



Mapping for Impact: District Prioritization Strategy for SRH Interventions in Sri Lanka

A Program Gap Analysis & Needs Assessment



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A PROGRAMME GAP ANALYSIS & NEEDS ASSESMENT

Published by
The Monitoring and Evaluation Unit
The Family Planning Association of Sri Lanka
2024

Established in 1953, The Family Planning Association of Sri Lanka is a leading service provider and advocate of Sexual and Reproductive Health and Rights in Sri Lanka. The Association seeks to promote multiple aspects of reproductive health and improve the quality of life and well-being.

FPA Sri Lanka is an accredited member of The International Planned Parenthood Federation (IPPF).

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First Published in March 2024

By The Family Planning Association of Sri Lanka

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Designed by: Janaranga Dewasurendra

Printed by:

ISBN 978-955-8876-37-4

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Foreword

As the Executive Director of The Family Planning Association of Sri Lanka (FPA Sri Lanka), I am honoured to present the pivotal report, "Mapping for Impact: District Prioritization Strategy for SRH Interventions in Sri Lanka: A Programme Gap Analysis & Needs Assessment." It holds significance for our organizational journey and the broader landscape of Sexual and Reproductive Health (SRH) in Sri Lanka. It also reiterates our commitment to the International Planned Parenthood Federation (IPPF) global strategy for 2023-2028, the International Conference on Population and Development (ICPD) commitments, and the Sustainable Development Goals (SDGs).

Sri Lanka, a leader in South Asia for many health-related accomplishments, faces a nuanced challenge. While national health outcomes are admirable, the economic recession of the last two years has brought the stark reality of sub-national inequities to light. This study is crafted to explore these complexities, draw attention to the existing gaps and offer insightful information that can direct focused interventions.

This report is a strategic roadmap, meticulously charted to guide our interventions toward optimal impact. As we navigate the complex terrain of SRH, our strategies must be evidence-based and attuned to the nuanced needs of the communities we serve. Although the publication's primary audience is our management and staff, it is a resource that transcends organizational boundaries and acts as a guide for national programme planning, offering insights and strategies that extend beyond FPA Sri Lanka's immediate sphere of influence.

The collaboration and dedication of the team behind this report are commendable. Their passion and expertise for advancing SRH have given life to a document that will undoubtedly shape our future interventions.

I invite readers to engage with the findings and join us in transforming knowledge into impactful action. Let us envision a future where SRH interventions are evidence-based and aligned with every community's diverse needs. I am confident that "Mapping for Impact" will guide us toward a future where SRH is a right realized by all.

Dr. Ruchitha Perera
Executive Director
The Family Planning Association of Sri Lanka

Abbreviations

Bol	Board of Investment
CDC	Centre for Disease Control
DCS	Department of Census and Statistics
DHS	Demographic and Health Survey
EPZ	Export Processing Zone
FHB	Family Health Bureau
FPA	Family Planning Association
HEB	Health Education Bureau
IPPF	International Planned Parenthood Federation
MOH	Medical Officer of Health
MoH	Ministry of Health
NGO	Non-Governmental Organization
PHM	Public Health Midwives
PHNS	Public Health Nursing Sisters
SARO	South Asian Regional Office
SRH	Sexual and Reproductive Health
WHO	World Health Organization

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Executive Summary

Introduction & Background: Established in 1953, FPA Sri Lanka stands as a pioneering non-governmental organization committed to advancing family planning, Sexual and Reproductive Health, and welfare in Sri Lanka. Over its 70-year journey, FPA Sri Lanka has played a pivotal role in shaping the country's health landscape, working in tandem with the government to achieve commendable sexual and reproductive health indices.

The "Mapping for Impact: FPA Sri Lanka's District Prioritization Strategy" report delineates a strategic initiative undertaken by The Family Planning Association of Sri Lanka (FPA Sri Lanka) to enhance the effectiveness and impact of its Sexual and Reproductive Health programmes. Rooted in data-driven, geospatial strategies, this study provides a comprehensive framework for selecting and prioritizing districts, ensuring targeted resource allocation to communities with the greatest need.

Objectives: The primary objective of this study is to conduct a rigorous gap analysis of Sexual and Reproductive Health services across all districts in Sri Lanka. This involves identifying disparities, deficiencies, and gaps in existing services, infrastructure, and healthcare indicators. A needs assessment specific to selected districts is also conducted, considering factors such as population dynamics, socio-economic conditions, and healthcare requirements. The study aims to develop a data-driven district prioritization strategy based on the findings, guiding the selection of districts for program implementation.

Methodology: The methodology consists of a systematic, five-step approach. The indicator selection involves curating 25 indicators covering vital aspects of public health and socio-economic conditions. Secondary data collection relies on trusted national sources for district-level data. Geographical mapping employs GIS software to visually represent key indicators across selected districts. Geo-prioritization and selection of districts involve a structured ranking and scoring system based on focus areas, weighted for calculation of final scores. Qualitative inquiries complement the quantitative process. Finally, a needs assessment and programme gap analysis evaluates unique district needs and programme deficiencies.

Results: The outcomes of this study materialize in the systematic prioritization of districts, achieved through the implementation of a comprehensive scoring and ranking system. Critical focus areas encompass population density, poverty, antenatal services, family planning, well woman care, HIV/STI services, subfertility services, and government health personnel. The resultant ranking intricately facilitates targeted resource allocation, strategically guiding interventions toward districts with the most pressing needs. This study offers a nuanced understanding of district-specific requirements, empowering The Family Planning Association of Sri Lanka to meticulously tailor programs for maximal impact.

Following these assessments, the final selection encompasses Batticaloa, Colombo, Jaffna, Gampaha, Kandy, Puttalam, Ratnapura, Galle, Moneragala, and Nuwara Eliya districts. Presently, The Family Planning Association of Sri Lanka operates in Batticaloa, Colombo, Gampaha, Galle, Nuwara Eliya, and Ampara districts. However, given Ampara's 21st-place ranking in this study, a strategic recommendation is to relocate the service delivery point to

the Monaragala district. Similarly, new service delivery points are strongly recommended in Jaffna, Kandy, Puttalam, and Ratnapura districts to align services more effectively with the identified needs in these regions.

Conclusion & Recommendations: In conclusion, the "Mapping for Impact" report marks a pivotal milestone in steering Sexual and Reproductive Health initiatives toward evidence-based decision-making. Through the synergistic integration of geospatial and demographic data, FPA Sri Lanka is poised to elevate the precision of its programmes, thereby ensuring not only equitable access but also advancing healthcare outcomes. The study advocates for a strategic relocation of FPA Sri Lanka's existing Service Delivery Point, emphasizing the imperative to shift from Ampara to Monaragala. Additionally, in anticipation of geographical expansion, the study prioritizes districts with distinctive needs – namely, Jaffna, Kandy, Puttalam, and Ratnapura. This strategic approach aligns FPA Sri Lanka's interventions with the nuanced requirements of diverse communities.

The empowerment derived from the study's findings extends to stakeholders, providing them with the insights needed to make judicious decisions. This, in turn, fosters a culture of accountability and amplifies the positive impact of FPA Sri Lanka's interventions. The recommendations put forth in this report set a course for responsive and tailored strategies, ensuring that FPA Sri Lanka's mission of enhancing Sexual and Reproductive Health is not only sustained but flourishes across Sri Lanka.

For further details, insights, and recommendations, refer to the complete "Mapping for Impact: FPA Sri Lanka's District Prioritization Strategy" report.

1. Introduction & Background

Established in 1953, The Family Planning Association of Sri Lanka (FPA Sri Lanka) serves as a non-governmental organization (NGO) that explores innovative and challenging processes of family Planning in Sri Lanka. We are proud to be one of the most expansive and well known NGO's in the country that focuses on Family Planning, SRH and welfare. At FPA Sri Lanka, we believe that reproductive health is a fundamental human right of every woman and man throughout her/his life cycle. FPA Sri Lanka's journey began 70 years ago, introducing family planning services to the country, when no other party was keen on doing so. The government took a policy decision in 1962 and integrated Family Planning into the state's Maternal and Child Health services. A large quantum of work FPA Sri Lanka has done subsequent to this move has ensured that all can access family planning products through the pharma trade, SRH education is taken to youth and disadvantaged groups, and free SRH services are accessible for the poor, marginalized and underserved communities (1). Thus working hand-in-hand with the government, complementing and supplementing products and services, and advocating remedies for policy gaps, FPA Sri Lanka has contributed towards Sri Lanka achieving excellent health indices on Sexual and Reproductive Health. Our focus is still on SRH, working towards the lofty vision of "building a country with Sexual and Reproductive Health, as a right to all" (1).

In the pursuit of improving the well-being and health of communities, strategic planning and precise resource allocation are essential. FPA Sri Lanka is committed to this very principle. To effectively carry out its mission of providing comprehensive package of Sexual and Reproductive Health related services, FPA Sri Lanka recognizes the significance of geospatial data in driving its impact. This report, "Mapping for Impact: FPA Sri Lanka's District Prioritization Strategy," delves into the organization's systematic approach to optimizing its efforts. It aims to provide a comprehensive overview of the strategy employed by FPA Sri Lanka to select specific districts for programme implementation. This selection process is grounded in rigorous data analysis, ensuring that resources are allocated where they are needed most. The whole exercise is grounded on 3 principles.

01) The Imperative of Geospatial Prioritization: Sri Lanka's diverse landscape and demographics present unique challenges when it comes to Sexual and Reproductive Health services. These challenges underscore the importance of a geospatially informed strategy. From densely populated urban areas to remote rural regions, FPA Sri Lanka's mission is to ensure equitable access to high-quality healthcare services. By harnessing the power of geospatial data, FPA Sri Lanka endeavors to target its efforts where it can make the most substantial impact. This strategy allows for a more granular understanding of the specific needs and demands of each district, resulting in tailored programmes and services.

02) A Holistic Approach: Gap Analysis and Needs Assessment: Central to FPA Sri Lanka's approach is a comprehensive gap analysis and needs assessment. This report will delve into the methodology and findings of these critical components of our district prioritization strategy. The gap analysis identifies disparities and deficiencies in existing services and infrastructure. Meanwhile, the needs assessment provides insights into the unique healthcare requirements of selected districts, accounting for population dynamics, socio-economic conditions, and healthcare indicators.

03) Targeting Impact, Enhancing Lives: The goal of this district prioritization strategy is clear: to optimize resource allocation and ensure that FPA Sri Lanka's programmes are reaching the communities that need them most. By mapping our impact and aligning our services with the diverse needs of Sri Lanka's regions, we aim to enhance lives, empower individuals, and contribute to the overall well-being of the nation.

2. Rationale

The rationale for conducting the "Mapping for Impact: FPA Sri Lanka's District Prioritization Strategy" study is rooted in the fundamental principles of data-driven decision-making and resource optimization in the field of public health. In an era characterized by rapidly evolving technological advancements and a growing understanding of the interplay between health and geography, harnessing the power of data-driven strategies has become paramount for organizations committed to the welfare of communities. The importance of this study can be summarized in the following key points:

01) Strategic Resource Allocation: FPA Sri Lanka is dedicated to efficiently deploying its resources and services to maximize their positive impact on communities across the country. By strategically prioritizing districts, resources can be directed to areas where they are most needed, ensuring that the organization's efforts are focused on communities with specific requirements.

02) Equity and Access: Sri Lanka's demographic and geographic diversity results in varying healthcare needs among its districts. This study aims to uphold the principles of equity and access by identifying districts with higher needs and disparities in family planning and sexual and reproductive health services. By addressing these disparities, FPA Sri Lanka can work towards providing equitable access to its services to all including marginalized and excluded groups.

03) Tailored Programmes: 'One-size-fits-all' approaches are often insufficient in addressing the multifaceted health needs of diverse population in the districts. Through geospatial analysis and the identification of gaps and needs, FPA Sri Lanka can tailor its programmes to meet the unique requirements of each district, ensuring that interventions are relevant and effective.

04) Data-Driven Culture: In an era of rapidly advancing data analytics and geospatial technologies, organizations must harness the power of data to build data culture for informed decision making. This study underscores the importance of data-driven strategies in optimizing programme implementation, resulting in better outcomes and a more efficient use of resources.

05) Informed Decision-Making: The study findings will empower FPA Sri Lanka and its stakeholders to make informed decisions regarding programme expansion, resource allocation, and service delivery. This approach enhances accountability and ensures that investments in public health yield the intended outcomes.

3. Objectives

The overall objective of this study is to enhance the effectiveness and impact of FPA Sri Lanka's Sexual and Reproductive Health programmes through data-driven, geospatial strategies. This study aims to provide a comprehensive framework for selecting and prioritizing districts, ultimately ensuring that FPA Sri Lanka's resources and services are directed to communities with the greatest need, resulting in improved healthcare access and outcomes. The specific objectives are to-

- 01) Conduct a rigorous gap analysis of Sexual and Reproductive Health services across all districts in Sri Lanka. This analysis will identify geographical disparities, deficiencies, and gaps in the existing services, infrastructure, and healthcare indicators, enabling FPA Sri Lanka to pinpoint areas where its interventions are most urgently needed.
- 02) Perform a needs assessment specific to selected districts, considering factors such as population dynamics, socio-economic conditions, and healthcare requirements. By assessing the unique needs of each district, FPA Sri Lanka can tailor its programmes to address the specific health challenges and demands of local communities, ensuring that services are contextually relevant and effective.
- 03) Develop a data-driven district prioritization strategy that utilizes the findings from the gap analysis and needs assessment. This strategy will guide the selection of districts for programme implementation, ensuring that resources are allocated to areas where they can make the most significant impact. It will provide a clear and evidence-based roadmap for FPA Sri Lanka to optimize its programmes, with a focus on equitable access and improved healthcare outcomes.

4. Methodology

The methodology employed in this study adheres to a systematic and rigorous approach consisting of five essential steps. These steps were meticulously executed to ensure a thorough assessment and subsequent prioritization of districts, all grounded in the evaluation of diverse indicators.

1) Indicator Selection

The process of selecting indicators laid a crucial foundation for this study. In total, 25 indicators were thoughtfully curated to encompass vital focus areas, addressing various aspects of public health and socio-economic conditions. Please refer to Table 01 for a comprehensive list of the selected indicators along with their respective definitions:

2) Collection of secondary data

The procurement of district-level data for the selected indicators was conducted through a systematic approach, relying on trusted national data sources. Each indicator was meticulously matched with its respective data source to ensure accuracy and reliability. The details of the data sources for each indicator are comprehensively presented in Table 02.

Table 01: Indicator selection; selected indicators, focus areas and indicator definitions

Indicator Focus	Indicator	Indicator Definition
1. Population Size	1.1. Population density per square km	Measure of the number of people residing in a unit geographic area. It is calculated by dividing the total population of the area by its land area in square kilometers.
2. Poverty & Unemployment	2.1. Percentage of poor households	Proportion of households within a district that fall below the poverty line, as determined by the poverty assessment conducted in 2016.
	2.2. Multidimensional Poverty Rate	Assesses poverty from various dimensions, including income, education, and health.
	2.3. Unemployment Rate	Measures the proportion of the workforce that is actively seeking employment but is currently jobless
3. Antenatal Services	3.1. Birth Rate	Represents the number of live births per 1,000 people in a district within a specified time frame.
	3.2. % of total teenage mothers registered	Percentage of teenage mothers within the total number of registered pregnancies in the district.
	3.3. Percentage of pregnant mothers with any antenatal morbidities	Percentage of pregnant women in the district who experience any antenatal health issues such as diabetes, hypertension, etc.
4. Family Planning Services	4.1. Percentage of eligible couples using modern family planning methods	Proportion of eligible couples in the district who are using modern family planning methods which do not include traditional methods.
	4.2. Percentage of eligible couples with unmet need for family planning	Percentage of eligible couples who wish to avoid or delay pregnancy but are not using any contraception method.
	4.3. Total Fertility Rate	Average number of children a woman is having / is expected to have during her reproductive years in the district.
	4.4. Modern Contraceptive Prevalence Rate	Proportion of women of reproductive age who are using modern contraceptive methods in the district.
5. Well woman Care	5.1. Percentage of 35 year age cohort attendance to WWC	Percentage of women in the 35-year age cohort who attend Well woman Care (WWC) programmes out of the 0.8% of the estimated population in the district.

Indicator Focus	Indicator	Indicator Definition
	5.2. Percentage of 35 year age cohort coverage who had undergone a Pap smear screening	Proportion of women in the 35-year age cohort who have undergone Pap smear screening out of the 0.8% of the population.
	5.3. Breast Cancer incidence rate (Crude Rate)	This represents the crude incidence rate of breast cancer in the district, indicating the number of new cases per 100,000 people.
	5.4. Cervical Cancer incident rate (Crude Rate)	Number of new cases of cervical cancer per 100,000 people in the district.
6. HIV/STI Services	6.1. Number of HIV cases reported per 100,000 population	Reported cases of HIV infection per 100,000 people in the district.
	6.2. Number of people living with HIV per 100,000 people	Number of individuals living with HIV in the district per 100,000 people.
	6.3. Number of syphilis cases reported per 100,000 population	Reported cases of syphilis infection per 100,000 people in the district
	6.4. Size of the Most at Risk Population for HIV per 100,000 Population	Size of the Most at Risk Population (MARPs) for HIV in the district per 100,000 people.
07) Subfertility Services	7.1. Percentage of eligible couples with subfertility	Percentage of eligible couples in the district who face issues related to subfertility.
8. Government Health Personnel	8.1. Number of medical officers per 100,000 population	Quantifies the number of medical officers available per 100,000 people in the district.
	8.2. Number of PHM + SPHM per 100,000 population	Number of Public Health Midwives (PHM) and Senior Public Health Midwives (SPHM) per 100,000 people in the district.
	8.3. Number of PHNS + SPHNS per 100,000 population	Number of Public Health Nursing Sisters (PHNS) and Senior Public Health Nursing Sisters (SPHNS) per 100,000 people in the district.
9. FPASL Coverage - 2022	9.1. Number of clients per 100,000- population	Number of clients served by FPASL per 100,000 people in the district
10. Other Considerations	10.1. Qualitative inquiries	Qualitative inquiries refer valuable insights and context for the selection or exclusion of districts in the prioritization strategy. Qualitative inquiries complement the quantitative data.- Both quantitative data and qualitative insights help in developing the evidence-informed district prioritization strategy.

Table 02: Collation of secondary data; list of indicators and data sources

Indicator	Data Source
1.1 Population density per square km	Mid-year population projection, Department of Census and Statistics, 2020 (2)
2.1 Percentage of poor households	Household Income & Expenditure Survey, Department of Census and Statistics, 2019 (3)
2.2 Multidimensional Poverty Rate	Multidimensional Poverty in Sri Lanka, Department of Census and Statistics, 2020 (4)
2.3 Unemployment Rate	Sri Lanka Labor Force Survey, Department of Census and Statistics, 2021 (5)
3.1 Birth Rate	Family Health Bureau Annual Report, 2020 (6)
3.2 % of total teenage mothers registered	Family Health Bureau Annual Report, 2020 (6)
3.3 Percentage of pregnant mothers with any antenatal morbidities	Family Health Bureau Annual Report, 2020 (6)
4.1 Percentage of eligible couples using modern family planning methods	Family Health Bureau Annual Report, 2020 (6)
4.2 Percentage of eligible couples with unmet need of family planning	Family Health Bureau Annual Report, 2020 (6)
4.3 Total Fertility Rate	Demographic and Health Survey, Department of Census and Statistics, 2016 (7)
4.4 Modern Contraceptive Prevalence Rate	Demographic and Health Survey, Department of Census and Statistics, 2016 (7)
5.1 Percentage of 35 year age cohort attendance to WWC	Family Health Bureau Annual Report, 2020 (6)
5.2 Percentage of 35 year age cohort coverage who have undergone Papsmear screening	Family Health bureau Annual Report, 2020 (6)
5.3 Breast Cancer incidence rate (Crude Rate)	Cancer incidence and mortality data, National Cancer Prevention Programme, 2019 (8)
5.4 Cervical Cancer incidence rate (Crude Rate)	Cancer incidence and mortality data, National Cancer Prevention Programme, 2019 (8)
6.1 Number of HIV cases reported per 100,000 population	Annual Report, National STD/AIDS Control Programme, 2021 (9)
6.2 Number of people living with HIV per 100,000 people	Annual Report, National STD/AIDS Control Programme, 2021 (9)
6.3 Number of syphilis cases reported per 100,000 population	Annual Report, National STD/AIDS Control Programme, 2021 (9)
6.4 Size of the Most at Risk Population for HIV per 100,000 Population	Size Estimation of Most at Risk Population, National STD/AIDS Control Programme, 2018 (10)
7.1 Percentage of eligible couples with subfertility	Family Health Bureau Annual Report, 2020 (6)
8.1 Number of medical officers per 100,000 population	Ministry of Health, 2020 (11)
8.2 Number of PHM + SPHM per 100,000 population	Ministry of Health, 2020 (11)
8.3 Number of PHNS + SPHNS per 100,000 population	Ministry of Health, 2020 (11)
9.1 Number of clients per 100,000- population	Monitoring and Evaluation Information Management System, FPA Sri Lanka, 2022 (12)
10.1 Qualitative -perspectives	Not Applicable

3) Geographical Mapping

Geographical mapping played a pivotal role in this study by providing a visual representation of key indicators across the selected districts. This critical step involved the creation of density maps for all 25 indicators using the advanced Geographic Information System (GIS) software, specifically QGIS (version 3.32.3 – LIMA edition). Through the integration of geographic data, these maps allowed for a profound exploration of disparities and intricate geographical variations among the districts, enriching our understanding of the diverse landscape within the region. This visual approach was instrumental in identifying areas with distinct characteristics, highlighting hotspots, and revealing potential areas of concern. The subsequent analysis and prioritization were significantly informed by the insights derived from these geographical representations.

4) Geo-prioritization and Selection of Districts

The heart of our study lay in the prioritization and selection of districts, a complex task that was accomplished through a meticulously structured ranking and scoring system. The study evaluates various focus areas to assess the overall performance and needs of each district. The relative weights allocated to each focus area are used to compute a final score and rank for each district, determining their priority for intervention and resource allocation. The assigned weights are presented in Table 03, enabling a transparent view of the value ascribed to each indicator.

Table 03: Focus areas and weights for calculation of final scores.

Focus Areas	Score	Weight
01) Population Density	5	0.05
02) Poverty & Unemployment	15	0.15
03) Antenatal Services	5	0.05
04) Family Planning	20	0.2
05) Well woman Care	20	0.2
06) HIV / STI Services	15	0.15
07) Subfertility Services	5	0.05
08) Government Health Personnel	15	0.15
Total	100	1

For each of the above focus areas, the districts are scored and ranked individually, and then the scores are weighted according to their relative importance. Once the scores for each district in each focus area are calculated, they are combined with their respective weights to obtain a final score. These final scores are then ranked from lowest to highest, with the district having the lowest score receiving the top ranking. This ranking helps in prioritizing districts based on their overall needs and performance across all focus areas. The districts with lower final scores indicate a greater need for intervention, while those with higher scores suggest a lower priority for resource allocation. This scoring and ranking methodology ensures that resources are directed to areas with the greatest requirements, optimizing the impact of the interventions.

While quantitative data formed the backbone of this process, it was complemented by a qualitative dimension, adding depth to the district selection strategy. Qualitative inquiries, which encompass non-quantitative sources of information and data, were seamlessly integrated into the process. These qualitative insights provided invaluable context and enriched our understanding of the districts, ultimately playing a pivotal role in the finalization of the district prioritization strategy. The synergy between quantitative and qualitative inputs was instrumental in achieving a well-rounded and holistic approach to district selection.

5) Needs Assessment and Programme Gap Analysis

With the districts selected, the next crucial phase involved an exhaustive evaluation of their unique needs and a comprehensive analysis of programme gaps. We examined the socio-economic landscape of each selected district, meticulously scrutinizing factors such as income levels, poverty, and employment. Simultaneously, a comprehensive exploration of the health-related challenges was undertaken. This encompassed an array of health indicators, including maternal and child health, family planning, the prevalence of infectious diseases, and the accessibility of healthcare services. The programme gap analysis provided critical insights into areas where existing health and socio-economic programmes might be falling short. By identifying these gaps, our study aimed to inform targeted interventions and investments that could drive positive change in the selected districts. It is within this phase that the real-world impact of our study began to take shape, as it laid the foundation for evidence-based decision-making and resource allocation.

5. Results

In this section, we'll break down what we found in our study. It's like taking a snapshot of each district in Sri Lanka to see what's going on there and then selecting districts where the issues and gaps are higher compared to other locations. We present a snapshot of distinct situations in each area, shedding light on various aspects we are interested in. Additionally, we evaluate existing programmes, pinpointing areas where enhancements or adjustments are necessary to serve the local population better.

5.1. Geographical mapping

This subsection section takes you on a visual journey across Sri Lanka, uncovering the geographical distribution of key indicators vital to our study. We've meticulously mapped out each of the selected focus areas to provide a clear, data-driven representation of the country's diverse landscape. These maps offer valuable insights into the spatial variations and disparities within the districts, highlighting how different regions grapple with unique challenges and opportunities. From population density to healthcare access, our geographic representations help paint a comprehensive picture of Sri Lanka's socio-economic and public health landscape, enabling informed decision-making and resource allocation.

5.1.1. Population density

The geographical distribution of population in Sri Lanka exhibits significant variations across its districts. The most densely populated areas are concentrated in the Western Province, with Colombo, Gampaha, and Kalutara districts standing out as the top three, each with distinct population densities per square kilometer. On the other end of the spectrum, the Northern Province features some of the least densely populated districts, such as Mullaitivu and Mannar. These disparities reflect the complex demographic patterns of the country, where urbanization and regional dynamics play pivotal roles in population concentration. While Colombo showcases the highest population density, Mullaitivu remains the least densely inhabited district, emphasizing the need for tailored developmental and healthcare strategies to address the varying needs of communities across the nation.

The geographical distribution of the population in Sri Lanka is visually represented in Figure 01. For detailed data and scores corresponding to the population density across various districts, please refer to Annexure 01. This annexure provides comprehensive information, including population sizes, land areas in square kilometers, population densities per square kilometer, final scores, and rankings for each district.

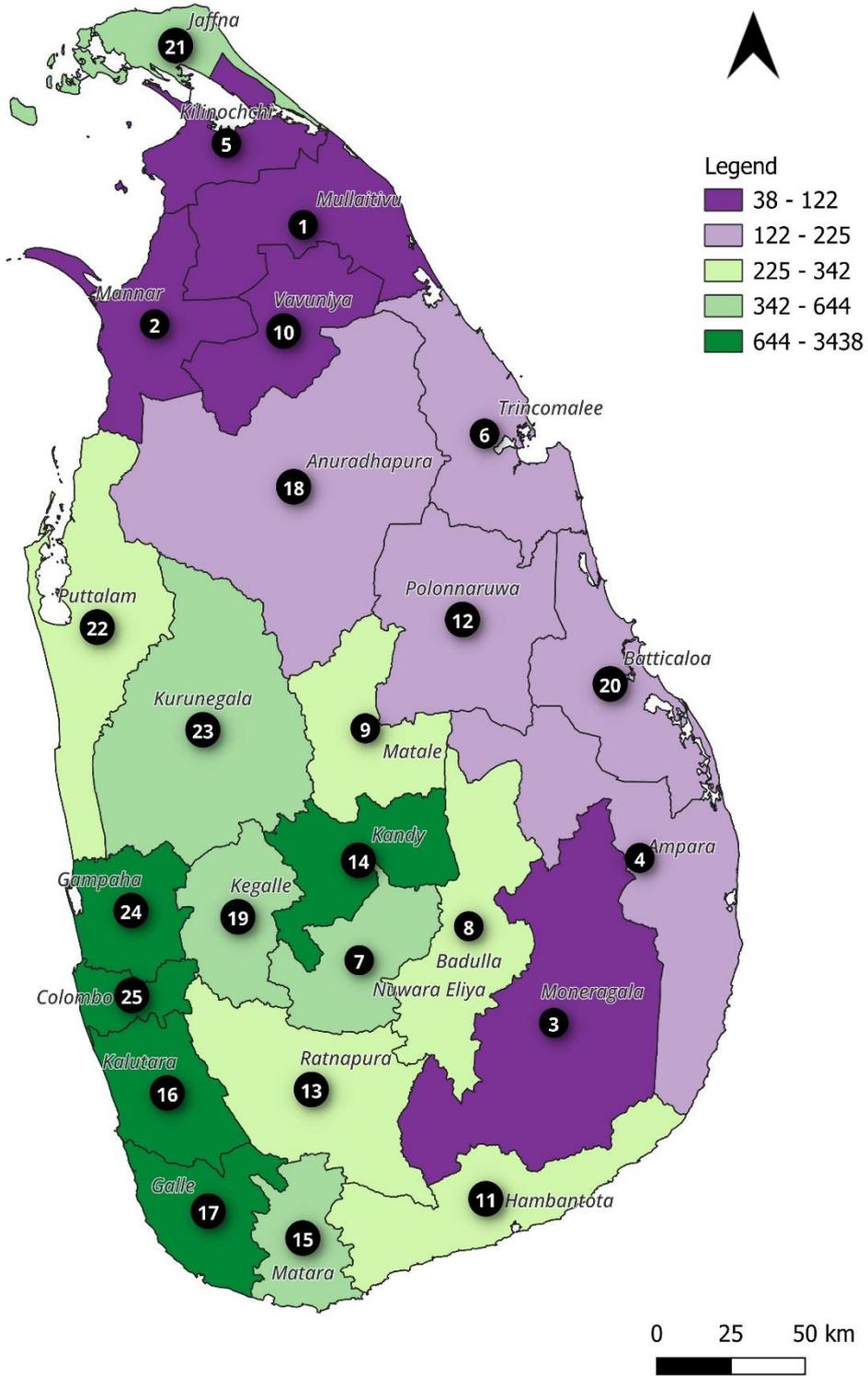


Figure 01: Geographical Distribution of Population Density in Sri Lanka
 Note: Labels represent the ranks, from lowest (1=Mutative) to highest (25= Colombo)

5.1.2. Poverty and unemployment

In assessing Poverty and Unemployment in Sri Lanka, three key indicators were employed: Percentage of Poor Households, Multidimensional Poverty Rate, and Unemployment Rate. These indicators provide a comprehensive understanding of the socio-economic conditions and employment challenges across different districts.

Percentage of poor households: The percentage of poor households in Sri Lankan districts exhibits noteworthy disparities. The lowest percentage of poor households is observed in the Colombo district, ranking 1st, in the Western Province, highlighting a higher socio-economic status. Conversely, Kilinochchi district in the Northern Province presents the highest percentage of poor households, ranking 25th, followed by Mannar district, ranking 2nd, signifying socio-economic challenges in these areas (Figure 02).

Multidimensional Poverty Rate: The Multidimensional Poverty Rate across Sri Lankan districts reveals significant disparities in living conditions. Colombo, part of the Western province, boasts the lowest Multidimensional Poverty Rate, securing the top rank at 1. Gampaha, also in the Western province, follows closely behind, ranking 2nd. Conversely, Nuwara Eliya in the Central Province, Badulla and Monaragala districts in the Uva Province stands out with the highest Multidimensional Poverty Rate (Figure 03).

Unemployment Rate: The Unemployment Rate in Sri Lankan districts presents a varied economic landscape, with Trincomalee in the Eastern province having the lowest rate, securing the 1st rank at an impressively low 1. Mannar, also in the Northern province, follows closely behind with a 2nd rank and an Unemployment Rate of 2.1, emphasizing relatively favorable employment conditions in these regions. Mullaitivu, also in the Northern province, ranks 3rd with an Unemployment Rate of 2.4. In contrast, districts such as Hambantota, Matara, Batticaloa, and Galle, all located in the Southern province, share the highest unemployment rates and rank 25th, highlighting pressing employment challenges in these regions. Similarly, Kandy in the Central province, as well as Matara and Batticaloa in the Southern province, exhibit high unemployment rates and rank 21st and 23rd, respectively. A notable observation is the Eastern and Northern provinces generally enjoying lower Unemployment Rates, while certain districts in the Southern and Central provinces face relatively higher unemployment challenges (Figure 04).

The overall rating of districts in Sri Lanka, based on a comprehensive assessment of Poverty and Unemployment, reveals varying degrees of socio-economic challenges. The districts were scored and ranked using above three crucial indicators. Notably, Badulla in the Uva Province emerged as the district with the most pressing issues, scoring the lowest with a total of 0.15. In contrast, Colombo in the Western Province secured the top position with a high score of 3.75, indicating a relatively lower severity of poverty and unemployment (Annexure 02).

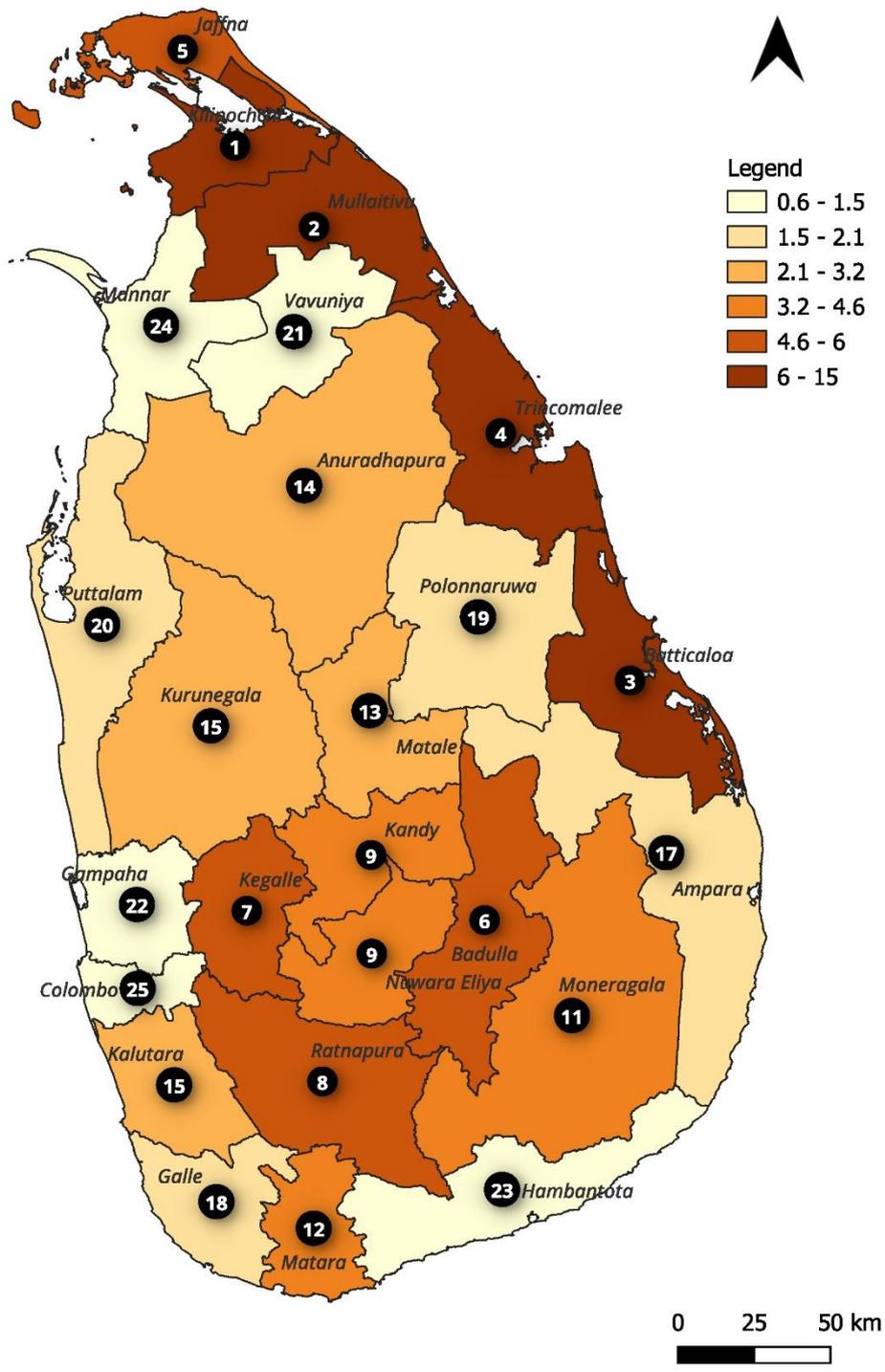


Figure 02: Percentage of poor households by district

Note: Labels represent the ranks, from highest (1= Kilinochchi) to lowest (25 = Colombo)

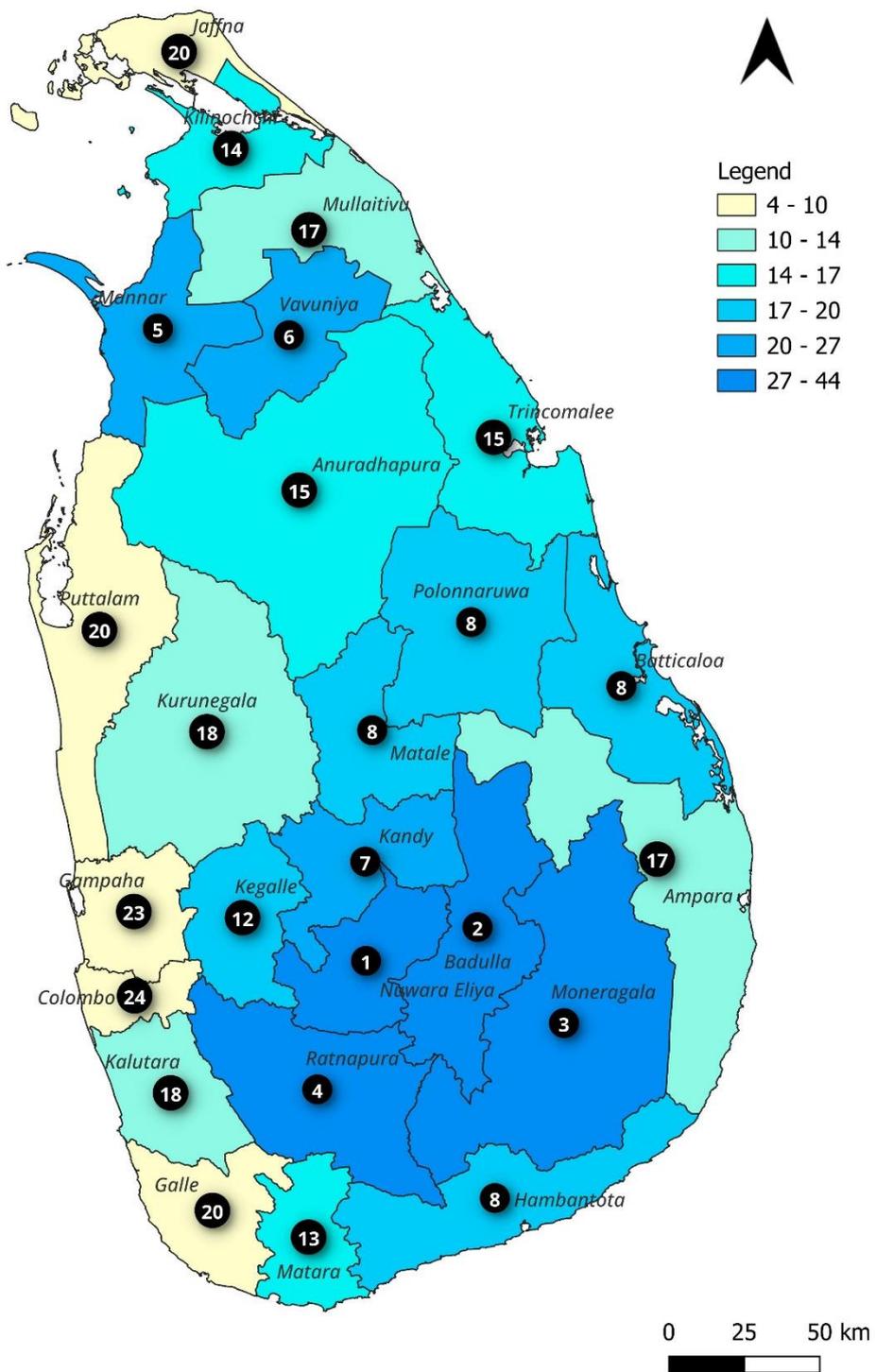


Figure 03: Multidimensional poverty rate by administration district

Note: Labels represent the ranks, from highest (1= Nuwara Eliya) to lowest (24= Colombo)

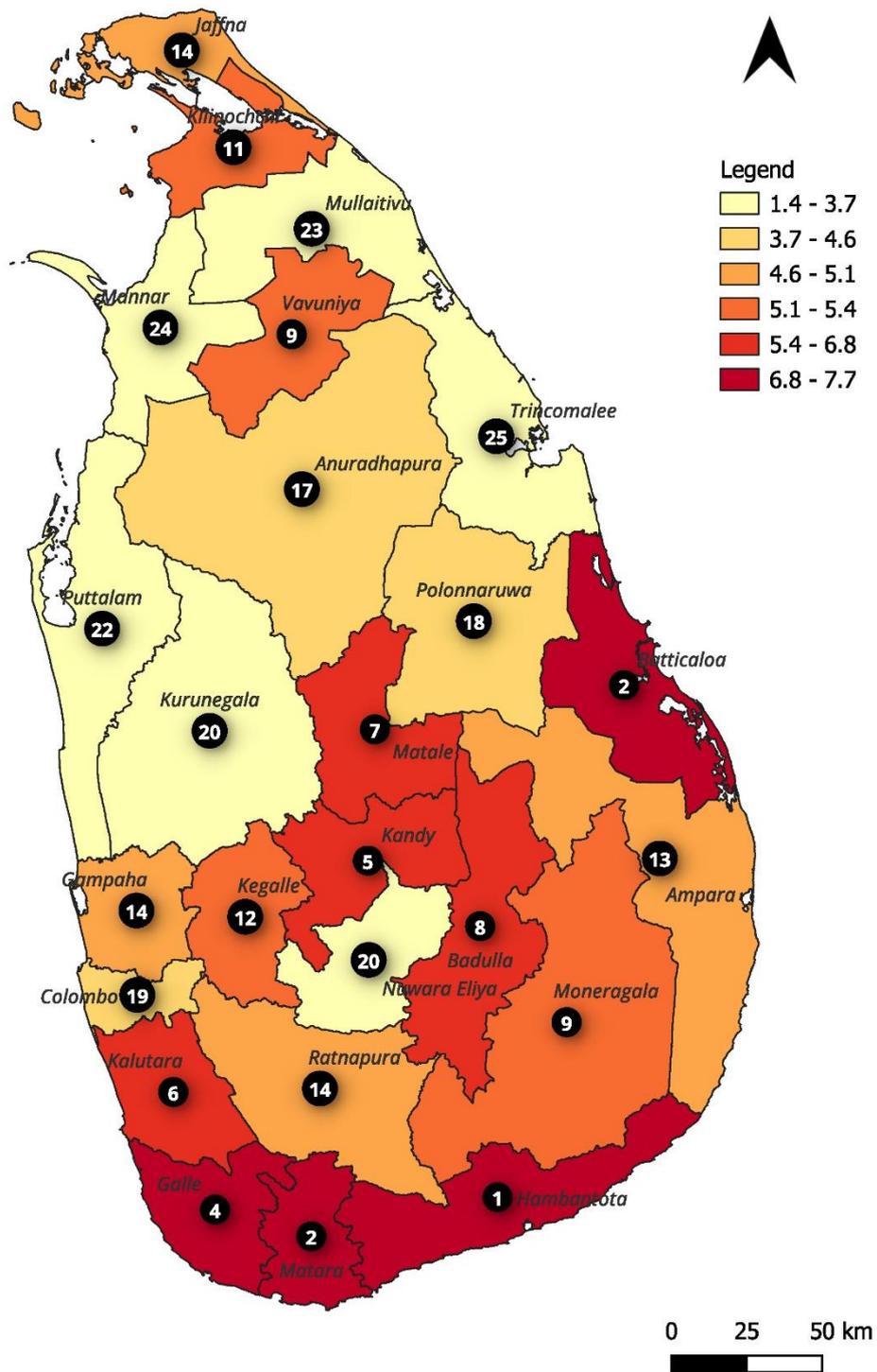


Figure 04: Unemployment rate by administration district

Note: Labels represent the ranks, from highest (1= Hambantota) to lowest (25= Trincomalee)

5.1.3. Antenatal services

Antenatal services in Sri Lanka were evaluated using three critical indicators: birth rates, the percentage of teenage mothers, and the percentage of pregnant mothers with antenatal morbidities.

Birth rate: In the assessment of Birth Rate across districts in Sri Lanka, the variations are significant, reflecting differing demographic trends and dynamics. Mullaitivu, a district in the Northern Province, stands out with the lowest birth rate, ranking first at 11.1. Gampaha in the Western Province follows closely with a rate of 12, securing the second position, while Kalutara, also in the Western Province, takes third place with a birth rate of 12.6. In contrast, Trincomalee, an Eastern Province district, reports the highest birth rate at 22.4, underscoring the diverse reproductive patterns within the country (Figure 05).

Percentage of teenage mothers registered: Teenage motherhood rates in Sri Lankan districts display significant variations, with Kandy in the Central Province having the lowest percentage of teenage mothers at 3.1%, ranking first. Gampaha in the Western Province is close behind with 3.2%, securing the second position, and Kegalle in Sabaragamuwa and Matara in the Southern Province share the third spot with 3.3%. In contrast, Batticaloa and Trincomalee, both located in the Eastern Province, report the highest rates of teenage motherhood, with 8.2% and 7.5%, respectively, highlighting the diverse adolescent reproductive patterns in different areas of the country (Figure 06).

Percentage of pregnant mothers with any antenatal morbidities: The percentage of pregnant mothers with antenatal morbidities varies significantly across Sri Lankan districts. Nuwara Eliya in the Central Province reports the lowest rate at 26.9%, ranking first, followed by Badulla in the Uva Province at 33.8%. On the other hand, Kilinochchi in the Northern Province records the highest percentage at 64.3%, emphasizing the diverse antenatal health challenges faced by pregnant mothers in different regions (Figure 07).

Overall the antenatal services in Sri Lanka exhibit variations across districts, as reflected by the comprehensive assessment of birth rates, the percentage of teenage mothers, and the percentage of pregnant mothers with antenatal morbidities. Kilinochchi in the Northern Province ranks the highest with a score of 0.05, highlighting the relatively challenging situation in terms of antenatal services. On the other hand, Kandy in the Central Province stands out with the best score of 1.10, demonstrating robust antenatal care services. This suggests that while some areas may face more significant challenges in providing adequate antenatal services, there are districts like Kandy setting a positive example with comprehensive support for expectant mothers (Annexure 03).

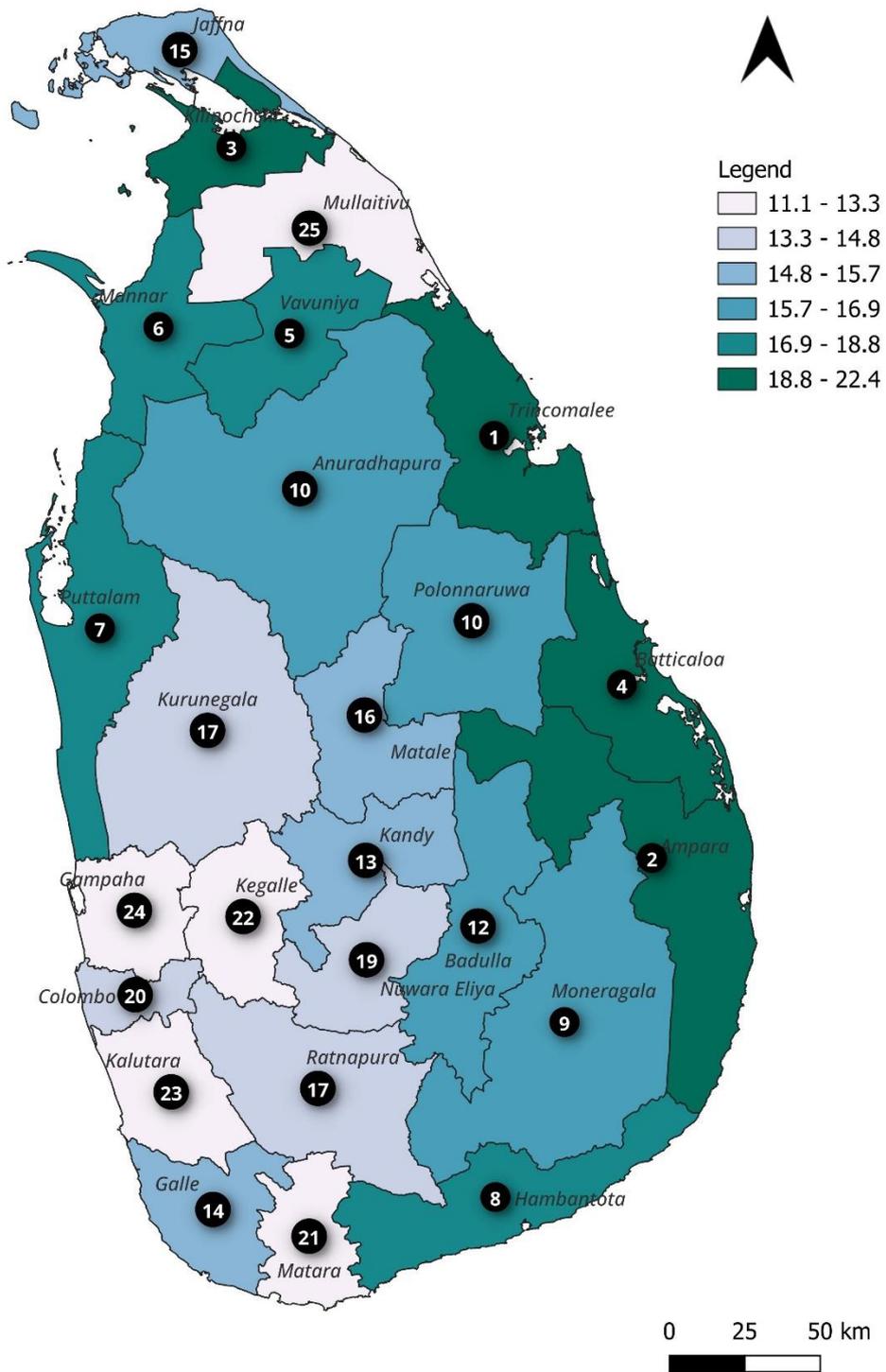


Figure 05: Birth rate by administration district

Note: Labels represent the ranks, from highest (1= Trincomalee) to the lowest (25= Mullative)

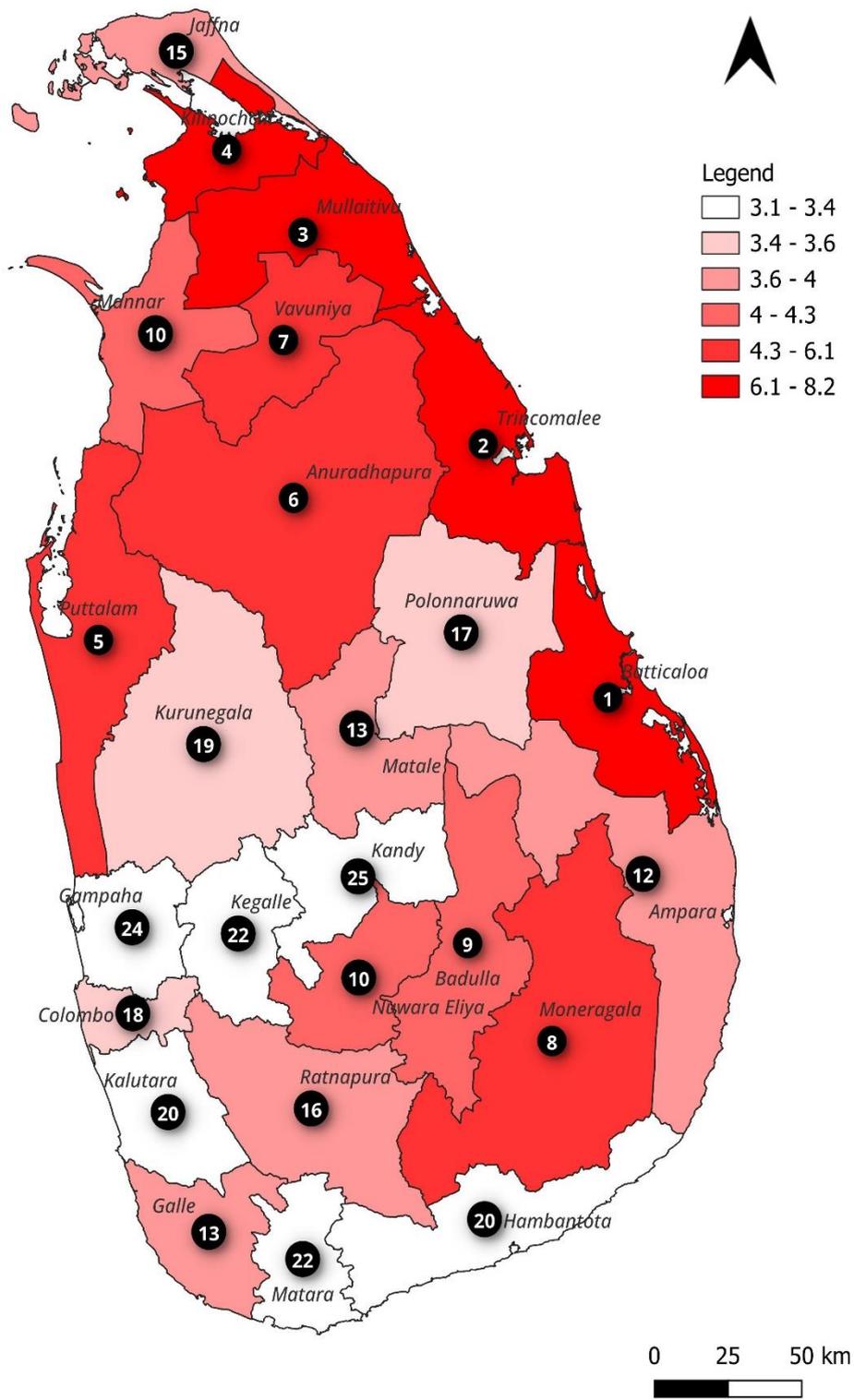


Figure 06: Percentage of teenage mothers registered by administration district
 Note: Labels represent the ranks, from highest (1= Batticaloa) to the lowest (25= Kandy)

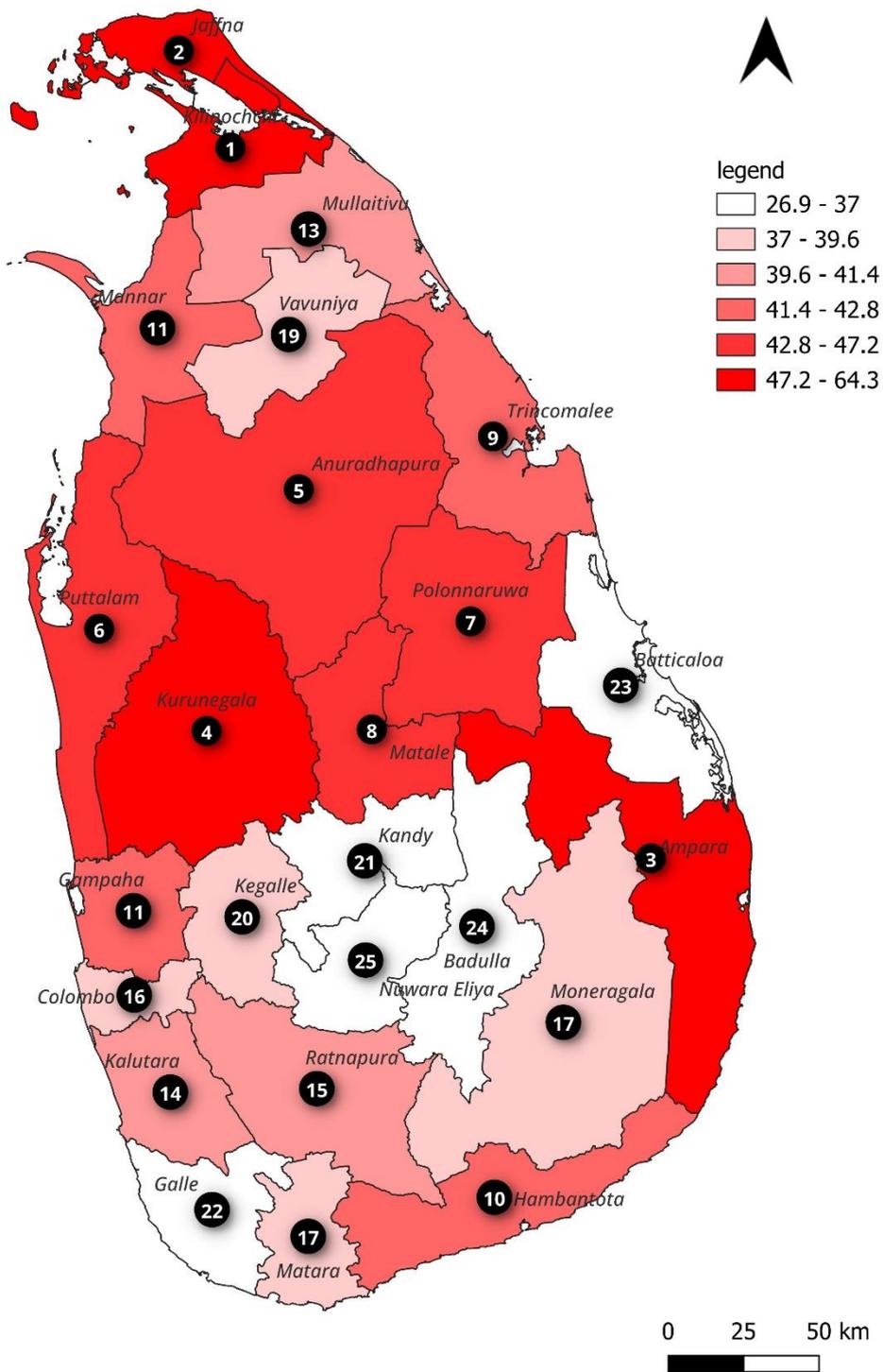


Figure 07: Percentage of pregnant mothers with any antenatal morbidities
 Note: Labels represent the ranks, from highest (1= Kilinochchi) to the lowest (25= Nuwara Eliya)

5.1.4. Family planning services

Family planning services in Sri Lanka were comprehensively assessed through four crucial indicators, providing a holistic view of the state of family planning in the country.

Percentage of eligible couples using modern family planning methods: The utilization of modern family planning methods among eligible couples in Sri Lanka's districts varies significantly, as indicated by the Percentage of eligible couples using modern family planning methods. The highest adoption rates are found in Uva's Badulla district, with an impressive 70.9%, followed closely by Northern Mullaitivu at 67.7% and North Central Polonnaruwa at 66.7%. Conversely, the lowest adoption rates are observed in Uva's Moneragala district, with just 34.9% of eligible couples using modern family planning methods, indicating a substantial disparity across districts in the country (Figure 08).

Percentage of eligible couples with an unmet need for family planning: Figure 09 illustrate the percentage of eligible couples in Sri Lanka's districts with unmet needs for family planning, with notable variations across regions. The district of Kilinochchi in the Northern Province has the lowest unmet need for family planning at just 1.8%, followed by Uva's Moneragala district at 2.3% and Northern Jaffna at 3.1%. In contrast, Western Gampaha has the highest unmet need, with 8.1% of eligible couples facing challenges in accessing family planning services, followed by Northern Vavuniya at 8.7%.

Total Fertility Rate: The Total Fertility Rate (TFR) varies across Sri Lanka's districts, with Sabaragamuwa's Ratnapura, Western Colombo, and Western Gampaha districts having the lowest TFR at 1.8, indicating a relatively lower average number of children born to women in these areas. In contrast, several districts, including Central Kandy, Sabaragamuwa Kegalle, have a TFR of 2.6, indicating a slightly higher fertility rate. These variations in TFR reflect differences in family planning practices and demographic trends among the districts, with the lowest TFR districts having lower population growth potential compared to the highest TFR districts (Figure 10).

Modern Contraceptive Prevalence Rate: The Modern Contraceptive Prevalence Rate (MCPR) in Sri Lanka's districts varies significantly, reflecting differences in family planning practices. North Central Polonnaruwa district has the highest MCPR at 67, indicating a relatively high percentage of eligible couples using modern contraceptive methods. In contrast, Northern Mannar district has the lowest MCPR at 18.4, suggesting a lower utilization of modern contraception in the area.

Overall, Uva Badulla district achieved the highest overall score, securing the first rank, with a strong percentage of eligible couples using modern family planning methods (70.90%) and a relatively lower unmet need (4.60%). Eastern Batticaloa district, despite having a moderate mCPR, claimed the top position (Annexure 04).

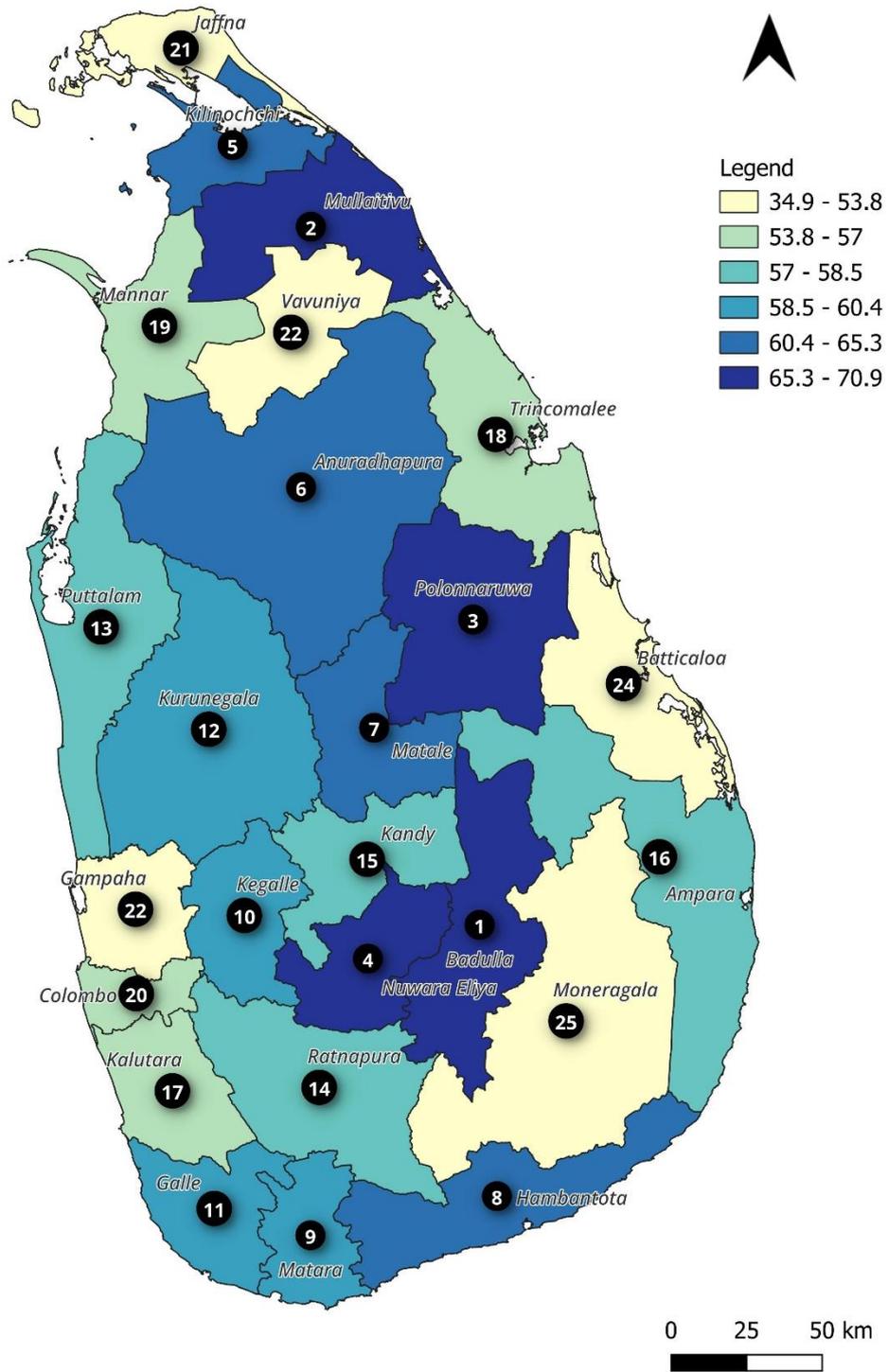


Figure 08: Percentage of eligible couples using modern family planning methods
 Note: Labels represent the ranks, from highest (1= Badulla) to the lowest (25= Moneragala)

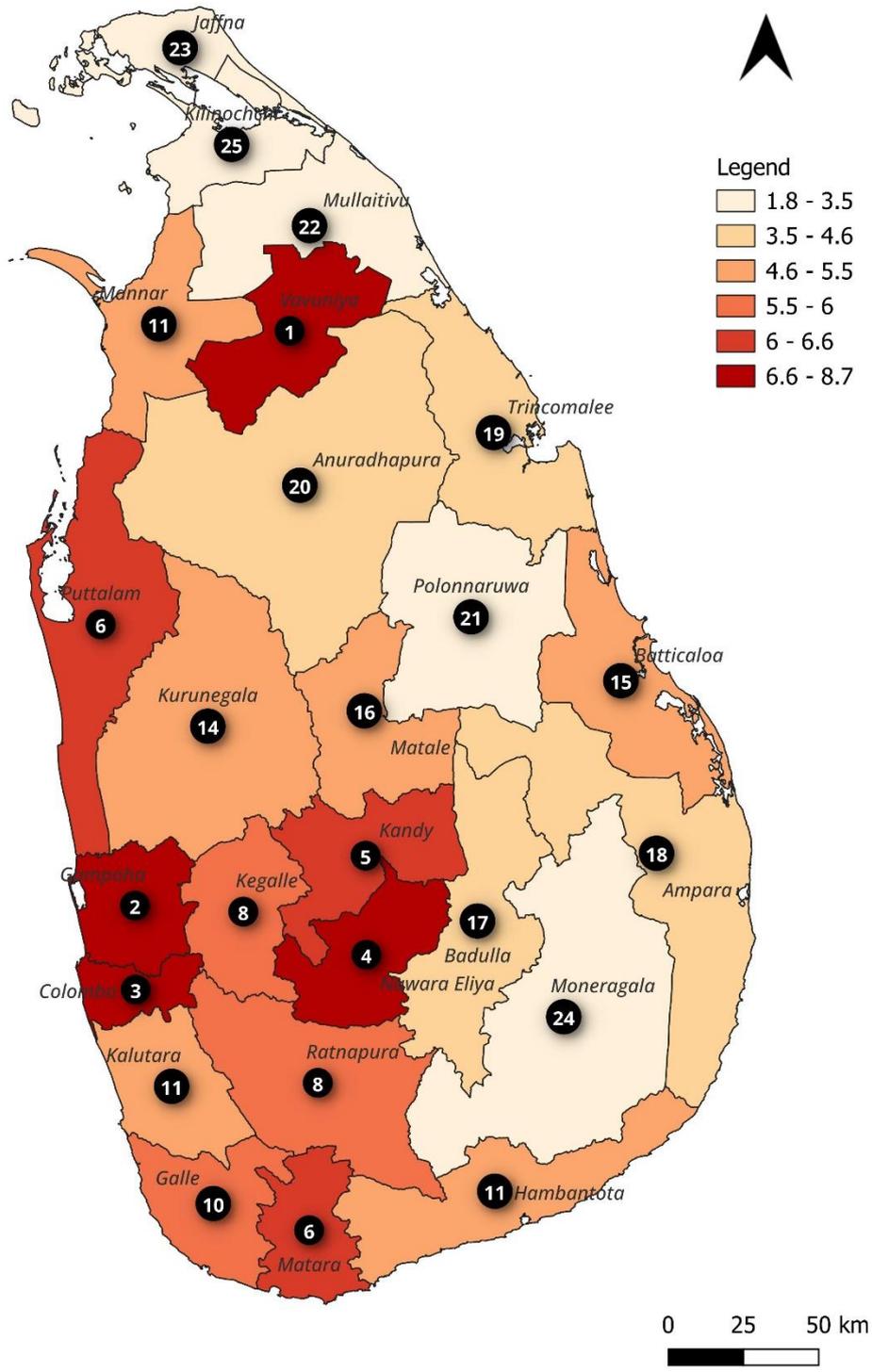


Figure 09: Percentage of eligible couples with an unmet need for family planning
 Note: Labels represent the ranks, from highest (1= Vavuniya) to the lowest (25= Kilinochchi)

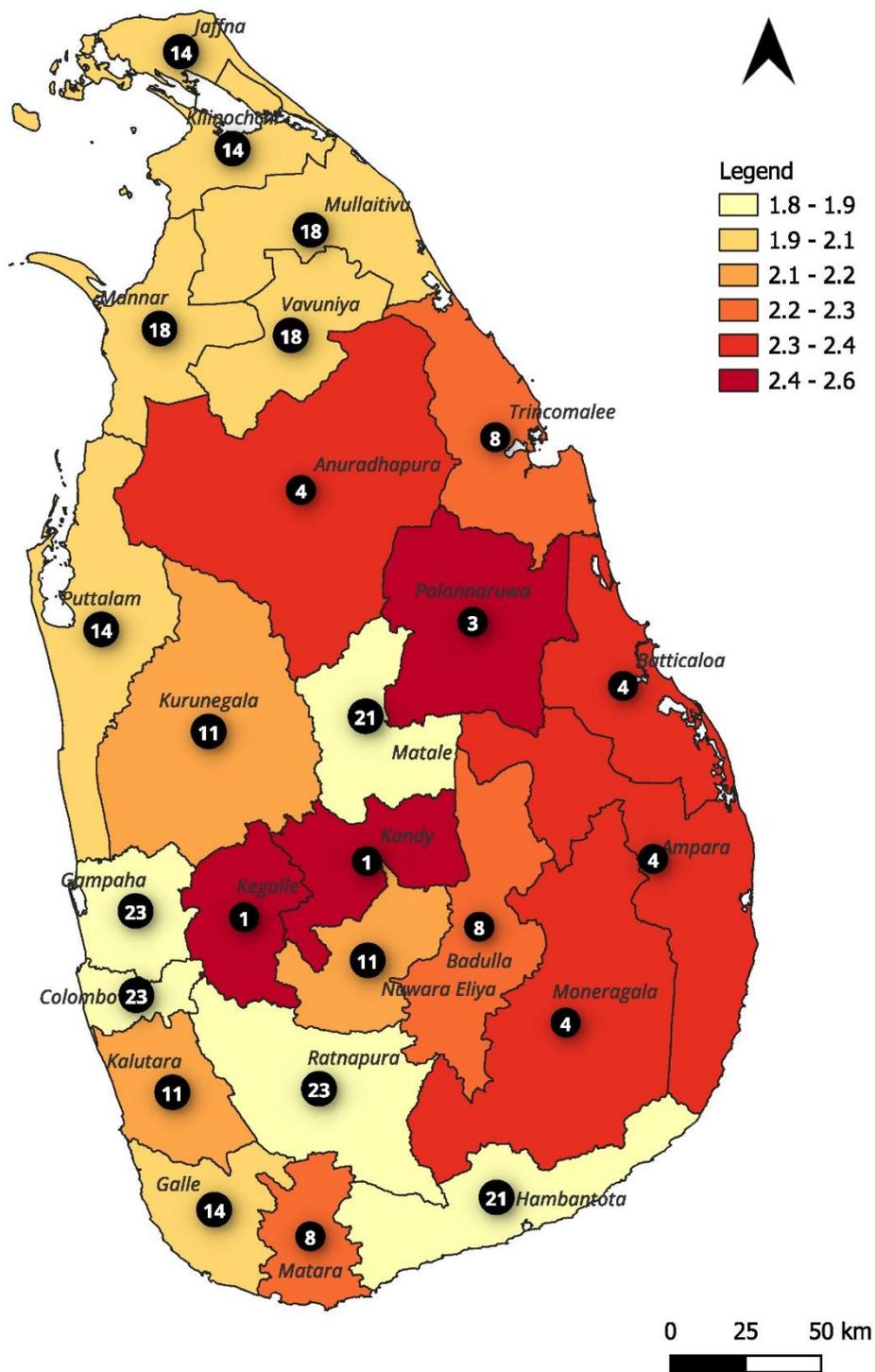


Figure 10: Total Fertility Rates by administrative districts

Note: Labels represent the ranks, from highest (1= Kandy & Kegalle) to the lowest (23= Colombo, Gampaha & Rathnapura)

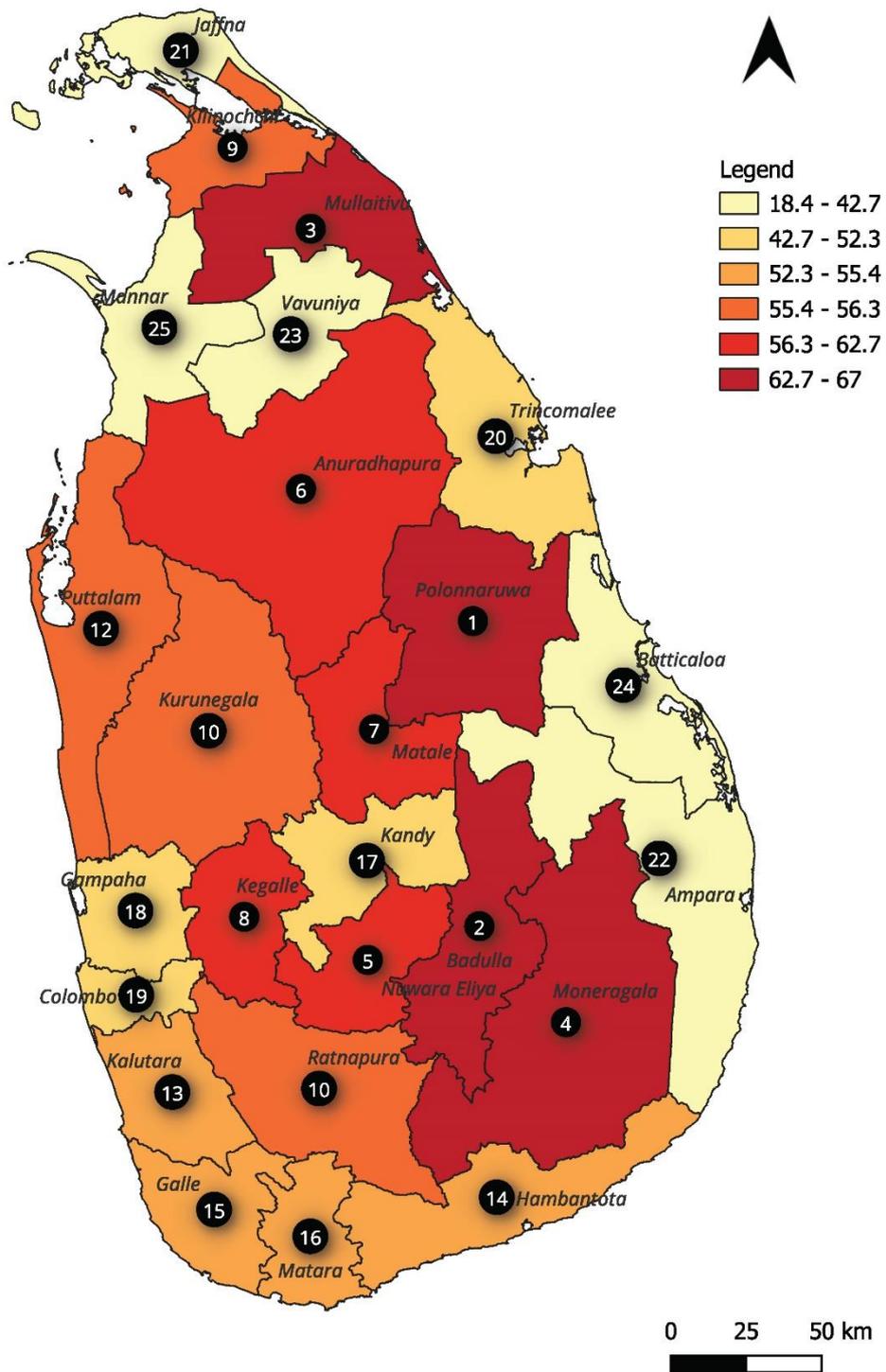


Figure 11: Modern Contraceptive Prevalence Rate

Note: Labels represent the ranks, from highest (1= Polonnaruwa) to the lowest (25= Mannar)

5.1.5. Well woman care

Women's wellness and healthcare services in Sri Lanka were assessed using four important indicators.

Percentage of 35 year age cohort attendance to WWC: In assessing the attendance of the 35-year age cohort at Women's Wellness Clinics (WWC) across Sri Lanka's districts, the highest attendance rates were observed in Matale (93.1%), Kandy (86.2%), and Mannar (85.1%). These districts ranked among the top in terms of women's participation in preventive healthcare services. Conversely, Moneragala (6.4%), Vavuniya (24%), and Kilinochchi (24.1%) reported the lowest attendance rates, indicating areas where further efforts might be needed to encourage women in the 35-year age group to engage with WWC services (Figure 12).

Percentage of 35 year age cohort coverage who had undergone pap smear screening: Figure 13 provides an overview of pap smear screening coverage among the 35-year age cohort in various Sri Lankan districts. Matale leads with the highest coverage rate of 86.3%, followed closely by Ampara (82.6%) and Mannar (78.1%). These districts are noted for their strong participation in cervical cancer screening. On the other hand, Moneragala (6.7%), Vavuniya (23%), and Kilinochchi (23.3%) recorded the lowest screening rates, indicating areas where efforts are needed to improve awareness and access to preventive healthcare services.

Breast Cancer incidence rate (Crude Rate): Figure 14 illustrates Sri Lankan districts based on their breast cancer incident rates. Anuradhapura, Vavuniya and Mullaitivu have the lowest rates at 4.2, followed closely by, Trincomalee, and Kilinochchi with rates ranging from 5.2 to 7.6, indicating relatively fewer breast cancer cases. On the other hand, Colombo, Kandy and Matale have the highest rates at 52.4 and 38.7, respectively, reflecting a higher prevalence of breast cancer in these districts.

Cervical Cancer incidence rate (Crude Rate): This table ranks Sri Lankan districts based on their cervical cancer incidence rates. Kurunegala has the lowest rate at 1.1, signifying a relatively lower incidence of cervical cancer, followed by Ampara and Vavuniya with rates of 2.7 and 3.1, respectively. Nuwara Eliya and Mullaitivu have the highest cervical cancer incident rates at 14 & 12.7, respectively, indicating a higher prevalence of cervical cancer in these districts. These rankings highlight areas where cervical cancer prevention and early detection efforts may be especially crucial (Figure 15).

In the assessment of overall Well Woman Care (WWC) services in Sri Lankan districts, it's noted that the Colombo district in the Western Province achieved the highest rank. This ranking is attributed to the district's higher cancer incidence rates and a relatively lower coverage of preventive services. Following Colombo, Moneragala secures the second rank, with Kilinochchi and Jaffna closely behind (Annexure 05).

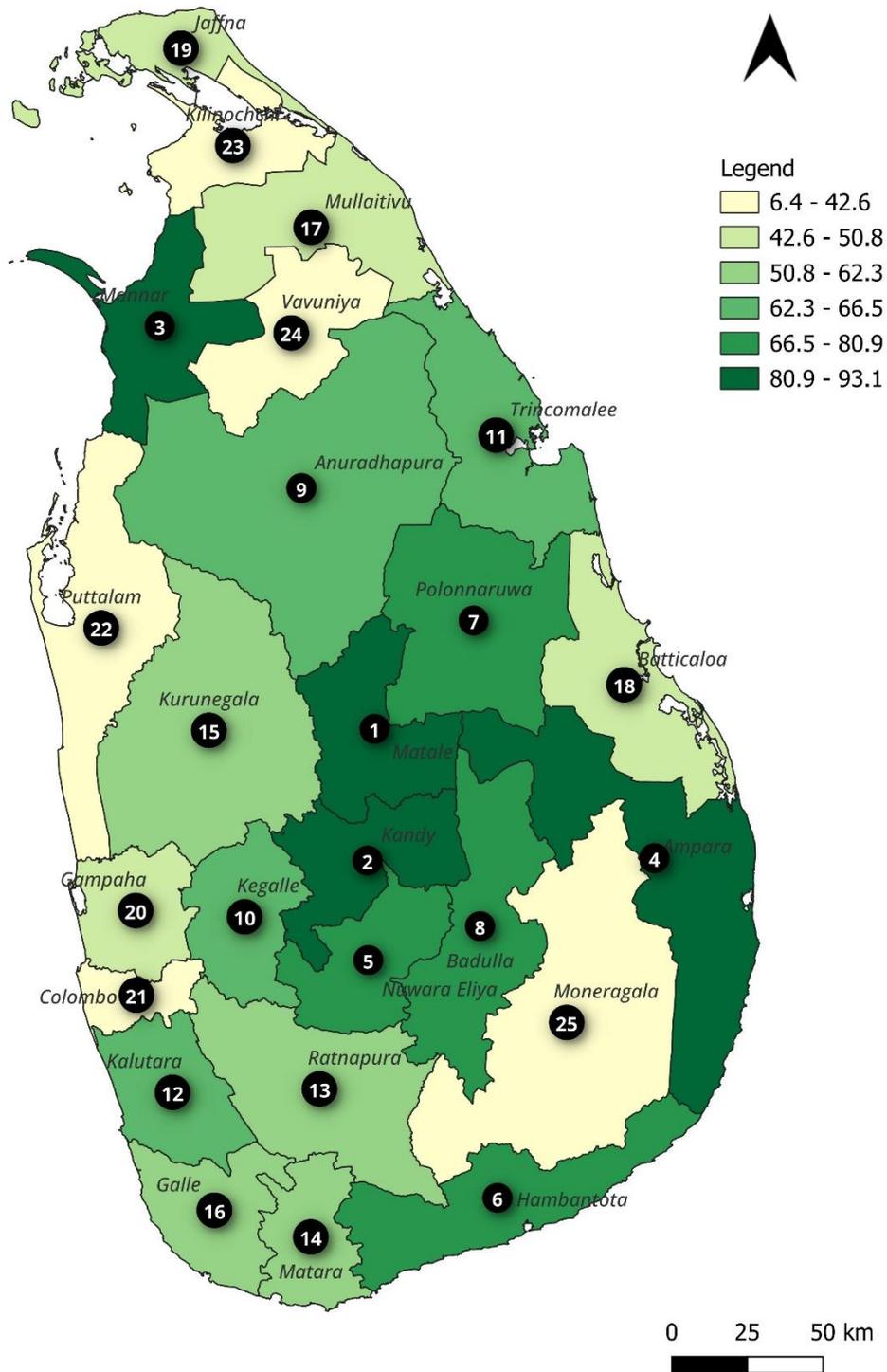


Figure 12: Percentage of 35 year age cohort attendance to WWC out of 0.8% of estimated population by administrative district.
 Note: Labels represent the ranks, from highest (1= Matale) to the lowest (25= Monaragala)

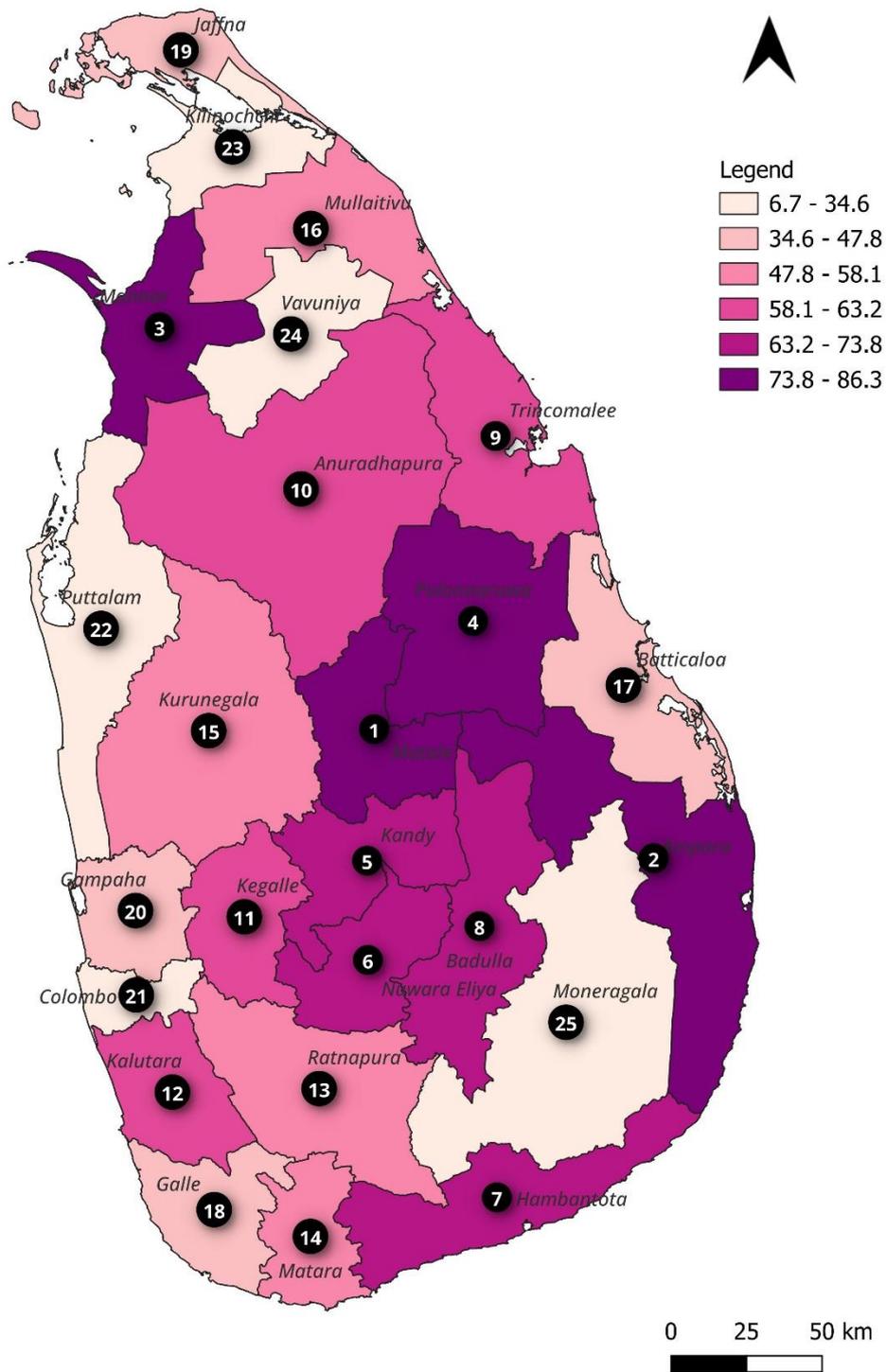


Figure 13: Percentage of 35 year age cohort coverage who had undergone pap smear screening.

Note: Labels represent the ranks, from highest (1= Matale) to the lowest (25= Monaragala)

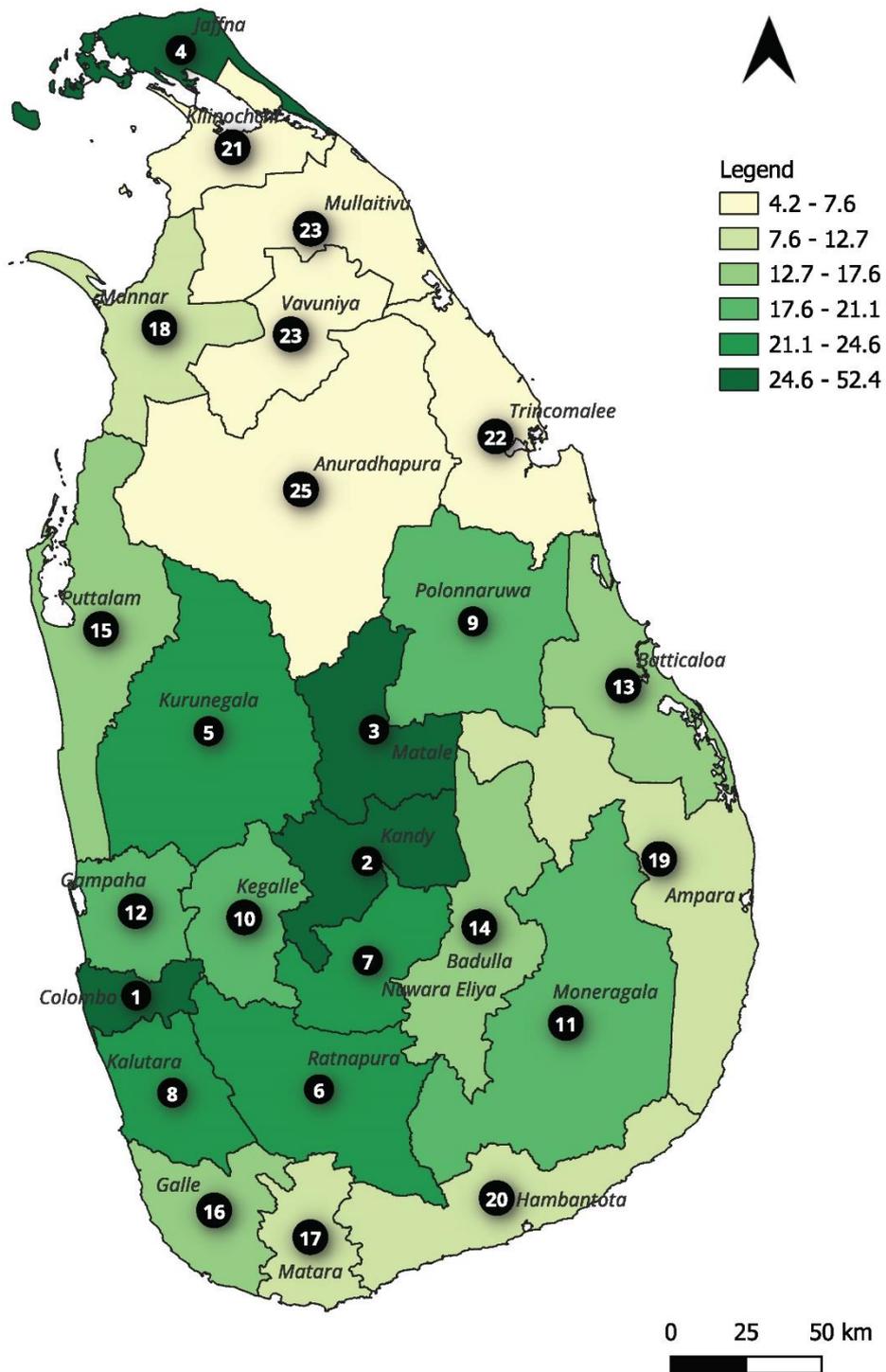


Figure 14: Breast cancer incident rate by administrative district

Note: Labels represent the ranks, from highest (1= Colombo) to the lowest (25= Anuradhapura)

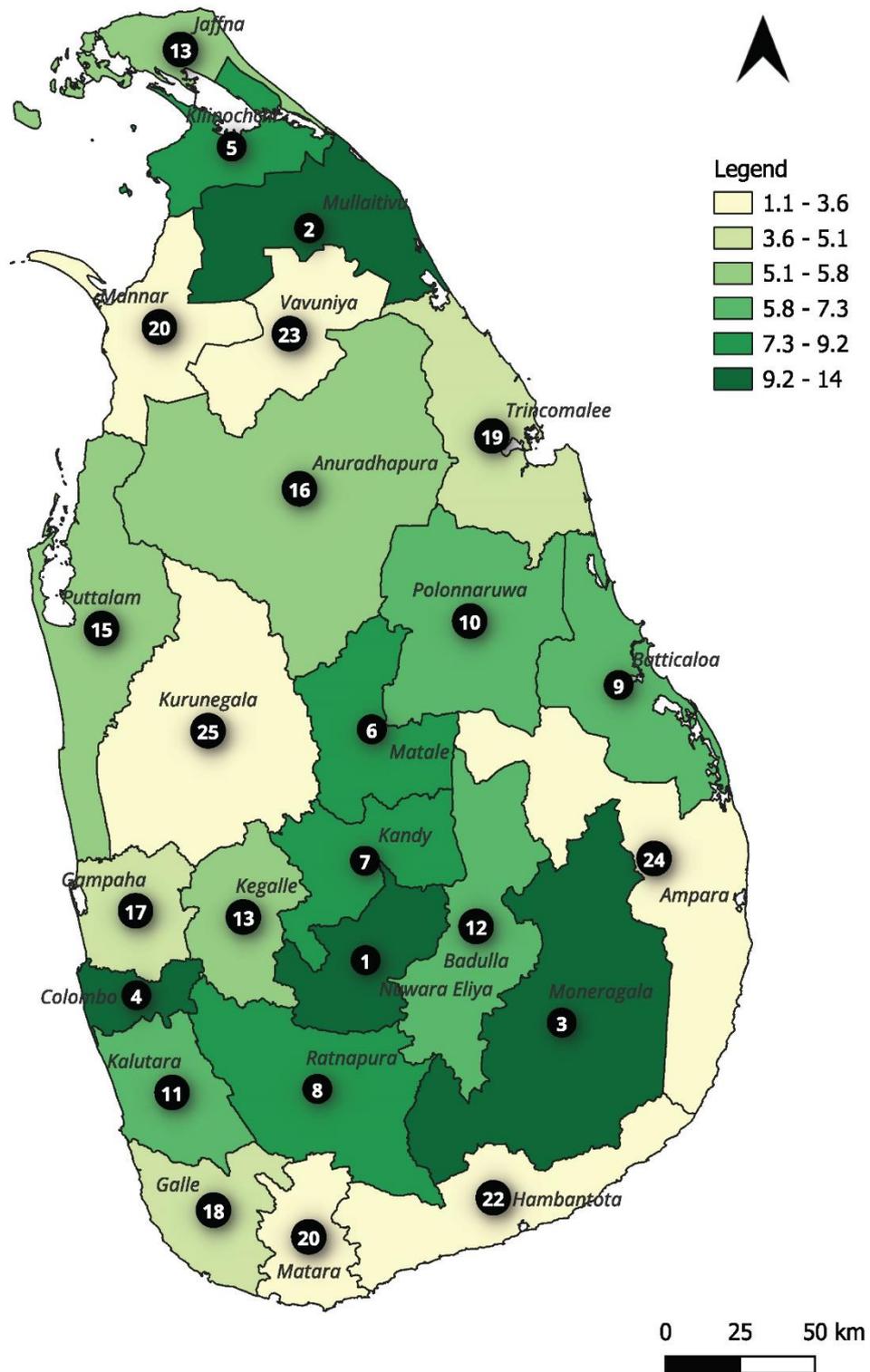


Figure 15: Cervical cancer incident rate by administrative district

Note: Labels represent the ranks, from highest (1= Nuwara Eliya) to the lowest (25= Kurunegala)

5.1.6. HIV/STI services

In Sri Lanka, the effectiveness of HIV/STI services is rigorously assessed through four crucial indicators. These include the number of reported HIV cases per 100,000 population, which provides insights into the prevalence and management of HIV. The second indicator, measuring the number of individuals living with HIV per 100,000 people, helps gauge the scale of the epidemic and the support systems in place. Additionally, the number of reported syphilis cases per 100,000 population serves as a vital metric for tracking sexually transmitted infections. Lastly, the size of the Most at Risk Population for HIV per 100,000 Population assesses the outreach and preventive efforts aimed at the most vulnerable groups.

Number of HIV cases reported per 100,000 population: The table reveals significant variations in the number of reported HIV cases per 100,000 population across Sri Lankan districts. Colombo, in the Western Province, reported the highest rate, with 09 cases per 100,000 population, signifying a considerable prevalence of HIV in the region followed by Gampaha and Hambantota. In contrast, Kilinochchi, Mullaitivu, and Puttalam Districts reported no HIV cases, obtaining the lowest rank (Figure 16).

Number of people living with HIV per 100,000 people: Figure 17 reveals variations in the number of people living with HIV per 100,000 people in Sri Lankan districts. Colombo, part of the Western Province, had the highest rate, with 54.42 people living with HIV per 100,000, highlighting a significant prevalence of the disease followed by Gampaha, Vavuniya and Kandy.

Number of Syphilis cases reported per 100,000 population: The data on the number of syphilis cases reported per 100,000 population in Sri Lankan districts shows significant variations. Mullaitivu and Moneragala, in the Northern and Uva Provinces respectively, reported the highest rates, with 3.25 cases per 100,000 population followed by Colombo, a district in the Western Province. While some districts reported very low or no cases, Mullaitivu and Moneragala faced relatively higher burdens, highlighting the need for targeted prevention and healthcare services in these areas (Figure 18).

Size of the Most at Risk Population for HIV per 100,000 Population: Figure 19 reveals the variation in the size of the Most at Risk Population (MARPs) for HIV across Sri Lankan districts. The Galle District in the Southern province reported the highest size, with 315 MARPs per 100,000 population followed by Gampaha and Puttalam. Conversely, Vavuniya, Kegalle, and Jaffna reported the lowest sizes, around 253 MARPs per 100,000 population.

After a comprehensive analysis of the four key indicators discussed, it is evident that the Districts of Colombo, Gampaha, and Galle stand out as having the highest priority for the implementation of an HIV prevention programme. In contrast, Kegalle and Kilinochchi Districts present the least vulnerability to an HIV epidemic, indicating lower immediate demands for prevention efforts.

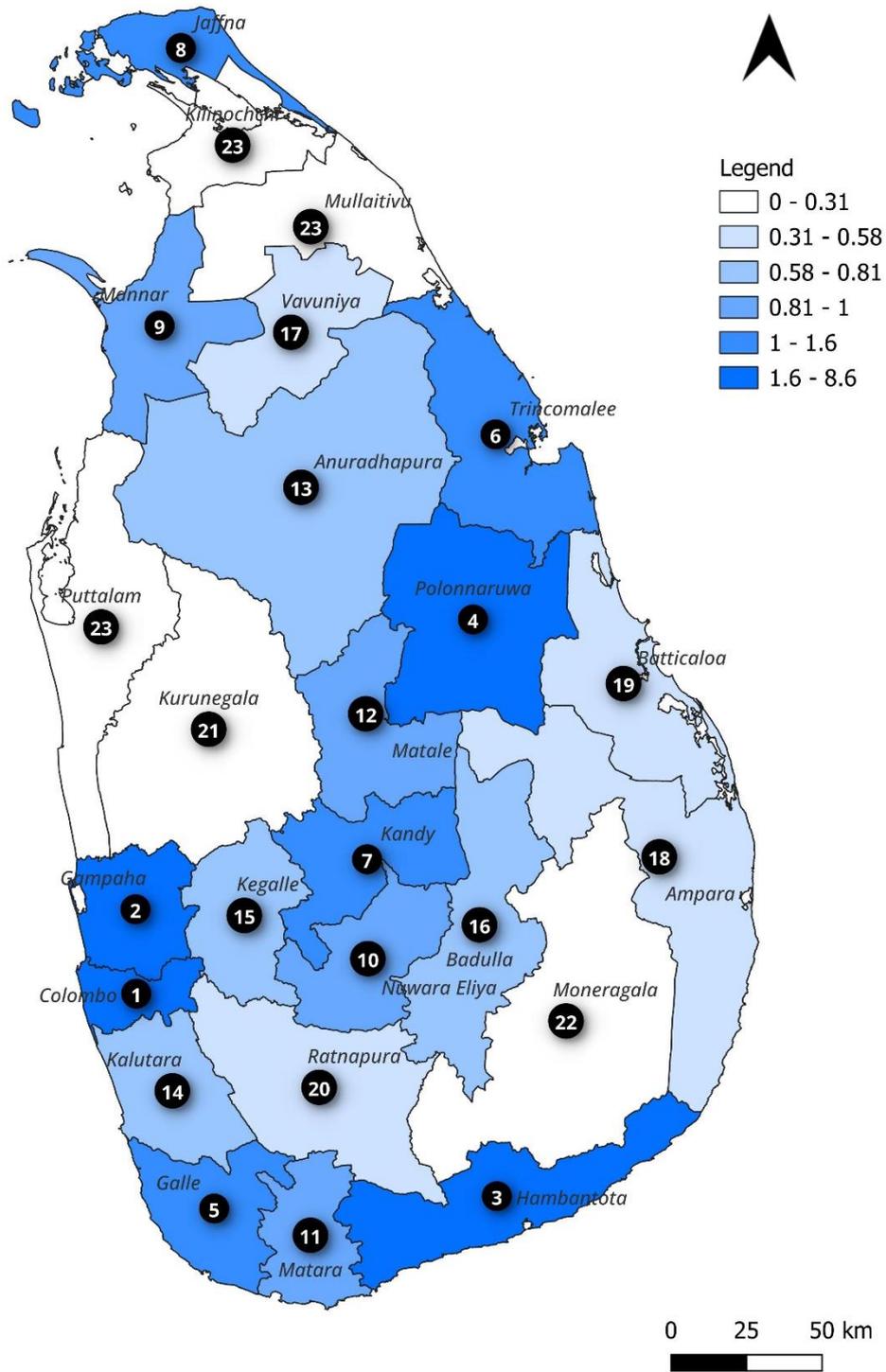


Figure 16: Number of HIV cases reported per 100,000 population

Note: Labels represent the ranks, from highest (1= Colombo) to the lowest (23= Kilinochchi)

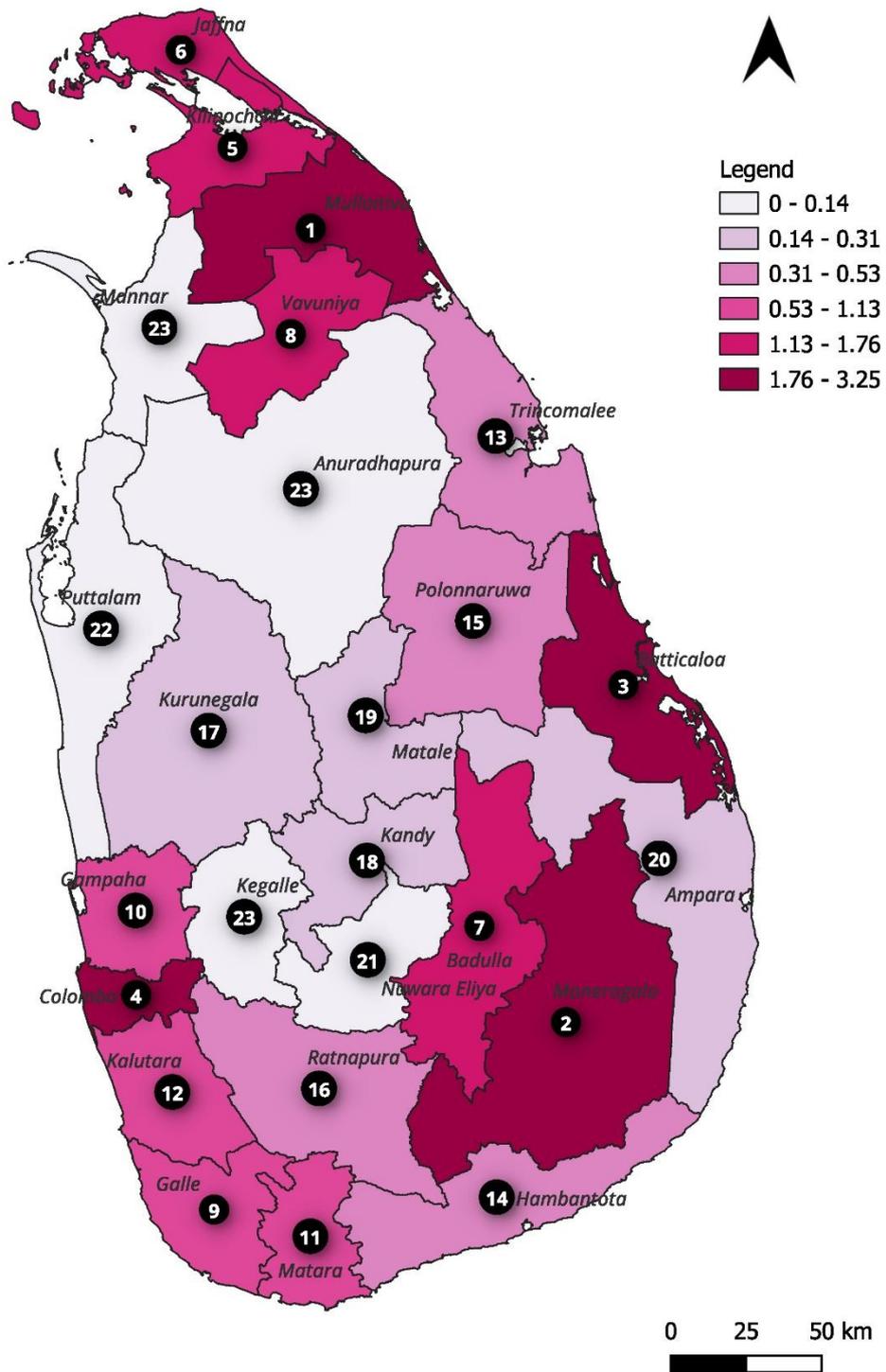


Figure 18: Number of Syphilis cases reported per 100,000 population
 Note: Labels represent the ranks, from highest (1= Mullativu to the lowest (23= Anuradhapura)

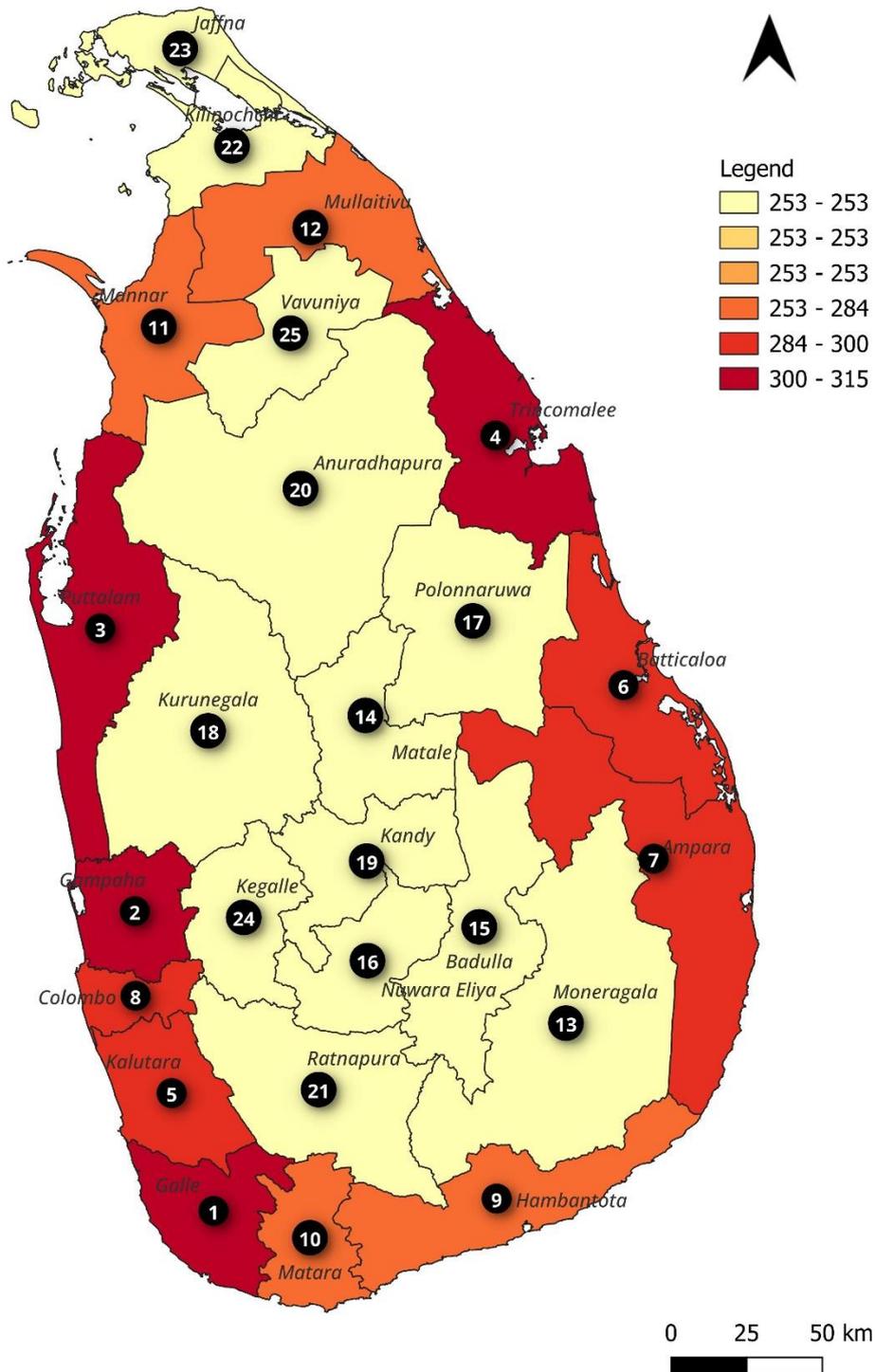


Figure 19: Number of Most at Risk People for HIV per 100,000 population
 Note: Labels represent the ranks, from highest (1= Mullaitivu to the lowest (23= Anuradhapura)

5.1.7. Subfertility services

Due to limited available information on subfertility issues at the district level, the measurement of demand for subfertility services relied on a single indicator: The percentage of eligible couples with subfertility. This indicator serves as a key metric in assessing the prevalence of subfertility-related challenges among eligible couples within each district. While a comprehensive understanding of subfertility issues would benefit from a more detailed dataset, the chosen indicator provides a foundational assessment to gauge and address the demand for subfertility services in the absence of more granular information.

Percentage of eligible couples with subfertility: This indicator measures the proportion of eligible couples in the district encountering challenges related to subfertility. The data source for this assessment is the Family Health Bureau Annual Report for the year 2020. By examining the percentage of couples grappling with subfertility issues, this indicator offers valuable insights into the extent of subfertility concerns within the district, providing a basis for understanding and addressing the demand for specific reproductive health services. The percentage of eligible couples facing subfertility varies across districts, with Moneragala in Uva Province having the lowest rate at 1.5%. Vavuniya and Mullaitivu in the Northern Province follow closely with rates of 1.6% and 1.7%, respectively. In contrast, Gampaha in the Western Province and Hambantota in the Southern Province exhibit the highest rates of 4.4% and 4.2%. Colombo and Kalutara, also in the Western Province, have rates of 4.04% and 4.1% (Figure 20).

As indicated in the latest review of the National Family Planning Programme (2016), the provision of subfertility services in the public sector lacks a defined structure. Currently, only two institutions in the country, namely Castle Street Hospital for Women and Mahamodera Hospital, house subspecialists in subfertility. Addressing subfertility is limited to facilities with gynaecologists, and advanced fertility treatments are exclusively accessible through private sector services. The private sector is also the sole provider of Assisted Reproductive Health Techniques (ART) for complex subfertility cases. Notably, doctors engaged in dual practice, including those in full-time private sector roles, contribute to delivering subfertility services. The absence of basic subfertility investigation laboratories at the district level within the public sector is a significant impediment to offering comprehensive subfertility treatment services. Additionally, there is a lack of an organized referral system for subfertility based on different levels of care (13).

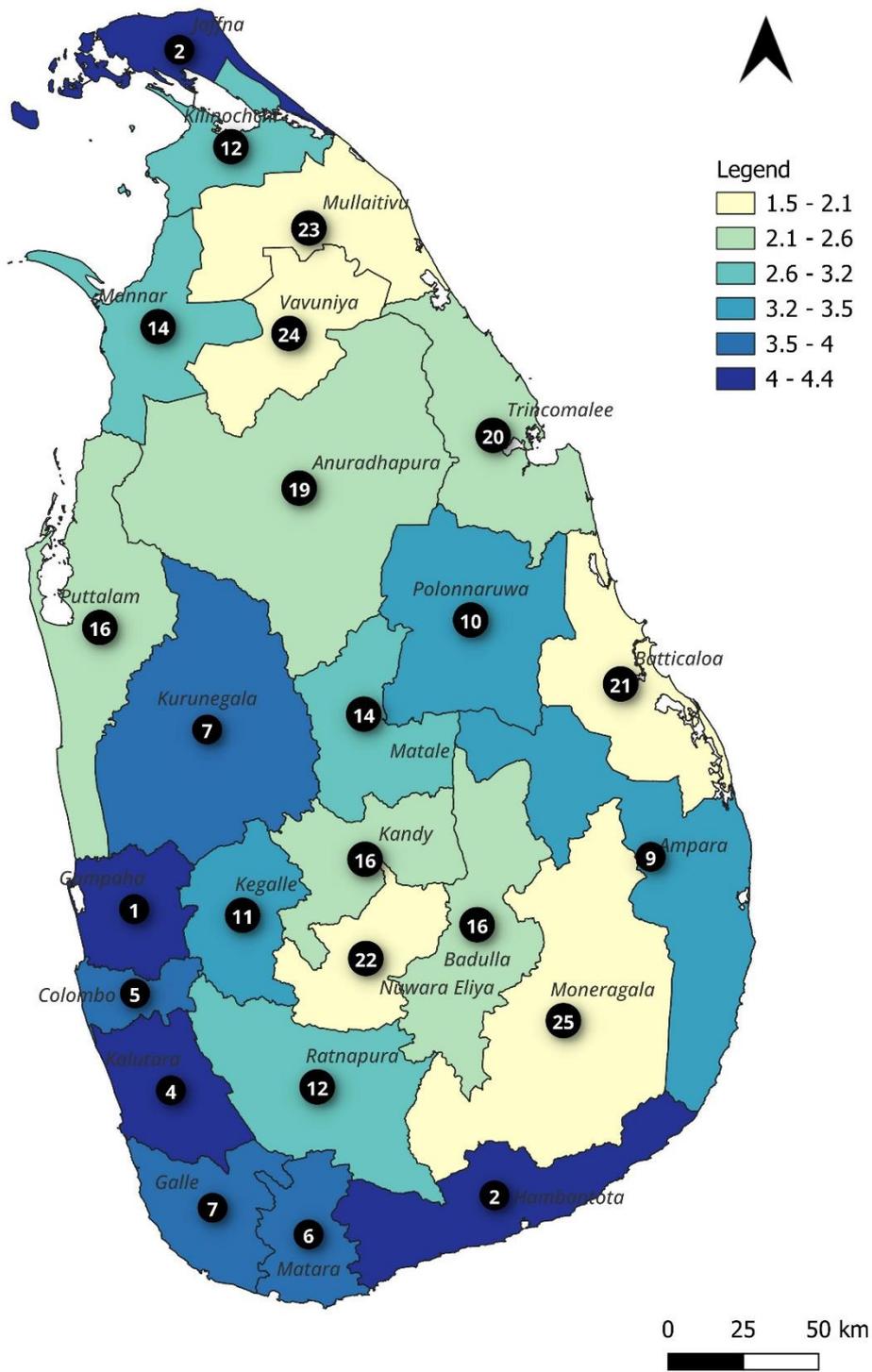


Figure 20: Percentage of eligible couples with subfertility
 Note: Labels represent the ranks, from highest (1= Gampaha) to the lowest (25 = Moneragala)

5.1.8. Government health personnel

The strength of the government health system was assessed using three key indicators. First, the number of medical officers per 100,000 population was measured, providing a quantification of the availability of medical professionals in the district. Second, the evaluation considered the number of Public Health Midwives (PHM) and Senior Public Health Midwives (SPHM) per 100,000 people, shedding light on the availability of midwifery services. Lastly, the number of Public Health Nursing Sisters (PHNS) and Senior Public Health Nursing Sisters (SPHNS) per 100,000 population was examined, offering insights into the presence of nursing professionals in the district. These indicators collectively contribute to assessing the overall strength and capacity of the government health system at the district level.

Number of medical officers per 100,000 population: The strength of the government health system, as reflected in the number of medical officers per 100,000 population, varies across districts. The Colombo District in the Western Province stands out with the highest number of medical officers. Other districts with notable scores include Kandy, Vavuniya, and Kilinochchi. On the other end, the Nuwara Eliya District in the Central province exhibits the lowest number of medical officers per 100,000 population, signaling potential weaknesses in the existing health system followed by Hambantota and Puttalam (Figure 21).

Number of PHM + SPHM per 100,000 population: The distribution of Public Health Midwives (PHM) and Senior Public Health Midwives (SPHM) per 100,000 population reveals variations across districts in Sri Lanka. The Mullaitivu District in the Northern Province demonstrates the highest density of PHM and SPHM, followed closely by Mannar and Moneragala. The Colombo District in the Western Province, however, shows the lowest density of PHM and SPHM per 100,000 population, indicating potential gaps in the health workforce (Figure 22).

Number of PHNS + SPHNS per 100,000 population: The density of Public Health Nursing Sisters (PHNS) and Senior Public Health Nursing Sisters (SPHNS) per 100,000 population varies across districts in Sri Lanka, indicating the strength of the government health system. The Mannar District in the Northern Province has the highest density of PHNS and SPHNS followed closely by Vavuniya and Anuradhapura. The Jaffna District in the Northern Province shows the lowest density of PHNS and SPHNS per 100,000 population, revealing potential gaps in the health workforce in this region (Figure 23).

The combined assessment of the three indicators provides a comprehensive measure of the effectiveness of the local government's community health system in each district. Notably, Puttalam, Kegalle, Nuwara Eliya, Ratnapura, and Jaffna emerged as districts with relatively weaker health systems, as highlighted in Annexure 08. This identification underscores the imperative for initiating new Sexual and Reproductive Health (SRH) interventions, including the establishment of additional service delivery points, in these specific districts.

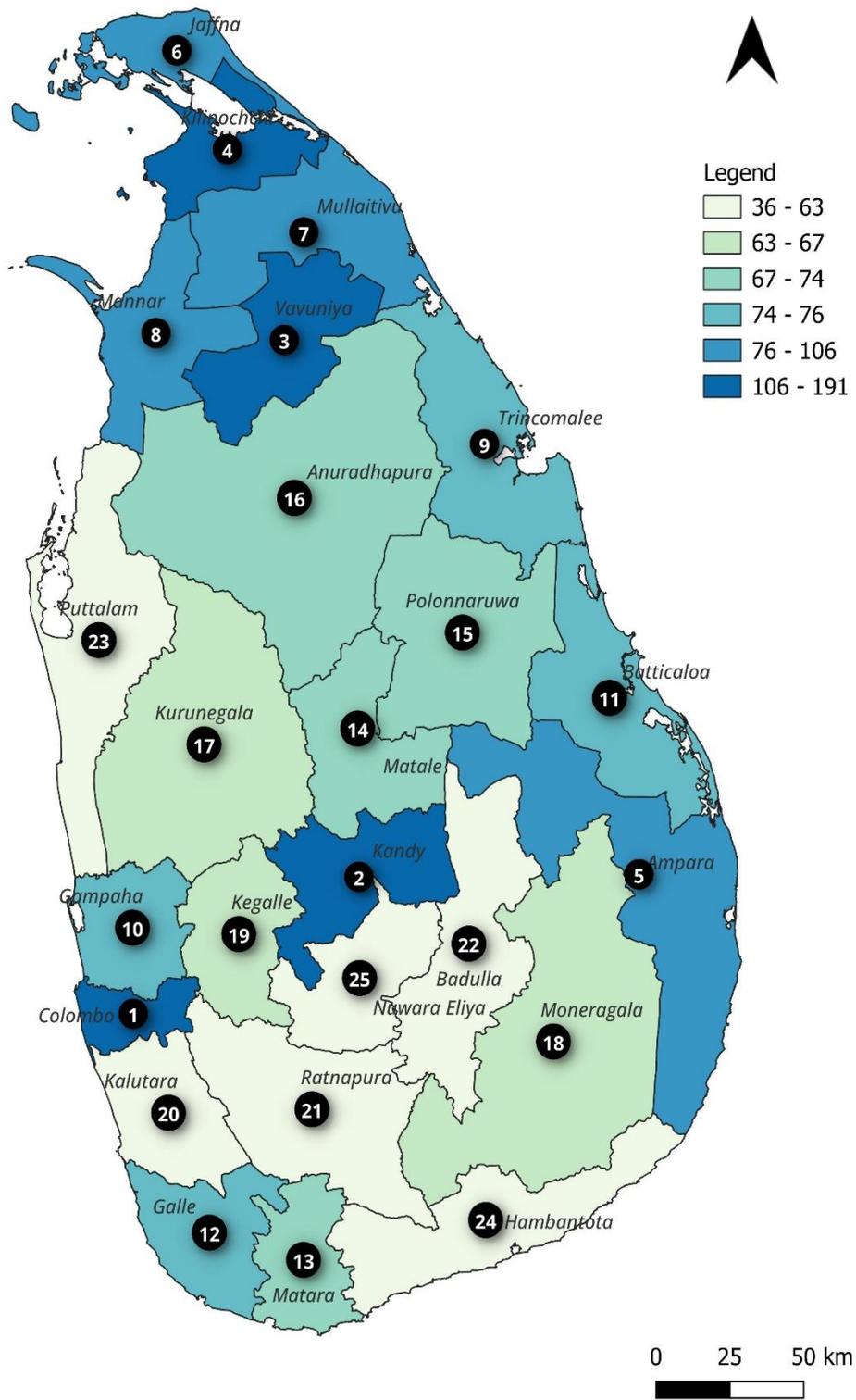


Figure 21: Number of medical officers per 100,000 population by districts
 Note: Labels represent the ranks, from highest (1= Colombo) to the lowest (25 = Nuwara Eliya)

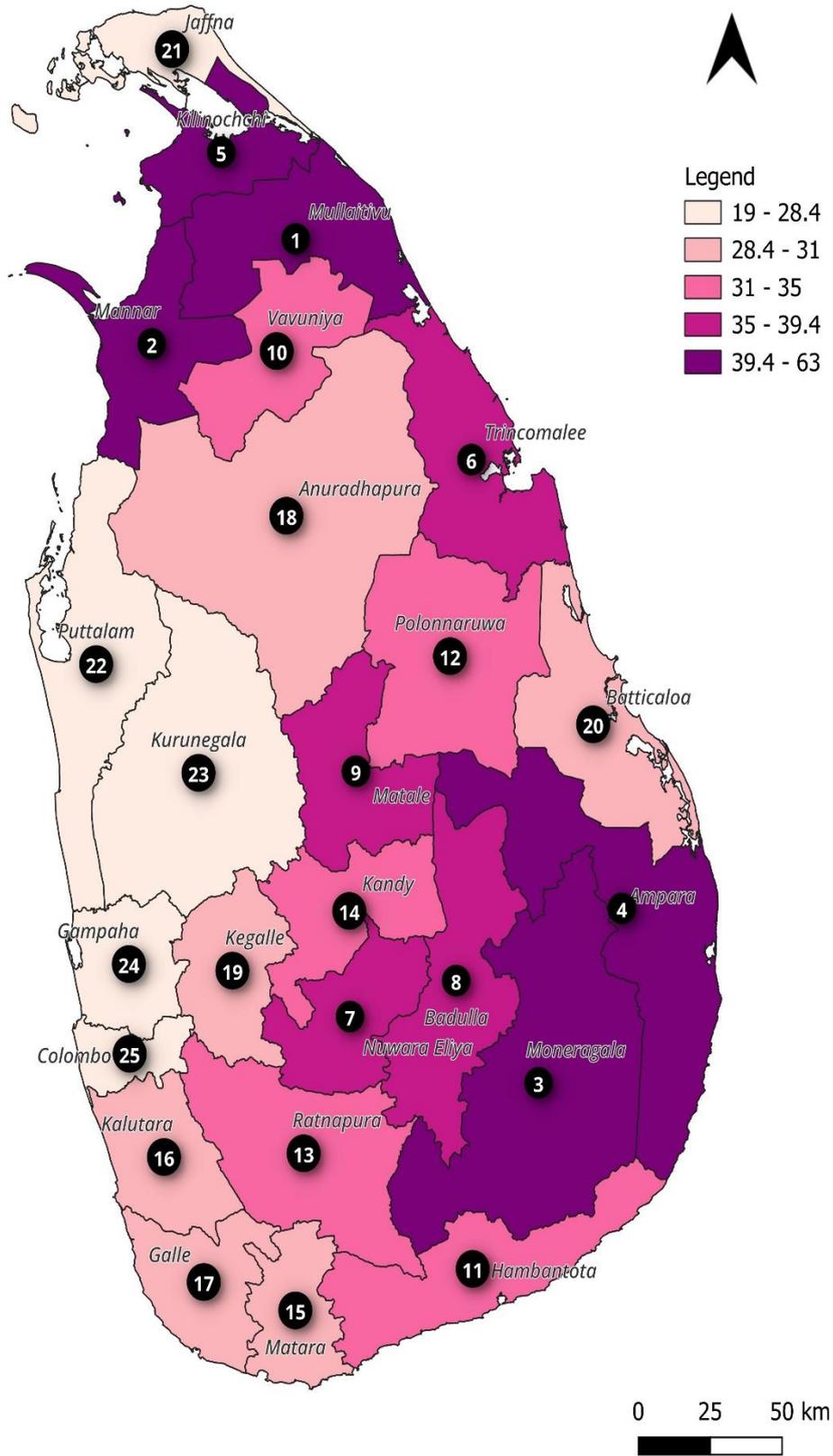


Figure 22: Number of PHM / SPHM per 100,000 population by districts
 Note: Labels represent the ranks, from highest (1= Mullativu to the lowest (25 = Colombo)

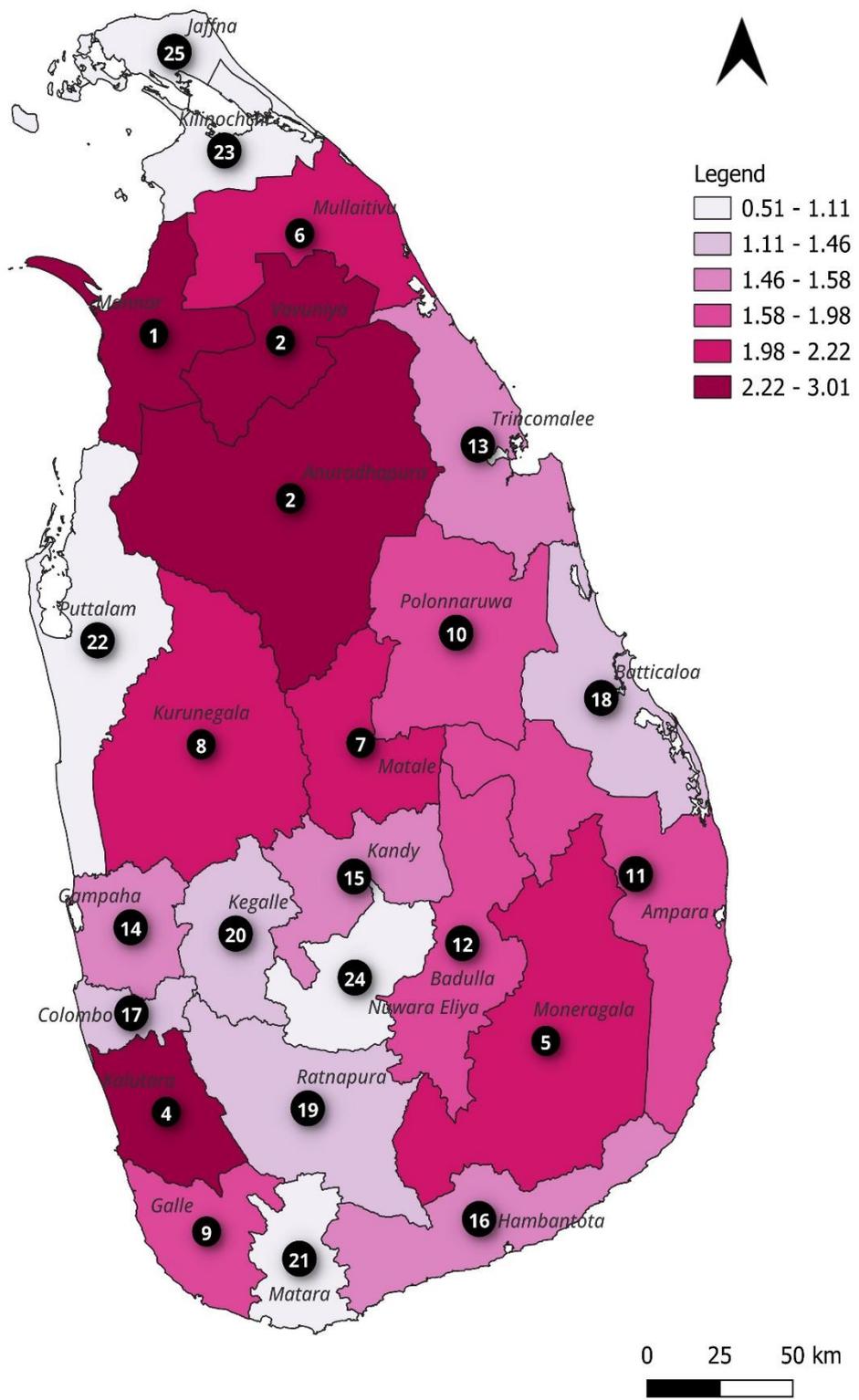


Figure 23: Number of PHM / SPHM per 100,000 population by districts
 Note: Labels represent the ranks, from highest (1= Mannar) to the lowest (25 = Jaffna)

5.1.9. Reach by FPA Sri Lanka

Figure 24 illustrates the outreach of FPA Sri Lanka in 2022, showcasing the number of clients reached per 100,000 population. Nuwara Eliya reported the highest reach, followed by Batticaloa, Ampara, Colombo, Gampaha, and Galle. Conversely, Kilinochchi reported the lowest reach, with Monaragala and Trincomalee following suit.

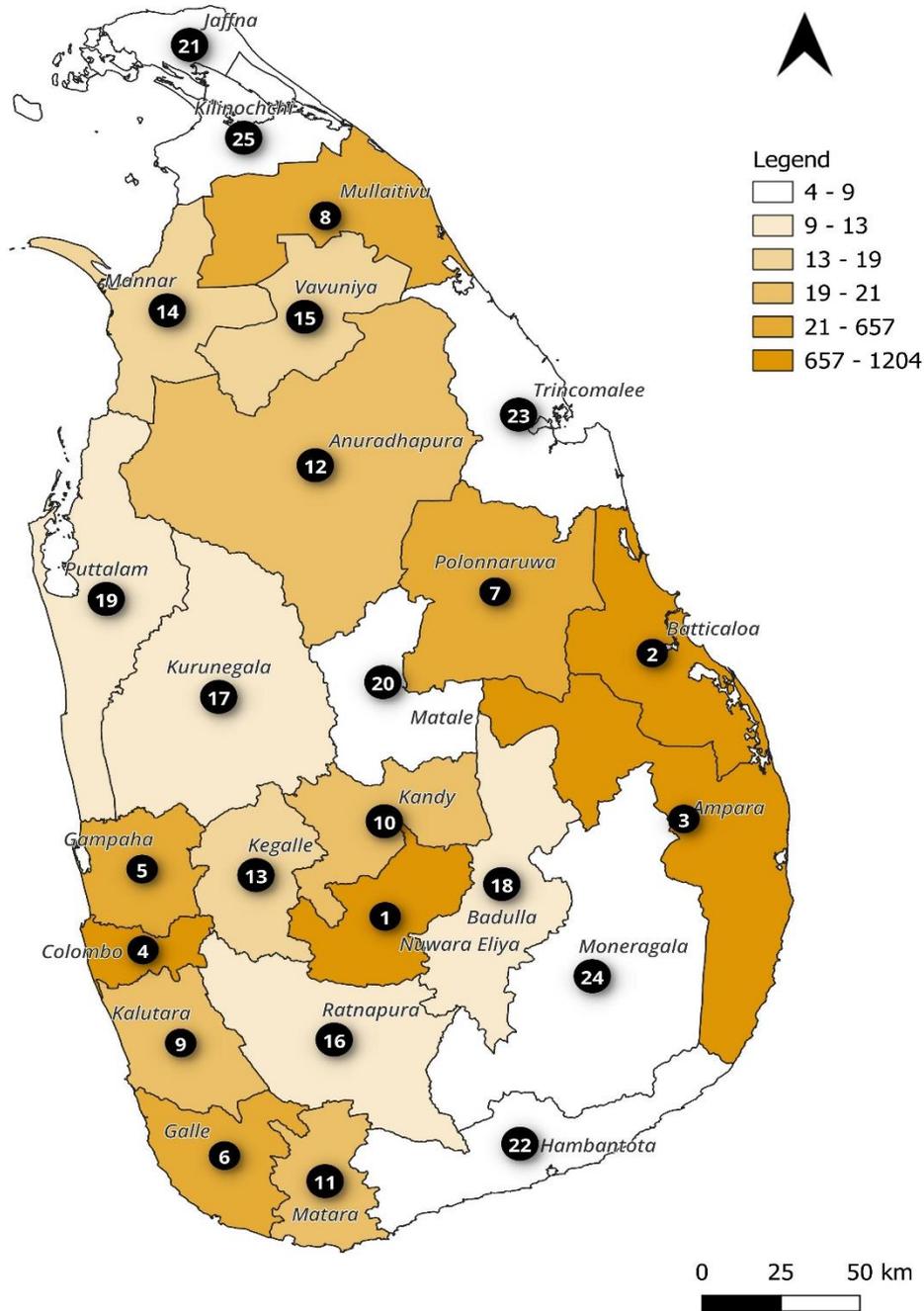


Figure 24: Number of clients reached by FPA Sri Lanka per 100,000 population by districts

Note: Labels represent the ranks, from highest (1= Nuwara Eliya) to the lowest (25 = Kilinochchi)

5.2. Geo-prioritization and districts selection

In the subsequent phase of the study, emphasis was placed on prioritizing and selecting districts that require new Sexual and Reproductive Health (SRH) interventions and service delivery points. This process involved assigning weights to each focus area based on their relative importance. The annexures 1 to 8 present the final scores calculated for each focus area, factored in with their respective weights.

The top ten priority districts identified in the first round based on the quantitative findings are Batticaloa, Colombo, Jaffna, Gampaha, Matara, Kandy, Kalutara, Puttalam, Ratnapura, and Galle. Conversely, the least priority districts include Kilinochchi, Trincomalee, Badulla, Kurunegala, Polonnaruwa, Ampara, Matale, Anuradhapura, Mullaitivu, and Mannar. However, the Matara district was excluded due to inflated case reporting rate influenced by patients from Hambantota and Monaragala districts seeking treatment at the Matara hospital. Additionally, FPA Sri Lanka's interventions in Matara from 2014 to 2015 were unsuccessful due to low demand at the ground level. Similarly, the Kalutara district was removed as it could be covered through the Galle and Colombo Districts. The Monaragala District, ranked 11th, replaced the Matara District. The Nuwara Eliya District, initially not among the top 10, was added to address the vulnerability of the plantation sector's female labor force to sexual and gender-based violations. These adjustments were made based on qualitative information received from experts in the sector. After these adjustments, the final selection comprises Batticaloa, Colombo, Jaffna, Gampaha, Kandy, Puttalam, Ratnapura, Galle, Moneragala, and Nuwara Eliya Districts.

Currently, The Family Planning Association of Sri Lanka operates in the Districts of Batticaloa, Colombo, Gampaha, Galle, Nuwara Eliya, and Ampara.. However, considering Ampara's 21st-place ranking in this study, it is recommended to relocate the service delivery point to the Monaragala district. Similarly, new service delivery points are recommended in Jaffna, Kandy, Puttalam, and Ratnapura Districts (Figure 25).

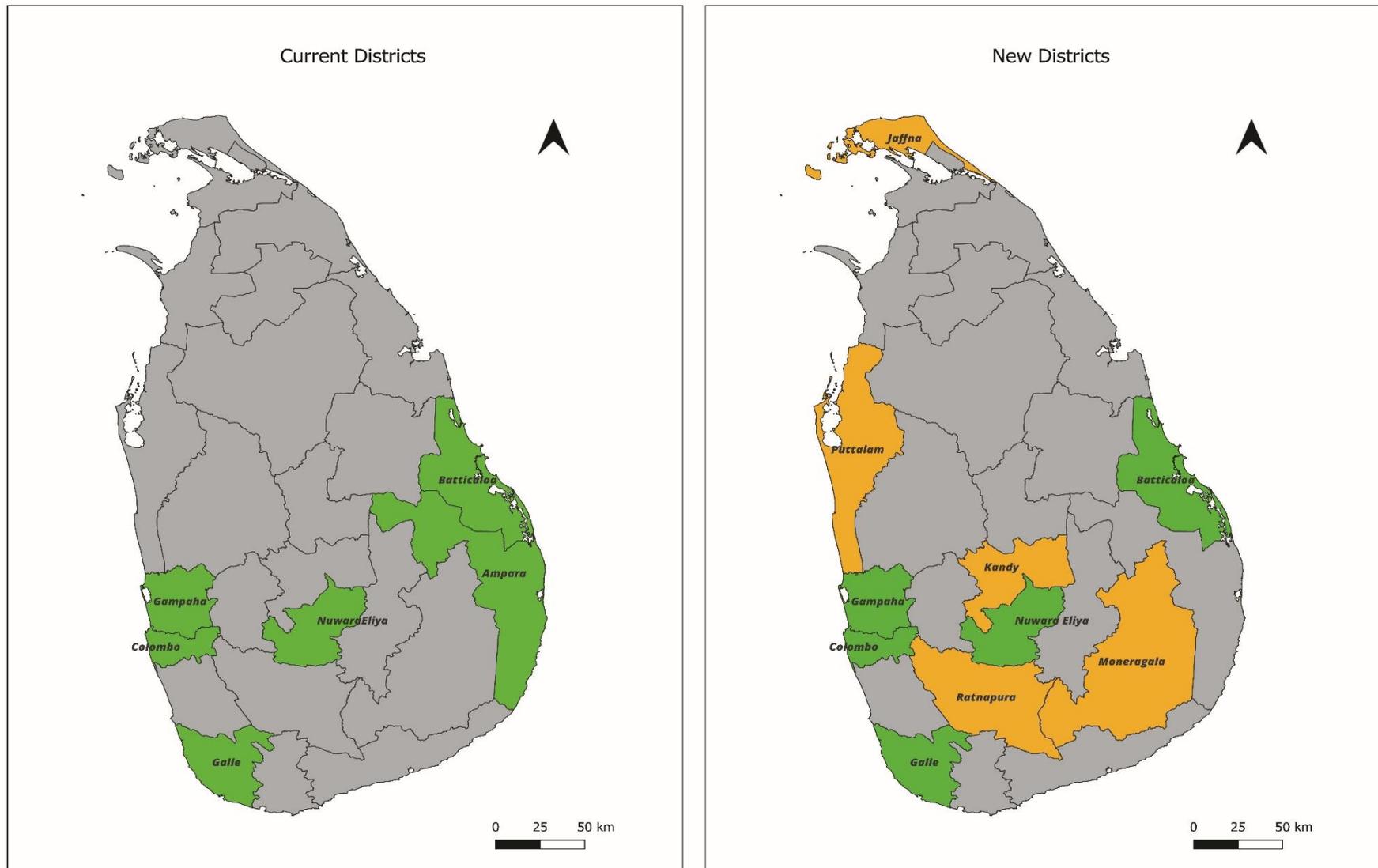


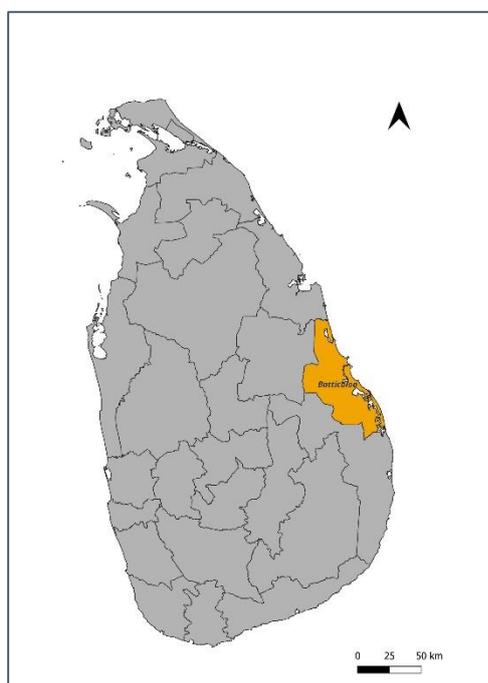
Figure 25: Suggested plan for geographical expansion based on the results of the study

5.3. Needs assessment and gap Analysis

Following the district selection, an extensive gap analysis and needs assessment were undertaken, utilizing both quantitative indicators and qualitative insights gathered during the study. The primary objective of this analysis is to pinpoint significant socio-economic trends and Sexual and Reproductive Health (SRH) issues and requirements within the selected districts. This information serves as a valuable resource for programme designers, healthcare professionals, and other key decision-makers to formulate targeted interventions. Moreover, the findings from this exercise offer crucial insights for donors, aiding them in making informed resource allocation decisions. It also serves as a robust justification for choosing the selected districts over others that did not make the cut.

5.3.1. Batticaloa

The Batticaloa District faces a complex array of challenges that necessitate thorough Sexual and Reproductive Health (SRH) programmes. With the second-highest poverty (3) and unemployment rates (5) in Sri Lanka, particularly in rural areas, the district's vulnerable groups, including high proportion of youth and ethnic minorities, bear a disproportionate burden. The high Multidimensional Poverty Rate of 20 (4), coupled with an unemployment rate of 7.2 (5), underlines complex nature of the issue and need for focused interventions targeting these marginalized communities.



Family planning services in Batticaloa demand special attention, as the district holds the highest burden in Sri Lanka. The Modern Contraceptive Prevalence Rate (mCPR) of 28.5 (3) and an Unmet Need for Family Planning of 5.3 (6) indicate the pressing need for tailored interventions to address family planning gaps and ensure access to reproductive health services. The district's high priority in the HIV epidemic, with 0.38 reported HIV cases and 2.28 syphilis cases per 100,000 population (9), signals a critical need for targeted awareness and prevention initiatives. The elevated rates of breast cancer (17.6 per 100,000 people) and cervical cancer (2.7 per 100,000 people) underscore the necessity for improved healthcare services and awareness programmes in Batticaloa (8). Furthermore, the district contends with challenges in healthcare infrastructure, reporting the 7th lowest rate of government health personnel per 100,000 population (11). The unique socio-political context adds layers of complexity to the district's health

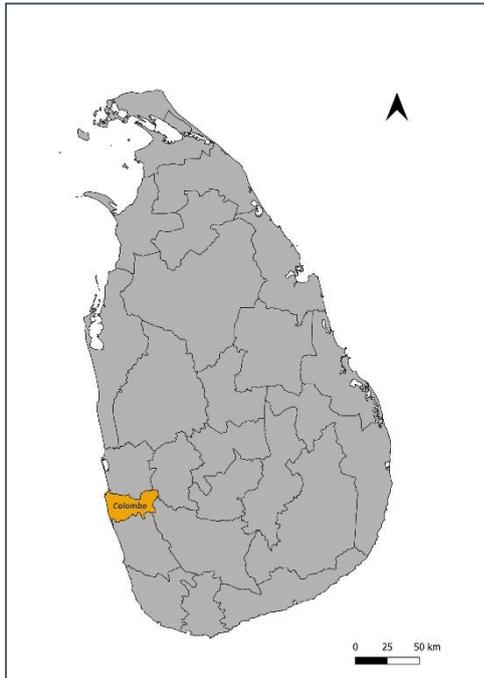
challenges. Batticaloa has been significantly affected by a 30-year war, impacting Tamils and Muslims, two ethnic minority groups. The district's status as a high-focus area for tourism, especially in the Pasikuda region, and the prevalence of a fishing community further heighten vulnerability to sexual and reproductive health issues. Additionally, the prolonged exposure to natural disasters, including floods and cyclones adds urgency to addressing the specific needs arising from such environmental vulnerabilities.

In conclusion, the multifaceted challenges of the Batticaloa district demands a holistic approach, considering socio-economic disparities, family planning needs, healthcare

infrastructure deficiencies, unique socio-political contexts, and environmental vulnerabilities. Tailored interventions can pave the way for improved sexual and reproductive health outcomes in this diverse and challenged district.

5.3.2. Colombo

Colombo, as the densely populated capital city of Sri Lanka, faces distinctive challenges that warrant the need for strong Sexual and Reproductive Health (SRH) programmes. The district's



high population density, ranked as the highest in the country at 3,438 people per square kilometer (2), poses unique challenges for healthcare delivery and necessitates targeted interventions. The demand for family planning services is notably high, ranking as the 6th highest district with a Modern Contraceptive Prevalence Rate (mCPR) of 47.4 and a total fertility rate of 1.8 (3), emphasizing the urgency for comprehensive family planning initiatives. Health concerns further elevate the challenges in Colombo, with alarming incidence rates for breast cancer (52.4 per 100,000) and cervical cancer (10.7 per 100,000) (8). The district's heightened risk for HIV, reporting 54 People Living with HIV (PLHIV) per 100,000 population and ranking 1st in HIV/STI issues nationally (9), underlines the critical need for targeted prevention and awareness programmes. The substantial percentage of eligible couples facing subfertility (4.04%) positions Colombo at the 5th rank nationally (6), indicating a demand for specialized

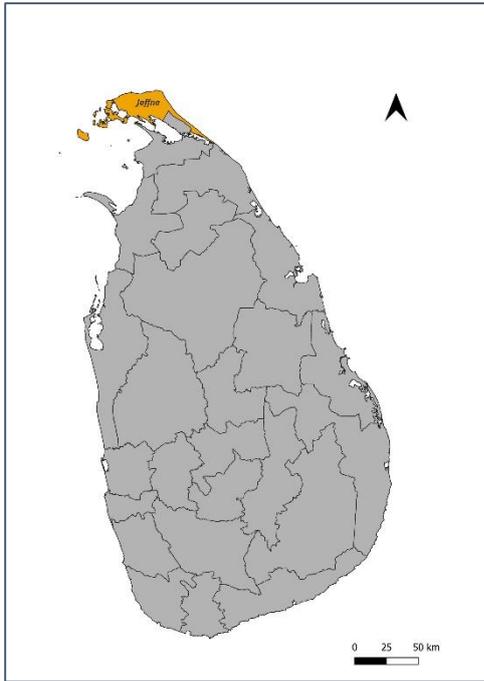
reproductive health services.

The unique demographic composition of Colombo, characterized by a diverse population and the presence of significant slum areas, necessitates tailored interventions to address the distinct needs of various ethnic groups. The city's reputation as the "city that never sleeps" implies continuous healthcare requirements, especially for vulnerable populations. Notably, Colombo hosts a higher concentration of key populations, including Men who have Sex with Men (MSM), female sex workers, drug users, and beach boys, compared to other districts (10). Internal migration due to economic activities further complicates the healthcare landscape, requiring strategic planning to ensure continuous access to SRH services.

In conclusion, the programme designers must consider its unique demographic challenges, high healthcare demands, and elevated risks for specific health issues of Colombo district. Tailored interventions should address the diverse population, high-risk groups, and the impact of internal migration on healthcare accessibility. Strategic planning is crucial to enhance the effectiveness of SRH programmes in this dynamic and complex urban setting.

5.3.3. Jaffna

The Jaffna District grapples with a dual challenge as the 7th highest density district in Sri Lanka, compounded by the enduring impact of a 30-year civil conflict. The district faces a significant demand for antenatal care services (6), ranking 9th nationally. A critical need exists to enhance maternal healthcare in the district, focusing on improving awareness, accessibility, and the quality of prenatal services. Addressing this gap is paramount to ensuring the well-being of mothers and infants in Jaffna.



Health challenges in Jaffna extend to a substantial burden of cancer, with a breast cancer incidence rate of 28.4 per 100,000 population and a cervical cancer incidence rate of 5.8 per 100,000, ranking the district 3rd in Sri Lanka for these cancer incidences (8). Comprehensive strategies are required to bolster cancer awareness, early detection, and treatment services. Additionally, Jaffna is identified as a high-risk district for HIV/STIs, ranking 9th nationally (9). With a syphilis case rate of 1.54 (9), a sizable at-risk population of 253 per 100,000 population (10), and 7 people living with HIV per 100,000 population (9), targeted interventions are essential to curb the spread of these infections.

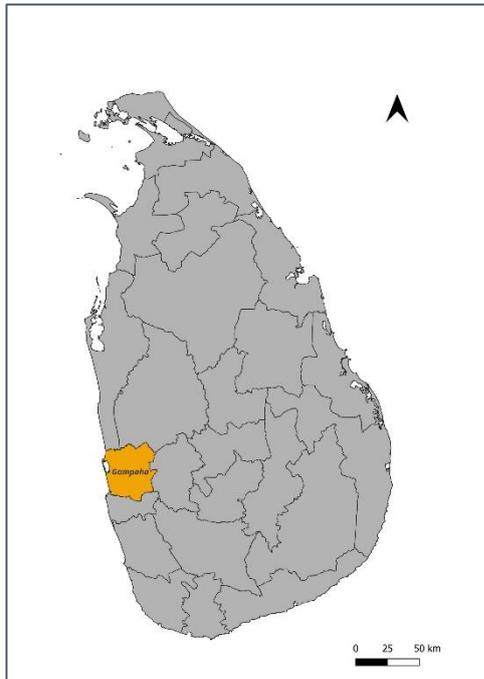
The district faces a substantial subfertility issue, ranking as the 2nd highest district in Sri Lanka (6). This underscores the urgency of implementing specialized SRH programmes to address the unique reproductive health needs of the population. The Jaffna District is positioned as the 5th lowest district in Sri Lanka concerning government health personnel per 100,000 population, indicating a comparatively limited healthcare workforce (11). The impact of the 30 years of civil conflict and the district's representation of the Sri Lankan Tamil population, an ethnic minority, necessitate culturally sensitive and comprehensive SRH programmes. Furthermore, the presence of a significant number of illegal external migrants from India poses additional challenges, highlighting the importance of inclusivity and accessibility in SRH services.

In conclusion, the SRH programmes in the Jaffna District should prioritize maternal healthcare enhancement, cancer awareness and treatment, HIV/STI prevention, subfertility issues, and culturally sensitive interventions to address the unique challenges posed by the district's demographic and historical context. Strategic planning is crucial to ensure the effectiveness and inclusivity of SRH programmes in this complex and diverse setting.

5.3.4. Gampaha

The Gampaha District encounters notable challenges attributed to its high population density, securing the 2nd position as the most densely populated district in Sri Lanka, with 1,719 people per square kilometer (2). This presents a substantial challenge for the region. Additionally, it ranks as the 4th highest district in terms of the demand for family planning services, boasting a Modern Contraceptive Prevalence Rate (mCPR) of 52 (7). Gampaha also emerges as a district with high demand for well-woman clinic services, reporting a breast cancer incidence rate of 18.1 and a cervical cancer incidence rate of 5.1 (8). The district contends with a

significant subfertility challenge, holding the top position in Sri Lanka concerning the percentage of eligible couples experiencing subfertility (6).



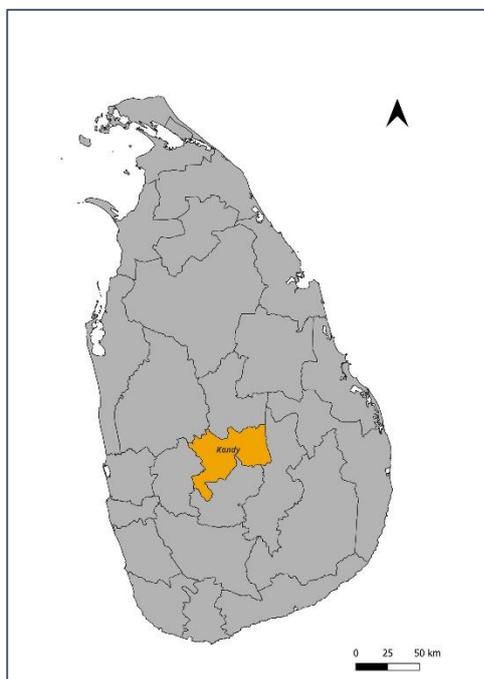
The Gampaha District stands out for hosting the highest number of investment zones, encompassing Katunayake, Biyagama, Mirigama, Wathupitiwala, and Malwatte, constituting a significant portion of the 14 Export Processing Zones (EPZs) in Sri Lanka (14). The female workforce employed within these EPZs is particularly susceptible to heightened vulnerabilities related to sexual and reproductive health (SRH), including issues such as gender-based violence, unintended pregnancies, and unsafe abortions (14).

The high population density necessitates targeted interventions to address the intensified demand for family planning services and well-woman clinic facilities. Strategies to enhance awareness, accessibility, and quality of these services would be pivotal. Furthermore, the pressing issue of subfertility demands specialized attention and intervention strategies to provide comprehensive and effective

support to the community. Understanding the unique challenges of the Gampaha district is crucial for tailoring SRH programmes to meet the specific needs of the population.

5.3.5. Kandy

The Kandy District in Sri Lanka emerges as the 4th most densely populated region, with 717 people per square kilometer (2), presenting a landscape characterized by heightened population density. This density intersects with significant socio-economic challenges, as the district secures the 3rd highest position nationally for poverty and unemployment rates. The



Multidimensional Poverty Rate stands at 22 (4), reflecting the diverse dimensions of poverty, while the Unemployment Rate is marked at 6.8% (5). Notably, Kandy ranks 2nd highest in the country in terms of the demand for family planning services, boasting a Modern Contraceptive Prevalence Rate (mCPR) of 52.3 (7) and an Unmet Need for Family Planning at 6.6 (6). The district faces a substantial priority in addressing the HIV epidemic, reporting 1.45 HIV cases per 100,000 population (9) and identifying 253 Most at Risk People per 100,000 population (10).

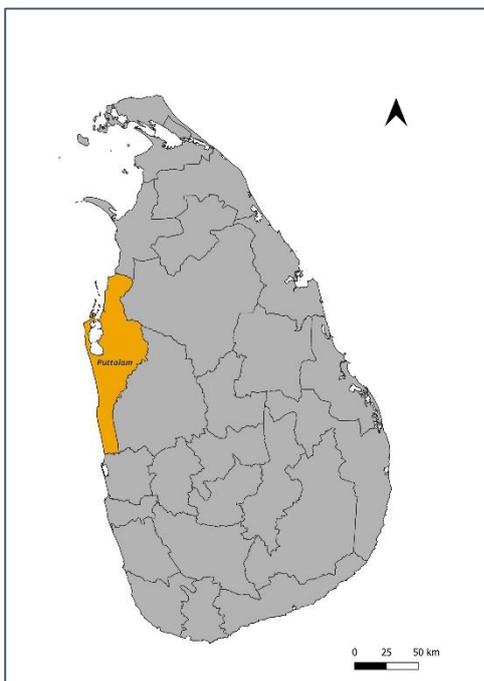
Given this backdrop, the sexual and reproductive health (SRH) programmes in the Kandy District reveal nuanced challenges that necessitate targeted interventions. The heightened demand for family planning services underscores the urgent need for tailored SRH initiatives encompassing family planning, contraceptive access, and reproductive

health education. Furthermore, the elevated priority for managing the HIV epidemic calls for focused strategies in awareness, prevention, and healthcare services to combat the prevalence of HIV cases and support those identified as most at risk. The district's unique role as a tourism hub and home to an Economic Processing Zone managed by the Board of Investment accentuates the need for SRH programmes that address the specific vulnerabilities and health needs of the diverse workforce, particularly the substantial female population.

Additionally, the district's vulnerability to natural disasters, particularly landslides, highlights the importance of integrated SRH programmes that consider the unique health risks posed by such events and prioritize community resilience. In summary, the Kandy District's SRH landscape demands a multifaceted approach that addresses family planning, HIV prevention, and the distinct health needs of the local workforce while incorporating strategies for resilience in the face of natural disasters.

5.3.6. Puttalam

The Puttalam District in Sri Lanka grapples with notable challenges, reflecting a critical need for comprehensive sexual and reproductive health (SRH) programmes. The district stands as the lowest among Sri Lankan regions in terms of government health personnel per 100,000 population (11). This staff deficiency in the government system serves as a significant impediment to ensuring timely and effective healthcare access for the local population. Another concerning aspect is the high breast and cervical cancer incidence rate, ranking the district as the 5th highest in the demand for Well Woman Care (WWC) across Sri Lanka (8; 6). This underscores the urgent necessity for targeted interventions in the form of cancer screening programmes, widespread awareness campaigns, and improved access to specialized cancer care services. A robust SRH strategy should be developed to tackle these cancer-related challenges, emphasizing prevention, early detection, and comprehensive treatment options.



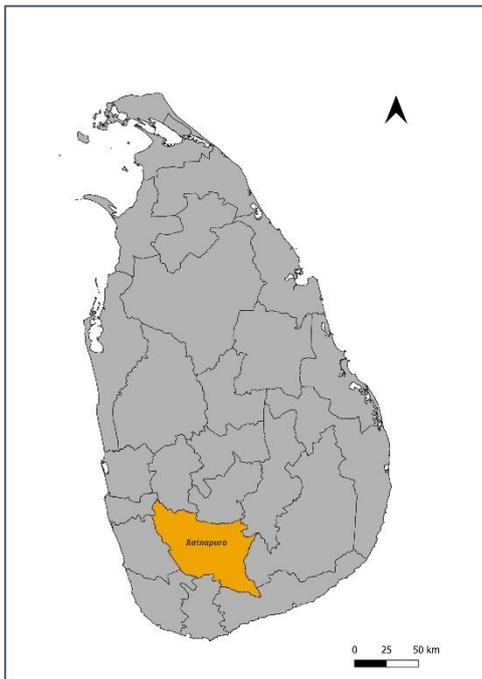
Furthermore, the Puttalam District faces challenges in maternal healthcare, ranking 4th lowest in terms of antenatal care services in Sri Lanka (6). This alarming statistic highlights a pressing need for focused interventions aimed at enhancing maternal health. Such initiatives should include comprehensive measures to increase awareness about maternal healthcare and ensure accessibility to prenatal services. The unique socio-demographic characteristics of the Puttalam District, including its status as a resettled area with Internally Displaced People (IDPs) due to the 30 years of civil conflict, a diverse ethnic distribution, a high rate of fishing communities, and low levels of literacy and education, necessitate tailored SRH programmes. These programmes should address the specific vulnerabilities of different population groups and focus on improving overall health literacy. Additionally, considering the high rate of illegal external migrants

from India, targeted interventions should be designed to address the SRH needs of this population.

In conclusion, the identified gaps and needs in the Puttalam District underscore the imperative for a holistic and tailored approach in SRH programmes. Initiatives should prioritize strengthening healthcare infrastructure, implementing cancer screening and awareness campaigns, and enhancing maternal healthcare services while considering the diverse socio-demographic characteristics of the population.

5.3.7. Ratnapura

The Ratnapura District in Sri Lanka presents a multifaceted scenario, demanding a thorough Sexual and Reproductive Health (SRH) programmes. The district contends with formidable socioeconomic challenges, ranking as the 6th highest district in poverty and unemployment rates across Sri Lanka. The Multidimensional Poverty Rate, standing at 28 (4), coupled with an Unemployment Rate of 4.7 (5), underscores the imperative need for comprehensive efforts. Any robust SRH initiative must be embedded within broader strategies addressing these underlying socioeconomic determinants. Adding to these challenges are elevated incidences of breast and cervical cancers, with the Ratnapura District facing a considerable health burden. The breast cancer incidence rate of 24.3 per 100,000 population and a cervical cancer incidence rate of 7.9 per 100,000 (8) position the district at the 7th rank in Sri Lanka. This underscores the urgency for targeted cancer screening programmes, extensive awareness campaigns, and improved access to specialized cancer care services. Integrating cancer prevention and management into SRH initiatives is pivotal for addressing the specific health challenges faced by the population.



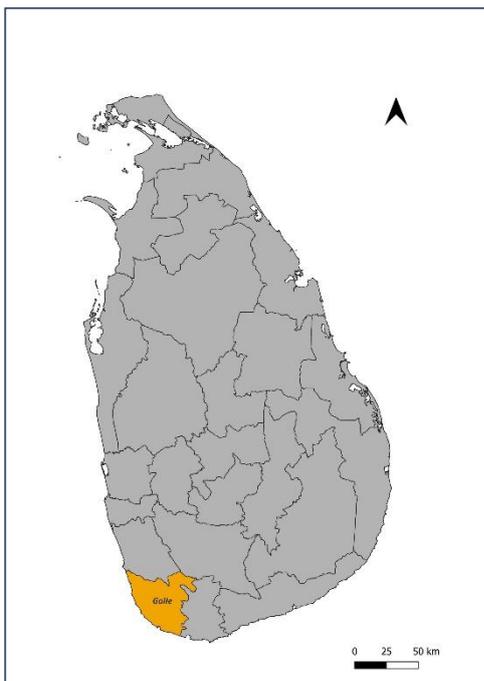
Furthermore, the Ratnapura District grapples with a critical shortage of government health personnel, ranking 4th lowest in Sri Lanka concerning the healthcare workforce per 100,000 population (11). This shortage poses a significant barrier to effective healthcare delivery. Addressing this challenge requires strategic planning to augment the number of healthcare professionals and optimize their deployment to ensure comprehensive health coverage for the population. This involves not only increasing the workforce but also strategically distributing healthcare resources to areas with the greatest need. In addition to healthcare challenges, the district experiences a high rate of natural disasters, including flooding and landslides. Internal migration, particularly due to the gem industry, further complicates the healthcare landscape. Moreover, the rural areas, predominantly inhabited by tea and rubber plantation workers, face a low health infrastructure.

Any comprehensive SRH programme for the Ratnapura District should incorporate disaster preparedness and response measures, consider the health needs of internal migrants, and focus on enhancing healthcare infrastructure in rural areas.

In conclusion, addressing the complex array of challenges in the Ratnapura District necessitates an integrated approach that extends beyond conventional SRH programmes. Initiatives must be designed to tackle poverty and unemployment, prioritize cancer prevention and management, strategically increase healthcare personnel, and account for the unique demographic and environmental factors shaping the health landscape of the district.

5.3.8. Galle

The Galle District, situated in the Southern Province of Sri Lanka, presents distinctive challenges and priorities that necessitate a thorough Sexual and Reproductive Health (SRH) programme. The district's high population density, ranking as the 5th most densely populated district in Sri Lanka with 685 people per square kilometer (2), indicates the necessity for SRH interventions tailored to accommodate the healthcare needs of a densely populated region. Addressing the unique challenges posed by high population density requires strategic planning to ensure comprehensive health coverage and accessibility for all residents. Furthermore, the district faces a relatively high priority for managing the HIV epidemic, reporting 1.60 cases per 100,000 population (9) and 315 Most at Risk People per 100,000 population (10). The HIV-related statistics underscore the importance of incorporating HIV prevention and management components into SRH programmes. This involves comprehensive awareness campaigns, access to testing and treatment, and support services for those affected.



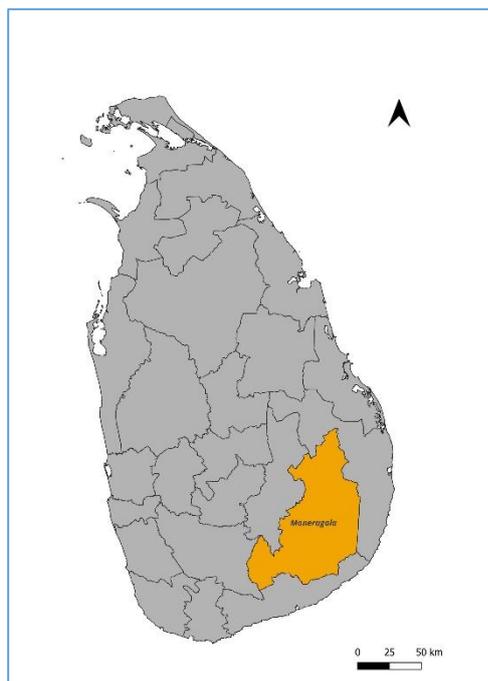
The ongoing changes in the district, marked by the expansion of the tourist industry, especially in beach areas, further accentuate the need for targeted SRH programmes. The Export Processing Zone, predominantly employing female factory workers, requires specific attention to address the unique health challenges faced by this demographic (15; 16). Integrating workplace health initiatives into SRH programs can contribute to the well-being of the female workforce in Galle. In addition to the HIV related concerns, the Galle District grapples with subfertility issues, ranking as the 7th highest district in Sri Lanka concerning subfertility (6). This highlights the need for targeted interventions aimed at improving reproductive health outcomes, including increased awareness, accessibility, and quality of family planning services. The development and implementation of effective family planning programmes are crucial to addressing the specific needs of the population in Galle. Moreover, the Galle

District is prone to natural disasters, particularly flooding, making it a focus area for disaster management. Any comprehensive SRH programme for Galle must include disaster preparedness and response measures to ensure the resilience of healthcare services during emergencies.

In conclusion, the Galle District's SRH challenges and priorities are multifaceted, ranging from high population density and subfertility issues to the management of the HIV epidemic and vulnerability to natural disasters. An effective gap analysis and need assessment should inform the development of SRH programmes that address these unique challenges, ensuring comprehensive and tailored interventions for the well-being of the population in the Galle District.

5.3.9. Moneragala

The Moneragala District is grappling with a Multidimensional Poverty Rate of 32, the third-highest in Sri Lanka (4), and a significantly high unemployment rate of 5.4 (5). According to the 2012 census, the economically inactive population in the Uva province, where Moneragala is located, is reported as 44.3 percent, reflecting challenges in workforce participation (17).



The well-woman clinic services in Moneragala encounter substantial challenges, especially in addressing women's health issues, with only 6.4% of women benefiting from government well-woman care services—marking the lowest coverage in Sri Lanka (6). The district presents concerning statistics, with a high breast cancer incidence rate of 19.6 and a cervical cancer incidence rate of 11.6 (8). Despite these elevated rates, the coverage for cervical cancer screening (Papsmear) among the 35-year age cohort is a mere 6.7%, and only 6.4% have undergone manual breast examination for breast cancer (6). These figures highlight the pressing need for targeted cancer screening initiatives, widespread awareness campaigns, and improved accessibility to cancer care services.

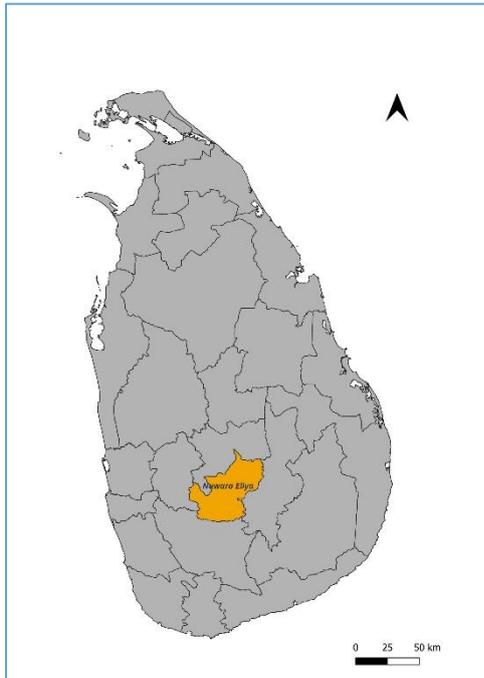
Maternal health services in Moneragala also face deficiencies, as highlighted by the district ranking 10th in antenatal care in Sri Lanka (6). This indicates a critical need for interventions to enhance maternal health, including increased awareness, accessibility, and the quality of prenatal services. The district also grapples with a high teenage pregnancy rate and a notable proportion of divorced and separated individuals. The vulnerability of widowed females, approximately seven times higher than that of widowed males, calls for targeted interventions to address the specific challenges faced by this demographic.

In this context, it is evident that the Moneragala district requires comprehensive and targeted interventions to address the complex challenges it faces in providing well-woman clinic services and improving sexual and reproductive health outcomes. Improving healthcare services should be a focal point, considering the multifaceted challenges identified through this gap analysis and needs assessment.

5.3.10. Nuwara Eliya

The Nuwara Eliya District is distinguished by its estate sector community, predominantly representing the minority Indian Tamil population, and faces the dual challenge of limited infrastructure and restricted access to health facilities. The district, characterized by a relatively high population density of 417 people per square kilometer (2), confronts significant challenges as one of the highest-poverty districts in Sri Lanka, boasting the highest Multidimensional Poverty Rate of 44 (4) and a notable percentage of poor households at 4.6% (3). Healthcare in Nuwara Eliya presents a critical concern, marked by a low number of government health personnel per 100,000 population, securing the 3rd lowest position in Sri Lanka (11). While Nuwara Eliya district boasts a considerably high Modern Contraceptive Prevalence Rate (62.7), it faces a significant challenge with a percentage of eligible couples

experiencing an unmet need for family planning at 6.7% (6). This places Nuwara Eliya as the fourth-highest district in Sri Lanka in terms of unmet family planning needs.



Furthermore, the Nuwara Eliya District registers the highest incidence rate of cervical cancer in Sri Lanka, reaching 14 cases per 100,000 population (8). Despite this concerning figure, almost one-fourth of women in the 35 age cohort have not availed themselves of screening for cervical cancer (6). Furthermore, Nuwara Eliya contends with a significantly elevated breast cancer incidence rate of 23.5 per 100,000 population, positioning it in the 6th rank nationally (8). However, the utilization of well-woman care services stands at 80% among eligible women (6). Despite the substantial health-related challenges, the Nuwara Eliya District grapples with a notably lower availability of government healthcare personnel. With merely 36 medical officers per 100,000 population, it holds the lowest position in Sri Lanka (11). Additionally, the district reports only 38 Public Health Midwives (PHM) and Supervisor Public Health Midwives (SPHM) per 100,000 population, ranking as the seventh lowest in

the country (11).

Despite being among the highest-priority areas for tourism, Nuwara Eliya contends with relatively low literacy rates and a scarcity of educational opportunities. The district also grapples with a high frequency of natural disasters, particularly landslides. Addressing these multifaceted challenges is essential to conduct a comprehensive gap analysis and needs assessment for the implementation of effective Sexual and Reproductive Health (SRH) programmes in Nuwara Eliya.

6. Conclusion

In conclusion, the "Mapping for Impact: FPA Sri Lanka's District Prioritization Strategy" has emerged as a crucial instrument for optimizing the effectiveness of Sexual and Reproductive Health programmes. The comprehensive approach, blending geospatial analysis with rigorous data-driven strategies, has provided valuable insights into the diverse landscape of Sri Lanka's districts. The study successfully identified and prioritized districts based on key indicators, enabling FPA Sri Lanka to tailor its programmes for maximum impact. The geospatial prioritization strategy, grounded in population density, poverty, healthcare services, and other vital factors, serves as a roadmap for targeted resource allocation. This approach ensures that interventions are directed to districts with the greatest needs, thereby enhancing the overall impact and reach of FPA Sri Lanka's programmes.

7. Recommendations

- 01) Strategic Relocation of Service Delivery Points:** The study recommends the relocation of the existing Service Delivery Point from Ampara to the Monaragala District. This move is informed by the district prioritization results, aligning service provision with identified needs for maximum impact.
- 02) Expansion of Service Delivery Points:** New Service Delivery Points are strongly recommended in districts that exhibit notable rankings and specific reproductive health challenges. These include Jaffna, Kandy, Puttalam, and Ratnapura. The establishment of these new points aims to address sub-national disparities and cater to the unique needs of each district.
- 03) Sensitization of Donors and Resource Mobilization:** Undertake a comprehensive sensitization campaign targeting potential donors, both local and international and highlight the impact of FPA Sri Lanka's programmes, emphasizing the alignment with district-specific needs. Concurrently, focus on resource mobilization to ensure sustainable funding for the expanded service delivery points and ongoing initiatives.
- 04) Continuous Monitoring and Adaptation:** The dynamic nature of public health demands continuous monitoring and adaptation. FPA Sri Lanka should establish mechanisms for ongoing assessment, incorporating emerging data and insights to refine and adapt its strategies over time.
- 05) Collaboration and Advocacy:** Collaboration with government agencies, local authorities, and other stakeholders is crucial. FPA Sri Lanka should engage in advocacy efforts to garner support for its programmes and to address policy gaps identified through the district prioritization strategy.

References

1. **FPA Sri Lanka.** *Corporate Website of The Family Planning Association of Sri Lanka.* [Online] The Family Planning Association of Sri Lanka, 2022. [Cited: November 2, 2022.] <https://www.fpasrilanka.org/about>.
2. **DCS.** *Mid-year population projection,* . Colombo : Department of Census and Statistics, 2020.
3. **DCS.** *Household Income & Expenditure Survey.* Colombo : Department of Census and Statistics, 2019.
4. **DCS.** *Multidimensional Poverty in Sri Lanka.* Colombo : Department of Census and Statistics, 2020.
5. **DCS.** *Sri Lanka Labor Force Survey.* Colombo : Department of Census and Statistics, 2021.
6. **FHB.** *Family Health Bureau Annual Report - 2020.* Colombo : Family Health Bureau, 2020.
7. **DCS.** *Demographic and Health Survey - 2016.* Colombo, Sri Lanka : Department of Census and Statistics, Sri Lanka, 2017.
8. **NCPP.** *Cancer incidence and mortality data.* Colombo : National Cancer Prevention Programme, 2019.
9. **NSACP.** *National STD/AIDS Control Programme - Annual Report (2021).* Colombo : National STD/AIDS Control Programme, 2021.
10. **NSACP.** *Report on the National Size Estimation of the Most at Risk Populations for HIV in Sri Lanka.* Colombo, Sri Lanka : National STD/AIDS Control Programme and Management Frontiers (Pvt) Limited, 2018.
11. **Ministry of Health.** [Online] 2020. [Cited: September 15, 2023.] http://sis.statistics.gov.lk/statHtml/statHtml.do?orgId=144&tblId=DT_HEA_ANN_115.
12. **FPA Sri Lanka.** Monitoring and Evaluation Information Management System. *MEIMS Homepage.* [Online] 2021. [Cited: February 22, 2021.] <https://me.fpasrilanka.org/login.htm>.
13. **FHB.** *National Family Planning Programme Review - 2016.* Colombo, Sri Lanka : Family Health Bureau, 2017.
14. **Board of Investment .** Board of Investment Corporate Website. [Online] 2020. [Cited: March 26, 2021.] <https://investsrilanka.com/>.
15. *Healthcare seeking behaviour among female garment workers in the Koggala Free Trade Zone, Sri Lanka.* **Rajapakse, Sanjeewa, et al.** 4, 2018, Journal of the College of Community Physicians of Sri Lanka, Vol. 24, pp. 149-155.
16. *The Risks and Consequences: An Analysis of Unintended Pregnancies and Unsafe Abortions among Female Factory Workers in Sri Lanka.* **Suranga, Suchira, et al.** 2, s.l. : Asian Review of Social Sciences, 2023, Asian Review of Social Sciences, Vol. 12, pp. 32-43.
17. **DCS.** *Population and Housing Survey.* Colombo, Sri Lanka : Department of Census and Statistics, 2012.

Annexure 01: Population size; indicators, final score and rank

Province	District	Population Size			Final Score	Rank
		Population size	Land area in square Km	Population density per square km		
Central	Kandy	1,375,382	1,917	717	0.20	4
Central	Matale	484,531	1,952	248	0.70	14
Central	Nuwara Eliya	711,644	1,706	417	0.45	9
Eastern	Ampara	649,402	4,222	154	0.85	17
Eastern	Batticaloa	526,567	2,610	202	0.80	16
Eastern	Trincomalee	379,541	2,529	150	0.90	18
North Central	Anuradhapura	860,575	6,664	129	1.00	20
North Central	Polonnaruwa	406,088	3,077	132	0.95	19
North Western	Kurunegala	1,618,465	4,624	350	0.50	10
North Western	Puttalam	762,396	2,882	265	0.65	13
Northern	Jaffna	583,882	929	629	0.35	7
Northern	Kilinochchi	113,510	1,205	94	1.05	21
Northern	Mannar	99,570	1,880	53	1.20	24
Northern	Mullaitivu	92,238	2,415	38	1.25	25
Northern	Vavuniya	172,115	1,861	92	1.10	22
Sabaragamuwa	Kegalle	840,648	1,685	499	0.40	8
Sabaragamuwa	Ratnapura	1,088,007	3,236	336	0.55	11
Southern	Galle	1,063,334	1,617	658	0.25	5
Southern	Hambantota	599,903	2,496	240	0.75	15
Southern	Matara	814,048	1,270	641	0.30	6
Uva	Badulla	815,405	2,827	288	0.60	12
Uva	Moneragala	451,058	5,508	82	1.15	23
Western	Colombo	2,324,349	676	3438	0.05	1
Western	Gampaha	2,304,833	1,341	1719	0.10	2
Western	Kalutara	1,221,948	1,576	775	0.15	3

Annexure 02: Poverty & unemployment; indicators, final score and rank

Province	District	Poverty & Unemployment				Score	Rank
		Percentage of poor households	Multidimensional Poverty Rate	Unemployment Rate			
Central	Kandy	4.6	22.0	6.8	0.45	3	
Central	Matale	3.2	20.0	6.1	1.20	8	
Central	Nuwara Eliya	4.6	44.0	3.7	1.50	10	
Eastern	Ampara	2.1	15.0	5.1	2.85	19	
Eastern	Batticaloa	8.1	20.0	7.2	0.30	2	
Eastern	Trincomalee	6.8	15.0	1.4	2.70	18	
North Central	Anuradhapura	2.7	17.5	4.6	2.25	15	
North Central	Polonnaruwa	1.7	20.0	4.5	3.00	20	
North Western	Kurunegala	2.3	11.5	3.7	3.30	22	
North Western	Puttalam	1.6	10.0	3.5	3.60	24	
Northern	Jaffna	6.0	10.0	4.7	2.25	15	
Northern	Kilinochchi	15.0	16.0	5.3	0.75	5	
Northern	Mannar	0.9	27.0	2.1	3.15	21	
Northern	Mullaitivu	11.2	14.0	2.4	2.10	14	
Northern	Vavuniya	1.5	26.0	5.4	1.80	12	
Sabaragamuwa	Kegalle	5.4	18.0	5.2	1.20	8	
Sabaragamuwa	Ratnapura	4.8	28.0	4.7	0.90	6	
Southern	Galle	2.0	10.0	7.0	2.55	17	
Southern	Hambantota	1.1	20.0	7.7	1.65	11	
Southern	Matara	3.7	17.0	7.2	1.05	7	
Uva	Badulla	5.9	37.0	5.6	0.15	1	
Uva	Moneragala	4.4	32.0	5.4	0.60	4	
Western	Colombo	0.6	4.0	4.4	3.75	25	
Western	Gampaha	1.3	5.0	4.7	3.45	23	
Western	Kalutara	2.3	11.5	6.5	1.95	13	

Annexure 03: Ante-natal services; indicators, final score and rank

Province	District	Antenatal Services				Score	Rank
		Birth Rate	% teenage mothers	% antenatal morbidities			
Central	Kandy	15.70	3.10	37.00	1.10	22	
Central	Matale	14.90	4.00	42.90	0.60	12	
Central	Nuwara Eliya	14.10	4.20	26.90	1.00	20	
Eastern	Ampara	22.00	4.03	49.41	0.15	3	
Eastern	Batticaloa	18.90	8.20	34.20	0.30	6	
Eastern	Trincomalee	22.40	7.50	42.80	0.10	2	
North Central	Anuradhapura	16.70	5.00	47.20	0.25	5	
North Central	Polonnaruwa	16.70	3.60	43.90	0.50	10	
North Western	Kurunegala	14.80	3.50	47.90	0.70	14	
North Western	Puttalam	17.10	6.10	44.10	0.20	4	
Northern	Jaffna	15.40	3.80	50.80	0.45	9	
Northern	Kilinochchi	21.00	7.00	64.30	0.05	1	
Northern	Mannar	17.40	4.20	42.10	0.35	7	
Northern	Mullaitivu	11.10	7.30	41.40	0.70	14	
Northern	Vavuniya	18.80	4.60	38.70	0.40	8	
Sabaragamuwa	Kegalle	13.20	3.30	37.90	1.25	25	
Sabaragamuwa	Ratnapura	14.80	3.70	40.30	0.85	17	
Southern	Galle	15.60	4.00	35.50	0.90	18	
Southern	Hambantota	17.00	3.40	42.40	0.65	13	
Southern	Matara	13.30	3.30	39.60	1.20	24	
Uva	Badulla	16.20	4.30	33.80	0.80	16	
Uva	Moneragala	16.90	4.40	39.60	0.50	10	
Western	Colombo	13.60	3.56	39.64	0.95	19	
Western	Gampaha	12.00	3.20	42.10	1.15	23	
Western	Kalutara	12.60	3.40	41.30	1.05	21	

Note: % antenatal morbidities = Percentage of pregnant mothers with any antenatal morbidities
 % teenage mothers = Percentage of total teenage mothers registered

Annexure 04: Family planning services; indicators, final score and rank

Province	District	Family Planning Services					
		% Modern FP	% Unmet need	TFR	mCPR	Score	Rank
Central	Kandy	58.00	6.60	2.60	52.30	0.40	2
Central	Matale	62.20	4.80	1.90	61.70	4.40	22
Central	Nuwara Eliya	66.40	6.70	2.20	62.70	3.40	17
Eastern	Ampara	57.97	4.43	2.40	40.60	0.80	4
Eastern	Batticaloa	51.60	5.30	2.40	28.50	0.20	1
Eastern	Trincomalee	56.40	4.20	2.30	45.40	1.60	8
North Central	Anuradhapura	65.00	4.00	2.40	62.50	4.00	20
North Central	Polonnaruwa	66.70	3.50	2.50	67.00	4.20	21
North Western	Kurunegala	59.10	5.40	2.20	55.80	3.20	16
North Western	Puttalam	58.50	6.30	2.10	55.60	2.60	13
Northern	Jaffna	53.80	3.10	2.10	42.70	2.40	12
Northern	Kilinochchi	65.30	1.80	2.10	56.30	4.80	24
Northern	Mannar	55.40	5.50	2.00	18.40	1.20	6
Northern	Mullaitivu	67.70	3.20	2.00	63.90	5.00	25
Northern	Vavuniya	52.00	8.70	2.00	30.70	0.60	3
Sabaragamuwa	Kegalle	60.10	6.00	2.60	59.30	2.00	10
Sabaragamuwa	Ratnapura	58.30	6.00	1.80	55.80	3.60	18
Southern	Galle	59.60	5.70	2.10	53.80	2.80	14
Southern	Hambantota	61.20	5.50	1.90	54.00	3.80	19
Southern	Matara	60.40	6.30	2.30	52.90	1.80	9
Uva	Badulla	70.90	4.60	2.30	64.70	4.40	22
Uva	Moneragala	34.90	2.30	2.40	63.70	3.00	15
Western	Colombo	55.08	7.27	1.80	47.40	1.20	6
Western	Gampaha	52.00	8.10	1.80	52.00	0.80	4
Western	Kalutara	57.00	5.50	2.20	55.40	2.20	11

Note: % Modern FP = Percentage of eligible couples using modern family planning methods
 % Unmet need = Percentage of eligible couples with unmet need of family planning
 TFR = Total Fertility Rate
 mCPR = Modern Contraceptive Prevalence Rate

Annexure 05: Well women care services; indicators, final score and rank

Province	District	Well Women Care				Score	Rank
		% WWC attend	% screened for pap	Breast Cancer rate	Cervical Cancer rate		
Central	Kandy	86.20	73.80	38.70	8.30	3.00	15
Central	Matale	93.10	86.30	38.10	8.50	3.40	17
Central	Nuwara Eliya	80.90	73.60	23.50	14.00	2.20	11
Eastern	Ampara	84.18	82.61	8.50	2.70	5.00	25
Eastern	Batticaloa	48.70	47.80	17.60	7.30	1.20	6
Eastern	Trincomalee	65.20	63.20	7.40	3.70	4.20	21
North Central	Anuradhapura	66.50	62.70	4.20	5.40	4.40	22
North Central	Polonnaruwa	78.10	74.10	21.10	6.70	3.60	18
North Western	Kurunegala	51.60	48.60	24.60	1.10	2.60	13
North Western	Puttalam	31.90	31.30	14.90	5.60	1.00	5
Northern	Jaffna	46.10	40.80	28.40	5.80	0.60	3
Northern	Kilinochchi	24.10	23.30	7.60	9.20	0.60	3
Northern	Mannar	85.10	78.10	10.90	3.60	4.80	24
Northern	Mullaitivu	50.80	48.50	5.20	12.40	1.80	9
Northern	Vavuniya	24.00	23.00	5.20	3.10	2.40	12
Sabaragamuwa	Kegalle	65.60	59.80	20.90	5.80	3.20	16
Sabaragamuwa	Ratnapura	62.30	58.10	24.30	7.90	1.40	7
Southern	Galle	51.20	47.50	13.60	4.90	2.60	13
Southern	Hambantota	78.80	72.40	8.00	3.30	4.60	23
Southern	Matara	59.10	55.70	12.70	3.60	3.80	19
Uva	Badulla	71.30	68.80	17.30	5.90	3.80	19
Uva	Moneragala	6.40	6.70	19.60	11.60	0.40	2
Western	Colombo	42.63	34.60	52.40	10.70	0.20	1
Western	Gampaha	43.80	37.60	18.10	5.10	1.60	8
Western	Kalutara	62.40	59.30	22.30	6.50	2.00	10

Note: % WWC attend = Percentage of 35 year age cohort attendance to well women clinics
 % screened for pap = Percentage of 35 year age cohort coverage who had undergone Papsmear screening
 Breast Cancer Rate = Breast Cancer incidence rate (Crude Rate)
 Cervical Cancer Rate = Cervical Cancer incidence rate (Crude Rate)

Annexure 06: HIV/STI services; indicators, final score and rank

Province	District	HIV/STI Services					
		# of HIV cases	# of PLHIV	# of syphilis cases	MARP Size	Score	Rank
Central	Kandy	1.45	9.23	0.29	253	1.50	10
Central	Matale	0.83	5.78	0.21	253	2.25	15
Central	Nuwara Eliya	0.98	1.55	0.14	253	3.15	21
Eastern	Ampara	0.46	0.62	0.15	287	2.70	18
Eastern	Batticaloa	0.38	1.90	2.28	287	1.50	10
Eastern	Trincomalee	1.58	3.16	0.53	301	0.60	5
North Central	Anuradhapur	0.81	6.16	0.00	253	2.70	18
	a						
North Central	Polonnaruwa	1.97	9.11	0.49	253	1.05	7
North Western	Kurunegala	0.31	5.93	0.31	253	2.70	18
North Western	Puttalam	0.00	5.77	0.13	301	2.40	16
Northern	Jaffna	1.20	7.02	1.54	253	1.35	9
Northern	Kilinochchi	0.00	0.00	1.76	253	3.60	24
Northern	Mannar	1.00	0.00	0.00	254	3.30	22
Northern	Mullaitivu	0.00	0.00	3.25	254	2.40	16
Northern	Vavuniya	0.58	9.88	1.16	253	1.80	12
Sabaragamuwa	Kegalle	0.71	4.52	0.00	253	3.75	25
Sabaragamuwa	Ratnapura	0.37	3.40	0.37	253	3.45	23
Southern	Galle	1.60	8.84	1.13	315	1.05	3
Southern	Hambantota	2.33	4.83	0.50	284	0.75	5
Southern	Matara	0.98	7.86	0.74	284	0.45	4
Uva	Badulla	0.61	2.94	1.23	253	1.95	13
Uva	Moneragala	0.22	2.00	3.10	253	1.95	13
Western	Colombo	8.60	54.42	2.15	285	0.15	1
Western	Gampaha	2.95	16.10	1.13	302	0.30	2
Western	Kalutara	0.74	5.97	0.74	300	0.75	7

Note: # of HIV cases = Number of HIV cases reported per 100,000 population
of PLHIV = Number of people living with HIV per 100,000 people
of Syphilis cases = Number of syphilis cases reported per 100,000 population
MARP Size = Size of the Most at Risk Population for HIV per 100,000 Population

Annexure 07: Subfertility services; indicators, final score and rank

Province	District	Subfertility Services				
		# of eligible couples	# of subfertility	% of subfertility	Score	Rank
Central	Kandy	276,052	7,177	2.60	0.80	16
Central	Matale	97,516	2,633	2.70	0.70	14
Central	Nuwara Eliya	143,357	2,867	2.00	1.10	22
Eastern	Ampara	137,414	4,874	3.55	0.45	9
Eastern	Batticaloa	108,306	2,274	2.10	1.05	21
Eastern	Trincomalee	80,518	1,771	2.20	1.00	20
North Central	Anuradhapura	175,713	4,393	2.50	0.95	19
North Central	Polonnaruwa	82,315	2,799	3.40	0.50	10
North Western	Kurunegala	321,250	11,565	3.60	0.35	7
North Western	Puttalam	155,978	4,055	2.60	0.80	16
Northern	Jaffna	115,185	4,838	4.20	0.10	2
Northern	Kilinochchi	24,165	773	3.20	0.60	12
Northern	Mannar	20,754	560	2.70	0.70	14
Northern	Mullaitivu	17,991	306	1.70	1.15	23
Northern	Vavuniya	35,470	568	1.60	1.20	24
Sabaragamuwa	Kegalle	165,500	5,461	3.30	0.55	11
Sabaragamuwa	Ratnapura	218,831	7,003	3.20	0.60	12
Southern	Galle	211,014	7,597	3.60	0.35	7
Southern	Hambantota	123,982	5,207	4.20	0.10	2
Southern	Matara	160,867	6,113	3.80	0.30	6
Uva	Badulla	164,634	4,280	2.60	0.80	16
Uva	Moneragala	92,999	1,395	1.50	1.25	25
Western	Colombo	456,661	18,470	4.04	0.25	5
Western	Gampaha	450,511	19,822	4.40	0.05	1
Western	Kalutara	182,711	7,491	4.10	0.20	4

Note: # of eligible couples = Estimated Number of Eligible couples
of subfertility = Number of eligible couples with subfertility
% of Subfertility = Percentage of eligible couples with subfertility

Annexure 08: Government health personnel; indicators, final score and rank

Province	District	Government Health Personals				
		# of medical officers	# of PHM	# of PHNS	Score	Rank
Central	Kandy	116.99	31.92	1.53	2.70	18
Central	Matale	71.62	35.91	2.06	2.85	19
Central	Nuwara Eliya	36.39	38.22	0.56	0.45	3
Eastern	Ampara	105.94	42.35	1.69	3.30	22
Eastern	Batticaloa	76.15	28.68	1.33	1.05	7
Eastern	Trincomalee	76.41	39.26	1.58	3.00	20
North Central	Anuradhapura	67.75	29.63	2.32	2.40	16
North Central	Polonnaruwa	69.69	33.98	1.97	2.25	15
North Western	Kurunegala	66.67	25.02	2.04	1.35	9
North Western	Puttalam	58.37	25.31	1.05	0.15	1
Northern	Jaffna	85.63	26.03	0.51	0.75	5
Northern	Kilinochchi	107.48	40.53	0.88	2.55	17
Northern	Mannar	78.34	62.27	3.01	3.75	25
Northern	Mullaitivu	84.56	62.88	2.17	3.60	24
Northern	Vavuniya	112.72	34.86	2.32	3.45	23
Sabaragamuwa	Kegalle	63.64	29.62	1.19	0.30	2
Sabaragamuwa	Ratnapura	63.05	32.81	1.29	0.60	4
Southern	Galle	75.05	30.00	1.97	2.10	14
Southern	Hambantota	56.34	34.51	1.50	0.90	6
Southern	Matara	73.71	31.08	1.11	1.05	7
Uva	Badulla	59.23	37.53	1.59	1.80	12
Uva	Moneragala	66.29	44.56	2.22	3.15	21
Western	Colombo	190.55	19.45	1.46	1.65	11
Western	Gampaha	76.23	21.00	1.56	1.35	9
Western	Kalutara	63.10	30.77	2.29	1.95	13

Note: # of medical officers = Number of medical officers per 100,000 population
of PHM = Number of PHM + SPHM per 100,000 population
of PHNS = Number of PHNS + SPHNS per 100,000 population

Annexure 09: Final score and rank by focus areas

Province	District	Population Density	Poverty & Unemployment	Antenatal Services	Family Planning	Well woman Care	HIV / STI Services	Subfertility Services	Government Health Personnel	Final Score	Rank
Central	Kandy	0.2	0.45	1.1	0.4	3	1.5	0.8	2.7	10.15	6
	Matale	0.7	1.2	0.6	4.4	3.4	2.25	0.7	2.85	16.1	22
	Nuwara Eliya	0.45	1.5	1	3.4	2.2	3.15	1.1	0.45	13.25	15
Eastern	Ampara	0.85	2.85	0.15	0.8	5	2.7	0.45	3.3	16.1	21
	Batticaloa	0.8	0.3	0.3	0.2	1.2	1.5	1.05	1.05	6.4	1
	Trincomalee	0.9	2.7	0.1	1.6	4.2	0.75	1	3	14.25	17
North Central	Anuradhapura	1	2.25	0.25	4	4.4	2.7	0.95	2.4	17.95	23
	Polonnaruwa	0.95	3	0.5	4.2	3.6	1.05	0.5	2.25	16.05	20
North Western	Kurunegala	0.5	3.3	0.7	3.2	2.6	2.7	0.35	1.35	14.7	19
	Puttalam	0.65	3.6	0.2	2.6	1	2.4	0.8	0.15	11.4	8
Northern	Jaffna	0.35	2.25	0.45	2.4	0.6	1.35	0.1	0.75	8.25	3
	Kilinochchi	1.05	0.75	0.05	4.8	0.6	3.6	0.6	2.55	14	16
	Mannar	1.2	3.15	0.35	1.2	4.8	3.3	0.7	3.75	18.45	25
	Mullaitivu	1.25	2.1	0.7	5	1.8	2.4	1.15	3.6	18	24
	Vavuniya	1.1	1.8	0.4	0.6	2.4	1.8	1.2	3.45	12.75	13
Sabaragamuwa	Kegalle	0.4	1.2	1.25	2	3.2	3.75	0.55	0.3	12.65	12
	Ratnapura	0.55	0.9	0.85	3.6	1.4	3.45	0.6	0.6	11.95	9
Southern	Galle	0.25	2.55	0.9	2.8	2.6	0.45	0.35	2.1	12	10
	Hambantota	0.75	1.65	0.65	3.8	4.6	0.75	0.1	0.9	13.2	14
	Matara	0.3	1.05	1.2	1.8	3.8	0.6	0.3	1.05	10.1	5
Uva	Badulla	0.6	0.15	0.8	4.4	3.8	1.95	0.8	1.8	14.3	18
	Moneragala	1.15	0.6	0.5	3	0.4	1.95	1.25	3.15	12	11
Western	Colombo	0.05	3.75	0.95	1.2	0.2	0.15	0.25	1.65	8.2	2
	Gampaha	0.1	3.45	1.15	0.8	1.6	0.3	0.05	1.35	8.8	4
	Kalutara	0.15	1.95	1.05	2.2	2	1.05	0.2	1.95	10.55	7

ISBN 978-955-8876-37-4



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