organization Units	Rukum East	Rolpa	Pyuthan	Gulmi	Arghakhanchi	Palpa	Nawalparasi west	Rupandehi	Kapilvastu	Dang	Banke	Bardiya	Total
Hospital (Government)	1	2	1	1	1	2	3	3	5	5	7	4	35
Private Hospital	0	2	0	1	2	2	2	19	3	11	24	0	66
Primary Health Care Center	1	2	2	4	2	2	1	5	2	2	3	2	28
Health Post	15	48	46	76	39	62	36	63	72	36	40	30	563
Birthing Center	15	64	55	68	24	49	13	29	31	40	34	27	449
BEONC Site	1	2	3	4	2	6	3	5	1	2	2	3	34
CEONC Site	1	1	1	1	1	3	1	5	1	4	5	1	25
Basic Health Service Center	15	22	16	37	19	8	28	44	14	32	27	42	304
Community Health Service Center	15	36	23	5	11	48	3	3	5	13	5	0	167
Urban Health centers	11	5	8	16	23	9	4	14	7	33	6	2	138
Wards with no government health facility	0	0	0	0	0	5	1	23	2	0	0	0	31
Outreach Clinic	25	176	170	222	67	178	127	214	309	129	121	204	1940
Immunization clinic	56	217	271	330	184	240	179	310	434	222	290	232	2965
FCHV	142	459	443	997	842	623	359	1506	1108	918	749	836	8982
TB DoTs Center	17	58	65	98	58	75	50	93	87	48	85	35	769
Safe Abortion Service Center	7	39	9	20	16	7	12	23	11	26	31	22	223
Health Facility with IUCD service	10	28	17	19	14	20	10	51	14	41	39	29	292
Health Facility with Implant service	18	48	32	18	48	25	46	80	42	88	46	35	526
Health facility with 5 temporary FP devices	10	26	13	13	14	17	10	51	29	41	39	29	292
Adolescent friendly health facility	10	30	48	30	18	17	0	37	22	19	0	25	256
Nutrition rehabilitation center	0	0	0	0	0	0	0	1	0	1	1	0	3

Organization Units	Rukum East	Rolpa	Pyuthan	Gulmi	Arghakhanchi	Palpa	Nawalparasi west	Rupandehi	Kapilvastu	Dang	Banke	Bardiya	Total
Snake bite treatment center	1	0	1	0	0	1	0	3	2	2	2	2	14
Vaccine sub center	3	3	0	0	7	8	0	3	10	1	2	1	38
ART center	0	1	1	1	1	2	1	2	2	2	1	1	15
OST Site	0	0	0	0	0	0	0	1	0	0	1	0	2

*Source: FY 2079/80 annual review slides presented by respective Health Offices*

## 1.6 Sources of Information in the Report

The main source of data for this progress report is the Health Management Information System (HMIS). Majority of the data used in this report is obtained from the DHIS2 platform. These data were retrieved from DHIS2, following the completion of the province annual health review meeting, and were summarized to analyze progress of various health programs and activities. Other information systems used in the report include the Logistic Management Information System (eLMIS), disease surveillance systems, sentinel reporting, and the IMU. The report also included information obtained from the municipal and provincial counterparts during the annual health review meeting undertaken at various levels (local levels, district, and province). The Annual Health Report Preparation Committee collated, compiled, and examined all relevant data and then organized them into various sections and chapters in the annual health report.

## 1.7 Structure of the Report

There are nine chapters in this annual progress report. The summary of provincial policies, background of annual report production, organizational structure, service delivery points and information sources are covered in Chapter 1. The chapter 2-7 discusses policy statements, progress and achievements, issues, bottlenecks and recommendations of various health programs and supportive programs in Lumbini Province. The chapter 8 summarizes the performance evaluation criteria and score of different provincial institutions. The chapter 9 summarizes the contributions and achievements of external development partners (EDPs, INGOs, and NGOs) in the health sector.

## **Chapter 2: Family Welfare**

### **2.1 Immunization**

#### **2.1.1 Background**

The National Immunization Program (NIP), formerly Expanded Program on Immunization (EPI), was started in 2034 BS and is a priority 1 program of the government. Immunization is important for reaching the Sustainable Development Goals (SDGs). Immunization reaches more people than any other health or social service, making it the cornerstone of primary care and a significant driver toward universal health coverage. This makes immunization critical to achieving SDG3 – ensuring healthy lives and promoting well-being for all people of all ages. Nepal’s constitution has assured access to basic health care services as a fundamental right of the people. The immunization Act-2072 has ensured the right to access quality of vaccines to every child. According to National Demographic Health Survey 2022, 80 percent of children aged 12-23 months were fully vaccinated against all basic antigens (BCG, OPV, DPT-HepB-Hib and Measles Rubella1) and 52 percent were fully vaccinated according to the national schedule. Four percent of children did not receive any vaccines.

At the provincial level, Health Directorate plans, executes and monitors various immunization activities. The Provincial Health Logistic Management Centre (PHLMC) executes the logistic plan including storage and distribution of vaccine and vaccine related commodities including cold-chain management. In line with the national target to eliminate Measles and Rubella (MR) by 2023, province government is working intensively to prevent community transmission of MR and associated disabilities and deaths. The MR being one of the most infectious diseases and to achieve the target of elimination will require very high routine immunization coverage of more than 95% of both first and second routine immunization dose of MR vaccine from ward level to municipal level and district level.

Currently, there are 13 antigens such as BCG, DPT-HepB-Hib (Penta), PCV, OPV (bOPV), fIPV, Measles and Rubella (MR), ROTA, JE, TCV for children and Td for pregnant has been included in the national immunization schedule, which is provided through planned 3173 EPI-Sessions EPI clinics-2965. Government of Nepal procures BCG, OPV, Td, JE, MR first dose and co-finances to GAVI supported vaccines DPT-HepB-Hib (Penta), PCV, TCV and MR second dose. With the aim of reaching every child in this province, activities like full immunization declaration, improving micro-planning for immunization have also been carried out. From this current fiscal year HPV vaccine is also being administered by targeting adolescent girls in a phase-wise manner.

Recently, the Family Welfare Division (FWD), Department of Health Services, Ministry of Health and Population is working out to develop the National Immunization Strategy (NIS) 2030. The NIS 2030 will be guided by national policies, guidelines, and strategies including Nepal Health Sector Strategy 2030; for upcoming National Immunization Program in line with the Immunization Agenda 2030 where province level is also contributing to provide the input through consultative meeting which was organized by the FWD.

#### **2.1.2 Target Population**

- Under-1 Year Children for BCG, DPT-HepB-Hib, OPV, fIPV, PCV and Measles/ Rubella1 (MR1) vaccine: **93431**
- 12-23 Months Children for JE, TCV and MR2: **93529**
- Total Expected Pregnancy for Tetanus and Diphtheria containing (Td) vaccine: **117632**.
- Total Expected Live Birth: **92683**
- Population under 5-Years for ARI/CDD/Nutrition:**470407**

### 2.1.3 Major Achievements

- As per the national plan, micro-planning activities were completed by the district level, health directorate did facilitate, monitor, and follow,
- Health Directorate facilitated, and managed Measles outbreak thorough outbreak response immunization in 4 districts (i.e., Banke, Bardiya, Dang, and Arghakhanchi).
- Planned, secured all the vaccine and logistics requirement, and proper distribution, and stock management at all levels,
- Full immunization sustainability campaign implemented in all districts where health directorate team conducted joint monitoring and followed up during the time of immunization month,
- Updated inventory of cold chain equipment for the immunization supply chain system,
- Covid-19 vaccination was implemented in line with the family welfare division' new deployment vaccination plan,
- The coverage of DPT-Hep B-Hib1 and3 has increased,

### 2.1.4 National Immunization Schedule

*Table 2.1.1: National Immunization Schedule*

SN	Timing	Number of Doses (Recommended)	Vaccinations
1	At birth OR on first contact with health institution	1	BCG
2	6, 10, and 14 weeks of age	3	OPV
3	6, 10, and 14 weeks of age	3	DPT-Hep B-Hib
4	14 weeks and 9 months	2	fIPV
5	6, 14 weeks and 9 months of age	3	PCV
6	6,10 weeks	2	Rota
7	MR1 at 9 months and MR2 at 15 months of age	2	Measles-Rubella
8	Pregnant women: 2 doses of Td one month apart in first pregnancy, and 1 dose in each subsequent pregnancy	2	Td
9	12 months of age	1	JE
10	15 months of age	1	TCV

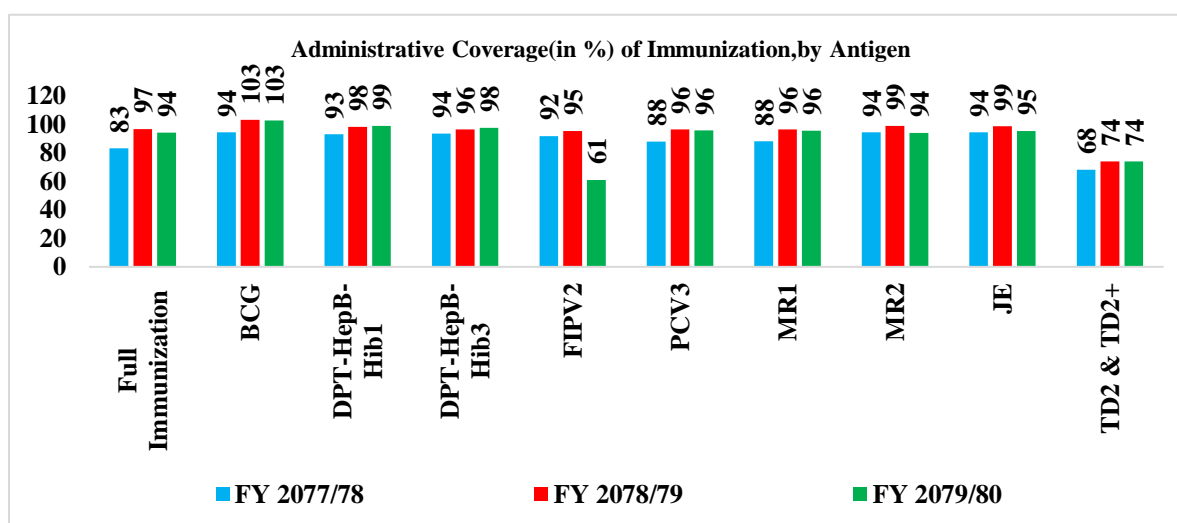
### 2.1.5 Immunization Status of Lumbini Province

## Immunization coverage

*Table 2.1.2: Immunization coverage by antigens doses FY 2079-80*

Antigens	Target population	Target	Achievement	Percent achieved
BCG	Under 1 Year	93431	95960	103
Rota-1 <sup>st</sup>	Under 1 Year	93431	91919	98
Rota-2 <sup>nd</sup>	Under 1 Year	93431	90959	97
DPT-HepB-Hib-1 <sup>st</sup>	Under 1 Year	93431	92251	99
DPT-HepB-Hib-2 <sup>nd</sup>	Under 1 Year	93431	91142	98
DPT-HepB-Hib-3 <sup>rd</sup>	Under 1 Year	93431	91054	97
OPV-1 <sup>st</sup>	Under 1 Year	93431	92231	99
OPV-2 <sup>nd</sup>	Under 1 Year	93431	91136	98
OPV-3 <sup>rd</sup>	Under 1 Year	93431	91026	97
PCV-1 <sup>st</sup>	Under 1 Year	93431	92228	99
PCV-2 <sup>nd</sup>	Under 1 Year	93431	91065	97
PCV-3 <sup>rd</sup>	Under 1 Year	93431	89309	96
FIPV-1 <sup>st</sup>	Under 1 Year	93431	79701	85
FIPV-2 <sup>nd</sup>	Under 1 Year	93431	56810	61
Measles/Rubella 1 <sup>st</sup>	Under 1 Year	93431	89192	95
Measles/Rubella 2 <sup>nd</sup>	12-23 months	93529	87820	94
Japanese Encephalitis-JE	12-23 months	93529	89075	95
Typhoid Conjugate Vaccine -TCV	12-23 months	93529	86181	92
TD (Pregnant Women) 2 & 2+	Expected live birth	92683	86817	94

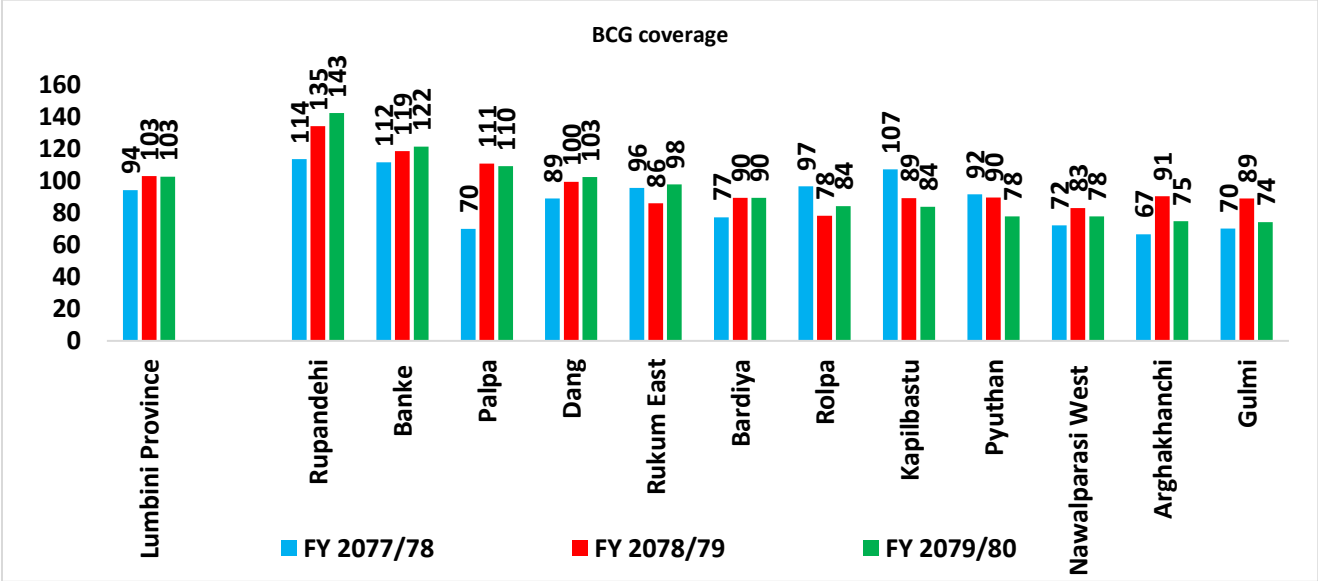
*Figure 2.1.1.: Trend of Immunization Coverage in Lumbini Province*



The bar graph (Fig.2.1.1) presents the trend of vaccination coverage by antigen in the province level. It has maintained the national recommended target of achieving >90 percent vaccination coverage except Td. The coverage of BCG immunization increased from 94 percent in FY 2077/78

to 103 percent in FY 2079/80. Similarity, the coverage with the first dose of DPT-Hep B-Hib1 increased steadily during the last 3 fiscal years (from 93 percent to 99 percent) whilst the number of receiving a second dose of MR2 vaccine declined from 99 percent in FY 2078/79 to 94 percent in FY 2079/80. Also, the coverage for MR2 was 94 percent which remained below the target 95 percent compared to last fiscal years. There are not any changes revealed in the coverage for PCV and BCG compared to last fiscal year. Likewise, this graphs also indicates the fully immunized coverage of children which was 94 percent in the FY 2079/80.

*Figure 2.1.2: Provincial and District Trend in BCG Coverage*



The bar graph (Figure 2.1.2) presents the trend of BCG vaccination coverage of districts by comparing with provincial status. Provincial coverage of BCG inoculation raised from 92 percent in FY 2077/78 to 103 percent in FY 2079/80. However, 5 of the 12 districts where the coverage dropped in this FY 2079/80, in comparison to the last fiscal year 2078/79. If we look at the progress of BCG by district, Pyuthan, Nawalparasi, Arghakhanchi and Gulmi recorded the lowest coverage 78 percent to 74 percent in FY 2079/80 compared to last fiscal year’ 90 percent to 83 percent coverage respectively, in the last FY 2078/79. The figure also indicates that there are only five districts such as Rupandehi, Banke, Palpa, Dang and Rukum East who maintained target of achieving >95% vaccination coverage for BCG, in this FY2079/80.

Figure 2.1.3: Provincial and Status of MR2 Coverage

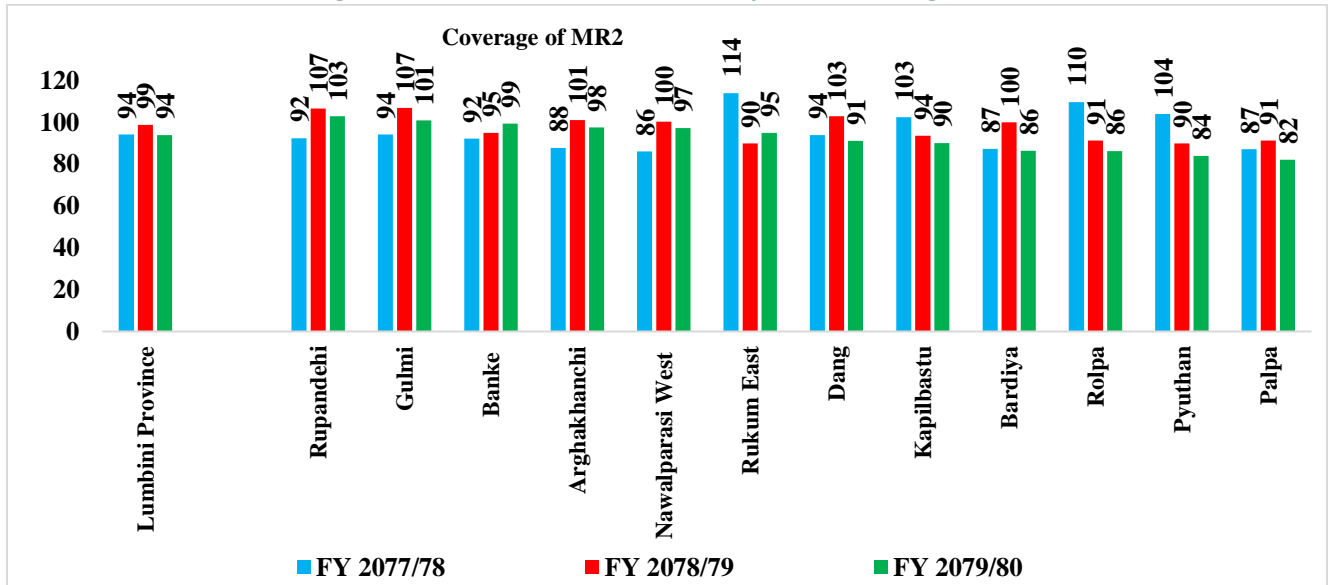
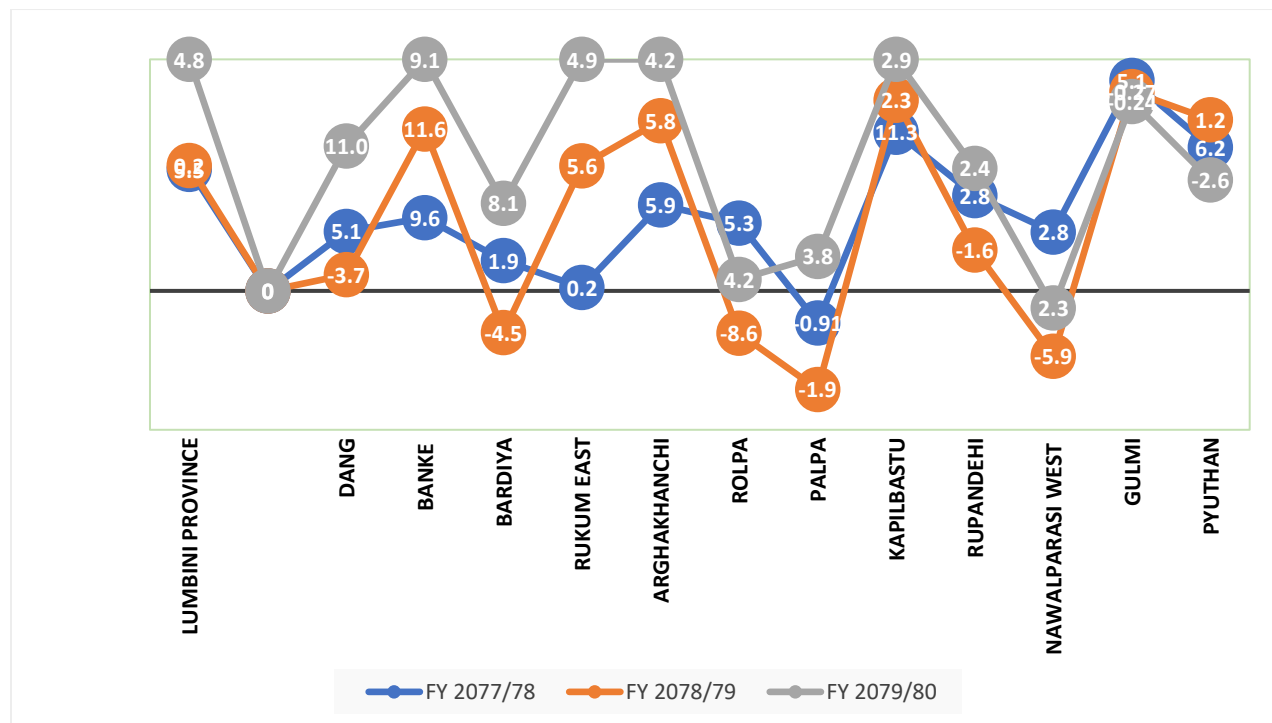


Figure 2.1.3: shows the MR2 coverage trend over the last three fiscal years. At province level, coverage for MR2 decreased steadily from 99 percent in FY 2078/79 to 94 percent in FY 2079/80. Similarly, most of the districts (10 out of 12) where the coverage of MR2 declined, except Banke and Rukum East. In Banke, the graph clearly indicates that MR2 coverage improved by over 4 percent over the last 3 fiscal years. Likewise, the immunization status remarkably improved by exceeding over 95 percent in FY 2079/80 compared to 90 percent in last FY 2078/79 in Rukum East. The graphs also reveals that a fluctuate trend in the coverage specifically in Rupandehi, Gulmi, Arghakhanchi, Nawalparasi West, Dang, Kapilbastu, Bardiya, Rolpa, Pyuthan and Palpa district compared to progress of MR2 coverage between FY 2079/80 and FY 2077/78.

## Dropout rates of vaccination

Figure 2.1.4: District and Provincial Trends of Dropout Rate: DPT-HepB-Hib1 VS MR2



The lines graph (Figure 2.1.4) compares in dropout rate between DPT-HepB Hib1 and MR2 at both province and district level, in FY 2079/80. Overall, the dropout rate increased at province level in this FY 2079/80 compared to previous FY 2078/79. When looking at dropout rates by district, Banke, Arghakhanchi, RukumEast where the dropout rate decreased slightly except Bardiya and Dang, and Rolpa. Dang district has the highest dropout rates (11 percent) between DPT-HepB Hib1 and MR2 in FY 2079/80. And the dropout rate between DPT-HepB Hib1 and MR2 was recorded to be negative (-2.6) in pyuthan district in FY 2079/80.

### Access and Utilization of Immunization Services

Immunization program evaluates status of districts by accessibility and utilization of immunization services. For this, districts are categorized in 1 to 4 categories; based on DPT-HepB-Hib1 coverage and dropout rate of DPT-HepB-Hib1 vs MR2 to know the accessibility and utilization of immunization services respectively.

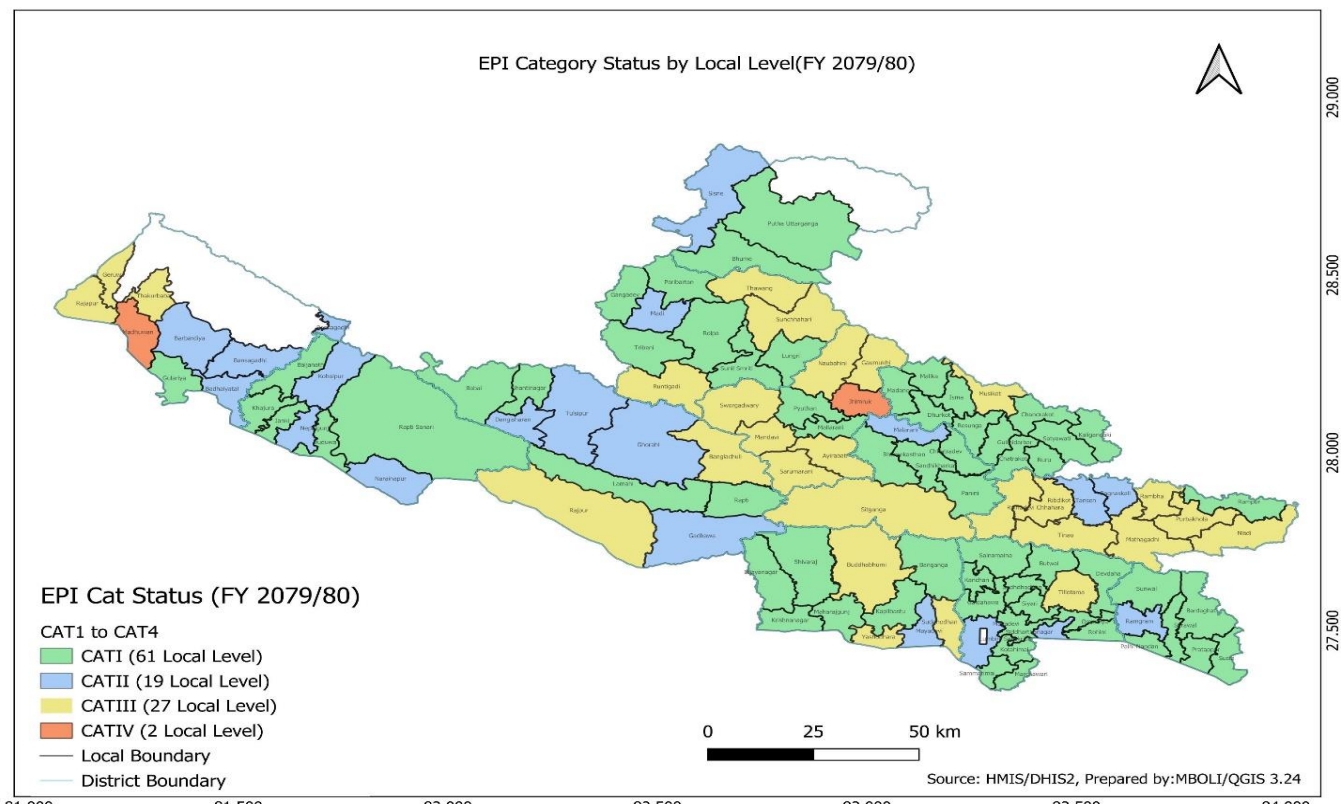
### Access and Utilization of Immunization Services

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*Table 2.1.3: Immunization Categorization by district*

Cat I Coverage $\geq$ 90% Dropout < 10%	Cat II Coverage $\geq$ 90% Dropout $\geq$ 10%	Cat III Coverage < 90% Dropout <10%	Cat IV Coverage <90% Dropout $\geq$ 10%
Rukum East, Gulmi, Arghakhanchi, Rolpa, Rupandehi, Nawalparasi West, Kapilbastu, Banke, Bardiya	Dang	Pyuthan Palpa	

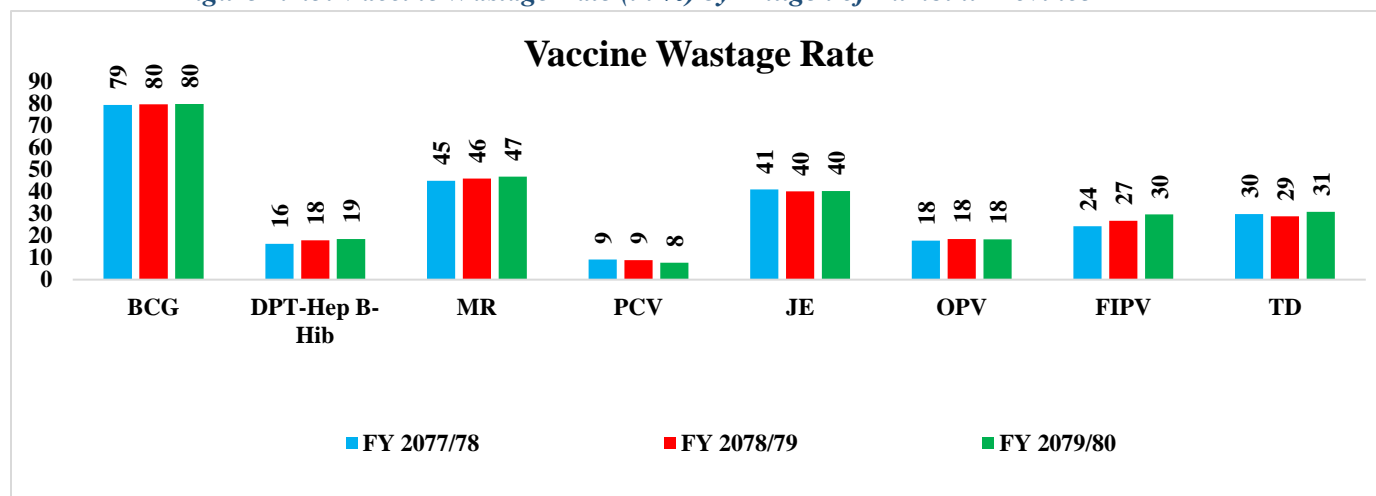
Table 2.1.3: clearly highlights that 9 out of 12 districts are in category-I (good access, good utilization), Dang district in Cat II, Pyuthan and Palpa districts in Cat III (poor access and utilization), whereas there is no district in category-IV (poor access, poor utilization). Nevertheless, problem in both access and service utilization of immunization still exists within the province. The planning of immunization service should be strengthened based on the HHs level' line-listed information, and participatory approach at community level: identifying gap of target and coverage through DQSA which can help to reduce the equity gaps in terms of access to EPI service. Thus, awareness on importance of vaccine, effective communication for immunization, regular supervision of outreach session, track of missed children in hard-to-reach population are further needed to address the access and utilization gaps. The Map 1 presents the categorization of Local Level Government according to immunization coverage and dropout. Map 1: Categorization of district according to immunization coverage and drop out.



As reflected in the above Map, 2 out of 109 Local Level Governance (LLGs) fall in Category-IV (poor access, poor utilization), while 27 LLG are in Category III, 19 LLG are in Category II and 61 are in Category-I. This indicates that there is a need of effective microplanning, monitoring and specific communication interventions to increase the access and utilization of immunization services at local levels.

### Vaccine Wastage Rate

Figure 2.1.5: Vaccine Wastage Rate (in %) by Antigen of Lumbini Province



The figure 2.1.5 indicates the vaccine wastage rate for several vaccine (i.e., BCG, JE, MR, bOPV, fIPV, DPT-HepB-Hib, PCV and Td) which was implemented by the program for last three fiscal years. Overall, vaccine wastage for almost all vaccine were higher (BCG, JE, MR, fIPV, DPT-HepB-Hib, Td) except PCV in FY 2079/80 in compared to last fiscal years. The wastage rate for BCG increased slightly from 79 percent in FY 2077/78 to just over 80 percent in FY 2079/80.

*Note: Vaccine wastage is an integral part of the vaccine logistics. The provincial government has recommended all districts to apply the national standard of vaccine wastage. Wastage rates are projected to be greater for all reconstituted vaccines (BCG, MR, and JE) that must be discarded within 6 hours (1 hour only for JE) or at the completion of the immunization session, whichever comes first. In Nepal, 'one vial per session' is utilized for BCG, MR, and JE vaccines, and because hills and mountain districts have small session sizes in some specific places due to sparse population distribution, greater wastage rates are estimated.*

#### National Benchmark for Vaccine Wastage

Name of Antigen	BCG	JE	MR	DPT-HepB-Hib	PCV	fIPV	bOPV	Rota	Td
National standard	50%	40%	33%	15%	10%	10%	15%	5%	15%

Based on the observations, physical damage, label loss, incomplete use of the nominal number of doses in multi-dose vials, expiration before use, and not maintaining the temperature for both heat and freeze sensitive vaccines are all common reasons of higher vaccine wastage.

## 2.1.6 Outbreak Response Immunization (ORI) Campaign against Measles

The mass vaccination campaign against Measles and Rubella was conducted in 3 districts (Banke, Dang and Dang). Banke District where the ORI campaign was implemented in 08-09-2079, and Bardiya and Dang in 02-03/2080 respectively. The campaign was facilitated and guided by the Health Directorate. The target population of Mass MR campaign was 6 months to below 15 years children.

*Table 2.1.4: Progress of Measles and Rubella Campaign (MR-ORI)*

Name of District	Target (6 Months to <15 Yrs.)	Achievement	Total Coverage (in %)
Banke	168402	173554	103%
Dang	203612	200645	98.5%
Bardiya	114510	114450	99.9%
Arghakhanchi (Sitganga Palika)	2305	2286	99.17%
	488829	490935	100%

Table 2.1.4 shows the vaccination coverage status of Measles/Rubella of different districts. A total of 488829 target was set for the MR-ORI for 4 places as shown in the table mentioned above. A total of 490935 children (>99% coverage) aged 6 months to below 15 years were immunized against Measles and Rubella during this ORI campaign in FY 2079/80. Among 4 districts, all districts achieved > 95% coverage in this mass ORI campaign.

## 2.1.7 Declaration of Full Immunization District

One of the best initiatives in the immunization program is the declaration of Ward, LLG, District, and ultimately the country as fully immunized. This initiative began with the goal of reaching every child and securing ownership and commitments for immunization from the local government bodies. UNICEF, WHO and WaterAid has been providing technical support to declare the fully immunized province and its sustainability, jointly with health Directorate team from the beginning. Lumbini Province was declared as fully immunization province in 31/3/79/80. As per full immunization sustainability guideline, all districts have been implementing guideline to ensure FID sustainability of fiscal year 79/80. The remaining districts Arghakhanchi, Kapilvastu and Dang have planned to declare FID sustainability at district level soon.

*Table 2.1.5: Full Immunization Declared and Sustained Status in Lumbini*

District	Fully Immunized District for the 1 <sup>st</sup> time (F/Y in BS)	FID Sustained Status (/F/Y in BS)	FID Sustained Date (until)/F/Y in BS)
Palpa	2070/11/13	2079/03/30	2080/03/28
Nawalparasi	2070/11/14	2079/4//10	2080/03/30
Arghakhanchi	2071/8/13	2079/3/32	2080/08/05
Gulmi	2071/12/30	2079/05/12	2080/03/29
Pyuthan	2073/09/15	2079/03/30	2080/03/26
Rupandehi	2073/10/21	2079/04/27	2080/03/31
Dang	2074/09/23	2079/03/30	Planned

District	Fully Immunized District for the 1 <sup>st</sup> time (F/Y in BS)	FID Sustained Status (/F/Y in BS)	FID Sustained Date (until)/F/Y in BS)
Rolpa	2075/03/25	2079/03/29	2080/03/30
Banke	2077/12/06	2079/05/12	2080/03/19
Kapilvastu	2078/003/23	2079/03/22	Planned
Bardiya	2078/03/31	2079/03/31	2080/03/31
RukumEast	2078/06/13	2079/03/32	2080/03/31

### 2.1.8 Vaccine Preventable Disease Surveillance:

Surveillance for vaccine-preventable diseases (VPDs) provides continuous, long-term evidence-based information that allows for the timely detection and response to VPD and the monitoring of impact of provincial and national immunization program. WHO-IPD provides technical assistance to provincial, district and municipality levels in all matters related to VPD surveillance and immunization. Surveillance Medical Officer facilitates in capacity building and sensitization of government and private sector staff in VPD surveillance and immunization by carrying out active case search, data analysis and reporting and other support as needed.

*Table 2.1.6: VPD surveillance and measles Positive Cases from Lumbini Province (2023)*

District	Non-Polio AFP cases		Total NMNR		Total measles positive cases	NNT
	Expected	Detected	Expected	Detected		
Arghakanchi	1	1	4	8	4	0
Banke	4	4	13	8	250	0
Bardiya	3	7	10	48	53	0
Dang	4	2	14	13	31	0
Gulmi	3	0	5	4	0	0
Kapilbastu	5	3	15	15	9	0
Nawalparasi-W	2	2	8	10	0	0
Palpa	2	0	5	8	0	0
Pyuthan	2	1	5	4	0	0
Rolpa	2	1	5	9	0	0
Rukum East	1	1	2	13	0	0
Rupandehi	6	3	23	13	3	0
Lumbini Province	35	25	109	153	350	0

Source: WHO-2023

AFP: Acute Flaccid Paralysis, (Minimum Indicator Rate= 1/50,000 <15 years); NMNR: Non measles non rubella, Minimum Indicator Rate: 1/50,000 (no age limit); Measles +ve cases includes Lab Confirmed + Epidemiology Confirmed cases; NNT: Neonatal Tetanus. There was a total of 6 JE positive cases, in Lumbini province, in 2023.

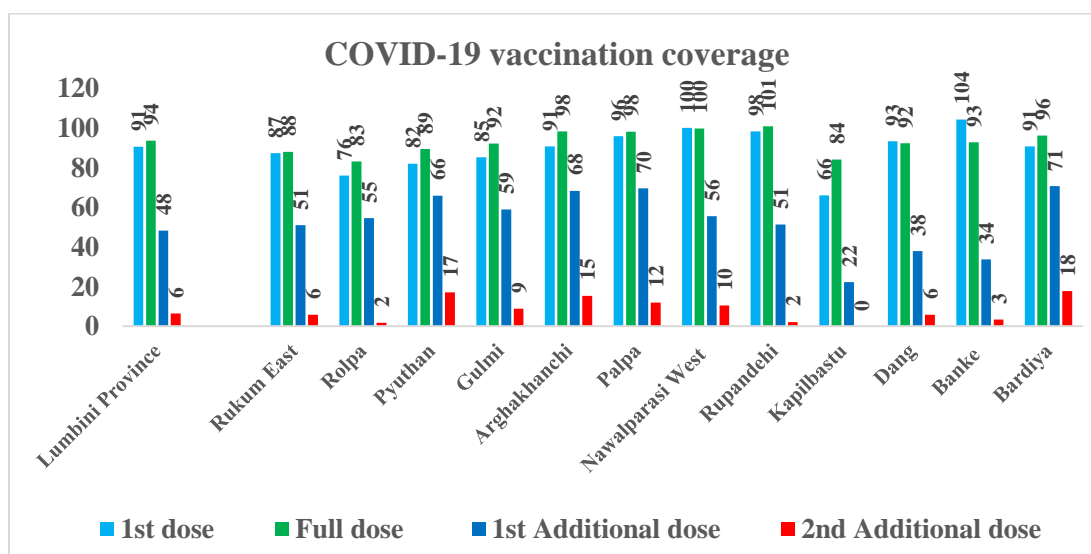
*Table 2.1.7: Vaccine Preventable disease reporting units*

District	Total no. of RU	Total Palika	Palika with at least one RU	Palika without RU
Arghakanchi	13	6	5	1
Banke	18	8	7	1
Bardiya	17	8	8	0
Dang	9	10	7	3
Gulmi	14	12	9	3
Kapilbastu	13	10	9	1
Nawalparasi-W	8	7	5	2
Palpa	15	10	8	2
Pyuthan	8	9	8	1
Rolpa	3	10	3	7
Rukum East	4	3	3	0
Rupandehi	18	16	15	1
Lumbini Province	140	109	87	22

Source: WHO-2023

Reporting Units (RU) include Government hospitals, Private medical colleges, and hospitals. Provincial non-Polio Acute Flaccid Paralysis (AFP) rate is 1.68 per 100,000 under 15 years population. (Expected  $\geq 2$  per 100,000 target population). Ten districts detected one or more Non-polio AFP cases. All (12) districts have met the measles surveillance standard by reporting the expected Non-Measles Non-Rubella (discarded) rate of 2.93 per 100,000 total population. The province has maintained the elimination status of Neonatal Tetanus (NNT). More than 79% of the Palika have at least one reporting unit. These units report the weekly reported cases of AFP, Suspected Measles and Rubella, Acute Encephalitis syndrome, and Neonatal tetanus. These are reported as a part of surveillance for Polio, Measles, Japanese Encephalitis and NNT.

*Figure 2.1.6: COVID-19 Vaccination Campaign*



Source: FWD, 2080

**Figure 2.1.7** shows coverage of COVID-19 vaccination among target total target population > 12 years by district. The first and second dose coverage of COVID-19, among the total population was just above 91 percent and 94 percent respectively whilst the coverage for the booster dose (first additional dose) was 48 percent. Likewise, the 2<sup>nd</sup> booster dose (2<sup>nd</sup> additional dose) vaccination status is just 6 percent at province level. However, province has been providing vaccination service in line with the FWD's policy and considering the WHO-SAGE the recommended risk groups in line with country precedence.

**Table 2.1.8: Supply Status of Vaccine for the COVID-19 Vaccination, PHLMC, Lumbini**

District	Antigen Wise Covid-19 vaccine Supplied (in Dose/s)								Total Vaccine Issued Dose
	Covishield Vaccine Issued Dose	Astrazeneca Vaccine Issued Dose	Total Vero Cell Vaccine Issued Dose	Janssen Vaccine Issued Dose	Moderna Vaccine Dose	Adult Pfizer Vaccine Issued Dose	Adult Pfizer Bivalent Issued Dose	Pediatric Pfizer Vaccine Issued Dose (5-11 Yrs)	
Rukum East	37450	23540	20611	3780	13800	0	8040	17000	124221
Rolpa	47810	56520	178115	31600	61510	26910	10200	71400	484065
Pyuthan	59910	149160	86870	26550	77070	0	41700	77200	518460
Gulmi	145250	137150	83790	25800	90520	29250	42960	73500	628220
Arghakhachi	73870	43920	155099	16000	45100	14040	33240	52800	434069
Palpa	63980	73670	248188	19500	50140	25740	32520	63800	577538
Nawalparasi (W)	244510	132470	170813	39600	98920	35100	45600	97200	864213
Rupendehi	113030	232200	1077661	127670	367660	143220	46200	288400	2396041
Kapilvastu	219430	130750	301600	108750	160570	0	21240	189400	1131740
Dang	222280	135450	445311	86000	189330	3648	65640	198200	1345859
Banke	262330	67950	371697	61750	134800	43110	70560	162800	1174997
Bardiya	260150	173700	180972	41000	148780	52650	80340	118300	1055892
Total Issued	1750000	1356480	3320727	588000	1438200	373668	498240	1410000	10735315
PHLMC Received	1750000	1356480	3336678	588000	1438200	373668	498240	1410000	10751266
PHLMC Stock	0	0	15951	0	0	0	0	0	15951

### 2.1.9 Immunization Supply Chain System

The Province Health Logistic Management Center (PHLMC) is the In-charge of the overall management of immunization supply chain as well as cold chain equipment optimization at the provincial level. UNICEF provides technical assistance for PHLMC for the immunization supply

chain and cold-chain system. The Cold Chain Optimization Platform (CCEOP) has been implementing to contribute to comprehensive Multi-Year Plan (cMYP) with the following objectives:

- Accelerate upgrading of existing equipment through the deployment of higher performing, innovative devices to health facilities.
- Extend appropriate cold chain devices into health facilities which have no equipment.
- Make supply chains more efficient and effective through the use of equipment better adapted to needs, and Cold chain equipment (CCE) is an essential component of the supply chains that ensure lifesaving vaccines reach every child.

**Table 2.1.9: Capacity of Cold chain Space at Provincial Vaccine Store, Lumbini Province**

S. N	Supply Chain Levels	WIC (+2 to +8° C)		ILR (+2 to +8° C)		DF (-15 to -25° C)		IPF (-15 to -25° C)		ILR (+2 to +8° C)	Volume consumed for RI (+2 to +8° C)
		Number	CC Volume (Ltr)	Number	CC Volume (Ltr)	Number	CC Volume (Ltr)	Number	CC Volume (Ltr)	Available CC Volume (Ltr)	
1	PHLMC Butwal	5	31250	6	980	2	666	2	293	21271.8	4483
2	Rukum East	0	0	3	244.5	1	258	1	148	161.37	32
3	Rolpa	0	0	5	789.5	2	458	1	145	521.07	125
4	Pyuthan	0	0	5	895.5	2	458	0	0	591.03	141
5	Gulmi	0	0	4	856	3	608.5	2	290	564.96	175
6	Arghakanchi	0	0	4	827	1	282	2	290	545.82	108
7	Palpa	0	0	5	760	2	564	0	0	501.6	158
8	Nawalparasi West	0	0	5	760	2	482	2	290	501.6	157
9	Rupandehi	1	3700	5	766	3	608.5	2	290	2947.56	432
10	Kapilvastu	0	0	5	856	3	740	1	145	564.96	290
11	Dang	1	3700	6	847	2	482	1	145	3001.02	275
12	Banke	0	0	5	997	3	608.5	0	0	658.02	249
13	Bardiya	0	0	7	1192	2	425	1	145	786.72	203
	Total Capacity	3	11250	65	10770.5	28	6640.5	15	2181	32617.53	6828

Table:2.1.9 presents the status of storing capacity of province. A total of 32617.5-liter capacity with ILR, and 6640.5-liter capacity with DF is available. Similarly, 2118-liter capacity is with Ice-Pack Fridge (IPF).

**Table 2.1.10: Cold chain capacity below district level**

S.N.	Supply Chain Levels	Sub-Center	Supply Center	ILR (+2 to +8° C)		DF (-15 to -25° C)	
		Number of Sites	Number of Sites	Number	CC in Litre	Number	CC Volume (Ltr)
1	Rukum East	0	3	4	219.5	1	520
2	Rolpa	4	2	9	689.5	3	361.8
3	Pyuthan	0	9	5	305	5	646
4	Gulmi	2	10	9	696	8	844
5	Arghakanchi	3	3	7	449	6	582

S.N.	Supply Chain Levels	Sub-Center	Supply Center	ILR (+2 to +8° C)		DF (-15 to -25° C)	
		Number of Sites	Number of Sites	Number	CC in Litre	Number	CC Volume (Ltr)
6	Palpa	4	2	8	784	5	647
7	Nawalparasi West	0	6	5	583	3	579
8	Rupandehi	4	13	21	1866	14	1592.5
9	Kapilvastu	3	7	17	1518	10	1431
10	Dang	2	5	8	667	6	1088
11	Banke	2	2	6	471	5	882
12	Bardiya	1	7	13	1119	7	1037
	<b>Total Capacity</b>	<b>25</b>	<b>69</b>	<b>112</b>	<b>9367</b>	<b>73</b>	<b>10210.3</b>

The table 2.1.10 indicates the total capacity of cold chain volume of both Ice-lined refrigerator/s and Deep Freezers at district level.

### Summary of Progress of Implemented Cold Chain Equipment Optimization Plate form:

Year	Number of Cold Chain Equipment Supplied
2019 CCEOP-1 <sup>st</sup> Phase	35 (21 ILR, 14 DF) in 21 sites covering 20 LLG.
2021 CCEOP 2 <sup>nd</sup> Phase	69 (34 ILR, 31 DF, 4 Solar Refrigerators) in 48 sites covering 46 LLG.
2024 CCEOP 3 <sup>rd</sup> & 4 <sup>th</sup> Phase	CCE approved for 12 DVS (2 ILR & 1 DF in each HO except Rupandehi-1 DF, Dang-1 DF only) and 49 CCE (23 ILR, 2 Solar, 24 DF) in 35 sites of 35 LLG.
Updated Cold chain equipment's inventory in F/Y 2079/80:	
Out of 398 equipment, 333 are functional, 7 cold chain equipment needs to repair, and 58 are non-functional.	

Note: ILR: Ice-lined Refrigerator, DF: Deep Freezer, CCE: Cold Chain Equipment

### 2.1.10 Integration of Hygiene Promotion through Routine Immunization Program

Hygiene promotion through routine immunization program is being implemented across the country through the national immunization program, one of the government priorities programs. Vaccination sessions are being conducted on monthly/ weekly/ daily basis in more than 16,000 vaccination centers across the country. It has been more than three years since the hygiene promotion is integrated at national scale and conducted through vaccination session and this will be continued through the immunization program on a routine basis. Following are the key reflections and learnings of the program:

- The hygiene promotion refresher training served as a valuable platform to introduce the new hygiene promotion strategy and urban hygiene promotion session package. However, there have been challenges in implementing the new package at the field level due to its unavailability. The lengthy procurement process hinders the timely delivery of the new package, posing a challenge. Nevertheless, the management of the package through Water Aid Nepal (WAN) for training purposes was highly effective, ensuring that each health office, local level has at least hygiene promotion packages available as a point of reference.

- Out of the 36778 immunization sessions conducted in FY 2079/80 among them, only 34020 hygiene promotion sessions had conducted and still 2758 of the immunization sites did not include hygiene promotion sessions in their plans. Notably, a significant number of unplanned hygiene promotion sessions occurred in urban areas where immunizations take place on a daily basis, particularly in private hospitals lacking the infrastructure to accommodate of mothers. It is crucial to endorse different immunization and hygiene promotion strategies specifically targeting these areas and addressing the mindset of affluent mothers. Options such as digitalization and home-based record cards could be considered to address these challenges.
- The impact of social media is significant: When Health facilities share their hygiene promotion sessions on social media, it influences other health facilities and health workers to conduct similar sessions.
- Refresher training and regular monitoring/onsite coaching support health workers in conducting hygiene promotion sessions smoothly at the immunization clinics. The participants' self-demonstration during the training made it a highly effective and interactive learning experience. Following challenges were observed for the smooth implementation of the hygiene integration in immunization:
  - In urban areas number of mothers/guardians are quite high and over-crowded, due to which health workers find difficulties to conduct the session. Urban strategy has been developed to address.
  - Hygiene promotion materials at the Health Facility/immunization site running out of stock – timely replenishment is required for which USAID and Nepal Government provisioned budget for the reproduction of the package this FY. Government had already started the procurement process, with the support of WAN strategy and revised package has been produced and supplied to all districts for the refresher training purpose.
  - Lack of local level ownership on hygiene behavioral change activities, local elected bodies focus more on hardware activities. Local body sensitization is required to internalize the hygiene agenda. In order to address the above issues, Family Welfare Division has allocated hygiene integration activities in their Annual Work Plan and Budget (AWPB) programs of the federal, province, district and local level for upcoming Fiscal Year.

*Table 2.1.11: Hygiene Promotion Session Implementation Status: FY 2079/80*

<i>Province &amp; district name</i>	<i>Hygiene sessions planned</i>	<i>Hygiene sessions conducted</i>	<i>People benefited from hygiene session</i>	<i>Immunization Sessions-Planned</i>	<i>Immunization Sessions-Conducted</i>	<i>Variation between immunization sessions vs hygiene sessions</i>
<b>Lumbini Province</b>	<b>35675</b>	<b>34020</b>	<b>569968</b>	<b>37974</b>	<b>36778</b>	<b>2758</b>
<b>Rukum East</b>	654	605	9434	660	611	6
<b>Rolpa</b>	2687	2638	36055	2690	2666	28
<b>Pyuthan</b>	3228	2892	30074	3279	3013	121
<b>Gulmi</b>	3878	3725	36145	4027	3867	142
<b>Arghakhanchi</b>	2260	2053	22462	2250	2041	-12
<b>Palpa</b>	3344	3294	40209	3418	3418	124
<b>Nawalparasi West</b>	2219	2231	43807	2295	2274	43

<i>Province &amp; district name</i>	<i>Hygiene sessions planned</i>	<i>Hygiene sessions conducted</i>	<i>People benefited from hygiene session</i>	<i>Immunization Sessions-Planned</i>	<i>Immunization Sessions-Conducted</i>	<i>Variation between immunization sessions vs hygiene sessions</i>
<b>Rupandehi</b>	3954	3943	103605	4411	4392	449
<b>Kapilbastu</b>	5278	5064	90675	5376	5218	154
<b>Dang</b>	2306	2099	46921	2975	2808	709
<b>Banke</b>	3035	2929	60070	3761	3673	744
<b>Bardiya</b>	2832	2547	50511	2832	2797	250

## Monthly Plan for Routine Immunization/Hygiene Promotion Session by District

*Table 2.1.12: Immunization/Hygiene Promotion Session Administration Plan by District*

<i>Name of District</i>	<i>First Phase /Date</i>	<i>Second Phase/Date</i>	<i>Third Phase 3/Date</i>
Rukum East	17 to 23	-	-
Rolpa	15 to 20	-	-
Pyuthan	2 to 6	9 to 13	-
Gulmi	10 to 14	16 to 20	-
Arghakhanchi	18 to 22	-	-
Palpa	8 to 14	16 to 22	-
Nawalparasi West	5 to 10	15 to 20	-
Rupandehi	10 to 14	19 to 23	-
Kapilvastu	2 to 6	10 to 14	17 to 21
Dang	10 to 14	19 to 23	-
Banke	6 to 11	19 to 26	-
Bardiya	2 to 6	19 to 23	-
<b>Province:</b>	<b>From 2 to 26 Day/ every month</b>		

### 2.1.11 Best Practices, New Initiatives and Lesson Learnt

- Guided to facilitate and manage Outbreak Response Immunization against Measles outbreak,
- Mobilized team and partners in Nepalgunj Municipality for identifying zero-dose children with the help of UNICEF, WHO and local organizations,
- Updated inventory list of cold chain equipment of all districts of this province,
- Maintained repairable cold chain equipment by doing regular follow-up,
- Intensified monitoring activities for routine immunization, SIAs and Covid-19 vaccination,
- Offered regular session to provide COVID-19 vaccination by apply integrated intervention,
- Conducted regular and joint and integrated monitoring for vaccine sub-centres, immunization session, full immunization declaration process (2541 dropped out children were searched and mainstreamed into routine immunization service across the province),
- Joint planning, regular surveillance, monitoring/supervision for EPI program (i.e., series of meeting with religious groups, school families, local government, mother groups, FCHVs and political representative UNICEF, WHO and supporting partners,

- Strengthened VPD surveillance, EPI Sessions were monitored jointly with Water Aid,
- Onsite coaching on site, and remotely followed up by HMIS reporting of EPI services.

**Lesson Learnt from the Intervention (Strengthening Routine Immunization Service during Post-Measles Outbreak Period)**

A focused intervention on search initiation for zero-dose/drop out children was implemented during the post-Measles Outbreak period, in Nepalgunj, Banke. For this, ward- level meeting was organized with religious leaders, FCHVS, elected representative, and health in-charge/health workers before starting the household survey for the full immunization. The initiation was led by the health section of Nepalgunj Municipality. For these activities, a technical and financial support was provided by the UNICEF. Detail orientation was given to the health workers, and accountability as also assigned for religious and elected leader to monitor household survey effectively while being implemented. In addition, during the FID month, social mobilization was intensified, and monitored implemented activities jointly by Health Directorate, Health Office, Banke, UNICEF and WHO. From this activity, a total of **271 Children (zero-dose)** aged under 59 months were searched, identified, and immunized through joint efforts.

**Challenges:** to visit household visit in large and densely populated city areas household, and difficult to convince vaccine hesitancy family members.

**Lesson Learnt:**

- More ownership is required at community level to strengthen immunization coverage,
- Strengthen communication, social mobilization for service utilization,
- Conduct regular household survey every year during the FID month,
- Routine follow -up of data, and timely analysis, and intensify session monitoring work.
- Leading monthly community meetings by religious leaders/elected leaders found easy to convince vaccine hesitancy people' households in the community. Therefore, a community engagement is essential in such a hard-to-reach/areas; to strengthen immunization program.

### Problems and Recommendation

Problems/ Constraints	Recommendation for the improvement	Responsibility
Outbreak of Measles (Banke, Bardiya, Dang & Arghakhanchi)	- Need to strengthen VPD surveillance and routine immunization program -Should be prioritized, mapped on high-risk places based on surveillance	District Palikas
Vaccine hesitancy people in certain communities	Need to promote/intensify social behavior change interventions	NHEICC/FWD HD District/ Palika
Difficulties in reaching zero-dose children of specific areas,	- Need to strong advocacy, community engagement, and awareness activities on immunization proram, -Ensure house-to-house survey	Palika/Health Facility
Congested warehouse building for the storage at province level	-Vaccine storage building including warehouse at provincial level as per EVM standard should be built up.	Province/MoH PHLMC Federal MoHP
Some old cold chain equipment's auctioning process from the HF's	-Need to initiate an auctioning process	MoH, PHLMC Federal/MoHP
Infrastructure/maintain quality of vaccine management as per EVM standard	-Need to build district vaccine store/cold-room in RukumEast District -Need to maintain quality of vaccine management as per EVM standard (i.e., infrastructure, transport, cold chain capacity expansion in line with new vaccine introduction, regulatory cold chain policy for local level), -Need to routine monitoring of vaccine sub-centre, session sites, -Timely maintenance of coldchain equipment	District, Provincial Government Palikas
Inconsistency in data quality of immunization program,	-Need to provide technical backup in low-performance Palika/s -Conduct RDQA/DQSA to generate evidence - Need to apply digital EPI-micro-planning system	Provincial Government Health Office/s Palikas
Chain management training to cold chain dedicated staffs (technical training))	Provide training to cold chain dedicated staff of districts and local levels	PHLMC, PHD
Problem in regular reporting on eLMIS and other real consumption	-Timely reporting of vaccine stock has to be implemented from district level -Need to arrange information reporting of cold-chain equipment in eLMIS system	Palikas Health Office
Insufficient materials for hygiene promotion sessions,	-Need to ensure supply of materials for hygiene promotion sessions	Federal Government/FWD

## **2.2 Integrated Management of Neonatal and Childhood Illnesses**

### **2.2.1 Background**

Community Based Integrated Management of Neonatal and Childhood Illness (CBIMNCI) is integrated program of Integrated Management of Childhood Illness (CBIMCI) and New-born Care Package (CBNCP). The goal of this program is to improve neonatal and child health as well as contribute to their health improvement and reduce illness and mortality among under five children. IMNCI Program is the integration package of child-survival addressing five major killer diseases namely diarrhea, pneumonia, malnutrition, measles, and malaria at community and health facility level focusing on under-five children throughout the country which is focused to reduce mortality and morbidity of newborn, addresses the main causes of neonatal mortality - infection, low birth weight, prematurity, hypothermia, and asphyxia.

### **2.2.2 Goals, objectives, strategies, and major interventions of the IMNCI Program**

**Goal:** Improved newborn and child survival and healthy growth and development.

**Objectives:**

- To reduce neonatal morbidity and mortality by promoting essential new-born services.
- To reduce neonatal morbidity and mortality by managing major causes of illness.
- To reduce morbidity and mortality by managing major causes of illness under 5 years children.

**Strategies**

- Quality of care through system strengthening and referral services for specialized care.
- Ensure universal access to health care services for new-born and young infant.
- Capacity building of frontline health workers and volunteers.
- Increase service utilization through demand generation activities.
- Promote decentralized and evidence—based panning and programming.

### **2.2.3 Major Interventions**

- **New-born Specific Interventions:** Promotion of birth preparedness plan, promotion of essential new-born care practices and postnatal care to mothers and new-borns, identification, and management of non-breathing babies at birth, identification and management of preterm and low birth weight babies and management of sepsis among young infants (0-59 days) including diarrhoea.
- **Child Specific Interventions:** Case management of children aged between 2-59 months for 5 major childhood killer diseases (pneumonia, Diarrhoea, Malnutrition, Measles and Malaria).
- **Cross-cutting Interventions:** Behaviour change communication for healthy pregnancy, safe delivery and promotion of personal hygiene and sanitation, improve knowledge related to immunization, nutrition, and care of sick children and improve interpersonal communication skills of HWs and FCHVs.

## 2.2.4 Major Achievements

### CB-IMNCI Program Monitoring Indicators

*Table 2.2.1: CB-IMNCI program monitoring indicators by district (FY 2079-80)*

District	% Of newborns applied chlorhexidine (CHX) gel	% Of PSBI cases received complete dose of Gentamicin	% Of pneumonia cases treated with antibiotics	% Of children under five years with diarrhea treated with zinc and ORS
Rukum East	97.3	0	100.1	99.3
Rolpa	98.7	57.9	100.2	100.1
Pyuthan	96.7	23.3	101.5	100.1
Gulmi	99	62.1	105	100.5
Arghakhanchi	100.1	0	99.8	109.8
Palpa	97.8	12.5	100.2	99.9
Nawalparasi	96.3	7.1	100.7	98.9
Rupandehi	99	16.1	97.2	100
Kapilvastu	95.3	16.7	100	95.4
Dang	97	11.2	100.5	99.7
Banke	92.4	30.4	100.1	99.2
Bardiya	94.3	82.1	101.3	99.3
Lumbini Province	96.5	36.2	100.4	99.4

In fiscal year 2079-80 among all expected live births, chlorhexidine was administered to 96.5 percent of newborn's umbilical cord (HF+FCHV). There was a substantial variance in CHX use among districts as Arghakhanchi having the highest use (100.1 percent) and Banke with the lowest (92.4 percent). The utilization of inj. Gentamicin for PSBI cases at province in children under the age of two months was 36.2 percent. Only three districts Bardiya, Gulmi and Rolpa utilized the full dose of Gentamicin in more than 55 percent of PSBI cases, while two districts Rukum East and Arghakhanchi used it in less than 1 percent of cases.

Use of antibiotics for pneumonia treatment was over 97.2 percent in all 12 districts, with average of 100 percent, highest being observed in ten districts (100 percent) and lowest in Rupandehi (97.2 percent). As per the CB-IMNCI treatment protocol, all diarrheal cases should be treatment with ORS and Zinc. Based on HMIS data, children suffering from diarrhea treated with ORS and Zinc at province was 99.4 percent, which was highest in Arghakhanchi (109 percent) and lowest in Kapilbastu (95 percent).

## Key achievements for management of < 2month newborns

*Table 2.2.2 Classification of treatment of <2month newborn cases by district (FY 2079-80)*

Indicators	Year	Rukum East	Rolpa	Pyuthan	Gulmi	Arghakhanchi	Palpa	Nawalparasi West	Ruapdehi	Kapilbastu	Dang	Banke	Bardiya	Lumbini
Possible severe bacterial infections (PSBI)	2077/78	4	65	52	23	6	212	17	27	19	169	36	311	941
	2078/79	19	65	77	9	9	410	27	18	11	212	37	339	1233
	2079/80	6	57	43	29	3	16	28	62	6	339	56	223	868
Local Bacterial Infection	2077/78	37	187	197	197	15	173	203	183	191	367	143	433	2326
	2078/79	110	198	176	204	57	406	243	235	113	308	150	430	2630
	2079/80	42	196	183	152	55	105	147	257	76	357	204	377	2151
Jaundice	2077/78	4	15	11	19	1	79	5	12	7	52	21	29	255
	2078/79	8	12	7	26	4	65	12	16	3	78	13	0	244
	2079/80	3	30	5	23	1	8	4	44	4	86	11	2	221
Low Weight/Feeding Problem ≤28 days (HF only)	2077/78	4	16	21	13	2	47	8	44	33	58	12	13	271
	2078/79	11	15	106	14	9	44	23	138	25	62	73	14	534
	2079/80	0	6	4	10	2	4	4	169	3	27	6	5	240
Referred	2077/78	2	29	44	26	7	37	28	37	38	70	27	34	379
	2078/79	5	30	64	21	7	36	28	38	8	110	33	32	412
	2079/80	10	32	38	38	7	26	39	48	18	118	39	39	452
Deaths	2077/78	0	0	1	0	1	25	0	3	1	8	3	1	43
	2078/79	0	0	0	1	1	20	0	0	0	5	0	0	27
	2079/80	0	0	0	1	0	0	0	0	2	0	0	0	3

In FY 2079-80, 868 cases were classified as Possible Severe Bacterial Infection (PSBI) at the provincial level which is lower than that of previous year (1233). In the FY 2079/80, the number of PSBI cases was highest in Dang (339) & Bardiya (223) and lowest in Arghakhanchi (3), Rukum East & Kapilbastu (6/6) as well as 2151 cases were classified as Local Bacterial Infection (LBI) at the provincial level which is lower than that of previous year (2630). The number of LBI cases was highest in Bardiya (377) and lowest in Rukum East (42). Similarly, the total cases of Jaundice at the provincial level declined from 244 in FY 2078/79 to 221 in FY 2079/80. Also, 240 cases were classified as low birth weight or breast-feeding problem (decrease from 534 to 240 between FY 2078/79 to FY 2079-80). In the FY 2079/80, 452 total cases were referred from both HF and PHC-ORC clinic, highest referral was done by Dang (118).

## Key achievements for management of 2-59 months children

### Diarrhea

#### Classification of diarrheal cases by province

CB-IMNCI program has created enabling to health workers for better identification, classification, and treatment of diarrhoeal diseases. As per CB-IMNCI national protocol, diarrhoea has been classified into three categories: 'No Dehydration', 'Some Dehydration', and 'Severe Dehydration'. The reported number and classification of total new Diarrheal cases has been presented in Table 17 below.

*Table 2.2.3: Classification of diarrhoeal cases by district (FY 2079-80) (2-59 months children)*

Indicator (Service unit)	Year	Rukum East	Rolpa	Pyuthan	Gulmi	Arghakhanchi	Palpa	Nawalparas West	Ruapndehi	Kapilbastu	Dang	Banke	Bardiya	Lumbini
Total (HF+ORC+FCHV)*	FY 2077-78	3907	18734	12616	8537	6434	6089	10624	25549	22405	23119	25869	15080	178963
		2%	10%	7%	5%	4%	3%	6%	14%	13%	13%	15%	8%	100%
	FY 2078-79	4013	15530	9795	6567	5469	4544	9011	24823	21391	22623	24326	12951	161043
		3%	10%	6%	4%	3%	3%	6%	15%	13%	14%	15%	8%	100%
FY 2079-80	3945	14344	9062	5972	4657	4058	8570	25245	20983	21509	22489	10858	151692	
	2%	9%	6%	4%	3%	3%	6%	17%	14%	14%	15%	7%	100%	
Total (HF+ORC)	2077/78	1723	5868	5309	3674	1728	2607	3199	6291	11374	4869	6161	5007	57810
	2078/79	1842	4961	3753	2644	1438	2155	2598	5935	8558	4250	5675	3866	47675
	2079/80	1992	5553	3912	2680	1700	2126	2860	7370	8729	5066	6128	3868	51984
No dehydration (HF+ORC)**	FY 2077-78	1308	5316	4683	3427	1578	2336	3020	5928	10774	4471	5668	4667	53176
		76%	91%	88%	93%	91%	90%	94%	94%	95%	92%	92%	93%	92%
	FY 2078-79	1389	4620	3505	2440	1305	1996	2508	5609	7937	3985	5382	3642	44318
		75%	93%	93%	92%	91%	93%	97%	95%	93%	94%	95%	94%	93%
FY 2079-80	1573	5173	3726	2524	1558	2082	2840	7045	8295	4880	5830	3698	49224	
	79%	93%	95%	94%	92%	98%	99%	96%	95%	96%	95%	96%	95%	
Some Dehydration (HF+ORC)**	FY 2077-78	407	549	620	236	150	258	174	355	598	385	493	339	4564
		24%	9%	12%	6%	9%	10%	5%	6%	5%	8%	8%	7%	8%
	FY 2078-79	449	341	247	204	133	155	90	325	523	261	293	223	3244
		24%	7%	7%	8%	9%	7%	3%	5%	6%	6%	5%	6%	7%
FY 2079-80	418	379	186	154	141	42	20	324	425	181	298	170	2738	
	21%	7%	5%	6%	8%	2%	1%	4%	5%	4%	5%	4%	5%	
Severe Dehydration (HF+ORC)**	FY 2077-78	8	3	6	11	0	13	5	8	2	13	0	1	70
		0.5%	0.1%	0.1%	0.3%	0.0%	0.5%	0.2%	0.1%	0.0%	0.3%	0.0%	0.0%	0.1%
	FY 2078-79	4	0	1	0	0	4	0	1	98	4	0	1	113
		0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	1.1%	0.1%	0.0%	0.0%	0.2%
FY 2079-80	1	1	0	2	1	2	0	1	9	5	0	0	22	
	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	
Total Diarrhoeal Cases (FCHV)***	FY 2077-78	2184	12866	7307	4863	4706	3482	7425	19258	11031	18250	19708	10073	121153
		56%	69%	58%	57%	73%	57%	70%	75%	49%	79%	76%	67%	68%
	FY 2078-79	2171	10569	6042	3923	4031	2389	6413	18888	12833	18373	18651	9085	113368
		54%	68%	62%	60%	74%	53%	71%	76%	60%	81%	77%	70%	70%
FY 2079-80	1953	8791	5150	3292	2957	1932	5710	17875	12254	16443	16361	6990	99708	
	50%	61%	57%	55%	63%	48%	67%	71%	58%	76%	73%	64%	66%	

Note: \*Percentage calculated against province total; \*\*Percentage calculated against total diarrheal cases (HF+ORC); \*\*\*Percentage calculated against total diarrheal cases (HF+ORC+FCHV)

A total of 151,692 diarrheal cases were reported in FY 2079/80, with nearly a third (34 Percent) coming from health facilities and PHC-ORC and the remaining two-thirds (66 Percent) coming from FCHVs. While diarrheal cases decreased in all eleven districts, the number slightly increased in Rukum east. More than nine out of ten (95 Percent) of the cases are registered in health facilities and PHC/ORC were classed as having no dehydration, with only one-tenth (5.2 percent) having some dehydration. Across all districts and at the provincial level, severe dehydration remained below 1 percent.

## Classification of Diarrheal disease Incidence

*Table 2.2.4: Incidence of diarrhoea among children under 5 years of age*

Indicator	Estimated <5 years population that are prone to diarrhea			Incidence of diarrhoea/1000 <5 years population		
	FY 2077-78	FY 2078-79	FY 2079-80	FY 2077-78	FY 2078-79	FY 2079-80
Rukum East	5490	6086	5972	711.7	657.6	660.6
Rolpa	23805	27177	26643	787	569.9	538.4
Pyuthan	24198	27327	26797	521.4	357.5	338.2
Gulmi	25283	21152	20586	337.7	309.6	290.1
Arghakhanchi	20150	15454	15028	319.3	352.9	309.9
Palpa	24605	21147	21011	247.5	214.3	193.1
Nawalparasi West	38436	32070	32059	276.4	280.2	267.3
Rupandehi	108453	92740	92312	235.6	266.9	273.5
Kapilbastu	67920	75907	75530	329.9	281	277.8
Dang	65572	58504	57881	352.6	385.6	371.6
Banke	61832	57731	57339	418.4	420.2	392.2
Bardiya	48418	39707	39249	311.5	325.3	276.6
<b>Lumbini</b>	<b>514162</b>	<b>475002</b>	<b>470407</b>	<b>348.1</b>	<b>338.1</b>	<b>322.5</b>

As shown in the Table 2.2.4, the incidence of diarrhoea per thousand under 5 years children in Lumbini province was 322.5 in fiscal year 2079-80, being highest in Rukum East (660.6) followed by Rolpa (538.4). Similar trend was also seen in the previous two fiscal years. The lowest incidence was observed in Palpa (214.3).

*Table 2.2.5: Treatment of diarrhoea cases by district*

Indicator	Percentage of children under five years with diarrhea treated with zinc and ORS			Percentage of children under five years with diarrhoea treated with IV fluid		
	FY 2077-78	FY 2078-79	FY 2079-80	FY 2077-78	FY 2078-79	FY 2079-80
Rukum East	93.4	93.9	99.3	0	0.05	0.1
Rolpa	97	100	100.1	0.19	0.18	0.05
Pyuthan	101.1	100.1	100.1	1	0.03	0
Gulmi	96.8	99	100.5	0.71	0.08	0.22
Arghakhanchi	95.8	98.8	109.8	0	0.14	0
Palpa	97.3	99.1	99.9	0.96	4.5	0
Nawalparasi West	94.7	97.6	98.9	0.06	0.15	0
Rupandehi	95	100.7	100	0.37	0	0.01
Kapilbastu	94	92.2	95.4	0.7	1.4	0.1
Dang	97.8	100	99.7	0.88	0.21	0.24
Banke	99	100.8	99.2	0	0.02	0.03
Bardiya	97	99.1	99.3	0.12	0	0
<b>Lumbini</b>	<b>96.8</b>	<b>98.7</b>	<b>99.4</b>	<b>0.47</b>	<b>0.51</b>	<b>0.07</b>

The percentage of diarrheal cases treated with zinc and ORS as per IMNCI protocol at the provincial level was 99.4 percent in fiscal year 2079-80, a increase of one percent (0.7%) over the previous year. There was a variation between districts treated with zinc and ORS with highest of Arghakhanchi (108) to lowest Kapilvastu (95.4). In all districts, less than 1% of severe diarrhoea cases were treated with intravenous (IV) fluid at the health facility level (Table 17).

## Acute Respiratory Infections

Every ARI case should be correctly examined and classified as no pneumonia, pneumonia, or severe pneumonia, and given home therapy, antibiotics, or referred to a higher center as indicated by the CB-IMNCI protocol.

*Table 2.2.6: Acute Respiratory Infection (ARI) and Pneumonia cases by district*

Indicators	Fiscal Year	Lumbini	Rukum East	Rolpa	Pyuthan	Gulmi	Arghakhanchi	Palpa	Nawalparasi West	Rupandehi	Kapilbastu	Dang	Banke	Bardiya
Target population (children under 5 years)	2077/78	514162	5490	23805	24198	25283	20150	24605	38436	108453	67920	65572	61832	48418
	2078/79	475002	6086	27177	27327	21152	15454	21147	32070	92740	75907	58504	57731	39707
	2079/80	470407	5972	26643	26797	20586	15028	21011	32059	92312	75530	57881	57339	39249
Total ARI cases (HF+ORC)	2077/78	107492	2364	9750	10377	10679	5524	6138	5759	10051	12435	10255	10103	14057
	2078/79	117915	3070	11660	11249	10718	5019	7518	5592	11269	9748	14036	12054	15982
	2079/80	115109	3000	9604	9650	10265	4754	6617	5979	13384	9232	14488	12801	15335
ARI incidence per 1,000 <5 children	2077/78	515	760.7	921.2	866.9	972.9	871.4	490.5	361.1	309.9	349.5	463.1	477.6	668.8
	2078/79	593.5	895.7	877.9	794.7	1180.7	1083.7	598.2	439.7	417.5	281.8	615.8	558	858.4
	2079/80	553.8	880.4	728.1	651.8	1160.3	964.5	475.2	383.9	442	271.9	589.6	543.1	792.2
Total Pneumonia cases (HF+ORC)	2077/78	617	55	112	97	36	11	33	20	49	93	13	84	14
	2078/79	382	45	99	64	15	9	36	13	20	30	16	26	9
	2079/80	306	45	50	50	27	6	12	14	30	30	17	13	12
Pneumonia incidence (per 1000)	2077/78	38.1	125.7	161.6	102.9	50.9	43.8	26.5	20.4	13.9	23	29.6	34.2	37.9
	2078/79	43.1	190.4	154.4	104.1	43.7	58.1	52.8	33.4	14.2	8.2	42.9	36.5	43.7
	2079/80	36.2	133.6	104.9	77.6	28.9	46.5	46	14.1	20.4	10.3	40.8	33.9	42.5
% of pneumonia among ARI cases (New Register)	2077/78	10.5	23.6	23.2	15.2	6.1	9	10.2	6.6	8	5.1	10.1	12.5	7.4
	2078/79	11.8	31.7	26.8	17.1	5.7	10.5	13.6	6.3	7.9	4.4	11.6	12.2	6.1
	2079/80	10.8	25	24.1	15.8	6.3	12	13.3	7	8.6	3.8	10.8	11	5.8
% of severe pneumonia among new cases	2077/78	0.12	0.36	0.11	0.17	0.12	0.03	0.2	0.12	0.1	0.27	0.04	0.16	0.03
	2078/79	0.05	0.26	0.11	0.05	0.04	0.01	0.13	0.06	0.02	0.07	0.04	0.01	0.02
	2079/80	0.05	0.13	0.04	0.13	0.11	0.01	0.02	0.05	0.03	0.11	0.04	0.01	0.04
Pneumonia treated with antibiotics (%)	2077/78	109.3	114.9	91.1	99.9	187.4	103	81.3	129.4	104	199.3	99.1	100.8	99.5
	2078/79	95.9	101.8	86.3	100.5	96.3	97	92.8	89.6	99.2	98.5	98.8	100	100.6
	2079/80	100.4	100.1	100.2	101.5	105	99.8	100.2	100.7	97.2	100	100.5	100.1	101.3
Total ARI (FCHV)	2077/78	157326	1812	12179	10600	13919	12034	5931	8122	23557	11306	20114	19429	18323
	2078/79	164018	2381	12199	10469	14257	11728	5133	8510	27447	11640	21990	20161	18103
	2079/80	145385	2258	9795	7815	13621	9740	3368	6329	27414	11307	19638	18341	15759

In FY 2079/80, 115109 ARI cases were recorded in HF and ORC, with 10.8 % of pneumonia cases and less than 1% of severe pneumonia cases. At the provincial level, the incidence of pneumonia (both pneumonia and severe pneumonia at HF and PHC-ORC) was 36.2 per 1000 children under the age of five. When compared to the previous fiscal year, the incidence of pneumonia among children under the age of five has fallen dramatically (from 43.1 in FY 2078/79 to 36.2 FY 2079/80 per 1000). Gulmi had the highest ARI incidence (1160.3/1000 U5 children), Arghakhanchi had the second highest (964.5/1000 U5 children), and Kapilbastu had the lowest incidence (271.9/1000

U5 children). Similarly, the largest percentage of pneumonia cases among ARI cases was found in Rukum-East and Rolpa district (25 and 24 percent, respectively), while the lowest was found in Kapilbastu district (3.8 Percent). Table 18 shows the data disaggregated by district.

### Other common childhood illnesses

The IMNCI program also focuses on identifying and testing children under the age of five for Malaria, malnutrition, measles, and other common illnesses. The nutrition program leads interventions to address childhood malnutrition, the National Immunization Program leads interventions to address measles and other vaccine-preventable infections, and the disease control program leads interventions to address malaria. The IMNCI program actively engaged with the respective programs to address these issues in a coordinated manner.

*Table 2.2.7: Classification of childhood illnesses as per IMNCI protocol by district (FY 2079-80)*

District	Malaria		Very Serious Febrile Disease	Measles	Ear Infection	Severe Malnutrition	Anemia
	Falciparum	Non-Falciparum					
Rukum East	0	0	0	3	356	9	0
Rolpa	0	0	10	0	1307	25	19
Pyuthan	0	0	0	0	1045	35	4
Gulmi	0	0	0	0	793	16	2
Arghakhanchi	0	0	0	2	502	12	2
Palpa	0	0	0	0	466	13	1
Nawalparasi West	0	0	0	0	873	201	32
Rupandehi	0	0	0	0	2143	370	202
Kailbastu	0	4	5	6	2039	223	19
Dang	0	14	1	8	1452	171	13
Banke	17	18	0	67	1837	352	15
Bardiya	0	0	0	5	1412	264	14
<b>Lumbini</b>	17	36	16	91	14225	1691	323

Under the IMNCI program, health workers identified 17 falciparum malaria cases, 36 non-falciparum malaria cases; 16 very severe febrile disease cases; 91 measles cases; 14225 ear infection cases; 1691 severe malnutrition cases and 323 anemia cases in children under five years of age in FY 2079/80.

## 2.3 Nutrition

### 2.3.1 Background

Nutrition is an important aspect of survival, growth, and development and a prerequisite for accelerated attainment of all the Sustainable Development Goals (SDGs). Better nutrition is associated with a better infant, child, and maternal health, stronger immune systems, safer pregnancy and childbirth, a lower risk of non-communicable diseases (such as diabetes and cardiovascular disease) and longer life. People with adequate nutrition are more productive and can contribute to disrupting the vicious cycle of deprivation and starvation.

The global burden of malnutrition has substantial and long-term developmental, economic, social, and medical consequences for individuals and their families, communities, and countries. Today, the world faces a triple burden of malnutrition: undernutrition, both stunting and wasting; vitamin and other micronutrient deficiencies and overweight and obesity, particularly in low and middle-income countries and Nepal is no exception.

The Nepal government (GoN) is dedicated to ensuring that all its residents have access to appropriate nutritious food, healthcare, and other social services that influence nutrition outcomes. Nepal has made considerable strides in eliminating stunting among children under the age of five. According to the Nepal Demographic Health Survey, stunting has dropped from 36 percent (in 2016) to 25 percent (in 2022), prevalence of wasting among children under the age of five was also reduced from 10 percent (in 2016) to 8 percent (in 2022) as well as underweight percent also dropped from 27 percent (2016) to 19 percent (2022) under the age of five. As per both NDHS report of 2016 & 2022, 55 percent of children under age 2 are breastfed within 1 hour of birth and children under age 6 months are exclusively breastfed decreased from 66 percent (in 2016) to 56 percent (in 2022). Children aged 6-23 months receive meals with a minimum dietary diversity increased from 47 percent to 48 percent, receive meals at the minimum frequency increased from 71 percent to 82 percent as well as children are fed a minimum acceptable diet also increased from 36 percent to 43 percent as well as 69 percent children also consume unhealthy foods besides 43 percent of children aged 6–59 months and 34 percent of women aged 15–49 are anemic.

In Lumbini Province, the prevalence of stunting among children under five was decreased from 38.5 percent (in 2016) to 25.1 percent (in 2022). Wasting prevalence remains stubbornly at an increasing trend from 7.6 percent (in 2016) to 16.2 percent (in 2022). Likewise underweight among under 5 children has decreased from 27.2 percent (2016) to 23.3 percent (2022). According to the NDHS 2022, the exclusive breastfeeding rate of Lumbini Province is at 36.3 percent, while only 62.6 percent of the children receive breastmilk within the first hour of birth, among youngest breastfed children aged 6–23 months, 45.9 percent children receive a minimum acceptable diet and 52.2 percent children received the minimum dietary diversity. Similarly, the province has a 48.9 percent prevalence of anemia among children under the age of five, and a 44.4 percent prevalence among women of reproductive age (NDHS 2022), which is higher than the national prevalence.

The province government has established a high-level commitment and prioritized nutrition programs to enhance the nutritional status of Lumbini province's children, pregnant women, breastfeeding mothers, and adolescents. The Ministry of Health and the Province Health Directorate (PHD) is responsible for providing nutrition services throughout the province in cooperation and collaboration with federal government and local levels, as well as development partners. As per national policies and strategies, the province has been creating nutrition program policies, strategies, and recommendations.

### **2.3.2 Key Policy Documents**

- The National Nutrition Strategy, of 2077- intends to address all forms of malnutrition through the health sector by implementing nutrition-specific and sensitive interventions and providing strategic and programmatic direction for nutrition interventions in Nepal through the health sector.
- Multi-sector Nutrition Plan (MSNP-II 2018-2022) - a broader national policy framework for nutrition, within and beyond the health sector, coordinated by the National Planning Commission (NPC) at the national level, provides national policy guidance for nutrition-specific and nutrition-sensitive interventions while also creating an enabling environment for nutrition interventions. Likewise, at the provincial level, the Province Planning Commission spearheads the rollout of the Plan.
- The 2071 National Health Policy focuses on nutrition improvement through the effective promotion of high-quality, nutritious foods produced locally.

### **2.3.3 Strategies**

The four key measures outlined in Nepal's National Health Policy 2076 for enhancing nutrition are as follows:

- Policies pertaining to multi-sector nutrition and food security programs will be updated and implemented with high priority.
- Short-term, medium-term, and long-term strategies will be used at all levels to promote nutritional diversification and balanced diet consumption among women and children of various ages.
- The school health and nutrition education programs shall be improved, developed, and implemented.
- Homestead food production will be encouraged while supporting healthy food consumption.

### **2.3.4 Nutrition interventions**

The Ministry of Health has been implementing Comprehensive Nutrition Specific Interventions (CNSI) to address maternal, adolescent, and child malnutrition. Which began with monitoring young children's growth and progressed to promotion, protection, and support for early initiation, exclusive and extended breastfeeding, and appropriate supplemental feeding, as well as community-based micronutrient supplementation. Likewise, Iron Folic Acid Supplementation was also provided for Pregnant, and lactating mothers and adolescent girls. The key interventions are as follows:

- Comprehensive Nutrition Specific Intervention (CNSI)
- Growth Monitoring and Promotion activities
- Maternal Infant and Young Child Nutrition (MIYCN)
- Integrated Management of Acute Malnutrition (IMAM)
- Supplementing IFA for adolescent girls, pregnant women, and breastfeeding mothers
- Supplementing Vitamin A for children aged 6-59 months.
- Deworming of children aged 12-59 months and school-going children.
- School Health Nutrition program
- Nutrition education and counseling
- Nutrition Rehabilitation Home

### 2.3.5 Current Global Nutrition Targets and Nepal's Status

*Table 2.3.1: Global nutrition targets and status of Nepal and Lumbini province*

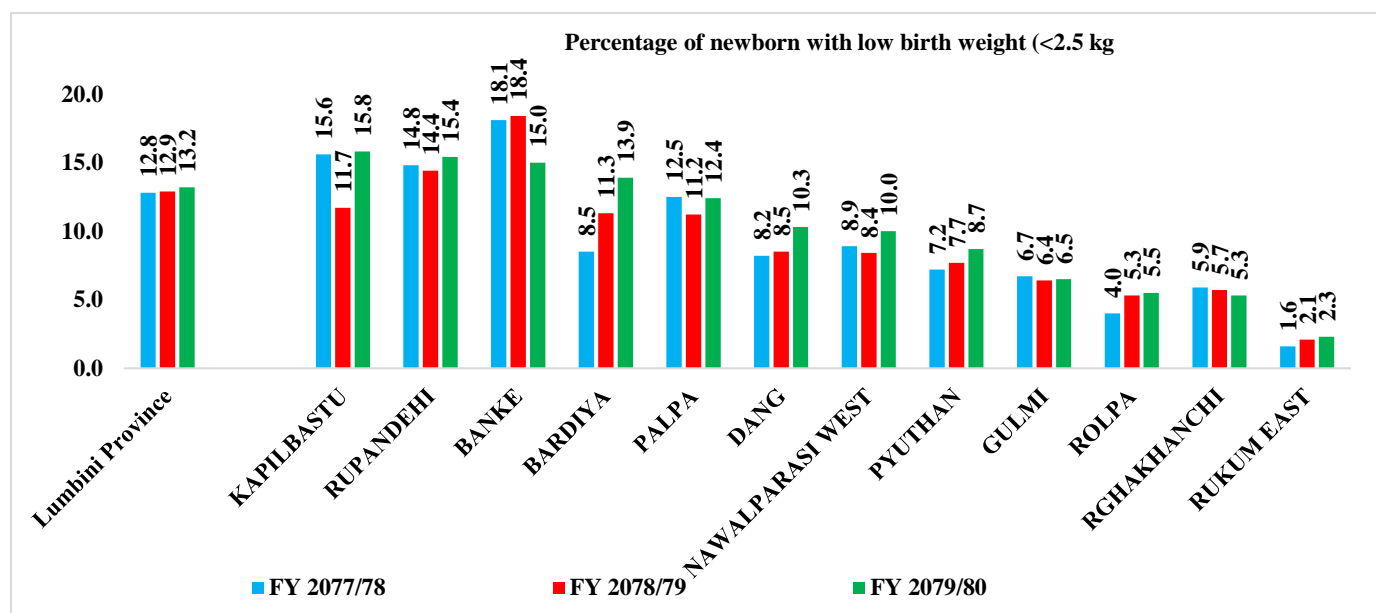
Indicators	Nepal (NDHS 2022)	Lumbini Province (NDHS 2022)	Targets		
			MSNP II 2022	WHA 2025	SDG 2030
Prevalence of stunting among under 5 years children	25	25.1	28	20	15
Prevalence of wasting among under 5-year-old children	8	16.2	7	<5	4
Prevalence of underweight among under 5-year-old children	19	23.3	20	15	9
Prevalence of low birth weight	15.6	13.2	10	≤1.4	≤1.4
% of children under 6 months with exclusive breastfeeding	56	36.3	80	85	90
% of children aged 6-23 months having a minimum acceptable diet	43	45.9	60	70	80
Anemia among children aged 6-59 months	43	48.9	28	23	10
Anemia among WRA (15-49 years)	34	44.4	24	18	10
% of Women (WRA) with chronic energy deficiency (measured as body mass index <18.5 kg/m <sup>2</sup> )	17*	11.8	12	8	<5
% of overweight and obese women of reproductive age (WRA)	35	8.1	18	15	<12

### 2.3.6 Major achievements

#### 2.3.6.1 Growth Monitoring and Promotion

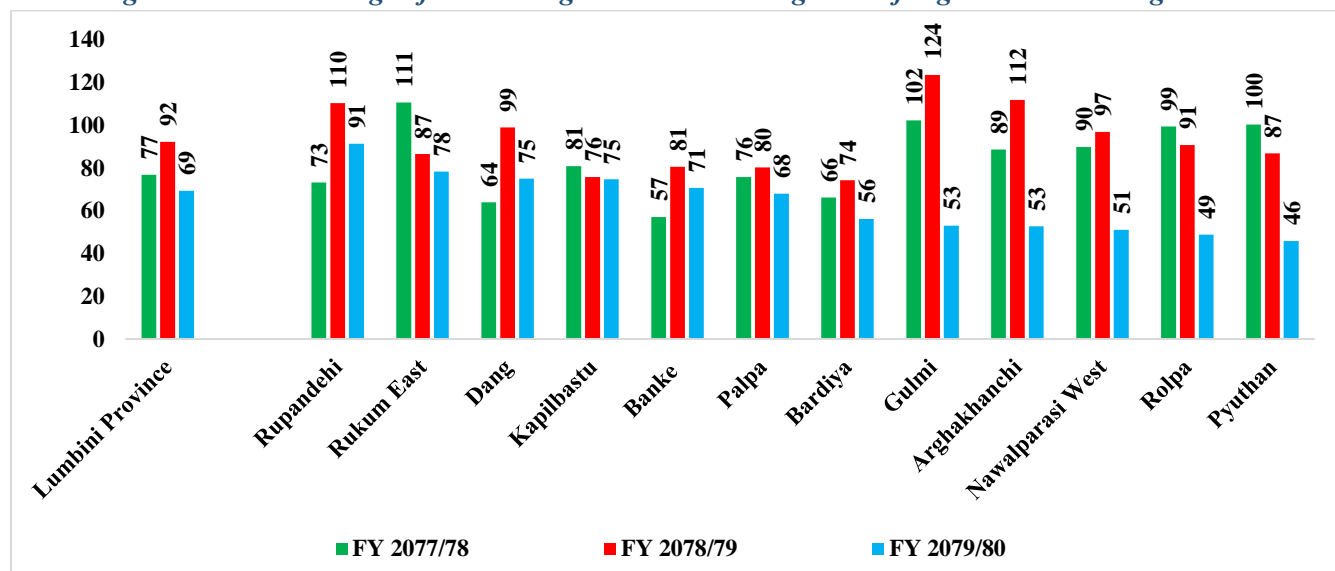
Monitoring the growth of children under the age of two years helps prevent and regulate protein-energy malnutrition and allows for preventive and therapeutic treatments. Every month, health workers at all public health facilities use the growth monitoring card, which is based on the WHO's updated growth requirements for children.

*Figure 2.3.1: Percentage of newborn with low birth weight (<2.5 kg)*



As of the previous fiscal year, the percentage of newborns with low birth weight (2.5 kg) increased from 12.9 percent FY 2078/79 to 13.2 percent FY 2079/80. Malnutrition is an intergenerational vicious circle and the prevalence of undernourished mothers in Nepal is one of the leading causes of LBW, which is aggravated by inadequate caloric intake during pregnancy. Therefore, efforts to improve maternal nutrition must be intensified with effective counseling at antenatal visits.

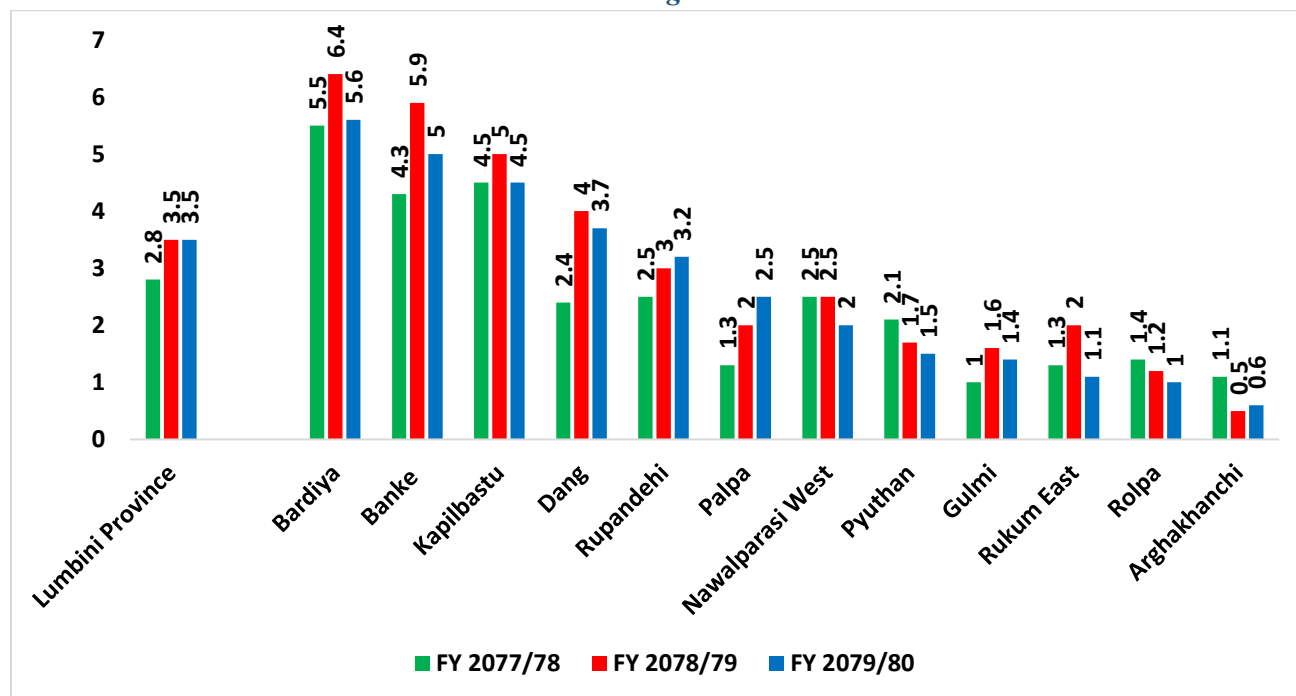
*Figure 2.3.2: Percentage of children aged 0-23 months registered for growth monitoring.*



In comparison to the previous two fiscal years, the percentage of children aged 0 to 23 months who were registered for growth monitoring decreased to 69% in FY 2079/80. There was a substantial variance in children aged 0 to 23 months who registered for growth monitoring among

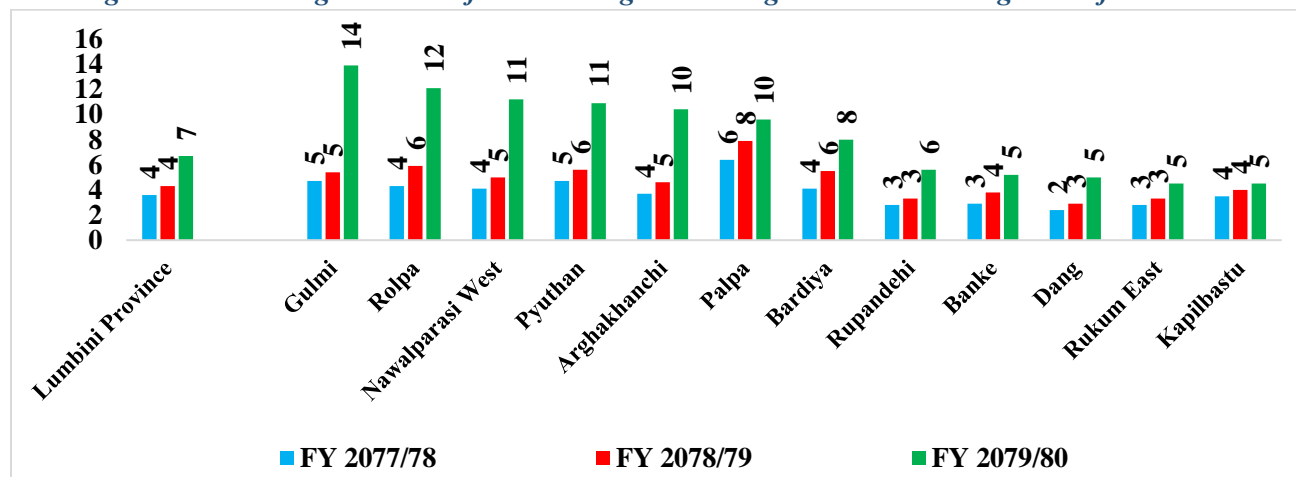
districts as Rupandehi having the highest growth monitoring (91 percent) and Pyuthan with the lowest (46 percent).

*Figure 2.3.3: Percentage of children aged 0-23 months registered for growth monitoring who were underweight.*



As of the previous fiscal year, the percentage of children aged 0-23 months registered for growth monitoring (New) who were underweight stagnated at 3.5 percent. In the fiscal year 2079/80, 3.5 percent children aged 0 to 23 months were classified as underweight. Bardiya has the most underweight children (5.6%), followed by Banke (5%), and Kapilbastu (4.5%). Whereas Arghakhanchi (0.6%) has the least underweight children (Figure 12). A link can be observed between increased growth monitoring and the increased diagnosis of underweight children.

*Figure 2.3.4: Average number of visits among children aged 0-23 months registered for GM*

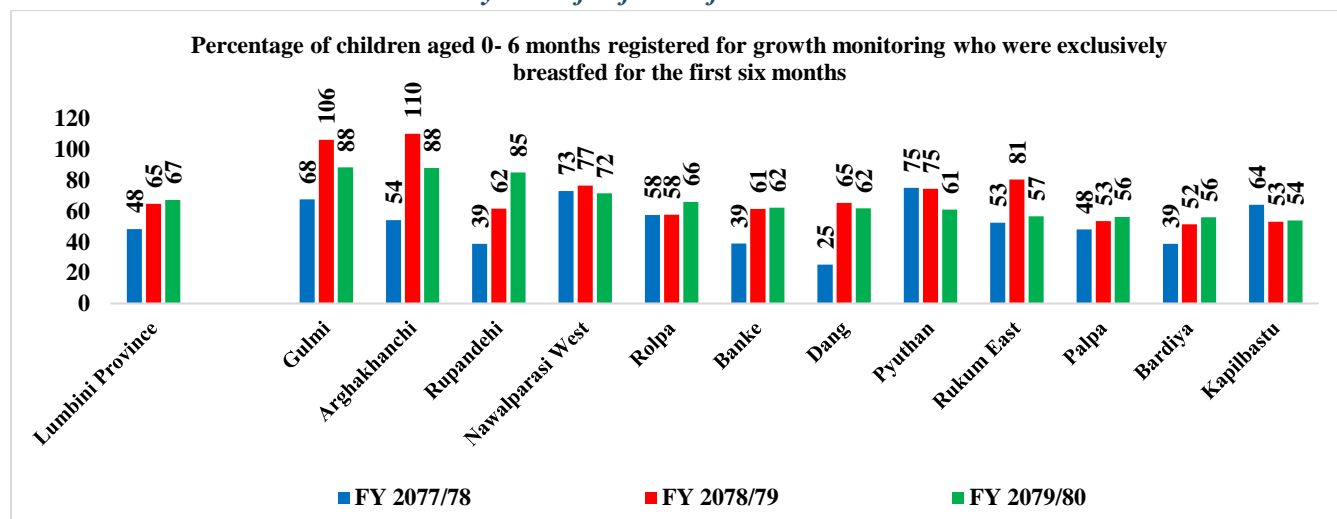


Though the WHO recommends 24 growth monitoring visits for children aged 0 to 23 months, the provincial average for the fiscal year 2079/80 is 7 times, which is increased from 4 to 7 times. Though the number of children registered for growth monitoring is increasing, retaining the revisit is challenging because the growth monitoring sessions are ineffective; the child's weight is taken but not plotted on the graph, and no information/counseling is provided to the mother about the child's nutrition status. Therefore, the parents/care takers do not perceive the benefit of bringing their children for monthly growth monitoring, children are typically weighed only during immunization sessions. However, with the implementation of the CNSI training package up to the FCHV level, measurement of growth monitoring visits based on revised guideline is expected that the growth monitoring indicators will be improved across the province in comparison to the previous fiscal year (Figure.13).

### 2.3.6.2 Infant and Young Child Feeding (IYCF)

Infant and young child nutrition and care practices are critical for improving child survival, growth, and development. The main components of IYCF include early initiation of breastfeeding (within an hour of childbirth); exclusive breastfeeding for six months; and nutritionally adequate and appropriate complementary feeding beginning at six months with sustained breastfeeding up to two years of age or beyond. With the rollout of the CNSI (Comprehensive Nutrition Specific Interventions), the IYCF program has been expanded to all 12 districts of Lumbini Province. The provincial government with guidance from the Federal Government has been working to improve IYCF practices to improve young children's nutrition.

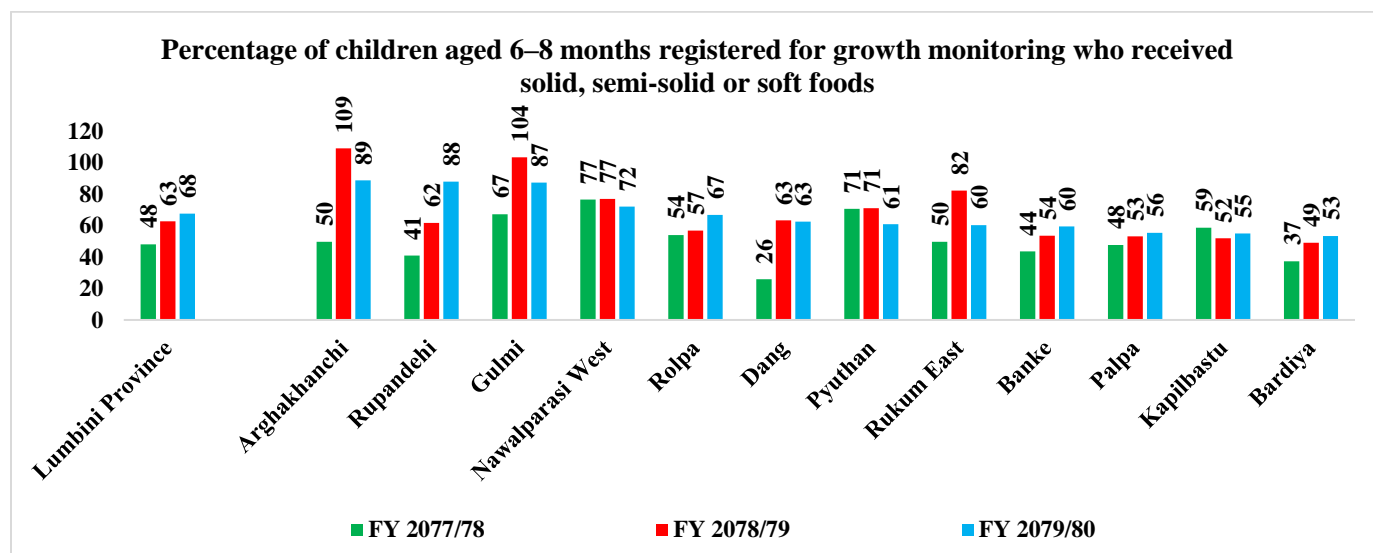
*Figure 2.3.5: Percentage of children aged 0-6 months registered for growth monitoring who were exclusively breastfed for the first six months.*



In comparison to the previous fiscal year, the percentage of children aged 0-6 months who were exclusively breastfed for the first six months who were registered for growth monitoring slightly increased from 65 percent FY 2078/79 to 67 percent FY 2079/80. As indicated in Figure 14, over two-thirds (67%) of children aged 0-6 months who were registered for growth monitoring were exclusively breastfed in the fiscal year 2079/80, an increase of 2% from the fiscal year 2078/79.

This statistic's percentage varies by district. Some districts have reported more than 88 percent progress, indicating that the recording/reporting systems need to be strengthened.

*Figure 2.3.6: Percentage of children aged 6–8 months registered for growth monitoring who received solid, semi-solid or soft foods.*



According to Figure 2.3.6, the percentage of children aged 6-8 months who were registered for growth monitoring and received solid, semi-solid, or soft foods in Lumbini Province grew to 68 percent in FY 2079/80, up from 63 percent in FY 2078/79. Except of five districts, the proportion of this indicator increased in seven districts in FY 2079/80. Though the growth monitoring has increased the IYCF practices have not been improved indicating that the behavioral change aspects need more focus during counseling.

### 2.3.3.3 Integrated Management of Acute Malnutrition

IMAM is a strategy for combating acute malnutrition. IMAM focuses on integrating effective acute malnutrition management into ongoing routine health services at all levels of health facilities, while still striving for maximum coverage. It also intends to integrate acute malnutrition management across sectors to ensure that treatment is connected to ongoing support.

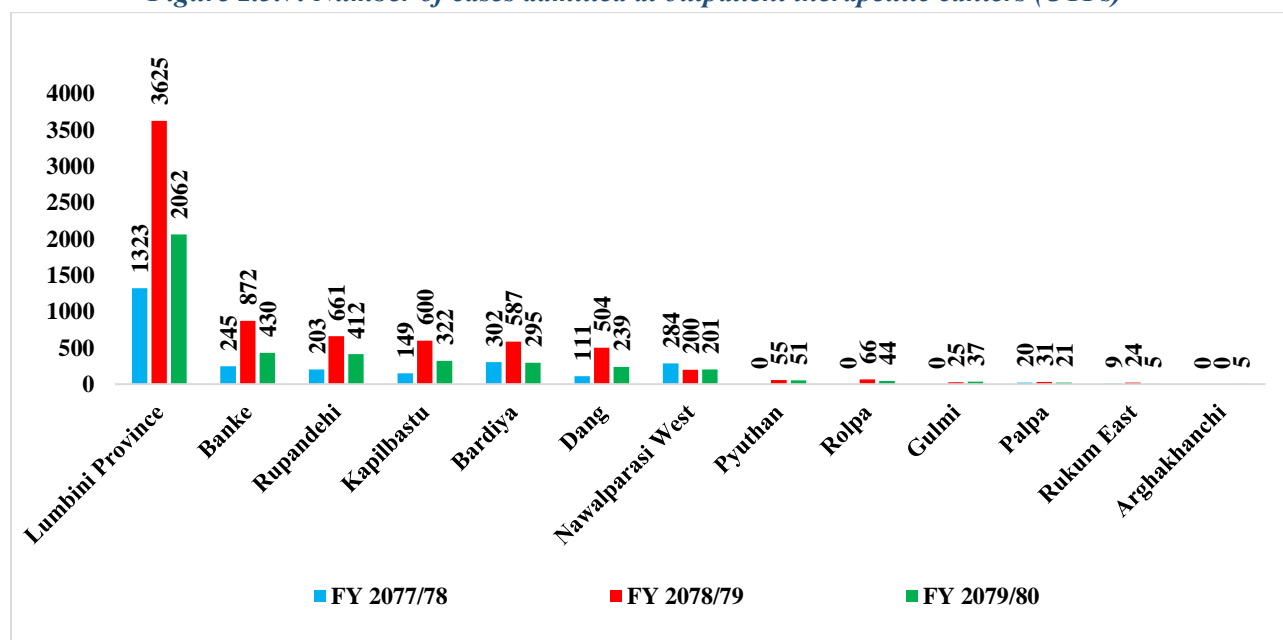
The Principles of IMAM are: Maximum Coverage, Timelines, Appropriate care, Care for as long as it is needed. The Major 4 components of IMAM are Community mobilization, Inpatient Therapeutic Care (ITC), Outpatient Therapeutic Care (OTC), and Management of Moderate Acute Malnutrition. Through MIYCN promotion and support for the sustained rehabilitation of identified cases through supportive follow-up, IMAM strives to integrate nutrition support across the health, early childhood development, WASH, and social protection sectors. With the implementation of the CNSI program, the IMAM program has been launched in all 12 districts of Lumbini Province. However, it will take some time for the new districts to fully implement the program.

*Table 2.3.2: District-wise number of OTC as of FY 2079/80*

District	As of FY 2079/80
Rukum East	5
Rolpa	10
Pyuthan	13
Gulmi	12
Arghakhanchi	4
Palpa	11
Nawalparasi West	18
Rupandehi	21
Kapilbastu	27
Dang	22
Banke	27
Bardiya	33
Total Lumbini Province	203

With the implementation of the CNSI training package, districts started to establish OTCs in strategic areas to serve malnourished children. With this, the number of OTCs in Lumbini Province has increased from 171 to 203. Bardiya has the most OTC (33) while Arghakhanchi has the fewest (4).

*Figure 2.3.7: Number of cases admitted at outpatient therapeutic canters (OTPs)*



The number of MAM cases admitted to the OTCs has decreased substantially, from 3625 in FY 2078/79 to 2062 in FY 2079/80. The key reason is community education, awareness, and lack of proper counselling by responsible health workers to parents, mothers/caretakers (Figure 16).

*Table 2.3.3: District-wise IMAM performance, FY 2079/80*

<b>Data</b>	<b>Number of cases admitted at outpatient therapeutic centers</b>	<b>% of defaulter rate of SAM cases</b>	<b>% of recovery rate of SAM cases</b>	<b>% of death rate of SAM cases</b>
Lumbini Province	2062	12.8	77.2	0.34
Rukum East	5	0	50	0
Rolpa	44	30.4	52.2	2.2
Pyuthan	51	27.1	54.2	2.1
Gulmi	37	8.6	58.6	0
Arghakhanchi	5	50	50	0
Palpa	21	16.7	33.3	0
Nawalparasi West	201	19.2	75.2	0.4
Rupandehi	412	10.5	79.1	0
Kapilbastu	322	17.4	70.7	0.36
Dang	239	15	73.9	0
Banke	430	6	90.3	0.46
Bardiya	295	10	79.1	0.29

Even though the IMAM program was implemented in all 12 districts, Arghakhanchi was the last to establish an OTC, as a result five cases being handled in the fiscal year 2079/80. The above table summarizes the performance of all districts (Table 22). Although the province cumulatively meets the SPHERE requirements for SAM Management (i.e., recovery rate >75%, defaulter rate 12%, and death rate 0.3%). This data varies by district. The death rate is acceptable in all program districts; however, the defaulter rate of more than 15% in Pyuthan, Rolpa, Dang, Kapilbastu, Nawalparasi, Palpa and Arghakhanchi is cause for concern. The defaulter rate in arghakhanchi is 50%, which calls for immediate action to improve the quality of community outreach activities and to build a systematic follow-up mechanism to reduce defaulter cases. Palpa had the lowest recovery rate (33.3%), while Banke had the highest (90.3%), followed by Rupandehi and Bardiya (79.1%). Only nine districts, Banke, Bardiya, Dang, Pyuthan, Rolpa, Kapilbastu, Rupandehi, Nawalparasi West and Gulmi are efficiently implementing the program and meeting the SPHERE standards.

### **Nutrition Rehabilitation Home**

Nutrition Rehabilitation Homes are facility-based malnutrition management programs that are integrated with hospital services. The NRH not only treats and manages malnourished children but also provides nutrition education and counseling to mothers/caretakers on appropriate health and nutrition behaviors. With the reopening of the Rapti Academy of Health Science in Paush 2078, the province now has three NRHs: one at Lumbini Hospital Butwal, one at Bheri Hospital Nepalgunj, and one at the Rapti Academy of Health Science, Dang. Table 25 shows the total number of admitted, discharged, defaulter, LAMA, and death cases of these 3 NRHs.

**Table 2.3.4: Status of admission, discharge, defaulter, and death at NRH**

Nutrition Rehabilitation Homes	Total number of SAM case Admitted			Discharged			Defaulter			Death		
	FY 2077/78	FY 2078/79	FY 2079/80	FY 2077/78	FY 2078/79	FY 2079/80	FY 2077/78	FY 2078/79	FY 2079/80	FY 2077/78	FY 2078/79	FY 2079/80
Lumbini Provincial Hospital	107	145	123	60	134	119	23	17	18	0	0	0
Bheri Hospital	80	201	155	60	197	153	4	7	7	0	1	0
Rapti Academy of Health Science	NA	46	84	NA	41	77	NA	3	7	NA	0	0
<b>Total</b>	<b>187</b>	<b>392</b>	<b>362</b>	<b>120</b>	<b>372</b>	<b>349</b>	<b>27</b>	<b>27</b>	<b>32</b>	<b>0</b>	<b>1</b>	<b>0</b>

### 2.3.6.4 Prevention and control of iron deficiency Anemia

Since 1998, the Ministry of Health has provided iron folic acid (IFA) supplements to pregnant and post-partum women to prevent maternal anemia. As per the protocol, pregnant women will be given 60 mg of elemental iron and 400 micrograms of folic acid starting in their second and continuing until 45 days after giving birth. In 2003, the Intensification of Maternal and Neonatal Micronutrient Program (IMNMP) began IFA supplementation through Female Community Health Volunteers (FCHVs) to promote access and consumption of IFA supplements. As a result of the intensification program, compliance with taking 180 tablets during pregnancy has increased; nevertheless, compliance with taking 45 tablets after childbirth remains an issue.

**Figure 2.3.8: Coverage of 180 IFA distribution to pregnant women by districts for last three years**

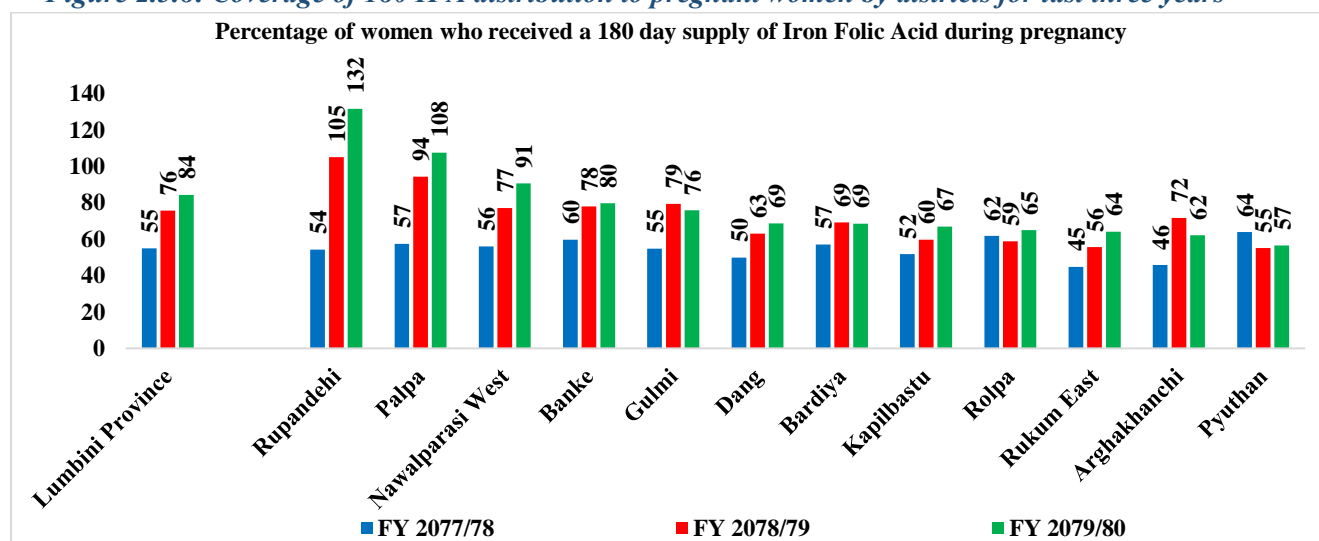
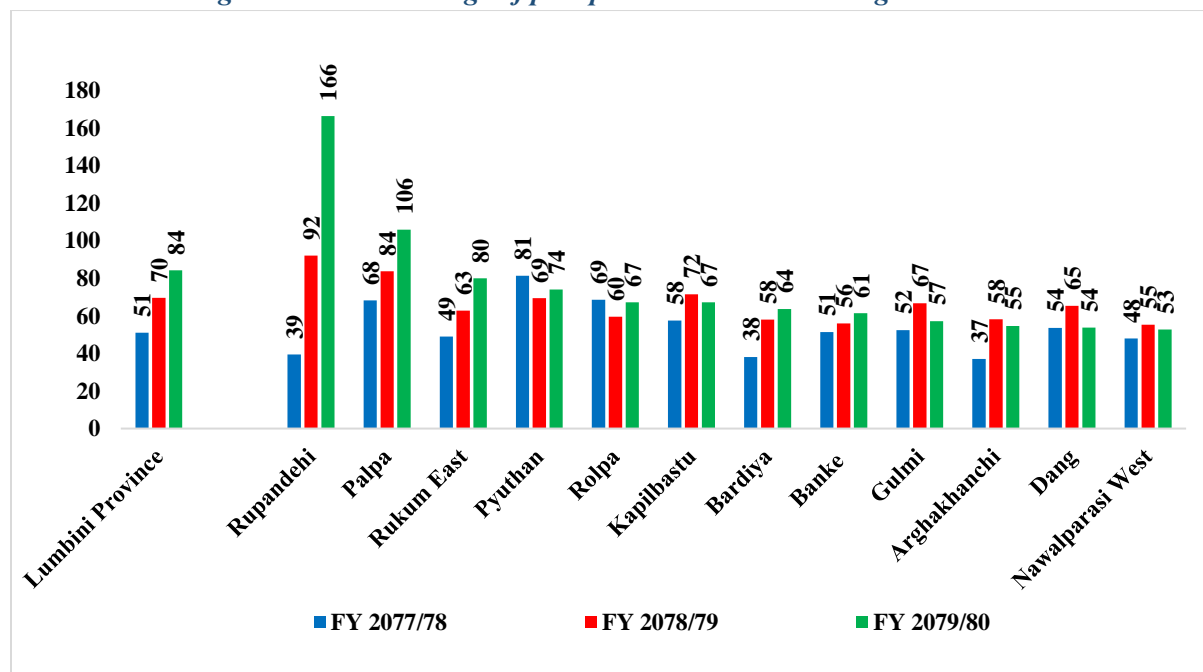


Figure 2.3.8 demonstrates that the distribution of iron-folic acid for 180 days in Lumbini Province increased from 76% in FY 2078/79 to 84% in FY 2079/80. One-quarter (25%) of pregnant women, on the other hand, have not received the necessary 180-day supplementation. Rupandehi had the largest percentage of pregnant women receiving needed doses (132%), followed by Palpa (108%), and Nawalparasi West (91%). Pyuthan has the least coverage (57%). Seventy five percent of the

districts (Rukum East, Rolpa, Pyuthan, Arghakhanchi, Gulmi, Dang, Kapilbastu, Banke and Bardiya) have lower coverage levels than the provincial average. Which is a cause for concern, and additional effort and Social Behavior Change Communication activities are essential to improve the coverage.

*Figure 2.3.9: Percentage of post-partum women receiving 45 IFA tablets.*



The proportion of post-partum women who received 45 IFA tablets increased from 70% in FY 2078/79 to 84% in FY 2079/80. However, when disaggregated down by district, the pattern is varied. Except for Gulmi, Arghakhanchi, Dang and Nawalparasi West, this coverage has increased in eight districts. Rupandehi has the maximum coverage (166%), followed by Palpa (106%), and Rukum East (80%). Nawalparasi-West has the lowest coverage (53%) (Figure 18).

### 2.3.6.5 Biannual distribution of Deworming Tablets and Vitamin A to Children- 6-59 months

To reduce childhood anemia and parasitic infestation through public health measures distribution of Vitamin A (children aged 6-59 months) along with the distribution of Deworming tablets (children aged 12-59 months) is conducted twice a year in Kartik (October) and Baisakh (April).

*Figure 2.3.10: Biannual distribution of deworming tablets and Vitamin A supplementation to children*

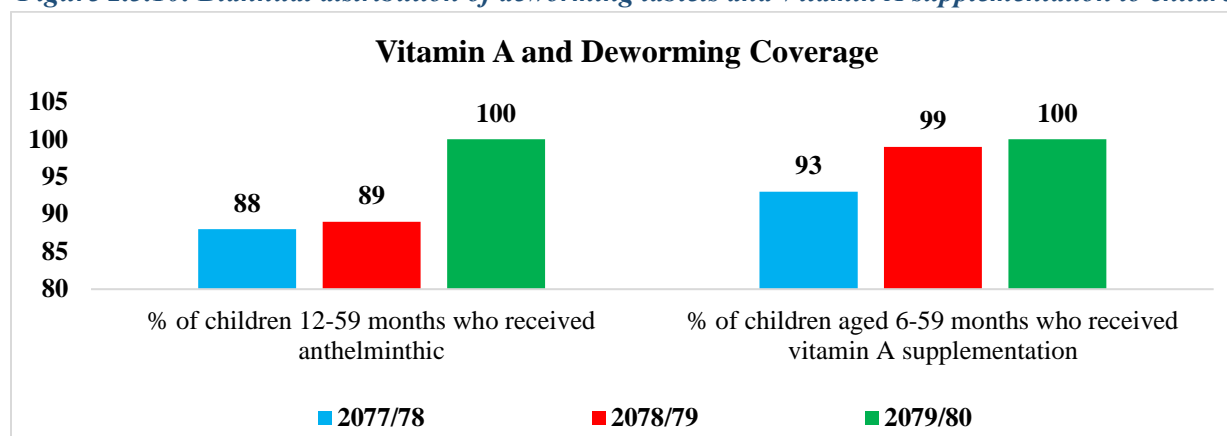


Figure 2.3.10 demonstrates that the overall distribution of deworming tablets to children aged 12 to 59 months received 100 percent in this FY 2079/80 as well as vitamin A supplementation coverage has reached 100 percent, a one percent coverage increases over the previous fiscal year 2079/80.

#### **2.3.6.6 Home Fortification of Complementary Food with Multiple Micronutrient Powder (MNP)/Baal-Vita**

According to the NDHS 2022, 43% of Nepalese children aged 6-59 months were anemic, which was mostly due to poor IYCF practices. To combat this issue, the Nepalese government began the home fortification of supplemental foods with Multiple Micronutrient Powder (MNP). MNP, also known as Baal-Vita in Nepali. Baal-Vita is a micronutrient combination that contains 16 micronutrients including iron, vitamin A, and zinc. This intervention is linked to enhancing complementary feeding practices. Mothers and caregivers are advised to begin introducing complementary foods at six months of age, focusing on age-appropriate feeding frequency, enhancing the dietary quality of complementary foods by making them nutrient and calorie-dense, and handwashing with soap before handling food and feeding the child. The recommended amount of fortification for a child aged 6-23 months is 180 sachets divided into three cycles with a four-month interval between each cycle, i.e., a child consumes Baal-Vita for two continuous months, then a four-month break, then another two months, and so on. Each cycle, a child should take 60 sachets of Baal-Vita for two months at a dose of one sachet per day. To improve the micronutrient content of children's diets, the Baal-Vita should be blended with complementary foods. With the launch of the CNSI program, all 12 districts in Lumbini province have begun to implement this intervention; nevertheless, the level of coverage and compliance is inadequate.

**Figure 2.3.11: Percentage of children who received at least 1 cycle (60 sachets) of MNP.**

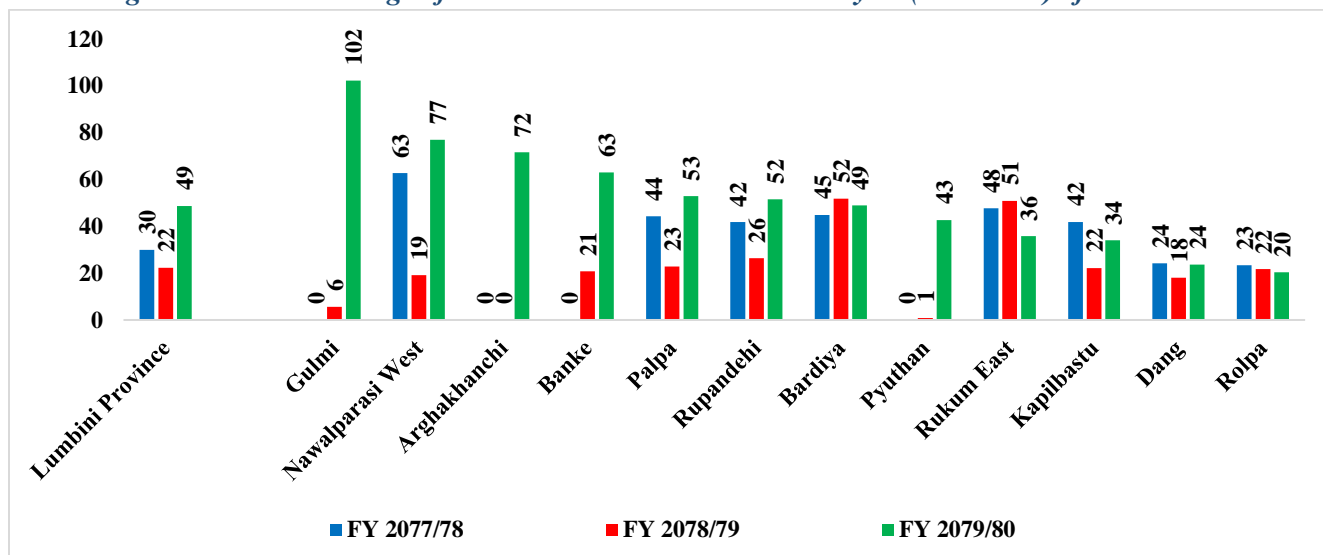
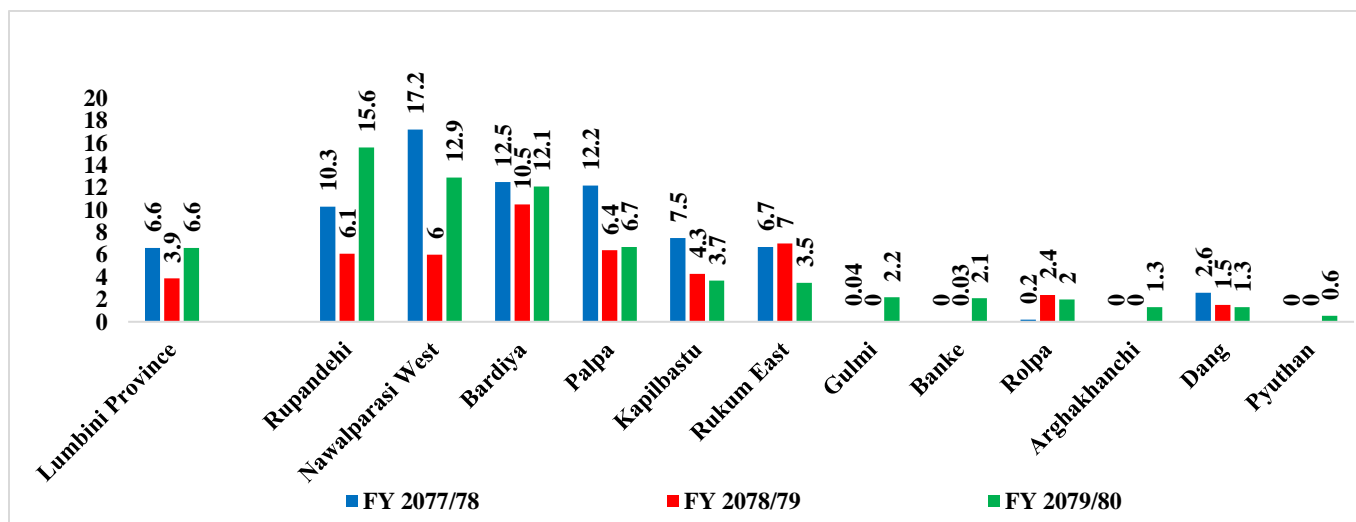


Figure 2.3.11 shows that the percentage of children that received at least one cycle of MNP has increased in this FY 2079/80 from 22 percent to 49 percent. It was 22 percent in the FY 2078/79 and 30 percent in the FY 2077/78. Data by the district shows that Gulmi has the most coverage at 102 percent while Rolpa has the lowest at 20 percent. It is critical to note that many districts have only recently implemented CNSI programs, hence data has not yet been included in the DHIS2.

**Figure 2.3.12: Percentage of children aged 6-23 months who received three cycle (180 Sachets) Baal Vita**



As illustrated in Figure 2.3.12, provincial coverage of MNP home fortification (3 cycles) is not satisfactory, but provincial coverage slightly increased from 3.9 percent in FY 2078/79 to 6.6 percent in FY 2079/80. Rupandehi has the most coverage of the three MNP cycles (15.6%), while Pyuthan has the lowest (0.6%). It is crucial to note that the first cycle intake coverage is determined based on the target population of 6-23 months, whereas the third cycle intake coverage is calculated

among children aged 6-23 months who have ever taken MNP. A barrier analysis study is essential to design methods to ensure that the child's mothers and caregivers are completely aware of the benefits of using Baal Vita.

### 2.3.6.7 School Health and Nutrition Program

In June 2006, the Government of Nepal's Ministry of Health and Population (MoHP) and Ministry of Education (MoE) collaborated to develop and approve the National School Health and Nutrition Strategy. Likewise, the MoHP and MoE developed a 5-year Joint Action Plan (JAP) in 2008, which was later revised/updated because of a 5-year 2014/15-2019/2020 (2071/72-2075/76) JAP with the goals of assisting in the development of the physical, mental, emotional, and educational status of school children through effective implementation and scaling up of SHN programs. The new JAP is a critical document for mainstreaming SHN in the health and education systems, as well as for the effective execution of SHN initiatives, with clear roles and responsibilities of both ministries and assistance from other stakeholders for nationwide scale-up.

The updated JAP proposes:

- To increase the school's capacity for annual physical health screenings in nutrition, vision, dental, and hearing.
- To increase the number of schoolchildren who receive deworming and iron supplements.
- To increase the capacity of schools to provide first aid services by providing suitable first aid kits.
- To increase the number of schools with operational latrines and hand washing facilities.
- To strengthen the capacity of SHN focal teachers on School Health and Nutrition services.
- To promote healthy school health and nutrition behaviors among children, and
- To implement the SHN program into the school's School Improvement Plan (SIP)/annual work plan.

### 2.3.6.8 One School One Nurse Program

The National Health Policy 2017 envisions one health professional at secondary-level schools entirely committed to promoting health awareness and services to children, adolescents, and young people. This program began as a pilot project in the FY 2075/76 and gradually expanded throughout the country. This initiative began & continuation in Lumbini Province in the FY 2079/80, and there are 80 school nurses in 29 LLGs, with financed by the federal, provincial, and the local government. The program has been still continuous in the respective palikas and schools (Table 26).

*Table 2.3.5: List of Schools with School Nurses in Lumbini Province*

SCHOOL HEALTH NURSE DEATAILS ACCORDING TO DISTRICT AND MUNICIPALITY				
SN	District	Municipality	No. of Nurses	Total No.
1	Rupandehi	Tilottama	7	16
		Butwal	2	
		Kanchan	1	
		Mayadevi	1	
		Rohini	1	
		Sainamaina	2	
		Siyari	1	
		Kotahimai	1	

<b>SCHOOL HEALTH NURSE DEATAILS ACCORDING TO DISTRICT AND MUNICIPALITY</b>				
<b>SN</b>	<b>District</b>	<b>Municipality</b>	<b>No. of Nurses</b>	<b>Total No.</b>
2	Nawalparasi West	Sunwal	1	1
3	Palpa	Rampur	4	7
		Mathagadhi	1	
		Rainadevi Chahara	2	
4	Kapilvastu	Banganga	1	2
		Maharajgunj	1	
5	Arghakhachi	Vumikasthan	12	12
6	Pyuthan	Pyuthan	1	2
7	Dang	Shantinagar	2	4
		Tulsipur	1	
		Rajpur	1	
8	Banke	Narainapur	1	14
		Baijnath	8	
		Raptisonari	5	
9	Bardiya	Rajapur	1	6
		Geruwa	5	
10	Rolpa	Triveni	12	15
		Runtigadhi	1	
		Rolpa	1	
		Thabang	1	
11	Rukum Purba	Putha Uttarganga	1	1
<b>Total</b>				<b>80</b>

The province-level review of the One School One Nurse Program was held, and the nurses discussed their accomplishments, concerns, and challenges throughout their employment. This opportunity was also used to orient the school nurses on various programs such as ASRH, Nutrition, etc.). Further research should be conducted to compare the success of schools with and without school nurses in order to justify the expansion to support the effective implementation of programs under the National School Health and Nutrition Strategy.

### **2.3.6.9 Weekly Iron Folic Acid Supplementation to Adolescent Girls**

The government of Nepal has provided weekly Iron Folic Acid (IFA) supplements to adolescent girls aged 10 to 19 under the framework of the School Health and Nutrition Strategy 2004. The purpose was to prevent and control the high prevalence of Iron Deficiency Anemia in this specific population subgroup. The intervention began as a pilot initiative and had since been gradually scaled up to encompass all LLGs in Nepal. This program component seeks to provide weekly Iron Folic Acid pills to all adolescent girls aged 10 to 19 years twice a year in Shrawan (Shrawan-Asoj) and Magh (Magh-Chaitra). They get one IFA tablet every week for 13 weeks throughout each cycle. As a result, each adolescent female should receive a total of 26 IFA tablets over the year. In Lumbini Province, all 109 LLGs are implementing the program; however, due to poorly recorded reporting and lack of coordination with schools, coverage has not been reported. As the DHIS-II has been amended and Adolescent Nutrition indicators have been integrated into the monthly reporting system from this FY 2079/80.



**Table 2.3.6: Percentage adolescent girls aged 10-19 years who received IFA supplement in fiscal year 2079/80**

District	% of adolescent girls aged 10-19 years who received IFA supplement for 13 weeks	% of adolescent girls aged 10-19 years who received IFA supplement for 26 weeks
Lumbini Province	25	20
Rukum East	20	21
Rolpa	43	35
Pyuthan	39	32
Gulmi	50	41
Arghakhanchi	29	30
Palpa	39	36
Nawalparasi West	72	64
Rupandehi	23	13
Kapilbastu	1	2
Dang	21	20
Banke	11	5
Bardiya	18	12

### **2.3.6.10 Nutrition in Emergencies (NiE)**

Nutrition in emergencies (NiE) has two major goals: to prevent deaths and to preserve people's right to food. People who are already malnourished before the disaster are more vulnerable to disease and death. Malnutrition is a risk among the areas impacted by the emergency because of a shortage of food or access to inadequate food and water, poor sanitation, and a lack of access to health care. The NiE focuses primarily on pregnant and lactating women (PLWs) and children under the age of five because they are nutritionally most vulnerable. In the impacted areas, the following five nutrition initiatives are implemented:

1. Promotion, protection, and support for breastfeeding of infants and young children aged 0-23 months.
2. Promotion of proper complementary feeding for infants and young children aged 6-23 months.
3. Management of moderate acute malnutrition (MAM) among children aged 6-59 months and among PLWs through targeted supplementary feeding program (TSFP)
4. Management of severe acute malnutrition among children aged 6-59 months through therapeutic feeding.
5. Intensification of Micro-nutrient supplementation for children and women including MNP and Vitamin A for children aged 6-59 months, IFA for pregnant and postnatal women.

In Nepal, the Nutrition Section of the Ministry of Health and Population's Family Welfare Division leads the Nutrition Cluster, which is co-led by UNICEF. Similarly, at the provincial level, the

health and nutrition clusters have been integrated and are co-led by multiple development partners, including UNICEF (nutrition) and WHO (health). During the COVID-19 Pandemic, the Province Health and Nutrition Cluster was activated and deployed for preparedness, information management, and coordinated response to reach the most vulnerable women and children of Lumbini Province. However, there is very few HR trained on NiE at the provincial and municipal levels, therefore initiatives to expand HR capacity are critical.

The following preparedness and response activities were implemented in the fiscal year 2079/80

- Regular operation of the Health and Nutrition Cluster for a coordinated response, monitoring, and information sharing.
- Comprehensive nutrition-specific interventions (CNSI) training has been implemented throughout the province, and CNSI includes a detailed section on NiE, which is an important component of capacity-building activities.
- Prepared/revised nutrition in emergency preparedness and response plans to address nutrition challenges in the COVID-19 setting, monsoon, and earthquake.
- Essential nutrition items are repositioned at Provincial Health Logistic Management Centers.

During the COVID-19 Pandemic, the nutrition cluster deployed all cluster partners, health workers, and FCHVs across the province. In this context, the Nutrition cluster's efforts in FY 2079/80 led to the following results:

- Nutritious relief (food packages) provided to golden 1000 days mothers.
- Messages on breastfeeding, and nutrition needs of golden 1000days mothers and children translated in 3 local languages (Tharu, Awadhi, and Kham) and disseminated through various mediums (miking, posters, Pamphlets, FM radios, FCHV, and volunteers' mobilization).
- 42 FM radios aired messages on nutrition and COVID-19 throughout the province.
- Volunteers mobilized at the points of entry with SBCC messages for the returnees focusing on 1000days families.
- SMS, targeted phone calls to the 1000 ssdays family to ensure that they are aware of the IYCF and maternal nutrition practices.

### **2.3.6.7 Nutrition SMART Survey**

The Provincial Health Directorate of Lumbini Province conducted a Nutrition assessment of children aged 6-59 months in Kapilvastu & Rukum East district in February 2023. The Nutrition programs are implemented under the umbrella of MSNP in this district. Nutrition-specific and sensitive interventions are implemented by the 7 sectors at all local levels. There are 23 & 5 Outpatient Therapeutic Care Centres (OTCs) in Kapilbastu & Rukum East to manage severe acute malnutrition. Since there is no municipal or district-level information on the nutrition status of children under 5 years of age, the provincial-level data is used to advocate and plan for nutrition interventions, which the local levels find difficult to accept and are not sensitive enough during the planning process. This data gap was addressed with the SMART survey. The results of the

survey and assessment reveal the state of nutrition as well as other aspects including food diversity, food security, and WASH.

### **Key discussion & conclusion SMART Survey: Kapilbastu district**

The nutrition status of children aged 6-59 months in Kapilvastu district should be seriously considered. The overall prevalence of stunting is 46% and it is higher among boys (51.5%) in comparison of girls (40.2%). Children are severely stunted in the age group of 30-41 months, which is highest (27.3%).

The severity of wasting is higher in girls (11%) than in boys (9.6%). The wasting is highest in the age groups of 6-17 months and 54-59 months at 15.5% and 15.6% respectively. The Underweight is more problematic among boys (39.4%) in comparison of girls (30.6%). It trend of both moderate and severe underweight is observed to be increasing with age group, which is highest in 54 to 59 months age group i.e. 37.5% and 12.5% respectively.

Furthermore, a minimal difference is reported in the combined rate of SAM among boys (1.7%) and girls (1.9%). According to the WHO and UNICEF new threshold set, the prevalence of stunting and wasting is at serious public health concern. Similarly, prevalence of underweight is 35.2% which is also in public health concern.

The overall nutrition status in Kapilvastu continues to be concerning, unstable and needs scale up of high impact nutrition interventions to meet the increasing needs, especially integrated malnutrition prevention interventions focusing on the first 1000 days of life, strengthening early detection and referral for acute malnutrition among women and children, and providing quality and timely treatment of all forms of malnutrition. Thus, financial investment is critical to ensuring the availability of relevant human resources, a core pipeline for nutrition and strategic partnerships for service delivery at scale.

### **Key discussion & conclusion SMART Survey: Rukum East district**

The nutrition status of children aged 6-59 months in the Rukum-East district has to be seriously considered. The overall prevalence of stunting is 37.9% and it is higher among boys (39.3%) in comparison to girls (36.3%). Children are severely stunted in the age group of 42-53 months, which is the highest (16.3%).

The severity of wasting is higher in boys (5.9%) than in girls (3.5%). The wasting (GAM) is highest in the age groups of 6-17 months i.e. 10.6%. The Underweight is more problematic among boys (19.3%) in comparison to girls (16.8%). The moderate and severe underweight is observed to be highest among the age groups of 30-41 months and 42-53 months at 23.1% and 24.1% respectively.

According to the WHO and UNICEF new threshold set, the prevalence of stunting is a serious public health concern.

The nutrition status in Rukum- East is concerning and needs scale-up of high-impact nutrition interventions to meet the increasing needs, especially integrated malnutrition prevention interventions focusing on the first 1000 days of life, strengthening early detection and referral for acute malnutrition among women and children, and providing quality and timely treatment of all

forms of malnutrition. Thus, financial investment is critical to ensuring the availability of relevant human resources, a core pipeline for nutrition, and strategic partnerships for service delivery at scale.

### **Recommendation of SMART Survey (Kapilbastu & Rukum East)**

Following key recommendations are based on the findings of the survey:

- A multi sectorial intervention (Nutrition Specific and Sensitive) is needed to address the high prevalence of malnutrition starting early detection and care of the most vulnerable children.
- Evidence based targeted intervention for the high prevalence of wasting and stunting in the particular age groups.
- There is association between nutritional status of children and social and behavior change, nutrition SBCC interventions should implement.
- Improved access to nutritious food: breast feeding, complementary foods.
- The existing nutrition program should implement with the high quality at the universal coverage.

### **2.3.8 Best Practice / Lesson learned / Innovation.**

#### **Province:**

- Province-level consultation on the role of stakeholders to improve the nutrition status of children, adolescents, and women.
- Meetings of the Nutrition and Food Security Steering Committee at the provincial level are held regularly.
- The appointment of a school nurse has aided the school's health and nutrition program.
- Fund allocation for the complementary food supplement to new mothers.
- Additional funding to ensure the smooth operation of NRH Lumbini.
- Fund allocation for the MSNP program.
- Growth Monitoring started at the MCH Clinic of the Hospitals
- Kush Hal Programmes with a focus on Muslim and marginalized communities.
- Ayurveda Programs focusing on the "Breastfeeding Promotion" (Satawari Churna)

#### **Local level:**

- Local level taking ownership and taking steps such as:
- Nutritional assessment of children under the age of five, as well as the development of a municipal health and nutrition profile.
- Nutritional packets are given to mothers during institutional birth. "Upadakshya Koseli Karyakram" and Aama Samuha Dwara Gharbhet.
- Incentives such as Salt packets, lentils, and soaps are provided to mothers of under 2 children to promote growth monitoring (Bachha Jokaun noon Bokaun).
- Establishment of the nutrition corner and breastfeeding room.
- Nutrition-friendly health facility declaration.

### 2.3.8 Issues and Challenges

- Despite local funding allocations, there is a lack of technical execution capability.
- Lack of strategies to address wasting.
- MAM management remains difficult since supplies such as RUTF are insufficient.
- Growth monitoring and promotion indicators have not improved. Mothers and caregivers of children under the age of two are uninformed of the location and benefits of GMP sessions.
- Irregular supply of nutrition commodities (MNP, Vitamin A capsules, RUTF, & Iron tablets).
- Active screening to detect children with severe and moderate acute malnutrition is ineffective, as is defaulter tracking.
- The Health Mothers' Groups are not functioning actively.
- The turnover and transfer of skilled health workers have had an impact on services at Outpatient Therapeutic Centers.
- Policy and focus shifts at donor agencies have had an impact on nutrition program.
- Despite the allocation of funds at the local level, there is a lack of technical ability for execution.

#### **Recommendation:**

- Develop Policies and Plans to influence the nutrition agenda at the local and provincial levels.
- Evidence generation (e.g., SMART surveys, studies) to enable effective program planning.
- Periodic training and capacity building of frontline service providers.
- Intensive RDQA at the health facility level and periodic data management and reporting training to frontline service providers.
- Develop strategies/interventions for the management of wasting, with an adequate supply of RUTF.
- Focusing on counselling mothers during growth monitoring sessions with visuals (plotted charts of child growth) to help parents realize the importance of regular growth monitoring.
- Uninterrupted supply of nutrition commodities.
- Prioritize community-based programs for active case finding and defaulter case tracking.
- Reactivation of health mothers' group.
- Ongoing capacity building/onsite coaching of OTC staffs, as well as the expansion of OTCs in the remaining districts/LLGs.
- Appointment of nutrition focal point person at the provincial and municipal levels.
- Ensure regular monitoring and supervision of nutrition programs and activities at provincial and municipal levels.

## 2.4 Safe Motherhood and Newborn

### 2.4.1 Background

The Constitution of Nepal 2015, provision the free basic health services as fundamental right of citizens. The Right to safe motherhood and reproductive health act 2018 and its regulation respect, preserve and commit to fulfilling the rights of women to safe motherhood and reproductive health services and to ensure their safety, quality, and accessibility.

Nepal is a signatory to the Sustainable Development Goal and has committed to one of the important targets to reduce the Maternal Mortality Ratio to less than 70 per 100,000 live births and reduce the Newborn Mortality Rate to less than 12 per 1000 live births by 2030. In this regard, Nepal has developed different policies, strategies, and guidelines to ensure that quality services are accessible, affordable, and available to all people especially targeting the unreached population.

The goal of the National Safe Motherhood Program is to reduce maternal and neonatal morbidity and mortality and improve maternal and neonatal health through preventive and promotive activities and by addressing avoidable factors that cause death during pregnancy, childbirth, and the postpartum period. Evidence suggests that three delays are important factors for maternal and newborn morbidity and mortality in Nepal (delays in seeking care, reaching care, and receiving care).

The following major strategies have been adopted to reduce risks during pregnancy and childbirth and address factors associated with mortality and morbidity:

- Promoting birth preparedness and complication readiness including awareness raising and improving preparedness for funds, transport, and blood transfusion.
- Expansion of 24 hours birthing facilities alongside Aama Suraksha Program promotes continuum of care from ANC to PNC.
- The expansion of 24-hour emergency obstetric care services (basic and comprehensive) at selected health facilities in all districts.

The Safe Motherhood Program, which was started in 1997, has made significant progress with the formulation of a safe motherhood policy in 1998. With the development of policies, programs and protocols, service coverage has been improved tremendously. The policy on skilled birth attendants (2006) emphasizes the importance of SBA at all births and embodies the government's commitment to train and deploy doctors, nurses, and ANMs with the necessary skills across the country. Implementation of the Aama Program to ensure free service and encourage women to give birth in a health facility has increased access to institutional deliveries and emergency obstetric care services. The adoption of the revised National Blood Transfusion Policy (2006) was another important step toward ensuring the availability of safe blood supplies in emergency situations.

## 2.4.2 Main Strategies of the Safe Motherhood Program

1. Promoting inter-sectoral coordination and collaboration at federal, provincial, districts and local levels to ensure commitment and action for promoting safe motherhood with a focus on poor and excluded groups.
2. Strengthening and expanding delivery by skilled birth attendants and providing basic and comprehensive obstetric care services at all levels. Major interventions include:
  - developing the infrastructure for delivery and emergency obstetric care
  - standardizing basic maternity care and emergency obstetric care at appropriate levels of the health care system
  - strengthening human resource management - training and deployment of advanced skilled birth attendant (ASBA), SBA, anesthesia assistant and contracting short-term human resources for expansion of services sites
  - establishing a functional referral system with airlifting for emergency referrals from remote areas, the provision of stretchers in wards and emergency referral funds in all remote districts
3. Strengthening community-based awareness on birth preparedness and complication readiness through FCHVs and increasing access to maternal health information and services
4. Supporting activities that raise the status of women in society.
5. Promoting research on safe motherhood to contribute to improved planning, higher quality services and more cost-effective interventions.

Nepal Safe Motherhood and Newborn Health Roadmap 2030 provides the framework for Nepal to fulfill its commitments under the Safe Motherhood and Reproductive Health Act 2018. The following are the main five outcomes:

- Outcome 1: Availability of high-quality maternal and newborn health services increased, leaving no one behind
- Outcome 2: Demand for and utilization of equitable maternal and newborn health services increased.
- Outcome 3: Governance of maternal and neonatal health services is improved, and accountability is ensured.
- Outcome 4: Monitoring and evaluation of maternal and newborn health improved.
- Outcome 5: Emergency preparedness and response for maternal and newborn health strengthened.

The Nepal Health Sector Strategy (NHSS) identifies equity and quality of care gaps as areas of concern for achieving maternal health SDG targets, and provides guidance for improving quality of care, equitable distribution of health services and utilization, and universal health coverage with better financing mechanisms to reduce financial hardship and out-of-pocket expenditure for illness.

### 2.4.3 Major Programmatic Achievements

#### Distribution of Facilities for Emergency Obstetric and Newborn Care (EONC) Services

The life-saving intervention that treats major causes of maternal and newborn mortality and morbidity, timely access to emergency obstetric and newborn care services are required. Based on level of care, these services have been divided into two parts (i.e., basic, and comprehensive emergency obstetric, and newborn care services). BEONC services include seven signal functions, whereas CEONC includes two additional signal functions not provided by BEONC.

Under the **BEONC**, the following signals functions:

- Parenteral administration of antibiotics.
- Parenteral administration of oxytocin or other uterotonic.
- Parenteral administration of anticonvulsant for hypertensive disorders of pregnancy.
- assisted vaginal delivery.
- Manual removal of retained placenta.
- Removal of retained products of conception.
- Neonatal resuscitation.

Under the category of **CEONC**, all seven of the above, including additional two signals functions contain as mentioned below:

- Blood transfusion; and
- CS.

In Birthing Centre (BCs) can only perform normal deliveries and provide obstetric first aid, including parenteral oxytocin, antibiotics, and anticonvulsants; they do not qualify as BEONC facilities.

**Table 2.4.1: Distribution of Emergency Obstetric and Neonatal Care (EONC) facilities**

District	CEONC			BEONC			Birthing Centre		
	FY 2077/078	FY 2078/079	FY 2079/080	FY 2077/078	FY 2078/079	FY 2079/080	FY 2077/078	FY 2078/079	FY 2079/080
Arghakhanchi	1	1	1	2	2	2	22	27	24
Banke	4	4	5	3	4	3	32	36	34
Bardiya	1	1	1	3	3	3	23	30	27
Dang	3	3	3	1	2	2	36	40	40
Gulmi	1	1	1	4	4	4	56	66	68
Kalpibastu	1	1	1	3	4	1	31	33	31
Nawalparasi-West	1	1	1	2	4	3	13	16	13
Palpa	3	2	3	3	4	6	45	52	49
Pyuthan	1	1	1	2	2	3	51	53	55
Rolpa	1	1	1	3	2	2	52	49	64
Rukum-East	0	0	1	1	1	1	15	17	15
Rupandehi	2	4	5	5	4	5	30	25	29
<b>Lumbini</b>	<b>19</b>	<b>20</b>	<b>24</b>	<b>32</b>	<b>36</b>	<b>35</b>	<b>406</b>	<b>444</b>	<b>449</b>

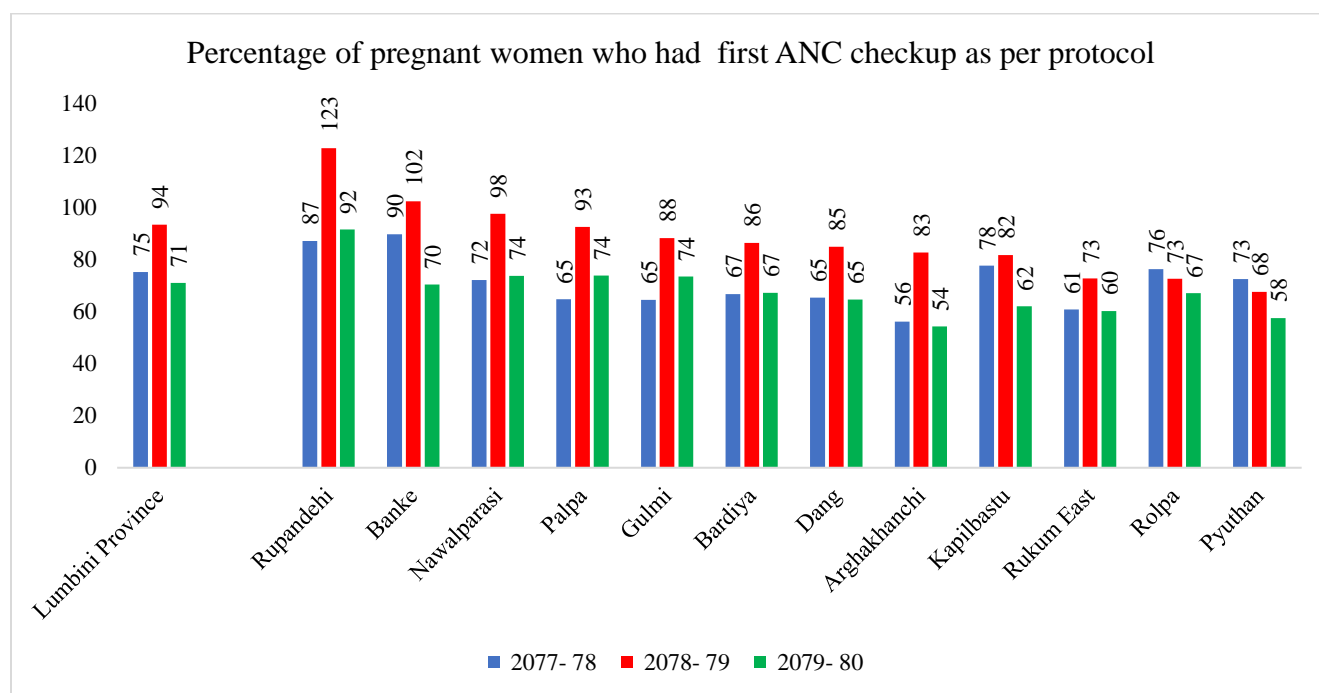
In the province, 26 hospitals have been providing CEONC services. Four more hospitals have strengthened CEONC service in FY079/80 and there are 35 BEONC service sites and 449 birthing centers. Additional 5 health facilities have extended their services as BCs in FY079/80.

### Antenatal Care

According to national protocols (ANC to PNC Continuum of care guideline) pregnant women should have at least eight antenatal contacts, give birth in a health facility, and have four post-natal check-ups. All pregnant women should have a minimum of four antenatal check-ups in their pregnancy. Women should receive the following services and general health check-ups during these visits:

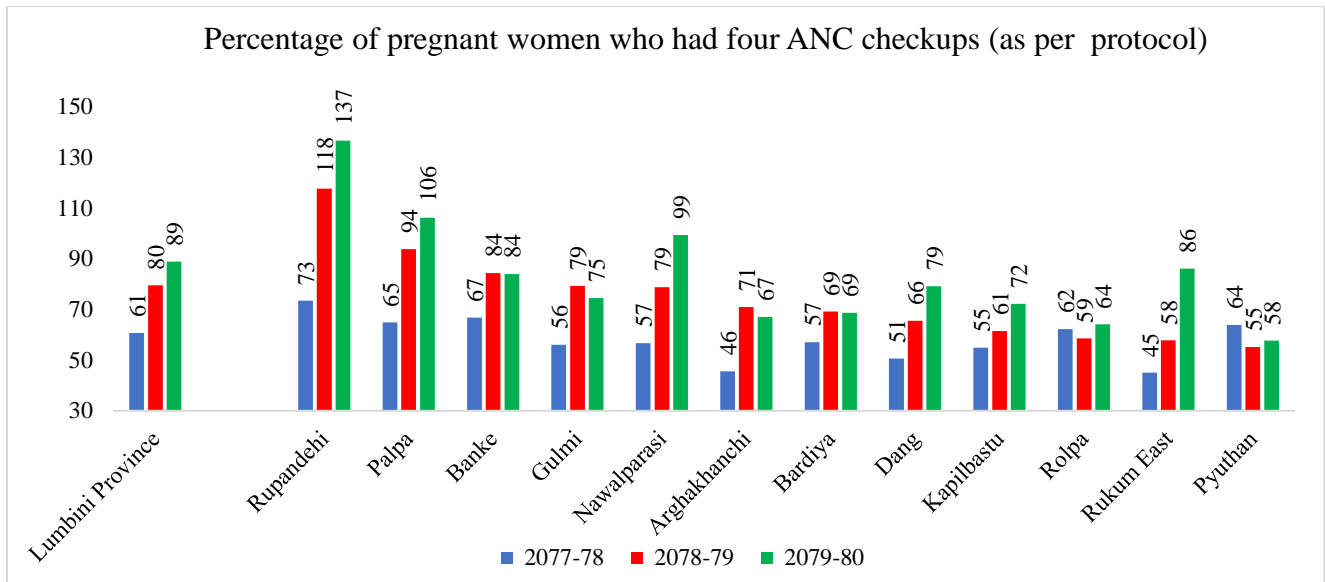
- Monitoring of blood pressure, weight, and fetal heart rate
- IEC and BCC on pregnancy, childbirth, and early newborn care, as well as family planning
- Information on danger signs during pregnancy, childbirth, and the postpartum period, as well as prompt referral to appropriate health facilities.
- Early detection and management of pregnancy complications.
- All pregnant women receive tetanus toxoid and diphtheria (Td) immunization, iron folic acid tablets, and deworming tablets, as well as malaria prophylaxis as needed.

*Figure 2.4.1: District and provincial trends in percentage of pregnant women with first ANC visits (as per protocol) among expected live birth*



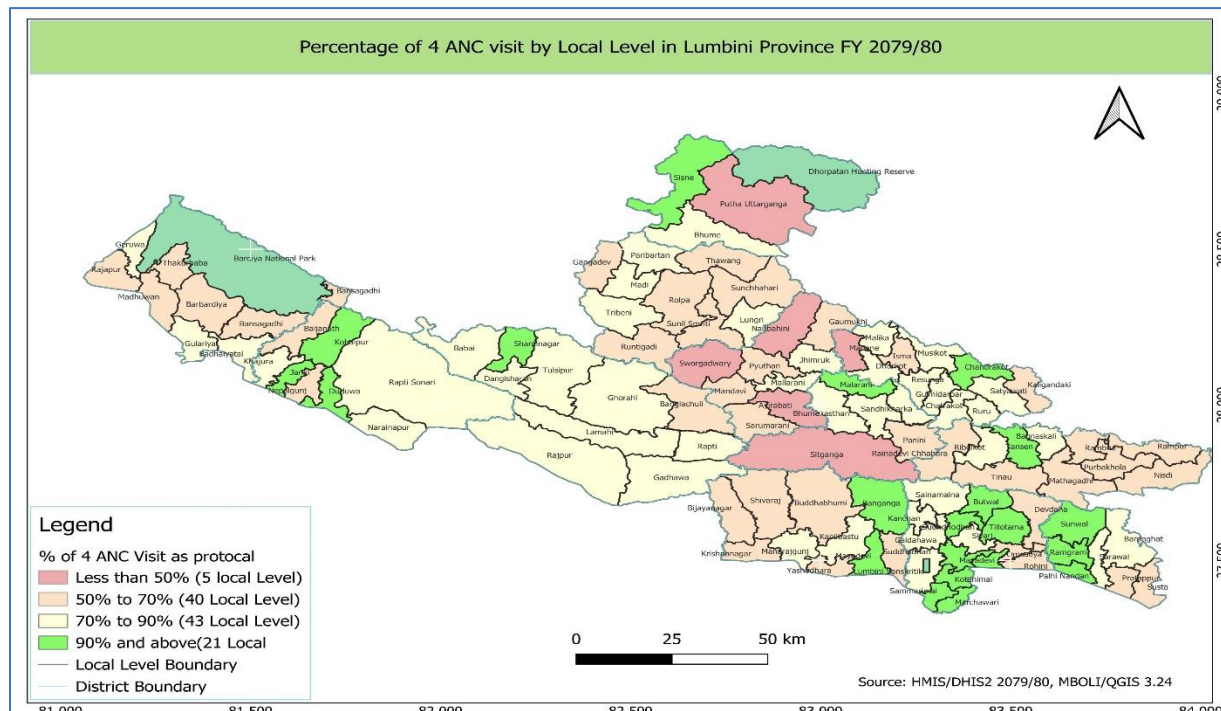
In Lumbini Province, the proportion of pregnant women who received their first antenatal care according to protocol decreased from 94% in FY 2078/079 to 71.1% in FY 2079/080 as well as it is in decreasing trend in all districts as compared to FY2078/079. Rupandehi has the highest coverage in the protocol-based first ANC visit (91.6%) among 12 district in Province.

**Figure 2.4.2: District and provincial trends in percentage of pregnant women with four ANC visits (as per protocol) among expected live births**



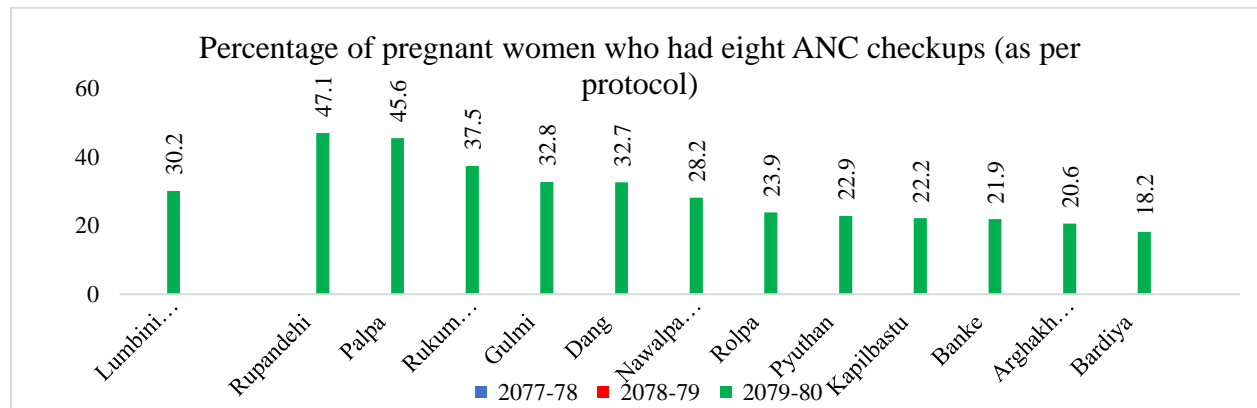
Percentage of women receiving four ANC checkups as per protocol is increased by 8.8% from FY 2077/078 (80%) to FY 2078/079(88.8%) in Lumbini Province. Rupandehi has the highest coverage (136.6%) of four ANC visits in FY 2079-80, followed by Palpa (106.2%) and Nawalparasi West (99.3%) while Pyuthan has the lowest (57.7%).

**Map: Four ANC visits as per protocol (as % of expected live births)-Local level.**



Out of 109 LLGs, only 21 LLGs have 90 % and above 4 ANC visit as per protocol and 5 LLGs still have less than 50 % ANC visit as per protocol which is very less in compared to SDG target

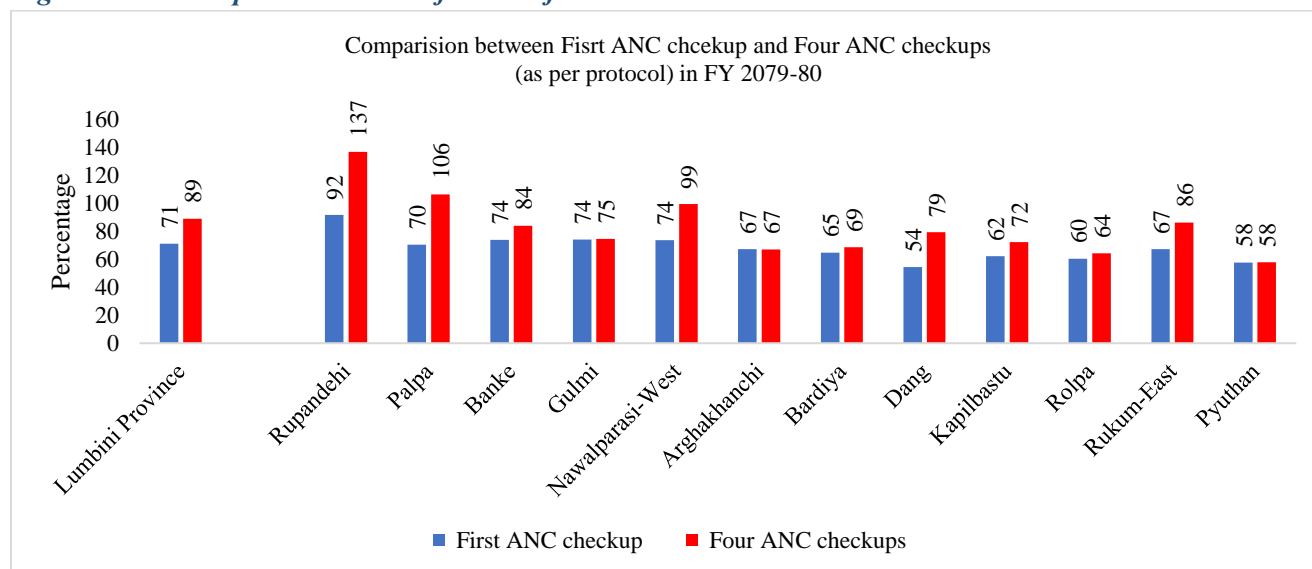
**Figure 2.4.3: District and provincial trends in percentage of pregnant women who had eight ANC checkups (as per protocol) among expected live births.**



In Lumbini Province, the proportion of pregnant women who received their eight antenatal contacts according to protocol in FY 2079/080 is 30.2%. Rupandehi has the highest coverage 47.1% followed by Palpa (45.6%) while Pyuthan has the lowest (18.2%).

### Comparison between first and four ANC visits

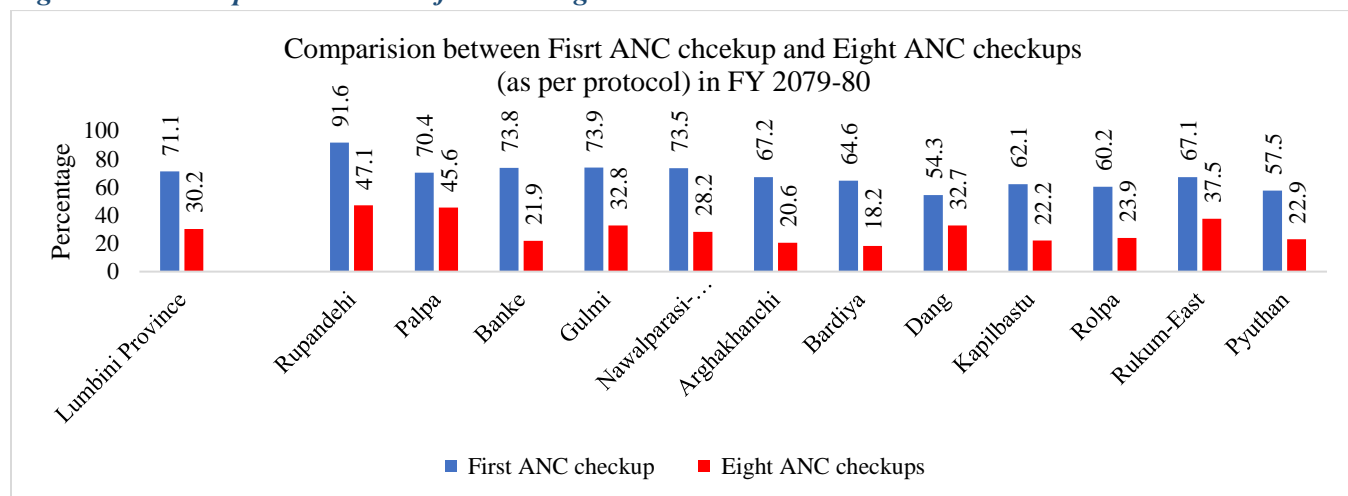
**Figure 2.4.4: Comparison between first and four ANC visits**



In Lumbini Province, the percentage of women who had four ANC visits is higher (88.8%) than the percentage of women who have first ANC visits (71.1%). ANC fourth visit is in increasing trend as compared to first visit in almost districts.

## Comparison between first and Eight ANC visits

Figure 2.4.5: Comparison between first and Eight ANC visits



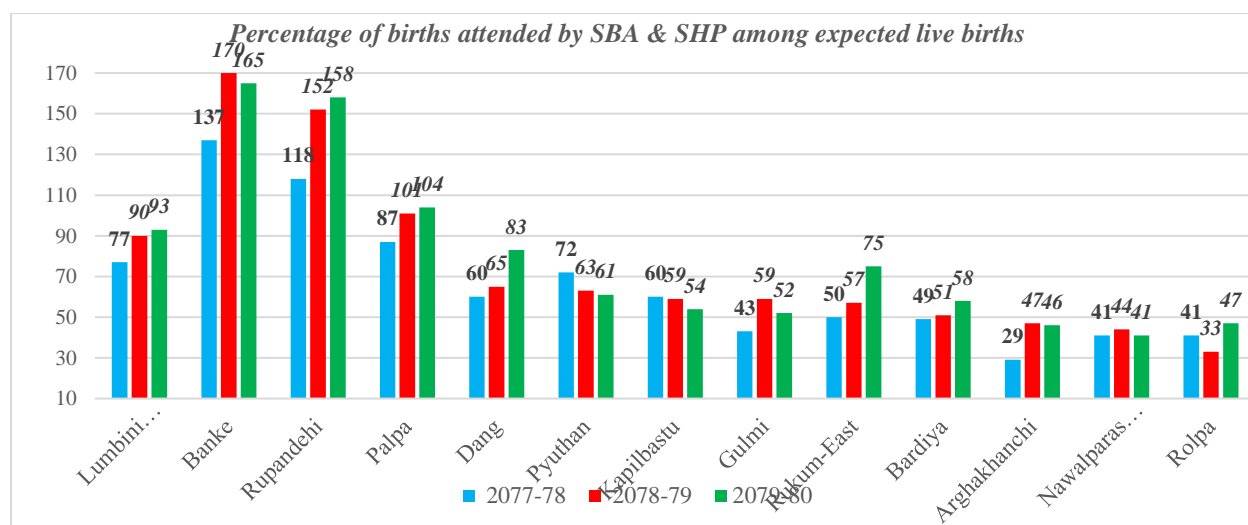
There was a major gap seen between percentage of first ANC visits (71.1%) and eighth ANC visits (30.2%) in Lumbini Province (indicates by table: 26).

## Safe Delivery

A safe delivery care includes skilled birth attendance at home and institutional deliveries; early detection of complicated cases and management or referral (after providing obstetric first aid) to an appropriate health facility with 24-hour emergency obstetric services, and registration of births and maternal and neonatal deaths. Although women are encouraged to give birth in a facility, home delivery with clean delivery kits, misoprostol to prevent post-partum hemorrhage, and early detection of danger signs and complications are important components of delivery care in settings where institutional delivery services are not available or are not used by the women.

## Delivery attended by SBA & SHP

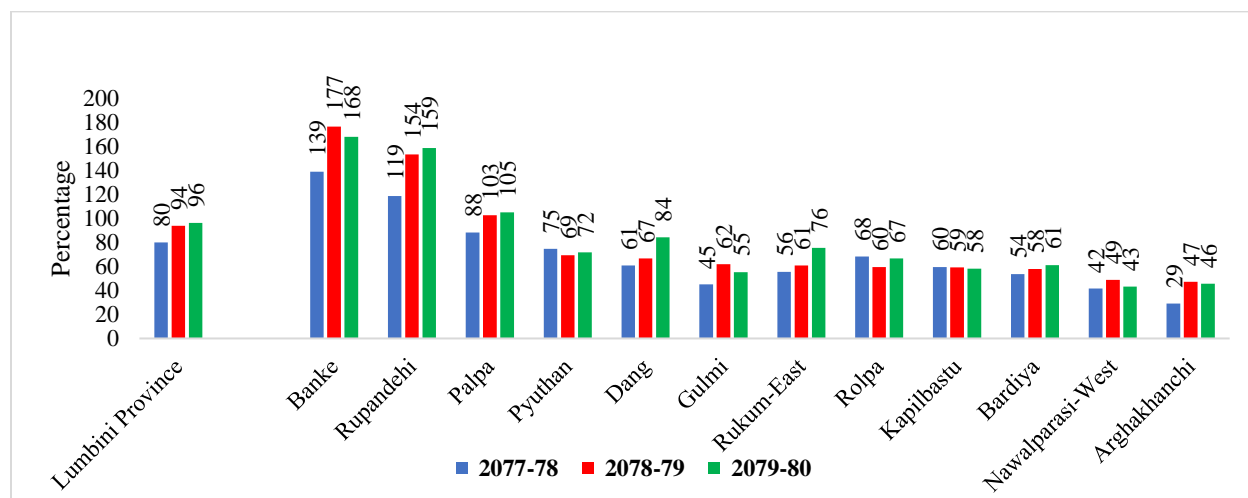
Figure 2.4.6: Percentage of births attended by SBA & SHP among expected live births.



There was slightly increase in the number of women delivered by Skilled Birth Attendant (SBA) & Skilled Health Personnel (SHP) from 90 % in FY 2078/79 to 93% in FY 2079/80 in Lumbini Province. Banke reported highest (165%), while Nawalparasi west reported lowest (41%) percentage of births attended by SBA and SHP among expected live births.

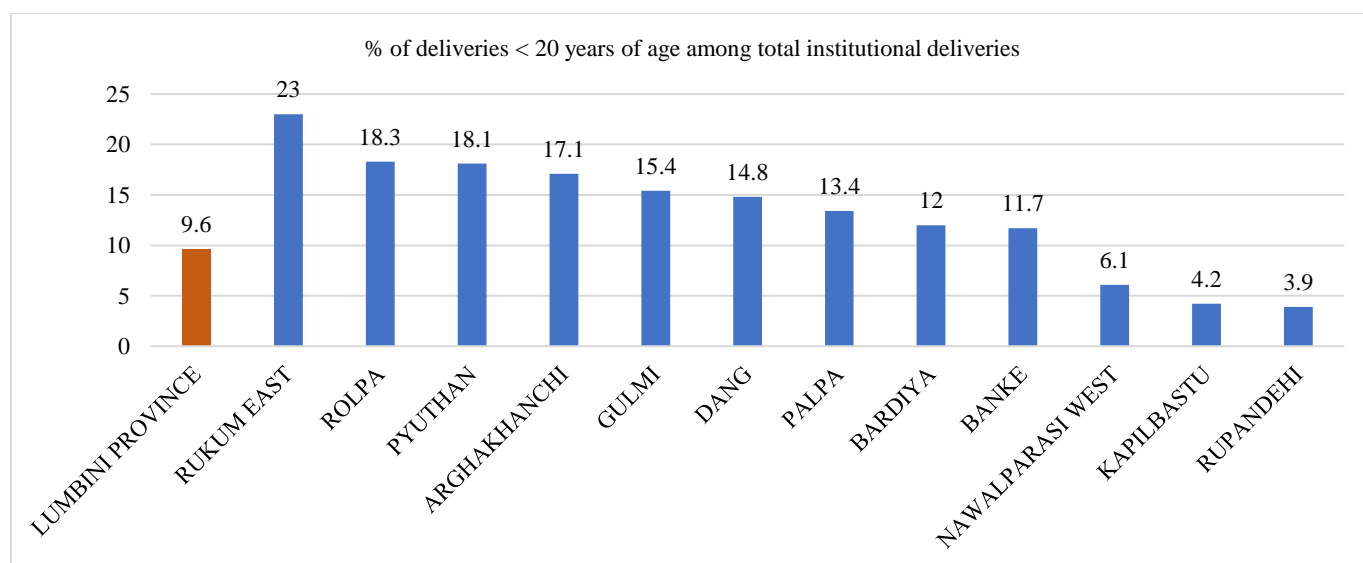
### Institutional Delivery

Figure 2.4.7: Percentage of institutional delivery



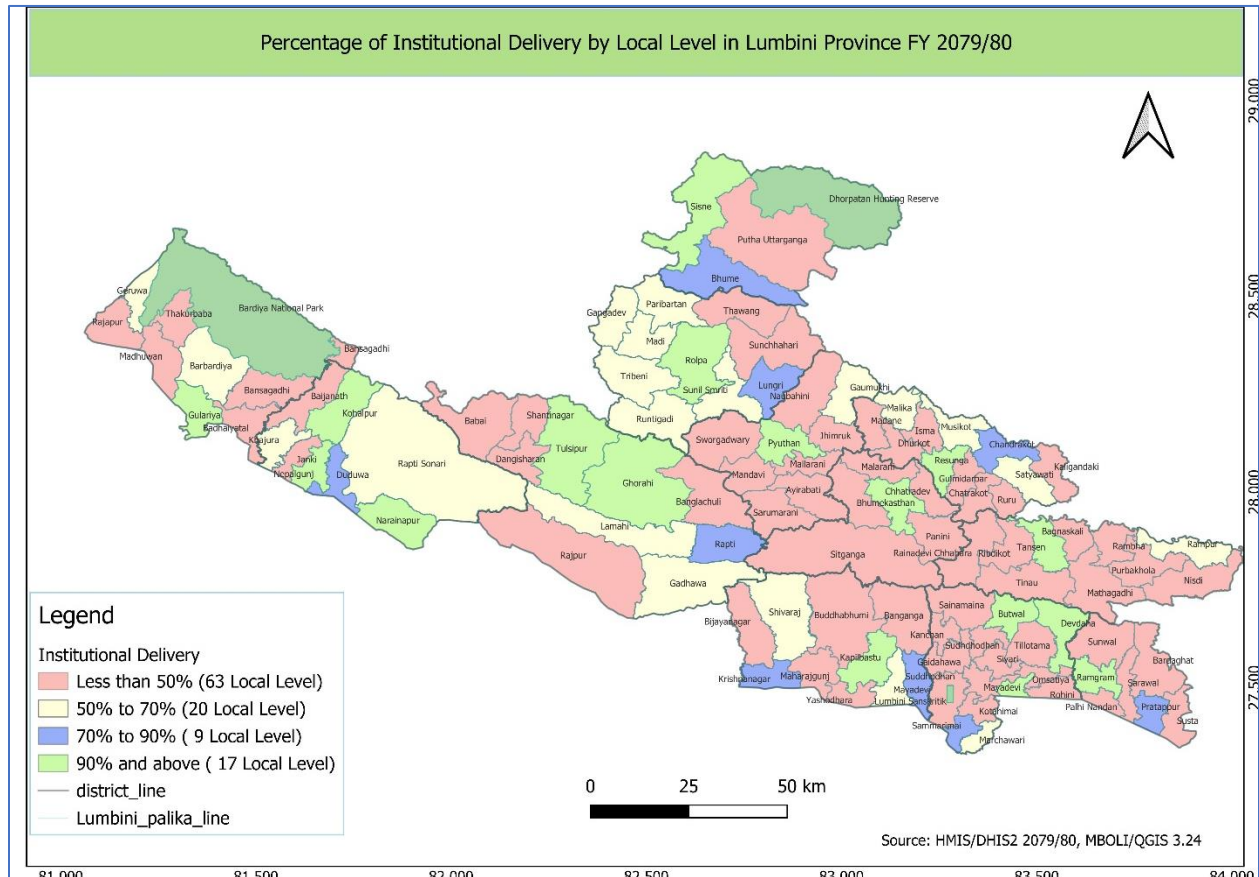
Nepal has committed to achieve 90 percent of all deliveries in health facilities by 2030 in order to meet the SDG target. Although the percentage of institutional deliveries in Lumbini province in FY 2079-80 was higher (96.4%) than the SDG target of 2030. Banke, Rupandehi and Palpa have reported more than 100 percent institutional deliveries while Nawalparasi west and Arghakhanchi reported less than 50% institutional deliveries.

Figure 2.4.8: Percentage of deliveries below 20 years of age among total institutional deliveries in FY 2079-80



In the fiscal year 2079/080, Lumbini Province recorded 9.6% of deliveries below 20 years of age among total institutional deliveries. Within Lumbini Province, Rukum East has the highest percentage (23%) of deliveries below the age of 20 followed by Rolpa (18.3%) and Pyuthan (18.1%). This data indicates a higher prevalence of childbirth among adolescents which highlights the need for targeted interventions and healthcare strategies.

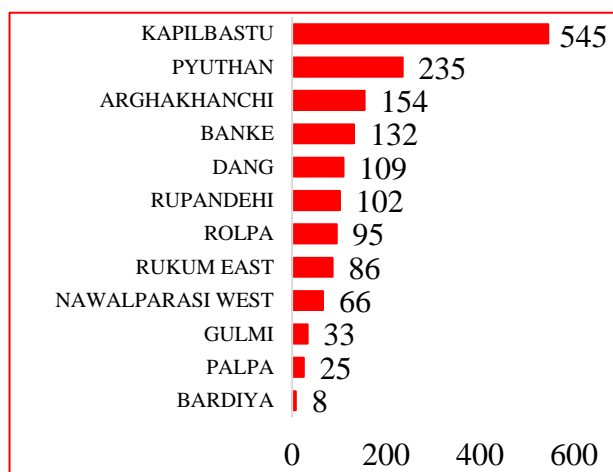
*Map: Percentage of institutional deliveries in Lumbini province-by Local level*



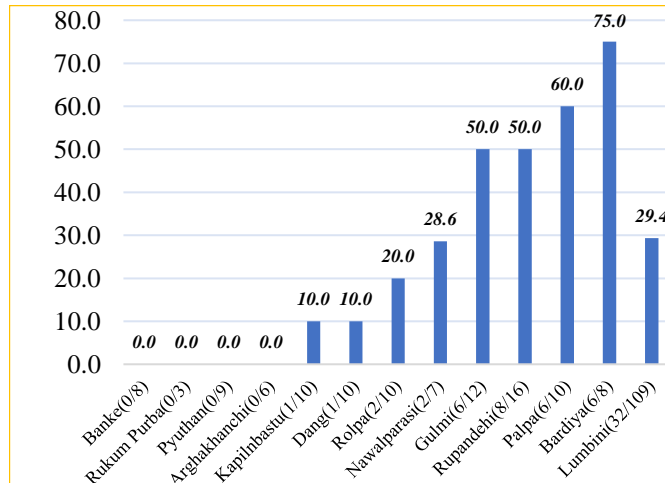
Although the percentage of institutional deliveries in Lumbini Province in FY 2079-80 (i.e., 96 percent) was higher than the SDG target of 2030. Institutional deliveries were reported to be less than 50% in 63 LLGs out of 109 LLGs. While only 17 LLGs have institutional deliveries 90% and above.

## Home Delivery`s

Figure 2.4.9: District with home delivery and district wise percentage of LLGs with zero home delivery



District-Wise Home Delivery in FY 2079/080



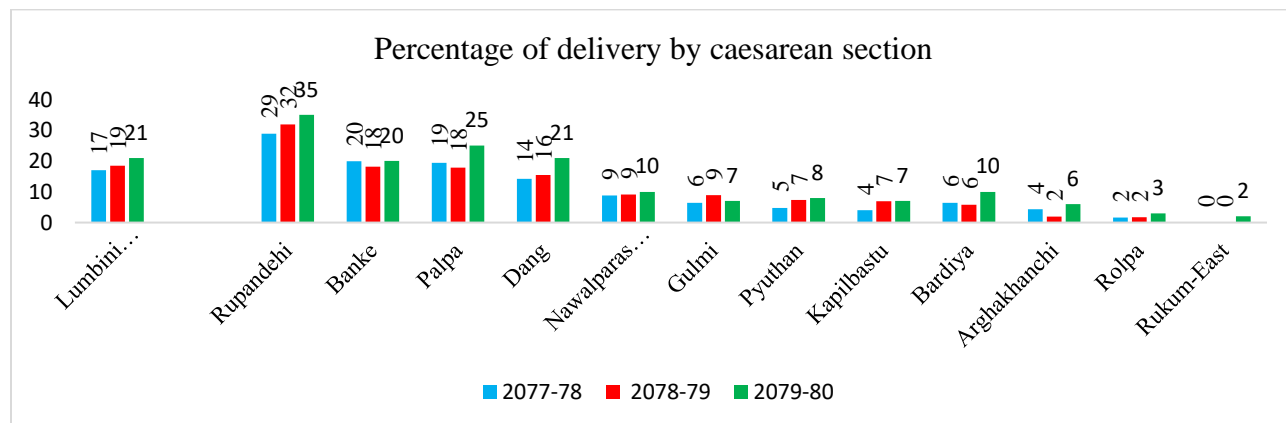
District-Wise Percentage of Palikas with reported zero home delivery in FY 2079/080

32 out of 109 LLGs (29.4%) of Lumbini Province have reported zero home delivery in fiscal year 2079-80. Within Lumbini Province, the highest number (545) of home deliveries was reported in Kapilbastu district.

## Deliveries by Caesarean Section (CS)

Since 1985, the international healthcare community has considered the ideal rate for caesarean sections to be between 10% and 15%. Since then, caesarean sections have become increasingly common in both developed and developing countries. WHO concludes that CS are effective in saving maternal and infant lives, but only when they are required for medically indicated reasons. Every effort should be made to provide caesarean sections to women in need, rather than striving to achieve a specific rate -WHO.

Figure 2.4.10: Percentage of deliveries by caesarean section



In Lumbini Province, there has been a continuous rise in the cesarean section rate. In FY 2079-80, 21 percent of institutional deliveries in the province were conducted by caesarean section which is higher than the ideal rate of CS (10%-15%). The highest rates of CS delivery were reported in Rupendehi (35%), followed by Palpa (25%), Dang (21%) and Banke (20%) While C-sections are a crucial medical intervention in certain cases, a rate exceeding the WHO's recommended threshold indicates a potential overuse of this procedure, unnecessary or avoidable C-sections can pose additional risks and healthcare costs without providing commensurate benefits To assess the effectiveness of strategies or interventions targeted at optimizing the use of caesarean section, in 2015, WHO proposed the use of the Robson classification (also known as 10-group classification) as a global standard for assessing, monitoring, and comparing caesarean section rates both within healthcare facilities and between them.

### Obstetric Complications

*Table 2.4.2: Table: Number of women treated for obstetric complications in FY 2079-80*

Obstetric Complication	RUKUM EAST	ROLPA	PYUTHAN	GULMI	ARGHAKHANCH	PALPA	NAWALPARASI	RUPANDEHI	KAPILBASTU	DANG	BANKE	BARDIYA	LUMBINI PROVINCE
Abortion Complication	7	15	31	11	0	11	47	760	54	289	251	85	1561
Antepartum Haemorrhage	1	1	9	7	3	29	3	101	4	23	86	33	300
Eclampsia		3	6	0	1	23	5	182	21	12	75	17	345
Ectopic Pregnancy	2	0	4	5	0	32	1	233	1	54	117	1	450
Hyperemesis Gravidarum		1	0	4	4	30	10	217	78	57	56	26	483
Obstructed Labor	7	10	9	0	4	390	10	44	12	1427	824	108	2845
Other Complications	7	14	353	23	37	29	155	285	140	100	1868	481	3492
Postpartum Haemorrhage	12	20	40	14	24	300	91	454	157	122	144	56	1434
Prolonged labour	25	43	49	8	11	592	36	364	23	200	137	186	1674
Puerperal Sepsis	4	1	0	1	1	12	5	41	7	6	12	6	96
Retained Placenta	10	46	32	10	4	33	23	102	8	82	64	24	438
Ruptured Uterus	1	1	1	0	1	0	0	9	0	3	19	0	35
Severe/Pre-Eclampsia	1	0	9	0	0	79	9	305	32	7	72	17	531
Total													<b>13,684</b>

Met need for Emergency Obstetric Care is a very important indicator of quality of care received by women. The total number of females receiving treatment for Emergency Obstetric Complication in FY 2078-79 was 13,684. Obstructed labor (2845), Prolonged Labour (1674), Abortion complication (1561) and Postpartum hemorrhage (1434) were the most common obstetric complications treated in FY 2079-80.

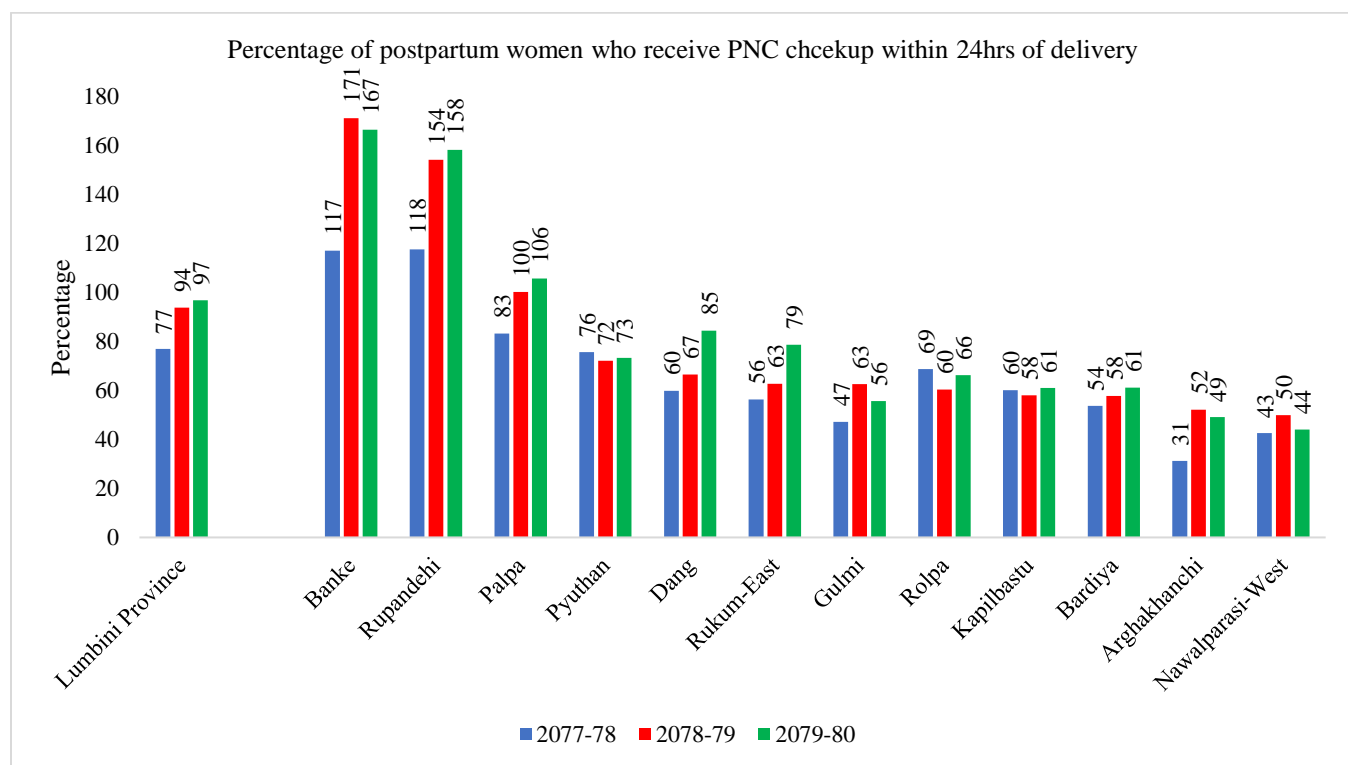
### Postnatal Care (PNC)

The postnatal period is a critical time in the lives of both mothers and their newborn children. Most maternal and neonatal deaths occur during this time. Yet, this is the most neglected period for the provision of quality care. As per the national protocol, at least four postnatal checkups are

recommended for all mothers and newborns. The guidelines encouraged all women for institutional delivery and stay in the health facility at least for 24 hours after delivery under the supervision and care of the health workers, as the first 24 hours of delivery is the crucial period for both mother and newborn. The postnatal care/ visit covers the following:

- Four postnatal check-ups, the first within 24 hours of delivery, the second on the third day, third on the seventh to fourteenth, and fourth on the 42 days after delivery.
- The identification and management of complications of mothers and Newborns, care immediately of health facilities and referrals to appropriate health facilities from the community.
- Breastfeeding as soon or within one hour of delivery and promotion of exclusive breastfeeding.
- Personal hygiene and nutrition education, and postnatal vitamin A and iron supplementation for mothers.
- Immunization of newborns.
- Postnatal family planning counselling and services.

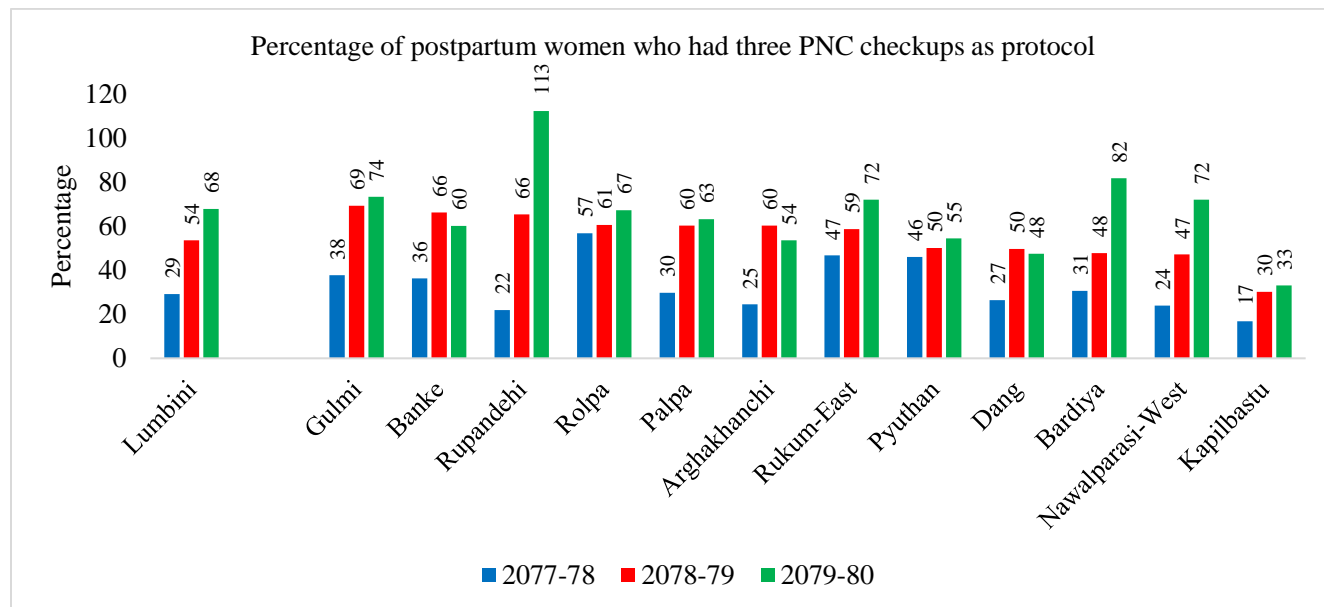
**Figure 2.4.11: District and provincial trend in percentage of postpartum women who received PNC check-up within 24 hours of delivery.**



Percentage of postpartum women who receive PNC checkup within 24hrs of delivery in the past 3 years is increasing from 77% to 96.9% in FY 2079/80. Banke reported highest (166.6%) while

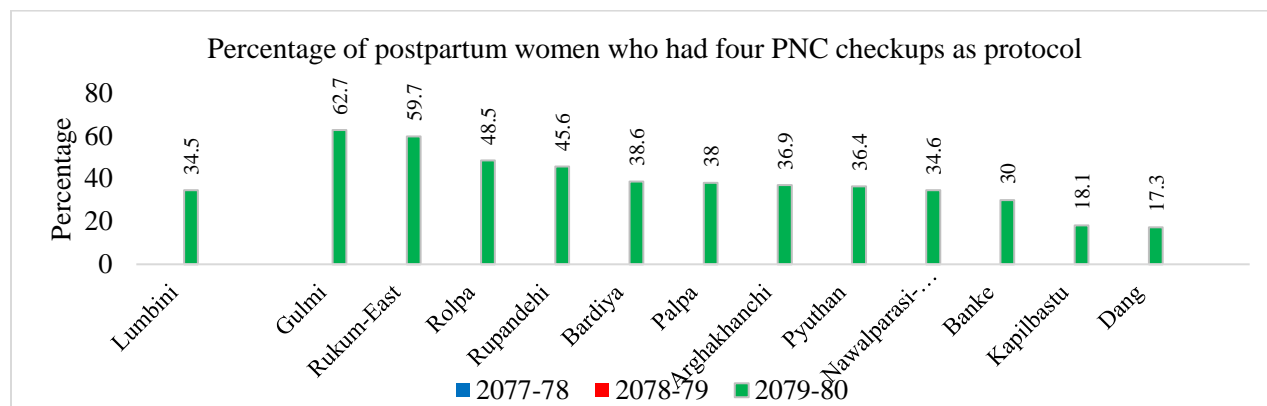
Nawalparasi west reported lowest (44.1%) Percentage of postpartum women who receive PNC checkup within 24hrs of delivery.

**Figure 2.4.12: District and provincial trends in percentage of postpartum women who had three PNC check-ups as per protocol.**



The proportion of mothers attending three PNC visits as per protocol increased in Lumbini province from 54 percent in FY 2078/079 to 68 percent in FY 2079/080. Lumbini Province has achieved SDG milestone 2022 of three PNC visits and progress so far is in track with the SDG Milestone 2025. Highest coverage reported in Rupandehi (113%) and lowest coverage in kapilbastu (33%).

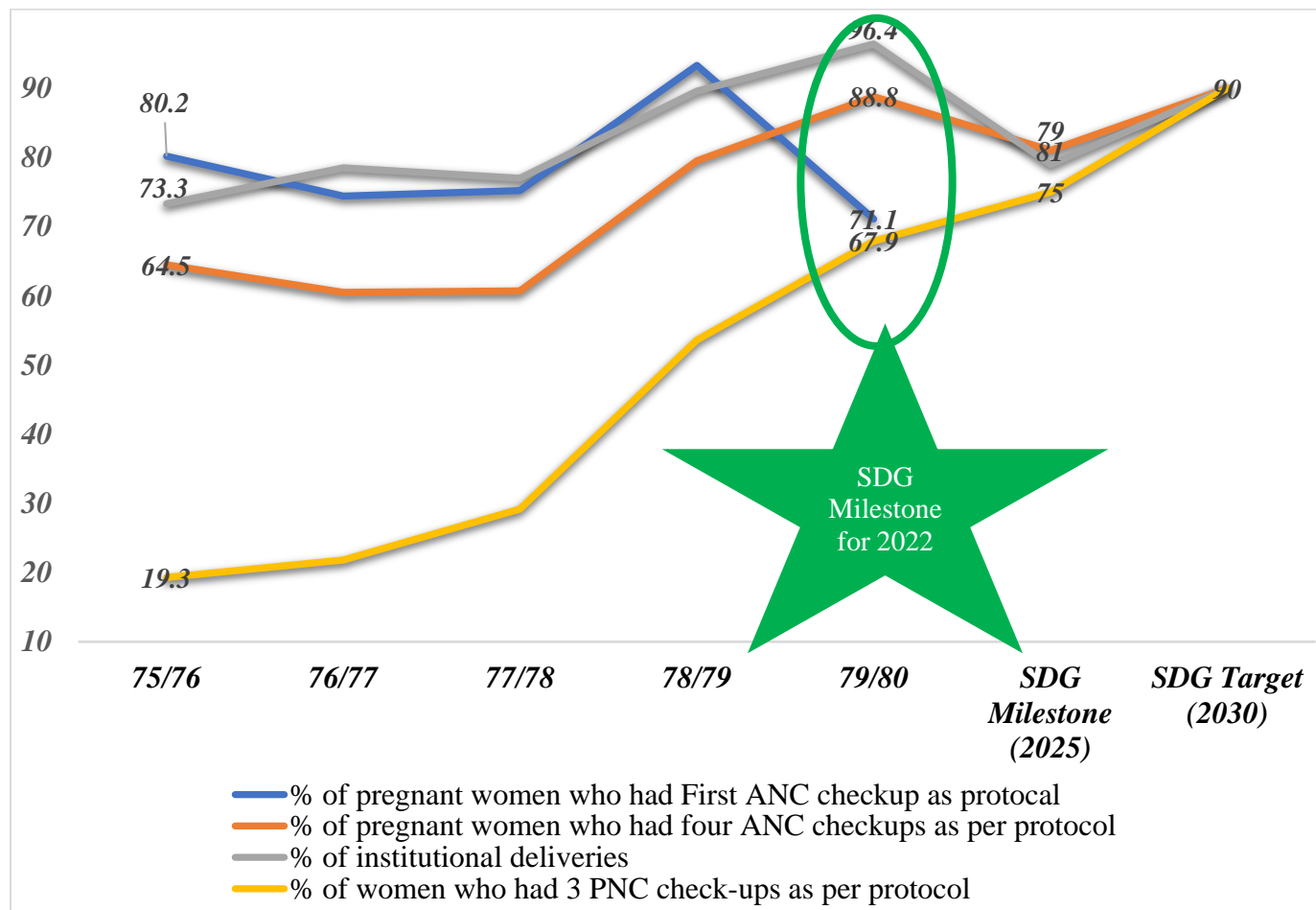
**Figure 2.4.13: District and provincial trends in percentage of postpartum women who had Four PNC check-ups (as per protocol).**



Government of Nepal endorsed ANC to PNC continuum of care guideline in 2079 B.S. according to revised protocol, four PNC care at 42 days of delivery is started in FY 2079-80 and service

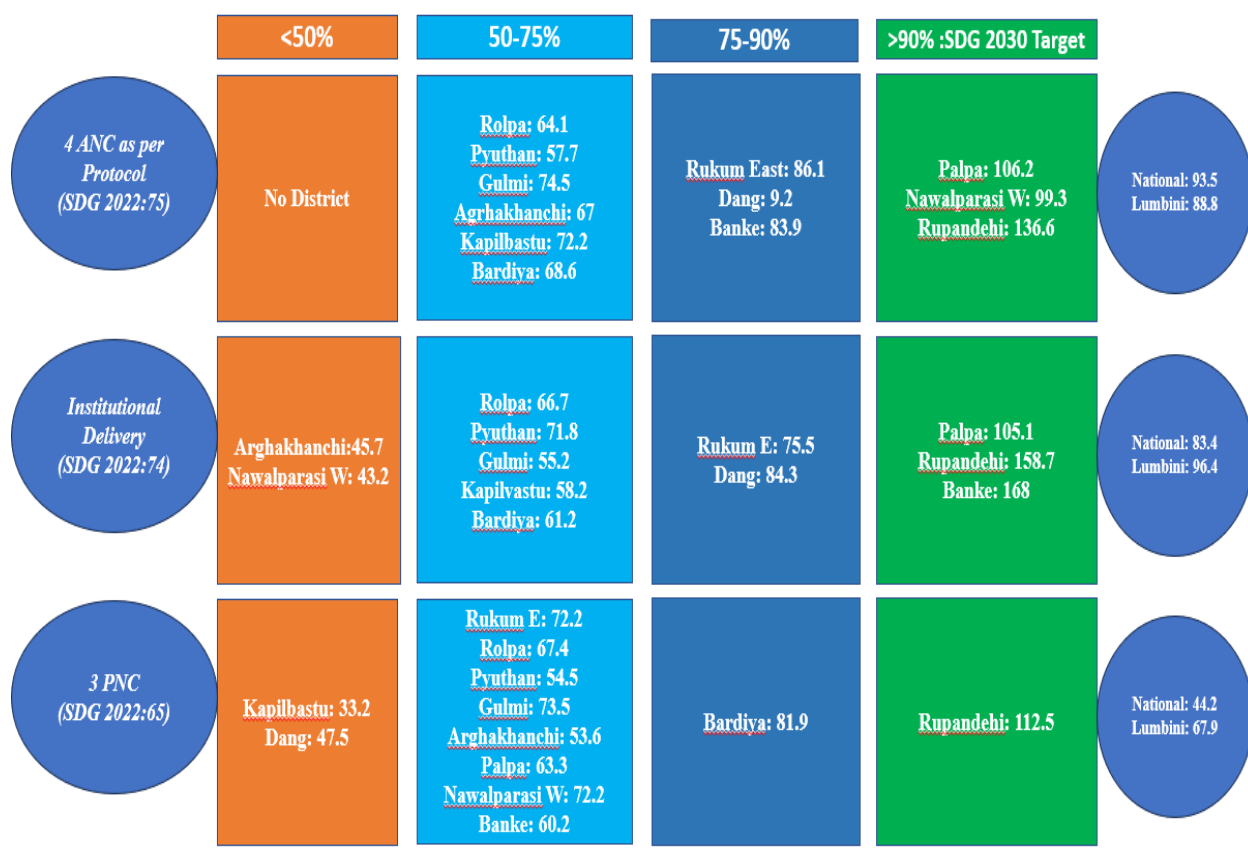
coverage of four PNC visits care is 34.5% in Lumbini Province. Highest in Gulmi (62.7%) and lowest in Dang (17.3%).

Figure 2.4.14: MNH: Continuum of Care



Gap in Continuum of Care in Lumbini Province: 71% ANC followed by 68% PNC. Similarly, first ANC as per protocol has decreased as compared to previous fiscal year. Lumbini Province has achieved SDG milestone 2022 and progress so far is in track with the SDG Milestone 2025

**Figure 2.4.15: MNH Indicator Trends**



### Maternal & Neonatal Deaths and Stillbirths

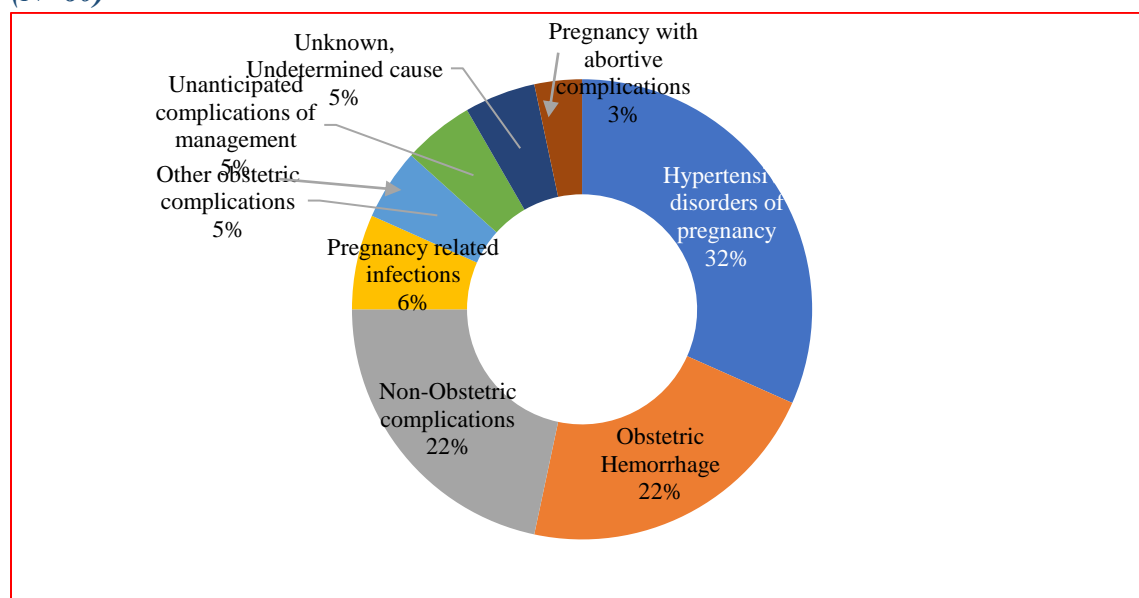
Nepal’s Safe Motherhood and Newborn Health (SMNH) Road Map 2030 aims to ensure a healthy life for, and the well-being of, all mothers and newborns. The Road Map is aligned with the Sustainable Development Goals (SDGs) to reduce the current Maternal Mortality Ratio (MMR) from 239 to 70 deaths per 100,000 live births (or at least two-thirds from the 2010 baseline) by 2030. It also aims to reduce the Newborn Mortality Rate (NMR) from the current 21 to less than 12 deaths per 1,000 live births, and the stillbirth rate from the current 18 to below 12.5 deaths per 1,000 live births by 2030. Nepal can achieve the Sustainable Development Goals only by identifying and reviewing every death and conducting appropriate activities to prevent similar deaths in future.

**Table 2.4.3: District wise Maternal, Neonatal Deaths and Stillbirths (Source: DHIS2)**

District	Maternal Death			Neonatal Death			Stillbirth (Fresh)			Stillbirth (macerated)		
	2077-78	2078-79	2079-80	2077-78	2078-79	2079-80	2077-78	2078-79	2079-80	2077-78	2078-79	2079-80
Arghakhanchi	1	1	0	10	17	2	13	4	11	4	5	6
Banke	47	32	29	237	250	142	95	165	145	338	377	261
Bardiya	3	4	7	48	38	32	32	12	14	61	66	40
Dang	0	2	6	33	34	21	21	35	18	72	84	78
Gulmi	0	1	0	6	11	6	17	12	10	14	21	15
Kapilbastu	0	2	6	10	23	9	96	64	22	61	72	82
Nawalparasi West	1	0	2	12	6	4	4	5	9	53	32	8
Palpa	4	3	0	30	30	23	26	38	27	51	38	32
Pyuthan	2	3	5	36	28	20	42	26	18	45	44	20
Rolpa	2	3	4	27	30	20	28	15	28	21	18	17
Rukum-East	0	0	1	7	3	5	5	1	6	2	2	1
Rupandehi	12	23	22	56	103	296	110	114	90	360	385	335
<b>Lumbini</b>	<b>72</b>	<b>74</b>	<b>82</b>	<b>512</b>	<b>573</b>	<b>580</b>	<b>489</b>	<b>491</b>	<b>398</b>	<b>1082</b>	<b>1144</b>	<b>895</b>

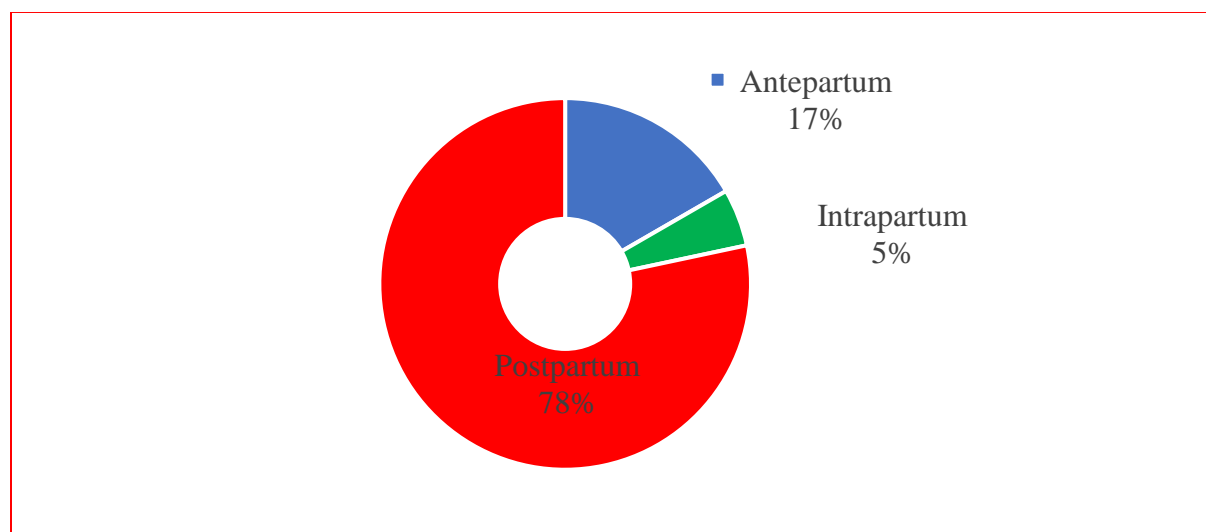
In Lumbini province, 82 maternal deaths, 580 neonatal deaths, and 1293 stillbirths were reported in fiscal year 2079-80. The number of maternal and neonatal deaths in FY 2079/080 was significantly higher than in FY 2078/079. Banke had the highest number of maternal deaths, followed by Rupandehi.

**Figure 2.4.16: Maternal Deaths by cause of death reported in Hospital MPDSR in FY2079/080 (N=60)**



Hypertensive disorders of pregnancy (32%) is the most common cause of maternal deaths in FY 2079/80 followed by Obstetric Hemorrhage (22%) and non-obstetric complications (22%) reported in Hospital MPDSR(Figure:37).

**Figure 2.4.17: Maternal Deaths by Period of death reported in Hospital MPDSR in FY2029//080 (N=60)**



In FY 2079/80, a high percentage of maternal deaths were reported in the postpartum period (78%) followed by the Antepartum (17%) period.

### 2.3.4 Issues, constraints, and recommendations

Issues and constraints	Recommendations	Responsibilities
-High maternal mortality in Banke and Rupandehi -No timely and complete reporting of Maternal and perinatal death in MPDSR web-based portal, data of DHIS2 and MPDSR web-based system not matched	-Implement safe motherhood roadmap strategies. -Monitoring and Functionalization of Hospital and community based MPDSR mechanism -Effective implementation of response plan -Periodic monitoring and review of implementation status of response plan -Closely monitoring and regular follow-up	FWD, HD, MoH, Hospitals, Health Offices
Major Gaps between 1 <sup>st</sup> ANC and Eight ANC visits as well as very low four PNC coverage	-Effectively implement the ANC to PNC continuum of care. -Introduce m-health technologies, where possible to register and track all pregnant women in communities. -Continue/initiate PNC home visit in hard-to-reach communities	FWD, MoH, HD, Local Levels
High delivery case load in referral hospitals so that hard to manage complications timely.	-Establishment of birthing Units block in referral hospitals with high caseloads of led by professional midwives/SBA/SHP	FWD, MoH, HD, PHD

Issues and constraints	Recommendations	Responsibilities
	-Make provisions for additional human resources in hospitals with high caseloads of deliveries.	
Rapid expansion of birthing centres without minimum service standard at local levels, but their utilization has been sub-optimal, and quality is degrading; high case load of deliveries in referral hospitals.	-Rethink the number and location of birthing facilities (collaborate with local governments to limit the expansion of birthing centres and focus on strengthening establishing birthing centres in strategic places) -Create specific criteria and standards for the establishment of birthing centres. -Focus on improving the quality of birthing centres. -Develop and implement innovative programs and community engagements to encourage women to give birth in the nearest birthing centres. -Ensure separate birthing units Map and categorize birthing centres according to the caseload	FWD, HD, PHD and Local Levels
Higher prevalence of childbirth among adolescents	-Strengthening school health program	HD, HO, Local level
77 Municipalities out of 109 still reported home delivery	-Strictly follow the full institutional delivery strategy	HD, HO, Local level
Poor referral practice	-Strengthen and functionalized referral Mechanism. <ul style="list-style-type: none"> <li>Provision of EOC fund.</li> </ul>	FWD, PHD, Local Level, HO
Services for RH morbidities (cervical cancer screening) not operational in many provincial hospitals despite readiness	<ul style="list-style-type: none"> <li>Make cervical cancer screening and treatment services available in hospitals on a regular basis.</li> </ul>	Provincial Hospitals

## 2.5 Family Planning

### 2.5.1 Background

The government of Nepal considers Family Planning program a top priority. The Right to Safe Motherhood and Reproductive Health Act of 2018, along with its 2020 Regulations, ensures quality Family Planning information and services as a women's right. The 15th national periodic

plan and the safe motherhood and newborn health roadmap 2030 also emphasizes the availability and accessibility of right-based FP services. Male condoms, oral contraceptive pills, injectables, implants, and IUCD are key components of the Basic Health Service for temporary family planning.

Lumbini province is committed to improving access to family planning services within the federal structure. Various policies and strategies, such as the provincial health policy 2077 and the first five-year periodic plan (FY 2076-77-2080-81), support family planning programs. The provincial government aims to allocate resources to enhance the health system, create a conducive environment for collaboration with external partners, and involve non-health sectors. Family planning information and services are accessible in Lumbini province through government facilities, social marketing, NGOs, private sectors, commercial outlets, private clinics, pharmacies, and medical colleges. Short-acting reversible contraceptive methods (SARCs like male condoms, oral pills, and injectables) are provided free regularly in public health facilities through primary health care centers (PHCC), health posts (HP), and primary health care outreach clinics (PHC/ORC). Female Community Health Volunteers (FCHVs) offer information, education, condoms, and oral contraceptive pills to the community. Long-acting reversible contraceptive (LARC) services, such as IUCD and implants, are available in a few hospitals, PHCCs, and HPs with trained healthcare providers. Satellite clinics, visiting service providers (in selected Lumbini districts), and mobile camps extend access to LARC services in remote areas. Sterilization services are mainly provided through seasonal and mobile outreach services due to limited static sites in Lumbini Province.

### **2.5.2 Objectives, Policies and Strategic Areas for Family Planning**

The overall objective of Nepal's Family Planning program is to improve the health status of all people through informed choice on accessing and utilizing client-centered quality voluntary Family Planning.

#### **National policies and strategic areas for Family Planning:**

1. Enabling environment: Strengthen the enabling environment for Family Planning.
2. Demand generation: Increase health care seeking behavior among populations with high unmet need for modern contraception.
3. Service delivery: Enhance FP service delivery including commodities to respond to the needs of marginalized people, rural people, migrants, adolescents, and other special groups.
4. Capacity building: Strengthen the capacity of service providers to expand FP service delivery.
5. Research and innovation: Strengthen the evidence base for Program implementation through research and innovation.

#### **Provincial policies and strategies on Family Planning:**

##### **Province Health Policy 2077**

**Policy 8:** Rights of adolescents for safe motherhood and reproductive health will be ensured.

*Strategy 8.3:* Family planning programs will be formulated and implemented as per the need by analyzing the status of safe motherhood and reproductive health of women in different classes, castes, religions, and regions.

**Policy 24:** Health care program will be formulated and implemented on the basis of demographic situation and distribution.

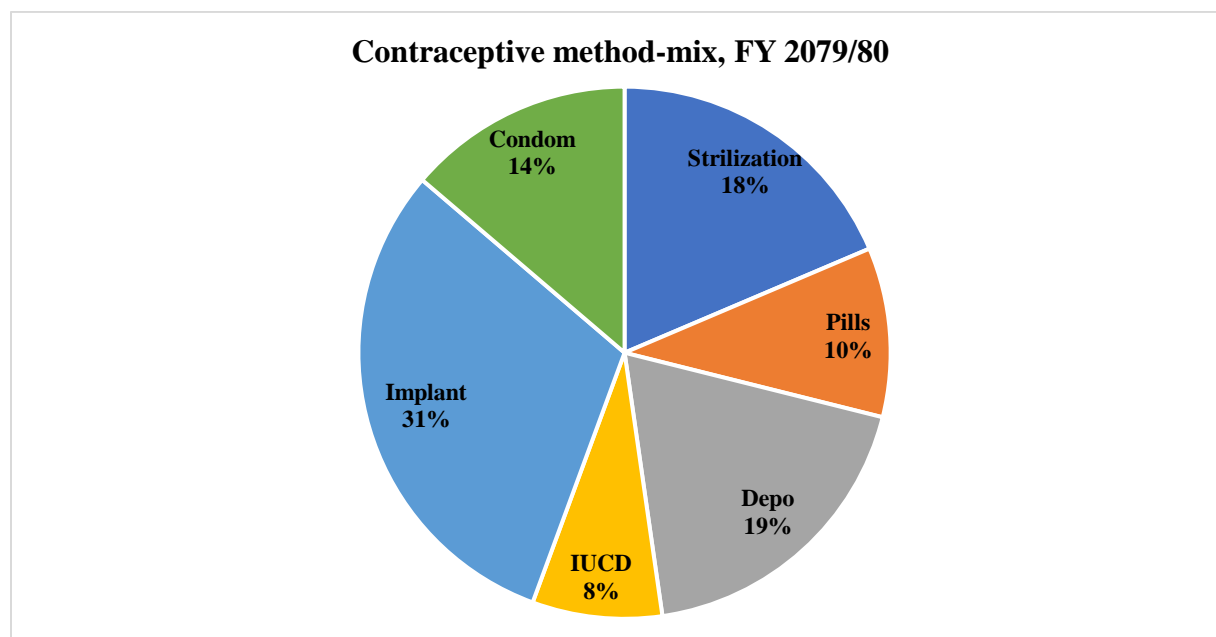
**Strategy 24.1:** The actual demographic information will be updated based on the gender ratio, and family health programs will be developed and implemented in the targeted age, class, region, and social group.

### 2.5.3 Major Achievements in the Family Planning Program

#### Current Users

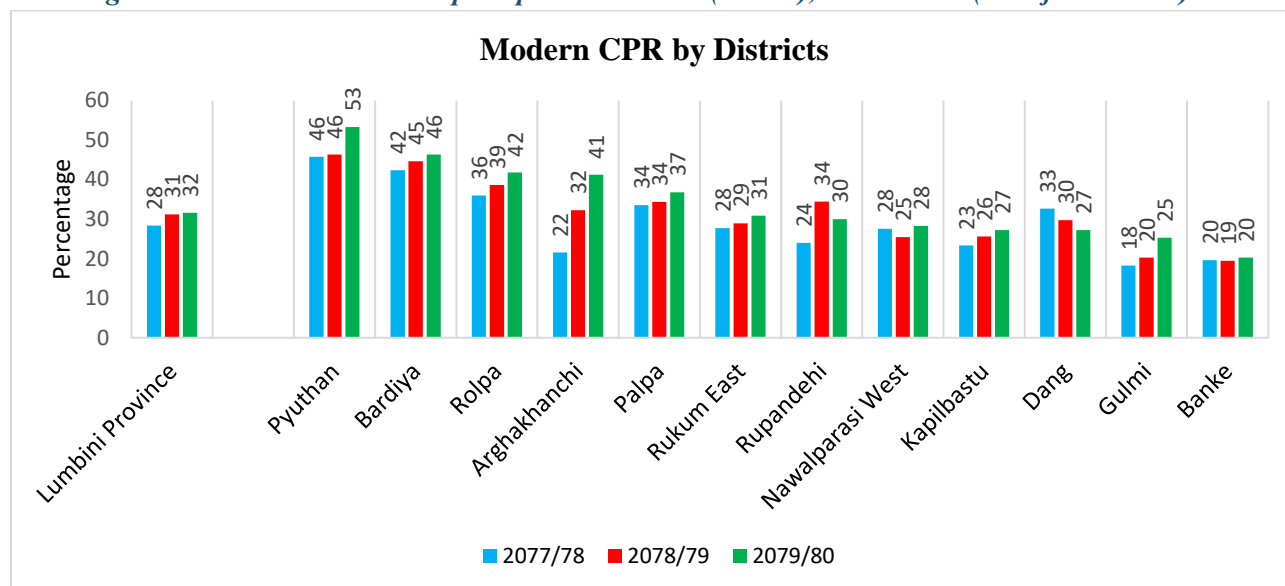
In the fiscal year 2079/80 in Lumbini Province, the most common mix- contraceptive method among current users were Implant (31%), followed by Depo (19%) and Sterilization (18%). Condom (14%), Pills (10%), and IUCD (8%) were the least commonly used methods.

*Figure 2.5.1: Proportion of FP Current Users-Method Mix (FY 2079-80)*



## Contraceptive Prevalence Rate (Unadjusted CPR)

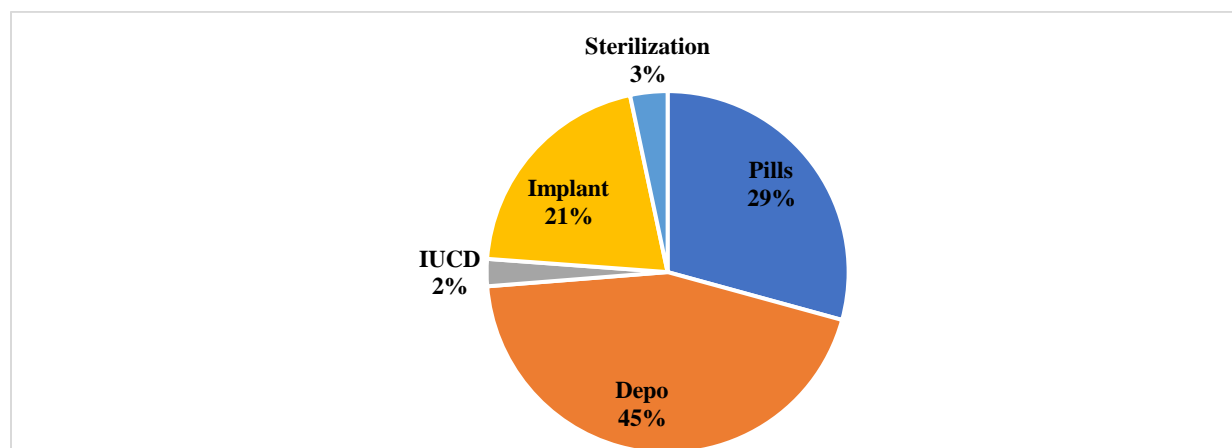
Figure 2.5.2: Modern contraceptive prevalence rate (mCPR), FY 2079/80 (unadjusted CPR)



The status of contraceptive prevalence rate of Lumbini Province has been in increasing trend over the last three years. In Fiscal year 2079/80, the highest percentage of contraceptive prevalence rate was in Pyuthan district (53) and the least in Banke district (21).

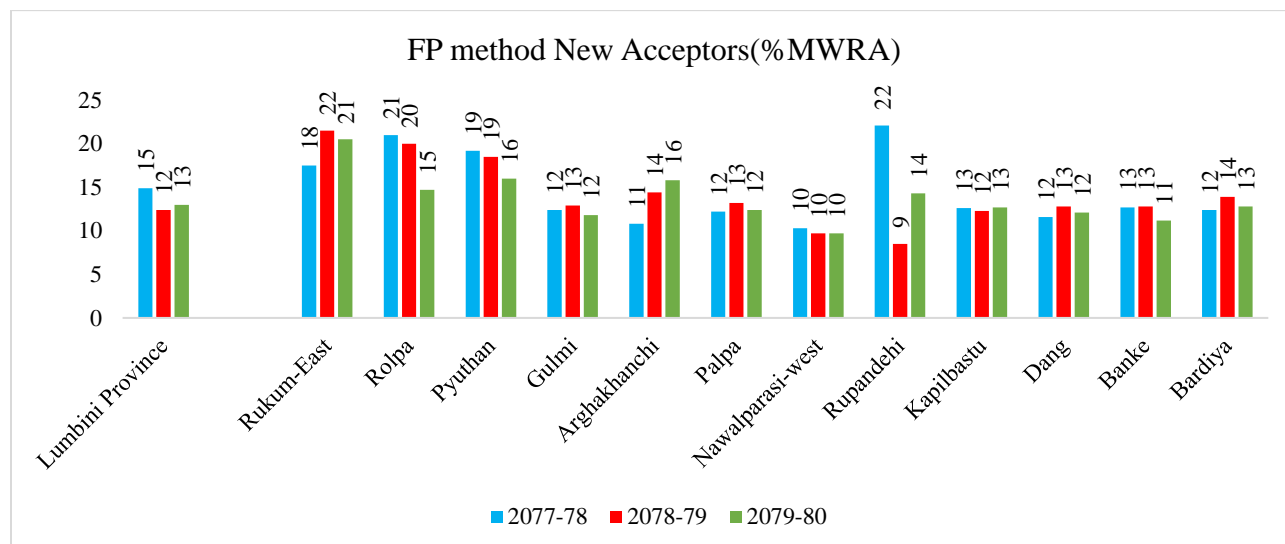
## New Acceptors for all Modern Methods of Province

Figure 2.5.3: Share of method-mix among new acceptors, FY 2079/80



In the fiscal year 2079/80 in Lumbini Province, almost half (45%) of the new acceptors of all modern family planning methods chose Depo, while 29% opted for Pills. Additionally, Implant made up 21% of the method mix, while sterilization and IUCD had shares of 3% and 2% among the new acceptors.

**Figure 2.5.4: Proportion of FP methods new acceptors among married women of reproductive age**



In Lumbini, the percentage of new family planning users among married women of reproductive age was 13% in fiscal year 2079-80, compared to 12% in fiscal year 2078-79. The proportion of new family planning acceptors has decreasing trend in eight districts compared to previous year.

### Acceptors of Postpartum Family Planning

In Lumbini Province, the use of post-partum family planning methods like IUCD, Implant, and Tubectomy is suboptimal when compared to the total number of deliveries. Only about 2.2% of women who have given birth have accepted family planning methods in the post-partum period. In fiscal year 2079-80, a total of 1963 post-partum mothers chose one of the three methods. Palpa had the highest proportion of post-partum family planning users (8.9%), followed by Nawalparasi West (4.4%).

**Table 2.5.1: Acceptors of post-partum family planning in FY 2078-79**

District	PP-IUCD	PP-Implant	PP-Tubectomy	Total PFPF	Total Deliveries	% of PFPF user
Rukum-East	0	27	0	27	865	3.1%
Rolpa	1	41	15	57	3607	1.6%
Pyuthan	9	79	31	119	3892	3.1%
Gulmi	2	15	1	18	2243	0.8%
Arghakhanchi	2	22	0	24	1373	1.7%
Palpa	6	277	117	400	4494	8.9%
Nawalparasi W	6	49	66	121	2768	4.4%
Rupandehi	93	207	445	745	28519	2.6%
Kapilbastu	7	78	0	85	8512	1.0%
Dang	3	47	57	107	9728	1.1%
Banke	26	38	173	237	18571	1.3%
Bardiya	1	21	1	23	4766	0.5%
Lumbini Province	156	901	906	1963	89338	2.2%

## 2.5.4 Issues, Constraints and Recommendations in Family Planning Program

Issues/ constraints	Recommendations	Responsibilities
Limited Availability of Adolescent friendly health services (AFHS)	<ul style="list-style-type: none"> <li>• Increase the number AFHS sites in accessible locations.</li> <li>• Train healthcare providers on youth/adolescent communication and confidentiality.</li> <li>• Introduce innovative outreach programs for adolescent/youth.</li> </ul>	FWD, HD, PHTC, Local Level
Limited Availability of All 5 Temporary Contraceptive Methods; Low Uptake of Long-Acting Methods where Services Exist	<ul style="list-style-type: none"> <li>• Launch local campaigns to ensure all HF's offer 5 methods.</li> <li>• Map HF's and identify training, coaching, or equipment needs.</li> <li>• Strengthen FP service providers through training/onsite coaching.</li> <li>• Ensure regular availability of LARCs in health facilities.</li> </ul>	FWD, HD, PHTC, Local Level
Stagnant or declining mCPR in districts	<ul style="list-style-type: none"> <li>• Implement FP microplanning in low mCPR districts.</li> <li>• Innovate approaches for reaching unreached populations.</li> <li>• Involve private and public sectors for quality FP services, emphasizing client rights.</li> </ul>	FWD, MoH, HD, Local Level
High Discontinuation of Contraceptive Use	<ul style="list-style-type: none"> <li>• Ensure continuous availability of services, covering all contraception needs based on clients' ages and reproductive stages.</li> <li>• Develop or improve systems to track clients for continuation or switching methods.</li> <li>• Ensure contraceptives are available in all health facilities.</li> <li>• Strengthen FP counseling to address myths, misconceptions, and concerns about side-effects.</li> </ul>	FWD, MoH, HD, Local level

	<ul style="list-style-type: none"> <li>• Improve follow-up mechanisms, reminding women of appointments for resupply.</li> <li>• Engage male partners for support.</li> </ul>	
Underutilization of post-pregnancy family planning services	<ul style="list-style-type: none"> <li>• Offer contraceptive counseling and services as part of postnatal care before discharge.</li> <li>• Integrate FP counseling in ANC clinic, postnatal ward, PNC, post-abortion, and during immunization.</li> <li>• Strengthen the post-abortion FP strategy for early initiation.</li> <li>• Promote post-partum FP counseling and services through FCHVs.</li> <li>• Orient and sensitize service providers, including Obs/Gyn, on PFP/PAFP.</li> </ul>	HD, Provincial Hospitals, Local Level

## 2.6 Safe Abortion

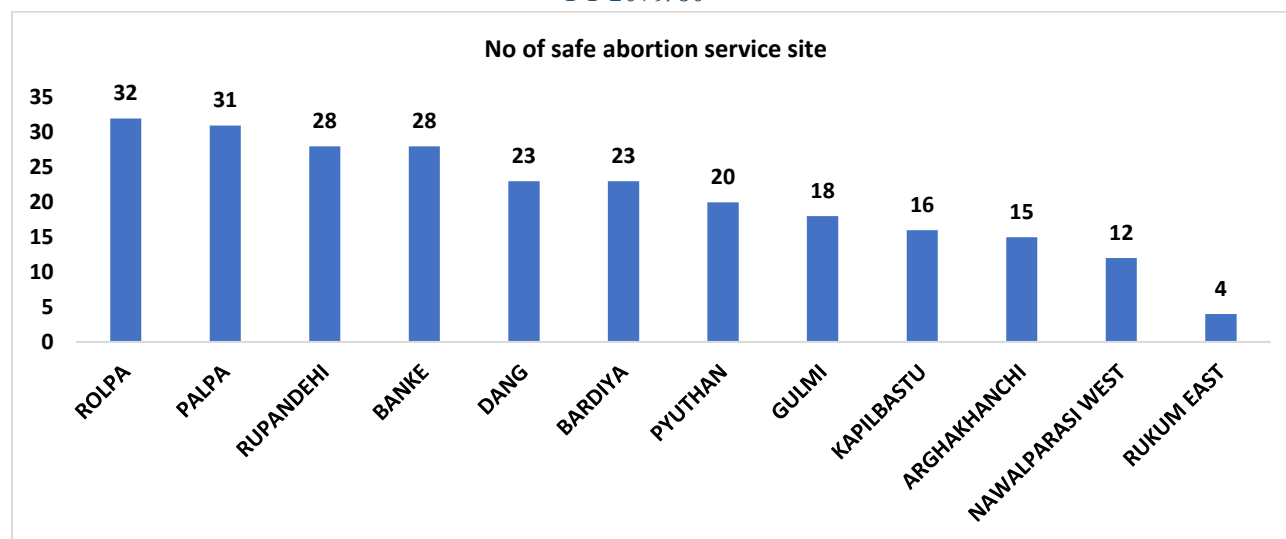
### 2.6.1 Background

Nepal legalized abortion in 2002 in response to advocacy that emphasized the high rate of maternal morbidity and mortality attributed to unsafe abortion. First trimester surgical abortion was made available throughout the country in 2004. Second trimester abortion training began in 2007 and medical abortion were introduced in 2009. According to Safe motherhood and Reproductive health Right act 2075, the law permits abortion with the consent of pregnant women for any indication up to 12 weeks gestation and up to 28 weeks of gestation in special conditions like Rape, insist, fetus abnormalities, mental condition, immune suppression disease.

In order to reduce unsafe practice of abortion and to reduce maternal morbidity and mortality through unsafe abortion, Safe motherhood and Reproductive health Right act 2075 and regulation 2077 adopted that only licensed health worker who has fulfilled the prescribed standards and qualification and is listed as safe abortion service provider shall have to provide the pregnant woman with safe abortion service pursuant to Section 15 in the licensed health institution which should also be listed as safe abortion service site .In Context of Lumbini Province ,Health directorate has been provided the authority of listing of safe abortion service sites and service provider which comes under provincial level.

### 2.6.2 Safe Abortion Service Site

*Figure 2.6.1: District wise no. of health facilities providing safe abortion service to at least one client in FY 2079/80*



The figure above shows the number of safe abortion service facilities in each district. Only service sites that served at least one client during fiscal year 2079/80 are included. In the fiscal year 2079/80, 250 health facilities in Lumbini provided safe abortion services. Out of 12 districts, Rolpa becomes district having a greater number of safe abortion service sites with thirty-two sites whereas Rukum east has only four sites.

### 2.6.3 Safe abortion services received.

The Table below displays the three-year trend in safe abortion services received by pregnant women at 12 districts of Lumbini province. Rupendehi had the largest number of safe abortion service users (4479), followed by Banke (2607), while Rukum-East, had the lowest absolute number of safe abortion service users (73).

**Table 2.6.1: District wise trends in the utilization of safe abortion services**

Districts	FY 2077-78	FY 2078-79	FY 2079-80
Rupandehi	3553	4903	4479
Banke	2448	2864	2607
Dang	2346	2262	2104
Kapilbastu	2247	1663	1764
Bardiya	1157	1122	1461
Nawalparasi West	1447	1556	1447
Palpa	1323	1404	1334
Rolpa	779	840	969
Arghakhanchi	657	724	679
Gulmi	778	742	675
Pyuthan	762	305	515
Rukum East	0	30	73
Lumbini Province	17497	18415	18107

**Table 2.6.2: Government Hospital with Second trimester abortion service in Lumbini Province**

S. N	Hospital	Second Trimester Abortion service	
		Yes	No
1.	Lumbini Provincial Hospital	√	
2.	Bhim Hospital		×
3.	Kapilvastu Hospital	√	
4.	Prithivi Chandra Hospital		×
5.	Bardiya Hospital		×
6.	Palpa Hospital		×
7.	Rampur Hospital		×
8.	Gulmi Hospital		×
9.	Rukum East Hospital		×
10.	Rapti Provincial Hospital	√	
11.	Pyuthan Hospital		×
12.	Arghakhanchi Hospital		×
13.	Rolpa Hospital		×
14.	Bheri Hospital ( <i>federal</i> )	√	

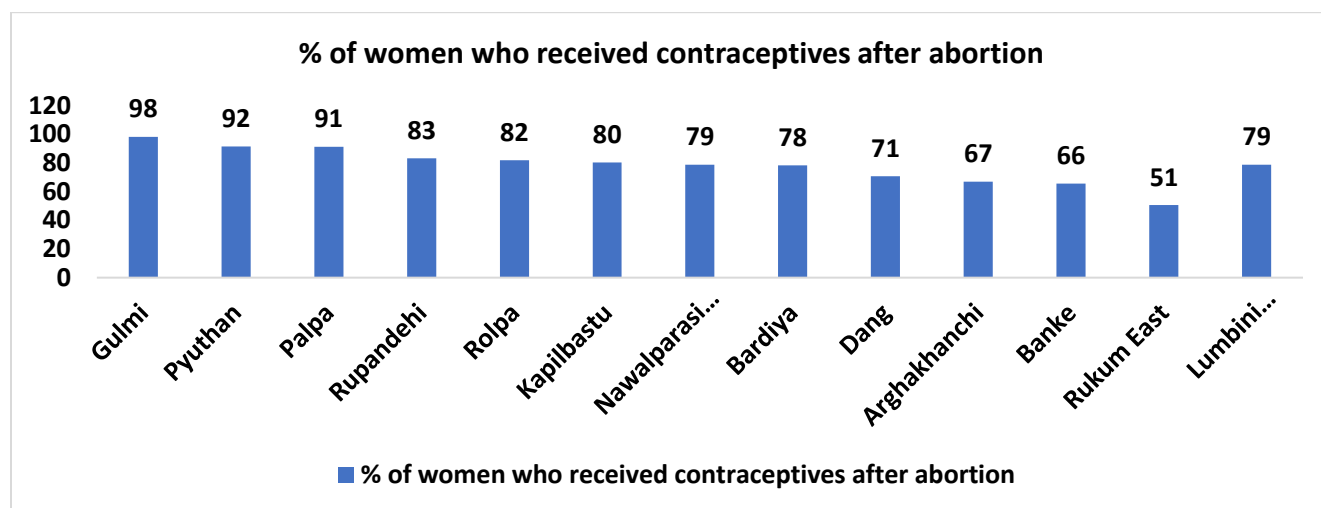
*Table 2.6.3: Table: District wise distribution of LLGs by number of abortion services (2079/80)*

District	Number of LLGs		
	Zero abortion services	<100 services	≥100 services
Arghakhanchi	0	4	2
Banke	0	4	4
Bardiya	0	3	5
Dang	2	6	2
Gulmi	1	10	1
Kapilvastu	4	1	5
Nawalparasi- West	0	4	3
Palpa	0	8	2
Pyuthan	0	8	1
Rolpa	0	6	4
Rukum-East	1	2	0
Rupandehi	1	9	6
<b>Lumbini</b>	<b>9</b>	<b>65</b>	<b>35</b>

#### 2.6.4. Post-abortion contraception use and proportion of LARC user

In the province, almost 79% of pregnant women who underwent an abortion utilized a post-abortion contraception in FY 2079/80. Gulmi had the largest percentage of abortion clients utilizing post-abortion contraception (98%), followed by Pyuthan (92%). While this figure was lowest in Rukum East (51%).

*Figure 2.6.2: Percentage of women who received contraceptives after abortion.*



## 2.6.5 Issues, constraints, and recommendations of safe abortion program

Issues /Constraints	Recommendation	Responsibility
Many safe abortion sites are non-functional due to not having listed service provider.	Training to the new provider regarding Safe abortion services.	PHTC
Stockout of Medical Abortion drugs or MVA syringe.	Provision of managing Medical Abortion drug in Health facility before it got stock out.	Local Level, HFOMC
Lack of understanding at the local level about the process of listing safe abortion service sites and providers, as well as the provisions of the Right to Safe Motherhood and Reproductive Health Regulation 2077.	Orient local governments on the listing process and other provisions of the Right to Safe Motherhood and Reproductive Health Act of 2075 and Regulation 2077.	FWD, Local Levels, EDPs

## 2.7 Adolescent Sexual and Reproductive Health

### 2.7.1 Background

The Family Welfare Division (FWD), Department of Health Services, considers National Adolescent Sexual and Reproductive Health a top-priority program. Nepal, as a South Asian country, created the first National Adolescent Health and Development (NAHD) Strategy in 2000. In 2018, the strategy was updated to address the changing needs of adolescents. The main aim of the National ASRH program is to promote the sexual and reproductive health of adolescents.

### 2.7.2 Objectives

- To increase the availability of and access to quality information on adolescent health and development and provide opportunities to build the knowledge and skills of adolescents, service providers and educators.
- To increase the accessibility and use of adolescent health and counselling services.
- To create safe and supportive environments for adolescents to improve their legal, social and economic status.
- To create awareness on adolescence issues through BCC campaigns and at national, provincial and community levels through FCHVs and mother groups

### 2.7.3 Targets

- To make all health facilities as adolescent friendly as per the envision of National Health policy (2014) and NHSS (2016-2021)
- To ensure universal access to ASRH services, the Nepal Health Sector Strategy Implementation Plan (2016-2021) aims to: scale-up Adolescent Friendly Service (AFS) to all health facilities; provide behavioral skill focused ASRH training to 5,000 health service providers and more than 100 health facilities to be certified with quality AFS by 2021 and to reduce the adolescent fertility rate (AFR) by improving access to family planning services and information.

#### 2.7.4 Key Intervention Area for ASRH Program

- School health nurse program (8 school nurses placed in various schools)
- ASRH site certification (three additional HFs certified in Rolpa and Arghakhanchi)
- Capacity building of health workers
- Scale up and strengthen health facilities for Adolescent Friendly Services (AFS).
- Establishment of Adolescent Friendly Information Corners (AFICs) in schools.
- ASRH training to health workers.
- Menstrual Hygiene management (MHM).
- Comprehensive Sexuality Education (CSE) in School (Kapilbastu and Rukum-East)
- Advocacy

#### 2.7.5 ASRH Certified Health Facilities in Lumbini Province

*Table 2.7.1: ASRH certified health facilities*

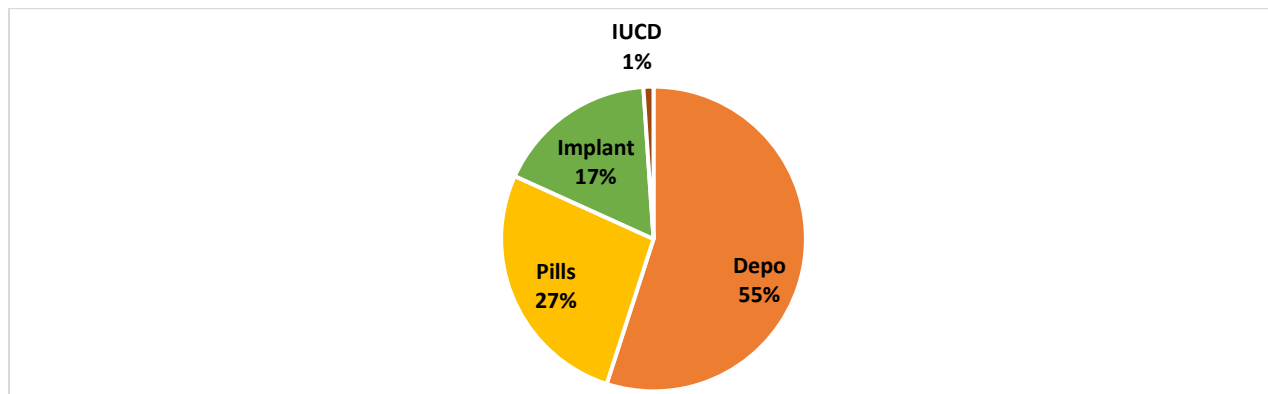
District	Health Facilities	Total
Arghakhanchi	Thada PHC, Hasanpur HP, Pokharathok HP, Arghatosh HP, Banghi HP and Subarnakhal HP	6
Dang	Gadawa HP, Satbariya HP, Sisahaniya HP	3
Kapilvastu	Gauri HP, Tilaurakot HP, Shivapur HP, Jayanagar HP, Barkalpur HP, Chanai HP and Rajpur HP	7
Pyuthan	Puranthani HP, Okharkot HP, Khaira HP, Sotre HP, Bhingri PHC, Gothiwang HP	6
Rolpa	Khumel HP, Libang HP, Kotgaun HP, Korchawang HF, Gairegaun HF, Khungri HP, Ghartigaun HP, Kureli HP, Thabang HP and Nuwagaun HP	10
Rukum	Sylakapha HP, Bafikot HP, Smiruti HP	3
Total		35

#### 2.7.6 Family Planning Service among Adolescent Women

##### **New acceptor of spacing methods among women under 20-year**

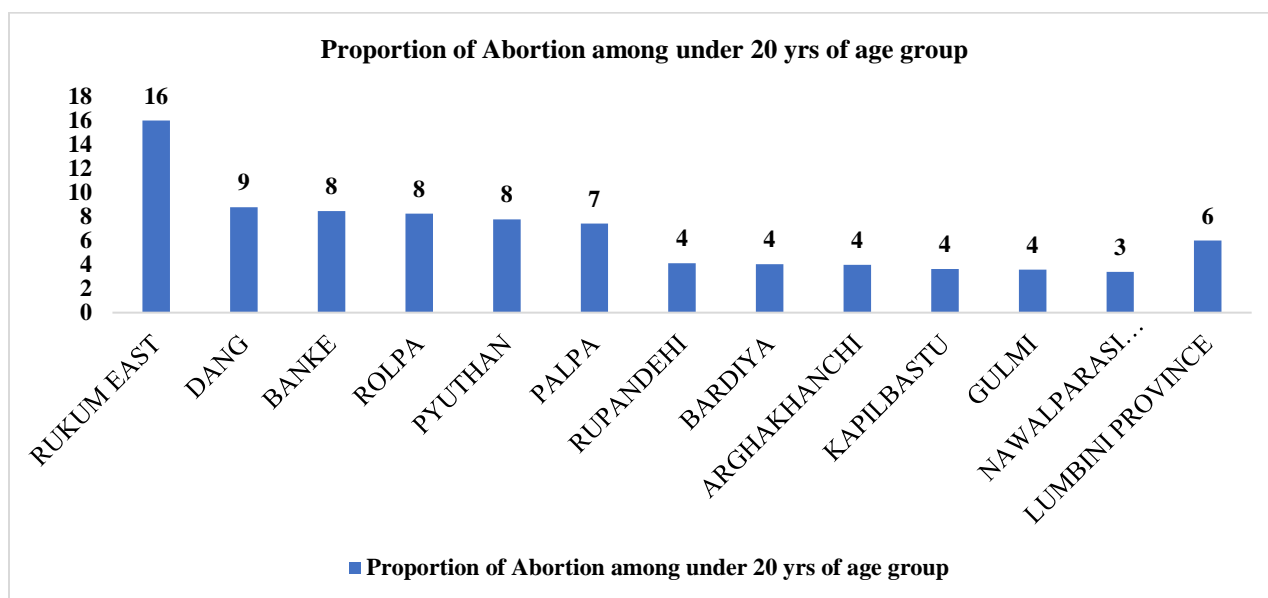
In the fiscal year 2079/80, over half (55%) of new users under 20 chose Depo for birth spacing, and Pills were the second most popular method at 27%. IUCD was the least favored method, making up only 1% of the total methods used.

*Figure 2.7.1: Temporary family planning mix method among <20 total new acceptor*



### Safe abortion service among adolescents

*Figure 2.7.2: Proportion of women under 20 years using safe abortion service in FY 2079/80*



The Figure 2.7.2 shows that, 6% of women receiving safe abortion services in Lumbini province were adolescents. According to district-level data, Rukum East has the highest percentage of adolescents accessing safe abortion services (16%), followed by Dang (12%), Banke, Rolpa & Pyuthan (8).

## District wise service utilization by adolescent in FY 2079/80

*Table 2.7.2: ANC & medical abortion service utilization by adolescent*

District	First ANC Visit (any time) < 20 Years	ANC Visits-Eight times as per protocol - <20 Years	Delivery under 20 years	Number of Women < 20 Years-Medical abortion
Rukum East	256	85	198	11
Rolpa	938	196	660	69
Pyuthan	756	187	705	35
Gulmi	549	121	345	22
Arghakhanchi	339	64	234	21
Palpa	672	168	604	89
Nawalparasi West	460	123	170	34
Rupandehi	1094	165	1115	104
Kapilbastu	265	21	354	49
Dang	2538	449	1436	102
Banke	840	104	2177	92
Bardiya	888	154	573	51
Lumbini Province	9595	1837	8571	679

### 2.7.7 Issues, Constraints and Recommendations of ASRH Program

Issues / constraints	Recommendation	Responsibility
High prevalence of early marriage and teenage pregnancy	<ul style="list-style-type: none"> <li>Intensify community awareness activities and comprehensive sexuality education in schools.</li> <li>Conduct workshops, campaigns, and outreach programs to raise awareness about the consequences of early marriage and teenage pregnancy.</li> <li>Engage local communities in discussions and initiatives to discourage these practices.</li> </ul>	MoHP (Federal, Provincial), Local Level
Less priority and inadequate resource allocation for ASRH program.	<ul style="list-style-type: none"> <li>Conduct sensitization/advocacy with decision-makers at the provincial and local levels for increased investment in adolescents and youths.</li> </ul>	MoHP (Federal, Provincial), Local Level and ASRH partners
Low CPR and high unmet need for contraception among vulnerable populations including adolescents	<ul style="list-style-type: none"> <li>Intensify information and awareness programs targeted to adolescents.</li> <li>Strengthen Adolescent Friendly Service Sites and information corners.</li> </ul>	MoHP (Federal, Province), Local Level

Issues / constraints	Recommendation	Responsibility
	<ul style="list-style-type: none"> <li>• Capacitate health workers regarding adolescent responsive service provision.</li> </ul>	
Declining trends in the utilization of sexual and reproductive health services by adolescents in many districts	<ul style="list-style-type: none"> <li>• Strengthen adolescent-friendly service sites.</li> <li>• Ensure functional integration of ASRH issues and services in the school nurse program.</li> <li>• Intensify adolescent-focused community and school awareness activities and comprehensive sexuality education.</li> </ul>	FWD, Province, Local Level and ASRH partners
Inadequate trained human resources on ASRH in health facilities	<ul style="list-style-type: none"> <li>• Strengthen ASRH clinical training sites and develop the capacity of service providers with behavioral and skill-focused competency-based ASRH training at all health facilities, especially AFS sites.</li> </ul>	FWD, MOH, Local Level

## Chapter 3: Epidemiology and Disease Control

### 3.1 Tuberculosis

#### 3.1.1 Background

Tuberculosis (TB) is a communicable disease that is a major cause of ill health and one of the leading causes of death worldwide. About a quarter of the global population is estimated to have been infected with TB, but most people will not go on to develop TB disease and some will clear the infection. Tuberculosis remains as a public health challenge in Nepal. It is preventable and curable, however large number of Tuberculosis patients are registered and large number of deaths due to Tuberculosis are reported every year.

As per National Strategic Plan (2021-2026), each year 69,000 fall ill with Tuberculosis with 238/100000 population incidence per year. TB prevalence rate is 416/100,000 which is 1.8 times higher than previously estimated by WHO, and revised incidence rate is 238/100,000 which is 1.6 times higher than previously estimated. The mortality rates associated with TB were also re-estimated to be 3.1 times higher than previous estimation while TB drug resistance is 1.6 times higher than the previous estimation. Hence, Nepal has been enlisted in WHO bulletin as a country having high resistance towards TB drugs. National Strategic Plan (2021/22-2025-26) of National Tuberculosis Program has guided to prepare in line with WHO END TB strategy and Sustainable Development Goal (SDG 2030).

*Figure 3.1.1. Service delivery sites related to Tuberculosis Control Program*

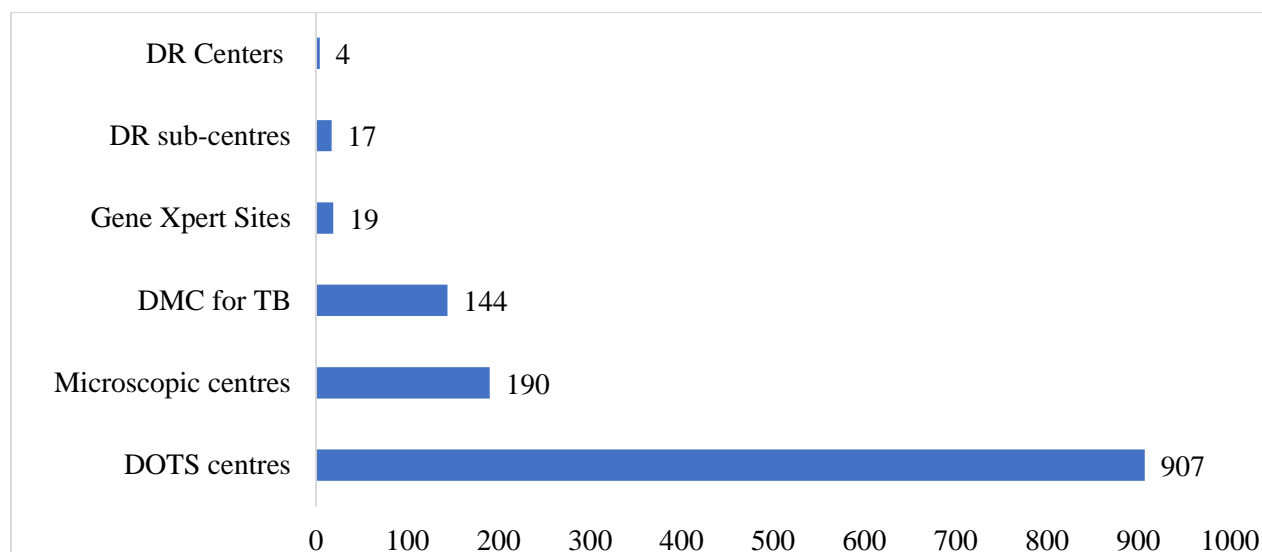


Figure 3.1.1 shows the service delivery sites related to TB control program of Lumbini Province. Currently there are 4 DR centers, 17 DR sub-centers, 19 Gene xpert sites, 190 microscopy sites, 144 DMC sites for TB and 907 DOTS centers in Lumbini Province. 1 DR center, and 147 DOTS centers are added in this fiscal year. It is also declared 144 designated microscopic centers (DMC) for TB program in Lumbini Province based on the set criteria for further TB diagnostic system strengthening at local level.

### 3.1.2 TB Case Finding

*Table 3.1.1: District wise TB Case finding of all forms, 2077/78 to 2079/80*

District	FY 2077-78	FY 2078-79	FY 2079-80
Rupandehi	1238	1705	1745
Dang	902	1453	1293
Banke	839	1089	1102
Kapilbastu	633	900	914
Bardiya	596	792	677
Nawalparasi west	421	472	470
Pyuthan	256	402	352
Palpa	339	345	334
Rolpa	221	333	287
Gulmi	186	289	257
Arghakanchi	178	249	221
Rukum east	53	56	53
<b>Total</b>	<b>5862</b>	<b>8085</b>	<b>7705</b>

In Table above shows the trend of TB case finding of all form during 3 fiscal years is presented. The overall case finding has decreased by 5% in FY 079-80 compared to FY 2078-79. The highest number of case finding can be seen in Rupandehi (1745) followed by Dang (1293) and Banke (1102) respectively. The TB cases has been decreased by 380 compared to last fiscal year. Out of

total decline 8% is PBC due to the interrupted supply of Gene xpert cartridge and intermittent functionality Gene xpert machine.

### 3.1.3 Case Notification Rate

*Table 3.1.2: TB case notification rate of Lumbini Province from 2077-78 to 2079-80*

District	2077-78	2078-79	2079-80
Dang	138	214	188
Banke	136	180	179
Pyuthan	105	173	149
Bardiya	123	172	145
Rupandehi	115	152	153
Palpa	137	142	135
Rolpa	93	141	120
Arghakhanchi	88	140	124
Kapilbastu	94	131	130
Nawalparasi West	111	122	120
Gulmi	73	117	103
Rukum east	90	96	90
<b>Lumbini Province</b>	<b>114</b>	<b>157</b>	<b>148</b>

In Lumbini Province, Case Notification Rate (all forms) in 2079-90 is 148/100,000 population, which is decreased by 9/100,000 than previous fiscal year. District having highest CNR is Dang (188/lakh) and with lowest CNR is Rukum East (90/Lakh). Still the CNR of Lumbini Province to be reach national estimated CNR difference is 90/100,000 population. Periodic review with major hospitals, monthly data analysis & feedback, maintain the cartridge stock balance, orientation to HWs at local level and community engagement for the TB case finding & referral are continued activities at local level help in realizing the national strategic gap and required case notification rate.

*Table 3.1.3: Key NTP indicators status, FY 2079-80*

Key NTP Indicators	Status
CNR (New and relapse)/100,000	146
% of HIV testing among TB patient	94.1
% of Pulmonary bacteriologically confirmed	57.9
% of children aged 0-4 years diagnosed with TB	5.9
% of children aged 5-14 years diagnosed with TB	3.6
% of women diagnosed with TB	38.3
% of men diagnosed with TB	61.7
% of TB cases notified by private sectors	30
<b>Total notified TB cases</b>	<b>7705</b>

Table 3.1.3 above shows the different outcome level indicator's status in Lumbini Province. HIV testing among TB patients' proportion is increased in this fiscal year which is 94.1 % that mitigates the national strategic targets. Similarly, 9.5% childhood TB >14 years aged is reported during this fiscal year, TB infection is relatively high among male which 61.7 % where female TB patient is 38.3 %. National strategic plan 2021-26 aims to contribute 30% TB case notification from private sector and Lumbini Province has achieved this target where 30% TB cases are identified and referred for registration from private sectors. Regular data verification & review, onsite coaching to private sectors, incorporating them in different orientation and review events. Conducting the CME in private sectors, establishing the technical network and sensitization, mobilizing the pharmacies and pay for performance scheme are key efforts to bring private sectors into system notification.

**Table 3.1.4: Type of TB notified in each district of Lumbini Province from 2077-78 to 2079-80**

District	2077/078			2078/079			2079/080		
	PBC	PCD	EP	PBC	PCD	EP	PBC	PCD	EP
Rukum east	28	6	19	32	5	19	34	8	11
Rolpa	130	29	62	205	39	89	161	37	89
Pyuthan	156	30	70	294	37	71	233	45	74
Gulmi	96	31	59	131	49	109	108	50	99
Arghakhanchi	73	39	66	114	55	80	105	45	71
Palpa	207	21	111	211	28	106	211	29	94
Nawalparasi west	262	59	100	314	61	97	290	53	127
Rupandehi	748	125	365	1015	211	479	989	223	533
Kapilbastu	427	79	127	591	120	189	577	133	204
Dang	533	172	197	783	317	353	743	249	301
Banke	495	139	205	653	173	263	597	245	260
Bardiya	386	83	127	497	150	145	418	114	145
<b>Total</b>	<b>3541</b>	<b>813</b>	<b>1508</b>	<b>4840</b>	<b>1245</b>	<b>2000</b>	<b>4466</b>	<b>1231</b>	<b>2008</b>

Table above shows the type of TB cases notified in the province. Out of total TB notified cases 58% is PBC, 26% is EP and 16% is PCD. Compared to national estimation PCD cases is expected to be 30%. However, due to the low utilization of chest x-ray and clinical diagnosis tools PCD case finding has been fallen in to only 16% that expected to be 30% as per national strategic plan.

### 3.1.4 Treatment Outcomes

*Table 3.1.5: TB treatment success rate from FY 2077-78 to FY 2079-80*

Districts	2077-78	2078-79	2079-80
Rukum East	83.9	90.6	92.6
Rolpa	94.2	94.3	94.2
Pyuthan	92.6	91.7	91.8
Gulmi	79.6	85.3	93.7
Arghakhanchi	95.9	91.7	95.2
Palpa	91.8	88.7	89.8
Nawalparasi West	87.9	86	92.4
Rupandehi	89.9	91.1	92
Kapilvastu	88.2	89.4	90.4
Dang	92.5	92.9	96.1
Banke	88.9	91.2	93
Bardiya	90.5	93.6	93.6
Lumbini Province	90.2	91	93

Treatment success rate of TB in 2079-80 is 93% which is increased from 91% of last fiscal year. Treatment success rate is lowest in Palpa (88.8%) whereas highest is in Dang (96.1%) among all districts of Lumbini Province.

### 3.1.5 Drug Resistant Tuberculosis

Drug-resistant TB has become a great challenge for the NTP and a major public health concern in the province. Multi-drug resistant TB (MDR-TB) is multifactorial and fueled by improper treatment of patients, poor management of supply and quality of drugs and airborne transmission of bacteria in public places. Case management has become difficult, and the challenge is confounded by catastrophic economic and social costs that patients incur while seeking care and on treatment. Innovative approaches and more funding are urgently needed for the programmatic management of drug resistance-TB nationally to detect and enroll more patients on multi-drug resistant (MDR) TB treatment, and to improve outcomes.

*Table 3.1.6: MDR TB cases notified by DR centre from 2077-78 to 2079/080*

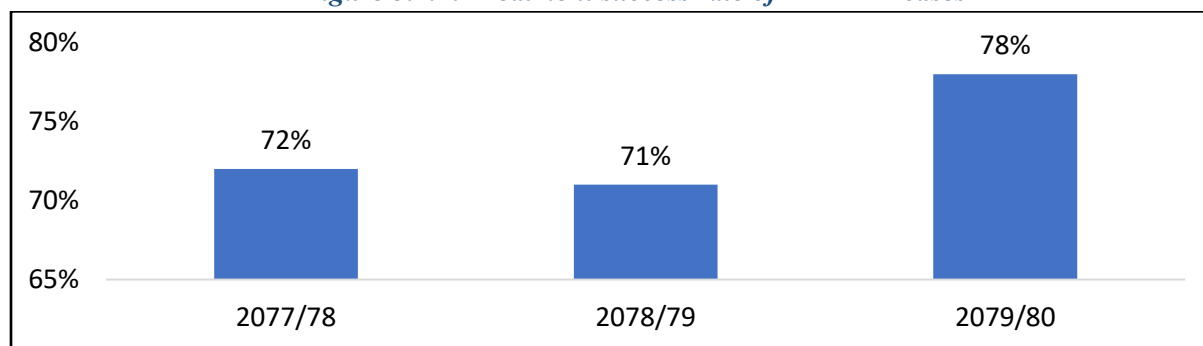
District/Province	2077/078	2078/079	2079/080
Banke	62	52	36
Rupandehi	74	107	113
Dang	8	10	6
<b>Lumbini Province</b>	<b>144</b>	<b>169</b>	<b>155</b>

In FY 2079/080, highest DR TB case holding is in Rupandehi where lowest DR-TB case holding is Dang. Overall, 155 DR TB cases were in holding in Lumbini province. DR cases compared to FY 2078/79 has decreased by 14 cases.

On average, 3% RR-TB among new cases has been reported through Gene x-pert test. The expansion and initial diagnosis of TB cases from Gene xpert has slightly increased the detection of RR-TB cases. Initial lost to follow up is 13% (24) out of total 179 RR cases detected from Gene xpert sites. Most of the lost to follow up cases are Indian which are not being tracked by DR centres due to their unreliable contact number provided during the test.

### Treatment outcome of Drug -resistant TB

*Figure 3.1.2: Treatment success rate of MDR TB cases*



DR TB success rate is 78% in Lumbini province which has increased by 7% compared to previous fiscal year. It shows good DR TB case management where 3% treatment success rate is over than the national strategic target (75%).

### Issues, Constrains and Recommendations

Issues and Constraints	Recommendation	Responsibility
Dependency towards gene Xpert machine and cartridge supply interruption is hampering the smooth TB case findings.	Preplan for the cartridge budget as per the expected testing target in the year should be placed so that adequate cartridge is available at the site in time for smooth TB testing. Designated Microscopic center should be materialized and strengthened for quality diagnosis at local level.	NTCC & PPHL
Quality TB screening and less quality sputum samples directs to low positivity rate in gene Xpert sites.	Periodic sensitization is needed to HWs for intensified and integrated TB screening and identify the true TB presumptive.	NTCC and PHD
Less utilization of Chest-Xray at public and private hospitals even in active case finding intervention resulted low PCD case finding.	Portable Chest X-ray machines needs be available at province and PPHL could introduce these machines in active case finding interventions.	NTCC and Province, partners

	Computer Added Detection (CAD) will be better tool for suggesting TB cases in major hospitals.	
Inadequate engagement of private sectors and infrequent capacity building to them has been missing the TB cases (suspected and diagnosed) under through private sectors.	Public Private Mix (PPM) module should be strengthened and technical network and TWG activation for private sector's engagement is recommended.	NTCC and Province, Partners
Community engagement is less in TB case identification that reducing the TB service access and in-referral of presumptive TB cases.	Community engagement should be enhanced through LLG by ensuring the active participation of different community platforms including higher level school and colleges for TB case identification and referral.	NTCC, Province and LLG
Initial lost to follow up of DR cases and DS case little bit is high and TB case has not been instantly following up for the treatment case by case.	Treatment tracking team should be strengthened and periodic review among tracking team is needed for the capacity building and essential sensitization.	NTCC, Province and Partners

### 3.2 HIV/AIDS and STI

#### 3.2.1 Background

With the first case of HIV identification in 1988, Nepal started its policy response to the epidemic of HIV through its first National Policy on Acquired Immunity Deficiency Syndrome (AIDS) and Sexually Transmitted Diseases (STDs) Control, 1995 (2052 BS). Taking the dynamic nature of the epidemic of HIV into consideration, Nepal revisited its first national policy on 1995 and endorsed the latest version: National Policy on Human Immunodeficiency Virus (HIV) and Sexually Transmitted Infections (STIs), 2011. A new National HIV Strategic Plan 2021-2026 is in place to achieve ambitious global goal of 95-95-95 By 2026, 95% of all people living with HIV (PLHIV) will know their HIV status, 95% of all people with diagnosed HIV will receive sustained antiretroviral therapy, and 95% of all people receiving antiretroviral therapy will have viral suppression. The NHSP (2021-2026) aims and guides to achieve 95-95-95 goals and elimination of vertical transmission by adopting IRRTTR fast track approach in integration with components such as TB program, CB-IMNCI, safe motherhood program etc. within strategic period.

Sexually Transmitted Infection (STI) have direct effect on maternal and child health. The adverse effects may range from infertility, maternal morbidity, and adverse pregnancy outcomes. Mother-to child transmission of STI may also result in stillbirth, neonatal death, low-birth weight, prematurity, sepsis, pneumonia, neonatal conjunctivitis, and congenital deformities. STI increase

the risk of sexual transmission and acquisition of HIV. Concurrent HIV in an STI patient may increase the infectivity and complicate treatment, which may further increase in mental health comorbidities like anxiety, depression, and dementia. Connection with this the Global Health Sector Strategy (GHSS) recommends the provision of high-quality STI prevention and care integrated into the primary health care centers, sexual and reproductive health services, and HIV preventive and care services.

### 3.2.2 Overview of the Epidemic

Starting from a ‘low level epidemic’ over the period of time, HIV infection in Nepal evolved itself to become a ‘concentrated epidemic’ among key populations (KPs), notably in People who Inject Drugs (PWID), Female Sex Workers (FSW), Men who have Sex with Men (MSM) and Transgender (TG) in this Province as well. Therefore, HIV and AIDS related program intervention are focused to KPs, others vulnerable population (Prison inmate, Migrant & their spouse) and prevention of mothers to child transmission of HIV (PMTCT) at ANC setting.

### 3.2.3 Progress and Major Achievements

#### HIV Testing Services

HIV testing and counseling services is the key approach to achieve first 95 goal as prioritized by NHSP (2021-2026). HIV testing and counseling services are provided through 15 government confirmatory sites and 46 non-government HIV screening service sites in Lumbini Province. Total 439 people are diagnosed HIV in 2079-80 performing the HIV testing among 203,116 people.

*Table 3.2.1: Service Statistics HIV Testing and Counselling for the period of BS 2077/78-2079/80*

Indicators	2077-78	2078-79	2079-80
Total tested for HIV	51856	133184	203116
Total Positive reported	473	659	439*

*\* From government confirmatory HTC Sites only*

The number of HIV testing is 203116 in FY 2079-80 which has increased by 53% compared with previous fiscal year. However, the number of positive cases has been decreased in FY 2079-80 than previous fiscal year by 33% (220). HIV testing coverage has increased due to efforts of several NGOs and pool fund program in the province, effective implementation of CLT, HIV self-testing, and index testing approaches in community has contributed to the overall increment of HIV testing. The main reason for less HIV positive cases in the fiscal year compared to previous year due to eliminating the duplication of HIV confirmed cases are systemized reporting through ART based HTC site only.

*Table 3.2.2: District wise Service Statistics HIV Testing and Counselling in 2079-80*

Districts	Tested for HIV			Positive reported		
	2077-78	2078-79	2079-80	2077-78	2078-79	2079-80
Rukum East	0	306	0	0	0	0
Rolpa	394	312	3604	5	1	1
Pyuthan	240	11514	19331	15	29	21
Gulmi	17924	14882	20260	9	29	15
Arghakhanchi	166	11176	16073	1	18	7
Palpa	845	9978	15447	21	51	29
Nawalparasi West	1177	11800	20522	23	51	34
Rupandehi	14321	18544	29306	146	167	163
Kapilvastu	2108	19303	16598	55	65	49
Dang	878	12504	25351	41	58	40
Banke	9577	11745	17328	117	157	47
Bardiya	4226	11120	19296	40	33	33
Lumbini Province	51856	133184	203116	473	659	439

Table 3.2.2 presents the service statistics of HIV testing and counseling. The HIV testing is higher in Rupandehi (29,306) among twelve districts, followed by Dang (25,351) and Nawalparasi-west (20,522) in FY 2079-80 whereas the positive yield among HIV testing is higher in Rupandehi which is (163) follows by Kapilvastu (49) and Banke (47).

*Table 3.2.3: Key Population wise HIV Testing and yield in 2079-80*

Key Population	HIV Testing	Testing Proportion	HIV Positive	Yield Burden
Sex workers	2630	1%	16	4%
PWIDs	7442	4%	33	8%
Clients of Sex Workers	927	0%	27	6%
Migrants	96209	47%	181	41%
Spouse of Migrants	63891	31%	113	26%
MSM/TG	1743	1%	20	5%
Prison Inmate	1381	1%	2	0%
Others	28893	14%	47	11%
<b>Total</b>	<b>203116</b>	<b>100%</b>	<b>439</b>	<b>100%</b>

Table above reveals that HIV testing performance and HIV yield among key population as HIV infection in Nepal evolved itself to become a ‘concentrated epidemic’. Highest disease burden is with migrant and their spouse which is 41% and 26% respectively out of total HIV diagnosed. However, yield rate is high among client of sex worker which is 2.9% and followed by MSM/TB which is 1.1%. Total of 203116 people are tested for HIV in this fiscal year and 47% and 31% HIV testing has been performed among Migrant and spouse of migrants respectively resulted highest number of HIV positive people 181 and 113 from Migrant and Spouse of Migrant community are identified respectively.

### Prevention of Mother to Child Transmission (PMTCT)

Aiming to the elimination of mother to child transmission, Ministry of Health and Population, Nepal taking a major transformative measure this fiscal year, providing lifelong ART for all identified pregnant women and breastfeeding mothers with HIV, regardless of CD4, along with prophylaxis treatment for their infants. The rollout of the lifelong treatment adds to the benefits of the triple reinforcing effectiveness of the HIV response: (a) help improve maternal health (b) prevent vertical transmission, and (c) reduce sexual transmission of HIV to sexual partners.

*Table 3.2.4: Service statistics on PMTCT for the period, 2079-80*

Indicators	2077-78	2078-79	2079-80
Tested for HIV: ANC, Labour and Puerperium	88644	103966	130136
HIV Positive pregnant women	61	16	17
Total deliveries by HIV+ mothers	27	26	32
Mothers enrolled in ART	43	17	17
Babies received prophylaxis	27	29	32

Table presented above shows a trend of service statistics of PMTCT during the last three fiscal years (F/Y 077/78, 078/079, and in 079/80). Provincial commitment is to eliminate vertical transmission of HIV among children by 2026, in line with national strategy. The number of women attending ANC, delivery and post-natal care who were tested and received results has increased than previous year. The number of HIV positive pregnant women increased to 17 from 16 in FY 2079/80 compared to 2078/79. The coverage for PMTCT has also increased.

Mandatory HIV testing among ANC attending pregnant women over a long period as well as testing in key population contributed in prevention of HIV transmission. Similarly, routine HIV test kit supply has been maintained which helped in sustaining regular testing of ANC attending women.

### Antiretroviral Treatment (ART)

Aiming to the suppression of HIV virus load among PLHIVs, ART plays a crucial role to maintain their quality of life. Total of 15 ART sites are providing regular treatment services along with counselling to HIV patients which has been maintaining treatment adherence more than 95% in Lumbini Province.

*Table 3.2.5: Service statistics on ART for the period, 2079-80*

Districts	No. of ART Site	PLHIV on ART	
		On ART (end of Ashad 2080)	New enrollment in FY 2079/80
Rukum East	0	0	0
Rolpa	1	46	1
Pyuthan	1	129	20
Gulmi	1	199	13
Arghakhanchi	1	132	7
Palpa	2	341	18

Districts	No. of ART Site	PLHIV on ART	
		On ART (end of Ashad 2080)	New enrollment in FY 2079/80
Nawalparasi West	1	317	33
Rupandehi	2	1748	186
Kapilvastu	2	561	58
Dang	2	394	36
Banke	1	556	64
Bardiya	1	175	35
<b>Lumbini Province</b>	<b>15</b>	<b>4598</b>	<b>471</b>

Table 3.2.5 reveals the service statistics on ART client. Total 4598 PLHIVs are currently receiving ART from 15 different ART sites of Lumbini Province where 471 newly diagnosed PLHIV are enrolled in ART in FY 2079/80 by adopting the test and treat approach.

### Sexually Transmitted Infection (STI)

National HIV Strategic Plan (2012-2026) aims to achieve case rate of congenital syphilis of  $\leq 50$  per 100 000 live births by promoting the treatment, obtaining cure, reducing infectivity and the risk of developing complications of STI. It is also guided from National STI management guideline 2022 that; to take correct medical and sexual history, establish a correct diagnosis and provide effective treatment, provide health education and counselling on infection, risk reduction and on compliance with treatment and promotion and/or provision of condoms. Connecting with this hospitals where ART centers are situated providing the STI services (screening , diagnosis and syndromic treatment) to vulnerable people including PLHIV and some of NGO based settlement clinics. From this service total of 1334 people are diagnosed with STI and out of them 1242 people are treated with STI in FY 079/80 in the Province .

*Table 3.2.6: STI service status for the period, 2079-80*

Vulnerable population	STI Diagnosed	STI Treated	Treatment %
Sex workers	414	379	92%
PWID	3	3	100%
MSM & TG	128	97	76%
Clients of FSW	111	101	91%
Migrants	49	46	94%
Spouse of Migrants	51	49	96%
PLHIV	111	110	99%
Other	467	457	98%
<b>Lumbini Province</b>	<b>1334</b>	<b>1242</b>	<b>93%</b>

Table 3.2.6 shows the STI service status in the province. Total of 1334 STI cases are diagnosed and out of them 93% (1242) STI cases are treated from the service sites. Seeing the information from the table highest number of STI cases are diagnosed among Sex workers followed by MSM/TG and client of FSW. Number of 111 PLHIV are diagnosed for STI and Treated to 99% (110).



## Issues, Constrains and Recommendations

Issues and constrains	Recommendation	Responsibility
Interruption in HIV test kits supply hampering the HIV test among ANC visiting mother timely.	Local procurement of HIV test kits from province and adequate supply for the PMTCT program is highly appreciated.	NCASC and Province
Unavailability of viral load testing service in the province eligible PHLIV are unable to know their VL status in time.	Viral load testing service should be established in the province.	NCASC and PPHL
HCV and HIV coinfecting cases are unable to get treatment in time due to the unavailability of medicine at the local appropriate hospitals.	Dedicated hospitals need to be nominated for the treatment and smooth supply of medicine is essential.	NCASC

### 3.3 Malaria

#### 3.3.1 Background

Nepal's malaria control Program began in 1954, mainly in the Terai belt of central Nepal with support from the United States. In 1958, the National Malaria Eradication Program was initiated and in 1978 the concept reverted to a control Program. In 1998, the Roll Back Malaria (RBM) initiative was launched for control in hard-core forests, foothills, the inner Terai and hilly river valleys, which accounted for more than 70 percent of malaria cases in Nepal. Malaria is a greater risk in areas with an abundance of vector mosquitoes, amongst mobile and vulnerable populations, in relatively inaccessible areas, and during times of certain temperatures.

Nepal aims to consolidate the gains secured so far and accelerate efforts to interrupt local malaria transmission and end indigenous malaria to zero case by 2022 and achieve malaria elimination by 2025. As countries move towards malaria elimination, imported infections become increasingly significant as they often represent most of the cases, can sustain transmission, cause resurgences, and lead to mortality.

Malaria risk stratification 2078-79 (2022) was tailored to suit the changing epidemiology of malaria in the country and to ensure appropriate weightage is allotted to key determinants of malaria transmission as recommended by external malaria program review. Malaria data from last three years reveals that even within Rural Municipalities or Municipalities, malaria is concentrated within some wards while other wards remain relatively free of malaria. In these settings, transmission is typically sufficiently low and spatially heterogeneous to warrant a need for estimates of malaria risk at a community level, the wards.

### National Malaria Strategic Plan (2014–2025 updated)

Current National Malaria Strategic Plan (NMSP) 2014-2025 was updated since it was developed in 2013 and targeted Pre-elimination and is as a result out of step with the latest normative guidance on malaria elimination from the World Health Organization (WHO) (“Global Technical Strategy 2016 – 2030” and ‘A framework for malaria elimination, 2017’), current country structure, disease epidemiology, 2017 midterm malaria program review. The aim of NMSP is to attain “Malaria Elimination in Nepal by 2025”.

- Vision: Malaria Elimination in Nepal by 2025.
- Mission: Ensure universal access to quality assured malaria services for prevention, diagnosis, treatment, and prompt response in outbreak.
- Goal: Reduce the indigenous malaria cases to zero by 2022 and sustain thereafter.
- Sustain zero malaria mortality

#### 3.3.2 Objectives

- To ensure proportional and equitable access to quality assured diagnosis and treatment in health facilities as per federal structure and implement effective preventive measures to achieve malaria elimination.
- The updated NMSP (2014-2025) will attain the elimination goals through the implementation of following five strategies:
  - Strengthen surveillance and information system on malaria for effective decision making.
  - Ensure effective coverage of vector control interventions in malaria risk areas to reduce transmission.
  - Ensure universal access to quality assured diagnosis and effective treatment for malaria.
  - Ensure government committed leadership and engage community for malaria elimination.
  - Strengthen technical and managerial capacities towards malaria elimination.

#### 3.3.3 Achievements in FY 2079-80

##### Epidemiology of Malaria

*Table 3.3.1: Malaria epidemiological information (2077/78 to 2079/80)*

Data / Period	2077-78	2078-79	2079-80
Population of Malaria endemic area	1918364	2434238	1788225
Total Slide examined	51843	57376	92652
Total Malaria positive Cases	85	153	181
Total Malaria PF cases	25	55	56
% of PF cases	29.4	35.9	30.9
Total Malaria PF indigenous	1	0	0
Total Malaria PF imported	24	55	56
Total Malaria Indigenous Cases	7	7	1
Total P. Vivax (PV) cases	60	95	108

<b>Data / Period</b>	<b>2077-78</b>	<b>2078-79</b>	<b>2079-80</b>
Annual blood examination rate (ABER) of malaria in high-risk districts	2.7	3.0	5.2
Annual parasite incidence rate	0.044	0.08	1.95
Annual PF incidence rate	0.013	0.022	0.60
Slide positivity rate (SPR) of malaria in high-risk districts	0.16	0.27	0.20
Slide positivity rate (SPR) of PF malaria in high-risk districts	0.048	0.001	0.06

\*Risk population of F/Y 2079-80 has been calculated as per the malaria Microstratification result of 2021/22.

The trends of malaria epidemiological situation for last three years show decreasing trends but in this fiscal year 079/80 the overall malaria cases are increased by 28 cases compared to previous year. Confirmed malaria cases decreased from 141 and 85 in 2076-77, 2077-78 but increased from 85 to 153 in 2078-79 and 153 to 181 in 2078-80. However, the proportion of *P. falciparum* infections is sharply decreased and accounted for 30.9 percent of all cases in this fiscal year. The number of total slides examined for malaria has increased by 61% compared to previous year in Lumbini Province to 92652 in 2079-80 compared to 57376 in last fiscal year. The annual parasite incidence (API) increased to 1.95 in this fiscal year in risk districts. There are no cases of indigenous *P. falciparum* cases reported in this fiscal year whereas number of indigenous *P. vivax* cases has decreased into single case in 2079/080 compared to previous year.

Implementation of community-based testing by mobilization of Village Malaria Workers (VMW) in malaria high and moderate risk wards, integration of mandatory malaria testing at point of entries (POE) and re-sensitization through refresher sessions by LLGs triggered increased malaria testing.

### **Issues, Constrains and Recommendations**

<b>Issues and Constraints</b>	<b>Recommendation</b>	<b>Responsibility</b>
Inadequate Malaria testing kits supply hampered to achieve 5% Malaria testing out of total OPD cases	Based on the new OPD visit approximately 5% equivalent quantity of RDT is recommended for the smooth supply periodically in PHLMC.	EDCD
Malaria cases at private sector go untreated and malaria testing and treatment compliance does not meet according to the national testing and treatment protocol.	Public Private Mix (PPM) approach is recommended to engage and sensitize all private sectors under malaria elimination scheme.	EDCD
Less activation of Malaria elimination task force from Province to local level	Malaria task force at LLG level needs to be formed and activated. LLG level micro planning regarding to the quality testing, vector control measures and case management is essential to maintain the milestones of elimination plan.	EDCD, Province & LLG

Considering all Palikas as possible endemic areas local capacity for case finding and case management is inadequate hindering to achieve the testing coverage at scale, foci follow up/investigation, case investigation and radical treatment of Malaria cases according to 1-3-7 principle.	Mapping the possible endemic area and a team should be capacitated for case finding and case management for immediate response and management from LLG level.	EDCD and Province
Lack of technical training to private big hospital's doctors on Malaria treatment and associated complication management.	Focal doctors with technical training for Malaria case management need to be developed and reference documents need to be provided to all private and public hospitals.	EDCD and Province

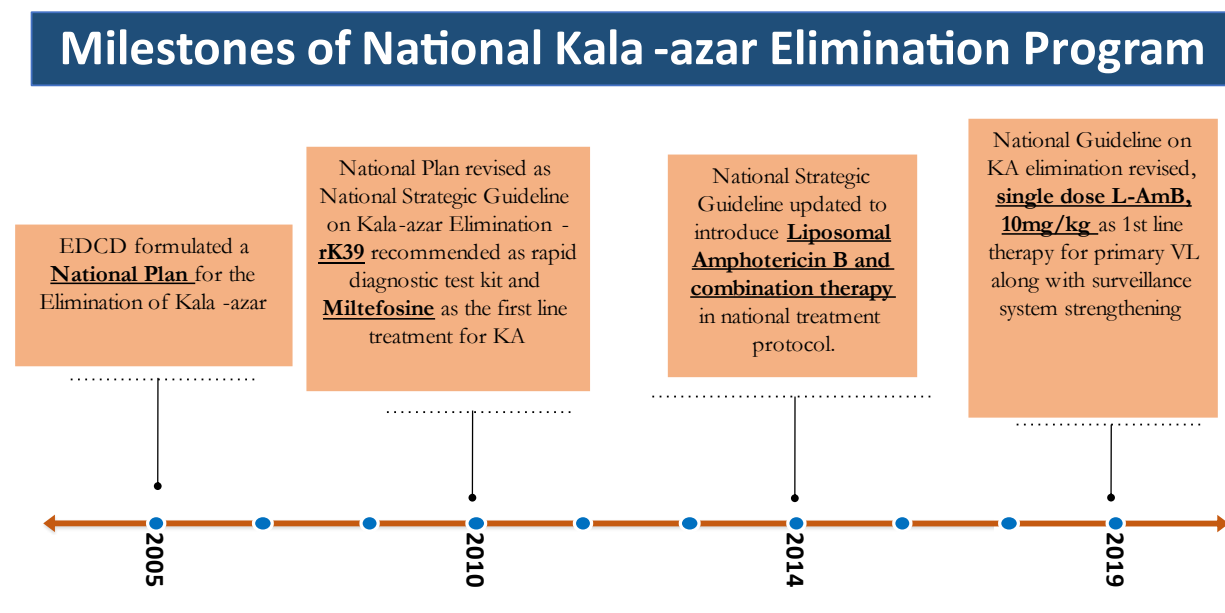
### 3.4 Kala-azar

#### 3.4.1 Background

Leishmaniasis is caused by an intracellular protozoan parasite, of which 20 Leishmania species can cause human disease. Leishmania parasites are transmitted through the bites of infected female phlebotomine sandflies, which feed on blood to produce eggs. The disease occurs in 3 main clinical forms: (i) life-threatening visceral leishmaniasis (VL) or kala-azar with its dermal sequel – post-kala-azar dermal leishmaniasis (PKDL); (ii) self-healing or chronic cutaneous leishmaniasis (CL); and (iii) mutilating mucosal or mucocutaneous leishmaniasis. Kala-azar is characterized by prolonged fever, weight loss, weakness, anemia, and hepato-splenomegaly. If untreated, the patient usually dies in about 2 years due to inter- current infections Kala-azar is slated for elimination in Nepal. Elimination of Kala-azar is defined as achieving annual incidence of less than 1 case of kala-azar in 10,000 population at the implementation unit i.e., district level in Nepal with case fatality due to Kala-azar less than 1%. The government of Nepal is committed to the WHO regional strategy to eliminate Kala-azar and signatory to the memorandum of understanding (MoU) on strengthening collaboration in the regional elimination efforts along with Bangladesh and India.

National strategic guideline on Kala-azar elimination in Nepal recommended rK39 as a rapid diagnostic test kit and Miltefosine as the first line treatment of Kala-azar in most situations. The 2010 guideline was updated in 2014 to introduce Liposomal Amphotericin B and combination therapy in the national treatment guideline. The 2014 national guideline was revised again in 2019 which recommended single dose liposomal amphotericin B as the first line treatment for primary kala-azar. L-AmB was introduced in Nepal in December 2015 after training about 60 doctors and nurses from endemic districts. The therapy should be directly observed, and patients should be hospitalized for the full duration of the therapy. L-AmB needs

a cold chain (<25° Celsius) for storage; and therefore, should be made available only in hospitals where proper storage is ensured. The revised national Kala-azar guideline, 2019 has recommended single-dose liposomal amphotericin B as the first-line therapy for primary Kala-azar.



*Figure 3.4.1: Milestones of National Kala-Azar elimination*

### 3.4.2 Goal, Objective, and Strategies of Kala-azar

Goal	Objective	Strategies
Contribute to the mitigation of poverty in kala-azar endemic districts of Nepal by reducing the morbidity and mortality of the disease and assisting in the development of equitable health systems	Reduce the incidence of kala-azar in endemic communities with special emphasis on poor, vulnerable and unreached populations.	<ul style="list-style-type: none"> <li>• Early diagnosis and complete treatment</li> <li>• Integrated Vector Management</li> <li>• Effective disease and vector surveillance</li> <li>• Social mobilization and partnership</li> <li>• Improve program management.</li> <li>• Clinical, implementation and operational research</li> </ul>
	Reduce case fatality rates from primary Kala-azar to ZERO	
	Detect and treat PKDL to reduce the parasite reservoir. Prevent and manage Kala-azar HIV-TB co-infections.	

## **Current interventions of Kala-azar:**

### **1. Early Diagnosis and Treatment**

- Free diagnosis of Kala-azar cases using RDT (rK39) and provision of free treatment with Liposomal Amphotericin B (LAmB).
- Diagnosis services are provided from the PHC level of government health facilities.
- Treatment services are provided from selected three hospitals (1 Bheri Hospital Nepalgunj 2. Lumbini provincial Hospital Butwal 3. United mission hospital Palpa) of Lumbini province.
- Provision of NPR 2000 per patient for travel during the discharge time of treatment.
- Provision of NPR 5000 per patient to the hospital for treatment.

### **2. Surveillance System Strengthening**

- Kala-azar surveillance system strengthening along with the introduction of online DHIS2/EWARS based reporting.

### **3. Indoor residual spraying**

- IRS activities ongoing in selected districts as per the need.

### **4. Active case detection**

- Social mobilization and partnership
- Develop and distribute IEC/BCC
- Training /orientation /symposium
- Index case-based surveillance (rK39) near 100 meters

### **5. Supervision and Monitoring**

- District health office conducted the supervision and monitoring of vector borne and neglected tropical disease. The necessary technical support was provided to local levels as needed.

### **6. Disease surveillance:**

- Enhancing disease surveillance is a crucial aspect in expediting the progress of the national kala-azar elimination program. Throughout the current fiscal year, diverse initiatives were implemented to fortify disease surveillance, encompassing on-site coaching at EWARS sentinel sites and improved data monitoring and evaluation.
- In FY 2079/80, proactive case detection was executed using an index case-based approach in both endemic and potentially endemic districts. Index case-based house to house searches were carried out by province, district, local levels, local health facility staffs and FCHVs for suspected kala-azar and PKDL cases.
- Suspected cases were then screened clinically by physicians and rapid diagnostic kits (rK39) by laboratory persons and other health workers. rK39 positive cases were referred to district, provincial hospitals and federal hospitals for further confirmation and management. Kala-azar tends to be underreported as most data is obtained through passive case detection, especially from diagnostic hospitals.

Over the last decade, there has been significant advances in the diagnosis and treatment of kala-azar. Nepal's national program made the rK39, dipstick test kit (a rapid and easily applicable serological test) available up to PHCC level in affected districts. Likewise, drugs for kala-azar such as liposomal amphotericin B, miltefosine and paromomycin are made available to all the kala-azar treatment centres. Kala-azar diagnostics and drugs are provided free of cost to the patients by EDCD.

**Table 3.4.1: Reported case of Kala-Azar by districts in OPD morbidity for FY 2076-78-2079-80**

S.N.	District	2077/78	2078/79	2079/80
1	Rupandehi	0	2	17
2	Palpa	3	9	6
3	Gulmi	0	0	1
4	Rukum East		0	0
5	Rolpa	70	0	0
6	Pyuthan	0	1	0
7	Nawalparasi West	0	0	0
8	Kapilbasti	10	0	0
9	Dang	208	2	0
10	Banke	0	50	0
11	Bardiya	0	0	0
12	Arghakhanchi	0	2	0
13	Lumbini Province	291	66	24

In 2079/080, total 24 Kala-azar cases were reported in Lumbini province, which is a decrease in status compared with the previous year (see above table). Most of the cases were reported from Rupandehi (17) and Palpa (6) districts. The number of new cases increased in Rupandehi district this year and the remaining districts of the province reported no cases.

**Table 3.4.2: Special activities conducted for Kala-azar elimination.**

S N	Name of District	Name of Activities	No. of events
1	Rukum East	ACD	0
2	Rolpa	ACD	6
3	Pyuthan	ACD	6
4	Gulmi	ACD	0
5	Arghakhanchi	ACD	0
6	Palpa	ACD	0
7	Nawalparasi West	ACD	0
8	Rupandehi	ACD	0
9	Kapilbastu	ACD	0
10	Dang	ACD	0
11	Banke	ACD	2
12	Bardiya	ACD	0
<b>Total</b>			<b>14</b>

Active case detection program is very effective program for early detection and prompt treatment of Kala-azar cases which will be supportive to national Kala-azar elimination program. In FY 2079/80, 14 events were carried out for case detection where 13 new cases were found in different community of Lumbini province.

**Strengths, Issues/Challenges and recommendations of National Elimination Program strengths:**

**1) Strengths**

- Availability of free of cost drugs and diagnostics for early case detection and timely treatment of kala-azar cases.
- Availability of recently revised standard national guidelines for kala-azar elimination program in Nepal including regular trainings to health professionals on kala-azar prevention, diagnosis and management
- Use of a multi-disciplinary approach to overcome the challenges for elimination of Kala-azar.
- Implementation of Health Management Information System (HMIS) and Early Warning and Reporting System (EWARS) for surveillance of Kala-azar.
- Implementation of active case detection of kala-azar through index case-based approach.
- Effective partnerships and collaboration with academics, researchers, and other stakeholders

**2) Issues/Challenges**

- Lack of effective implementation of indoor residual spraying specially in endemic doubtful districts.
- Increasing number of other forms of leishmaniasis such as cutaneous leishmaniasis which needs further.
- Monitoring and evaluation.
- Inadequate awareness about disease among the communities.

**3) Recommendations**

- Verification of endemicity status of kala-azar in endemic doubtful districts consistently reporting new cases of kala-azar.
- Improve the disease and vector surveillance.
- Dissemination of educational messages to public, public health professionals and policy makers related to kala-azar.
- Improving active case detection and investigation and management of outbreaks.

### **3.5 Lymphatic Filariasis**

#### **3.5.1 Background**

Lymphatic filariasis is a public health problem in Nepal. The disease has been detected in Terai from 300 feet above sea level to 5,800 feet above sea level in the mid hills. Comparatively more cases are seen in the Terai than the hills, but hill valleys and river basins also have high disease burdens. The disease is more prevalent in rural areas, predominantly affecting poorer people. *Wuchereria bancrofti* is the only recorded parasite in Nepal. The mosquito *Culex quinquefasciatus*, an efficient vector of the disease, has been recorded in all endemic areas of the country.

## Campaign data, round of campaign conducted, future plan.

Goal	Objective	Strategies
The people of Nepal no longer suffer from Lymphatic Filariasis.	<ul style="list-style-type: none"> <li>To eliminate Lymphatic Filariasis as a public health problem by 2020</li> <li>To interrupt the transmission of Lymphatic Filariasis</li> <li>To reduce and prevent morbidity.</li> <li>To provide deworming through Albendazole to endemic communities especially to children</li> <li>To reduce mosquito vectors by the application of suitable available vector control measures</li> </ul>	<ul style="list-style-type: none"> <li>Interrupt transmission by yearly mass drug administration using two drug regimens (diethylcarbamazine citrate and albendazole) for six years.</li> <li>Morbidity management by self-care and support using intensive simple, effective, and local hygienic techniques.</li> </ul>

## Reported cases of Lymphatic Filariasis

*Table 3.5.1: The reported case of Filariasis by districts, FY 2077/78 to 2079/80*

District	2077/78	2078/79	2079/80
Rupandehi	18	0	5
Kapilbastu	75	1	5
Nawalparasi West	5	2	2
Banke	4	6	1
Rukum East	0	0	0
Rolpa	0	0	0
Pyuthan	0	0	0
Gulmi	6	0	0
Palpa	40	1	0
Dang	0	0	0
Bardiya	8	0	0
Arghakhanchi	0	0	0
Lumbini Province	156	10	13

A total of 13 new cases of Lymphatic Filariasis were identified in FY 2079/80 in Lumbini Province. Out of the total reported cases, 5 cases diagnosed and confirmed in both districts Rupandehi & Kapilbastu respectively (morbidity reporting).

*Table: 3.5.2 Surgical Problems-Hydrocele by district*

District	2077/78	2078/79	2079/80
Rupandehi	521	862	1051
Bardiya	530	364	327
Banke	122	300	309
Dang	74	189	177
Palpa	86	187	173
Kapilbastu	74	82	123

District	2077/78	2078/79	2079/80
Pyuthan	60	134	46
Arghakhanchi	7	18	41
Rolpa	13	10	23
Gulmi	35	21	20
Nawalparasi	27	54	11
Rukum East	1	1	8
<b>Lumbini Province</b>	<b>1550</b>	<b>2222</b>	<b>2309</b>

Source: DHIS2

### Lymphatic Filariasis elimination status of Lumbini Province

Among 12 districts, six districts (Nawalparasi-west, Rupandehi, Palpa, Arghakhanchi, Pyuthan, Bardiya and Rukum east) are near to achieve the elimination status of Filariasis.

*Table 3.5.3: Lymphatic Filariasis Elimination Status of Lumbini Province*

Districts	LF MDA status	Survey status	Upcoming activity	Remarks
Nawalparasi	MDA Stopped	TAS III Pass 2018		Mapped
Rupandehi	MDA Stopped	TAS III Pass 2017		Mapped
Palpa	MDA Stopped	TAS III Pass 2019		Mapped
Arghakhanchi	MDA Stopped	TAS II Pass 2019		Mapped
Pyuthan	MDA Stopped	TAS II Pass 2019		Mapped
Rukum	MDA Stopped	TAS II Pass 2019	TAS III 2022	Mapped
Gulmi	Non-Endemic			
Kapilvastu	MDA	Pre-Re-TAS Fail 2020		
Dang	MDA	Pre-TAS Fail 2019	Re-Pre TAS 2021	Mapped
Banke	MDA	Pre-TAS Fail 2019	Mapping 2021	Mapped
Bardiya	MDA (stooop after TAS Pass)	Re-Pre-TAS Pass 2020	AS 2021	Mapped
Rolpa	MDA Stopped	TAS II Pass 2019	Mapping 2021	Mapped

Source: MMDP report of Health Office

### MDA Status of Lumbini Province FY 2079/2080

*Table 3.5.4: MDA Status of Lumbini Province FY 2079/2080*

SN	District	Reported Lymphedema Cases	Reported Hydrocele cases	Running Round	Coverage	Remarks
1	Banke	1	309	13 <sup>th</sup>	75%	Continued
2	Dang	0	177	13 <sup>th</sup>	81%	Continued
3	Kapilvastu	5	123	15 <sup>th</sup>	85%	Continued

Source: MDA & HMIS report

### MDA related major activities.

- Implementation unit and local level activities: Planning meetings, training of health workers, advocacy, social mobilization, IEC/BCC, monitoring and supervision, interactions with the media, interactions with multi-sector stakeholders including newly elected local body and logistics supply.

- Community level activities: Volunteer’s orientations, advocacy, social mobilization, IEC/BCC, implementation of MDA activities and monitoring and supervision.
- Social mobilization activities: The production of revised IEC materials, checklists, reporting

**The following are the major Program recommendations.**

- Continue MDA for Pre TAS- unsuccess districts, and carry out transmission assessment, periodic surveillance, and follow-up surveys to monitor progress towards elimination.
- Strengthen the health system and service providers' capacity for morbidity management, disability prevention, and post-MDA surveillance.
- Carry out operational research, studies, and Program reviews.
- Consolidate all documents related to the Program in a dossier for the later validation and verification of elimination.

### **3.6 Dengue**

#### **3.6.1 Background**

Dengue is a mosquito-borne disease that is transmitted by mosquitoes (*Aedes aegypti* and *Aedes albopictus*) and occurs in most of the districts of Nepal. WHO (2009) classified dengue i) Dengue without warning signs, ii) Dengue with warning signs, iii) Severe Dengue. The first dengue case was reported from Chitwan district in a foreigner. The earliest cases were detected in 2005. Since 2010, dengue epidemics have continued to affect lowland districts as well as mid-hill areas. This trend of increased magnitude has since continued with number of outbreaks reported each year in many districts- Chitwan, Jhapa, Parsa (2012-2013), Jhapa, Chitwan (2016-2016), Rupandehi, Jhapa, Mahottari (2017), Kaski (2018) and Sunsari, Kaski, Chitwan (2019). The mostly affected districts in Lumbini province are Rupandehi, Banke, Bardiya, Dang and Kapilbastu though all 12 districts are affected. *Aedes aegypti* (the mosquito-vector) was identified in five peri-urban areas of the Terai (Kailali, Dang, Chitwan, Parsa and Jhapa) during entomological surveillance by EDCD during 2006–2010, indicating the local transmission of dengue. However, recent study carried out by VBDRTC has shown that both the mosquitoes (*A. aegypti* and *A. albopictus*) have found to be transmitting the disease in Nepal. Studies carried out in collaboration with the Walter Reed/AFRIMS Research Unit (WARUN) in 2006 by EDCD and the National Public Health Laboratory (NPHL) found that all four sub-types of the Dengue viruses (DEN-1, DEN-2, DEN-3 and DEN-4) were circulating in Nepal.

#### **3.6.2 Goal, Objectives, and Strategy of Dengue Control Program:**

**Goal:**

To reduce the morbidity and mortality due to dengue fever, Dengue Hemorrhagic Fever (DHF) and Dengue Shock Syndrome (DSS).

**Objectives:**

- To develop an integrated vector management (IVM) approach for prevention and control.
- To develop capacity on diagnosis and case management of dengue fever, DHF and DSS.

- To intensify health education and IEC activities.
- To strengthen the surveillance system for prediction, early detection, preparedness, and early response to dengue outbreaks.

#### **Strategies:**

- Early case detection, diagnosis, management and reporting of dengue fever.
- Regular monitoring of dengue fever surveillance through the EWARS
- Mosquito vector surveillance in municipalities
- The integrated vector control approach where a combination of several approaches is directed towards containment and source reduction.

#### **3.6.3 Major activities in 2079-80**

- Conducted orientation to multi-stakeholders at local levels for advocacy on dengue prevention and control including support for search and destroy activities.
- Conducted ‘search and destroy’ activities at local levels to search for the potential breeding sites of Aedes mosquitoes and destroy them.
- Routine surveillance of Dengue through EWARS (sentinel sites).
- Trained physicians, nurses, paramedics and laboratory technicians on dengue case detection, diagnosis, management, and reporting
- Supplied rapid diagnostic test kits (IgM)
- Dengue case monitoring and vector surveillance
- Developed IEC materials and disseminated health education messages engaging various stakeholders including the media and youth.
- Distribution of nets

*Table 3.6.1: New Dengue cases of 2077/078 to 2079/080*

<b>Districts</b>	<b>2077-78</b>	<b>2078-79</b>	<b>2079-80</b>
Rupandehi	25	92	2254
Gulmi	18	17	796
Arghakhanchi	6	18	577
Dang	15	6	573
Palpa	1	7	332
Kapilbastu	5	22	322
Nawalparasi	0	1	315
Banke	13	41	241
Bardiya	1	115	147
Rukum East		0	6
Pyuthan	1	3	6
Rolpa	0	0	5
Lumbini Province	85	322	5574

The number of reported dengue cases increased significantly over last few years, however increased this year against the FY 2078/79. District wise, Dengue cases increased in all districts.

### **3.7 Leprosy**

#### **3.7.1 National Leprosy Control Program**

Nepal has achieved the elimination of Leprosy as a public health problem in Dec 2009 and declared elimination in 2010. Elimination status at national level has been sustained since then, however further reducing the disease burden and eliminating Leprosy at sub-national level is still a challenge. National Leprosy Strategy (2016-20) envisioned Leprosy Free Nepal with a goal to end the consequences of Leprosy including disability and stigma. In July 1019, Leprosy control and disability management section (LCDMS), EDCD, MoHP with support of WHO, GPZL and all ILEP partners reviewed the implementation of National Leprosy Strategy and envisioned the Zero Leprosy Roadmap (2021-2030).

#### **Vision, goal, and strategic pillars:**

Vision: Leprosy free Nepal

Goal: Elimination of Leprosy at the sub-national level (municipality)

Strategic pillars:

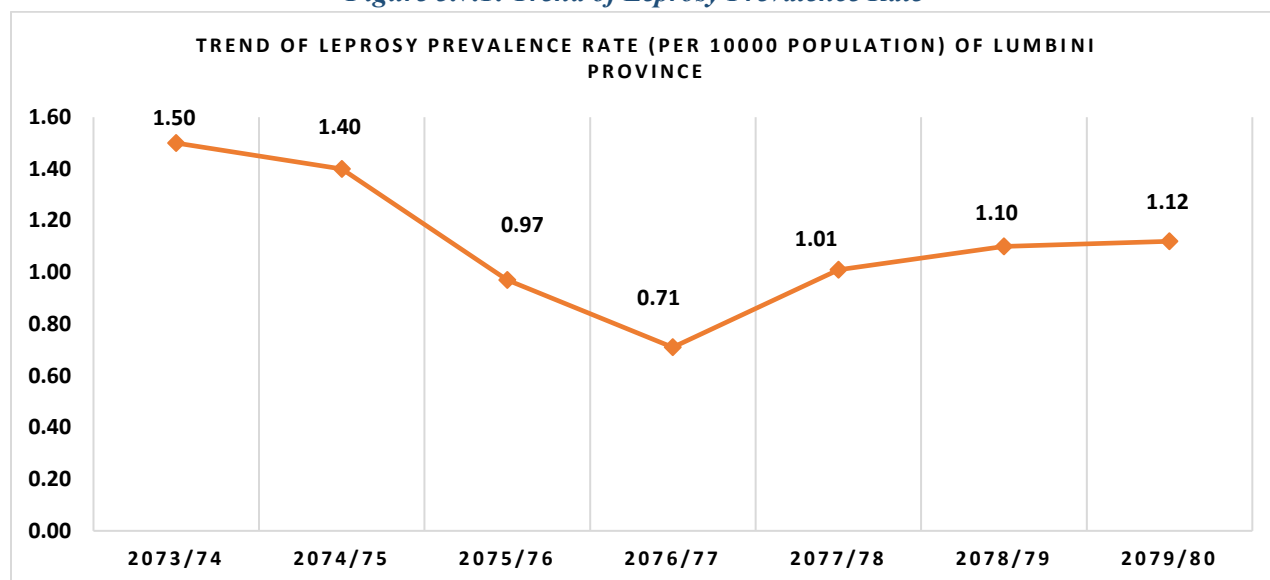
1. Implement the national Leprosy roadmap for zero Leprosy across all levels.
2. Scale-up leprosy prevention alongside integrated active case detection
3. Manage Leprosy and its complications and prevent new disability.
4. Combat stigma and ensure human rights are respected.

#### **3.7.2 Prevalence and new case detection rate**

##### **Trend of Leprosy prevalence**

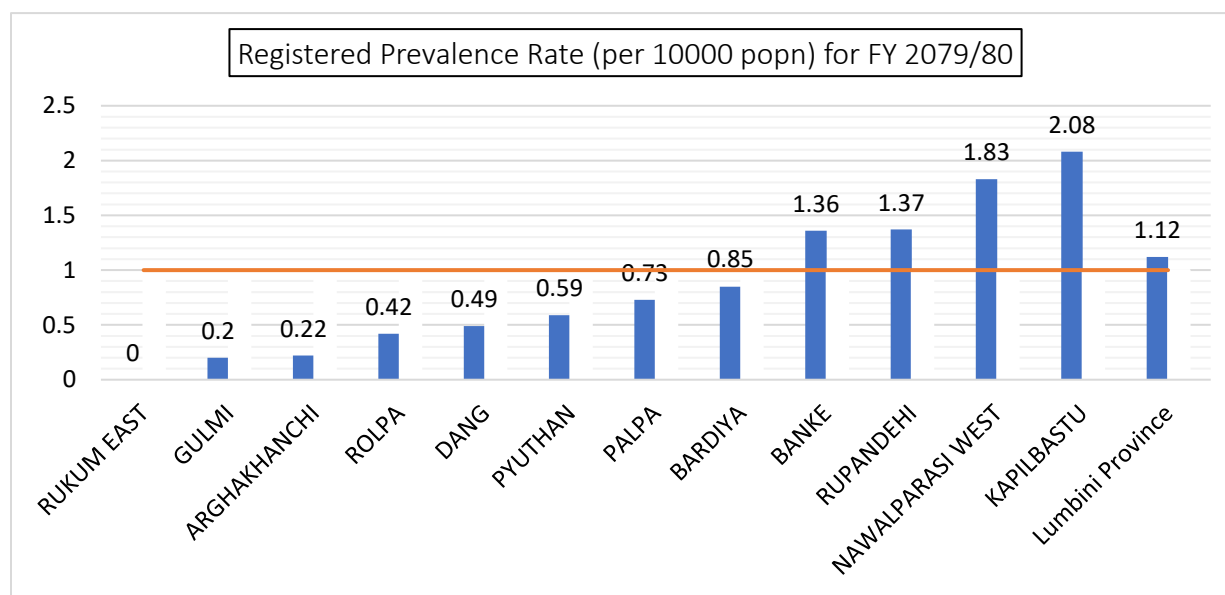
The trend of Leprosy prevalence rate of Lumbini Province from FY 2073/74 to FY2079/80 has decreased from 1.5 to 1.1 per 10000 population. This rate is above the cut-off point of 1 case per 10,000 set by WHO to indicate the elimination of Leprosy as a public health problem. In last six years, the Leprosy prevalence was reported below 1 in two consecutive years between 2075/76 and 2076/77. However, this is slowly in increasing trend. The New Case Detection Rate (NCDR) has gradually decreased from 17.6 to 10.8 per 100,000 population from FY2073/74 to 2079/80. The NCDR was above 10 except in FY2076/77 where active case detection activities, contact examination were limited due low priority placed in terms resource and funding.

*Figure 3.7.1: Trend of Leprosy Prevalence Rate*



### District wise prevalence of Leprosy

*Figure 3.7.2: District wise Prevalence of Leprosy*



In Fiscal Year 2079/80, 4 terai districts (Kapilbastu, Nawalparasi West, Rupandehi and Banke) of Lumbini Province reported prevalence rate above 1 per 10000 population. Kapilbastu reported the highest prevalence rate of 2.

## New Case Detection

The detection of new cases signifies the ongoing transmission with the rate measured per 100,000 population. A total 565 new Leprosy cases were detected in 2079/80 and Kapilbastu reported 168 new cases, which is highest in this Province. Kapilbastu reported the highest new case detection rate with 23.9 per 100,000 populations with detection of 168 new Leprosy cases. The NCDR of Lumbini Province has decreased from 11.4 to 10.8 in FY 2079/80 compared to earlier fiscal years.

**Table 3.7.1: District-wise new case detection rate (NCDR) of Leprosy for FY2079/80**

District	Total Leprosy New cases	New case detection rate of leprosy	Percentage of new leprosy cases presenting with a grade-2-disability	Proportion of children (0-14 years) among new cases detected
<b>Lumbini Province</b>	<b>565</b>	<b>10.8</b>	<b>5.1</b>	<b>6.9</b>
Rukum East	2	3.4	0	0
Rolpa	5	2.1	0	0
Pyuthan	12	5.1	0	8.3
Gulmi	8	3.2	0	0
Arghakhanchi	4	2.2	0	0
Palpa	13	5.3	0	0
Nawalparasi West	70	17.8	11.4	7.1
Rupandehi	140	12.3	2.9	12.9
Kapilbastu	168	23.9	3.6	6
Dang	26	3.8	0	0
Banke	80	13	12.5	3.8
Bardiya	37	7.9	2.7	5.4

The percentage of grade-2 disability among new cases of the province has decreased from 7.7 (FY 2078/079) to 5.1 (FY 2079/80). Among districts, Banke reported the highest proportion of G2D disability with 12.5 followed by 11.4 in Nawalparasi West, while seven districts maintained 0 Grade-2 disable cases. Similarly, the proportion of child cases among new increased from 2.9 to 6.9 at Provincial level for FY 2079/80 (Table 58).

## Strengths, Weakness and Challenges for Leprosy Control Program

Strength	Weakness	Challenges
High level political commitment and expression of interest in accelerating Leprosy control at provincial/local level	Program implementation and monitoring from local government is inadequate	Follow up and care of patients released from treatment (RFT)
Availability of Diagnostic standard, protocol, and operational guideline for curative services of Leprosy	Limited Human Resource at all levels and inadequate expertise among those available staffs	Recording and Reporting of cross-border cases

Strength	Weakness	Challenges
Good collaboration and communication among supporting partners	Continuation of contact examination and LPEP implementation	Social stigma is still prevalent in society due to lack of awareness about Leprosy among community people
Free MDT, transport service for released from treatment cases and other service for treating complications	Lack of rehabilitative care and services those affected by Leprosy	Channelizing and supply of assistive devices from PHLMC to far districts
Integration of Leprosy services at health facility level with other programs	Under and over reporting of Leprosy data in HMIS	Unavailability of disability related data at local level

### 3.8 Snake bite

#### Background

Snakebite is an important occupational hazard affecting farmers, plantation workers, herders and fishermen. Snakebite is a life-threatening medical emergency and survival of the victims depends much on the appropriate first aid measures and immediate transportation to the nearest health center where the facility to administer anti-snake venom and supportive care is available. In rural population of Nepal, the doctor population ratio is far from accepted norms and most of the trained health workforce are based in urban areas. Therefore, the people of rural areas often seek health care from practitioners of indigenous medicine. Most of the death related to snakebite occurs before reaching the treatment center, either during transportation or at the village. Doctors or health workers at primary care level as well as some of the district and provincial level hospital do not treat snakebite, likely due to inadequate training on snakebite management during medical schools resulting in lack of confidence on management of snake envenoming. This national guideline is intended to ensure standardized, timely and effective management of snakebite in the country.

*Table 3.8.1: Snake bite cases in last three fiscal years*

Data	Snake bite: non-poisonous			Snake bite: poisonous		
	2077/ 078	2078/079	2079/080	2077/ 078	2078/079	2079/080
Organization unit	2077/ 078	2078/079	2079/080	2077/ 078	2078/079	2079/080
Lumbini Province	1920	3022	2270	278	371	249
Rukum East	5	15	6	2	2	0
Rolpa	65	91	69	18	63	8
Pyuthan	10	9	12	1	2	5
Gulmi	56	66	40	13	10	3
Arghakhanchi	29	21	11	14	1	0
Palpa	288	316	30	34	31	33
Nawalparasi West	32	186	229	26	19	4
Rupandehi	1181	1880	1469	93	189	138
Kapilbastu	6	0	20	42	1	0

Data	Snake bite: non-poisonous			Snake bite: poisonous		
	2077/ 078	2078/079	2079/080	2077/ 078	2078/079	2079/080
Dang	225	412	295	35	42	47
Banke	0	1	42	0	0	7
Bardiya	23	25	47	0	11	4

In 2079/080, 2270 non-poisonous and 249 poisonous cases were reported in Lumbini Province, which is in increasing trend compared with the previous years (see above table). Most cases were reported from Rupandehi (1469) while least were reported from Rukum East in FY 2079/080.

### 3.9 Scrub Typhus

#### 3.9.1 Background

Scrub Typhus is an acute, febrile, infectious disease that is caused by *Orientia* (formerly *Rickettsia*) *tsutsugamushi*. It is also known as *tsutsugamushi* disease. It is an obligate intracellular gram-negative bacterium from the *Rickettsiaceae* family.

In FY 2079/080, total of 2843 Scrub Typhus cases were reported in Lumbini Province with highest cases reported from Rupandehi district.

*Table 3.9.1: Scrub Typhus cases in FY 2079/080*

Scrub Typhus- FY 2079/080	
Lumbini Province	2843
Rukum East	1
Rolpa	8
Pyuthan	0
Gulmi	458
Arghakhanchi	507
Palpa	496
Nawalparasi West	6
Rupandehi	906
Kapilbastu	0
Dang	147
Banke	48
Bardiya	266

Source: DHIS2 report

### 3.10 Rabies/Dog Bite

#### 3.10.1 Background

Rabies is a vaccine-preventable viral zoonotic disease responsible for an estimated 59,000 human deaths every year across the world. All warm-blooded mammals are susceptible to infection by the rabies virus (RABV). Transmission of RABV by dogs is responsible for up to 99% of human rabies cases in rabies-endemic regions, and more than 95 % of the patients seek Rabies PEP for dog bites.

However, there is a small proportion of human rabies reported due to transmission via wildlife (such as foxes, wolves, jackals, mongoose, racoons, skunks and bats). The virus is present in the saliva of the infected animal and is transmitted to other animals and to humans through the saliva. Rabies is a disease with the highest documented case-fatality rate, close to 100%. Rabies has terrified man since antiquity. Rural populations are disproportionately affected, experiencing the greatest burden with the least access to affordable preventive treatment.

Rabies is caused by Lyssavirus belonging to the family Rhabdoviridae which are enveloped viruses having single-stranded, negative-sense RNA genome of approximately 12 kilobytes size The genus, Lyssa, comes from the Greek goddess Lyssa, the 11 spirits of madness, frenzy, and rage Meanwhile, rabies on itself is derived from Latin term rabere that implies madness and raving In Sanskrit, the word rabies is derived from an ancient word rabhas that implies ‘to create violence. Dogs are responsible for the spread of rabies,

*Table3.10.1: Dog Bite Cases*

Data	Dog Bite		
	FY 2076/077	FY 2077/078	FY 2078/079
<b>Lumbini Province</b>	<b>16715</b>	<b>22914</b>	<b>32465</b>
Rukum East	39	79	156
Rolpa	283	307	468
Pyuthan	229	153	455
Gulmi	689	915	1333
Arghakhanchi	542	573	676
Palpa	747	2180	700
Nawalparasi West	1462	2676	3746
Rupandehi	7469	10186	14174
Kapilbastu	2157	1785	6584
Dang	1768	2445	2037
Banke	51	40	46
Bardiya	1279	1575	2090

In 2079/080, 32,465 dog bite cases were reported in Lumbini Province, which is in increasing trend as compared with the previous years. Most cases were reported from Rupandehi (14174) and least from Banke (46) district.

### 3.11 Early Warning and Reporting System (EWARS)

#### 3.11.1 EWARS reporting Status of Sentinel Sites

There are currently 18 sentinel sites in Lumbini province that are reporting on EWARS: two from federal level hospitals, nine from provincial level hospitals, four from medical colleges and three private/community hospitals. The table 62 depicts the status of EWARS reporting from 18 sentinel sites in FY 2079-80, of which all hospitals have actively reported.

**Table 3.11.1: Reporting Status of EWARS**

Status	Federal hospital / Institute	Provincial hospital	Private medical college/ hospital
Active Reporting	Bheri Hospital Rapti Academy of Health Sciences	Bardiya Hospital Pyuthan Hospital Rolpa Hospital Lumbini Provincial Hospital Kapilvastu Hospital Prithvi Chandra Hospital Rukum East Hospital Gulmi Hospital Arghakhanchi Hospital	Universal College of Medical Sciences AMDA Hospital Crimson Hospital Nepalgunj Medical College Teaching Hospital_Kohalpur Devdaha Medical College Lumbini Medical College_Palpa United mission Hospital

#### Issues, constraints, and recommendations

Issues and constraints	Recommendations	Responsibility
Existence of reporting and data quality issues in EWARS	Regular data quality assessment, review, and feedback	Health Directorate, Health Offices, Local levels
Inadequate skilled human resource, and financial resources for information collection, analysis, dissemination and use at local level	Capacity building of health workers and managers on recording/reporting systems, including public health analytics  Allocate of adequate resources for information management at local, province and federal level	Federal MoHP, Provincial MoH/HD, local level
Limited analyses, interpretation, dissemination, and use of data for policy and planning	Promote evidence-informed policy development, planning and decision making at all levels	Federal MoHP, Provincial MoH/PHD, local level
No sentinel sites in some hospitals	Expansion of sentinel site in East Rukum and Palpa Hospital, and selected private hospitals	Provincial MoH/HD, local level

## Chapter 4: Hospital Services

### 4.1 Background

The Lumbini Province is committed to improving the health status of people by delivering high quality health services. The key objective of the province is to provide quality curative health services with specialized care to reduce morbidity and mortality by ensuring early diagnosis and prompt treatment from hospitals. In 2006, the government of Nepal incorporate emergency and inpatient services as Essential Health Care Services Package. This package aims to provide free of charge to destitute, poor, disabled, senior citizens, FCHVs, victims of gender-based violence and others from provincial hospitals, PHCCs and for all citizens through health post. The constitution of Nepal has guaranteed the basic health services as the fundamental human right of the people. To ensure the fundamental right of people province government strengthen all provincial, as well as local and tertiary level health facilities to deliver quality health care services.

After implementation of federal system in Nepal, three tires of government were there to provide services in their jurisdiction. In the province, there are 21 hospitals currently operated under federal and province government and local levels. Among them, three federal hospitals are tertiary level, one secondary B level and 13 Secondary A level hospitals operate under the province and 4 primary hospitals operate under the local government (Table 4.1.1).

*Table 4.1.1: Hospitals categorized by ownership and level.*

Hospitals by Ownership		By Level
<b>Federal level (3)</b>		
1	Bheri Hospital	Tertiary
2	Rapti Academy of Health Science	Tertiary
3	Sushil Koirala Prakhhar Cancer Hospital	Tertiary
<b>Provincial level (13)</b>		
1	Lumbini Provincial Hospital	Secondary B
2	Rapti Provincial Hospital	Secondary A
3	Arghakhanchi Hospital	Secondary A
4	Bardiya Hospital	Secondary A
5	Pyuthan Hospital	Secondary A
6	Rolpa Hospital	Secondary A
7	Gulmi Hospital	Secondary A
8	Prithvi Chandra Hospital	Secondary A
9	Bhim Hospital	Secondary A
10	Kapilvastu Hospital	Secondary A
11	Rampur Hospital	Secondary A
12	Rukum East Hospital	Secondary A
13	Palpa Hospital	Secondary A
14	Proposed Bhaluwang Hospital	Secondary A

Hospitals by Ownership		By Level
Local level (4)		
1	Lamahi Hospital	Primary
2	Pipara Hospital	Primary
3	Shivaraj Hospital	Primary
4	Chisapani Hospital	Primary

### Infrastructure Availability

The Table 64 shows the infrastructure status of all provincial hospitals of which all hospital owns a land and has been functional. Lumbini provincial hospital operates 400 beds and other 12 hospitals operate 50 beds.

*Table 4.1.2: Infrastructure availability in provincial hospitals*

SN	Hospitals	Total Beds	Land	Building
1	Lumbini Provincial Hospital	400*	Available	Under process
2	Rapti Provincial Hospital	50	Available	Available but not adequate
3	Arghakhanchi Hospital	50	Available	Available, but not as per MOH standard
4	Bardiya Hospital	50	Available	Available and adequate
5	Pyuthan Hospital	50	Available	Available but not as per Secondary A (MoH standard)
6	Rolpa Hospital	50	Available	Under construction (nearly completed)
7	Gulmi Hospital	50	Available	Under construction
8	Prithvi Chandra Hospital	50	Available	Under construction
9	Bhim Hospital	50	Available	Under construction
10	Kapilvastu Hospital	50	Available	Available and adequate
11	Rampur Hospital	50	Available	Nearly completed (yet to handover)
12	Rukum East Hospital	50	Available	Under construction
13	Palpa Hospital	50	Available	Available but not adequate room
14	Proposed Bhalubang Hospital	50	Available	Available, but not as per MOH standard

\*100 bed allocated by hospital development committee

## Availability of major hospital services

Table 65 depicts the availability status of major hospital services in the province-level hospitals of Lumbini Province.

*Table 4.1.3: Availability of major services in provincial hospitals*

Key Service indicators		No. of hospitals	Name of Hospitals
IPD service	Medical Ward	13	All province-level hospitals
	Surgical Ward	8	Lumbini Provincial, Rapti Provincial, Bardiya, Kapilvastu, Gulmi, Prithvi Chandra, Bhim, Arghakhanchi and Pyuthan Hospital
	Maternity Ward	13	All provincial hospital
	Paediatric Ward	8	Lumbini Provincial, Rapti Provincial, Bardiya, Kapilvastu, Gulmi, Arghakhanchi, Bhim, Rukum East Hospital
	Orthopaedic Ward	1	Lumbini provincial hospital
	Psychiatric Ward, Geriatric Ward, ENT	1	Lumbini provincial hospital
ER service		14	All province-level hospitals
Surgical service	Operation theater (OT)	12	All province-level hospitals except Palpa hospital
	Post-Operative Ward	8	All province-level hospitals except Bhim and Rukum East hospital
Pharmacy service		11	All province-level hospitals except Rukum East hospital
24 hrs Laboratory service		13	All province-level hospitals
Blood Bank		9	All province-level hospitals except Arghakhanchi, Bhim, Palpa, Rampur, Rukum East hospital
X-ray service		13	All province-level hospitals
USG service		12	All province-level hospitals except Pyuthan hospital
CT Scan service		3	Lumbini Provincial, Rapti Provincial and Bhim hospital
Intensive Care Unit (ICU)		5	Lumbini Provincial, Rapti Provincial, Kapilvastu, Bardiya and Bhim hospital
Neonatal Intensive Care Unit (NICU)/SNCU		5	Lumbini Provincial, Kapilvastu, Bardiya, Rapti Provincial and Bhim hospital
Pediatric Intensive Care Unit (PICU)		1	Lumbini provincial hospital
Endoscopy service		2	Lumbini Provincial, Rapti Provincial and Pyuthan hospital (Not functioning)
Haemodialysis service		4	Lumbini Provincial, Rapti Provincial, Bheri hospital and RAHS
Dental service		12	All provincial hospital except Rukum East hospital
Extended Health Service (EHS)		1	Lumbini provincial hospital

Key Service indicators	No. of hospitals	Name of Hospitals
Physiotherapy	10	All provincial hospital except Rapti Provincial, Palpa and Rukum East hospital
Nutrition Rehabilitation Centre	3	Lumbini provincial, Bheri hospital and RAHS
One Stop Crisis Management Centre (OCMC)	13	All province-level hospitals

### Major Achievements of Hospital:

- Local government have taken ownership of Primary Level of hospitals while Secondary A and B Levels of hospitals are under direct ownership of provincial government.
- Most of the hospitals are centrally located or placed on strategic well catchment area.
- Presence of motivated and dedicated hospital staffs.
- Patient flow is good in almost all hospitals.
- Continued to provide antenatal care, postnatal care, Family planning, Nutrition, and Immunization services from MCH clinics under all province level hospitals.
- Free Screening and treatment of Sickle cell and thalassemia from Prithvi Chandra, Lumbini, Kapilvastu, Rapti, Bheri and Bardiya hospitals.
- Free COPD service from all provincial hospital
- Dialysis service, CT scan service is continued from Rapti provincial hospital and Lumbini provincial hospital.
- Bheri, Rapti Provincial, Lumbini Provincial and Bhim are COVID Dedicated hospitals.
- Established dental department and provided dental service from dental surgeon in all hospitals under province except Rukum East Hospital.
- Primary eye care service has been initiated in Arghakhanchi, Bhim, Rolpa, Gulmi and Rukum East Hospital.
- Dialysis and CT scan service is continued from Rapti and Lumbini provincial Hospital.
- Endoscopy service has been provided by Pyuthan, Rapti and Lumbini provincial Hospital.
- ICU service has been provided by Bhim, Kapilvastu, Rapti and Lumbini provincial hospital.
- Kapilvastu, Rapti and Lumbini provincial Hospital also providing NICU service.
- Oxygen plant is established in all Secondary A and B Level of hospitals.
- Most of the hospital's buildings are under construction (Rolpa, Rampur, Bhim, Rukum East, Gulmi, PrithviChandra, Lumbini Provincial Hospital)
- All hospitals are very sensitized by MSS scoring arising positive healthy competition between hospitals leading to improvement in quality health care services.

## 4.2 Hospital Management Strengthening Program

Since FY 2071/072, the Ministry of Health and Population (MoHP) implemented Hospital Management Strengthening Program (HMSP) in Nepal. In 2013, this program was initiated as a Hospital Management Training (HMT) in collaboration with National Health Training Center (NHTC) and Nick Simons Institute (NSI) and piloted in four district hospitals and two hospitals- Pyuthan and Gulmi are included from Lumbini province.

Later in 2014, the Hospital Management Training became the Hospital Management Strengthening Program due to its modality and coverage. This program intended to identify existing gaps in service availability and readiness through self and joint assessment using the Minimum Service Standards (MSS) tool, as well as help to develop evidence-based action plan. This initiative was planned to implement in all district level hospitals in phase-wise manner (15 to 50 bedded). By FY 2075/76, the MSS program reached to 83 district level hospitals. After four years of successful implementation of the District Hospital MSS; the district hospital MSS tool was revised and strengthen its implementation up to Tertiary Hospital. After the revision, four different MSS tools (Primary, Secondary A, Secondary B and Tertiary level MSS) are introduced for different level of hospitals. Altogether, MSS covered 130 hospitals from local, province and federal level in Nepal.

In Lumbini province, MSS program was implemented in 20 hospitals that included 2 federal, 14 provincial and four local level hospitals. The hospital MSS reflects the most important minimum criteria for providing services, but it is not an "ideal" list of maximum standards. This MSS checklist differs from a program-specific quality improvement tool which outlines the equipment, supplies, furniture, and human resources needed to provide service reflecting the service's standard operating guideline. The major achievements of Lumbini province under three MSS domains are described hereunder:

**Governance and Management:** The federal and province government and local levels now place a high importance on hospital service quality as they started to monitor hospital services based on MSS score. The hospital development committee, which was vacant in many hospitals before, has now been completed, which has helped in creating favorable environment in the hospitals with respect to leadership and governance. Hospital Development Committee (HDC) is taking charge of overall service improvement and hospital service expansion. The majority of Hospital Development Committee (HDC) chairpersons and Medical Superintendent considered MSS as a guiding principle for quality healthcare services. On set agendas, meeting was organized regularly that usually cover all hospital related issues and way forwards. Hospitals now adopted best practices like, displaying hospital organograms, service utilization charts, citizen charters, information officer contact information, and other crucial service delivery statistics.

**Clinical Service Management:** The Province government has focused on ensuring adequate physical infrastructure, equipment, human resources, and instrument in each hospital. After implementation of federal system, Province government upgraded five primary hospitals in Secondary A level hospital to deliver the specialist services. In order to manage quality OPD

services, at least one specialist doctor is deployed in all province-level hospitals. Province government has given a special emphasis on surgical services. The CEONC service was implemented in all provincial hospitals except Palpa Hospital and newly upgraded Rukum East. Beside CEONC, most of the hospitals expanded their other major surgical services and few hospitals also have new modular OT set-up. With the aim to strengthen preventive services; MCH clinic was established in all provincial hospitals to deliver preventive services: ANC, PNC, family planning and immunization in an integrated way. In diagnostic service, all hospital replaced old x-ray machine with digital and DR system x-ray machines likewise laboratory services also strengthened, fully automated and semiauto analyzers and wide range of tests including culture, T3, T4 TSH, HbA1C, and other major tests were available. Free screening and treatment of sickle cell and thalassemia services were started in six terai region hospital including federal hospital (Bheri Hospital). Remarkable milestone was achieved in regard to add services like ICU with ventilators, Special Newborn Care Unit (SNCU), Electronic Health Record (EHR), Hemodialysis, ENT, and CT scan services.

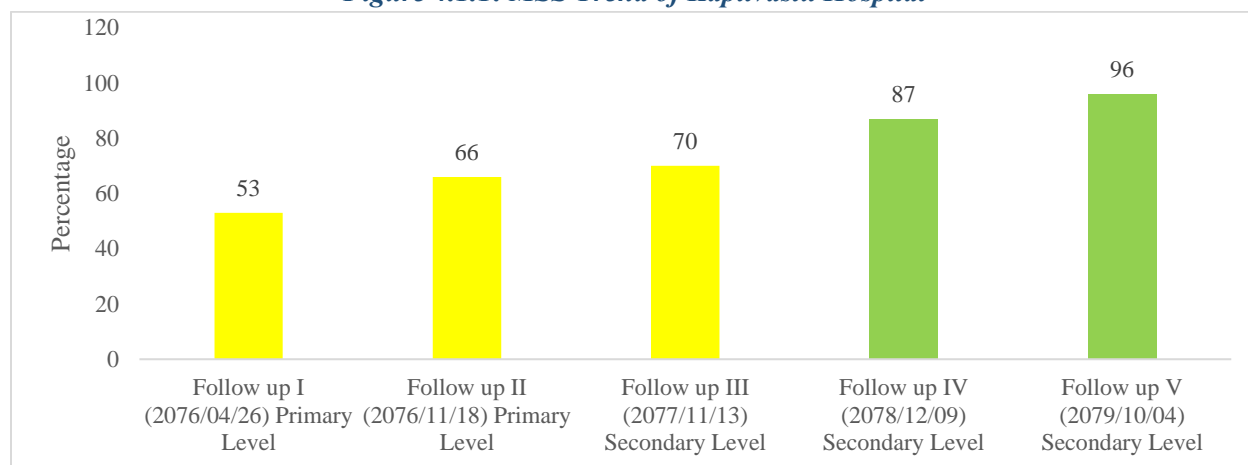
**Hospital Support Services:** The support service management contributes to improve the quality of hospital clinical services. Separate CSSD, laundry and housekeeping departments were established in hospital. The need for a separate repair and maintenance department in the hospital after the MSS follow-up assessment of various departments found that expensive medical equipment used to be broken and stored. To solve this issue, many hospitals established repair and maintenance department and deputed biomedical engineers or biomedical technicians. Now, province government given a special attention to manage hazardous health care waste, there is an arrangement of Autoclave in most of the hospital and some hospital started to sterilize waste before its disposal. According to the policy of the government, a social service unit was established, and free treatment was arranged for the poor, destitute and helpless citizens from all provincial hospitals.

### **MSS trend and action plan of individual hospitals**

#### **Kapilvastu Hospital**

Kapilvastu Hospital was established in 2029 BS with 15 bedded hospital and latter it was upgraded to 50 bedded hospitals by province government in FY 2077/078. The hospital is located in Kapilvastu municipality-05 of Kapilvastu district.

**Figure 4.1.1: MSS Trend of Kapilvastu Hospital**



The figure 4.1.1 depicts the trend of MSS score in last three fiscal years and shows the overall score in increasing trend. In FY 2079/80, Kapilvastu hospital scored 96 percent which is highest among the provincial hospitals. Hospital achieved this success by establishing the infrastructure and addressing the health service gaps outlined in the earlier MSS and following MSS guideline for governance and management, clinical service management and hospital support services.

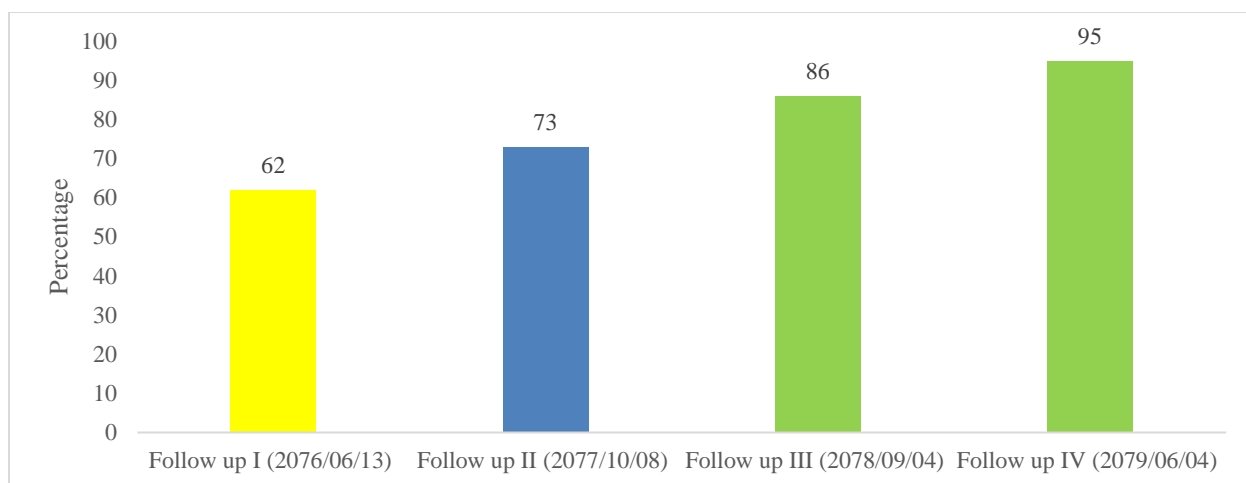
**Action Plan of Kapilvastu Hospital:**

S. N	Prioritized Gap	Action steps to be taken to fulfill the gap
1	Add on CT scan/MRI service	Plan for prerequisite on adding up machineries
2	Setting up of Dialysis Service	Coordinate for fund and plan for requirements
3	Continuity to social audit	Conduct Social Audit
3	Upgrading hospital from 50 bedded hospital to 100 bedded hospital for service delivery	Coordinate, plan, and readiness for 100 bedded hospitals

**Bardiya Hospital**

Bardiya Hospital was established in 1991 B.S. It is located in Gulariya Municipality, ward no. 6, Bardiya district. Bardiya Hospital is the only referral center of district, which has been delivering top-notch healthcare services with limited resources. This hospital was upgraded to 50 bedded hospitals in 2071-72.

**Figure 4.1.2: MSS Trend of Bardiya Hospital**



The Figure 4.1.2 shows that Bardiya hospital is progressing to fulfill the service availability and readiness gap. In 2079/80, Bardiya hospital obtained 95 percent overall score, which is a second highest score in province after Kapilvastu hospital. To achieve this, all staff of hospital and hospital development committee is dedicated to establishing well managed hospital in all domains, strengthening services and delivering quality health care services.

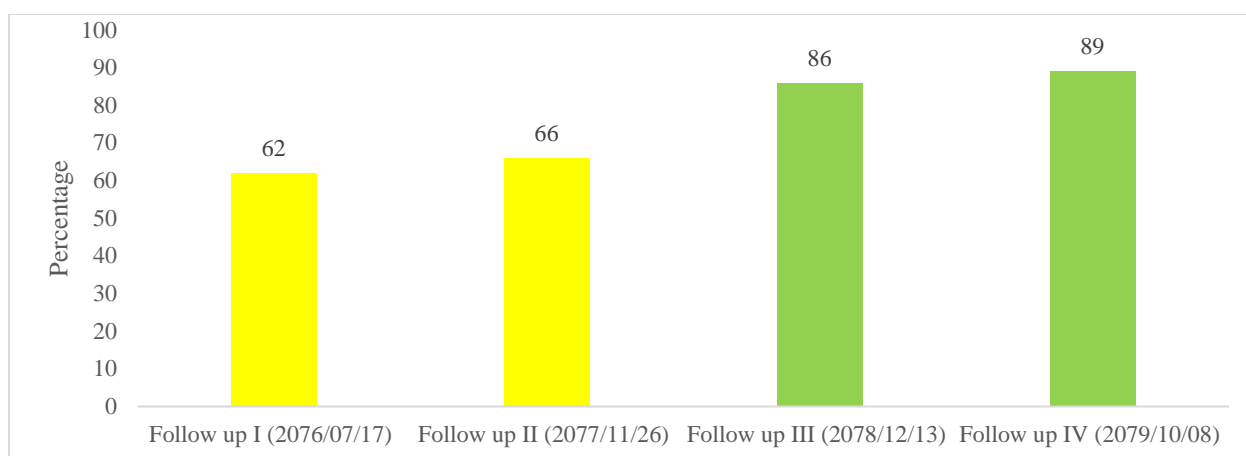
*Action plan prepared by Bardiya Hospital:*

SN	Prioritized gaps	Steps to be taken to fulfill
1.	Upgrade of infrastructure and equipment for quality service delivery	Renovation, Upgrade hospital to 100 bedded with identical service blocks and manage the required equipment/ machines and commodities
2.	Inadequate human resources in respect to service delivery load	Coordinate and allocate adequate resources and manpower as per the service and client flow. Run own academy to overcome staff scarcity.
3.	Alternative water and power source is not adequate and sustainable	Add on alternative water and power source to sustain quality service and sanitation

### **Gulmi Hospital**

Gulmi hospital, located in Tamghas Municipality was established in 2022 BS as a 15 bedded hospital and later upgraded to 50 bedded hospitals in 2071.

*Figure 4.1.3: MSS Trend of Gulmi Hospital*



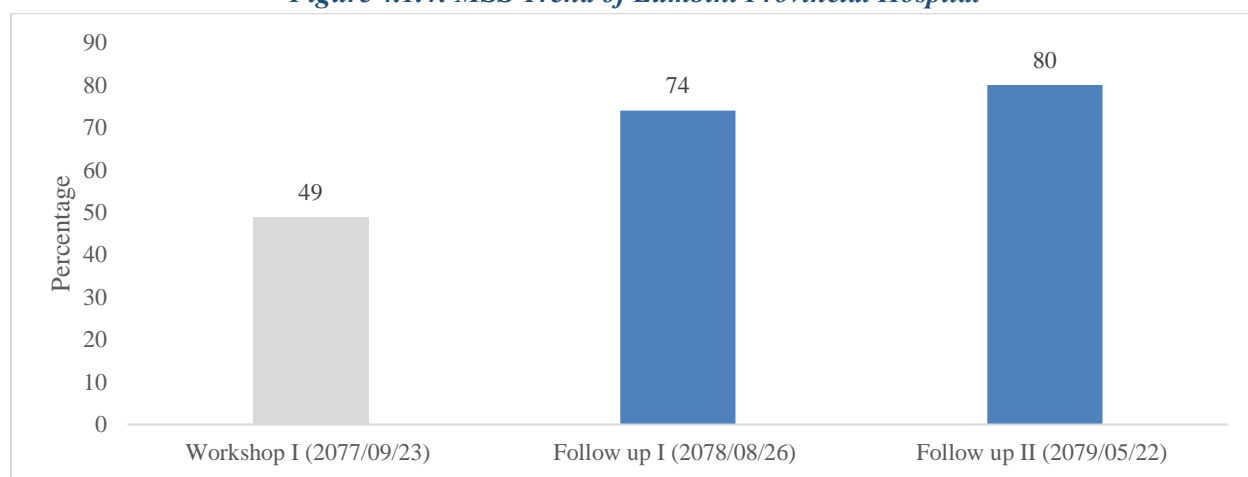
The figure above shows the MSS score status of Gulmi hospital in last four fiscal years. Overall, the score is in increasing trend. In the last fiscal year, the hospital scored 89 percent being the second highest MSS scorer with consistent progress in respect to timeline.

*Action Plan prepared by Gulmi Hospital:*

SN	Prioritized gaps	Steps to be taken to fu
1.	Need to deliver ICU/HDU, Geriatric, Hemodialysis and Digital X-ray service	Coordination with MoH for infrastructure and human resource to operate and deliver the services.
2.	Insufficient infrastructure space for service delivery	Renovation and Coordination for resources on required infrastructure settings
3.	No canteen facility for visitors	Organize HDC meeting, resource estimation and manage canteen
4.	No specialized human resource for GP, Anaesthesia, paediatrics, etc...	Coordination with federal, province and Resunga Municipality for human resource management

Lumbini Provincial Hospital is situated at the junction of Mahendra and Siddhartha highway in Butwal Sub-Metropolitan City of Rupandehi District. Lumbini Zonal Hospital was established in 1967 B.S as a 6 bedded hospital and later upgraded as Lumbini Provincial Hospital in 2071/72. Lumbini Provincial hospital is only a Secondary B level hospital under Province government and one of the main referral hospitals of Lumbini Province also play a crucial to serve poor citizens who cannot afford private hospitals.

*Figure 4.1.4: MSS Trend of Lumbini Provincial Hospital*



The above diagram shows the MSS score of three MSS assessments done in this hospital. Within the short period of time, hospital succeeded to achieve significant progress to fulfill MSS gaps. Hospital performed new initiatives, like; provisioned a designated staff like MSS focal person, In-charge for every department, allocated space set-up different staff. Another major support for progress is from infrastructure development. Now, hospital operate separate maternity building.

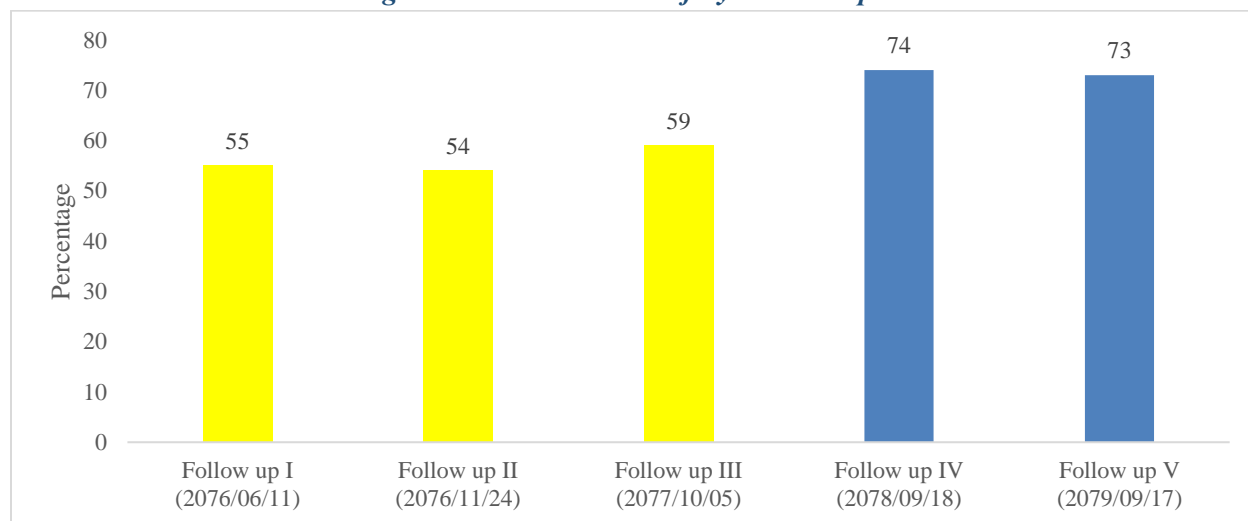
*Action Plan prepared by Lumbini Provincial Hospital:*

SN	Prioritized gaps	Steps to be taken to f
1.	Service users deprived of NICU, MRI, SNCU, PICU, Cardiac catheterisation obstetrics and gynae service	Initiate construction, development of service outlet, purchase and management of resources including HR for quality service delivery
2.	Expansion of separate service counters for ER, Insurance, OPD, IPC and Pharmacy service	Infrastructure, equipment, fund, human resource and time management in respect to service and client flow.
3.	Separate infrastructure for birthing centre service outlet	Coordination for monitory and logistics support. Birthing centre service friendly infrastructure construction and adequate human resource management
4.	Social audit needs to be conducted annually	Conduct social audit yearly

## Pyuthan Hospital

Pyuthan Hospital the only government hospital of Pyuthan district situated at Pyuthan Municipality ward no. 4, Bijuwar. It was established in 2045 B.S as a 15 bedded hospital. Before the establishment of the hospital, it was a health care center located at the district headquarter ‘Khalanga’. In 2045 B.S, the health care center was upgraded to District Hospital. This hospital has been upgraded to 50 bedded by the government since 2073 BS. Pyuthan hospital has been selected as a HUB hospital by Ministry of Health and Population in collaboration with Ministry of Health, Lumbini province, and Nick Simons Institute since FY 2077/78.

*Figure 4.1.5: MSS Trend of Pyuthan Hospital*



The above diagram shows the increasing trend of MSS score in Pyuthan Hospital but in FY 2079/80 its score 73 percent demands more efforts on improvement compared to previous years.

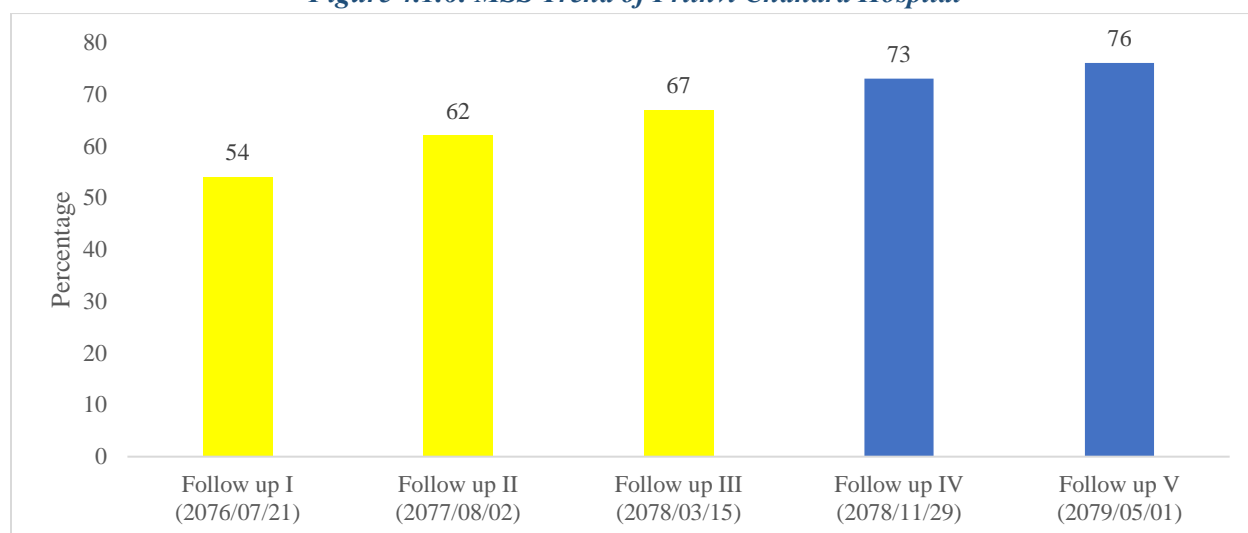
*Action plan prepared by Pyuthan Hospital:*

SN	Prioritized gaps	Steps to be taken to
1.	Documentation of service information in reporting system	Implement Electronic Health Record System
2.	Infrastructure construction/renovation for special clinics (FP and Safe abortion), medico legal service, visitors waiting home, storage, housekeeping, basic supplies, surgical and paediatric nursing station	Coordination for resources required. Construction and separate space allocation to individual service for the quality service delivery and to prevent overcrowding
3.	Service users deprived of X-ray, USG and SNCU service	Procurement and separate space for delivery of service.
4.	Hospital waste disposal system strengthening	Installation of autoclave for waste disinfection as well as install transformer for power backup

## Prithvi Chandra Hospital

Prithvi Chandra Hospital was established in 1968 B.S. The hospital is located in Ramgram Municipality ward no. 5, Parasi-Bazaar. This hospital was upgraded in 50 bedded in 2073 B.S. and it serves as the district sole referral facility.

*Figure 4.1.6: MSS Trend of Prithvi Chandra Hospital*



The MSS score trend of Prithvi Chandra Hospital illustrates steady efforts on track. The MSS score of this hospital is also on increasing trend with 76% score in last MSS assessment.

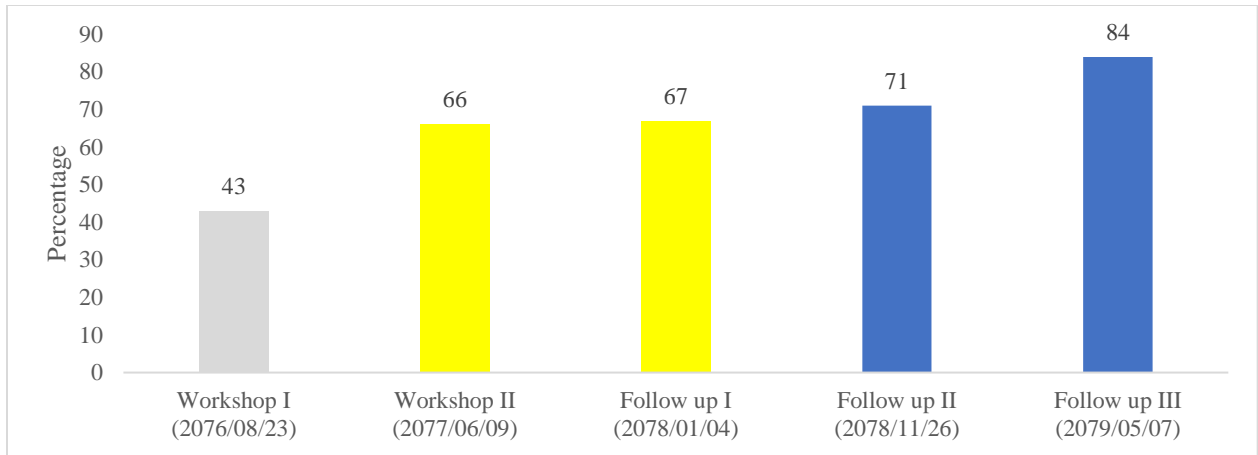
*Action Plan prepared by Prithvi Chandra Hospital:*

SN	Prioritized gaps	Steps to be taken to fulfil
1.	No separate ward as per MSS	Separate physical structure for medical, surgical and paediatric wards with dedicated staff as well as prepare and use hospital operational manual
2.	X-ray service continuity for client	Staff management for 24 hours X-ray service
3.	Separate space for breast feeding staffs and visitors in office premises	Manage separate space ensuring privacy and convenience
4.	No proper room for security guard	Arrange space for dedicated security guard unit
5.	Activate disaster management committee	Form, activate and strengthen disaster management committee
6.	Hospital infection prevention initiative management	Strengthen hospital canteen service and improve infection prevention initiative by proper waste management

### **Rapti Provincial Hospital**

Rapti Provincial Hospital is in Tulsipur Sub-Metropolitan city of Dang district. Rapti Zonal hospital was declared as Rapti Provincial Hospital by cabinet of Lumbini province Government in 2019. Rapti Provincial Hospital is the one of the major referral health institutions not only for Dang but also for citizen of Rukum, Rolpa, Pyuthan and Salyan districts.

*Figure 4.1.7: MSS trend of Rapti Provincial Hospital*



The figure above portrays the increasing trend of MSS score over the years in Rapti Provincial hospital. In FY 2079/80, the hospital achieved 84% of overall score in last assessment illustrating trend of consistent efforts for quality health service.

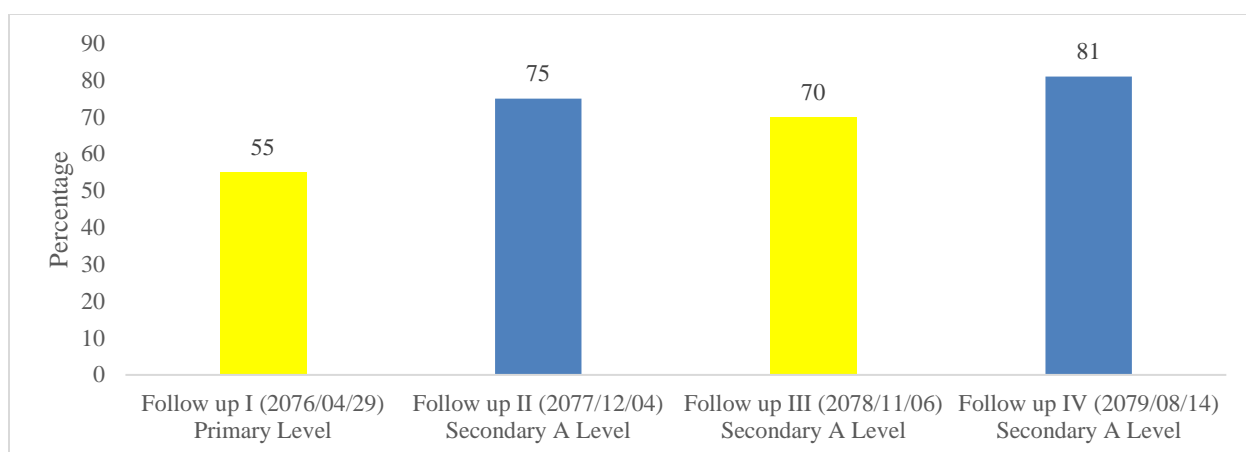
*Action plan prepared by Rapti Provincial Hospital:*

SN	Prioritized gaps	Steps to be taken to fu
1.	Service users deprived of ICU, and Physiotherapy service	Adequate human resource for service delivery in respect to service seekers load
2.	Additional space for lab service and hospital store	Expansion of lab including microbiology with culture service and adequate hospital store space
3.	Space for operation service	Follow up for construction of modular operation theatre

### **Arghakhanchi Hospital**

Arghakhanchi hospital is located at Sandhikharka Municipality Ward no. 1, Syale Bazaar of Arghakhanchi district. This hospital was established in 2045 B.S as 15 bedded hospital and later upgraded to 50 bedded hospital in 2077/78.

*Figure 4.1.8: MSS Trend of Arghakhanchi Hospital*



The above diagram shows the fluctuation in MSS score trend of Arghakhanchi hospital. Despite of decrease in MSS score by 5% in FY 2078/79 (against the MSS of 2077) Arghakhanchi hospital managed to integrate its efforts for quality health service to 81 percent score in FY 2079/80.

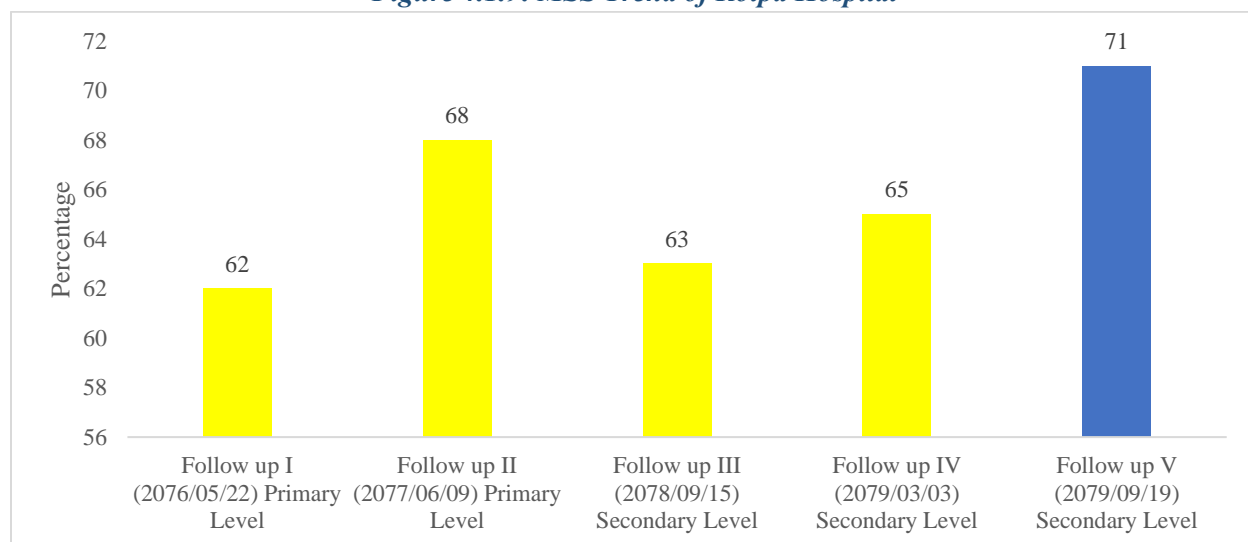
*Action Plan prepared by Arghakhanchi Hospital:*

SN	Prioritized gaps	Steps to be taken to f
1.	Inadequate human resource as per sanctioned position	Appointment of staff in contract
2.	Poor quality of recorded data, specifically- OPD, IPD and surveillance data	Install Electronic Health Record System Analyse and discuss periodic progress with staffs
3.	Inadequate infrastructure: limited room for service delivery and space for visitors	Construction of building as per MoHP infrastructure standard
4.	Problem in insurance claim payments	Claiming insurance payment in appropriate way
5.	Hospital infection prevention initiative management	Improve infection prevention initiative by proper waste management following use of autoclave

### **Rolpa Hospital**

Rolpa Hospital is in Rolpa Municipality Ward No. 2, Reugha of Rolpa district. It was established in 2059 B.S as a Health Center and later it was upgraded to District Hospital in 2061 B.S. The name of hospital was changed to Rolpa Hospital, Reugha in 2075. Rolpa Hospital approved 15 bedded, but in FY 2077/78 Rolpa Hospital is upgraded to 50 bedded by provincial government.

**Figure 4.1.9: MSS Trend of Rolpa Hospital**



The above diagram shows the fluctuation in MSS score of Rolpa hospital, which is struggling for the range of 62-68% over the years period. In FY 2079/80, two MSS assessments were conducted, and hospital succeeded to achieve 71% in last assessment.

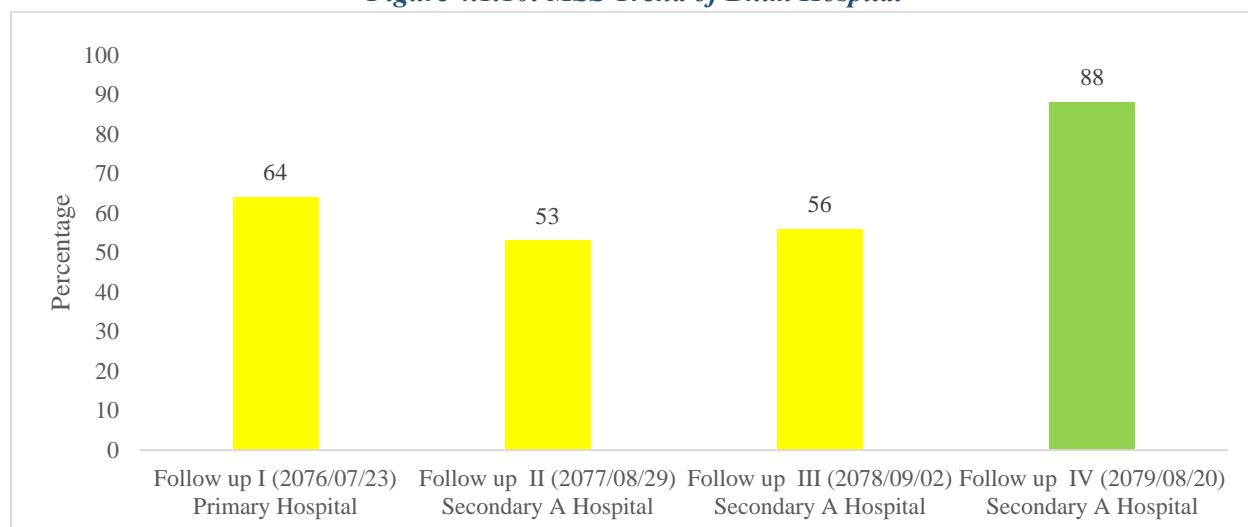
*Action plan prepared by Rolpa Hospital:*

SN	Prioritized gaps	Steps to be taken to fu
1.	Separate service outlets space management	Furnishing and partition as required of new building for dedicated and separate service outlet
2.	Insufficient machines and equipment in new building	Procurement and if applicable maintenance of machine and equipment required in new building for quality service delivery
3.	Hospital infection prevention initiative management	Allocate dedicated space, use of autoclave, segregation and prepare work plan for waste management
4.	No human resource available for repair and maintenance of hospital equipment	Recruitment of BMET for repair and maintenance of medical equipment
5.	No power backup for service delivery	Procurement and installation of transformer for power back up in new building
6.	Vacant officer level staffs for managerial support	Recruitment of officer level staffs for managerial support

### **Bhim Hospital**

Bhim Hospital is in Siddharthanagar Municipality Ward No. 13, Bank Road in the southern part of Rupandehi district of Lumbini Province. Bhim Hospital was established in 1990 B.S as 3 bedded hospital and upgraded to 15 bedded in 2035 and it was again upgraded to 25 bedded in 2041 B.S. And in FY 2077/78, it has been upgraded from 25 to 50 bedded hospital.

**Figure 4.1.10: MSS Trend of Bhim Hospital**



The MSS score of Bhim hospital shows slight increment against the Follow-up II and III. Bhim hospital's efforts and dedication to the quality health service could be observed in FY 2079/80 reflecting MSS score to 88 percent in last assessment.

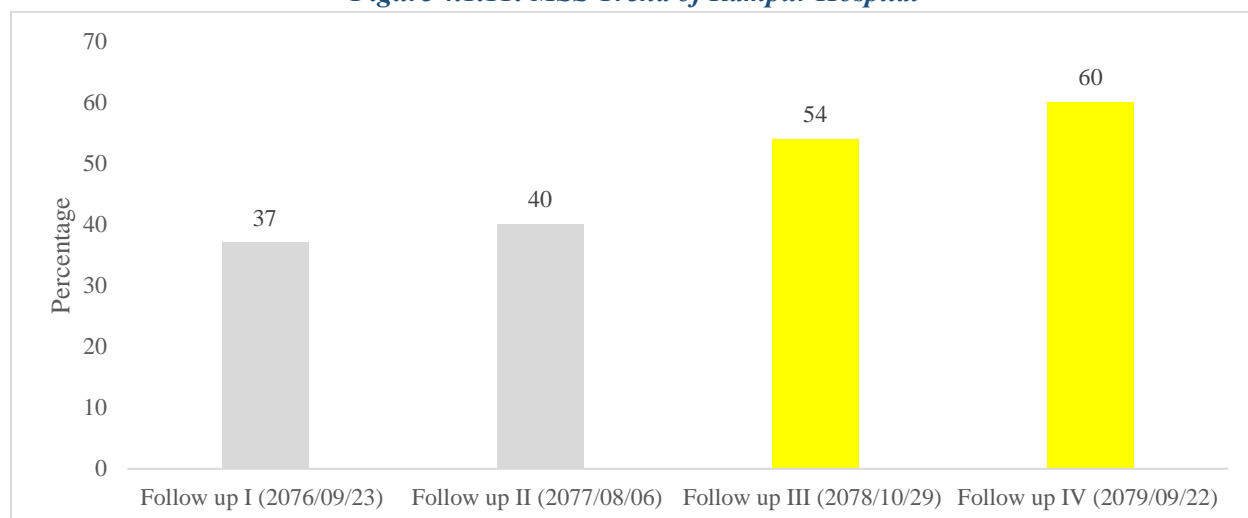
*Action plan prepared by Bhim Hospital:*

SN	Prioritized gaps	Steps to be taken to fulfill
1.	Need of additional Mortuary building, mortuary van and freeze	Resource allocation for the construction of mortuary building , mortuary van and freeze
2.	Problem in recording and reporting	Suitable software installation for recording and reporting
3.	Infection prevention and hospital waste management	Collaboration with local/Provincial/Federal government for waste management resource allocation

### **Rampur Hospital**

Rampur Hospital is in Rampur municipality, ward no. 5, Saniamrai of Palpa district. It was established in 2052 B.S as a health center and later upgraded as 15 bedded hospital in 2069 B.S. And in 2071/72, it has been upgraded to 50-bedded hospital.

**Figure 4.1.11: MSS Trend of Rampur Hospital**



The above diagram shows the MSS score trend of Rampur hospital. The Rampur hospital shows the steady increasing trend of MSS. In FY 2079/80, Rampur hospital obtained 60 percent MSS Score.

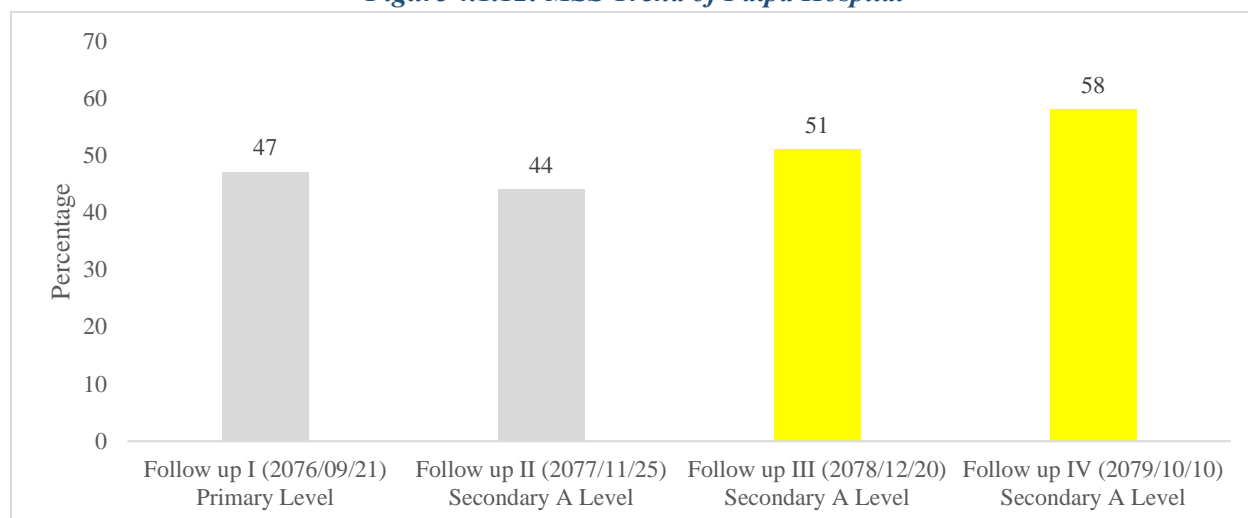
**Action Plan prepared by Rampur Hospital:**

SN	Prioritized g	Steps to be taken to fulfil
1.	MPDSR monthly meeting is not regular	Continuity and regularity of MPDSR meeting
2.	Insufficient human resource	Requests Scholarship Graduate doctors from MOHP, Recruit Paramedics form HDC and Regular Program for required staffs
3.	Addition space for morning conference and library is needed	Manage space for the morning conference and library in the hospital
3.	Breast feeding room space for staff is not available	Allocate separate space for the staffs to ease breast feeding

**Palpa Hospital**

Palpa hospital is in Silikhantole, Ward no. 4 of Tansen Municipality, Palpa. It was first established as a Primary Health Care Center. Later it was upgraded in 15 bedded and renamed as Palpa Hospital in 2046 B.S. Additionally, it was upgraded by the provincial government in 50 bedded hospitals in FY 2077/78.

**Figure 4.1.12: MSS Trend of Palpa Hospital**



The above diagram shows the MSS score trend of Palpa hospital. The Palpa hospital shows the increasing trend of MSS. In FY 2079/80, Palpa hospital has scored 58 percent, which is 7% increment in two consecutive years compared with the previous score.

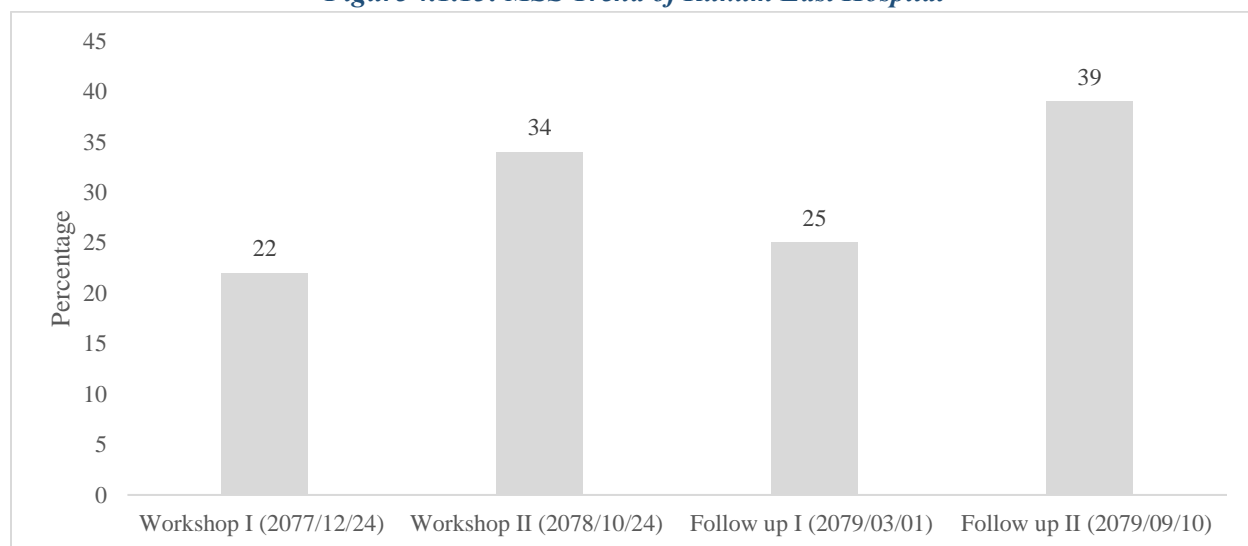
*Action Plan prepared by Palpa Hospital:*

SN	Prioritized gaps	Steps to be taken to f
1.	Inadequate human resource	Fulfilment of vacant posts
2.	CEONC, OPD, USG, Physiotherapy service needs to be strengthened	Hire subjective expert human resources to effectively deliver the desired service
3.	Provide additional Lab service from hospital premises	Expansion of lab service (TFT, body fluid analysis, amylase, lipase, troponin I, h. pylori Ag)
4.	Service user deprived of ambulance service	Coordination for the purchase of new ambulance
5.	Nutrition Rehabilitation Home service delivery	Coordination with province/Federal Government for human resource and required training

**Rukum East Hospital**

Rukum East Hospital is located on Sisne Rural Municipality Ward no. 5, Rukumkot. Rukum East is geographically remote as well as economically and educationally backward district with lack of basic health facility and health services. Rukum East Hospital has been established to provide health services to the people of Rukum East. Currently, the hospital building is under construction and has been running on the building of Rukumkot Health Post.

**Figure 4.1.13: MSS Trend of Rukum East Hospital**



The above diagram shows the MSS score trend of Rukum East hospital. In FY 2079/80, first follow up MSS score declined by 9 percent in comparison to previous year; second follow up in the same fiscal year showed improvement with 39 percent MSS score. The MSS score was decreased due to insufficient human resource, limited infrastructure, and vacant hospital's managerial and leadership positions as per organogram.

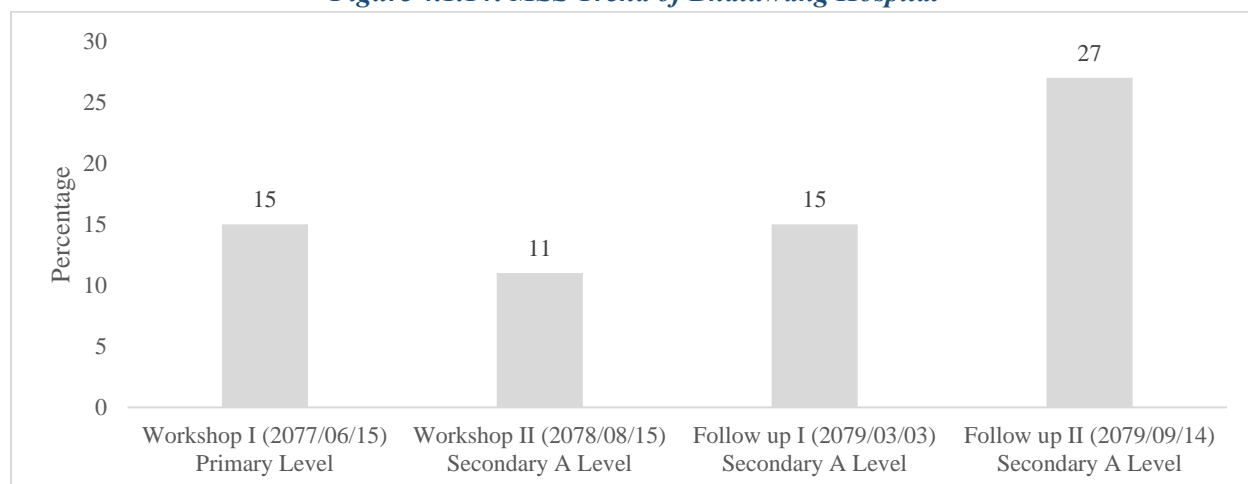
Action Plan prepared by Rukum East Hospital:

S.N.	P r i o r i t i z e d g a p s	S t e p s t o b e t a k e n t o f
1.	Need to expand dental and physiotherapy service	Procurement of equipment and accessories
2.	Insufficient space for hospital store, staff quarter and waiting home for visitors	Coordinate for construction of hospital store waiting home for visitors or manage on rent
3.	No Hospital Pharmacy	Start hospital's own pharmacy and allocate seed money for establishment of pharmacy
4.	Hospital website not developed	Procurement of the consulting services
5.	No ambulance service	Procurement of ambulance suitable for hilly terrain.

### **Proposed Bhaluwang Hospital**

Lalmatiya Health Post was proposed to upgrade in 50-bedded Secondary A level hospital in 2078 BS. Initially, Hospital was established as a Sub-Health post in 2052 B.S. and upgraded as Health Post in 2072 B.S. Hospital is located in Rapti Rural Municipality, Deukhuri Valley, Dang.

**Figure 4.1.14: MSS Trend of Bhaluwang Hospital**



Being the recently upgraded hospital, the MSS score seems poor compared with province-level hospitals. The above diagram shows the fluctuation in MSS score which is struggling for 15% over the year's period. In FY 2079/080, two MSS assessments were conducted, and hospital succeeded to achieve 27% in last assessment. Multi-sector collaboration is needed to strengthen the services of Bhaluwang hospital.

Action plan prepared by Bhaluwang Hospital:

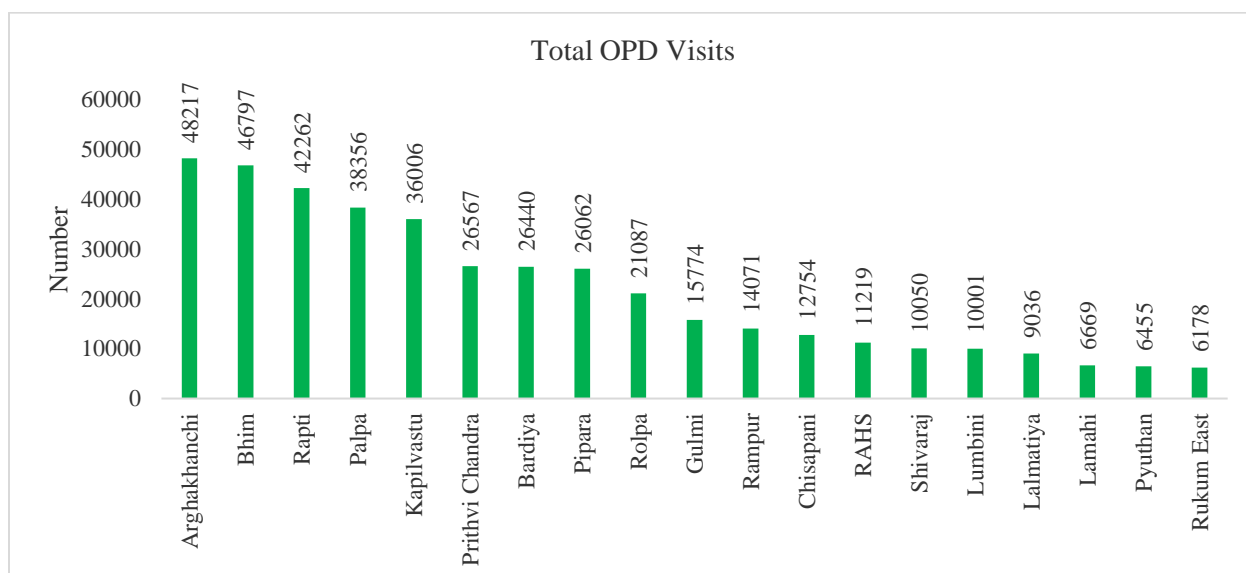
S.N.	Prioritized gaps	Steps to be taken to full
1.	Hospital Management Committee is inactive, QI committee is not formed, and staff meeting is not regular	Orientation to HMC about their roles and responsibilities, formation of QI committee as per the guideline and regularity of monthly staff meeting
2.	Insufficient space for dressing room, minor OT, General Inpatient, Pharmacy, Ticket counter, DOTS, CSSD, Laundry	Space management and appropriate set up for dressing room, minor OT, General Inpatient, Pharmacy, Ticket counter and DOTS
3.	Infrastructure is required for OT and Postmortem service	Established one major OT setup, Construct postmortem department with running water facilities and also have refrigerator chamber for death body storage
4.	Insufficient Human resources	Recruit or hire staffs for account and CSSD section, nominate Information officer and delegate responsibility
5.	Power backup required	Procurement and Install Generator and Inverter with earthing
6.	Governance issues	Formation of grievances handling committee, develop the navigation chart, digital client registration, e-billing, e-attendance, prepare and display duty roster, conduct social audit timely and regularly
7.	Insufficient equipment's and medical supplies	Procurement of equipment for Lab, Indoor, OT, emergency, Maternity. Maintain emergency medical supplies in ER and Labour room

8.	Limited infrastructure for quality service delivery	Coordination with LLG and province to build prefab building and DPR for 50 bedded Hospital
9.	Waste Management initiative required	Properly segregate the waste at source and dispose safely

### 4.3 Outpatients and Inpatient Services

The figure below shows that there were 4,14,001 new OPD visit in FY 2079/080. The number of new OPD visits is higher in Arghakhanchi hospital followed by Bhim hospital, Rapti Provincial hospital and Palpa Hospital, and Rukum East hospital with the fewest new OPD visits. However, Lumbini provincial hospital had relatively low case reporting, which indicate the necessity of routine data review.

*Figure 4.1.15: New OPD visit of hospitals in FY 2079-80*



Below table shows a hospital-wise bed occupancy rate in last three fiscal years. Bed occupancy rate in FY 2079/80 increased in Arghakhanchi, Prithivi Chandra, Rapti Provincial and Kapilvastu hospitals, while decreased in Pyuthan, Rampur, Chisapani hospital and Rapti Academy of Health Sciences as compared with FY 2078/079. Overall, the bed occupancy rate of majority of hospitals looks poor owing to patient flow that signifies to improve the recording and reporting system of hospital.

*Table 4.1.4: Bed Occupancy rate in last three years*

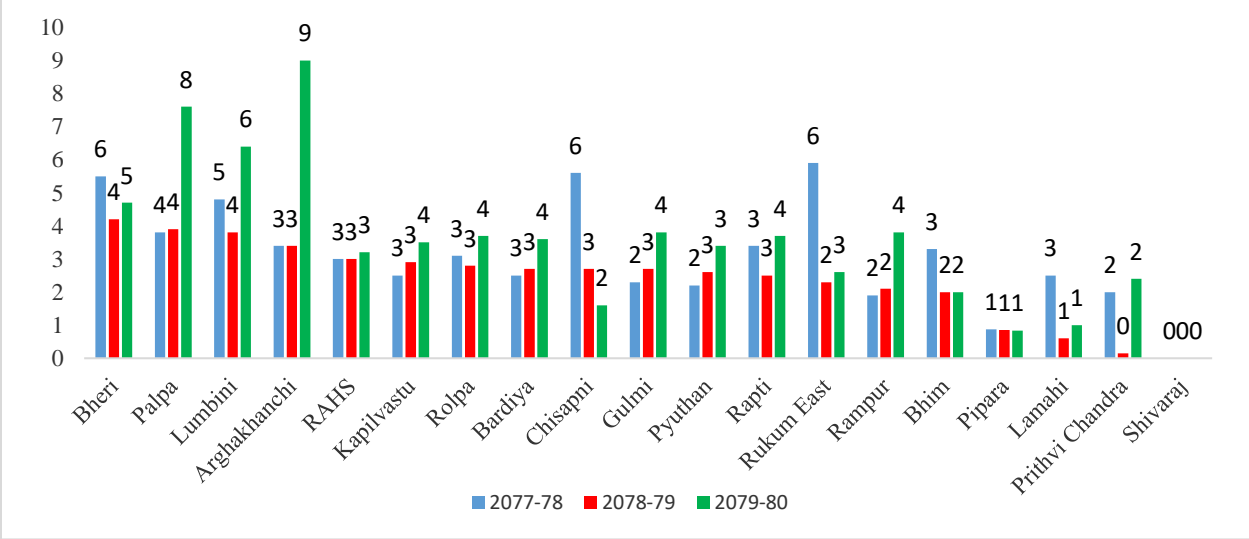
Hospitals	2077-78	2078-79	2079-80
Bheri	125	89	91
Pyuthan	56	70	53
Lumbini	44	61	72
Kapilvastu	68	56	77
Bardiya	45	48	63

Hospitals	2077-78	2078-79	2079-80
Gulmi	26	47	54
Rolpa	52	37	45
RAHS	33	37	34
Rapti	55	34	54
Rampur	20	28	21
Arghakhachi	27	26	93
Bhim	42	23	36
Chisapani	20	12	7
Palpa	10	10	22
Pipara	10	8	16
Rukum East	57	7	18
Prithvi Chandra	31	2	29
Shivaraj	0	0	0
Lamahi	9	0	7

**Average length of stay in hospitals in last three years**

The average length of stay in hospital is highest in Arghakhanchi hospital (9), followed by Palpa hospital (7.6), Lumbini provincial hospital (6.4) and Bheri hospital (4.7) and lowest in and Lamahi hospital (1) and Pipara hospital (0.84) in FY 2079/80. Further, there was no reporting from Shivaraj hospital.

*Figure 4.1.16: Average length of stay in hospitals in last three years*

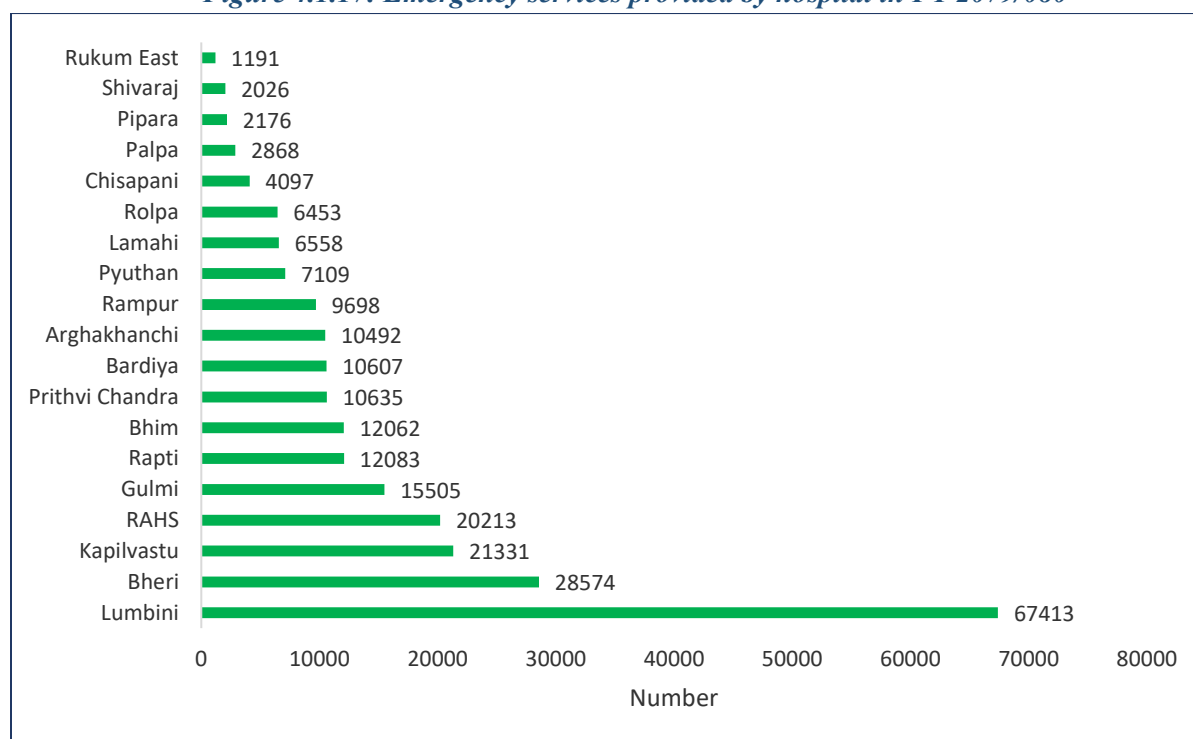


**4.4 Emergency Services**

The below figure shows an emergency service provided by hospital in Lumbini province in FY 2079/080. A total 183678 patients were benefited from emergency services through hospital in the province. According to the hospital record, 67413 patients who received emergency service in Lumbini Provincial Hospital which is the highest number compared to other hospital; which

followed by Bheri Hospital, Kapilvastu hospital and RAHS respectively. Rukum East hospital account the lowest number of emergency services provided which is followed by Shivaraj and Pipara hospital. Currently, all hospitals in Lumbini province are operating emergency services.

*Figure 4.1.17: Emergency services provided by hospital in FY 2079/080*



#### 4.5 Radiology Services

The Table 63 shows an average number of CT scan performed per day by hospitals in last three fiscal years. Currently, CT-Scan service has been provided by five hospitals under Lumbini Province, namely, Lumbini provincial hospital, Rapti Academy of Health Sciences, Rapti Provincial hospital, Bheri hospital and Bhim hospital. Lumbini provincial hospital (19) has performed highest CT scan per day in FY 2079/080 which is followed by Rapti Provincial hospital (9). Bhim hospital has been an additional CT scan service outlet in Lumbini Province from FY 2079/080.

*Table 4.1.5: Average number of CT scan per day*

Hospitals	2077/078	2078/079	2079/080
Lumbini Provincial Hospital	7	11	19
Rapti Academy of Health Sciences	2	6	4
Bheri Hospital	4	5	6
Rapti Provincial Hospital	2	3	9
Bhim Hospital	0	0	1

*Table 64: Average number of Ultrasound per day*

Hospitals	2077/078	2078/079	2079/080
Lumbini	82.1	130.6	144.3
Bheri	22.4	44.3	65.3
RAHS	27.3	36.8	72.8
Rapti	25.8	31.6	46.6
Bardiya	25.2	28.7	32.5
Kapilvastu	17.5	23.4	29.2
Bhim	12.3	20.7	26.9
Gulmi	16.2	19.9	21.7
Argkhanchi	13.3	15.5	20.8
Rolpa	13.1	14.7	15.8
Prithvi Chandra	11.6	14.3	16.5
Pyuthan	11.2	8.8	0.12
Rampur	3.1	5.8	9.9
Chisapani	1.4	3.6	2.8
Palpa	0.88	2.1	2.6
Rukum East	1.6	1.9	3.2
Shivaraj	3.3	1.5	1.9
Lamahi	0	0.44	0.5
Pipara	0	0	2.4

The Table 4.1.5 depicts an average number of ultrasounds performed by hospitals in last three years. The highest average number of ultrasounds performed per day by hospital is reported by Lumbini (144) and lowest by Pyuthan and Lamahi in FY 2079/080. Besides, the increment in an average number of ultrasounds per day was observed from Lumbini hospital and RAHS which is followed by Bheri, Rapti Provincial hospital and Bardiya hospital. Pipara hospital has initiated its service from FY 2079/080.

*Table 4.1.6: Average number of X-ray per Day*

Hospitals	2077/078	2078/079	2079/080
Lumbini	106	182	198
Bheri	67	86	107
RAHS	34	65	96
Gulmi	24	41	50
Pyuthan	24	36	32
Rapti	30	35	53
Bardiya	26	28	30
Kapilvastu	16	23	30
Palpa	17	23	25
Bhim	11	22	28
Prithvi Chandra	16	19	21
Rolpa	15	18	16
Argkhanchi	13	15	17

Hospitals	2077/078	2078/079	2079/080
Rampur	11	14	16
Lamahi	3	7	7
Chisapani	6	3	5
Rukum East	0	2	4
Shivaraj	2	2	1
Pipara	0	2	4

The Table 4.1.6 shows the average number of laboratory test performed per day in hospitals of Lumbini province in last three years. Majority of the test per day is performed in Lumbini provincial hospital followed by Bheri and RAHS and that of the lowest in Shivaraj hospital in FY 2079/080.

*Table 4.1.7: Average number of laboratory test per day*

Hospitals	2077/078	2078/079	2079/080
Lumbini	810	2851	2971
Bheri	69	1420	2583
RAHS	619	954	1623
Bhim	326	570	703
Gulmi	350	548	566
Bardiya	411	522	675
Pyuthan	272	496	582
Rapti	496	433	643
Kapilvastu	276	420	563
Prithvi Chandra	167	231	252
Argkhanchi	147	219	272
Rampur	91	180	171
Rolpa	166	178	316
Palpa	68	168	261
Lamahi	32	62	62
Chisapani	10	55	84
Pipara	24	53	102
Rukum East	25	42	58
Shivaraj	20	17	54

#### **4.6 Major and Minor Surgeries Conducted by Hospitals**

Table 67 shows that there are altogether 35,958 surgeries conducted by hospitals in Lumbini province in FY 2079-80 of which 48.16% is major surgeries and 51.84% is minor surgeries. Of all minor surgeries, majority is from outpatients undergoing minor surgeries (50.08%) which is followed by emergency (37.33%) and inpatients (12.57%). The high number of major surgeries is reported from Lumbini provincial hospital which is followed by RAHS, Bheri hospital and Bhim hospital and minor surgeries is reported from Rapti provincial hospital followed by Kapilvastu

hospital and Bhim hospital. There is also a need to strengthen recording of minor cases in hospitals wherein there is high patient flow in emergency, outpatients, and inpatients.

**Table 4.1.8: Major and Minor surgeries conducted by hospitals.**

Hospitals	Major surgeries	Minor surgeries	Emergency patients: Minor Surgeries	Inpatients: minor surgeries	Outpatients: minor surgeries
Lumbini	7662	1579	7	19	1553
Bheri	2481	416	12	181	223
RAHS	2759	1140	0	1140	0
Bhim	1011	2256	1006	22	1228
Rapti	897	4268	737	245	3286
Kapilvastu	681	2787	2624	75	88
Pyuthan	363	744	0	126	618
Bardiya	594	535	131	67	337
PrithviChandra	333	1600	779	37	784
Gulmi	157	1291	559	391	341
Rolpa	127	265	197	12	56
Rampur	101	296	262	8	26
Arghakhanchi	85	270	251	6	13
Chisapani	0	505	332	0	173
Lamahi	63	74	14	2	58
Palpa	0	486	24	1	461
RukumEast	3	129	24	13	92
<b>Total</b>	<b>17317</b>	<b>18641</b>	<b>6959</b>	<b>2345</b>	<b>9337</b>

#### 4.7 Maternity Service

Table below shows the data regarding maternity service provided by hospital of FY 2079/080. The highest number of clients has been served by Lumbini provincial hospital. A significant gap in number of women attending 4<sup>th</sup> ANC visits compared to 1<sup>st</sup> ANC visits exists which highlights the importance of proper counselling and addressing the barriers during antenatal period

**Table 4.1.9: Maternity service provided by hospital**

Hospitals	Total ANC 1st Visit	Total ANC 4th Visit	Total Institutional Deliveries	Total C/S Delivery
Bheri	166	144	5595	1403
Lumbini	2005	5597	12275	4482
Bhim	175	994	2820	1011
Bardiya	119	173	1682	483
RAHS	0	0	3608	1414
Kapilvastu	352	1019	2109	590
Rapti	1162	1193	2721	530

Hospitals	Total ANC 1st Visit	Total ANC 4th Visit	Total Institutional Deliveries	Total C/S Delivery
Pyuthan	167	137	1880	317
Gulmi	176	128	654	157
Prithvi Chandra	97	640	284	1159
Palpa	227	182	35	0
Arghakhanchi	105	207	622	84
Lamahi	308	371	336	26
Rolpa	249	107	508	118
Rampur	260	226	316	42
Rukum East	90	99	167	13
Chisapani	112	87	91	0
Pipara	191	225	411	0
Shivaraj	341	127	649	0
<b>Total</b>	<b>6302</b>	<b>11656</b>	<b>36763</b>	<b>11829</b>

#### 4.8 Post-mortem Conducted in Hospital

As of the below table, the total postmortem conducted in hospital was 2960 in FY 2079/080. Among the hospitals Post-mortem service was observed high at Bheri hospital. Further, no postmortem cases were observed in Chisapani, Pipara and Shivaraj hospital. Regular follow up of postmortem conducted in hospitals is required.

*Table 4.1.10: Post-mortem conducted in hospital*

Hospitals	2077/078	2078/079	2079/080	Hospitals	2077/078	2078/079	2079/080
Bheri	527	511	512	Palpa	134	121	121
Lumbini	482	487	443	Arghakhanchi	114	92	58
Bhim	344	341	306	Lamahi	105	89	12
Bardiya	213	231	179	Rolpa	47	81	91
RAHS	257	222	290	Rampur	32	42	44
Kapilvastu	163	203	263	Rukum East	29	32	22
Rapti	149	190	150	Chisapani	0	0	0
Pyuthan	148	158	152	Pipara	0	0	0
Gulmi	144	136	120	Shivaraj	0	0	0
Prithvi Chandra	187	126	197	<b>Total</b>	<b>3075</b>	<b>3062</b>	<b>2960</b>

## Chapter 5: Social Security and Other Public Health Programs

### 5.1 One-Stop Crisis Management Center

#### 5.1.1 Background:

Gender Based Violence (GBV) is a complex issue, requiring a multi-layered and multi-sectoral approach. Thus, it is important to involve and engage various sectors such as legal, safety and security, communication, and health. The health sector (OCMC) has a crucial role in helping GBV survivors. A health service provider is often the first point of professional contact for GBV survivors. However, health service providers often tend to miss the opportunity to identify GBV survivors due to a lack of awareness. Thus, proper training is necessary for health service providers to recognize, treat, and coordinate with other sectors to address the problems faced by GBV survivors.

According to National Demographic Health Survey (NDHS) 2022, 23 % of women of reproductive age have experienced physical violence since age 15, and 8% have ever experienced sexual violence. Moreover, 6% of them have experienced violence during their pregnancy. The most common form of reported violence among married women includes physical violence (23%), followed by sexual violence.

The Ministry of Health and Population has created 94 one-stop crisis management centers (OCMCs) in 77 districts since 2011. These were established in response to Clause 3 of the 'National Action Plan 2010 against Gender Based Violence', which calls for the establishment of hospital based OCMCs to provide integrated care to survivors of GBV.

'Hospital-based OCMC Operational Manual' (MoHP 2016) states that OCMCs shall provide the following seven kinds of services through multi-faceted coordination with other agencies:

- Health services - Immediate treatment of physical and mental health needs of GBV survivors with OCMCs having to stock the equipment and the free health service medicines to provide these services.
- Psycho-social counseling to survivors and perpetrators.
- Security - by working with the police and district administration offices to provide security to survivors in hospitals, safe houses, and in their communities.
- Safe homes services- for temporary stay of women and child survivors.
- Legal advice, counseling, and support to survivors through district attorney, paralegal and legal counselors.
- Rehabilitation-by providing further counselling, education, vocational skills training, and another livelihood support
- Information, education and empowerment- through provision of information concerning the services provided by OCMC, measures to protect against GBV, legal aid and other support services for GBV survivors, and information on safety measures.

OCMCs are designed to provide GBV survivors with a comprehensive range of services, including health care, psychosocial counseling, access to safe homes, legal protection, personal security, and rehabilitation support through education, vocational skills training, and other livelihood support, using a multisectoral and locally coordinated approach. Gender-based violence (GBV) affects many women and children in Nepal causing physical, sexual, and psychological harm. In Lumbini province, there are 15 hospital-based One-Stop Crisis Management Centers in operation. With the support of MoHP federal and province, web-based platform DHIS2 was introduced in the province for recording and reporting purpose of OCMCs services. The OCMC focal persons of all 15 hospitals were provided training in FY 2078-79.

### 5.1.2 Major Achievements

*Table 5.1.1: Service utilization status of OCMCs*

<b>Name of Hospital run OCMCs</b>	<b>FY 2077-78</b>	<b>FY 2078-79</b>	<b>FY 2079-80</b>
Kapilbastu Hospital	1063	89	129
Lumbini Provincial Hospital	275	490	504
Bhim Hospital	201	231	362
Arghakhanchi Hospital	62	44	225
Rukum East Hospital	22	89	79
Rolpa Hospital	70	68	74
Pyuthan Hospital	463	481	589
Gulmi Hospital	51	50	54
Rapti Provincial Hospital	23	155	131
Bardiya Hospital	115	134	272
Prithivi Chandra Hospital	329	342	213
Bheri Hospital	0	180	352
Palpa Hospital	28	38	51
Rapti Academy of Health sciences	0	86	286
Rampur Hospital, Palpa	0	0	57
<b>Total number of survivors</b>	<b>2702</b>	<b>2477</b>	<b>3,378</b>

Table 5.1.1 shows the utilization of OCMC services by district in last three fiscal years. Overall, 3,378 persons were served by OCMCs across the province, a trend that has been expanding for the past three years. In FY 2079-80, the OCMC at Pyuthan Hospital offered the most services, while Palpa Hospital provided the least (51) followed by Gulmi (54) and Rampur Hospital (57)

## GBV cases by type of violence

*Table 5.1.2: Total number of survivors by type of violence*

District	Rape	Sexual Abuse	Physical Assault	Force Marriage/Child marriage	Denial of Resources and Opportunities/Services	Emotional/Psychological Abuse/Mental Torture	Other
Kapilbastu Hospital	34	16	50	1	5	20	8
Lumbini Provincial Hospital	43	30	45	98	5	243	0
Bhim Hospital	64	13	139	90	0	28	27
Arghakhanchi Hospital	5	4	11	157	0	48	0
Rukum- East Hospital	17	5	39	4	3	29	0
Rolpa Hospital	30	4	25	2	8	5	0
Pyuthan Hospital	17	7	30	288	161	86	0
Gulmi Hospital	12	9	18	16	0	0	0
Rapti Provincial Hospital	50	10	41	11	3	45	0
Bardiya Hospital	37	23	55	150	1	4	2
Prithivi Chandra Hospital	19	4	190	0	0	0	0
Bheri Hospital	112	170	60	10	7	9	0
Palpa Hospital	1	31	7	12	0	0	0
Rapti Academy of Health Sciences	86	19	94	17	6	56	8
Rampur Hospital	0	0	0	51	0	6	0
<b>Total No. of survivors</b>	<b>527</b>	<b>345</b>	<b>804</b>	<b>907</b>	<b>199</b>	<b>579</b>	<b>45</b>

Of the total 3,383 cases, Table 5.1.2 shows the GBV cases by the type of violence. The most commonly reported cases were child marriage/Force marriage (907), Physical Assault (804), emotional/psychological abuse/mental torture (579), Rape (527), sexual abuse (345), Denial of resources and opportunities/services (199) and others (45).

## GBV cases disaggregated by age and sex:

*Table 5.1.3: Total cases disaggregated by age, sex and presence of disability*

District	Total cases	Disaggregation by age, sex & Presence of disability(N)								
		Below 9 Yrs.	10-14 Yrs.	15-18 Yrs.	19-59 Yrs	Above 60 Yrs.	Female	Male	Others	Persons with Disabilities
Kapilvastu Hospital	129	1	12	29	85	2	129	0	0	0
Lumbini Provincial Hospital	504	0	80	85	329	10	455	49		8
Rampur Hospital	57	0	1	26	30	0	57	0	0	0
Bhim Hospital	362	2	20	59	275	6	318	44	0	0
Argkhanchi Hospital	225	1	5	83	131	5	191	34	0	1
Rukum-East Hospital	79	4	5	13	51	6	74	5	0	5
Rolpa Hospital	74	4	16	9	44	1	72	2	0	12
Pyuthan Hospital	589	3	18	186	378	4	573	16	0	0
Gulmi Hospital	54	1	5	19	28	1	54	0	0	2
Rapti Provincial Hospital	131	11	13	28	73	6	130	1	0	5
Bardiya Hospital	272	3	22	105	137	5	265	7	0	4
Prithvi Chandra Hospital	213	3	11	24	171	4	206	7	0	0
Bheri Hospital	352	13	25	91	209	14	348	4	0	7
Palpa Hospital	51	4	9	13	20	5	51	0	0	0
Rapti Academy of health science	286	7	38	52	183	6	284	2	0	3
<b>Total No. of Survivors</b>	<b>3,378</b>	<b>57</b>	<b>280</b>	<b>822</b>	<b>2144</b>	<b>75</b>	<b>3207</b>	<b>171</b>	<b>0</b>	<b>47</b>

Table 5.1.3 shows the total no of cases Disaggregated by age, sex, and Presence of disability. A vast majority of GBV survivors were female (3207) and most of them belongs to the age groups from 19-59 years (2144) followed by age group 15-18 years (822), 10-14 years (280) and Below 9 years (57). Of the total cases, 75 and 47 cases were reported from elderly population (>60 Years) Person with disabilities, respectively.

### 5.2 Social Service Unit (SSU)

Senior citizens, poor and helpless, and people with disabilities have had difficulties in getting health care for many years due to the lack of medicines, inability to pay for services through out-of-pocket, and other factors. In the spirit of the Constitution and in recognition of the State's responsibility to provide health care services, the MoHP decided to operate a pilot program in eight hospitals for two years (fiscal years 2069/70-2070/71), to test the concept and collect experiences and learnings. Following federalism, it is the province's responsibility of province government to maintain and expand services in the remaining hospitals. In the Lumbini Province, 12 hospitals currently run social service unit. With the support of federal MoHP and province, web-based platform DHIS2 was introduced in the province to record and report SSU services including OCMC and geriatric services. All hospital staff, SSU focal person of all the hospitals were trained in FY 2078/079.

## 5.2.1 Service utilization status of social service unit

*Table 5.1.4: Service Statistics of SSU in Lumbini Province*

Name of Hospital (SSU)	FY 2077/078	FY 2078/079	FY 2079/080
Lumbini Provincial Hospital	7445	10257	7702
Gulmi Hospital	1389	974	1157
Bardiya Hospital	1009	722	523
Pyuthan Hospital	969	1869	1884
Rolpa Hospital	856	2369	65
Kapilbastu Hospital	823	1028	887
Prithivi Chandra Hospital	753	1451	1719
Arghakhanchi Hospital	605	654	664
Rapti Provincial	393	4349	5475
Rampur Hospital	89	40	51
Palpa Hospital	76	274	506
Bhim Hospital	64	722	634
<b>Total</b>	<b>14471</b>	<b>24709</b>	<b>21267</b>

The following table illustrates that total 21,267 Ultra-Poor, Poor, Senior Citizens, Disabled, GBV Victims, FCHVs, and Others received free health care services from SSU in FY 2079–2080. It's less than the previous fiscal year. Rampur Hospital served the fewest clients (51), whereas Lumbini Provincial Hospital provided free care to the greatest number of patients (7,702) from the SSU.

### SSU services utilized by ultra-poor/poor citizens.

*Table 5.1.5: Utilization of SSU services by the ultra-poor or poor citizens*

Hospital/SSU	FY2077/078	FY2078/079	FY 2079/080
Lumbini Provincial Hospital	2475	3474	1876
Bardiya Hospital	534	128	413
Kapilbastu Hospital	451	758	612
Prithivi Chandra Hospital	422	727	681
Arghakhanchi Hospital	285	271	339
Gulmi Hospital	280	280	342
Pyuthan Hospital	148	119	205
Rampur Hospital	79	36	47
Palpa Hospital	54	138	248
Rapti Provincial Hospital	49	673	466
Rolpa Hospital	39	105	43
Bhim Hospital	6	128	81
<b>Total</b>	<b>4822</b>	<b>6837</b>	<b>5353</b>

Table 5.1.5 demonstrates that, the use of SSU services by poor or ultra-poor citizens has slightly decreased in half of the hospitals in FY 2079/080 in comparison with previous Fiscal year. The SSU provided free services to 5353 ultra-poor and poor people in FY 2079/080.

### SSU services utilized by helpless people.

*Table 5.1.6: Utilization of SSU services by the helpless people*

Hospital/SSU	FY 2077/078	FY 2078/079	FY 2079/080
Lumbini Provincial Hospital	273	298	189
Kapilbastu Hospital	74	22	13
Prithivi Chandra Hospital	38	37	107
Bardiya Hospital	37	38	39
Pyuthan Hospital	14	7	21
Gulmi Hospital	12	14	4
Arghakhanchi Hospital	11	46	16
Palpa Hospital	5	14	5
Rolpa Hospital	3	1	1
Rapti Provincial Hospital	1	35	59
Rampur Hospital	0	0	0
Bhim Hospital	0	38	21
<b>Total</b>	<b>468</b>	<b>550</b>	<b>475</b>

Table 5.1.6 shows the trends in the use of SSU by the helpless People. SSU provided free services to 475 helpless people from 11 hospitals aside from Rampur Hospital. Nonetheless, Lumbini Provincial Hospital had the greatest number of Helpless People using SSU services, while Rampur Hospital and Rolpa Hospital recorded the lowest numbers.

### SSU services utilized by persons with disability.

*Table 5.1.7: Utilization of SSU services by persons with disability*

Hospital/SSU	FY 2077/078	FY 2078/079	FY 2079/080
Lumbini Provincial Hospital	204	175	126
Bardiya Hospital	97	14	32
Kapilbastu Hospital	80	13	14
Pyuthan Hospital	47	53	47
Arghakhanchi Hospital	34	52	53
Prithivi Chandra Hospital	25	35	50
Gulmi Hospital	22	12	3
Rolpa Hospital	18	75	13
Bhim Hospital	18	14	26
Rapti Provincial Hospital	13	148	138
Palpa Hospital	2	13	26
Rampur Hospital	2	3	2
<b>Total</b>	<b>562</b>	<b>607</b>	<b>530</b>

Table 5.1.7 shows that health service utilization by persons with disabilities via SSU. However, the highest number of people with disabilities utilizing health care services via SSU was reported at Lumbini Provincial Hospital, while the lowest number was reported in Rampur hospital.

### SSU services utilized by senior citizens.

*Table 5.1.8: Utilization of SSU services by senior citizens*

Hospital/SSU	FY 2077/078	FY 2078/079	FY 2079/080
Lumbini Provincial Hospital	4086	6175	5399
Gulmi Hospital	1054	640	788
Rolpa Hospital	778	2125	0
Pyuthan Hospital	733	1663	1528
Rapti Provincial Hospital	323	3437	4767
Prithvi Chandra Hospital	255	624	801
Arghakhanchi Hospital	242	214	206
Bardiya Hospital	117	267	0
Kapilvastu Hospital	61	50	102
Bhim Hospital	22	267	385
Palpa Hospital	9	77	184
Rampur Hospital	0	1	2
<b>Total</b>	<b>7680</b>	<b>15540</b>	<b>14162</b>

Table 5.1.8 demonstrates that senior citizen's use of SSU services has increased in Gulmi Hospital, Pyuthan Hospital, Rapti Hospital, Prithvi Chandra Hospital, kapilvastu Hospital, Bhim Hospital and Palpa Hospital between FY 2078-79 and FY 2079-80 but none of the senior citizen use SSU service in Rolpa hospital and Bardiya Hospital. In the FY 2079-80 14,162 elderly persons benefited from the social service units from 10 hospitals in Lumbini province. Lumbini Provincial Hospital served the greatest number of senior citizens (5,399) followed by Rapti Provincial Hospital (4,767) through its SSU unit.

### SSU services utilized by senior citizens by survivors of GBV, FCHVs and Others

*Table 5.1.9: Utilization of SSU services by senior citizens by survivors of GBV, FCHVs and Others*

Name of Hospital	Gender Based Violence			FCHVs			Others		
	FY 2077/078	FY 2078/079	FY 2079/080	FY 2077/078	FY 2078/079	FY 2079/080	FY 2077/078	FY 2078/079	FY 2079/080
Arghakhanchi Hospital	2	0	0	31	38	18	0	43	0
Bhim Hospital	18	269	1	0	5	3	0	1	0
Bardiya Hospital	133	0	0	7	5	5	84	273	1
Kapilbastu Hospital	97	70	0	60	7	5	0	108	91

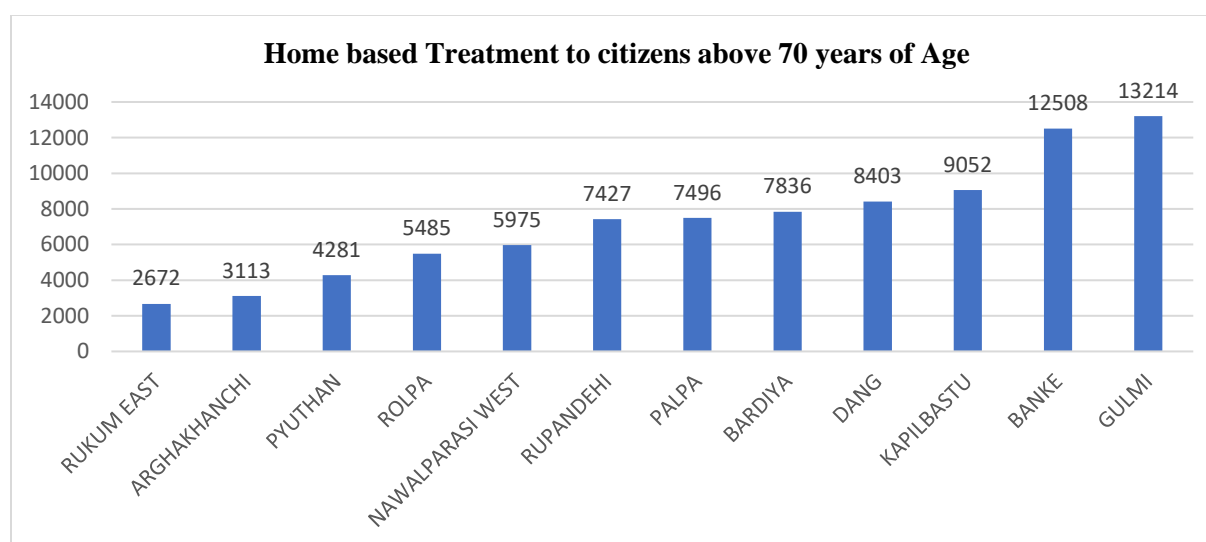
Name of Hospital	Gender Based Violence			FCHVs			Others		
	FY 2077/078	FY 2078/079	FY 2079/080	FY 2077/078	FY 2078/079	FY 2079/080	FY 2077/078	FY 2078/079	FY 2079/080
Lumbini Provincial Hospital	7	0	1	52	20	7	82	114	0
Palpa Hospital	0	1	1	0	0	1	0	3	2
Prithivi Chandra Hospital	0	0	0	13	17	17	7	4	63
Pyuthan Hospital	6	9	44	18	8	7	2	10	32
Rampur Hospital	0	0	0	0	0	0	0	0	0
Rolpa Hospital	11	18	0	11	38	2	0	7	0
Gulmi Hospital	0	46	0	15	9	2	6	19	18
Rapti Provincial	3	10	1	3	34	34	1	12	10
<b>Total</b>	<b>277</b>	<b>423</b>	<b>48</b>	<b>210</b>	<b>181</b>	<b>101</b>	<b>182</b>	<b>594</b>	<b>217</b>

In Lumbini province, 48 survivors of gender-based violence used the SSU service in fiscal year 2079/080, which is lower than the previous fiscal year. In fiscal year 2079/080, 101 FCHVs and 217 in other categories received free SSU service.

### 5.3 Home Based Treatment to Citizens above 70 Years of Age

The provincial government of Lumbini has initiated its flagship program of providing home-based treatment for older citizens aged 84 and above from FY 2076/077. The age limit has been revised since FY 2077/078 for older citizens which reveals aged 70 years and above in the current context.

*Figure 5.1.1: Number of 70+ Years citizens receiving home-based treatment in FY 2079-80*



Above figure illustrates that in Lumbini province, a total of 87,462 citizen used the services in FY 2079/080. Gulmi has the highest utilization (13,214), followed by Banke (12,508) while Rukum East account the lowest (2672).

#### 5.4 Medical Treatment of Deprived Citizens (Bipanna Nagarik Kosh)

**Bipanna Nagarik Kosh** was started after the Janandolan of 2062 BS. With the country slowly recovering from the decade long armed conflict, this Kosh was established to provide some financial relief to people from difficult and costly diseases. Cardiovascular diseases, Renal failure, Stroke, Cancer, Head and Spinal injury, Sickle Cell Anaemia, Parkinson's disease and Alzheimer's disease are covered under this program. Services under this program are available at various health facilities and hospitals recognized and enlisted by the Ministry of Health. Any citizen who cannot bear the cost of medical treatment for diseases is eligible for the services under this program.

*Table 5.1.10: Province run medical treatment for deprived citizen in FY 2079-80*

Districts	cancer	Valve replacement	Kidney transplant	Total
Nawalparasi	64	0	4	68
Rolpa	39	1	2	42
Pyuthan	46	0	0	46
Rukum East	8	0	0	8
Gulmi	88	2	6	96
Dang	196	3	5	204
Palpa	101	2	0	103
Kapilvastu	129	2	10	141
Bardiya	135	1	1	137
Arghakhanchi	82	1	2	85
Banke	159	0	1	160
Rupandehi	278	4	7	289
<b>Total</b>	<b>1325</b>	<b>16</b>	<b>38</b>	<b>1,379</b>

Table 79 shows the medical treatment provided to impoverished citizens in fiscal year 2079/080, with a total of 1,379 people benefiting from financial assistance. The majority of them (1,325) had cancer-related disease, followed by kidney transplant and valve replacement. The majority (289) were from Rupandehi, with the fewest (8) from Rukum East.

*Table 5.1.11: Special financial assistance scheme of province for treatment of deprived citizen (FY 079-80)*

Districts	Heart	Cancer	Head Injury	Spinal Injury	Sickel Cell Anemia	Parkinson	Alzeimer	Total
Nawalparasi	121	138	1	8	6	0	1	348
Rolpa	34	89	1	13	0	0	0	137
Pyuthan	38	85	3	5	0	0	0	131
Rukum East	12	14	1	5	0	0	0	32
Gulmi	107	200	3	11	0	0	0	321
Dang	172	317	5	12	83	2	1	592
Palpa	92	145	2	7	3	0	0	249
Kapilbastu	42	39	1	2	0	1	0	85
Bardiya	112	269	0	26	118	1	0	526
Arghakhanchi	90	124	1	9	0	0	0	224

Banke	147	315	0	12	41	0	0	515
Rupandehi	398	454	2	10	9	0	0	873
<b>Total</b>	<b>1,365</b>	<b>2,189</b>	<b>20</b>	<b>120</b>	<b>260</b>	<b>4</b>	<b>2</b>	<b>4,033</b>

Table above shows the number of beneficiaries who received special financial assistance for their treatment as it was provided for deprived citizen (in FY 2079/080). A total of 4,033 were benefited from the financial relief which was provided by the government. Majority of them belonged to having disease related to cancer (2,189) followed by heart disease (1,365) and sickle cell anemia (260). Majority of them were from Rupandehi (873) and least from Rukum East (32).

**Table 5.1.12: Prioritized Program of Lumbini Province Government of FY 2079-80**

Districts	Sickle cell Anemia	Thalassemia	Total
Nawalparasi	2	53	55
Rolpa	0	0	0
Pyuthan	0	0	0
Rukum East	0	0	0
Gulmi	0	0	0
Dang	7	144	151
Palpa	0	0	0
Kapilvastu	4	29	33
Bardiya	11	140	151
Arghakhanchi	0	0	0
Banke	12	100	112
Rupandehi	10	95	105
<b>Total</b>	<b>46</b>	<b>561</b>	<b>607</b>

Sickle cell anemia and thalassemia are the priority one (P1) Program of Lumbini province Government. Lumbini Province government has been providing free service for those suffering from these two diseases. Table 86 shows the medical treatment provided to impoverished citizens in fiscal year 2079/080, with a total of 607 people benefiting from financial assistance. 561 people suffering from thalassemia and 46 people suffering from sickle cell anemia were benefitted financially from Lumbini province government.

#### **Issues, Constraints and Recommendations:**

<b>OCCMC</b>		
<b>Issues and Constraints</b>	<b>Recommendations</b>	<b>Responsibilities</b>
Budget inadequate in respect to case load	Additional budget in respect to case count has to be provided	MOH/HD
No forensic expert available	Recruitment of forensic expert	PHTC
Problem in rescue and rehabilitation	Establishment of district level rehabilitation center	MOH/HD
Problem with referral mechanism	Required adequate budget for referral	HD

Lack of Public awareness about OCMC	Public mobilization, mass media awareness, notice board, Radio and broucher	Federal and Province Government
Limited space for dealing OCMC cases	Separate wards and rooms for dealing OCMC cases	MOH/HD
Privacy and confidentiality of the patient not maintained	Privacy of the patient should be well addressed	Hospital
High Staff Turnover in Rukum east hospital	Staff motivation activities should be done	Hospital Development committee

SSU		
Issues and Constraints	Recommendations	Responsibilities
Very Poor categorization in manual, leading to confusion	Revise of manual with clear illustration as per need of service and type of hospital	MOH
Infrastructure is not as per the standard	Budget for infrastructure has to be allocated and released	MOH/HD
No medico legal training to concern health worker	Provide medico-legal training to SSU staff in coordination with training center	PHTC
No spacious room for SSU service delivery	Arrangement of spacious room and training provision	Hospital Development Committee
Lack of public awareness about SSU service for utilization	Public mobilization, mass media and awareness	Hospital committee
Poor underprivileged unable to bring recommendation from municipal authority	Recommendation based on poor in coordination with municipal body(urban/Rural)	MOH
Lack of Human resources for service delivery	Need of Human Resources management	Federal Government

## Chapter 6: Supporting Programs

### 6.1 Health Service Governance and Management

#### 6.1.1 Health Budget Status

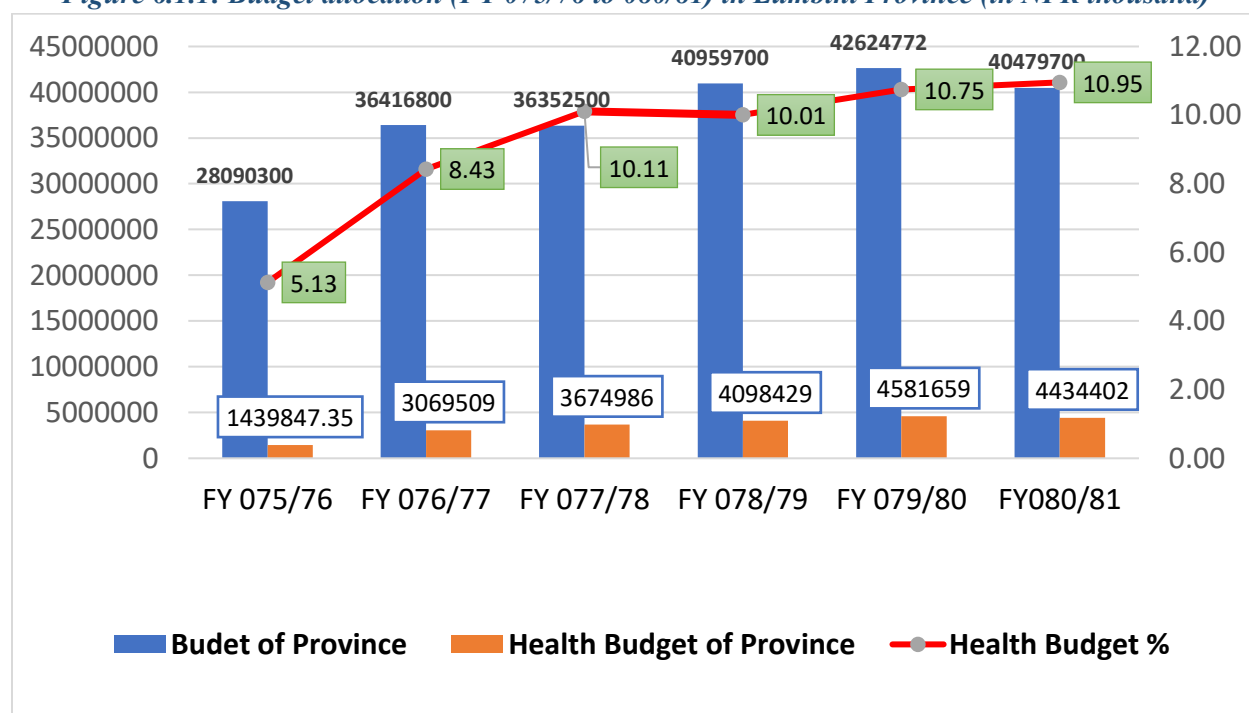
*Table 6.1.1: Budget allocation for Health (FY 075/76 to 080/81) in Lumbini province (in NPR thousand)*

Fiscal Year	Province Total budget	Province Health budget	Health budget %
2075/076	28,090,300	1,439,847.35	5.1
2076/077	36,416,800	3,069,509	8.4
2077/078	36,352,500	3,674,986	10.1
2078/079	40,959,700	4,098,429	10.0
2079/080	42,624,772	4,581,659	10.75
2080/081	40,479,700	4,434,402	10.95

Source: Redbook FY 075/76-080/81

As presented in the Table: the budget size of Lumbini province is being increased with advancement of fiscal year along with increment in the share of health budget. While comparing health budget from FY 2075/076 to 2080/081, the budget has increased by two folds. The budget allocation trend describes the Provincial Government's commitment to towards meeting health needs of people to achieve Sustainable Development Goals and attain Universal Health Coverage as illustrated in Provincial Health Policy.

*Figure 6.1.1: Budget allocation (FY 075/76 to 080/81) in Lumbini Province (in NPR thousand)*



*Table 6.1.2: Health budget (Capital & Recurrent) allocation trend of Lumbini province (in NPR*

*thousand*

Fiscal Year	Capital Budget	Capital Budget %	Current Budget	Current Budget %
2075/076	367,192	25.50	1,072,655.35	74.5
2076/077	896,375	29.20	2,173,134	70.8
2077/078	1,040,655	28.32	2,634,331	71.7
2078/079	1,109,328	35.81	2,989,101	64.2
2079/080	1,500,860	32.76	3,080,799	67.24

, PLMBIS & Redbook FY 075/76-80/81

Table 83 shows that Lumbini province health current budget ratio seems bigger than capital. The most of health programs are allocated under the current budget which make it larger than capital budget.

**Table 6.1.3: Recurrent & capital three years budget vs expenditure trend of health budget (Amount in NPR thousand)**

Fiscal Year	Capital Expenditure	Recurrent Expenditure	Capital Expenditure %	Recurrent Expenditure %
2075/076	283924.447	768173.262	77.32	71.6
2076/077	220259.880	1238113.790	24.57	57.0
2077/078	585276	1819314	56.24	69.1
2078/079	1041599	2678044	63.50	77
2079/080	409319	2584118	27.27	83.88

Source: MOH, PLMBIS & Redbook FY 2075/076-2079/080

Table 6.1.3 shows that, capital expenditure is about one fourth while & recurrent expenditure is above 83.88%. The trend of recurrent expenditure has steady increment from FY 076/077. The reason behind the growth in expenditure is development of provincial structure in FY 076/77 and subsequent development of pragmatic strategy and plan as well as its realistic implementation.

## 6.2 Health Information Management

### Introduction

Health information management is the systematic and gateway of information designed to provide information for health care decisions involving institutional management, quality patient care, health care policies and planning and research of health sector organization. The major sources of health sector information in the Lumbini province include Health Management Information System (HMIS), Electronic Logistic Management Information System (eLMIS), Logistic Management Information System (LMIS), Training Information Management System (TIMS), Early Warning and Reporting System (EWARS), Health Facility Registry Nepal, Maternal Perinatal Death Surveillance and Response (MPDSR), Minimum Service Standard (MSS), IMU Nepal application (COVID-19), Electronic TB Register (eTB Register) and other disease surveillance and reporting systems.

## **6.2 1 Health Management Information System (HMIS)**

Health Management Information System is a planned system of collecting, processing, storing and disseminating health related information organized with an objective of generating routine information to improve healthcare management decisions at all levels of the health system. It monitors the performance and ensure the service quality of health program, health facilities and health workforce, compare perceived service delivery to expected standards to provide timely and accurate reports. HMIS is only one component of a large program of monitoring and evaluation (M&E) within the health sector, which includes monitoring of selected indicators of the Sustainable Development Goal, Nepal Health Sector Strategy and Implementation Plan and the First Periodic Plan (2076/77-2080/81) of the Lumbini Province.

### **HMIS in DHIS2 Platform**

District Health Information Software 2 (DHIS2) is an open-source, web-based platform and can be designed and upgraded according to users' needs on their own. DHIS2 is developed by the Health Information Systems Program (HISP) as an open and globally distributed process. The development is coordinated by the University of Oslo with support from NORAD and other donors. Nepal implemented this software nationally for HMIS online reporting system from FY 2073/74. Currently in Lumbini province (as of Ashad 2080), 1,333 reports are expected and of which 168 reports are submitted by parent organization, 1085 reports are self-submitted, and 80 reports are unreported in DHIS2.

**Data collection process in HMIS FCHVs:** FCHVs plays vital role in data collection and implementation of National Immunization Program, Birth Preparedness Packages, Community-Based Integrated Management of Neonatal & Childhood Illness (CB-IMNCI), Integrated Management of Acute Malnutrition, Infant & Young Child Feeding and Family Planning Programs at the ward level and maintain a pictorial register. Each month they are visited by the community health workers (AHW/ANM) who collect the FCHV reporting form (HMIS 9.1).

**Community Health Workers (ANM/AHWs):** Community health workers conduct PHC/ORC outreach clinics and EPI clinics. These workers submit a Reporting Form (HMIS 9.2) monthly to their assigned health facility. This collates data from the FCHV registers and their outreach services.

**Community Health Units, Basic Health Service Centers, and Urban Health Clinics:** CHU, BHSC and UHCs either submit monthly report directly through DHIS2 platform or submit a hard copy to the health Post/PHC/local level (health section). Those facilities submitting reports in DHIS2 also submit a copy of monthly report to the health Post/PHC/local level (health section).

**Health Post (HP) and Primary Health Care Centre (PHCC):** HPs and PHCCs either submit monthly report (HMIS 9.3) through DHIS2 platform or submit the hard copy to the municipal health section. Those facilities entering report in DHIS2 also submit a copy of report to municipal health section for monitoring and recording purpose.

**Public Hospitals:** Public Hospitals submit a reporting form (HMIS 9.4) in DHIS2 every month.

**Non-public health facilities:** These health facilities either submit report (HMIS 9.5) in DHIS2 or submit it to the municipal health section of the same geographic area for online reporting.

**Health Office:** Health Offices monitor and ensure the data received from all reporting units and provide feedback regularly.

**Health Directorate:** Health Directorate manages the information system at the province and local levels. Specifically, the Health Directorate works as a focal point to manage DHIS2. The HD also provides oversight to the overall information management, routinely reviews the health service data, and provides feedback to counterparts at province and local levels.

**Integrated Health Management Information Section of Management Division under the Federal MoHP:** Coordinate, collaborate and facilitate the federal, province and local levels for health care-related information management and implementation.

### **Logistics Management Information System**

To systematize the management of logistics, the Logistics Management Information System (LMIS) unit was established in LMD in 1994. LMIS unit started Web-based LMIS in 2065/66 and online IMS was implemented 2073/74 for store management. Further, MD started using eLMIS from Baishakh 2075 B.S to strengthen supply chain management, LMIS data entry and data visualization for better decision making. eLMIS is implemented up to Local Level stores and gradually implementing on service delivery points (SDPs). SDPs where eLMIS is not implemented are sending quarterly LMIS forms. After the restructure of Nepal's governance in federal structure, the logistics management division was removed, and its functions are being carried out through Logistic Management Section under Management Division of Department of Health Services.

An efficient management of logistics is crucial for an effective and efficient delivery of health services as well as ensuring rights of citizen of having quality of health care services. Logistics Management Division (LMD) was established under the Department of Health Services in 2050/51 (1993), with a network of central and five regional medical stores as well as district level stores. The major function of LMD was to forecast, quantify, procure, store, and distribute health commodities for the health facilities of government of Nepal. It also involved repair and maintenance of bio-medical equipment, instruments, and the transportation vehicles.

### **eLMIS Implementation in Nepal**

eLMIS implementation MD/LMS has successfully implemented the electronic Logistics Management Information System (eLMIS) in all Central Medical Stores, all Provincial Health Logistics Management Center (PHLMC), 77 Health Office stores, 753 LLGs, all 8 Laboratory and many Service Delivery Points

within FY 2078/79. Remaining Service Delivery Points are in process of implementation. With the COVID-19 pandemic, MD initiated to track and trace COVID-19 commodities in eLMIS and decided to implement eLMIS up to Service Delivery Points where computer and internet service are available. A separate configuration was added on eLMIS to manage and track COVID-19 commodities. Separate new requisition type as 'COVID-19' was included in addition to regular and emergency requisition. A new dashboard was added on eLMIS for tracking COVID-19 commodities. Additional real time reports to track COVID-19 stock status.

### **eLMIS implementation at Service Delivery Point in Lumbini Province**

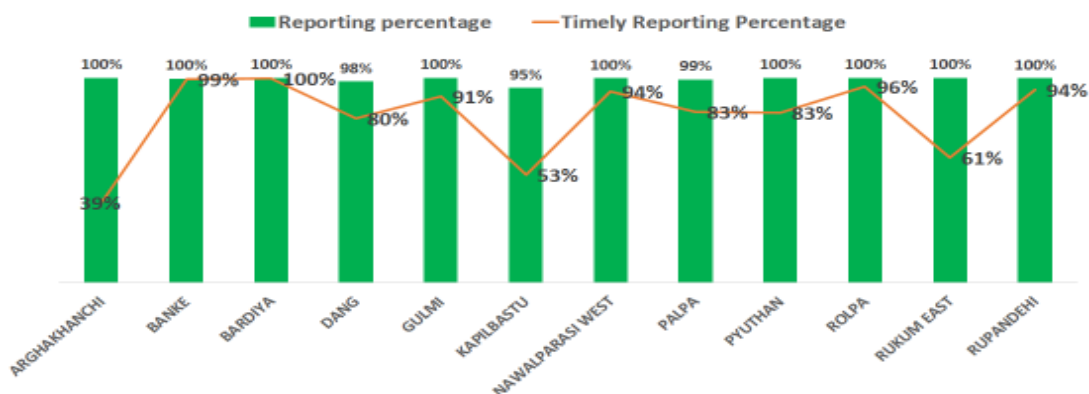
As eLMIS is implemented up to all Health Office, Hospital LLG stores across many services deliveries point of Lumbini Province. LLGs analyzed the need of real time system for their service delivery points and initiated eLMIS implementation on Service Delivery points under their jurisdiction.

The electronic Logistics Management Information System (eLMIS) is a revolutionary and cost-effective system of health data management that ensures greater commodity security and better health outcomes for the people of Nepal. Health programs rely on supply chains for adequate quantities and quality of health products for their patients.

Built the electronic logistics management information system (eLMIS) that includes all health programs in the country. eLMIS links health facilities with the central store, PHLMC, District Medical store and LLG medical store to collect and distribute logistics data in real time. Knowing which medicines are used and which medicines are required helps supply chain managers provide continuity of supply for patients.

LMS has procurement, storage, cold chain, vaccine management and supply units as well as functional logistic management information resource center. Major role of LMS is to forecast, quantify, procure, store, distribute/transport of program commodities, e.g. essential medicines, vaccines, Family Planning and Reproductive Health (FP/RH) Commodities, biomedical equipment's including procurement and distribution of transportation vehicles, ambulances, refrigerator van and proper disposal and auctioning of de-junking of commodities, equipment's, furniture etc.

**Figure 6.1.2: District Wise LMIS Reporting Status with Timeliness of FY/2079/080**

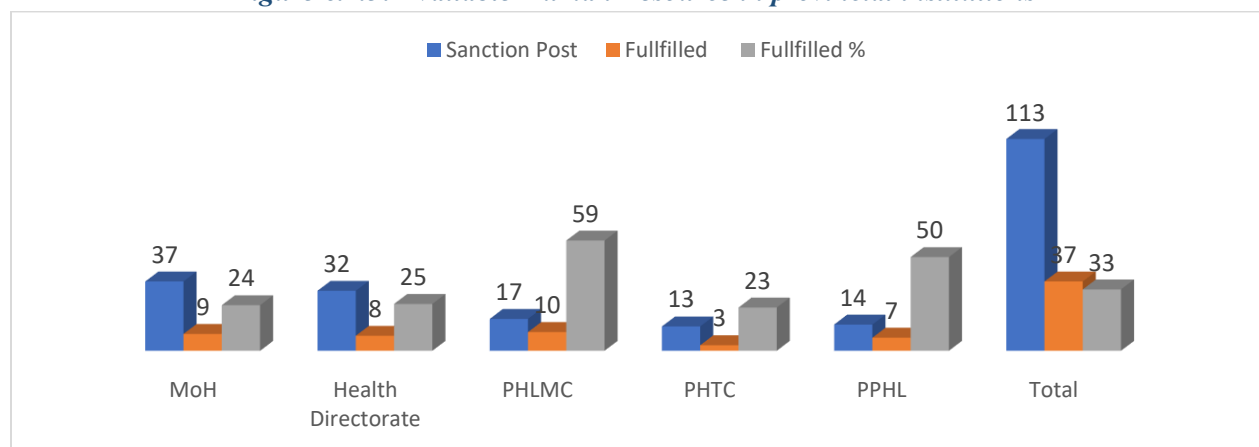


### 6.3 Human Resource for Health

#### 6.3.1 Available Human Resource in provincial institutions:

In Lumbini province, almost 33% of human resources were fulfilled against the sanctioned positions in the provincial institutions- MoH, HD, PHLMC, PHTC and PPHL.

*Figure 6.1.3: Available Human Resource in provincial institutions*



#### 6.3.2 Available Human Resource at Health Offices

Health Office Rukum ranked lowest i.e 55% staff fulfillment rate (against the sanctioned) compared with other Health Offices. The Health Office Nawalparasi west ranked highest 100% staff fulfillment against the sanctioned position (in each). Almost 50% health office has contracted staffs for supporting regular activities.

*Table 6.1.4: Available HR at Health Offices*

Health Office	Position (excluded support staff and driver)		Fulfilled %	Contract staff
	Sanctioned	Fulfilled		
Rukum	9	5	55	0
Pyuthan	9	8	88	0

Health Office	Position (excluded support staff and driver)		Fulfilled %	Contract staff
	Sanctioned	Fulfilled		
Kapilbastu	12	9	75	1
Gulmi	11	7	63	4
Banke	12	11	91	0
Palpa	12	10	83	0
Bardiya	12	8	66	0
Dang	12	8	66	0
Nawalparasi	9	9	100	0
Rolpa	9	8	88	1
Rupandehi	12	10	83	1
Arghakhanchi	9	7	77	2

Source: FY 2079/80 annual review slides of Health Offices

### 6.3.3 Human Resources of Hospital under Lumbini Province

#### Staff fulfilled as per sanctioned position:

Only 37% of the consultant doctors are fulfilled against the sanction position while 8 hospitals are operating without the availability of consultants. This gap has been fulfilled by 33 consultants recruited in contract or through scholarship or other means. Of the 111 sanctioned position of medical doctors, 52 are available (49% fulfilled against the sanctioned), while One districts have no medical doctors recruited permanently.

Table 6.1.5: Staff fulfilled as per sanctioned position- Medical Officers

Hospital	Consultant Doctors						Medical Officers					
	Sanctioned	Fulfilled	% Fulfilled	Scholarship	Contract	Others	Sanctioned	Fulfilled	% Fulfilled	Scholarship	Contract	Others
Arghakhanchi Hospital	11	0	0	1	0	0	6	0	0	4	0	0
Gulmi Hospital	9	0	0		1	0	4	4	100	0	4	2
Palpa Hospital	11	1	9	0	0	0	6	4	67	0	0	0
Rampur Hospital	9	0	0	0	1	0	4	4	100	0	11	0
Bhim Hospital	9	2	22	0	8	0	7	5	71	4	1	0
Kapilbastu Hospital	10	0	0	1	3	0	7	1	14	0	4	0
Prthivchandra Hospital	9	1	11	0	1	0	4	2	50	0	7	0
Pyuthan Hospital	9	0	0	0	6	0	4	3	75	3	1	4
Rolpa Hospital	11	0	0	1	0	0	6	4	67	0	2	0
Bardiya Hospital	9	0	0	0	0	2	4	4	100	2	3	4
Rukum Purba Hospital	11	0	0	0	1	0	6	2	33	0	1	0
Lumbini Provincial Hospital	48	22	46	3	0	0	47	17	36	0	30	0
Rapti Provincial Hospital	14	11	79	4	0	0	6	4	67	18	0	0
<b>Total</b>	<b>170</b>	<b>37</b>	<b>22</b>	<b>10</b>	<b>21</b>	<b>2</b>	<b>111</b>	<b>54</b>	<b>49</b>	<b>31</b>	<b>64</b>	<b>10</b>

Source: FY 2079/80 annual review slides of Hospital

Almost 57% of paramedics and 93% of nursing staff are fulfilled against the sanctioned position. Staff fulfillment rate seems low in Kapilbastu and Rukum Purba Hospital.

**Table 6.1.6: Staff fulfilled as per sanctioned position- Paramedics/Nursing Staffs**

Hospital	Paramedics						Nursing					
	Sanctioned	Fulfilled	Fulfilled %	Scholarship	Contract	others	Sanctioned	Fulfilled	Fulfilled %	Scholarship	Contract	others
Arghakhanchi Hospital	3	1	33	0	13	0	8	6	75	0	10	1
Gulmi Hospital	5	4	80	0	6	2	9	4	44	0	4	5
Palpa Hospital	1	1	100	0	0	0	8	7	88	0	0	0
Rampur Hospital	5	3	60	0	6	0	7	6	86	0	7	0
Bhim Hospital	3	3	100	0	0	0	10	8	80	0	7	0
Kapilbastu Hospital	3	0	0	0	3	0	11	0	0	0	11	0
Prthivchandra Hospital	5	3	60	0	13	0	7	3	43	0	19	0
Pyuthan Hospital	5	2	40	3	9	0	7	9	129	0	24	0
Rolpa Hospital	3	3	100	6	0	0	5	5	100	0	15	0
Bardiya Hospital	5	4	80	0	1	14	9	8	89	0	4	16
Rukum Purba Hospital	3	0	0	0	2	0	8	4	50	0	4	0
Lumbini Provincial Hospital	37	22	59	0	12	0	108	117	108	0	111	0
Rapti Provincial Hospital	6	2	33	5	0	2	20	25	125	43	0	0
<b>Total</b>	<b>84</b>	<b>48</b>	<b>57</b>	<b>14</b>	<b>65</b>	<b>18</b>	<b>217</b>	<b>202</b>	<b>93</b>	<b>43</b>	<b>216</b>	<b>22</b>

Source: FY 2079/80 annual review slides of Hospital

Staff fulfilled as per sanctioned position (fulfilled/sanctioned) \*

### 6.3.4 Human Resource at Local Levels

Overall, 83% of the human resource in local levels are fulfilled against the sanctioned positions. Percentage of human resources fulfilled against the sanctioned position ranges from 51% to 142%, with highest fulfillment in the local levels of Dang district and lowest in Kapilvastu.

Table: 6.1.7 Human Resource Status at Local Levels

District	No of LLG	Sanctioned position	Fulfilled Position	% Fulfilled	(Contract)
Rukum	3	88	61	69	66
Pyuthan	9	278	196	71	181
Kapilbastu	10	203	104	51	112
Arghakhanchi	6	384	285	74	161
Rolpa	10	283	217	77	173
Nawalparasi West	7	193	188	97	96
Dang	10	196	278	142	225
Bardiya	8	295	194	66	202
Palpa	10	275	250	91	190
Gulmi	12	562	333	59	356
Rupandehi	16	380	424	112	159
Banke	8	328	361	110	163
<b>Total</b>	<b>109</b>	<b>3465</b>	<b>2891</b>	<b>83</b>	<b>2084</b>

Source: FY 2079/80 annual review slides of Health Offices

### 6.3.5 Issues and Recommendations

Issues and constraints	Recommendations	Responsibilities
Low staff fulfilment status in provincial institutions and selected local levels	Opening of the required positions Hiring of contract-based staff	PPSC, MoH
Consultant and medical recorder positions in hospitals are not fulfilled as required	Vacancy opening for the positions required at hospitals. Staff fulfilment of the positions required at hospitals temporarily to operate current job and responsibilities	PPSC, MoH

### 6.4 Health Logistic Management System

Province Health Logistic Management Center (PHLMC) is responsible to procure, store and distribute health commodities, vaccines, equipment, health diagnostic test kits and Ayurveda medicines for the hospitals under province government and health facilities under local levels through Health Offices in 12 districts. The PHLMC was established under the Ministry of Social Development, Province-5 on 13<sup>th</sup> Chaitra 2075 (FY 2075-76). PHLMC creates a network of federal, provincial and district medical stores as well as of medical stores at Local Levels and promotes evidence-based decision making based on the analysis of e/LMIS data and Inventory Management System. The PHLMC also involves in supporting basic health logistics management, support public procurement system for different levels, strengthening LMIS system, repair, and maintenance of bio-medical equipment, effective management of vaccine and cold chain equipment and instruments. Further, PHLMC works in preparing specification and technical document for the procurement of commodities.

#### Major activities

- Develop Annual Procurement Plan (APP) and Consolidated Procurement Plan (CAPP)
- Develop procurement plan and procedure.
- Forecasting and quantification of health commodities
- Procurement, storage, distribution, re-distribution, transportation /reverse logistics of medicines, equipment of health commodities and Ayurvedic medicine and equipment.
- Safe disposal of health commodities
- Strengthen Logistics Management Information System (LMIS)
- Strengthen storage capacity and good storage practice.

## Major Achievements

1. Procurement of medicine and other essential commodities: Essential medicines including iron and folic acid, albendazole, NCD medicine, IMNCI medicine and Paustik Aahaar
2. Machinery & equipment procurement: Portable USG Machine, portable Digital X-ray, patient monitor, SNCU/NICU equipment, Minilap/ Vasectomy and NCD equipment
3. Storage: Warehouse building and walking cooler installation at vaccine Store at Tamnagar, Butwal, ensure good storage practices (13 storage guideline), store management, cold chain management, Effective Vaccine Management (EVM)
4. Forecasting and Quantification: PHLMC conducted consensus forecasting and quantification workshop with an objective to ensure the effective procurement and assurance of availability of the medicine. Key participant of the workshop included the representative of Ministry of Health, Health Directorate, Health Training Centre and warehouse focal person from Health Offices. Three days program was effective as different method/ approach like consumption of medicine, morbidity, and allocation of medicine as per the health facility was done for forecasting and quantification exercises.
5. Distribution: Adopted four different approaches for medicine and logistics distribution- push system, pull system, mixed system and reverse logistics system
6. Logistics Management Information System (LMIS): This is a system of records and reports which might be paper-based or electronic. LMIS is used to aggregate, analyze, validate, and display data (from all levels of the logistics system) that can be used to make logistics decisions and manage the supply chain. LMIS data elements includes the stock on hand, demand, issue, adjustment and expiry information. It links the different level (i.e., central store, PHLMC, District store, LLG and health facility) through the information. Information provided by the LMIS helps perform role by each level. LMIS is considered as the heart of the supply chain cycle and acted as the most efficient tools in the procurement of the medicine and other commodity. In Lumbini Province, all 109 Local Levels and health facility of Nawalparasi West, Rupandehi, Banke and Bardiya submit the LMIS report electronically (eLMIS).
7. List of Activities:  
List contains major procurement which impacts on the program indicator on the availability of the product/ commodity to the service delivery sites. More than twenty-five procurements had been placed by the PHLMC in FY 2079/080.

*Table 6.1.8: Procurement list*

S.N.	Procurement	Proc. Method	Procurement Status
1	Procurement of Albendazole	NCB	Completed
2	Procurement of OI Medicine	Direct Pro..	Completed
3	Procurement of Paustik Aahar (fortified flour)	Direct Pro..	Completed
4	Procurement of Iron with folic acid	NCB	Completed
5	Procurement of STI	NCB	Completed
6	Procurement of IMNCI	NCB	Completed
7	Procurement of Transportation	NCB	Completed
8	ECG Machine	NCB	Completed
9	Patient Monitor	NCB	Completed
10	Male Latex Condom	NCB	Completed
11	Ayurveda Medicine	NCB	Completed
12	Free Essential Medicine (General Items)	NCB	Completed
13	Free Essential (IV Fluid & Injectable Items)	NCB	Completed
14	Free Essential (Antibiotic)	NCB	Completed
15	Free Essential (Cream and Liquid)	NCB	Completed
16	NCD Medicine	NCB	Completed
17	SNCU/NICU	NCB	Completed
18	Portable USG Machine	NCB	Completed
19	IUD, implant NSV and Minilap Kit	NCB	Completed
20	X-ray Machine	NCB	Completed
21	NCD Equipment	NCB	Completed
22	Free Essential Medicine Surgical Items	NCB	Completed
23	Medicine for Motherhood Program (Oxytocin)	NCB	Completed
24	HMIS 3.5 tool	SQ	Completed
25	Supply, Delivery and Installation of Generator	SQ	Completed
26	Mental Health Medicine	NCB	Completed
27	Disaster Medicine	NCB	Completed
28	4WD Double cab pickup	NCB	Completed

Procurement of Portable USG, X-ray Procurement, ECG and patient monitor: All the major commodities have been supplied as per the demand and need of the respective institutions. The USG were supplied based on training provided by the province health training centre.

*Table 8.1.9: Supply of ECG, Patient Monitor, Portable USG and X-ray Machine to Health Facilities*

Health Facility	ECG	Patient monitor	Portable USG	Portable X-ray
Quantity Procure by PHLMC	33	34	34	32
Adguri Health Post			1	
Airawati Rural Municipality (PHC)	1	1		1
Balkot Primary Health Center		1		1
Bageshwori Primary Health Center	1	1		
Banakatawa Primary Health Center	1	1		1
Bangi Health Post			1	
Barbardiya Municipality			1	
Basantapur Primary Health Center	1	1		1
Birbas Health Post			1	
Bhingri Primary Health Center				1
Chisapani Hospital, Bardhaghat			1	
Damri Health Post			1	
Dhakdhai Primary Health Care Center		1		1
Dhurkot Primary Health Center		1	1	1
Ghartigaun Health Post			1	
Hansipur Health Post			1	
Haranampur Primary Health Center		1		1
Holeri Primary Health Center	1	1	1	
Johang Primary Health Center				1
Jagannathpur Primary Health Center		1		1
Janaki Rural Municipality			1	
Kapilbastu Hospital, Taulihawa			1	
Khajura Primary Health Center	1	1		
Khasauli		2		
Khalanga PHC				1
Lalmatiya Health Post	1	1		
Lamahi Hospital - Lamahi Dang			1	
Laxmanpur Primary Health Center	1	1		1
Lumbini Ayurvedic Chikitshalaya		1	1	
Lumbini Primary Health Center	1	1		1
Maharajanj Primary Health Center		1		
Motipur Primary Health Center	1	1		
Narikot Health Post			1	
Palhinandan Hospital	1			1
Patabhar Health Post			1	
Provincial Health Training Center, Butwal			6	
Putha Uttanganga Rural Municipality			1	
R.C-HOSPITAL_Barbardiya- 6		1		
Rainadevi Chhahara Rural Municipality			1	

Health Facility	ECG	Patient monitor	Portable USG	Portable X-ray
Rajapur Primary Health Center	1	1		
Rapti Provincial Hospital	2			
Rayapur Primary Health Center	1	1		1
Rignerah Health Post			1	
Ruru Rural Municipality (PHC)	1			1
Shantinagar Rural Municipality			1	
Shivaraj Hospital, Bahadurgunj			1	
Shreegaun Primary Health Center	1	1	1	1
Shringha Primary Health Center				1
Sikatahan Health Post			1	
Sorahawa Primary Health Center		1		
Sulichaur Primary Health Center	1	1		1
Susta Rural Municipality			1	
Syuja Primary Health Center	1	1		1
Tahu Primary Health center				1
Thabang Rural Municipality		1		
Thulo Lumpek Health Post			1	
Tulsipur Sub-Metropolitan City			1	
Yasodhara Basic Hospital	1	1	1	
<b>Total supplied:</b>	<b>20</b>	<b>28</b>	<b>31</b>	<b>24</b>
<b>Stock on hand:</b>	<b>17</b>	<b>9</b>	<b>19</b>	<b>8</b>

Supply of NCD equipment: Glucometer Device, Peak flow meter, Sphygmomanometer, weighing machine and urine strips were procured and supplied to the Health Offices as per the Number of LLGs planed based on need.

*Table 6.1.10: Supply of different NCD equipment to Health Offices*

Health Office	Glucometer Device	Peak Expiratory Flow Meter	Sphygmomanometer	Urine Strips 3 Parameter
Quantity Procured	264	264	273	280
Arghakhanchi	17	17	17	17
Banke	21	21	21	21
Bardiya	22	25	22	22
Dang	25	25	25	33
Gulmi	26	25	26	26
Kapilbastu	25	25	25	25
Nawalparasi West	19	19	19	19
Palpa	11	22	22	22
Pyuthan	20	20	20	20
Rolpa	22	25	20	22
Rukum East	8	80	8	8
Rupandehi	37	37	37	40

Health Office	Glucometer Device	Peak Expiratory Flow Meter	Sphygmomanometer	Urine Strips 3 Parameter
Quantity supplied	253	341	262	275
Stock on hand	20	28	3	15

Procurement of Minilap/ Vasectomy set: Procured the IUCD insertion/ removal set, Implant insertion/removal set, Minilap set, and vasectomy set.

*Table 6.1.11: Supply of family planning commodity to Health Offices*

Health Facility	Implant insertion Set	Implant removal Set	IUCD insertion set	IUCD removal Set	Minilap set	Vasectomy set
<b>Procured Quantity</b>	<b>600</b>	<b>600</b>	<b>250</b>	<b>250</b>	<b>240</b>	<b>240</b>
Arghakhanchi	35	35	13	13	13	13
Banke	45	45	20	20	17	17
Bardiya	45	45	20	20	17	17
Dang	55	55	25	25	25	25
Gulmi	65	65	27	27	25	25
Palpa	55	55	21	21	21	21
Pyuthan	50	50	22	22	22	22
Rolpa	62	62	22	22	21	21
Rukum East	17	17	7	7	7	7
Rupandehi	71	71	25	25	34	33
Quantity supplied	500	500	202	202	202	201
Stock on hand	100	100	48	48	38	39

Procurement of Vitamin k1 Inj, oxytocin, Mag sulphate, Calcium Gluconate:

*Table 6.1.12: Supply of different RH related medicine to different institutions*

Institutions	Calcium Gluconate 10 ml Injection	Magnesium Sulphate 00mg/2ml Injection	Oxytocin 5 IU / ml Injection	Vitamin K 1 ml Injection
Quantity Procured	1200	10000	120000	120000
Bhim Hospital	20	180	2100	2175
District Hospital - Pyuthan	30	250	2400	2700
District Hospital Rolpa	10	50		700
Health Office Arghakhanchi	50	350	4800	4050
Health Office Banke	100	750	9600	8100
Health Office Bardiya	100	850	8200	9450
Health Office Dang	150	1200	7200	13500
Health Office Gulmi	40	350	3400	4050
Health Office Kapilbastu	150	1250		14850

Institutions	Calcium Gluconate 10 ml Injection	Magnesium Sulphate 100mg/2ml Injection	Oxytocin 5 IU / ml Injection	Vitamin K 1 ml Injection
Health Office Nawalparasi West	40	400	5800	4400
Health Office Palpa	60	500	4800	5400
Health Office Pyuthan	40	200	3400	4050
Health Office Rolpa	60	550		6400
Health Office Rukum East	20	150		1350
Health Office Rupandehi	100	800	2846	9450
Lumbini Provincial Hospital			23400	5400
Prithvi Chandra Hospital Nawalparasi	20	300	2400	2700
Rampur Hospital	20			
Rapti Provincial Hospital	60	500	4800	5961
Tamghas Hospital	20	100	1400	1350
Grand total	1090	8730	86546	106036
Stock on hand	110	1270	48300	13964

## Procurement of Defibrillator

*Table 6.1.13: Supply of Defibrillator to different district hospital*

Health Facility	Defibrillator
Quantity Procured	10
Bardiya District Hospital	1
Bhim Hospital	1
Arghakhachi District Hospital	1
Palpa Hospital	1
Prithvi Chandra Hospital Nawalparasi	1
Gulmi District Hospital	1
District Hospital - Pyuthan	1
District Hospital Rolpa	1
Rampur Hospital, palpa	1
Rukum East District Hospital	1
Total	10
Stock on hand	0

Procurement of SNCU/NICU equipment to hospitals:

*Table 6.1.14: Supply of SNCU/NICU equipment to different hospital*

Health Facility	Baby Warmer (Radiant Warmer with Trolley)	CPAP Machine	Electric Suction	Infusion Pump	Phototherapy Machine	Sphygmoma nometer	Syringe Pump
Quantity Procured	12	4	6	6	6	9	6
Bardiya District Hospital				1	1	1	1
Bhim Hospital	2	1		1	1	1	1
District Hospital - Pyuthan			1			1	
District Hospital Rolpa	2		1	1	1	1	1
Lalmatiya Health Post	2	1		1	1	1	1
Palpa Hospital	4		2	4			2
Prithvi Chandra Hospital Nawalparasi	2	1	1	1		1	1
Rampur Hospital	2						
Rukum East-District Hospital			1			2	
Tamghas Hospital	2	1	1	1	1	1	1
Total	16	4	7	10	5	9	8
Stock on hand	0	0	0	3	0	0	0

Procurement of Iron and Albendazole:

*Table 6.1.15: supply of Iron folic acid and albendazole to different district*

Health Facility	Albendazole	Iron and Folic Acid
Quantity Procured	3565000	36000000
Health Office Arghakhanchi	303000	1190000
Health Office Banke	120000	4910000
Health Office Bardiya	186000	2960000
Health Office Dang	252000	2540000
Health Office Gulmi	314000	1350000
Health Office Kapilbastu	342000	2490000
Health Office Nawalparasi West	288000	3360000
Health Office Palpa	305000	2020000
Health Office Pyuthan	390000	2000000
Health Office Rolpa	300000	2100000
Health Office Rukum East	90000	880000
Health Office Rupandehi	360000	4700000
Total	3250000	30500000
Stock on hand	689500	6048500

Procurement of Condom: Around 14 lakh 60 thousand condom were procured and supplied to health office.

Procurement of essential Medicine: Essential medicine are supplied as per the demand and LMIS report of the health office and district hospital.

**Issues/Challenge & recommendation:**

Issues/Challenges	Recommendations
<ul style="list-style-type: none"> <li>• Inadequate storage space (dry commodities and cold chain commodities)</li> <li>• Old building for warehouse (penetration water from roof, no proper ventilation)</li> <li>• Vehicle not available for commodity supply</li> <li>• Lack of staff (staffs not fulfilled on sanctioned post)</li> <li>• Limited budget for essential and program commodities.</li> <li>• Non-functional eLMIS/LMIS in few hospitals, LLGs and SDPs</li> <li>• No clear demarcation on the procurement of program wise and essential medicine by different levels</li> </ul>	<ul style="list-style-type: none"> <li>• Budget provision for standard warehouse for effective storage of drug &amp; vaccine.</li> <li>• Provision of sufficient budget for transportation of program commodities and monitoring</li> <li>• Human resource should be fulfilled as soon as possible.</li> <li>• Required/ planned program budget from PHLMC should be approved on time</li> <li>• Capacitate the human resource of hospitals &amp; municipalities to smoothly operate the eLMIS/LMIS recording and reporting system.</li> <li>• Should develop the proposed the list of medicine to be procured by LLGs, Province and federal government</li> </ul>

**6.5 Health Training Program**

A skilled, motivated, and healthy workforce is the foundation of a high-quality, effective, and efficient health-care system. Health Training Centre, Lumbini Province was established in FY 2075/076 as the provincial body for coordination, planning and implementation of all training activities under Ministry of Health, Lumbini Province.

**6.5.1 Goal:**

To enhance the technical and managerial capacity of health care service providers at provincial level and local level to deliver quality healthcare services towards attainment of the optimum level of health status of citizen of Lumbini Province.

**6.5.2 Objectives:**

- Assess training requirements of health personnel and prepare training plans based on the program’s requirement.
- Plan, implement and train health workers as demanded by programs,
- Design, develop and refine teaching, learning materials to support implementation of training programs,
- Develop/improve capacity of trainers to deliver quality training at provincial level,
- Co-ordinate with all governmental and non-governmental organizations to avoid duplication of training and improve quality of training,

- Supervise, monitor, follow-up and evaluate training programs.
- Conduct operational studies to improve training efficiency and effectiveness etc.

### 6.5.3. Strategies:

- Developing and standardizing training packages,
- Conducting pre-service, in-service, short term and long-term trainings as per national and provincial requirements,
- Integrating and institutionalizing training activities,
- Developing links with professional career development organizations,
- Strengthening Training Information Management System (TIMS) and develop trainer's pool at federal and provincial level.

### 6.5.4. Organizational Structure

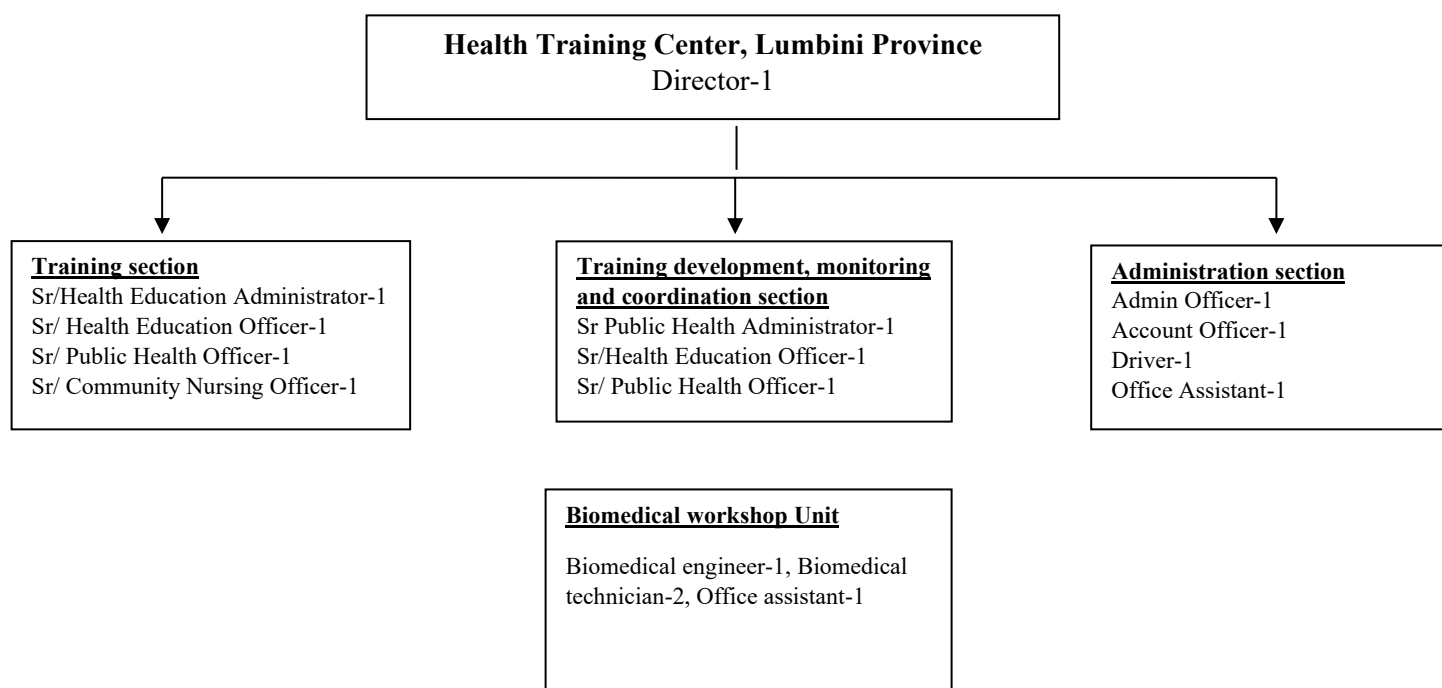


Figure 89. Organizational structure of Health Training Center, Lumbini Province

### 6.5.5. Current situation of Human Resource:

Table: 6.1.16 Current situation of Human Resource:

S.N.	Post	Level	Service	Group	Sanction Post	Vacant	Remarks
1	Director	11th	Health	Health Education	1	1	Kaaj in Bagmati
2	Sr/ Health Education Administrator	9th/10th	Health	Health Education	1	1	Kaaj from federal

3	Sr/ Public Health Administrator	9th/ 10th	Health	Health Inspection	1	1	Vacant
4	Sr/ Public Health Officer	7th / 8th	Health	Health Inspection	2	2	Scholarship Bonding 1
5	Sr/ Health Education Officer	7th / 8th	Health	Health Education	2	0	1- Study leave, Kaajma-1
6	Sr/ Community Nursing Officer	7th / 8th	Health	Community Nujrsing	1	1	Vacant
7	Admin Officer	7th / 8th	Administration	Administration	1	1	Vacant
8	Account Officer	7th / 8th	Administration	Account	1	1	Kaaj
9	Driver		Engineer	M.E	1	1	Contract
10	Office Assistant		Administration	Administrator	2	1	1 Contract
	<b>Total</b>				<b>13</b>	<b>10</b> <b>(77%)</b>	

### 6.5.6. Health Training Center accredited clinical training sites in Lumbini Province

Following 12 clinical training sites were accredited in Lumbini Province for different clinical trainings. Table 101 shows the list of accredited clinical training sites along with the approved training.

*Table 6.1.17: List of clinical training sites in Lumbini Province*

SN	Name of clinical training sites	Name of training
1	Bheri Hospital, Banke, Nepalgunj	ASRH, GBV, SBA, SAS
2	Rapti Academy of Health Science, Gorahi, Dang	SBA, Implant
3	Lumbini Provincial Hospital, Butwal, Rupandehi	SBA, SAS, GBV, Implant
4	Rapti Provincial Hospital, Tulsipur, Dang	SBA, Implant, IUCD
5	Bhim Hospital, Bhairahawa, Rupandehi	SBA
6	Association of Medical Doctors of Asia (AMDA)- Nepal Hospital, Butwal, Rupandehi	SBA, OTTM
7	Family Planning Association of Nepal (FPAN) branch, Butwal, Rupandehi	SAS, VIA, FP- LARC
8	Family Planning Association of Nepal (FPAN) branch, Dang	FP- LARC
9	Marie Stopes Chandrouta, Kapilvastu	Implant, SAS
10	Lumbini Medical College, Palpa	SBA, Implant
11	Nepalgunj Medical College, Kohalpur	SBA, ECCT
12	Mission Hospital, Palpa	SBA, MLP

### 6.5.7. Major activities carried out in FY 2079/080

Health Training Centre, Lumbini Province organizes various basic, competency and clinical based trainings for health workers in accredited training sites to enhance the knowledge and skill of health service providers in multiple clinical areas. In FY 2079/080, the Health Training Center conducted 41 training activities where approximately 1548 health workers were trained.

*Table 6.1.18: List of training provided through Training Centre*

SN	Name of Activity	Target (Batch)	Achievement (Batch)	Participants
<b>National Health Training Program</b>				
1	Primary emergency care TOT for doctors, nurses and health workers	0	0	0
2	Cervical cancer screening and VIA training for doctor and nurses	4	4	40
3	Mental health training –module 2	1	1	17
4	RoUSG training for nursing staff	4	6	36
5	CTS training	2	2	23
6	Role of health sector in gender-based violence training for doctor’s nurses and health workers	3	3	36
<b>AIDS and STI Control Program</b>				
7	PMTCT Program	1	6	112
8	Medical ethics	0	0	0
<b>Nursing and social security program</b>				
9	National FCHV TOT	4	6	140
10	E-BASED skill development training for assistant health workers for elderly health	1	1	20
<b>Curative service program</b>				
11	PTC/BLS training	1	4	84
12	Skill lab training for PTC/BLS training	0	0	0
13	TOT training on nose, eye, ear and oral health	1	1	17
14	Social audit skill development program	1	2	38
<b>Outbreak disease control program</b>				
15	PEN training for NCDs	1	3	63
16	Snakebite management training	1	1	25
17	Food security, water, air security, road safety, zoonosis, communicable dis, outbreak management, UV ray protection related training	1	1	25
18	Risk communication training program for healthcare workers to improve communication in epidemic response and management	1	1	20
<b>Disability prevention and leprosy control program</b>				
19	Disability management and rehabilitation related training for health workers	0	0	0
20	Leprosy training for health workers	1	4	78
<b>Family welfare program</b>				

SN	Name of Activity	Target (Batch)	Achievement (Batch)	Participants
21	Family planning and adolescent health service	6	6	24
22	Reproductive health morbidity service	6	10	60
23	Mentor development training for MNH onsite coaching mentoring	1	1	12
24	Refresher review and planning for clinical mentoring of MNH	0	0	0
25	ToT for implementing nutrition program quality improvement directive	1	1	24
26	Safe abortion (MA/MVA) training	4	4	20
27	CBIMNCI training	1	1	20
28	Kangaroo mother care training	3	3	30
<b>Integrated Health and Sanitation Program</b>				
29	NTDs related training	1	6	115
30	Training on ayurveda program operation and management for health workers and TOT training on preparing manuals for lifestyle programs	1	1	16
31	Advance FCHV Training	2	2	20
32	Rural Medical Responder (RMR) training for health workers	1	2	38
33	42 days training on operation theatre management for nurses working in operation theatre	1	1	7
34	Medico legal training for doctors	1	1	10
35	Medical abortion training	10	35	175
36	Vasectomy training for doctors	0	0	0
37	Implant training for health workers	1	7	28
38	Skilled Birth Attendant (SBA) Training for doctors, nurses and auxiliary heal	4	5	50
39	CAC training for staff nurse and medical officers	1	1	10
40	Snakebite management	1	1	25
41	Minilab training for doctors	1	1	8
42	Basic physiotherapy	1	1	21
43	RUSG training	1	2	12
44	MLP training for health workers	1	1	6
45	Kidney dialysis training	1	1	13
46	Critical care training	2	2	30
47	Biomedical workshop run and management	1	1	NA
	<b>Total</b>	<b>82</b>	<b>125</b>	<b>1548</b>

#### 6.5.8. Best Practices in Training Centre

1. In this FY 2079/080, Provincial Biomedical Workshop has formally started its service as a unit of Health Training center, Lumbini Province. This unit has been established for capacity building of human resources as well as maintenance, calibration, and validation of biomedical equipment of district and provincial level hospitals and other health institution of Lumbini province.
2. Training Information Management System has been used to list out the participants who received training in specific time- period.
3. Trainings are conducted based on quality and quantity of cases available in the site.

### 6.5.9. Issues, challenges and recommendations

Issues and bottlenecks	Recommendations	Responsibility
Sanctioned post not fulfilled	Recruit and place adequate technical skilled human resources in health training center	MoH
Provincial health training center lack its own building	Coordinate with MoH for allocation of budget to construct the building	MoH
Training need assessment system hasn't been institutionalized	Develop criteria and initiate systematic training need assessment	MoH
Lack of training information due to multi-door training implementation approach	Establish one door accredited training system	MoH, NHTC, HTC
Less budget for monitoring and evaluation of training programs	Ensure budget expenditure for monitoring and evaluation programs	MoH, NHTC, HTC
Lack of coordination with health training center on different ToT programs conducted by various institutions and organizations	Provision of legal procedure to coordinate with health training center prior the conduction of ToT program by various health institution and organizations	MoH, NHTC
Problem on expansion of clinical training site	Coordinate with NHTC and other support partners for site strengthening and ensuring the quality	NHTC
Legal issues of relevant professional organization on training like RoUSG, Dental Extraction	Advocacy with professional organizations on the depth of issue on public health and HR distribution	MoH, HTC
Inadequate coordination among provincial and federal department / division regarding training conduction and certification	Meaningful coordination with HTC	MoHP, MoH, NHTC, HD, PPHL

## 6.6 Public Health Laboratory Services

Provincial Public Health Laboratory was established in FY 2075/076 as a provincial government reference and monitoring laboratory. However, its official inauguration was held on 16th of Magh, 2076 (30th of January 2020). It is located at Tamnagar, Butwal-12 in its own 4 story building. The main aim and objective of PPHL is to fulfill and undertake organizational, administrative, and co-operative responsibilities for the laboratory services in both government as well as private sectors throughout the province. National External Quality Assurance Scheme (NEQAS) monitoring, supervision, empowering the laboratory personals, licensing, conducting research in diagnostic field are some key functions of PPHL. The PPHL has the facility of biosafety level II (BSL- II) laboratory with real-time PCR (RT-PCR) which is intensively being used for integrated Influenza and COVID-19 surveillance.

### 6.6.1 The vision, mission, goal of Province Public Health Laboratory

#### **Vision**

To develop PPHL as an art-of-state lab which will be the center of excellence in diagnostic and research.

#### **Mission**

To ensure and facilitate the quality lab services to the citizen of Lumbini Province, being premier government monitoring, administrative reference lab, through different government and non-government laboratories.

#### **Goal**

- To extend desired lab services in all hospitals and health care organizations up to health post levels throughout the province
- To develop a reference lab and quality-assuring lab for diagnostic and public health services, and upgrade accordingly
- To address and manage the diagnosis of newly emerging diseases.
- To organize appropriate training for lab personnel

### 6.6.2 Major activities of PPHL

PPHL has accomplished following activities in FY 2079/80.

- a. Quality control and Assurance of TB, Malaria and HIV test across the province.
- b. RT-PCR integrated test for influenza A & B, and SARS CoV2.
- c. Conduction of Basic and Refresher Malaria Microscopy Training.
- d. Malaria Slide collection for establishment of Malaria Slide Bank.
- e. Formulation of PPHL Road Map for next 5 years.
- f. Supportive supervision and strengthening of GeneXpert Centers across the province.
- g. Designation of TB and Malaria Microscopy Centers.
- h. Conduction of TB Microscopy (Basic and Refresher) Malaria Microscopy (Basic and Refresher) Slit Skin Smear for Leprosy, LQAS, HIV and STI Training for laboratory personnel.

The following table depicts the status of TB External Quality Assessment (EQA) program. Among 144 Designated Microscopic Centers (DMCs) for quality control (QC) of microscopic examination of TB, 125 DMCs participated in the EQA and additional 33 non-TB DMCs also had participated during this period. The health office at respective district collects the microscopic QC slides quarterly from peripheral health facilities where TB cases are diagnosed through microscopic examination. These slides are selected based on Lot Quality Assurance System (LQAS) method. The average agreement rate of QC slides between QC assessor and microscopic center was 99.4%. All the discordant slides between QC assessor and microscopic centers are sent to NTCC for confirmation. Thereafter, final QC feedback reports are dispatched. Ultimately, PPHL conducts onsite coaching and supportive supervision to microscopic centers from where false slides are reported.

**Table 6.1.19: District wise participation of Microscopic Centers (MC) for TB Quality Control FY79/80**

S.N.	District	No. of TB DMC	MC in TB QC participation	Participation Rate	Non-DMC Participation no.
1	Rupandehi	25	23	92%	8
2	Kapilvastu	11	10	91%	2
3	Dang	20	18	90%	10
4	Banke	12	9	75%	1
5	Bardiya	18	18	100%	
6	Palpa	9	8	89%	3
7	Gulmi	9	7	78%	2
8	Arghakhanchi	7	3	43%	
9	Pyuthan	10	10	100%	3
10	Rolpa	10	10	100%	3
11	Rukum East	4	2	50%	
12	Nawalparasi West	9	7	78%	1
TOTAL		144	125	87%	33

The table depicts the status of Malaria External Quality Assessment (EQA) program. Among 34 Designated Microscopic Centers (DMCs) for quality control (QC) of microscopic examination of malaria, 25 DMCs participated in the EQA and additional 4 Non-Malaria DMCs also had participated during this period. The health office at respective district collects the microscopic QC slides quarterly from peripheral health facilities where Malaria cases are diagnosed through microscopic examination. Total slide collected for QC were 546, among which 34 were rejected while 368 slides were accessed with agreement rate of 92.4%. All the discordant slides between QC assessor and microscopic centers are sent at VBDRTC for confirmation. Ultimately, PPHL conducts onsite coaching and supportive supervision to microscopic centers from where false slides are reported.

**Table 6.1.20: District wise participation of Microscopic Centers (MC) for Malaria Quality Control FY79/80**

SN	District	Malaria DMCs no.	Participation
1	Rupandehi	5	2
2	Kapilvastu	5	4
3	Dang	4	5
4	Banke	4	4
5	Bardiya	4	3
6	Palpa	2	1
7	Gulmi	2	0
8	Arghakhanchi	2	1
9	Pyuthan	1	1
10	Rolpa	2	2
11	Rukum East	1	2
12	Nawalparasi West	2	0
<b>TOTAL</b>		34	25

### **HIV Dried Tube Specimen (DTS) in External Quality Assessment System (EQAS) Program**

HIV Dried Tube Specimen panel comprised of 5 blinded samples (for each site) are sent from NPHL to PPHL for EQAS program across the province. PPHL distributes the PT sample to HIV testing sites. Thereafter, testing sites examine the samples and report the result to PPHL. PPHL compiles the report and send them to NPHL, where NPHL compares results of each sample in the panel with pre-determined results. Finally, results to each individual participating site are dispatched from NPHL with feedback and recommendations through PPHL. Onsite coaching and supervision visit are undertaken by PPHL to sites scoring less than 90%.

**Table 6.1.21: HIV DTS EQAS Program summary**

S.No.	Particulars	Status
1	No. of sites participated in HIV DTS EQA Program	15
2	No. of sites reporting all three-layer testing	15
3	Average DTS QC score	87.8 %
4	No. of site scoring less than 90%	3

### **Training**

- Conducted 2 batches of basic TB microscopic training and TB refresher training,
- Conducted 1 batch of GeneXpert operation and maintenance training.
- Conduction of regular onsite coaching & supervision to Laboratories
- Provided technical support to conduct CLT training of HIV in co-operation with Save the Children

- Two batch of Slit skin smear Examination for leprosy Training
- One Batch Malaria Basic Microscopy and one batch Malaria Refresher Microscopy training.
- One batch HIV and STI Training for laboratory personnel.

## Chapter 7: Ayurveda and Alternative Medicine

### 7.1 Background

Ayurveda' literally means "Science of Life". Ayurvedic medicine is one of the world's oldest holistic healing systems which works through simple and therapeutic measures along with promotive, preventive, curative and rehabilitative health of people. The sources of Ayurvedic medicine are medicinal herbs, minerals, and animal products. Ayurveda health services are being delivered through Provincial Hospital, District Ayurveda Health Centers and Ayurveda dispensaries across the province. The Ayurveda and Alternative Medicine unit in the Ministry of Health & population (MoHP) is responsible for formulating policies and guidelines for Ayurveda and other traditional medical system.

Fifteenth periodic plan of Government of Nepal (2019/20-2023/24) has guided the government to develop and expand Ayurvedic, natural medicine and other complementary medicines in planned way. More specifically, it says: i) Institutional mechanism will be developed for identification, collection, preservation and promotion of locally available medicinal herbs and minerals; ii) Health tourism will be promoted by establishing service center for Ayurveda and other complementary medicine at national level.

### 7.2 Ayurvedic Health facilities of Lumbini Province

Ayurved health services are delivered by one provincial hospital, 2 Ayurved Chikitsalaya, 10 Ayurved Swasthya Kendra, 46 Ayurved Aushadhalaya, 42 Nagarik Arogya Kendra and 2 Bishtarit Sewa Kendra in Lumbini Province.

*Table 7.1.1: Ayurvedic Health facilities of Lumbini Province*

SN	Districts	Provincia l Ayurved Hospital	Ayurved Chikits alaya	Ayurved Swasthya Kendra	Ayurved Aushadhalaya	Nagarik Aarogya Kendra	Bistarit Sewa Kendra
1.	Rupandehi	-	1	-	6	4	-
2.	Kapilvastu	-	-	1	4	5	-
3.	Pyuthan	-	-	1	3	4	1
4.	Dang	1	1	-	4	6	-
5.	Arghakhanchi	-	-	1	2	4	-
6.	Palpa	-	-	1	7	3	-
7.	Gulmi	-	-	1	5	5	1
8.	Banke	-	-	1	5	4	-
9.	Bardiya	-	-	1	4	4	-
10.	Rolpa	-	-	1	2	4	-
11.	Nawalparasi W	-	-	1	4	-	-
12.	Rukum East	-	-	1	-	-	-
<b>Total</b>		1	2	10	46	43	2

## Reporting Rate:

The reporting rate of last three consecutive fiscal years of 12 districts is shown in the given bar diagram. Reporting status of each district is in increasing trend in past three years and all districts have achieved 100% reporting rate in the fiscal year 2079/80.

*Table 7.1.2: Reporting Status*

Service utilization	2077/078	2078/079	2079/080
Total Clients Served	2,59,339	4,01,940	50,6166
Average clients per day per institution	12	19	24

### 7.3 Significant Initiative and activities in Ayurveda and Alternative medicine

- Lumbini Ayurveda Hospital was upgraded to 15 bed hospital.
- Healthy Life Promotion through Kitchen Improvement to Home makers (*Swsthakar jiwanshaili ka laagigrihandiharukaalaagi Bhansaghar Sudhar Karyekram,*)
- Healthy Lifestyle Promotion, Nature friendly Model Village and City and Awareness Program (*Shastha jiwanshai prawardhan prakriti maitrinamunagaau Shahar tatha janachetanamak kaaryekram Sanchalan*) was designed and implemented.
- Training manual was developed on *Swastha Jiwan Shaile* and handbook of *Bhasaghar Sudhar Karyekram*
- Expansion of Specialized Panchakarma and surgery (*Shalya*) services at Provincial Ayurveda Hospital, Bijauri
- Rampur Ayurveda Hospital was upgraded to 15 bed hospital and operationalized in coordination with the local level.
- *Ayurved Dispensary (Aausadhalaya)* was established in Janaki Local level.
- Line listing of traditional healers was carried out in 10 districts.
- Training on AHMIS to Ayurveda Health Workers of province, districts, and local levels

### 7.4 Service statistics of Ayurveda health facilities

*Table 7.1.3: Age wise distribution of client in ayurvedic health facilities*

Name of Health Facility / Age	0-12 months	1-4 year	5-16 year	17-59 year	≥ 60 years
District Ayurveda Health Center_Arghakhanchi	47	93	215	12640	6845
District Ayurveda Health Center_Banke	20	284	1000	15417	8301
District Ayurveda Health Center_Bardiya	44	132	582	5995	3353
District Ayurveda Health Center_Gulmi	66	479	4233	11010	2798
District Ayurveda Health Center Kapilvastu	183	543	1661	43153	8757

District Ayurveda Health Center_Nawalparasi West	2	31	103	7186	2071
District Ayurveda Health Center_Palpa	50	97	403	8715	6304
District Ayurveda Health Center_Pyuthan	46	250	558	15427	3735
District Ayurveda Health Center_Rolpa	62	159	1846	6980	4242
District Ayurveda Health Center_Rukum East	0	23	80	1655	613
Lumbini Ayurveda Chikitsalaya_Butwal	27	336	1060	28094	10463
Provincial Ayurveda Chikitsalaya_Dang	1445	3699	567	16544	8513
Rapti Ayurveda Chikitsalaya_Dang	29	185	746	20678	7869
Lumbini Province	2021	6311	13054	193494	73864

Table above shows the age wise distribution of client receiving services from ayurvedic health facilities in fiscal year 2079/080. In Lumbini province, the highest number of new clients receiving ayurvedic health facilities are in the age group of **17-59 years**.

### OPD Visit and Client Served

Following table depicts the number of people who had OPD visit disaggregated by new visit and follow up along with gender. It also describes the total number of clients who received Ayurved health services.

*Table 7.1.4: Service utilization on OPD visit and client served.*

S. No	District / Data	OPD Visit					Client served		
		New (Female)	New (Male)	Follow up. (Female)	Follow (Male)	Total Visit	Female	Male	Total
1	Rukum East	982	561	397	301	2241	1442	929	2371
2	Rolpa	8647	6828	2172	1481	19128	11577	7794	19371
3	Pythun	10587	8274	6391	4988	30240	17025	12448	29473
4	Gulmi	19342	13702	5101	2907	41052	24240	17110	41350
5	Argakhanchi	13072	10385	1245	1007	25709	14204	11307	25511
6	Palpa	16929	10325	7255	4642	39151	24087	15093	39180

7	Nawalparasi West	12060	8962	5363	4127	30512	20858	18445	39303
8	Rupandehi	27529	20620	19002	13063	80214	45861	33235	79096
9	Kapilbastu	29161	25603	14718	11776	81258	44329	35007	79336
10	Dang	30529	20439	15591	10698	77257	46481	30962	77443
11	Banke	16324	14530	5286	4815	40955	21545	19492	41037
12	Bardiya	12615	9484	5459	4319	31877	18609	14086	32695
13	PAH_Dang	10773	8244	6673	5078	30768	7327	4575	11902

### Service utilization status of different health services

IPD service has been provided by Lumbini Provincial Ayurved Hospital and Provincial Ayurved Hospital Bijauri. The ayurvedic health facilities offers various types of services. Following table provides details of some programs which are listed below with the number of service utilizers.

*Table 7.1.5: Service utilization status of different health services*

SN	Service Institution	A	B	C	D	E	F	G	H	I	J	K	L	M	Total
1	IPD	0	0	0	0	0	85	594	0	0	0	0	0	0	679
2	OPD	25511	41037	31877	41314	51099	39980	30768	39303	39180	29675	46832	13079	2348	432003
3	Geriatric Services	6694	2519	6827	3935	4870	9615	2963	4168	5005	2394	5542	1215	873	56620
4	Safe motherhood Services	805	1044	1359	1157	852	413	150	1088	2114	435	1302	589	64	11372
5	Purvakarma/Panchakarma	3539	3044	5781	2597	3651	5032	10068	3631	4402	1184	5777	955	0	49661
6	Yoga	2668	1320	4061	720	1148	1943	0	823	4071	2394	3087	671	709	23615
7	School Health Program	3798	225	1900	1381	296	210	240	575	1299	470	1389	603	277	12663
8	Surgery	2761		23	0	-	-	3158	0	0	0		0	0	5942
9	Lab	96	825	1794	684	2564	5032	15946	0	3321	828	2421	740	0	34251

**Note:** A. Arghakhanchi B. Banke C. Bardiya D. Gulmi E. Kapilvastu F. LAH, Butwal G. PAH, Bijauri H. Nawalparasi I. Palpa J. Pyuthan K. Dang L. Rolpa M. Rukum

The Naagarik Aarogya Kendra (Citizen Wellbeing Centre) is the unique health facilities which are established at local levels to provide ayurveda public programs to the public. Different promotive, preventive and curative health programs are being conducted from Nagarik Aarogya Sewa Kendra. The table describes the services provided by Nagarik Aarogya Sewa Kendra according to the district.

*Table 7.1.6: Client Served by Nagarik Arogya Kendra*

S.N	District	OPD	Purvakarma	Yoga	Lifestyle modification	School Health Program	Home based treatment to citizen >70 yrs
1	Arghakhanchi	10270	494	1107	616	357	67
2	Banke	17067		496		1000	
3	Bardiya	20493	2165	2175	1407	624	401
5	Gulmi	9769	60	321	321	603	185
6	Kapilvastu	11332	453	1502	1548	1120	1213
7	Rupandehi	23438	401	1943	428	356	479
8	Nawalparasi	0	0	0	0	0	0
9	Palpa	5355	767	229	276	85	369
10	Pythan	14817	76	33	0	0	1238
11	Rapti,Dang	20308	1715	268			
12	Rolpa	9769	60	321	321	603	185
13	Rukum	0	0	0	0	0	0
	Total	142618	6191	8395	4917	4748	4137



**Status of medical equipment at health facilities**

*Table 7.1.7: Status of availability of infrastructure and equipment in Ayurveda health Service centres in Lumbini province*

S.N	Instrument/ Equipment	Agrghakhanchi	Banke	Bardiya	Bijauri	Gulmi	Kapilvastu	LAH, Lumbini	Nawalparasi	Palpa	Pyuthan	Rapti, Dang	Rolpa	Rukum
1	Microscope	1	1	1	2	1	1	1	0	1	2	1	1	
2	Calorimeters	1	1	1	4	1	1	-	0	1	2	1	1	
3	Centrifuge	1	1	1	7	1	1	1	0	1	1	1	1	
4	Fridge	2	2	2	8	1	1	3	1	1	1		2	
5	Hot air oven	1	1	1	2	1	1	1	0	1	0	1	1	1
6	Autoclave	2	1	1	3	4	1	5	1	3	2	4	2	1
7	Micro Pipate	6	5	5	5	5	3	1	0	5	2	7	5	
8	Dry-bath	1	0	0	2			-	0	1	2	1	0	
9	Semi-Auto Analyser	1	1	1	3	1	1	1	0	1	2	1	1	
10	Sirodhara table	1	3	3	2	1	2	2	0	1	1	1	1	
11	E.N.T. set	1	0	0	1	2	1	3	1	1	6	1	2	1
12	B.P. set	5	4	4	8	15	1	8	3	6	8	4	5	6
13	Weight machine	5	2	2	5	8	3	4	2	3	6	2	4	3
14	Baby weight machine	-	0	0	1	1		1	0	1	1	1	0	
15	Steam-box sitting	1	1	1	2	3	1	4	0	1	1	2	1	
16	Desk top computer	3	2	2	9	2	3	5	1	2	4	4	3	2
17	Laptop	2	4	4	6	3	3	4	1	3	4	2	4	2
18	Printer	3	4	4	16	3	3	5	2	4	5	4	3	1
19	Nadi-swedan yantra	1	1	1	1	1	2	4	0	1	1	2	1	
20	Grinder – machine	1	1	1	2	2		1	0	1	1		1	

21	Glucometer	3	1	1	1	8	2	2	2	5	1	2	4	1
22	Steam- box Laying	1	1	1	2	1	1	1	0	1	2		0	
23	Power back-up	1			2		1	2	0	0	1		1	1
24	Inverter	1	2	2	4	2	1	2	0	1	1	3	2	
25	Projector	1	1	1	1	1	1	2	1	1	1	1	1	1
26	U.S.G machine	-	0	0	1	0		1	0	0	0		0	
27	X-ray machine	-	0	0	3	0		-	0	0	0		0	
28	Solar heater	-	0	0	1	1		-	0	0	1		1	
29	Washing machine	-	0	0	3	0		1	0	0	0		0	
30	Deluxe bed	-	0	0	30	0		-	0	0	0		0	

## **Public Health Program in Ayurveda**

Ayurveda has significant role in health promotion and disease prevention in both communicable and non-communicable disease including mental health. It also serves an efficient means to achieve Sustainable Development Goal and attain universal health coverage. Ministry of health has designed public health program for improving nutritional status through Healthy Life Promotion through Kitchen Improvement to Home makers.

Healthy Lifestyle Promotion, Nature friendly Model Village City and Awareness Program is a new public health program designed by Ministry of Health. This program was designed for prevention and management of non-communicable disease and promotion of physical and mental health through healthy lifestyle promotion.

## **Yoga orientation to school teachers**

This is the regular program conducted by district ayurveda health centers. Yoga is an effective way to boost physical activity and lower the risk of non-communicable diseases. Global Action Plan on Physical Activity 2018- 2030 by WHO has emphasized regular practice of yoga and recognize yoga as a helpful tool for all age group people to include yoga into their daily lives and increase their level of activity to support good health. Yoga is as important tool for preventing and controlling NCDs. There are many studies showing effectiveness of yoga practice from early age promotes health and prevent NCDs in future.

The objective of this program is to orient school teachers about yoga and conduct yoga activities at schools to prevent risky behavior and has a good impact on children's psychological and social development and prevents from future chronic illness and NCDs.

## **Safemotherhood Program (Stanpaai sewa program)**

Women go through dramatic mental and physical changes as their reproductive systems go through major changes. Women can take charge of their health by eating a proper diet, seeking the proper screenings and maintaining a healthy lifestyle.

In newborn babies breast milk is the ideal nourishment till the age of 6 months. Breast feeding apart from nourishment promotes emotional and physical bonding in mother and child. It also improves immunity, promotes intelligence and psychomotor functions. Asparagus racemosus (Shatavari) is a proven galactagogue drug. Saatavari churna is distributed to postnatal mothers to increase breast milk so that newborn babies get nourishment.

## **Line listing of Traditional Healers**

Several studies have shown that alternative practitioners may play an important role in addressing health care needs by offering culturally appropriate treatment. It is necessary to preserve and enhance their traditional knowledge. So Ministry of Health has designed program to list traditional healers and their knowledge.

*Table 7.1.8: Line listing of Traditional Healers*

Program	Healthy Lifestyle Promotion, Nature friendly Model Village City and Awareness Program	Orientation to teachers on yoga	Healthy Life Promotion through Kitchen Improvement to Home makers	Line listing of Traditional Healers
Rukukm	200	60	220	40
Rolpa	171	16	300	-
Dang	227	21	143	105
Pythuan	597	66	354	98
Palpa	656	19	125	309
Nawalparasi	974	21	212	44
Rupandehi	326	29	260	187
Kapilbastu	161	20	263	0
Gulmi	40	391	275	87
Arghakhachi	2668	109	146	89
Banke	588	21	300	205
Bardiya	1728	15	304	122

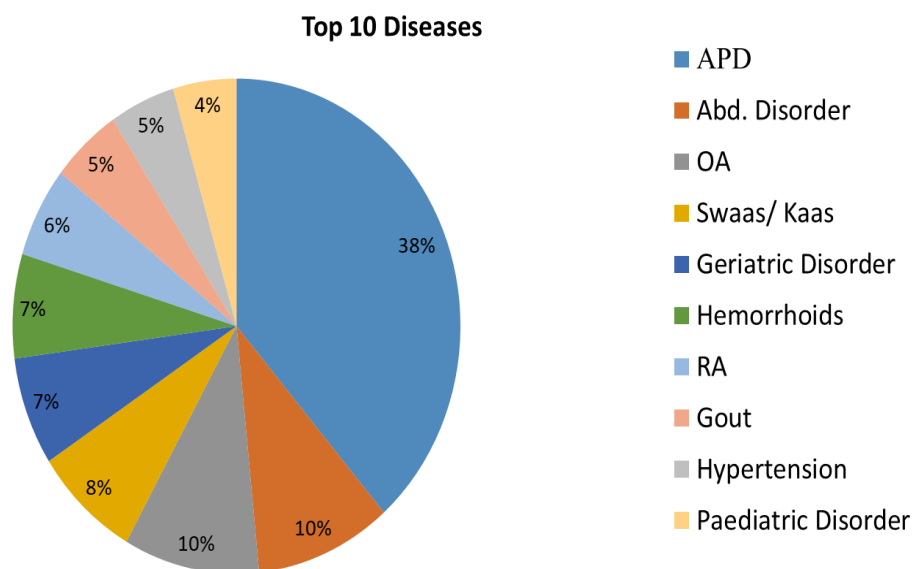
### Top Ten Diseases of Lumbini Province

Top 10 diseases in ayurveda health facilities of Lumbini province is presented in the table below. Around 38% of patients visiting ayurveda health institutions are diagnosed with amlapitta followed by udara roga 10% and sandhivaat 10%.

*Table 7.1.9: Top Ten Diseases*

S.N.	Disease	Number of Patient	Percent
1.	Amlapitta	13441	38
2.	Udar Roga (Abdominal Disorder)	28855	10
3.	Sandhivaat (Osteoarthritis)	28813	10
4.	Kaas (Cough)	22448	8
5.	Jara Vyadhi (Geriatric Disorder)	20842	7
6.	Arsha (Hemorrhoids)	20039	7
7.	Aamavaat (Rheumatoid arthritis)	17413	6
8.	Raktapitta (Gout)	14899	5
9.	Uchha rakachaap (Hypertension)	13895	5
10.	Baal Roga (Paediatric Diseases)	13460	4

*Figure 7.1.1.: Distribution of Disease Burden*



## 7.7 Issues and recommendations

Key Issues	Recommendation	Responsibility
Inadequate human resources for Ayurveda services	Review the organogram and recruit staff through PPSC. Deliver service by recruiting staff on contract	PPSC, MoH/ HD
Lack of appropriate recording and reporting system	Development and Implementation of Ayurveda Information Management System (AHIMS) Training on AHIMS for Ayurveda personnel	MOH
Low priority for Ayurveda programs	Allocate adequate program and budget for the Ayurveda health activities	MoH/ HD
Unavailability of vehicle for Banke, Bardiya, Kapilvastu, Arghakhanchi	Procurement of vehicles for the district.	MoH
No Standard Treatment Guidelines for Ayurveda health facilities	Develop standard treatment protocol for curative Ayurveda services and provide orientation to Ayurved staff	MoH, Federal MoHP
Inadequate coverage and human resource at Nagarik Aarogya Kendra	Expansion and strengthen Nagarik Aarogya Kendra	MoH

## Chapter 8: Performance Evaluation

### 8.1. Background

The Ministry of Health and Health Directorate conducted routine monitoring and supervision visits of health programs in different health service delivery outlets (hospitals, health offices/ municipalities/ health facilities and Ayurveda health centers) to strengthen the ongoing health service delivery activities through regular feedback mechanism. The Health Directorate has formed a five-member evaluation committee in leadership of Senior Public Health Administrator to prepare a criterion to examine different aspects of health system functionality and ranking of health offices, hospitals and Ayurveda health facilities based on the annual service delivery and management status. In FY 2079/080, the Health Directorate continued the annual performance evaluation of provincial authorities based on the pre-defined criteria.

The major criteria undertaken for hospital evaluation were MSS score, reporting rate, reporting rate on time, OPD reporting, IPD reporting, financial affairs, remoteness, annual report preparation, health directorate evaluation of FY 2079-80. For health office, major criteria undertaken for evaluation were achievements of national programs- National Immunization, Nutrition program, Community based integrated management of neonatal and childhood illness, Family Planning program, Safe motherhood program, Female Community health volunteers, Primary Health care outreach clinics, Tuberculosis control program, Malaria control program, Reporting Status of HMIS, Physical and Financial Progress, District Annual Health Report, Remoteness and Achievement status, Financial Management and Evaluation by Health Directorate. Similarly, the criteria undertaken for Ayurveda health facilities were based on health service provided in FY 2079/80 relating to reporting rate on DHIS2, total clients served, purbakarma and panchakarma, financial and physical progress, irregularity clearance, annual report preparation, innovative work and remoteness.

*Table 8.1.1.: Detail criteria for hospital performance evaluation*

S.N	Indicators	Marking
1	Minimum Service Standard (MSS) evaluation	40
2	Reporting rate	5
3	Reporting rate on time	5
4	% of OPD service reported among total popu.	5
5	IPD service reported	5
6	% of institutional deliveries among district's live birth	10
7	Financial progress	5

8	irregularity clearance	5
9	Remoteness	5
10	Hospital annual report	5
11	Health directorate evaluation	10
	Total	100

**Table 8.1.2: Detail criteria for Health Office performance evaluation:**

Indicator	Numerator	Multiplier	Weight	Evaluation Criteria
<b>National Immunization Program (10)</b>				
Dropout Rate of Penta 1 <sup>st</sup> vs MR II	Number of children under one year who received Penta Ist-MR II vaccine	100	2.5	Below 10% dropout rate equals 5, otherwise decreases proportionately
% of measles/rubella II	Number of children under one year immunized with II dose of measles/ rubella	100	4.5	100% coverage equals 5, otherwise decreases proportionately
TD2 & TD2+ Coverage	Number of pregnant women who received Td2 and Td2+	100	3	100% coverage equals 3, otherwise decreases proportionately
<b>Nutrition Program (5)</b>				
Average growth monitoring visit (U2 yr)	Total number of visits among children completed 23 months and registered for growth monitoring in 0-23 months	100	3	100% coverage equals 3, otherwise decreases proportionately
% of exclusive breast feeding	Number of children 0-5 months and registered for growth monitoring who were exclusively breastfed	100	2	100% coverage equals 2, otherwise decreases proportionately
<b>Community Based Integrated Management of Neonatal &amp; Childhood Illness (CBIMNCI, 5)</b>				
% of diarrheal cases treated with zinc plus ORS	Number of children under five years with Diarrhea treated with ORS and zinc (facility, outreach and community	100	2	100% coverage equals 2, otherwise decreases proportionately

Indicator	Numerator	Multiplier	Weight	Evaluation Criteria
% of severe pneumonia among new cases	Number of new cases of children under five years with ARI Suffering very/severe pneumonia (facility, outreach & community)	100	3	3 for coverage $\leq 1\%$ , otherwise decreases Proportionately
<b>Family Planning Program (8)</b>				
%new acceptor MWRA TEMPORARY	total number of MWRA currently using modern temporary methods of family planning	100	3	3 for % of new acceptor MWRA temporary $\geq 25\%$ , otherwise decreases proportionately
% of Sterilization against its target	total number of new acceptors of Permanent Methods Vasectomy and Minilap	100	5	100% coverage equals 5, otherwise decreases proportionately
<b>Safe motherhood program (18)</b>				
% of pregnant women who had four ANC Checkups as per protocol (4th,6th,8th and 9th month) among expected pregnancy	Number of pregnant women aged 15-49 years who had four ANC Checkups as per protocol (4th, 6th, 8th and 9th month)	100	5	5 for coverage $\geq 100\%$ , otherwise decreases proportionately
% of Institutional delivery	Number of deliveries conducted in health facilities	100	3	3 for coverage $\geq 90\%$ , otherwise decreases proportionately
% of PNC 4th Visit	Number of postpartum women who received four PNC checkups as per protocol (24 hours, on 3rd day and 7th to 14th days, and 6 weeks day)	100	5	5 for coverage $\geq 90\%$ , otherwise decreases proportionately
Home delivery	Number of Home delivery reported. With expected live birth	100	5	Below 0 Home delivery equals 5, otherwise decreases proportionately
<b>RH Morbidities (3)</b>				

<b>Indicator</b>	<b>Numerator</b>	<b>Multiplier</b>	<b>Weight</b>	<b>Evaluation Criteria</b>
% Screening of uterine prolapsed	Number of women with uterine prolapse scened	100	3	100% equals 3, otherwise decreases proportionately
<b>Female Community Health Volunteers (FCHV, 2.5)</b>				
% of mothers group meetings held	Number of mothers group meetings held	100	2.5	100% equals 2.5, otherwise decreases proportionately
<b>Primary Health Care Outreach Clinics (PHCORC, 2.5)</b>				
% of planned Primary Health Care-Outreach Clinics (PHC/ORC) conducted	Number of primary health care outreach clinics conducted	100	2.5	100% equals 2.5, otherwise decreases proportionately
<b>Tuberculosis Control Program (5)</b>				
Case notification rate (PBC and relapse) (%)	New bacteriologically confirmed pulmonary cases registered in NTP in defined time and area	100	3	100% equals 3, otherwise decreases proportionately
Treatment success rate (%)	[(Number of new positive cases (bacteriologically confirmed who got smear negative result in the last month of treatment and on at least one previous occasion) + (number of new positive cases registered who completed treatment but did not meet the criteria for cure or failure)]	100	2	2.5 for coverage $\geq 90\%$ , otherwise decreases Proportionately
<b>Malaria Control Program (3)</b>				
Annual Blood examination rate	Number of blood slides examined (microscopic, RDT, both)	100	3	3 for coverage $\geq 10\%$ , otherwise decreases proportionately
<b>Leprosy (5)</b>				
Leprosy Prevalence Rate	Number of leprosy cases under treatment (PB and MB)	10000	5	0 for 5 and 5 for above 1.95 negative marks proportionality

Indicator	Numerator	Multiplier	Weight	Evaluation Criteria
<b>Reporting status of HMIS, physical and financial progress (5)</b>				
Complete & timely Reporting	NA	NA	5	5 for complete & timely reporting otherwise decreases proportionately
<b>District Annual Health Report (5)</b>				
District Annual Health Report	NA	NA	5	5 for excellent, otherwise decreases accordingly
<b>Jestha nagarik treatment program (2)</b>				
Jestha Nagrik treatment target (70 years estimated pop.) vs achievements	Number of Jestha Nagarik service given	100	2	2 for $\geq 100\%$ then otherwise decreases proportionately
<b>Remoteness (3)</b>				
Remoteness		3		3 for Rukum Purba, 2 for Rolpa, Pyuthan, Gulmi, Arghakhanchi & Palpa, and 1 for Nawasprasi, Kapilvastu, Bardiya and 0.5 for Dang, Banke, Rupendehi
<b>Achievement Status (3)</b>				
Achievement uniformity		3		3 for $CV \leq$ excluding negative indicators and Evaluation by HDs, Otherwise decreases proportionately
<b>Financial Management (5)</b>				
Budget absorption capacity		2.5		2.5 for 100% expenditure, otherwise decreases proportionately
Irregularities Settlement (IS)		2.5		2.5 for $IS \geq 50\%$ , otherwise decreases proportionately
<b>Evaluation by Health Directorates (10)</b>				
Evaluation by Health Directorate		10		Retention of HO at district=1, District health Presentation=2, Co-ordination, Participation and response=3, Commitment=3 and innovation-2

**Table 8.1.3: Detail criteria for Ayurveda performance evaluation:**

S.N	Indicators	Marking
1	Reporting rate on DHIS2	10
2	% of total new Client served	10
3	% of total OPD served	10
4	% of Purbakarma and Panchakarma among total patients	10
5	Financial/Physical Progress	10
6	Irregularity Clearance	10
7	Annual Report	10
8	Innovative work	10
9	Remoteness	10
10	Response to MoH/HD	10
	Total	100

**Table 8.1.4: Ranking of Hospital performance evaluation:**

Hospitals	Marks obtained	Rank of this year	Rank of last year
Bardiya Hospital	74.61	1	2
Kapilbastu Hospital	71.76	2	1
Lumbini Provincial Hospital	70.36	3	4
Gulmi Hospital	69.14	4	3
Bhim Hospital	67.74	5	10
Arghakhanchi Hospital	67.21	6	5
Prithibi Chandra Hospital	67.04	7	8
Rapti Provincial Hospital	66.4	8	7
Pyuthan Hospital	63.05	9	6
Rolpa Hospital	62.81	10	9
Rampur Hospital	55.1	11	11
Palpa Hospital	53.2	12	12
Rukum Purba Hospital	49.2	13	13

**Table 8.1.5: Ranking of Health Office performance evaluation:**

<b>Health Office</b>	<b>Marks obtained</b>	<b>Rank of this year</b>	<b>Rank of last year</b>
RUKUM EAST	70.56	7	12
ROLPA	76.07	2	6
PYUTHAN	72.59	5	3
GULMI	73.05	4	5
ARGHAKHANCHI	67.10	10	10
PALPA	76.76	1	8
NAWALPARASI WEST	71.59	6	4
RUPANDEHI	73.49	3	1
KAPILBASTU	60.63	12	7
DANG	67.55	9	9
BANKE	66.33	11	11
BARDIYA	69.84	8	2

**Table 8.1.6: Ranking of Ayurveda performance evaluation:**

<b>Organization</b>	<b>Marks obtained</b>	<b>Rank of this year</b>	<b>Rank of last year</b>
Ayurveda Health Center, Rukum Purba	44.94	12	11
Ayurveda Health Center, Rolpa	55.60	10	10
Ayurveda Health Center, Pyuthan	56.01	9	7
Ayurveda Health Center, Gulmi	60.42	7	6
Ayurveda Health Center, Arghakhanchi	61.03	5	4
Ayurveda Health Center, Palpa	60.56	6	5
Ayurveda Health Center, Nawalparasi West	57.42	8	12
Lumbini Ayurveda Chikitsalaye	65.72	2	9
Ayurveda Health Center, Kapilbastu	72.23	1	1
Ayurveda Health Center, Rapti Dang	62.05	4	3
Ayurveda Health Center, Banke	55.14	11	8
Ayurveda Health Center, Bardiya	62.64	3	2

**Table 8.1.7: Indicator wise achievement of district and its ranking:**

Indicators	Drop Out (DPT1 Vs DPT3)	Measles2 Coverage	TD2 &TD2+ Coverage	Average growth monitoring visit (U vis)	% of exclusive breast feeding	Diarrheal Case treated with ORS and Zinc	% of severe pneumonia among new cases	%new acceptor MWRA TEMPORARY	Sterilization target vs achievements	% of pregnant women who had four ANC checkups as per protocol	% of institutional delivery	% of PNC 4th Visit	Home delivery	% Screening of uterine prolapsed	% of PHC ORC Conducted	Mother group Meeting Conducted	Annual Blood examination rate	TB Case notification	TB Success rate	Leprosy PR	HMIS Timely Reporting rate	Indicators \ Consistency (standard deviation)	Financial progress	Jestha nagarik treatment program	Irregularities	Performance marking by HD	Annual Report preparation	Remoteness Marks	Total Marks	Rank of this year	Last year Rank
RUKUM EAST	1.88	4.27	2.23	0.58	1.45	1.99	2.61	0.62	1.20	4.31	2.27	2.99	1.23	0.31	2.32	2.49	0.02	1.22	2.78	5.00	5.0	1.90	2.45	2.5	2.48	6.5	5	3	70.56	7	12
ROLPA	1.73	3.88	1.88	1.74	2.18	2.00	2.88	0.44	2.95	3.21	2.00	2.43	4.12	0.40	2.43	2.44	0.05	1.62	2.83	5.00	4.9	1.96	2.49	1.6	2.50	9.5	5	2	76.07	2	6
PYUTHAN	1.78	3.78	1.71	1.21	2.31	2.00	2.61	0.48	4.40	2.89	2.15	1.82	2.83	0.21	2.24	2.44	0.10	2.00	2.75	4.13	4.9	1.85	2.30	1.1	2.50	9.5	4.5	2	72.59	5	3
GULMI	1.75	4.50	1.89	2.00	2.80	2.00	2.67	0.35	1.10	3.73	1.66	3.14	4.59	0.26	2.49	2.49	0.22	1.39	2.81	4.49	4.8	1.92	2.31	2.1	2.29	8	3.25	2	73.05	4	5
ARGHAKHANCHI	1.83	4.39	1.70	1.14	2.96	2.00	2.97	0.47	0.70	3.35	1.37	1.85	2.44	0.29	2.44	2.45	0.13	1.67	2.86	5.00	5.0	1.80	1.74	0.7	2.34	6.5	5	2	67.10	10	10
PALPA	1.53	3.69	1.73	1.96	1.23	2.00	2.94	0.37	4.80	5.00	3.00	1.90	4.71	1.03	2.50	2.49	0.10	1.83	2.69	3.44	4.9	2.01	2.06	1.6	2.50	9	3.75	2	76.76	1	8
NAWALPARASI WEST	2.50	4.38	2.23	1.24	2.21	1.98	2.85	0.29	4.50	4.97	1.30	1.73	4.48	0.10	2.40	2.49	0.15	1.62	2.77	0.00	4.9	1.88	1.95	1.0	2.25	9.5	5	1	71.59	6	4
RUPANDEHI	2.50	4.50	2.52	0.99	1.89	2.00	2.91	0.43	5.00	5.00	3.00	2.28	4.72	0.25	2.50	2.47	1.43	2.00	2.76	1.41	4.9	1.65	1.98	0.5	1.95	6.5	5	0.5	73.49	3	1
KAPILBASTU	2.20	4.05	2.23	0.75	1.61	1.91	2.67	0.38	5.00	3.61	1.75	0.91	3.14	0.15	2.03	2.31	0.35	1.76	2.71	0.00	4.9	1.82	1.10	0.9	2.47	6	4.75	1	62.45	12	7
DANG	2.23	4.10	2.10	0.71	1.55	1.99	2.88	0.36	5.00	3.96	2.53	0.87	4.53	0.21	2.13	2.47	0.53	2.00	2.88	4.51	4.9	1.66	1.77	0.9	1.27	5	4	0.5	67.55	9	9
BANKE	1.43	4.47	2.70	0.80	1.70	1.98	2.97	0.34	5.00	4.20	3.00	1.50	4.40	0.09	2.26	2.37	0.89	2.00	2.79	0.00	4.7	1.47	2.19	1.6	2.48	5	3.5	0.5	66.33	11	11
BARDIYA	1.95	3.88	2.14	1.09	1.76	1.99	2.88	0.38	2.95	3.43	1.84	1.93	4.95	0.26	2.44	2.43	0.67	1.95	2.81	0.00	5.0	1.92	2.12	1.1	2.48	9.5	5	1	69.84	8	2

*Table 8.1.8: Indicator wise achievement of Hospitals and its ranking:*


Hospital Name	Minimum service Standard (Score: 50%)	Reporting Rate(Score=5): 5 for 100% then decrease	Reporting Rate on time (Score=5): 5 for 100% then decrease	% of OPD service reported among total popu.	IPD service reported	% of institutional deliveries among district' s live birth	Budget Utilizatio	Irregularity Clearanc e (Score=5	Remoteness	Remoteness	Annual Report	Total	Rank	Last year Rank
Lumbini Provincial Hospital	32.00	5.00	5.00	1.30	3.09	6.84	4.25	1.64	0.50	8.50	2.25	70.36	3	4
Rapti Provincial Hospital	33.60	5.00	5.00	0.42	0.68	2.36	4.82	4.53	0.50	6.00	3.50	66.40	8	7
Bhim Hospital	35.20	5.00	5.00	0.41	0.71	1.57	4.69	4.66	0.50	6.00	4.00	67.74	5	10
Prithibi Chandra Hospital	32.80	5.00	5.00	0.27	0.28	1.81	4.92	4.97	1.00	8.00	3.00	67.04	7	8
Kapilbastu Hospital	38.40	5.00	5.00	0.31	0.47	1.44	4.91	4.99	1.00	6.00	4.25	71.76	2	1
Palpa Hospital	23.20	5.00	5.00	0.41	0.06	0.08	4.20	4.76	2.00	6.00	2.50	53.20	12	12
Rampur Hospital	24.00	5.00	5.00	0.28	0.03	0.74	4.07	4.98	2.00	7.00	2.00	55.10	11	11
Arghakhanchi Hospital	32.40	5.00	5.00	0.25	0.32	2.07	3.72	4.95	2.00	7.00	4.50	67.21	6	5
Gulmi Hospital	35.60	5.00	5.00	0.37	0.27	1.61	3.56	4.98	2.00	7.00	3.75	69.14	4	3
Rolpa Hospital	28.40	5.00	5.00	0.14	0.15	0.94	4.68	5.00	2.00	7.00	4.50	62.81	10	9
Pyuthan Hospital	29.20	5.00	5.00	0.23	0.42	3.47	4.82	4.66	2.00	5.00	3.25	63.05	9	6
Rukum Purba Hospital	16.40	5.00	5.00	0.06	0.06	1.46	4.33	4.89	3.00	6.00	3.00	49.20	13	13
Bardiya Hospital	38.00	5.00	5.00	0.56	0.46	2.16	4.68	5.00	1.00	9.00	3.75	74.61	1	2


**Table 8.1.9: Indicator wise achievement of Provincial Ayurveda Health facility and its ranking:**

Ayurveda Offices	Financial progress	Reporting rate on DHIS2	% Total Client in total population	% OPD visit in total population	% of Purbakarma	Beruju clearing	Annual Report	Innovative works	Remoteness	Marks from HD	Total	Rank of this fiscal	Rank of last fiscal
Ayurveda Health Center, Rukum Purba	5.56	10.00	0.20	0.18	0.00	10.00	0.00	6.00	5.00	8.00	44.94	12	11
Ayurveda Health Center, Rolpa	8.93	10.00	1.63	1.85	0.94	10.00	4.25	6.00	4.00	8.00	55.60	10	10
Ayurveda Health Center, Pyuthan	9.99	10.00	2.48	1.85	0.69	10.00	3.00	6.00	4.00	8.00	56.01	9	7
Ayurveda Health Center, Gulmi	10.00	10.00	3.48	3.95	2.00	10.00	3.00	6.00	4.00	8.00	60.42	7	6
Ayurveda Health Center, Arghakhanchi	9.47	10.00	2.15	3.95	2.72	10.00	3.75	7.00	4.00	8.00	61.03	5	4
Ayurveda Health Center, Palpa	9.13	10.00	3.30	3.26	3.38	10.00	3.50	7.00	3.00	8.00	60.56	6	5
Ayurveda Health Center, Nawalparasi West	9.31	10.00	3.31	2.51	2.79	10.00	2.50	6.00	3.00	8.00	57.42	8	12
Lumbini Ayurveda Chikitsalaye	9.70	10.00	6.66	5.75	8.03	3.58	3.00	9.00	2.00	8.00	65.72	2	9
Ayurveda Health Center, Kapilbastu	9.42	10.00	6.68	6.55	7.58	10.00	3.00	8.00	3.00	8.00	72.23	1	1
Ayurveda Health Center, Rapti Dang	9.23	10.00	3.93	3.82	5.08	10.00	3.00	7.00	2.00	8.00	62.05	4	3
Ayurveda Health Center, Banke	9.99	10.00	3.45	3.69	2.34	6.42	3.25	6.00	2.00	8.00	55.14	11	8
Ayurveda Health Center, Bardiya	9.80	10.00	2.75	2.64	4.45	10.00	4.00	8.00	3.00	8.00	62.64	3	2
<b>Full Marks</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>100.00</b>		

## Chapter 9: Health Related External Development Partners


The constitutional essence of Coordination, Collaboration and Co-existence among the Health Development Partners and Government counterparts have been adopted effectively in Lumbini province. The hierarchy of results discussed in the previous sections are a common product of consolidated efforts of government and development partners. Ministry of Health, Health Directorate, Provincial Health Logistic Management Center, Health Training Center and Provincial Public Health Laboratory acknowledge the partnership with health development partners and their contribution to improve the health indicators of province. This chapter highlights the major thematic area and scope of activities, geographical coverage, and key achievements in fiscal year 2079/080.


Name of Organization/Program	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2079/080	Contact Person/s (Name, Designation, Email, Phone number)	Working in Fiscal Year 80/081 in province (Yes / No)
<p><b>World Health Organization (WHO)</b></p> 	<p>Health System Strengthening, Adolescent Health, Immunization/Covid Vaccination, Disease control and surveillance and Health Emergency, Non- Communicable Disease and Mental Health, Communicable Disease and Neglected Tropical Disease</p>	<p>Province and 12 districts</p>	<ul style="list-style-type: none"> <li>• Supported to develop guidelines, policy under guidance of MOH. Eg. (Poshan Jhola, implementation Plan, Road Map on Public Health Laboratory,etc.)</li> <li>• Supported to develop Guideline and Manual on Annual Health Program (Bhansaghar Sudhar, Swastha Jeevan Shaili, etc )</li> <li>• Supported to organize AAHA program, Health Policy Dialogue in selected local levels.</li> <li>• Technical support as requested by MOH.</li> <li>• Capacity building of different levels of health workers on Mental Health and PEN Package as well community engagement on Mental Health</li> <li>• Formation of HDPRP plan of all the HUB hospitals.</li> <li>• Information Management- Resource mapping, Situation analysis, preparation of maps, situation reports and presentations, Daily Media Monitoring</li> <li>• Outbreak Investigation- Food Poisoning and Measles</li> </ul>	<p>Shankhuk Bhatta- Provincial Health Officer, 9849321269, <a href="mailto:bhattas@who.int">bhattas@who.int</a></p> <p>Dr. Sagar Tiwari SIMO 9857020614 <a href="mailto:tiwarisa@who.int">tiwarisa@who.int</a></p> <p>Anupam Ray Provincial Coordinator 9815851711 <a href="mailto:anray@who.int">anray@who.int</a></p>	<p>YES</p>

Name of Organization/Program	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2079/080	Contact Person/s (Name, Designation, Email, Phone number)	Working in Fiscal Year 80/081 in province (Yes / No)
			<ul style="list-style-type: none"> <li>• Provincial and Local level RRT orientation, capacity building program, team and committee formation.</li> <li>• Expedited efforts in achieving Visceral Leishmaniasis (VL) elimination, Coordination, and advocacy for Kala-Azar elimination program.</li> <li>• Conducted regular VPD surveillance, immunization session site and DVS monitoring in all twelve districts.</li> <li>• Conducted workshops in hospitals, Health post, primary health care centers, private hospitals, and clinics on VPD surveillance activities.</li> <li>• Provided technical support in basic immunization training for health workers.</li> <li>• Provided technical support in Measles outbreak and its response (ORI)</li> <li>• Conducted Root cause analysis for Measles outbreak in Lumbini province.</li> </ul>		
<p>UNICEF    for every child</p>	<p>Child Health,  Vaccination including  C-19, Risk and  Communication  Nutrition</p>		<p><b>Assisted in Outbreak Response Immunization and MR-ORI Campaign: (490935 Children vaccinated)</b></p> <ul style="list-style-type: none"> <li>• Contributed in vaccine transportation, and provided technical support on planning, monitoring, cold chain management during Measles Outbreak time,</li> <li>• Assisted health office/s and local government in conducting outbreak response immunization/campaign in Banke, Sitganga/Arghakhanchi , and Barddiya and Dang,</li> <li>• Regular technical support for PHLMC and health directorate on Routine, COVID-19 Vaccination</li> <li>• Distributed leaflets (#28500); 20,000 pc in Banke (#5000 pc) in Dang and 3500 in Bardiya through Red Cross,</li> </ul>	<p><b>Riddhi Sharma</b>  Chief  UNICEF Bhairahawa,  <a href="mailto:risharma@unicef.org">risharma@unicef.org</a>  9857017269</p> <p><b>Meena Thapa</b>  Nutrition Officer  <a href="mailto:methapa@unicef.org">methapa@unicef.org</a>  9857017258</p> <p><b>Yangzi Sherpa,</b></p>	<p>Yes</p>

Name of Organization/Program	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2079/080	Contact Person/s (Name, Designation, Email, Phone number)	Working in Fiscal Year 80/081 in province (Yes / No)
			<ul style="list-style-type: none"> <li>• Assisted districts/province to sustain full immunization activities;</li> <li>• Assisted HD to organize immunization coordination committee's meeting at province level,</li> <li>• <b>Capacity building training on EVM-SOP:</b> financially &amp; technically assisted, trained 124 dedicated health workers of vaccine sub-centre/s by covering all 112 sites of 12 districts),</li> <li>• Contributed to auditing GAVI Supporting Vaccine, jointly with GAVI team/HD</li> <li>• Supplied temperature recording logbook, maintenance plan and monitored of vaccine sub-centres</li> </ul> <p><b>As a new intervention in Palika:</b></p> <ul style="list-style-type: none"> <li>• Assisting Shivaraj Municipality, Kapilvastu to establish "The SMART EPI Clinic."</li> </ul> <p><b>Quality Maternal &amp; Child Health Care</b></p> <ul style="list-style-type: none"> <li>• Assisted NHTC in conducting assessment for SNCU training site accreditation at Lumbini Provincial Hospital</li> </ul> <p><b>Health and Nutrition Emergency</b></p> <ul style="list-style-type: none"> <li>• Provided support for the Multi-Hazard Emergency Preparedness and Response plan through SUPER Project.</li> <li>• Capacity building of 17 high risk Palika's on Nutrition in Emergency and prepare Multi hazard response plan for Nutrition.</li> <li>• Managed preposition of essential emergency supplies (e.g. Health kits, LLIN, ORS, Blankets, water purifier)</li> </ul> <p><b>Multi-Sector Nutrition:</b></p> <ul style="list-style-type: none"> <li>• Nutrition Specific <i>and</i> Nutrition Sensitive <i>Interventions</i></li> <li>• Supported the Nutrition SMART survey in 2 districts Kapilvastu and Rukum East.</li> </ul>	<p>Health Officer  <a href="mailto:ysherpa@unicef.org">ysherpa@unicef.org</a>  Mob: 9857017260</p> <p><b>Shiva Subedi</b>  9851216884  Immunization Coordinator(UNV)  <a href="mailto:spsubedi@unicef.org">spsubedi@unicef.org</a></p> <p><b>Khushiram Chaudhary</b>  Data Management &amp; Information Technician(UNV)  9848080483  <a href="mailto:ktharu@unicef.org">ktharu@unicef.org</a></p>	


Name of Organization/Program	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2079/080	Contact Person/s (Name, Designation, Email, Phone number)	Working in Fiscal Year 80/081 in province (Yes / No)
			<ul style="list-style-type: none"> <li>• Assisted in planning &amp; and implementation of the MSNP interventions at the province and <b>47</b> Local levels.</li> <li>• Supported for the capacity building of LG (local governments) for Nutrition Friendly Local Governance in <b>20</b> Palikas.</li> <li>• Support for the preparation of the nutrition status paper of <b>8</b> Palikas.</li> <li>• Engagement of women in income generation through women cooperatives/groups in <b>42</b> Palikas.</li> <li>• Integration of Child Cash Grant with Nutrition by orientation to the mothers in <b>47</b> Palikas.</li> <li>• Establishment of WASH corner and menstrual hygiene management in <b>13</b> schools</li> <li>• Capacity building of ECD facilitators and parents on importance of nutrition</li> </ul> <p><b>Behavior Change Communication and strengthening HMIS</b></p> <ul style="list-style-type: none"> <li>• Printed and supplied IEC materials posters (<b>#483 set</b>) for communication for immunization service (Immunization schedules, counselling poster), for the <b>7</b> districts.</li> <li>• <i>Financially</i> and technically assisted Nepalgunj Municipality in searching zero-dose children and drop-out children during full immunization month; through line-listing, and community engagement in Banke,</li> <li>• Regular support on follow-up, immunization data quality improvement, and line-listing in Nepalgunj Municipality.</li> </ul>		

Name of Organization/Program	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2079/080	Contact Person/s (Name, Designation, Email, Phone number)	Working in Fiscal Year 80/081 in province (Yes / No)
<p><b>USAID's Strengthening System for Better Health Activity (SSBH)</b></p> <p><i>Strengthening Systems for Better Health Activity</i></p> <p><i>स्वास्थ्यको लागि राम्रम प्रणाली</i></p>	<p>-Maternal, Neonatal &amp; Child Health and Family Planning</p> <p>-Health Systems and Governance</p> <p>-Generation and Use of Health Information</p>	<p>6 Tarai districts - Nawalparasi, Rupendehi, Kapilvastu, Dang, Banke and Bardiya)</p>	<ul style="list-style-type: none"> <li>• Policy/Advocacy- Supported to develop Health Sector Strategic Implementation plan, Training plan.</li> <li>• Clinical Trainings: SBA, Implant, IUCD, CoFP/Counselling</li> <li>• Strengthening Training Site (RPH and LPH)</li> <li>• DHIS2 Coach/Mentor development, RDQA, HIS Coaching/Mentoring, Annual health review, Annual municipal planning</li> <li>• MNCH Coaching Mentoring</li> <li>• GESI training to Municipalities</li> <li>• HP-MSS, HFOMC, SDC orientation in selected municipalities/HFs</li> <li>• Updated municipal Health profile of all municipalities.</li> <li>• Municipal Health Emergency preparedness and response</li> </ul>	<p>Nila Kantha Gautam- Provincial Manager- Health Governance Lead</p> <p>Mobile: 9858751001</p> <p>Nilakantha_Gautam@ssbhnepal.org</p>	<p>No (Project Phase out)</p>
<p><b>USAID/Suaahara-II</b></p> <p><b>SUAAHARA</b></p> <p><i>Building Strong &amp; Smart Families</i></p> <p><b>Helen Keller Intl</b></p>  <p><b>Transforming Lives Through Nutrition (TLTN)</b></p>	<p>Integrated Nutrition Program Nutrition Child Health Agriculture WASH Health Education and Communication (IEC/BCC) GESI</p>	<p>109 Municipalities of 12 districts</p> <p>TLTN: 16 Local Level of 3 districts (West nawalparashi,</p>	<ul style="list-style-type: none"> <li>• Capacity building of service providers on MIYCN, IMAM, CB-IMNCI and management of Low birth -weight baby</li> <li>• Strengthening OTCs services; review meeting, onsite coaching</li> <li>• Interpersonal communication through home visit</li> <li>• Strengthen Health mother groups meeting, food demonstrations, celebrations key life events, peer facilitators.</li> <li>• Developed /build capacity of coaches for nutrition &amp; CB-IMNCI program.</li> <li>• Support to roll out mother baby friendly Hospital (MBFHI) initiative.</li> <li>• Provide support for municipality, district and province level nutrition review meetings.</li> </ul>	<p>Bharat Sharma, Project Coordinator, (Provincial Focal Point)</p> <p>Mobile: 9852025948, <a href="mailto:bsharma@hki.org">bsharma@hki.org</a></p>	<p>Suaahara II program closed in Nov 2023</p> <p>Yes (TLTN Project)</p>




Name of Organization/Program	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2079/080	Contact Person/s (Name, Designation, Email, Phone number)	Working in Fiscal Year 80/081 in province (Yes / No)
		Ruapandei and Kapilbastu)	<ul style="list-style-type: none"> <li>Strengthen local level food security committees on 36 local levels.</li> </ul>		
<p><b>Nepal Health Sector Support Program (NHSSP)</b></p> 	Health System Strengthening Governance and Accountability,	Province and selected Municipalities	<p><b>Governance and Accountability:</b> Technical assistance for:</p> <ul style="list-style-type: none"> <li>Development of Annual policy, programme, AWPB and program implementation guidelines</li> <li>Health system analysis and sharing of findings.</li> <li>Policy dialogue to identify provincial health priorities.</li> <li>Preparation of Procurement Improvement Plan</li> <li>Development of Financial Management Improvement Plan</li> <li>Analysis and sharing of Health sector Budget.</li> <li>Execution of annual work plan and budget on regular basis</li> <li>Development of municipal health policy and Act in local levels.</li> <li>Coaching on procurement process of medicine and commodities</li> <li>Capacity building of HFOMC members in focused local levels</li> </ul> <p><b>Equity based Planning:</b> Technical assistance on:</p> <ul style="list-style-type: none"> <li>Training to health workers on revised HMIS tools</li> <li>Execution of annual and semi-annual review</li> <li>Preparation of annual report</li> <li>Roll out and follow-up of Routine Data Quality Assessment (RDQA)</li> <li>Coaching &amp; mentoring on HMIS/DHIS2 &amp; e-LMIS</li> <li>Onsite coaching on data verification in health facilities.</li> <li>Regularization of monthly meeting at palika level</li> <li>Planning and implementation learning circle</li> <li>Evidence generation and its use for planning process</li> </ul>	<p>Deepak Chhetri, Provincial Lead Email: <a href="mailto:deepak@nhssp.org.np">deepak@nhssp.org.np</a> Mobile: 9857820104</p> <p>Alok Nath Jha, Evidence based planning Coordinator Email: <a href="mailto:alok@nhssp.org.np">alok@nhssp.org.np</a> Mobile: 9845367994</p> <p>Tara Nath Yogi, Quality and Coverage Coordinator Email: <a href="mailto:tara@nhssp.org.np">tara@nhssp.org.np</a> Mobile: 9868922722</p>	No


Name of Organization/Program	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2079/080	Contact Person/s (Name, Designation, Email, Phone number)	Working in Fiscal Year 80/081 in province (Yes / No)
			<ul style="list-style-type: none"> <li>• Execution of Municipal level annual review</li> </ul> <p><b>Quality and coverage:</b>            Technical assistance on:</p> <ul style="list-style-type: none"> <li>• Orientation on BHS- STP to develop district level facilitators.</li> <li>• Functionality assessment and regular reporting from OCMC site</li> <li>• Orientation to health workers on MPDSR</li> <li>• Strengthening and regular monitoring of functionality of CEONC sites</li> <li>• MNH onsite Clinical coaching in health facilities</li> </ul>		



Name of Organization/Program	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2079/080	Contact Person/s (Name, Designation, Email, Phone number)	Working in Fiscal Year 80/081 in province (Yes / No)
		RHIP project – All 3 municipalities of Rukum East	<ul style="list-style-type: none"> <li>• Capacity Building of HFOMC as per national guidelines in 6 health facilities</li> <li>• DHIS-2 Training to 17 health workers</li> <li>• MNH update Training to 7 HWs</li> <li>• Construction of 3 Maternity Waiting Home, 1 BCs, 4 lab facilities</li> <li>• Support 2 RUSG Machin</li> </ul>	Rajendra Rijal Team leader Mobile: 9857029471 <a href="mailto:rajendra.ruchal@fairmed.ch">rajendra.ruchal@fairmed.ch</a>	
	<ul style="list-style-type: none"> <li>• HIV &amp; AIDS Program</li> <li>• Tuberculosis Program</li> <li>• Malaria Program</li> </ul>	<ul style="list-style-type: none"> <li>• HIV Prevention, Care and support Program in 11 districts</li> </ul>	HIV Program <ul style="list-style-type: none"> <li>• 145,647 Vulnerable and key population reached through prevention package.</li> <li>• 136,688 Vulnerable and key population performed HIV testing through community led testing which is 67% contribution in overall HIV testing in the province.</li> </ul>	Mim Bahadur Singh 9843435559 <a href="mailto:mim.singh@savethechildren.org">mim.singh@savethechildren.org</a>  Subhas Shrestha 9857062783	Yes


Name of Organization/Program	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2079/080	Contact Person/s (Name, Designation, Email, Phone number)	Working in Fiscal Year 80/081 in province (Yes / No)
		<ul style="list-style-type: none"> <li>• TB Case finding Support program in 9 districts</li> <li>• Malaria vector control and case management as per need and as per case reporting</li> </ul>	<ul style="list-style-type: none"> <li>• 135 new HIV cases have been identified and enrolled in treatment which is 31% contribution in overall case finding in the province.</li> <li>• 2939 PLHIV received home based care and support service through CHBC team</li> <li>• 2034 PLHIV received temporary residential support with positive prevention counselling through CCC.</li> </ul> <p>TB Program</p> <ul style="list-style-type: none"> <li>• 4799 new TB cases are diagnosed and ensured for treatment enrollment via sputum transportation, contact tracing, FAST program, TB investigation among SAM/MAM children, Private sector mobilization and DR referral center which is 62% contribution in overall TB case finding in the province.</li> <li>• 784 children under five staying with their parents who are currently taking TB medicine and received preventive treatment (3HR) as per the latent TB treatment guideline.</li> <li>• 36 DR cases were detected from DR referral centers and 36 cases are enrolled for DR TB treatment.</li> </ul> <p>Malaria Program</p> <ul style="list-style-type: none"> <li>• 181 Malaria cases ensured from MDIS reporting and investigated according to the national CBI guideline.</li> <li>• Conducted 12 Malaria re-orientation program to HWs that increased 61% malaria testing from HFs.</li> <li>• 2 foci investigation has been conducted with financial and technical support to make the clear-foci as per elimination milestone under vector control section.</li> </ul>	<a href="mailto:Subhas.shrestha@savethechildren.org">Subhas.shrestha@savethechildren.org</a>	


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<p><b>Nick Simons Institute (NSI)</b></p> 	<p>Curative Support Service Program (CSSP), Hospital Strengthening Program (HSP), and Training Program</p>	<p>18 hospitals of Lumbini Province (14 Provincial and 4 Local Level Hospitals)</p>	<ul style="list-style-type: none"> <li>Started Surgical Services from Rukum East and Bhaluwang Hospital</li> <li>Provide support to deploy 68 clinical staffs (Consultants, GPs, MO, SN, AA, BMET)</li> <li>Provide biomedical equipment in 6 province level Hospital</li> <li>Provide technical and financial support on MSS Implementation</li> <li>Conducted MSS orientation to develop MSS resource persons</li> <li>Clinical training: CTS, ASBA, SBA, OTTM, PEC, ECCT, MLP, Cardiac Conclave, SAFE course</li> <li>Provide support to strengthen training site</li> </ul>	<p>Suraj Shrestha Mob.: 9860104056   545 1978 <a href="mailto:surajshrestha@nsi.edu.np">surajshrestha@nsi.edu.np</a>   <a href="mailto:nsi@nsi.edu.np">nsi@nsi.edu.np</a></p>	<p>YES</p>
<p><b>WaterAid</b></p> 	<p>Child health (Hygiene Behavior change)</p>	<p>12 districts</p>	<ul style="list-style-type: none"> <li>Technical support to government AWPB activities on immunization in PHD and HO.</li> <li>(Facilitation in basic and refresher training immunization and Hygiene promotion programs,</li> <li>Monitoring of immunization and hygiene promotion sessions at EPI clinics.)</li> </ul>	<p>Manoj Nepal 9851017373 <a href="mailto:Manubabu14@gmail.com">Manubabu14@gmail.com</a></p>	<p>Yes</p>
<p><b>AHF Nepal</b></p> 	<p>Health care delivery/Quality of care specially in HIV testing and treatment</p>	<p>Lumbini Provincial Hospital, Kapilvastu Hospital, Bheri Hospital and one HIV info Center at</p>	<p>HR support in Hospitals: 13 Condom Distributed: 69800 pcs IEC materials distributed: 5289 Transportation Support: 685 Lab Support: 65 Nutrition Support: 402 CMEs: 29 TWG Meetings: 23 Inception Meetings: 3</p>	<p>Dharma Raj Bhattarai 9857060137 <a href="mailto:Dharma.Bhattarai@aidhealth.org">Dharma.Bhattarai@aidhealth.org</a></p>	<p>Yes</p>

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		Sunauli Boarder			
<b>United Mission to Nepal (UMN)</b> 	Mental Health (MH)-3 districts MNCH-3 districts, ASRH, FP, WASH-Nawalparasi	Kapilvastu ( Yesodhara and Mayadevi RM) Nawalparasi West ( Pratappur and Palhinandan RM) Rukum East ( Bhume and Putha uttarganna RM)	<b>Kapilvastu:</b> <ul style="list-style-type: none"> <li>• A total of 32 health workers received Basic Mental Health training (NHTC-Module-2) and psychosocial counselling training (NHTC-Module-1)</li> <li>• 203 FCHVs oriented on mental health and Community Informant Detection Tool (CIDT) to identify and refer the people with mental illness to health post.</li> <li>• Total 11 health facilities have started basic mental health services and total 403 person with mental illness received mental health service.</li> <li>• Total 21 health workers received DHIS-2 training, now the health posts have started to report mental health information through the reporting system</li> <li>• Provided psychotropic medicine support to 11 health facilities.</li> <li>• 952 community people oriented on mental health issues.</li> <li>• Conducted mental health camp in 2 RMs, total 281 people received mental health services through psychiatrist.</li> <li>• The project supported to 8 people with mental illness on income generation activity.</li> <li>• The project reached 4143 direct beneficiaries throughout the FY 2079-2080; Nawalparasi:</li> <li>• The Community health project has supported the process to certify AFHS standard developed by MoHP, FWD</li> </ul>	Lalita Chaudhary, Project Manager-Health, Kapilvastu, 9848420260 <a href="mailto:lalita.chaudhary@umn.org.np">lalita.chaudhary@umn.org.np</a>  Ishwar KC, Project Manager-Health, Bardhaghat, Nawalparasi, 9845204640, <a href="mailto:Ishwar.kc@umn.org.np">Ishwar.kc@umn.org.np</a>  Nabin Prasad Chaudhary, Project Manager-Health Rukumkot, 9849523595 <a href="mailto:nabin.chaudhary@umn.org.np">nabin.chaudhary@umn.org.np</a>	Yes


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			<ul style="list-style-type: none"> <li>• In total 90 people have taken mental health services this year from 2 RMs. By now, they are recovering from their problems and returning to a normal life.</li> <li>• The long-acting FP method i.e., implant services is expanded to ten local HFs This year, 967 women received implant services from these health facilities</li> <li>• 45 HHs of 201 family members (including 22 PwDs) have been using safe drinking water this year.</li> <li>• Large bio sand filters (120ltr/hr capacity+ 1000 ltr storage tank) with water pumps has been provided to 4 schools and 3 HFs, a sanitary pad disposal chamber for 1 school, soak pits for 2 schools, hand washing corners for 3 schools, a hand pump for 1 school and 2 HFs, and a placenta pit for 2 HFsRukum East:</li> <li>• A total of 35 health workers received Basic Mental Health training (NHTC-Module-2) and psychosocial counselling training (NHTC-Module-1)</li> <li>• 69 FCHVs oriented on mental health and Community Informant Detection Tool (CIDT) to identify and refer the people with mental illness to health post</li> <li>• Total 15 health facilities have started basic mental health services and total 498 persons with mental illness received mental health service</li> <li>• A total of 25 health workers received DHIS-2 training, now the health posts have improved the quality of reporting, and started to report mental health information through the reporting system</li> <li>• 952 community people oriented on mental health issues.</li> </ul>		


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			<ul style="list-style-type: none"> <li>• Conducted mental health camp in Bhume RMs, where 450 people received specialist mental health serv</li> <li>• 15 HFs were strengthened with essential health equipments, placenta pit-1, and 2 solar back up were supported in HFs of Rukum East</li> <li>• A total of 21 health workers including Skilled Birth Attendants (SBAs) were provided with MNH updates and clinical mentoring, helped to improve the quality of MNH services</li> <li>• 20 episodes were broadcasted through the local FM radio station</li> <li>• 687 (F:590, M:97) community members have been sensitised on mental health review</li> <li>• 765 community members including children and women benefited from the gender and child-friendly toilets-2 in schools and HFs.</li> <li>• The project supported 17 mother groups and PPLPs through Group Capacity Assessment, sensitisation on the settlement level planning process, and orientations on rights and entitlements of right holders</li> </ul>		



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<p><b>FHI360 (USAID-PEPFAR-EpiC Nepal)</b></p> 	<p>EpiC- HIV (HIV Prevention, Care, Support and Treatment) EpiC-PSM (Procurement &amp; Supply Chain Management) &amp; EpiC-COVID Response</p>	<p>Bardiya, Banke, Dang, Gulmi Kapilvastu, Nawalpaarsi-West, Palpa, Rolpa &amp; Rupandehi.</p>	<p>EpiC- HIV (HIV Prevention, Care, Support and Treatment)</p> <ul style="list-style-type: none"> <li>• 5,660 key populations and priority populations were reached with individual and/or small group-level HIV prevention interventions designed for the target population.</li> <li>• 763 Individuals were diagnosed and treated for Sexually Transmitted Infections (STIs) using a national algorithm.</li> <li>• 3,408 individuals who received HIV Testing and Counseling (HTC) services for HIV and received their test results.</li> <li>• 273 individuals who tested HIV Positive.</li> <li>• 3,406 HIV-positive who are receiving care and support services outside of the health facility.</li> <li>• 936 individuals newly enrolled on (oral) antiretroviral PrEP to prevent HIV infection.</li> <li>• 488 adults and children newly enrolled on antiretroviral therapy (ART)</li> <li>• 1,128 health care workers, and other stakeholders that participate in stigma and discrimination reduction and gender-transformative training.</li> <li>• 321,552 condoms distributed (pieces)</li> <li>• 133,668 lubricants distributed (pieces)</li> <li>• EpiC-PSM (Procurement and Supply Chain Management)</li> <li>• eLMIS Rollout in all health facilities in Rolpa District</li> <li>• Conducted Bi-Monthly meeting for eLMIS data and Supply chain indicators with province leads</li> <li>• Conducted SCMWG Meeting</li> </ul> <p>Provided Supportive Supervision to 12 warehouses (Health store) in Lumbini province and COVID Response</p>	<p>Ram Saran Sedai (Program Officer), 9846086101, <a href="mailto:ramsedai@fhi360.org">ramsedai@fhi360.org</a></p>	<p>Yes</p>


Name of Organization/Program	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2079/080	Contact Person/s (Name, Designation, Email, Phone number)	Working in Fiscal Year 80/081 in province (Yes / No)
			<ul style="list-style-type: none"> <li>• Conducted two batches of Pediatric Essential Critical Care Training, collaborated with provincial health training centre.</li> <li>• Provided support to assess Point of Entry (PoE) in 3 sites of Rupandehi, Kapilvastu and Banke and provided logistic support.</li> </ul>		
<b>Plan International Nepal</b> 	<p>Early Childhood Development (Maternal and Child Health and Nutrition)</p> <p>Sexual and Reproductive Health &amp; Rights (SRHR)</p> <p>Health in Emergencies</p>	<p>All 8 local Governments of Bardiya District</p>	<ul style="list-style-type: none"> <li>• Reached more than 4500 parents (pregnant women, lactating mother and care giver of under 3 children) through positive parenting education sessions.</li> <li>• Supported 225 HMGs to regularize their monthly meeting as per protocol</li> <li>• Capacity building of health service providers &amp; FCHVs on Early Childhood Development and father's engagement in childcare</li> <li>• Early identification and screening of children with malnutrition - 1435</li> <li>• Support to local government in developing integrated ECD strategic plan - 2 Palikas</li> <li>• Support to establish child play and stimulation corner in health facility in an integration with growth monitoring and immunization - 9 centers</li> <li>• Diverse initiatives have expanded the accessibility of sexual and reproductive health and rights (SRHR) information and services for adolescents and youths. Both demand and supply were addressed. Recorded</li> </ul>	<p>Nirajan Khadka            Technical Advisor - SRHR            9851196382  <a href="mailto:nirajan.khadka@plan-international.org">nirajan.khadka@plan-international.org</a></p> <p>Kiran Prashad Bhandari            Technical Advisor - ECD            9843618122  <a href="mailto:Kiran.bhandari@plan-international.org">Kiran.bhandari@plan-international.org</a></p>	<p>Yes</p>

Name of Organization/Program	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2079/080	Contact Person/s (Name, Designation, Email, Phone number)	Working in Fiscal Year 80/081 in province (Yes / No)
			<p>data indicated increased SRH services use among those under 20 from public health facilities.</p> <ul style="list-style-type: none"> <li>• Young people actively advocated for adolescent friendly SRHR services (AFSs), applying health facility score cards for local accountability to strengthen health facilities.</li> <li>• Communities gained a better grasp of SRHR topics, legal awareness, and specific rights such as the "Right to Safe Motherhood and Reproductive Health Act 2018."</li> <li>• Over 50 public health facilities devised comprehensive action plans and budgets to improve AFS quality, with some securing local government commitment.</li> <li>• Informative materials reached schools, health facilities, and communities, addressing harmful social norms. 400+ health providers from public facilities were trained in age-appropriate and gender-inclusive SRHR services particularly ASRH services.</li> <li>• Schools established adolescent-friendly information corners and menstrual health and hygiene restrooms, while 200+ teachers received comprehensive sexuality education training, benefiting school adolescents and teachers alike. Strengthened linkage between schools and health facilities to increase demand for AFSs.</li> <li>• Engaging fathers in adolescent SRHR was a priority, with 2000+ participating in fathers' group meetings.</li> </ul>		

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			<ul style="list-style-type: none"> <li>• Policy support included guidelines for adolescent-friendly health services (AFHS) and orientation package for health providers on AFHS with gender-transformative approaches.</li> <li>• Staff, partners, and community members received sensitization on SRHR through "Conversations That Matter." SRHR considerations during emergencies (SRHRiE) were integrated into various emergencies training sessions.</li> </ul>		
<p><b>Family Planning Association Nepal</b></p> 	Sexual and Reproductive Health	Dang, Banke, Bardiya, Kapilbastu, Rupandehi, Nawalparasi and Palpa (Need Base Support for all District	<p>Works with marginalized, vulnerable and socially excluded people which includes Adolescent and Youth, SWs, PLHIVs, LGBTIQ, migrant workers, GBV survivors, trafficked returnees, people with disabilities, people in remote areas and affected people by disasters and crisis.</p> <p><b>Sexual and reproductive health</b></p> <ul style="list-style-type: none"> <li>• Collaboration with health institutions and clinics</li> <li>• Provision of comprehensive SRH services</li> <li>• Training healthcare providers</li> <li>• Advocacy to increase availability and affordability of SRH services</li> <li>• <b>Generating demand/SRH Services to Marginalized People:</b></li> <li>• Promotion of SRH Rights</li> <li>• Empower young people to realized sexual and reproductive health and rights by integrating CSE</li> </ul>	Basant Khanal, Branch Manager and Proviencial Focal 9857832208, <a href="mailto:fpandang@fpan.org.np">fpandang@fpan.org.np</a>	Yes

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			<ul style="list-style-type: none"> <li>• Increase accessibility of SRH services through the new and existing service delivery models</li> <li>• Access to digital health services (telemedicine) and alternative service delivery models (home based care, self-care, etc.)</li> <li>• Medical and sexual and reproductive health services</li> <li>• Safe abortion service</li> <li>• Long-Acting Reversible Contraceptive and permanent sterilization camps</li> <li>• Comprehensive Sexuality Education</li> <li>• Advancing sexual and reproductive health and rights of persons with disabilities</li> </ul>		
<p><b>Ipas Nepal</b></p> 	<p>Sexual and Reproductive Health, Safe abortion Service (SAS), Post abortion Family Planning, SAS training, Policy Advocacy related to SRHR/ SAS and Climate justice</p>	<p>Province and Selected Municipalities of Pyuthan, Rolpa and Rukum-East</p>	<ul style="list-style-type: none"> <li>• Natural leaders have been capacited and self-mobilized and engaged in the community to strengthen SRHR</li> <li>• Supported to LGs to allocate and utilize budget for SAS related issues (Training, MA drugs, service expansion and other procurement essentials)</li> <li>• Supported in development of health policy (focused to SRHR related issues) in intervened Municipalities</li> <li>• Supported to 20 safe abortion service providers and 15 ANMs for Implant and MA training respectively to increase accessibility of SAS and LARC and promote Post abortion family planning</li> <li>• Supported in expansion of safe abortion site in intervened Municipalities</li> <li>• Supported in LAPA (Local Adaptation Plan of Action) in certain Municipalities to address the climate change impact in SRHR</li> </ul>	<p>Bishnu Devkota, Province Coordinator, 9851108527, E-mail: devkotab@ipas.org</p>	<p>YES</p>

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	<ul style="list-style-type: none"> <li>- Maternal and Child Health Care Coordination</li> <li>- Mobile Health</li> <li>- Community Health Toolkit (CHT) Apps for Health workers, Community Health Nurse</li> <li>- SMS Powered CHT for FCHVs</li> <li>- Global Digital Health Organization</li> </ul>	Banke, Pyuthan, (2080-81 - Bardiya, Rolpa and Arghakhanchi )	<ul style="list-style-type: none"> <li>- Upgraded our existing Apps from 4 ANC to 8 ANC as well as 3 to 4 PNC as per new protocol which will now notify our FCHVs and pregnancies who are registered in mhealth</li> <li>- Upgrade to Direct Client Messaging system which will now notify Pregnancy for ANC, PNC and Delivery once registered including FCHVs and HFs</li> <li>- District orientation organized in Bardiya with commitment from all 8 municipalities which will add 836 FCHVs and 78 HFs</li> <li>- Partnership meeting with Rolpa and ready to deploy mhealth program which will add 459 FCHVs and 101 HFs with digital health.</li> <li>- Initial discussion for deployment in Arghakhanchi with full coverage in 2023/2024</li> <li>- In 2079/80 - Our FCHVs and HWs of Banke and Pyuthan reach.</li> </ul> <table border="1" data-bbox="873 967 1514 1170"> <tr> <td>Total pregnancy registered</td> <td>3072</td> </tr> <tr> <td>Total number of ANC visits confirmed</td> <td>7675</td> </tr> <tr> <td>Total Delivery</td> <td>2674</td> </tr> <tr> <td>Institutional Delivery</td> <td>2553 (95%)</td> </tr> <tr> <td>Total number of PNC visit confirmend</td> <td>5705</td> </tr> </table>	Total pregnancy registered	3072	Total number of ANC visits confirmed	7675	Total Delivery	2674	Institutional Delivery	2553 (95%)	Total number of PNC visit confirmend	5705	Pawan Baishya Project Officer <a href="mailto:baishya@medic.org">baishya@medic.org</a> 9848177861 Banke	Yes
Total pregnancy registered	3072														
Total number of ANC visits confirmed	7675														
Total Delivery	2674														
Institutional Delivery	2553 (95%)														
Total number of PNC visit confirmend	5705														
	Private Sectors' Family Planning Services	Banke (Kohalpur, Nepalgunj and Baijanath Municipality) , Dang (Rapti, Lamahi and	<ul style="list-style-type: none"> <li>• Project Kick off meeting conducted in Province and all palika's</li> <li>• Health facility assessment done in private sector (Pharmacy, Clinic, Polyclinic and Hospital) of 5 district- Banke, Dang, Kapilvastu, Nawalparasi and Nawalparasi west at 337 HFs</li> </ul>	Bikram Chand, Provincial Coordinator <a href="mailto:bikram.chand@crs.org.np">bikram.chand@crs.org.np</a> 9858082311	Yes										

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		Ghorahi Municipality), Kapilvastu (Bhuddhabhumi, Badganga, Kapilvastu Municipality), Rupandehi (Sainamaina, Butwal, Tiltotama, Sidharthana and Devdaha Municipality), Nawalparasi West (Sunawal, Bardghat Municipality)	<ul style="list-style-type: none"> <li>Selected, enrolled and done triparty MoU with 214 selected HFs from the base of 337 health facility assessment, Selected palika and project</li> <li>Done MoU with province health training center and gave ASRH training to service providers of 214 private HFs</li> <li>Conducted DMPA training to all selected private HFs service providers</li> <li>Conducted recording, reporting training to all selected private HFs service providers</li> <li>Rolled out family planning service record from all 214 private HFs</li> <li>Rolled out quality assurance/quality improvement component in all 214 private HFs</li> <li>Rolled out client feedback mechanism from all private HFs</li> </ul>		
<b>ADRA Nepal (Health Reform Project)</b> 	<ul style="list-style-type: none"> <li>Maternal and Child Health Nutrition</li> <li>WASH</li> <li>CB-IMNCI Service Strengthening</li> </ul>	All 8 Local Governments of Bardiya District	<ul style="list-style-type: none"> <li>Support to OTCs: nutrition friendly health facility initiative (2 sites)</li> <li>Equipment (anthropometric) support to HFs and ORCs (20 HFs and 80 ORCs)</li> <li>Growth Monitoring and Promotion Training to health workers (119 staff)</li> </ul>	Tarka Bahadur Thapa, Project Coordinator Email:tarka.thapa@adranepal.org Phone: 9851214434, 084-420285	Yes

Name of Organization/Program	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2079/080	Contact Person/s (Name, Designation, Email, Phone number)	Working in Fiscal Year 80/081 in province (Yes / No)
			<ul style="list-style-type: none"> <li>• Refresher Training on Nutrition Specific Services to health workers (201 staff)</li> <li>• MIYCN Refresher Training for FCHVs (ongoing)</li> <li>• Development, distribution and installation of IEC materials (acrylic boards, reflective flex boards, mount boards, posters etc.)-ongoing</li> <li>• MoU with Palika for installation of Yamaha Clean Water Supply System (YCWSS) in Barbardiya Municipality</li> </ul>		
<b>USAID Adolescent Reproductive Health</b>	<ul style="list-style-type: none"> <li>• Family Planning</li> <li>• Adolescent Reproductive Health</li> </ul>	<p><b>Banke</b> (Janaki RM, Khajura RM, Duduwa RM, Narainapur RM)</p> <p><b>Pyuthan</b> (Naubaini RM, Gaumukhi RM, Swargadwari MP, Pyuthan MP, Jhimruk RM)</p> <p><b>Rolpa</b> (Rolpa MP, Lungri</p>	<ul style="list-style-type: none"> <li>• Roll out of FCHV modular package: Training to FCHVs &amp; HWs on FCHV modular package in all working municipalities</li> <li>• Self-Applied Technique for Quality Health (SATH) implementation in HMGs: Implemented SATH in 24 HMGs to encourage community mothers to be supportive of adolescents and their RH needs.</li> <li>• Youth Led Community Health Score Board (YLCHSB): Social Accountability tool YLCHSB in 12 HFs &amp; prepare joint action plan by tri parties.</li> <li>• Development of ARH mentorship module: Development of ARH mentorship module in leadership of FWD.</li> <li>• Master Mentor development workshop: Developed Master Mentors - 3 from government hospitals. Master mentors in Lumbini Province: Dr. Kirtipal Subedi, Sr. Consultant Gynaecologist, Bheri Hospital; Ms Shila Sharma, Nursing Office, Bheri Hospital; Ms Madhuri Gyawali, Nursing Officer, Lumbini Province Hospital.</li> <li>• Implementation of Hub &amp; Spoke model of mentorship: Identified 5 hubs and 18 spokes facilities in Lumbini</li> </ul>	<p>Upasana Shakya Shrestha, Province Coordinator</p> <p>Email: upasana.shrestha@care.org</p> <p>Phone: +977-9857036830</p>	<p>Yes</p>

Name of Organization/Program	Major Thematic Area	Geographic Coverage	Major Achievements in FY 2079/080	Contact Person/s (Name, Designation, Email, Phone number)	Working in Fiscal Year 80/081 in province (Yes / No)
		RM, Runtigadhi RM)	<p>Province. Identified 5 Hub sites are Rolpa Hospital, Pyuthan Hospital, Bhingri PHCC, Khajura PHCC and Bheri Hospital</p> <ul style="list-style-type: none"> <li>• Implemented Mentorship Model at 3 Hospitals (Bheri, Pyuthan and Rolpa).</li> <li>• Orientation on Adolescent Friendly Health Services (AFHS)-2079 BS implementation guideline at all level</li> <li>• Supported in formation &amp; oriented on roles of local level coordination committee.</li> <li>• Conducted ARH Policy and Program review at Lumbini Province to identify gaps and way forward</li> <li>• Technical Support for GESI policy formulation in Rolpa municipality.</li> <li>• ASRH training to private health facilities: MoU with 63 Private HFs based on eligible criteria. 5 days ASRH training to 18 Private Health Service Providers of Banke</li> <li>• Formation of 156 groups of adolescents, their fathers, mothers and young mothers (Pregnant, lactating and Married) to aware on ARH, address the social norms through social analysis and action (SAA), and create supportive community.</li> <li>• Orientation to social &amp; religious leaders on ARH.</li> <li>• Advocacy campaign with youth clubs and municipalities: Engagement of youth clubs in each municipality for advocacy &amp; demand generation on ARH agenda.</li> </ul>		

## Contributors to Annual Report Preparation

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