Case Study

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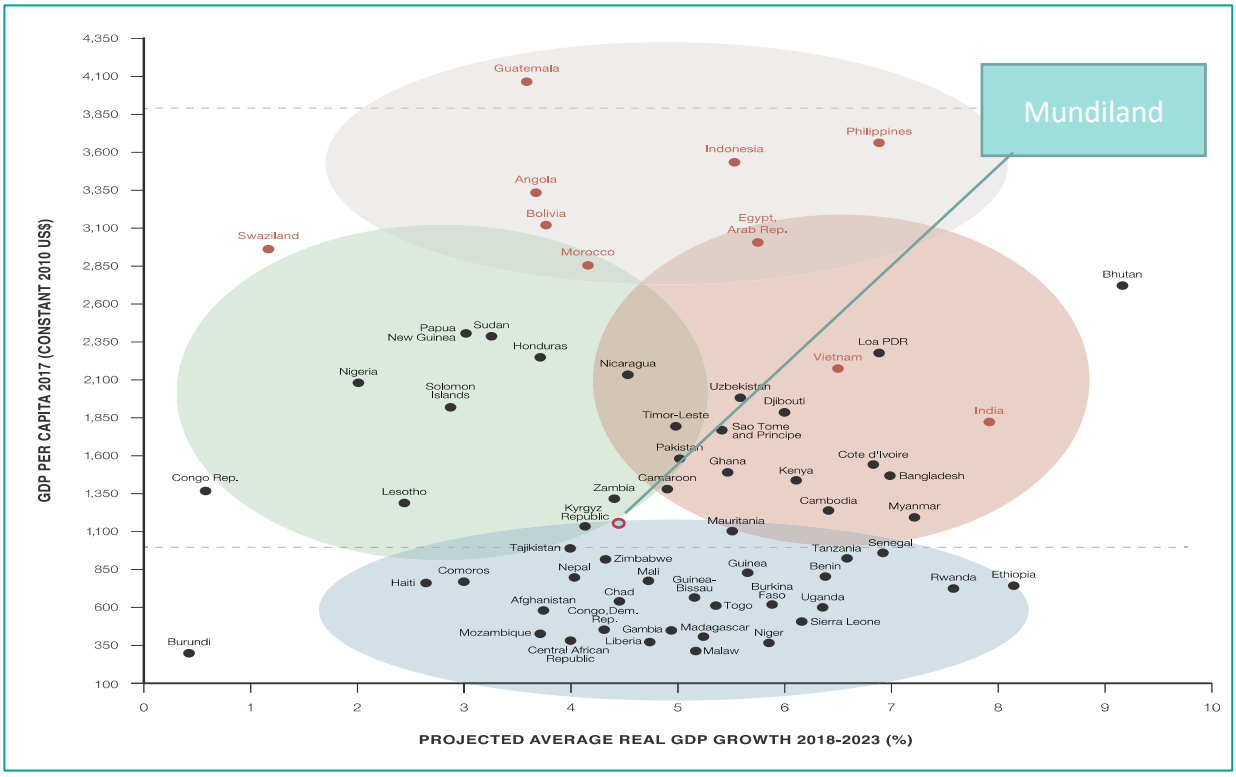
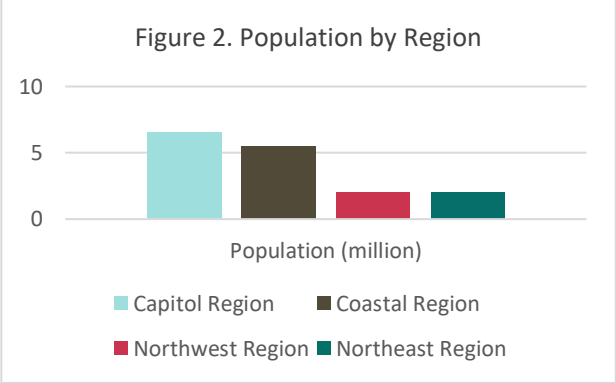
Country Context

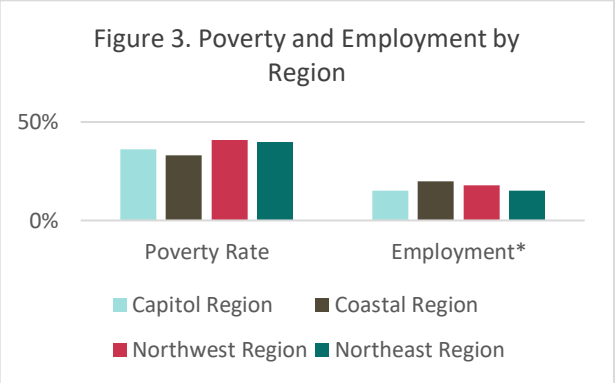
Mundiland has a population of just under 16 million.

- The country experienced remarkable economic growth from 2000 to 2015.
- From 2000 to 2015, the average annual GDP growth rate was 5.7%, making the country one of the fastest growing economies in the developing world.
- During the same period, the country's GDP per capita (in constant terms) nearly doubled from US$680 in 2000 to US$1040 in 2015, with an average annual increase of 4.4%, which is significantly higher than the average economic growth in other lower-middle income countries (3.1%). The latest GDP (in 2018) was recorded at US$ 17.7 billion, or $1,110 per capita, with a projected average real GDP growth (2018-2023) of 4.3%.

Figure 1. GDP and Projected GDP Growth







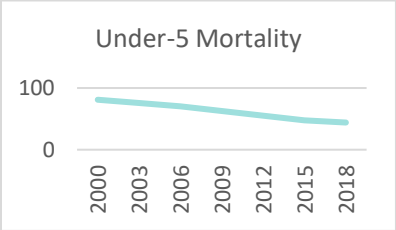
Demography and Health Outcomes

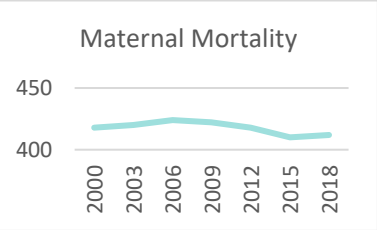
While Mundiland's infant and under-5 mortality rates are cause for concern, the Ministry of Health is most concerned with maternal and neonatal mortality.

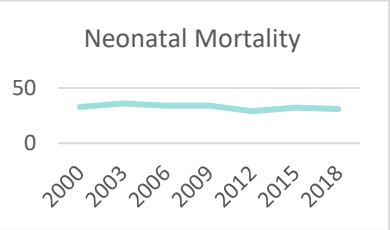
Figure 4. Mundiland Public Health Dashboard

Infant Mortality	32 (per 1,000 live births)
Under-5 Mortality	44 (per 1,000 live births)
Neonatal Mortality	31 (per 1,000 live births)
Maternal Mortality	412 (per 100,000 live births)

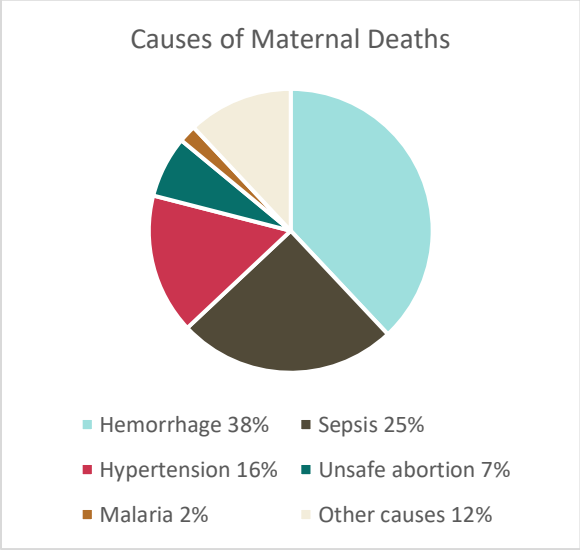
Under-5 mortality has declined steadily since the year 2000. However, maternal and neonatal mortality have declined only slightly, and unevenly.

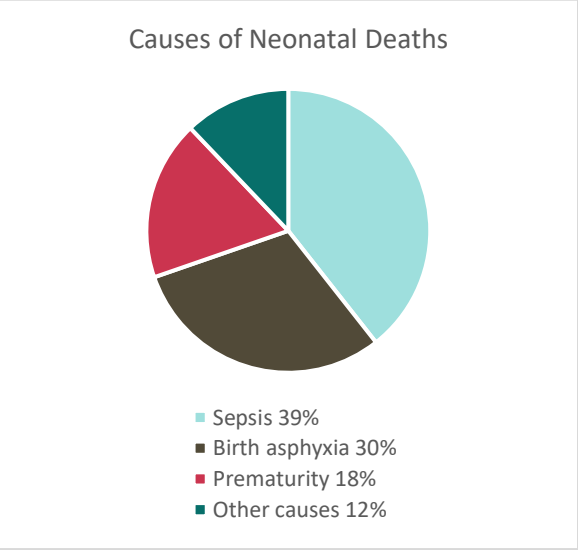






Neonatal deaths account for 70% of under-five deaths.





Stunting among children under 5	19%
Wasting among children under 5	8%
Anemia prevalence in women age 15-49	47%
Low birth weight prevalence	16%

Mundiland's health indicators related to nutrition are similar to those of other lower-to-middle income countries in its region.

Health Services

Many of Mundiland's health service coverage indicators show positive trends.

- The prevalence of modern contraceptive use among married women went from 16% in 2010 to 20% in 2018.
- Between 2010 and 2018, the percentage of children under 5 who sleep under an insecticide-treated net rose from 42% to 55%; use of malaria treatment from 46% to 63%.
- In those same years, DPT immunization (percentage of infants receiving 3 doses) rose from 54% to 68%.

Health Service Delivery

Mundiland has 2,341 primary health facilities, or 14.6 per 100,000 population. (In comparison, Sierra Leone has 19.4, Central African Republic 14.2, Liberia 10.4, and Senegal 7.4.)

65% of deliveries take place in health care facilities, up from 48% in 2010, and 72% of deliveries are by a skilled birth attendant.

Table 1. Health Service Delivery Indicators by Region

Region	Population	Primary care facilities	CEmONC Hospitals	Antenatal care 4	Skilled birth attendant	Delivery in health facility	Post-natal care 2	Number of maternal deaths (2018)	Number of neonatal deaths (2018)	Number of deaths among under 5 (2018)
Capitol	6,500,000	1,014	14	83%	81%	63%	65%	700	4,350	5,900
Coastal	5,500,000	781	9	81%	87%	70%	42%	480	2,500	4,200
Northwest	2,000,000	276	5	68%	67%	58%	39%	500	2,610	5,140
Northeast	2,000,000	270	5	55%	63%	53%	41%	620	7,900	9,400
Total	16,000,000	2,341	33	75%	72%	65%	47%	2,300	17,360	24,640

53% of pregnant women in the Northwest and 68% of pregnant women in the Northeast claim it takes them more than 60 minutes to walk to the nearest facility. Public transportation is readily available in the Capitol and Coastal regions making commute time to health facilities not more than 30 minutes.

In the World Health Organization's 2015 Service Availability and Readiness Assessment (SARA) for Mundiland, several indicators flagged quality problems pertaining to equipment and to provider readiness, particularly relating to maternal and neonatal care.

Table 2. Obstetric Care Indicators

Obstetric Care Indicator	Percentage of Facilities Providing
Neonatal resuscitation	85%
Parenteral administration of antibiotics	77%
Parenteral administration of oxytocic drugs	75%
Staff trained in CEmONC	62%
Blood pressure apparatus	75%
Delivery pack equipment available	90%
Partograph available	71%
Delivery bed available	58%
Neonatal bag and mask available	50%
Hemoglobin test available	5%

Majority of women (87%) make at least one ANC visit during their pregnancy, and 75% of the women make the recommended four or more ANC visits.

Table 3. Number of Pregnant Females who had One Antenatal Care Visit (ANC1) in 2018

Region	10-14 years	15-19 years	20-24 years	25+ years	Total
Capitol Region	7,000	18,700	49,050	120,250	195,000
Coastal Region	5,010	14,050	38,500	108,850	166,410
Northwest Region	1,890	7,800	17,100	28,300	55,090
Northeast Region	2,400	12,600	23,300	32,200	70,500
Total	16,300	53,150	127,950	289,600	487,000

Health Workforce

With 21 skilled healthcare workers per 10,000 population, Mundiland is only slightly below the WHO recommended minimum of 23 per 10,000. The Northwest region, though, has only 18, and the rural Northeast region only 16 skilled healthcare workers per 10,000 population.

Maternal and Neonatal Death Surveillance and Response (MNDSR) reports indicate that 73% of maternal deaths and 87% of neonatal deaths occur at a hospital.

National BEmONC and CEmONC training of all health care staff was conducted in 2016 and 2017. Due to staff turnover, currently 80% of staff at primary health centers and 62% of staff at hospitals are trained in delivering BEmONC and CEmONC services.

Essential Medicines

Nationally, 60% of health facilities (primary care and hospitals) report no stock out of essential RMNCAH tracer drugs and commodities during quarterly quality assessments. 130 primary health centers and hospitals with high patient volume have reported stock outs of essential drugs and commodities during the last 3 months of each year since 2010.

The supply chain is highly fragmented between multiple, parallel supply chains, each with their own administration, management and warehousing budgets. In addition, none of these parallel (mostly donor driven) supply chains finance delivery to the health facility level – the "last mile". Safe blood availability in remote sites is a particular challenge.

Health Financing

Mundiland's total health expenditure is approximately US$ 726 million, or US$ 45 per capita, representing 4.1% of GDP.

Domestic general government health expenditure, at US$ 13 per capita, represents 1.2% of GDP and 6% of general government expenditure.

Figure 5. Total Health Expenditure

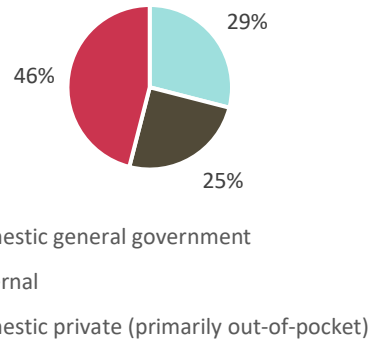
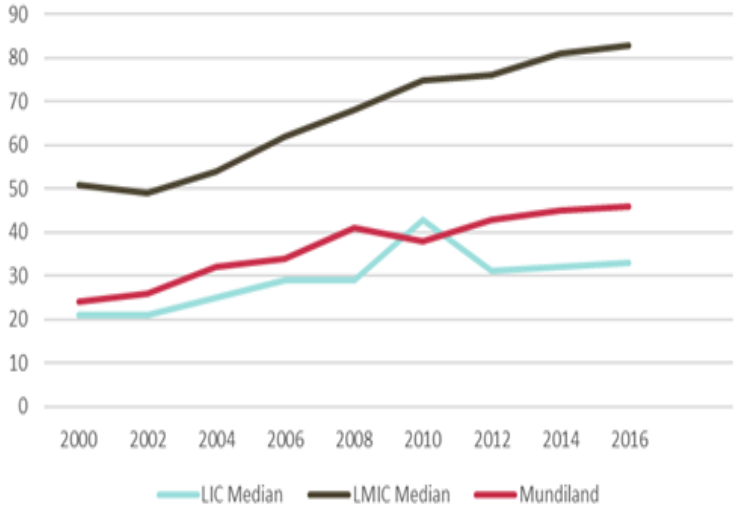


Figure 6. Total Health Expenditure per Capita (constant 2010 US$)



Government Spending and Prioritization of Health

Mundiland's government health expenditure has nominally increased in the last 15 years, from US$ 140 million in 2000 to US$ 204 million in 2015. This was mostly due to the country's high economic growth (5.7% average annual GDP growth rate).

Mundiland is able to raise substantial public revenue through taxes. Aggregate public spending – the overall amount of government spending relative to the economy – remained stable at about 28% of GDP. (For comparison, the aggregate public spending of other lower-middle income countries is 31%, with an average annual growth rate of 1.0%.)

While absolute government health expenditure rose from 2000 to 2015, reprioritization of public spending across sectors has led to decreases in the share of public expenditure in health. The share of government expenditures going to health has dropped from 9% (in 2005) to 6% in 2015 (the average for lower-middle income countries (9.7%)).

Government Health Expenditure

Mundiland's government health expenditures are skewed towards secondary and tertiary care – only 33% of expenditures go to the primary care level.

Mundiland's domestic expenditure is separated into financing for Ministry of Health (MOH) and the Ministry of Local Government and Rural Development (MOLGRD), which channels financing to the districts. In the 2017-2018 budget, 56% of the health sector budget was allocated to the MOH, while 44% was allocated to MOLGRD.

The MOH is responsible for all central tertiary hospitals, the central medical stores, central MOH functions and health workforce personal emoluments, with 73% of annual budgets allocated to salaries. The remainder is divided into capital development (12%) and operating costs at the central level (15%). Discussions have been under way to devolve salary budgets to district managers; however, due to implementation challenges with the recent devolution of drug budgets, salaries are still centrally managed by MOH.

Meanwhile, the MOLGRD finances all district health management teams that oversee all primary and secondary care (i.e. district hospitals, health centers, health posts, and village workers). District-level budgets are historical, input-based, line-item budgets, with little autonomy for facility providers.

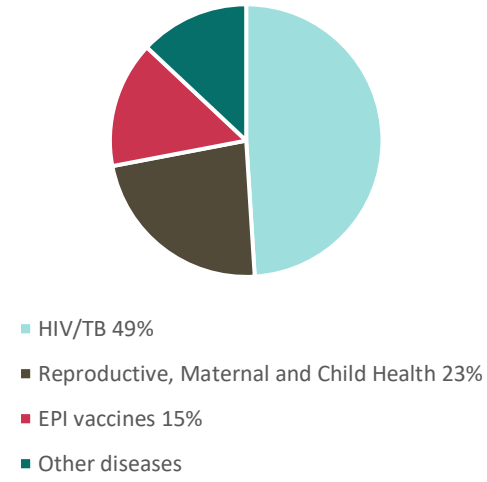
Despite occasional delays in Treasury disbursements, budget execution has been high across both ministries, averaging 97% over the last five years.

External Financing for Health

Despite economic growth, government investments in health and consequently health outcomes in Mundiland have not kept pace with economic development. As such, donors have continued to invest resources into health services and disease control, with external financing comprising 25% of total health expenditure. External funds are fragmented across a large number of funders and implementing entities, who focus on a number of disease-oriented programs. Most donors, including the Global Fund, Gavi, UNICEF, and others have earmarked their investments to specific disease programs.

A sector wide approach (SWAp) pool fund mechanism was set up in the late 90s, but has not been active in recent years. A number of bilateral and multilateral donors have indicated potential willingness to partner with the Government of Mundiland in better aligning their investment priorities. However, conversations have not yet materialized in the form of executed funding.

Figure 7. Focus of External Funds



Financial Protection

Out-of-pocket (OOP) payments comprise 89% of private health expenditure and 46% of total health expenditure. There is significant variation in OOP spending across income quintiles, with lower income groups spending a far greater share of household incomes on health care. Over-the-counter drugs make up the bulk of outpatient spending, but transportation, prescription drugs, and consultation fees are also significant.

Situation Analysis – Discussion

1. Based on the preceding pages of the Case Study, what do you see as Mundiland's main issues in the health sector?

2. What are the possible problems/root causes of the weak performance of the health system? Think about root causes, including funding, payment function, organization/regulation and/or behavioral issues.

Prioritization – Discussion

1. Review the list of problems/root causes you created during the Situational analysis case study work. What would solutions to these problems would look like? What reform would you need to implement?
2. Think through the prioritization aspects for one or more of the reforms (if possible use one also relevant to your country). Briefly consider each item from multiple perspectives:
    - What is the likely **impact**?
    - Can you **technically** implement?
    - Is it **affordable** (at scale)?
    - Are there **innovations/alternatives** that are cheaper?
    - Is it **politically** feasible?

After you've looked at all items, pick two reforms and use this table to capture key prioritization factors.

	Reform priority 1: _____	**Reform priority 2:** _____
Impact		
Technical		
Affordability		
Innovations		
Political	(omit for this case study exercise)	

Costing and Resource Mapping

Fast forward to 2020. The Government of Mundiland is nearing completion of its Investment Case (IC). The MOH has completed costing of the priorities and resource mapping exercises. To implement the IC, the MoH needs to ensure that:

- there is sufficient funding for the costed priorities;
- funding is stable, predictable, and ideally domestically financed;
- both domestic and external financing in health are aligned to the main priorities;
- planned health investments are not duplicative nor going to overfunded areas.

The MOH has received the final data sets for both costing and resource mapping data, and now needs to figure out the best way to apply them to the priorities of the IC.

Costing and Resource Available

Mundiland's Country Platform completed a rapid costing of the priorities by compiling recent costing data from existing health strategies and plans. The MOH completed a resource mapping exercise that captures government and major donor budget commitments in health through 2024. The Country Platform used the health sector resource mapping to assess resources available for the IC priorities. The total cost of the IC minus the total resource available of the IC highlights a total financing gap of US$ 1,901,000,000 over four years or 63% of the total cost of the investment case.

Figure 8. Funding of IC Total Cost

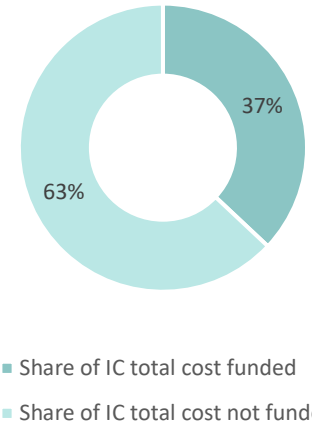


Table 4. Total IC Costs vs Budget Commitments, both domestic and external resources, 2021-24

Write priorities from previous exercises here.

Priority	Cost	Budget Commitment	Funding Gap	% of IC Cost Funded
Priority 1: _____	445,000,000	485,000,000	40,000,000	109%
Priority 2: _____	1,655,000,000	514,000,000	-1,141,000,000	31%
Priority 3: _____	915,000,000	115,000,000	-800,000,000	13%
Total	3,015,000,000	1,114,000,000	-1,901,000,000	37%

Figure 9. Funding Gap of the IC Over Time

Table 5. Total annual budget commitments for the IC, by priority and financing source, 2021-2024

	2021	2022	2023	2024	Total
Government	155,000,000	156,000,000	125,000,000	85,000,000	521,000,000
Donor	241,000,000	205,000,000	91,000,000	56,000,000	593,000,000
Govt + Donor	396,000,000	361,000,000	216,000,000	141,000,000	1,114,000,000

Table 6. Proportion financed by government vs. by donors

	2021	2022	2023	2024
% Government	39.1%	43.2%	57.9%	60.3%
% Donor	60.9%	56.8%	42.1%	39.7%
Total	100.0%	100.0%	100.0%	100.0%

Table 7. Total Budget Commitments to IC vs. Total Country Health Portfolio, by source, 2021-2024

Donor	Donor financing Commitments to IC as a Proportion of Total Country Health Portfolio*	Donor financing not allocated to the IC
AfDB	0%	160,000,000
JICA	38%	50,000,000
EU	18%	185,000,000
Gates	12%	150,000,000
Gavi	44%	133,500,000
GIZ	24%	13,000,000
Global Fund	18%	441,000,000
UNFPA	50%	8,000,000
UNICEF	0%	36,000,000
USAID	51%	123,000,000
WB/GFF	100%	0

* Annual figures aggregated over 2021-2024 four-year period

Figure 10. Budget Resources for the IC by Source, 2021-2024

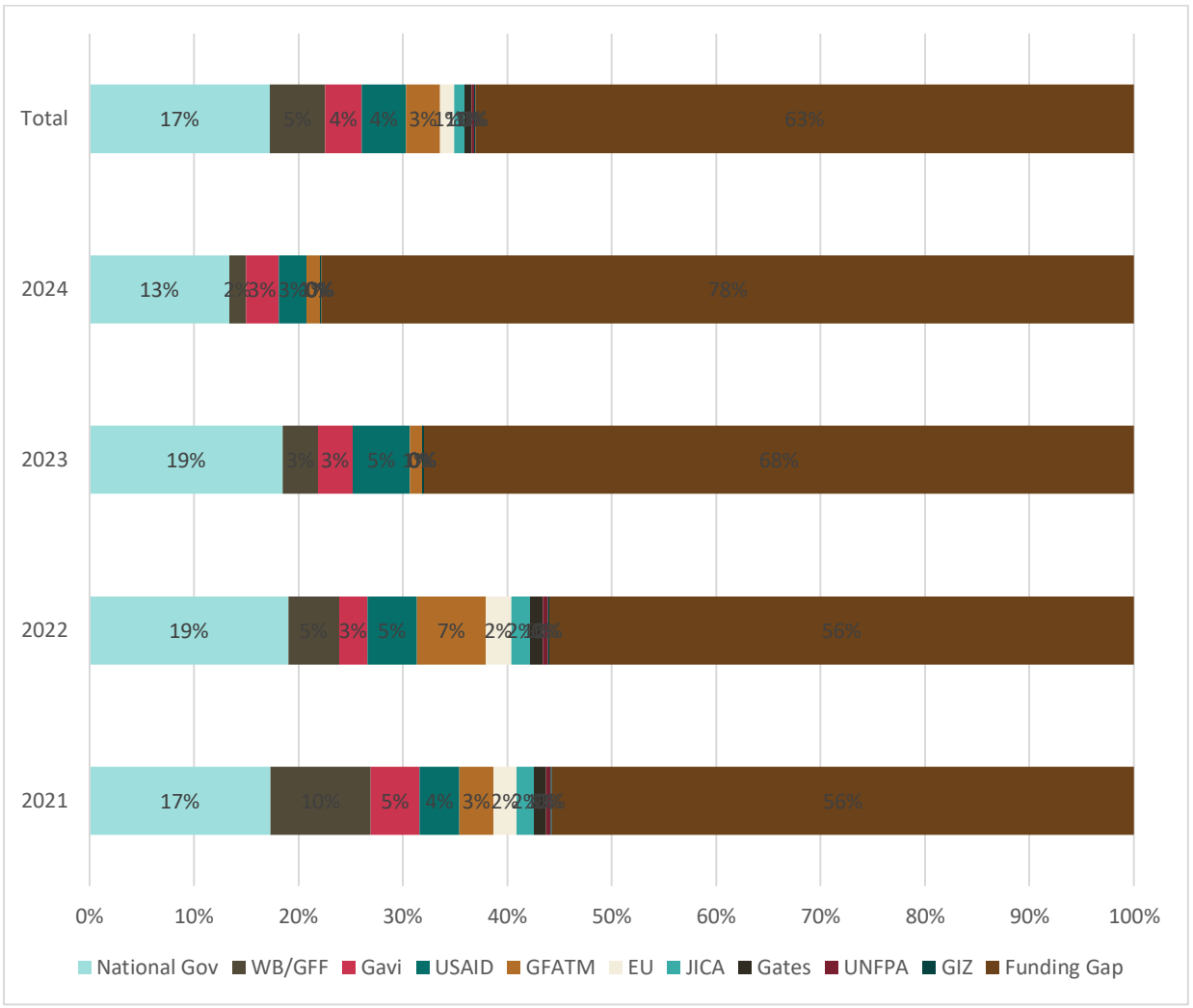


Table 8. Total annual budget commitments for the IC, by priority and financing source, 2021-2024

	2021	2022	2023	2024	Total
Priority 1	**165,000,000**	**130,000,000**	**105,000,000**	**85,000,000**	**485,000,000**
National Gov	70,000,000	71,000,000	60,000,000	60,000,000	261,000,000
Provincial Gov	0	0	0	0	0
USAID	30,000,000	35,000,000	37,000,000	17,000,000	119,000,000
JICA	15,000,000	15,000,000	0	0	30,000,000
AfDB	0	0	0	0	0
WB/GFF	41,000,000	0	0	0	41,000,000
Gates	0	0	0	0	0
GFATM	9,000,000	9,000,000	8,000,000	8,000,000	34,000,000
EU	0	0	0	0	0
Priority 2	**181,000,000**	**181,000,000**	**101,000,000**	**51,000,000**	**514,000,000**
National Gov	80,000,000	80,000,000	60,000,000	20,000,000	240,000,000
Provincial Gov	0	0	0	0	0
GIZ	1,000,000	1,000,000	1,000,000	1,000,000	4,000,000
EU	20,000,000	20,000,000	0	0	40,000,000
Gates	10,000,000	10,000,000	0	0	20,000,000
Gavi	40,000,000	20,000,000	20,000,000	20,000,000	100,000,000
GFATM	0	25,000,000	0	0	25,000,000
WB/GFF	30,000,000	25,000,000	20,000,000	10,000,000	85,000,000
USAID	0	0	0	0	0
JICA	0	0	0	0	0
Priority 3	**50,000,000**	**50,000,000**	**10,000,000**	**5,000,000**	**115,000,000**
National Gov	5,000,000	5,000,000	5,000,000	5,000,000	20,000,000
Provincial Gov	0	0	0	0	0
UNFPA	4,000,000	4,000,000	0	0	8,000,000
Gates	0	0	0	0	0
Gavi	2,000,000	2,000,000	2,500,000	0	6,500,000
UNICEF	0	0	0	0	0
USAID	4,000,000	4,000,000	0	0	8,000,000
JICA	0	0	0	0	0
GFATM	20,000,000	20,000,000	0	0	40,000,000
GIZ	0	0	0	0	0

Financing the Investment Case - Discussion

1. Review the information in Figure 9 and Table 4.
    a. What percentage of the four-year total IC is funded, and what percentage is not?

    b. How do the priorities compare in terms of budget sufficiency?

    c. What actions would you consider taking to reduce the funding gap?

2. Review tables 5 and 6.
    a. What percentage of resources available is funded by government and what percentage by donors?

    b. What arguments would you use to convince Ministry of Finance to increase the budget allocations to the health sector?

    c. When should this happen in the budget cycle so that you can influence the national planning and budget process?

    d. Who should be engaged to influence this process?

3. Given the unequal funding of IC priorities and the major funding sources for Priority 1 (see Tables 4 and 8).
    a. How would you address the overfunding of Priority 1?

    b. Which donors would you approach for discussions (see Table 7 and Figure 10)?

    c. Describe your strategy for engaging with the various external financiers of the health sector. What would be your main entry points for discussions?

Investment Case Implementation

Fast forward to 2023. Mundiland's Country Platform is three years into implementation of its Investment Case.

Because the Country Platform serves as the shared space to track the progress of health/nutrition activities, outputs, and outcomes against targets, it has focused on data to guide its planning, coordination, and implementation of the RNMCAH-N investments in the Investment Case and health financing reforms. It also focuses on why results are or are not being achieved and what steps should be taken to fix these issues.

Mundiland's Country Platform is particularly interested in regional variations in results, and in whether the available resources (financing, human resources, systems, etc.) match the regional needs.

The Country Platform has assembled the following monitoring data:

Table 9. RMNCAH-N outcomes by region, 2023

Region	Maternal deaths	Neonatal deaths	Under 5 deaths	Stunting	Wasting	Anemia among pregnant women	Percentage of low birth weight babies	Modern contraceptive prevalence rate
Capitol Region	670	4310	5700	11%	5%	40%	15%	30%
Coastal Region	450	2440	3500	18%	7%	45%	12%	27%
Northwest Region	500	2600	4750	24%	9%	46%	17%	11%
Northeast Region	630	7950	9200	29%	12%	68%	16%	8%
National	2,250	17,300	23,150	19%	8%	47%	16%	20%

Note: Data in this table for stunting, wasting, anemia among pregnant women, percentage of low birth weight babies and modern contraceptive prevalence rate are the same as Mundiland's 2018 baseline. No new data has been collected for these indicators since 2018.

Table 10. Maternal and child health service utilization of services by region, 2023

Region	DPT3 immunization	Antenatal Care 4 visits (ANC4)	Postnatal Care 2 visits (PNC2)	Skilled birth attendant	Delivery in health facility	IFA supplementation for pregnant women	Vitamin A supplementation	Growth monitoring promotion
Capitol	78%	83%	65%	81%	63%	90%	90%	77%
Coastal	74%	81%	42%	87%	70%	76%	65%	70%
Northwest	56%	68%	39%	67%	58%	65%	71%	45%
Northeast	41%	55%	41%	63%	53%	53%	56%	39%
National	68%	75%	47%	72%	65%	75%	72%	66%

Table 11. Spending on maternal and child health by region, 2023 (Government + Donors)

Region	Pregnant women/antenatal care services	Safe birth delivery by skilled attendance	Nutrition services	Reproductive health and family planning
Capitol Region	10,410,591	8,654,589	6,271,441	3,913,379
Coastal Region	8,481,159	7,253,623	4,575,362	2,789,855
Northwest Region	1,982,183	1,447,661	929,844	640,312
Northeast Region	1,673,759	1,219,858	539,007	567,376

Investment Case Implementation - Discussion

1. Looking at the data in Tables 9 and 10, list the issues with the performance of each region. What corrective actions could Mundiland's Country Platform take? This may include further data collection or analysis to explore causes of non-performance.

2. Review the information on the previous two pages of this Case Study. Is the current budget being spent on the right things? Explain how you assess this, including any assumptions you use. What are some concrete examples?

3. What is the variation across Mundiland's regions in spending and impact? How does spending correlate with outcome? What recommendations would the Country Platform make based on this?

4. The GFF highly recommends developing dashboards and other data visualizations as management tools. What recommendations would you give to develop a Scorecard based on the existing data in order to optimize its function as management tools (i.e. presentation, type of indicators, frequency, information system, etc.)? What are some potential challenges with the implementation of a scorecard?

Operationalization

Mundiland's GFF Country Platform operationalized its Investment Case by elaborating a Theory of Change and a Results Framework for each reform. Two of the reforms are:

- Increase the percentage of fully-functional CEmONC facilities
- Reduce user fees for the poor

Examples of indicators from Mundiland's Investment Case to assess Fully Functional CEmONC Facilities

<table>
<tr><th>Activities</th><th>Outputs</th><th>Outcomes</th><th>Impact</th></tr>
<tr><td>Train and mentor hospital staff on CEmONC services</td><td>Hospital staff have the capacity to provide CEmONC services</td><td rowspan="8">% of CEmONC facilities fully functional</td><td rowspan="8">MMR decrease
NMR decrease</td></tr>
<tr><td>Train staff on forecasting essential medicine and supplies</td><td rowspan="2">Supply chain / logistics management and information system able to detect and respond to low stocks</td></tr>
<tr><td>Roll-out eLMIS</td></tr>
<tr><td>Advocate for increase in hospital operational budget to support CEmONC services</td><td>Budget approved for hospital operational cost including electricity, water, sanitation and infection control</td></tr>
<tr><td>Enter CEmONC services data in hospital information system and analyze monthly</td><td>Hospital uses data for quality improvement of CEmONC services</td></tr>
<tr><td>Implement national hospital infection control guidelines</td><td>Reduced hospital infection rate</td></tr>
<tr><td>Purchase freezer for hospital blood bank</td><td>Hospital can store blood units</td></tr>
</table>

Examples of indicators from Munidland's Investment Case to assess Reducing User Fees for the Poor

Activities	Outputs	Outcomes	Impact
Estimate funding need (cost services, estimate coverage and utilization, etc.)	Costing conducted	% of target population with ID card increases Health service utilization by those with registered IDs increases	U5MR, IMR, etc. decrease
Develop roll-out plan, assign roles and responsibilities	Implementation plan finalized and approved by SMT		
Secure funding for implementing roll out and covering cost of services	Budget finalized and approved		
Update information systems to enable tracking of exempted users and their utilization	EMR, OpenIMIS, and other relevant system customization completed		
Train health managers and facility staff on new policy, HIS updates, SOPs, etc.	Regional facility manager trainings completed		
Conduct awareness campaigns to encourage registration of new ID cards	National campaign conducted		

Operationalization - Discussion

Fully Functional CEmONC Facilities

As of 2024, 60% of Mundiland's CEmONC facilities are fully functional. This is below expectation, as the Investment Case seeks to increase that percentage from the 2018 baseline of 32% to 90% by 2024.

1. What are some possible explanations for the fact that only 60% of Mundiland's CEmONC facilities are fully functional, several years after implementing the IC?

2. In retrospect, what monitoring would have allowed Mundiland's Country Platform to spot the problem earlier?

Reducing User Fees for the Poor

As of 2024, 15% of the poorest quintile have been identified (as part of a Social Safety Net program) and own exemption cards, so they do not have to pay user fees to access services at public facilities. There has been a significant increase, among those with exemption cards, in utilization on Ante Natal Care (ANC4) and skilled deliveries in health facilities. However, there has also been an increase in out-of-pocket expenditures amount amongst the target population. Moreover, there has been no change in the neonatal mortality rate.

1. What could explain the lack of financial protection offered by the scheme?

2. What could explain the lack of health impact of the increased use?

3. In retrospect, what monitoring would have allowed Mundiland's Country Platform to spot the problem earlier?