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GOVERNO DA GUINÉ-BISSAU
MINISTÉRIO DA SAÚDE PÚBLICA
Gavi The Vaccine Alliance

GUINEA-BISSAU

NARRATIVE TO THE THEORY OF CHANGE

In view of a support request from Gavi

GaneshAID
Organisation Mondiale de la Santé Bureau régional de l'Afrique
unicef for every child

Ministry of Health

Guinea-Bissau Expanded Immunisation Program

Narrative to the Theory of Change,

In view of a request for Gavi EAF support

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List of Abbreviations

AEFI	Adverse Events Following Immunisation
AfDB	African Development Bank
AU	The African Union
BCG	Bacille Calmet et de Guérin
CCIA	Inter Institutional Commission for the Coordination of the Expanded Vaccination Program
CHWs	Community Health Workers
cMYP	Comprehensive Multiple Years Plan
CPLP	The Community of Portuguese Language Countries
CSOs	Civil Society Organizations
DHIS 2	Digital Health Information System 2
DPT	Diphtheria - Pertussis - Tetanus
EAF	Equity Accelerator Funding
ECOWAS	The Economic Community of West African States
EPI	Expanded Programme of Immunisation
ERG	Equity Reference Group for Immunization
EU	The European Union
EVM	Effective Vaccine Management
GHG	Greenhouse gas
HSS	Health System Strengthening
IDA	International Development Association
IHME	Institute for Health Metrics and Evaluation
INPS	National Institute of Social Security
INSA	Institut National des Sciences Appliquées
IRMMA	Identify - Reach - Monitor - Measure - Advocate
JFR	Joint form report
MICS	Multiple Indicator Cluster Surveys
MINSAP	Ministério da Saúde Pública

NDC	Nationally determined contribution
NGOs	Non-Governmental Organizations
NIP	National Immunisation Program
REC/RED	Reach Every Child/Reach Every District
SAB	Autonomous Sector of Bissau
SDGs	Sustainable Development Goals
SIVE	Serviço de Imunização e Vigilância Epidemiológica
UN	United Nations
UNICEF	The United Nations International Children's Emergency Fund
VAR	Vaccine Arrival Reports
VPDs	Vaccine-Preventable Diseases
WB	World Bank
WHO	World Health Organization
ZD	Zero-dose

Part 1 - Situation analysis: main conclusions

1.1. Analysis of the situation of the immunisation system in Guinea-Bissau

The Republic of Guinea-Bissau is bounded by Senegal (north), by Guinea (south and east), and by the Atlantic Ocean (west). With a tropical climate, the rainy season is from June to November and the dry season is from December to May. With an area of 36,125 km2, Guinea-Bissau has an estimated population of 1,881,004 inhabitants in 2019, i.e. a density of approximately 43 inhabitants per km2, with 51.6% women and 50.2% young people aged 15-35. The natural population growth rate is estimated at 2.2% (source INSA).

Administratively, the national territory is divided into 8 administrative regions. The capital, Bissau, has the status of Autonomous Sector.

Due to the geographical characteristics of the regions of Bolama/Bijagós (mainly made up of islands) and Oio, they have been subdivided into 4, bringing the number of health regions to 11, including the Autonomous Sector of Bissau (SAB). The analysis of the situation of the immunisation system in Guinea-Bissau takes into account the politico-economic context, the difficulties related to COVID-19 and the epidemics of vaccine-preventable diseases (VPDs) (measles, poliomyelitis). The immunisation system faces the challenges of populations with difficult access to immunisation and a significant drop in monthly coverage in 2020 and 2021 due to the COVID-19 pandemic and ongoing strikes in the health sector. In this section, the health regions are the important factors that reduce the performance of the National Immunization Program in terms of vaccination coverage and equity.

1.1.1. Political-socio-economic situation

Guinea-Bissau has a history of political and institutional fragility[1]which dates back to its independence from Portugal in 1974. It is one of the most coup-prone and politically unstable countries in the world. Since independence, four successful coups have been recorded, and another 16 coups have been attempted, plotted or alleged. Some progress has been made with the previous president, José Mário Vaz, who was the first to complete a full term since independence. The 2019 presidential elections were followed by a political crisis that ended in April 2020 with the recognition by ECOWAS of Umaro Sissoko Embalo as President of the Republic. With the inauguration of the new

[1]The Costs of Fragility in Guinea-Bissau - Chronic Political Instability. Tito Nicias. International Monetary Fund. July 2015

government in March 2020, the country has recorded political stability despite internal tensions and allegations of political interference in the justice system. The next legislative elections are scheduled for early 2023 and presidential elections for the end of 2024.

The African Development Bank describes the economic outlook in Guinea-Bissau. Estimates show growth at 3.8% for 2021, a recovery from the -1.4% in 2020, which reflects the recovery of trade and the increase in cashew production. The agriculture-based economy suffered from lockdowns and border closures in 2020, however it recovered in 2021, driven, on the supply side, by the primary sector which accounted for 48% of GDP in 2021 and, on the demand side, by investment, which increased by 6.4% compared to 2020. The consequences of the pandemic are reflected in the resumption of inflation, estimated at 3.3% in 2021 against 1.5% in 2020, due to higher fuel and food prices. However, according to estimates, the budget deficit narrowed to 5.6% of GDP in 2021, from 9.8% in 2020, thanks to higher tax revenues from the cashew nut trade and the rationalisation of expenditure[2]. It is funded by grants and loans from international financial institutions and regional commercial banks. The following graphs are taken from the African Economic Outlook (AEO) 2022.

Source : Les données datent de avril 2022 et proviennent des autorités nationales ; données pour 2021 sont des estimations et données pour 2022 et 2023 sont des prévisions fondées sur les calculs des auteurs.

Figure 2: *Economic indicator of Guinea-Bissau*

1.1.2. COVID-19 and outbreaks of vaccine preventable diseases in Guinea-Bissau

The first cases of COVID-19 in Guinea-Bissau were recorded on March 25, 2020. Faced with the disease, the country declared a state of emergency from March 27, 2020 to August 28, 2020. measures and protocols to deal with the pandemic, resulting in the restriction of movement of the population, the use of mandatory masks, strict confinement and social distancing. By the end of December 2020, Guinea-Bissau had reported 2,447 cases. Of these confirmed cases, 2,080 (86%) are in Bissau, the capital. Ten (10) regions out of 11 have confirmed cases of COVID-19. 45 people have died from COVID-19, representing a lethality rate of 1.83%. The country continues to have more cases of men, 62%, than women, 38%.

After this period of emergency, the first state of calamity was decreed, until December 2020, where people were allowed to circulate until 6:00 p.m., I continued to restrict movement to regions, social distance, and use of masks.

In April 2021, activities resumed in schools, churches and mosques and meetings of up to 25 people, with the necessary hygienic-sanitary restrictions. One of the effects resulting from these measures is the decrease in the activities of the SIVE, leading to a decrease in vaccination coverage. If vaccination is suspended, epidemics and diseases that have already diminished or disappeared in the country such as measles and poliomyelitis. Postponement of routine vaccination results in the re-emergence of vaccine-preventable diseases, with associated mortality and morbidity.

[2] Guinea-Bissau Economic Outlook

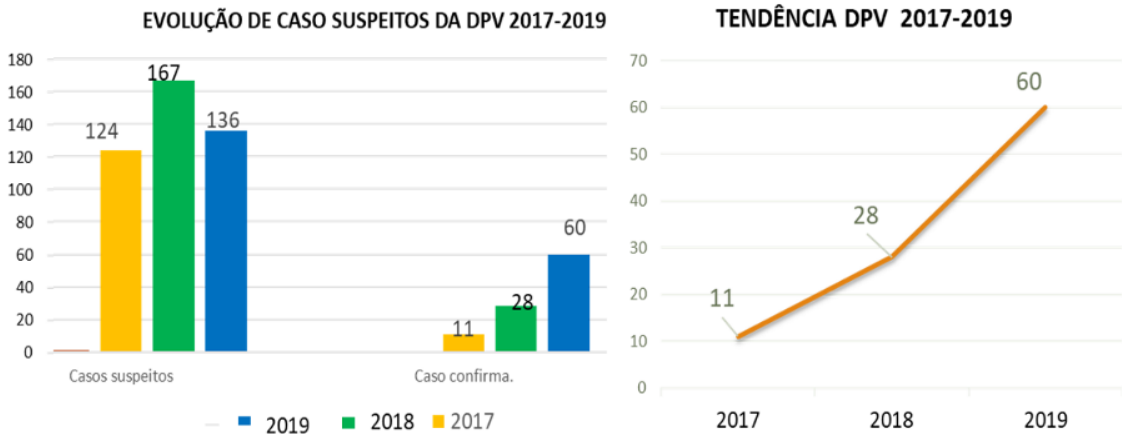

Figure 3: *The situation of VPDs in Guinea-Bissau 2017-2019*

From 2017 to 2019, there is an increase in suspected cases of VPD (measles and AFP) and in 2019, there is a slight decrease in 2018, unlike confirmed cases which show a positive trend in the same period, as shown in the graphic.

In 2020, there were only 16 suspected cases recorded at the VPD in the first quarter; During the following quarters, no suspected cases were recorded, due to the involvement of technical staff in the response to the COVID-19 pandemic. It should be noted that no case has been analysed for lack of reagents at the National Public Health Laboratory since the start of the pandemic.

Over the past three years (2017-2019), there have been a significant number of measles cases. In 2020 there is a clear decrease in these same diseases, but it is part of the base that is probably due to the involvement of technicians in the response to the COVID-19 pandemic.

1.1.3. Fragility, Conflict and Violence (FCV)

Conflicts and political instability have significantly weakened Guinea-Bissau's productive infrastructure over the past three decades, with recurring political crises and tensions between the civilian and military leadership. This situation contributes to increasing the degree of vulnerability of the population, especially in rural areas where most economic activities continue to take place. As growth has been weak, poverty levels remain high. ECOWAS had provided support to the political process and the national reform agenda under the “Guinea-Bissau P5” formula - The group of five (5) implement partners in Guinea-Bissau (The African Union (AU), the Community of Portuguese Language Countries (CPLP), ECOWAS, the European Union (EU), and the UN))[3].

1.1.4. Refugees, internally displaced persons, migrant populations, and special populations

Guinea-Bissau, one of the poorest and most fragile countries in the world, has around 1.9 million inhabitants. The Atlantic Ocean coast of Guinea-Bissau is made up of the Bijagos archipelago of more than 100 islands. It borders Senegal to the north and Guinea to the south and east and, despite its size, is home to a wide variety of ethnic groups, languages and religions. The Equity analysis conducted in August 2018 identified the refugees and migrant populations:

[3] UN Peacebuilding

Table 1: *Vulnerable population groups by region in Guinea-Bissau (Equity analysis report, 2018) (unit: people)*

Regions	Dispersed populations or isolated	Migrants	Nomades	Poor populations in urban and peri-urban	Population affected by conflicts and other causes	Religious group
1. Oio	16,009	136	110	3528	-	-
2. Bafata	4730	10	1403	-	-	21
3. Bijagos	1322	706	667	-	524	-
4. Biombo	1232	225	-	56	-	264
5. Bolama	101	-	-	-	-	-
6. Farim	Numerous	-	-	-	-	-
7. Quinara	4,867	556	235			
TOTAL	28,371	1,633	2,305	3,584	524	285

1.1.5. Natural disasters

Of all the countries in the world, Guinea-Bissau is the fourth most vulnerable to climate change according to the 2019 Notre Dame Global Adaptation Initiative country index. Climate change impacts are an increasingly important driver of *food insecurity*, exacerbating existing *vulnerabilities*. The impact of climate change is significant, and resources are rapidly dwindling, while each year fires destroy more than 120 hectares of forest. Despite an overall decline in rainfall, it is becoming more and more intense, and often goes hand in hand with violent winds, which leads to enormous agricultural losses. In 2020, severe floods affected the rice-growing region in the south of the country. The government has started adopting climate-resilient measures, such as introducing drought-resistant crop varieties, diversifying agricultural production, and funding projects to facilitate the energy transition to cleaner energy options. The NDC has identified two main sources of greenhouse gas emissions, namely changes in land use and forests, and the energy sector, and aims to reduce GHG emissions by 30% by 2030. Indeed, at the current rate of decline in wood resources, and taking into account energy needs, emissions are expected to jump to 150,000 Gt eqCO2 by 2050, compared to around 10,000 Gg today. The main mitigation measures targeted reforestation and power generation. Financial needs are estimated at USD 694 million for the period 2021–30.

1.1.6. Expanded Vaccination Program (EPI) in Guinea-Bissau (The national immunisation program in Guinea-Bissau)

1.1.6.1. The overview of the NIP (National Immunization Program)

The health organisation is defined by the decree on the organisation and attribution of the Ministry of Health. It is of the pyramidal type and comprises three levels, each with a well-defined population of responsibility:

- **On a national level**, the management of the SIVE/EPI Department is ensured by a National Director, supported by a team. Overall, the service has six (07) divisions/Services: the epidemiological surveillance department, Logistics, Planning, M&E (data management), Administration and Finance, Supervision and Continuing Education, Complementary Vaccination, Communication/Social Mobilization and Epidemiology Surveillance. The Management of SIVE has a total of sixteen (16) human resources in all categories. However, 5 positions still remain to be filled, in particular those of planning, social mobilisation and the cold chain maintenance service. This lack of technical personnel is detrimental to program management, particularly planning, implementation, monitoring and evaluation.

- **At regional level**, EPI Focal Points deliver immunisation activities under the authority of the Regional Director. The Director of the EPI exercises indirect functional supervision over the Regional Health Directors for immunisation activities through these focal points. There is also a mobile team organised by EPI managers in

close collaboration with the DRS which includes other members of the Regional Health Team. It provides support for mobile strategies which unfortunately are only implemented during campaigns.

- ***At the peripheral level,*** a chief doctor or a nurse (Head of the Health Area) coordinates the health activities of the health Area and implements all the essential Primary Health Care packages. (Effective Vaccine Management Report, 2019).

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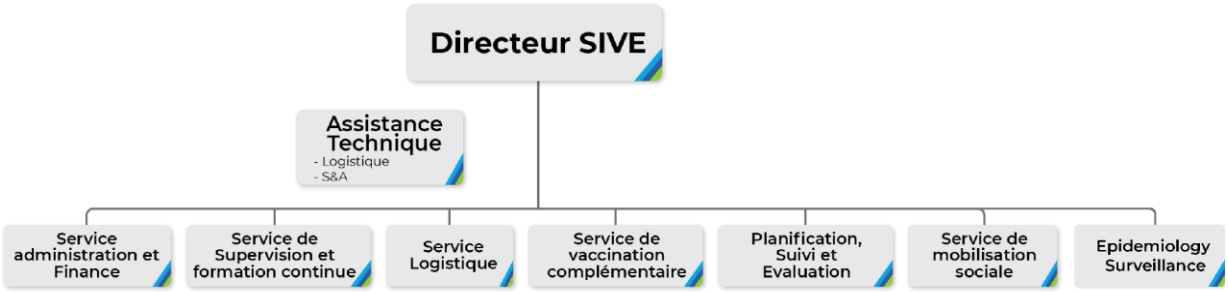

Figure 4: *The structure of SIVE in Guinea-Bissau*

In addition to public health facilities, the private sector, which was created in 1988, contributes significantly to health coverage, particularly in Bissau and in large urban centres. The few private structures that offer the vaccination service comply and contribute to the vaccination of children in collaboration with respective regions and submit reports to the EPI.

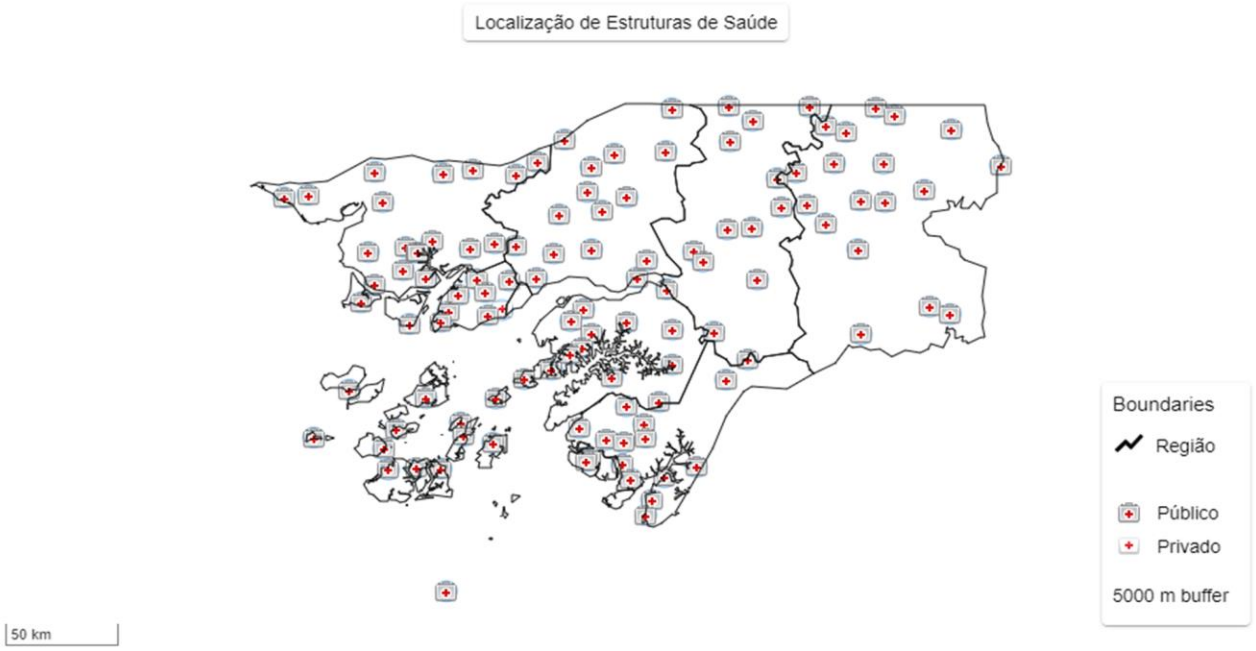

Figure 5: *Location of public and private health facilities in Guinea-Bissau*

The map of public and private health facilities in Guinea-Bissau shows the high concentration of the facilities in the coastal areas in the regions of Biombo, Quinara and Tombali. However, when distance increases from the coastal areas, the number of facilities decreases.

1.1.6.2. Immunisation schedule in Guinea-Bissau

The EPI launched in 1984 currently covers 13 diseases controlled by 9 vaccines, the schedules are described in the following tables:

Table 2: *Routine immunisation schedule for children 0-11 months*

Contact	*Age*	*Antigens*
1	*Birth*	*BCG, VPOb-0*
2	*6 weeks*	*PENTA1, PCV13-1, VPOb1, Rota 1*
3	*10 weeks*	*PENTA2, PCV13-2, VPOb2, Rota 2*
4	*14 weeks*	*PENTA3, PCV13-3, VPOb-3, VPI*
5	*9 months*	*Anti-rougeole, VAA*
6	*15 - 23 months*	*VAS 2*

Table 3: *Routine immunisation schedule for women.*

Pregnant women or women of childbearing age		
Contact	***Age***	***Antigènes***
1	*1st contact (from the age of 14 or during pregnancy)*	*VAT1*
2	*4 weeks after VAT1*	*VAT2*
3	*6 months after VAT 2*	*VAT3*
4	*1 year after VAT 3*	*VAT4*
5	*1 year after VAT 4*	*VAT5*

1.1.6.3. Key challenges and achievements of the NIP

A situation analysis was conducted in 2018 across the main components of the EPI system in Guinea-Bissau:

Table 4: *Key challenges and its root causes of the EPI in Guinea-Bissau*

EPI Components	**Achievements**	**Challenges and root causes**
1. Service delivery	Implementation of the ACD approach ➔ Fixed strategy can reach 34% of target population ➔ Advanced strategy can reach 59% of target population ➔ Mobile strategy can reach 7% of target population	➔ Insufficient implementation of the RED/REC approach in all districts ➔ Almost non-existence of the implementation of advanced and mobile strategies due to the lack of logistical means and financial resources for operational costs. ➔ Absence of a specific strategy to vaccinate children in camps (“baraques”) in large cities.

EPI Components	Achievements	Challenges and root causes
		➔ Breaks in the functioning of the cold chain for certain health areas leading to the impossibility of storing vaccines. ➔ Weak involvement of communities in the planning, implementation and monitoring-evaluation of vaccination activities. ➔ Insufficient communication (communities, families are not informed of the schedule of visits in advanced strategy,). ➔ Low quality of services due to insufficient qualified human resources at all levels.
2. Logistics, vaccine supply and quality	➔ Adequate capacity for storage of current program vaccines ➔ Existence of a draft equipment maintenance plan	➔ Difficulties in financing national resources for vaccines and vaccination inputs; ➔ Non-existence of standard documents and procedures for the disposal of CdF equipment and rolling stock ➔ insufficient implementation of the vaccine distribution plan from the regions to the health areas ➔ insufficient means of transport for the distribution of vaccines from the region to health areas and supervision ➔ 60% of cold chain equipment is not PQS ➔ motorcycles need to be replaced
3. Surveillance	➔ Global progress on VPD surveillance	➔ Insufficient supervision at all levels of the health pyramid (2 per year). ➔ Insufficient involvement of private structures and clinicians. ➔ Lack of community-based surveillance. ➔ Insufficient monitoring and management of data characterised by the low rate of timeliness and completeness of data. ➔ Underreporting of neonatal tetanus cases.
4. Communication	➔ Existence of an integrated communication plan for routine vaccination. ➔ Existence of a coordination structure for all communication and social mobilisation activities ➔ Existence of a social mobilisation groups ➔ Integrates communicators from other health partners ➔ Regular meetings of the communication and social mobilisation group ➔ Availability of Community Health workers for health promotion in health areas	➔ Insufficient funding for the communication plan. ➔ Insufficient qualified human resources in health regions for communication activities. ➔ Lack of regular and systematic supervision of the Communication component. ➔ Absence of a person specifically dedicated to communication in the EPI. ➔ Insufficient communication material.

EPI Components	Achievements	Challenges and root causes
5. Programme management	➔ Guinea-Bissau has a national vaccination policy drawn up since February 2006 which places particular importance on prevention through vaccination. ➔ Available SIVE organisation chart with a description of the tasks by position through terms of reference. ➔ Available plans ➔ Existing coordination group with the ICC ➔ Available integrated supportive supervision grids	➔ Insufficient national resources for financing vaccination ➔ Non-existence of a budget line to support operational activities (supportive supervision at central level/DRS/health areas, advanced strategy, mobile). ➔ Poor use of partners' resources for the operational activities of the EPI (advanced and mobile strategies, formative supervision, maintenance of Cold chain equipment, transport, motivation). ➔ Lack of ownership of policy documents; national strategies by the regional levels and health areas. ➔ Insufficient functioning of strategic CCIA ➔ Low Promptness in data collection. ➔ Quantitative and qualitative lack of human resources. ➔ Insufficient monitoring and evaluation at all levels. ➔ Absence of administrative and financial management procedures manual.
6. Human Resources Management	➔ A National Human Resources Development Plan has been drawn up for the period 2008-2017	➔ Not optimal implementation of this national human resource development plan. ➔ Shortage of qualified human resources resulting from a multitude of factors including: the closure of training schools for health professionals for nearly seven years (1998 – 2005), the brain drain following politico-military instability; low pay and poor working conditions. ➔ Unbalanced distribution of human resources with over 50% of the health professionals in Bissau, while Oio, Quinara and Tombali have only 0.3 doctors/10,000 inhabitants.

1.1.6.4. Changes in the immunisation system since the last Immunisation program review (2017)

The Gavi Health System Strengthening (HSS) supported interventions for SIVE in Guinea-Bissau was prepared in 2017 for 5 years. The first-year budget represented $1,603,155.79 (43%) and the second year was $666,023.30 (17%). The situation in Guinea-Bissau has been impacted by the COVID-19 pandemic with prioritised support to the COVID-19 program. The government requested Gavi secretariat to reallocate financial resources ($127,311) from the SIVE to strengthen Covid-19 activities. Additionally, the payment of the debt that the government owed to Gavi since 2017, continued to be delayed by the quarantine, but was finally paid at the end of 2020. Gavi made funds available (USD 200,000) for SIVE in Q4 2020 to start activities.

In September 2020, the Gavi funding was mainly allocated to carry out:

- Supportive supervision,
- Vaccine distribution,
- Multilateral dialogue,
- Advanced strategies,

- And operations of the SIVE.

Due to the pandemic and the unavailability of financial resources for immunisation activities, the SIVE recognized the urgent need to strengthen advocacy activities so that the government provides a larger and adequate budget for implementing the vaccination activities aligned with the Comprehensive Multiple Years Plan (cMYP) and the EVM cIP.

A higher budget than in previous years (350,887,275 FCFA) has been requested.

1.2. Root cause analysis to reach zero-dose, under-immunised and missed communities

1.2.1. Size of target child population

1.2.1.1. Accuracy of estimates

The population data for Guinea-Bissau are estimated from the census carried out in 2009, due to the unavailability of documents containing more recent data. The smallest age range in the population census is 0 to 4, which limits when you want to get an idea, for example: the total number of children aged 0 to 2 or 0 to 1 year. Insufficient completeness of some PAV reports resulted in SIS/DHIS2 data accuracy issues. For this reason, other sources of data are triangulated when assessing vaccination coverage and identifying zero-dose and under-immunised children. Therefore, data from Admin JRF 2020, WUENIC 2020, IHME 2020 and MICS, 2014 were compared.

Table 5: *Population and zero-dose estimates by source*

Year	Coverage Source	Population Source	# Surviving Infants	# Zero Dose	Country EPI ownership	Accuracy	Granularity	Annual measurement
2020	WUENIC	UN WPP	63,401	8,876	Medium/Low	Medium	Low	Yes
2020	Admin JRF	Admin	65,399	8,502	High	Low	Medium	Yes
2020	IHME	World Pop (unadjusted)	59,524	7,428	Low	High (admin1) + Unclear (5x5km)	High	No (without annual data inputs)
2014	MICS	MICS			Medium	High	Low	No (without huge investment)

The survey data on the number of surviving infants and number of zero-doses are not reported because it is typically of a different year from the other estimates.

The administrative data tends to be of poor quality:

- Across LMICs, year-to-year correlation in administrative district coverage is relatively low (0.5)
- 59% of LMICs have ≥25% of districts with DTP1 coverage > 100% based on administrative data
- 40% of LMICs have ≥25% of districts with negative DTP drop-out based on administrative data

Source	# Surviving infants, 2020	Annual % growth, 2015-2020
JRF	65,399	1%
WPP 2019	63,401	1%
WorldPop	59,524	1%

2020 is the latest year for which data is available from all sources.

Zero-dose is calculated using DTP1 coverage subtracted from the target population, so differences in population estimates will generate different estimates of the number of zero-dose children. The trends in population data vary by source.

WPP's population estimate (used for WUENIC estimates) is 3% lower than country data reported through JRF.

WorldPop's population estimate (used for IHME estimates is 9% lower than country data reported through JRF.

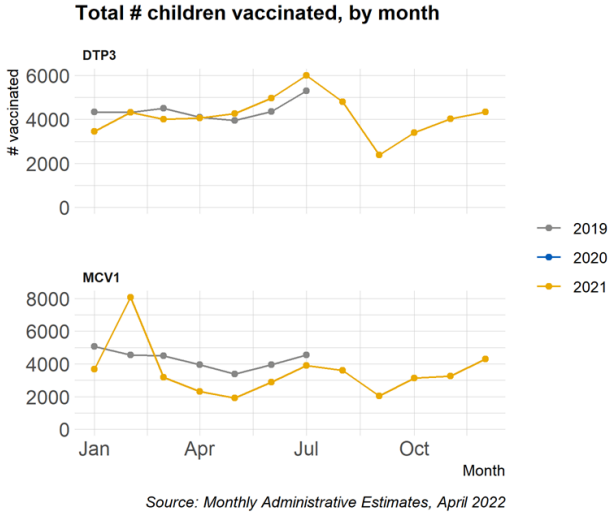

Figure 6: *Total children vaccinated by month*

Zero-dose trends

The WUENIC data indicate a -5 percentage point change in DTP1 from 2015 to 2020, with an increase of **+64% of zero-dose** in 2021. The number of zero-doses is estimated to be 8,876 children based on the WUENIC 2021 source.

The COVID-19 pandemic impacts routine immunisation with a decreased number of children vaccinated by month. The figure below shows the decrease of Penta 3 immunisation coverage from 2018 to the first half of 2020[4].

[4] Diálogo multilateral Gavi 2020.

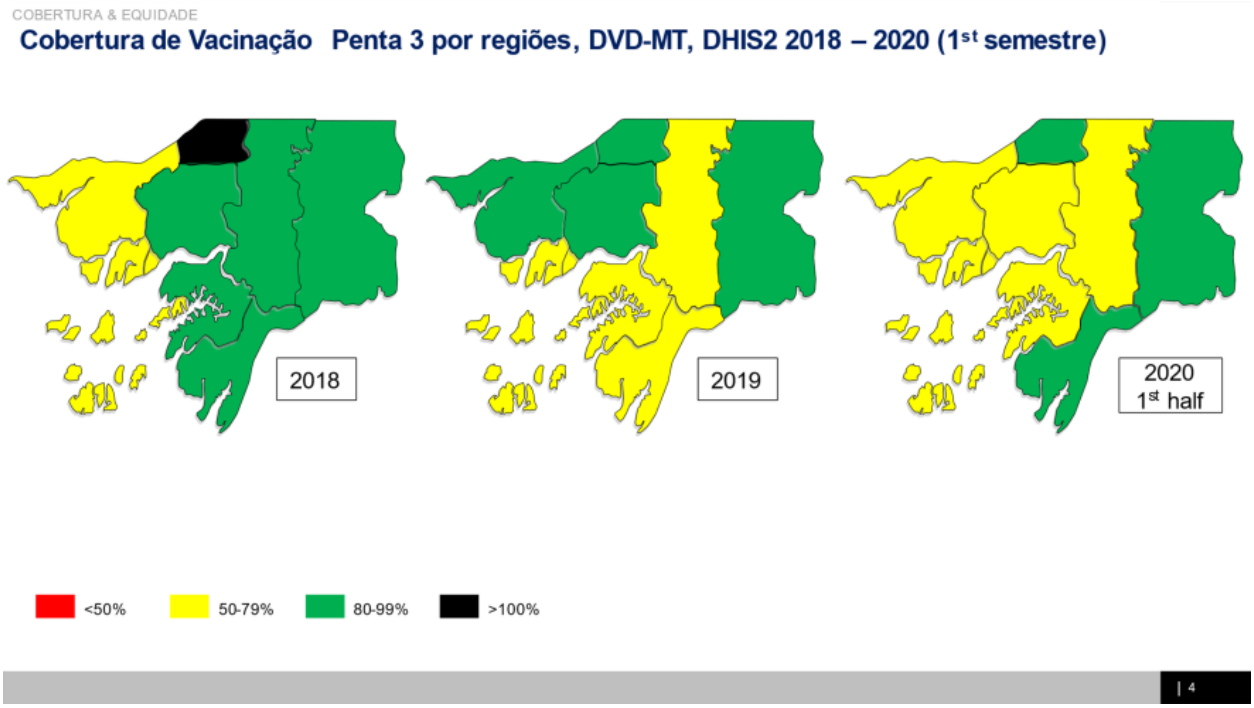

Figure 7: *The COVID-19 disruption was also negative in terms of higher Penta 3 dropout rates in 2020.*

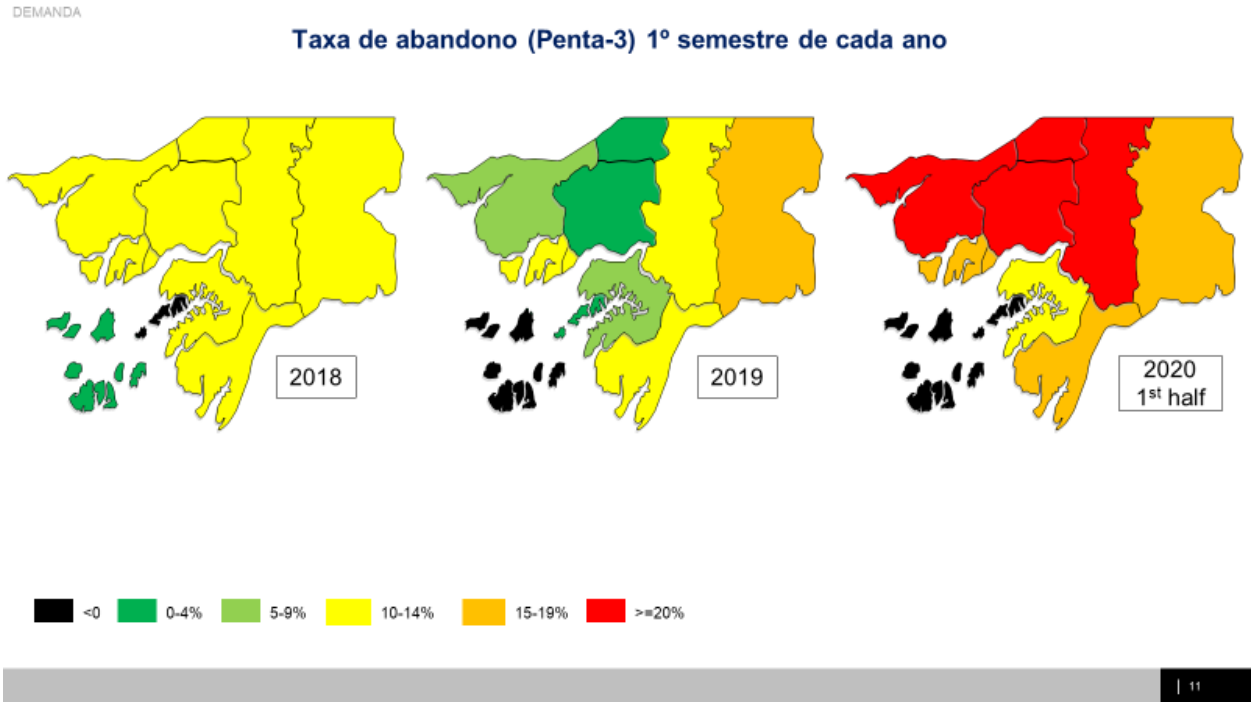

Figure 8: *The impact of COVID-19 on the immunisation coverage from 2018-2020*

Comparing the difference in the number of vaccinated children compared to 2019, there is a significant decrease in MCV1 and a slight increase in DTP3 (+1%) in 2021.

The SCM assessment conducted in January 2022 revealed a high level (more than 50%) of disruption to routine immunisation in health-based facilities and outreach.

1.2.1.2. Populations not covered by estimates

In Guinea Bissau, some mobile, nomadic, refugees and dispersed or isolated populations may not be covered in the estimates of target populations. The following table provides information on the hard-to-reach communities in seven out of nine regions. The regions are the home of nomads, migrants, poor in urban and peri-urban areas, and dispersed/remote populations. The geographical accessibility indicators range from 30% (lowest indicator rate) in Oio to 63% (highest indicator rate) in Bolama.

Table 7: *Indicators of geographical accessibility of the equity analysis in Guinea Bissau 2017 and 2018 by region in Guinea Bissau*

Region name	Hard-to-reach communities (nomads, migrants, poor in urban and peri-urban areas, dispersed/remote populations) number of people	Geographic accessibility
Oio	19,783	30%
Bafata	6,619	33%
Bijagós	3219	60%
Biombo	1777	46%
Bolama	101	63%
Farmim		42%
Quinara	5,658	36%
Total	**5097**	**36%**

1.2.2. Number of ZD and under-vaccinated children

1.2.2.1. Quantification and localization of ZD children

IHME estimates indicate that the number of zero-dose children has increased between 2015-2020. Indeed, DTP1 coverage declined (-5pp 2015-2020) and the target population is growing (1% growth per year 2015-2020). The WUENIC 2020 estimates 8,876 zero-doses representing 14% of surviving infants in Guinea-Bissau.

Table 8: *Zero-dose children in Guinea-Bissau by region*

Regions	Districts	Number of ZD children (Source: JRF 2019)	% ZD children (Source: JRF 2019)	Number of ZD children (Source: IHME 2020)	% ZD children (Source: IHME 2020)	ZD children (Source: DHIS 2, 2021)	%ZD children (Source: DHIS 2, 2021)
GABU	GABU	0	-9%	932	10%	-690	-7%
FARIM	FARIM	0	-3%	210	11%	10	0%
WIO	WIO	525.84	795%	786	11%	1090	15%
CACHEU	CACHEU	874.83	11%	661	9%	1963	25%

Regions	Districts	Number of ZD children (Source: JRF 2019)	% ZD children (Source: JRF 2019)	Number of ZD children (Source: IHME 2020)	% ZD children (Source: IHME 2020)	ZD children (Source: DHIS 2, 2021)	%ZD children (Source: DHIS 2, 2021)
BAFATA	BAFATA	1367.94	14%	517	6%	570	6%
TOMBALI	TOMBALI	672.96	16%	307	15%	1357	33%
BIOMBO	BIOMBO	558.4	16%	373	7%	810	23%
QUINARA	QUINARA	439.2	16%	338	12%	900	33%
BIJAGOS	BIJAGOS	257.6	28%	22	12%	290	31%
SAB	SAB	5394.6	30%	759	6%	6198	34%
BOLAMA	BOLAMA	121.68	36%	120	11%	181	45%
NATIONWIDE		**5395**		**5025**		**12679**	

The total number of zero-dose children is estimated at 12,679 (DHIS 2, 2021), which is a number above the JRF and IHME 2020 estimates (respectively 5,395 and 5,025). ***The DHIS-2 data appear to be closer to the current situation as the country spent almost one year (2021) on strike, without fully functional health structures.*** This is the rationale for Guinea Bissau to use their own data from the DHIS-2 2021 and then to avoid underestimating priority populations. ***The following table provides the immunisation coverages in 2021. Highlighted in red and bold, the districts have been prioritised because of the cumulative highest number of ZD and low immunisation coverages (Penta1 and Penta3).*** The 2021 data show an alarming situation regarding ZD and under-immunised children with low immunisation coverage.

Table 9: *Vaccination coverage of Guinea-Bissau - 2021*

TABELA:N-5 Crianças não vacinados sub vacinados e desvacinados em penta-3 janeiro a dezembro2021 Guine-Bissau

Regioes	0-11 meses 3,467%_Sobreviventes_2021	Penta1	%	Não Vacinados	% Não Vacinados	Penta2	Sub Vacinados	% Sub Vacinados	Penta3	Sub Vacinados	% Sub Vacinados	Total Desvacinados	% Desvacinados	%Vacinados em Penta-3
Bafata	9474	8904	94%	570	6%	8599	305	3%	7697	902	10%	1777	19%	81%
Bijagos	921	631	69%	290	31%	625	6	1%	565	60	10%	356	39%	61%
Biombo	3447	2637	77%	810	23%	2484	153	6%	2345	139	6%	1102	32%	68%
Bolama	399	218	55%	181	45%	225	-7	-3%	237	-12	-5%	162	41%	59%
Cacheu	7995	6032	75%	1963	25%	5538	494	8%	5424	114	2%	2571	32%	68%
Farim	2028	2018	100%	10	0%	1757	261	13%	1458	299	17%	570	28%	72%
Gabu	9073	9682	107%	-609	-7%	8810	872	9%	8206	604	7%	867	10%	90%
Oio	7258	6168	85%	1090	15%	4833	1335	22%	3767	1066	22%	3491	48%	52%
Quinara	2701	1801	67%	900	33%	1372	429	24%	1309	63	5%	1392	52%	48%
SAB	18146	11948	66%	6198	34%	11582	366	3%	10822	760	7%	7324	40%	60%
Tombali	4142	2785	67%	1357	33%	2489	296	11%	2207	282	11%	1935	47%	53%
Guine-Bissau	65584	52824	81%	12760	19%	48314	4510	9%	44037	4277	9%	21547	33%	67%

FONTE DE DADOS: DHIS2

FONTE DE INFORMAÇAO: GESTOR DE DADOS SIVE

The ZD children are identified in the following districts:

1. **Highest number of ZD ranking #1: SAB - 6198** (Low coverage and high number of ZD children)
2. **Highest number of ZD ranking #2: CACHEU 1963** (Low coverage and High number of ZD children)
3. **Highest number of ZD ranking #3: TOMBALI – 1357** (Low coverage and High number of ZD)
4. **Highest number of ZD ranking #4: OIO - 1090** (low coverage and high number of ZD)
5. **Highest number of ZD ranking #5: QUINARA** – 900 (Low coverage and high number of ZD)
6. **Highest number of ZD ranking #6: BIOMBO** - 810 (High number of ZD)

   Others:

7. BAFATA - 570
8. BIJAGOS - 290
9. BOLAMA - 181
10. FARIM - 10
11. GABU - (-690)

1.2.2.2. Level of geographic concentration of ZD children

The analysis carried out revealed that ZD children are identified in all health regions with a concentration zone in six priority regions: SAB, OIO, TOMBALI, QUINARA, BIOMBO, CACHEU. The table below ranks the health regions by number of ZD children (source DHIS 2, 2021 and IHME 2020). It turns out that the six regions with the most ZD children are also the health regions with the most under-immunised children.

In 2021, 97% of ZD children and 83% of under-immunised children lived in these six health regions. The details are as following table:

Table 10: *Six priority districts are identified by the number of ZD children (DHIS 2 2021) (unit: people)*

Region	Districts	# of ZD children	% of ZD children	# of PENTA 1	# of PENTA 3	# under-immunised
SAB	SAB	6198	34%	11 948	10 822	760
CACHEU	CACHEU	1963	25%	6 032	5 424	114
TOMBALI	TOMBALI	1357	33%	2 785	2 207	282
OIO	OIO	1090	15%	6 168	3 767	1 066
QUINARA	QUINARA	900	33%	1 801	1 309	63
BIOMBO	BIOMBO	810	23%	2 637	2 345	139
NATIONWIDE		**12 318**		**31 371**	**25 874**	**2 424**

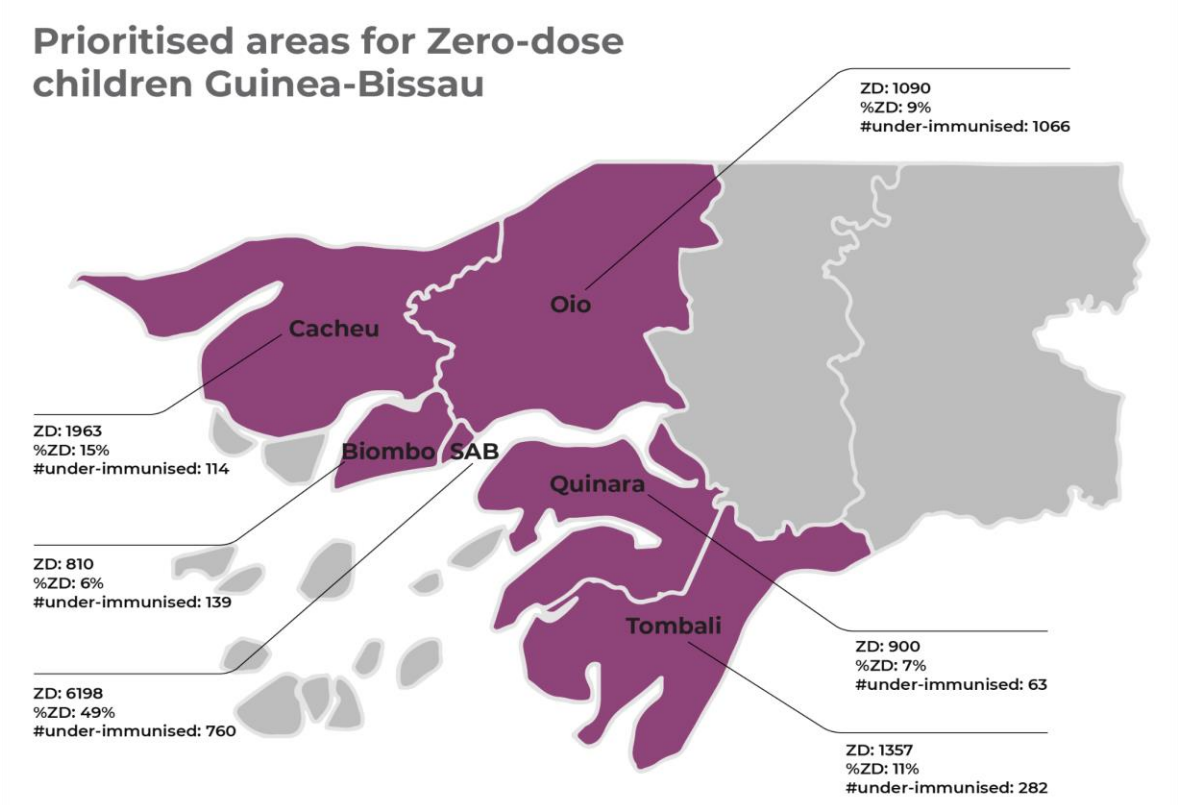

Figure 9: *Target areas - Mapping of prioritised regions/districts with highest number of ZD, low immunisation coverages and high number of under-immunised children in Guinea Bissau (DHIS 2 - 2021)*

1.2.3. Profile of Zero-Dose, Under-Vaccinated children and their communities

1.2.3.1. Proportion of zero-dose and under-vaccinated children living in different areas

ZD children are classified by zone as defined by the Equity Reference Group for Immunization (ERG). The ERG total combines urban, peri-urban, remote rural, and conflict areas (broadly defined). The estimates are presented in the table below. It should be noted that ZD children mostly live in ***non-remote rural areas: 55%*** of surviving children (3,556 children out of 6,479). In particular, ZD children in non-remote rural areas represent ***63% of all ZD children*** in the country. The IHME estimates that 19% of ZD children live in remote rural areas and 16% in urban areas.

Table 11: *Distribution of surviving infants and zero-dose by ERG parameters (DHIS 2-2021) (unit: people)*

Regions	Districts	Settings	# of surviving children	#ZD children	% of ZD children	# under-immunised children	# of PENTA 1	# of PENTA 3
SAB	*SAB*	*Urban and peri-urban*	*18146*	*6198*	*49%*	*760*	*11948*	*10822*
CACHEU	*CACHEU*	*Rural*	*7995*	*1963*	*15%*	*114*	*6032*	*5424*
TOMBALI	*TOMBALI*	*Rural*	*4142*	*1357*	*11%*	*282*	*2785*	*2207*
OIO	*OIO*	*Rural*	*7258*	*1090*	*9%*	*1066*	*6168*	*3767*
QUINARA	*QUINARA*	*Rural*	*2701*	*900*	*7%*	*63*	*1801*	*1309*
BIOMBO	*BIOMBO*	*Rural*	*3447*	*810*	*6%*	*139*	*2637*	*2345*
BAFATA	*BAFATA*	*Rural*	*9474*	*570*	*4%*	*902*	*8904*	*7697*
BIJAGOS	*BIJAGOS*	*Rural*	*921*	*290*	*2%*	*60*	*631*	*565*
BOLAMA	*BOLAMA*	*Rural*	*399*	*181*	*1%*	*-12*	*218*	*237*
FARIM	*FARIM*	*Rural*	*2028*	*10*	*0%*	*299*	*2018*	*1458*
GABU	*GABU*	*Rural*	*9073*	*-690*	*-5%*	*604*	*9682*	*8206*
TOTAL			**65584**	**12679**		**4277**	**52824**	**44037**

*Note that this analysis is based on 2021 data. Parameters are not mutually exclusive and cannot be added to obtain totals. The ERG Total is the combination of urban, peri-urban, remote rural

1.2.3.2. Remaining proportion of zero-dose and under-vaccinated children outside urban areas, remote rural areas and areas of fragility or conflict

In 2019, the remaining proportion of zero-dose children outside urban and rural areas represents 20% of all ZD children (source IHME).

1.2.4. Reasons for non-vaccination or incomplete vaccination

1.2.4.1. Cultural, social, and political obstacles

Political stability but internal tension: Guinea-Bissau[5] has a history of political and institutional fragility dating back to its independence from Portugal in 1974. It is one of the most coup-prone and politically unstable countries in the world. Since independence, four successful coups have been recorded, with another 16 coups attempted, plotted, or alleged. Some progress has been made and since March 2020, the country has registered political stability with moments of heightened tension from several parts of society, including civil servants, armed forces, parliamentarians, political parties and unions. Narcotrafficking assertions exposed the prevalence of destabilising and entrenched interests, limiting inclusive development, governance and the rule of law. With the departure of UNIOGBIS, peacebuilding is yet to be consolidated, as deep-rooted socio-political and economic grievances remain, fuelled by significant disparities between regions.

Precarious socio-economic situation worsened by COVID-19: COVID-19[6] continued to exacerbate pre-existing vulnerabilities experienced by children, compromising the realisation of child rights and the achievement of the Sustainable Development Goals (SDGs). Guinea-Bissau's socio-economic situation was already precarious prior to the identification of the first COVID-19 case in March 2020. Whilst progress had been made on some child-related indicators, namely the reduction of child mortality from 89 deaths per 1,000 live births to 51 per 1,000 live births between 2014 and 2019, reduced investments in basic social services and reduced household incomes brought on by the COVID-19 pandemic and other long-standing structural issues have resulted in increased fragility and harder living conditions for families.

Routine immunisation against childhood diseases was severely impacted by the non-payment of government contributions for the procurement of vaccines leading to stock-outs of BCG, polio, and measles vaccines. An estimated ***68,968 infants were not immunised over the past three years***. As such, diphtheria/tetanus/pertussis (DTP) coverage for children aged 0-11 months with three doses dropped from 74% in 2020 to 71% in 2021, exposing an increased number of children to vaccine-preventable diseases, particularly in ***urban areas***. A polio outbreak during the year highlights the fragility of the EPI and the urgent need for its reinvigoration. Where community health workers had previously stepped in to support the provision of primary health care, for the most part of 2021 they boycotted activities due to non-payment of incentives. Subsequently, prevention and treatment of childhood illnesses, including diarrhoea, pneumonia, malaria, and malnutrition were inadequate. Strikes by the health workers affected the provision of health services, including the COVID-19 immunisation effort.

Cultural and social determinants of full immunisation coverage: On the socio-cultural level, the EPI External Review conducted in 2017 reveals that specific populations require special communication, because of their way of life or their general level of education, in this case, the so-called populations of difficult accessibility to nomadic populations, populations living in the islands and the refugee populations. There is also ethno-cultural diversity characterised by the variability of traditional power structures, family and community habits, and other social norms. This means that the strategic approaches usually used in the country become ineffective. In households, vaccination topics are rarely discussed by parents; moreover, some believe that it is not necessary to vaccinate children all the time. Others claim they are running out of time. We must not neglect the fear of side effects which could be an obstacle to vaccination practice. The main socio-cultural reasons associated with the non-vaccination of children are ***ignorance***, ***belief,*** and the ***inaccessibility of landlocked areas***. The most vulnerable groups in terms of access to vaccination would be the ***isolated villages*** in geographical areas with difficult access (islands, mountains, rivers, swamps).

[5] World Bank Guinea-Bissau Overview. Sept 2021
[6] UNICEF Country Office Report 2021 - Guinea-Bissau

A recent study[7] assessed full immunisation coverage trends and related inequalities, according to wealth, area of residence, subnational regions, and maternal schooling level in Guinea-Bissau. The study revealed that cultural and social conditions are important determinants to immunisation equity. Indeed, the data from the 2006, 2014, and 2018 Guinea-Bissau Multiple Indicator Cluster Surveys (MICS) were analysed. Full immunisation coverage increased by 1.8p.p./year (95%CI: 1.3; 2.3) over the studied period. Poorer children and children born to uneducated mothers were the most disadvantaged groups.

Over the years, wealth inequality decreased and urban-rural inequalities were practically extinguished. In contrast, inequality of maternal schooling level remained unchanged, thus, the highest immunisation coverage was among children born to the most educated women. This study shows persistent low immunisation coverage and related inequalities in Guinea-Bissau, especially according to maternal schooling level.

1.2.4.2. Disability and Inclusion Considerations

Disability: The people with disabilities in Guinea-Bissau suffer from poverty and multidimensional poverty, being excluded from social life. Often the discrimination resulting from disabilities is combined with other factors such as gender and age, which further complicates the situation of people with disabilities and their potential to live a decent life. Additionally, the disability can lead to levels of discrimination higher in rural areas and on islands, where it can be associated with witchcraft.

People with albinism: The people with albinism constitute a group strongly discriminated against because of their physical conditions. The levels of stigma and discrimination to which they are subject are high. They are mainly due to cultural reasons and myths about the origins of their state, which deprives them of education and work opportunities.[8] There is no national data or statistics on people with albinism in RGB, because they are often hidden by their families, and even not immunised. However, recently, the awareness of society for the rights of people with albinism increased.[9]

1.2.4.3. Reasons for non-vaccination by context, geography, or community

Context: Most of the population of Guinea-Bissau live in small villages and the country's several main towns. The population is sparse on the low-lying lands of the coast and in the savanna regions. The majority of Guinea-Bissau's population traditionally lived in rural villages and individual households. It is estimated that ***66 percent of the population lives more than 5 km from the nearest health structure***. The national average is one health centre for more than 13,500 inhabitants. Health care services are mostly concentrated in Bissau and the regional capitals.

Although, on average health facilities in Guinea-Bissau had 69% of a defined set of essential vaccines[10] available and not expired, the variation across regions. The region of Bolama-Bijagos has the lowest availability of vaccines among the different regions (41% on average) while Biombo has the highest availability with 90%, more than twice as high. The availability of vaccines in *Regional Hospitals* is very low (17%) followed by *Reference Hospitals* (42%), the four Health Centers Type A have an average **availability of vaccines of 92%** while the most common type of facility (Health Centre Type C) has **69% of vaccines available** on average.

Geographical accessibility: About 6 out of 10 children live **more than 5 km** from a health facility. There is a lack of service delivery. Indeed, the health regions have not set up teams dedicated to vaccination in mobile strategies despite the existence of large and difficult-to-access regions such as Bafata, Gabu and the insularity of some regions such as Quinara, Bolama and Bijagos due to lack of canoes and sufficient vehicles. Moreover, fixed vaccination strategies are not regularly carried out. Also, the vaccinations in the distant areas (between 5 and 15 km) are insufficient, accentuated by the frequent damage to rolling stock.

[7] Inequalities in child immunization coverage: potential lessons from the Guinea-Bissau case. Cadernos de Saúde Pública. 16 January 2023.
[8] Human Rights Council, Report of the Independent Expert on the enjoyment of human rights by persons with albinism, New York 2016.
[9] News by e-Global: https://eglobal.pt/noticias/lusofonia/guine-bissau/albinos-vitimasde-descriminacao-social-na-guine-bissau/
[10] Guinea -Bissau: Service Delivery Indicators Report – Health. June 2019, Health Nutrition Population Global Practice. Africa Region. Document of the World Bank.

Table 12: *Indicators of geographical accessibility of the equity analysis in Guinea-Bissau 2017 and 2018 by region (11 regions)*

Accessibilité géographique												
Indicateurs	**Bafata**	**Quinara**	**Oio**	**Biombo**	**Bolama**	**Farim**	**Bijagós**	**Gabu**	**Tombali**	**Cacheu**	**SAB**	**National**
% d'enfants âgés de 0 à 11 mois vivant dans un rayon de 5 km ou à une heure de marche d'un ES	33%	36%	30%	46%	63%	42%	60%	33%	25%	42%	100%	48%
% de séances de vaccination à stratégie fixe	93%	87%	93%	70%	73%	91%	81%	97%	86%	100%	100%	90%
% de séances de vaccination par stratégie avancée achevées	74%	88%	66%	72%	89%	61%	79%	73%	53%	75%	#DIV/0!	73%
% de structures sanitaires avec au moins une moto ou un vélo fonctionnel pour élaborer des stratégies avancées	100%	100%	100%	75%	100%	0%	100%	74%	100%	68%	43%	77%

Hard-to-reach communities, special communities: Ethnic minority groups are mainly identified in the hard-to-reach communities:

- Fula and Mandinka populations, predominantly Muslims, live for the most part in the north and north-east.
- Balanta lives along the southern coast.
- Concentrated on Bissau Island and related estuaries on the Geba River, Papel also live north of the River Mansoa.

1. Dispersed populations or isolated communities
   The dispersed and isolated populations are Fulas, Mandinkas, Balanta[11], and cassava farmers who move to hard-to-reach areas. Also, fishermen and breeders are part of this category of the population.

2. Migrants
   Fulas from Conakry, Trader from Guinea-Conakry, Fishermen.

3. Nomads
   Fulas, local community of Farmers and Fishermen, Fishermen and Farmers.

4. Communities affected by conflict or other causes
   There are mainly Farmers.

5. Poor in urban and peri-urban areas
   People who do not have the financial means to look for the vaccine, former Lepers.

6. Religious groups
   Mandincas Ababos, Believers of the Church of God and Love.

7. Resident Pastors
   Fulas.

1.2.4.4. Obstacles related to the supply of immunisation service delivery

1. Service delivery
   - Insufficient planning with low capacity of actors in micro-planning.
   - Inadequate capacity building in micro-planning, monitoring and supervision.

[11]Main minority groups in Guinea-Bissau: Balanta, Fula (Fulani), Manjaco (Manjack or Mandyako), Mandinca (Mandinka), Papel (Pepel), Ejamat (Felupe), Jola (Diola), Susu, Cape Verdeans.

- Insufficient qualified human resources in the EPI (ACD, EVM, Follow-up of guidance, operational management of activities.
- Strikes by health workers affected the provision of health services, including the COVID-19 vaccination effort.
- Poorly planned immunisation strategies: non-inclusive, lack of documentation of the process, ineffectiveness of certain outings.
- Absence of mobile immunisation teams.
- Inadequate inventory management: inventory register not kept up to date, vaccination not filled in, consumption of inputs not entered in the tally sheet; misclassification of children vaccinated with Penta 1 and Penta 3.
- Low-quality supervision: lack of follow-up on recommendations, voluminous supervision package.
- Inadequate data analysis: partitioning of EPI management, low to medium involvement of other RCT members in EPI management.
- Low Commitment of local leaders in micro-planning and IPC.
- Absence see Insufficiency of the CIP towards the parents.
- Poor integration of child survival activities.

2. Vaccines, Cold chain and Logistics
- Management of EPI vaccines and consumables is insufficient.
- Cold chain management is insufficient.
- Waste management is insufficient.
- Inadequate implementation of EVM recommendations.
- 60% of cold chain equipment is not PQS approved.

3. Communication
- Communication for routine immunisation is insufficient.
- Insufficient implementation of interpersonal communication.
- Absence of human resources dedicated to communication at the level of the EPI program.
- Lack of information on the vaccination schedule.

1.2.4.5. Barriers related to immunisation demand

In 2018, a study was carried out by the Ministry of Health/SIVE, under the coordination of UNICEF, in seven regions of Guinea-Bissau, namely: Autonomous Sector of Bissau (SAB), Biombo, Bijagós, Bolama, Cacheu, Gabu and Tombali. Important obstacles to immunisation related to immunisation demand have been identified. Indeed, immunisation decisions are influenced by communities' lifestyles, perceptions of health, beliefs about childhood diseases, perceptions about the risks of diseases, perceptions about vaccine effectiveness and vaccine components, and trust in the immunisation services and EPI. Also the geographical access and quality of health and immunisation services are critical.

Distance to access health centre

The distance between the Health centre and villages is a major contributor to routine immunisation failure, especially during the rainy season.

- Most caregivers and parents walk to the health centre. Travel time varies from less than 20 minutes to 7 hours, with a higher incidence in the period up to one hour.
- When travelling by public transport, motorbike, or boat), most take between 20 minutes and 2 hours.
- Some mothers have to, in more remote villages, leave around 3:00/4:00 a.m. so that they can be at the health centre at 8:00 a.m.

Overload of mothers
- The overload of the mother makes her forget the dates of vaccination
- "*Here in the community we know the role of mothers, they trade, take care of the house, cook, with all these tasks they end up forgetting the day of the vaccination".*

Economic-related barriers
- Economic concerns prevail and mothers often miss vaccinations to go to work.
- Lack of interest and lack of money are other reasons given for not getting vaccinated;
- Even if communities do not have to pay for the vaccine, some people don't have money for transportation.

Traditional habits, myths, and beliefs

- Among people who always prefer to deal with any problem at the healer rather than at the health centre or hospital.
- In some religious groups, the vaccine is perceived as a product introduced by white people to reduce the fertility of African people, especially Muslims.
- Association of poor vaccine administration with future disabilities.
- Perception that children take too many vaccines (injections) and that it can lead to death.
- Rejection of immunisation and disinformation in some groups.

Fears of adverse events following immunisation

- Lack of information about adverse events will not prepare caregivers to manage side effects.
- In some cases, they will stop bringing the babies to the health centre.

Rumours

- Vaccines make children restless and kill them.

Language barriers

- Some people fear being “despised” by nurses because they don't speak Creole. This is an important barrier to taking a child for vaccination.

Low interest and devaluation

- Insufficient knowledge and understanding of immunisation.
- Low literacy.

Gender-related obstacles

- Dependence on the mother to take the child to vaccination (She does not bring him without the permission of the husband, even if it is absent, resulting in non-compliance with vaccination).
- Lack of father involvement (exclusive authority in many households).
- Forced or early marriage of girls, early pregnancy of mothers with low level of education and literacy, no access to health information.

The persistent low vaccination demand and uptake is also described in the situation analysis of the cMYP 2018-2022 and causes have been identified.

Lack of social mobilisation

- insufficient involvement of communities in planning immunisation activities.
- insufficient qualified human resources.

Communication for behaviour change

- Communication for Behaviour Change activities has often only taken place during mass vaccination campaigns during which the Regions and health areas have the means.
- There is no communication for behaviour change in routine immunisation.

Communication for social change

- The 2018 situation analysis describes specific populations that require special communication, because of their way of life or their general level of education. The difficult accessibility includes nomadic populations, communities of the islands, and refugee populations.
- There is also ethno-cultural diversity characterised by, among other things, the variability of traditional power structures, family and community habits, and other social norms. This means that the strategic approaches usually used in the country become ineffective.
- In households, vaccination topics are rarely discussed by parents; moreover, some believe that it is not necessary to vaccinate children all the time. Others claim they are running out of time.
- Likewise, the fear of side effects is an obstacle to vaccination practice.
- The report of the external review of the 2017 EPI revealed that the main socio-cultural reasons associated with the non-vaccination of children are ***ignorance***, ***belief,*** and the ***inaccessibility*** of landlocked areas. The most vulnerable groups in terms of access to vaccination would be the isolated villages in geographical areas with difficult access (islands, mountains, rivers, swamps.

1.2.4.6. Gender-related barriers

Women's low level of education and literacy, as well as lack of access to health information, can reduce women's motivation to have their children vaccinated. In Guinea-Bissau, the illiteracy rate is 65% and the gross enrolment rate is around 53%, with a high dropout rate, especially among girls. It appears that the literacy rate is lower among women (23.8%) than among men (52.6%), due to socio-cultural and economic factors.

There are still situations of practices harmful to women, such as the mutilation and marriage of young girls.[12] Indeed, early and forced marriage: is very widespread, 37% of women aged 20-49 having been married before the age of 18.70 elsewhere, 44% of women aged 15 to 49 are in a polygamous union (52% in rural areas) and almost half of women aged 15 to 24 years old are married to a man of at least 10 years older. These alarming rates of early marriage indicate a significant underlying problem: the economic difficulties which force women to marry at an early age or consent to a polygamous marriage. This situation is related to the highly informal nature of the economy and the fact that women represent an important part of this informal economy. The difference in education between men and women can be explained, even partially, by the fact that young women can drop out of school when they have the option of early marriage or when they are forced.

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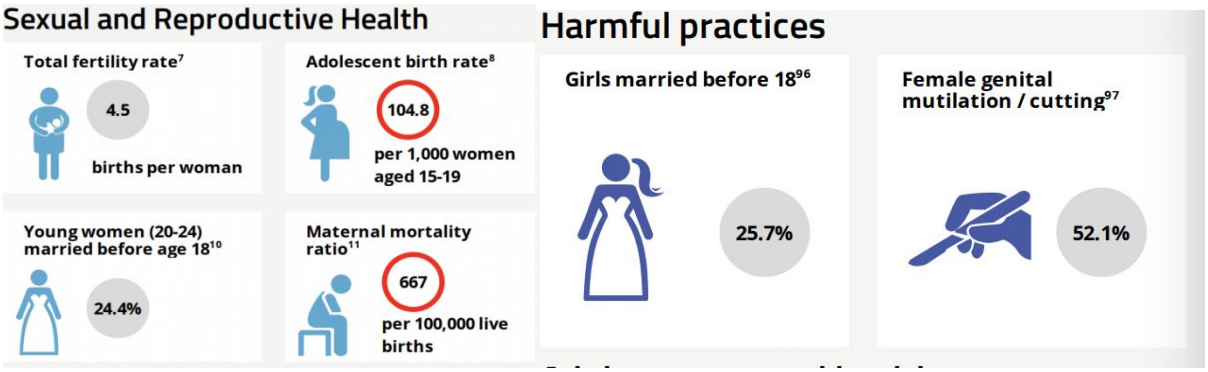

Figure 10: *Situation of Sexual and Reproductive health*

1.2.4.7. Obstacles related to governance and finance

The country's health system faces persistent challenges related to low public spending, poor infrastructure, inadequate supply of qualified health workers and inadequate clinical and managerial training systems. This is compounded by dysfunctional referral; service delivery and health-information systems. Other challenges include weak governance and inadequate management capacity and systems (such as budgeting and the management of public finances, human resources and supply chains).

There is a need to design interventions to handle the immediate challenges accentuated by the pandemic and adopt a medium- to long-term perspective to address systemic and structural constraints within the health sector.

As part of the achievement of the 2018-2022 objectives in terms of immunisation coverage, Guinea-Bissau has developed a cMYP along with a financial sustainability plan. The objective of this sustainability plan was to mobilise essential resources to the implementation of the cMYP and to ensure that the resources mobilised are disbursed on time. It should be noted that with the exception of 2017 when the State contributed entirely to the purchase of both traditional and co-financed vaccines, the EPI is highly dependent on external support for the acquisition of different antigens. The Government is experiencing many difficulties in mobilising the additional resources needed to consolidate the achievements and improve health performance, particularly for the EPI.

With the pandemic, urgent resources have been reallocated to implement COVID-19 activities, leading to some disruptions in immunisation services.

[12] SEXUAL AND REPRODUCTIVE HEALTH AND RIGHTS INFOGRAPHIC SNAPSHOT Guinea-Bissau 2021

Part 2 - National vision and request for Gavi support

2.1. Description of the overall vision of Guinea-Bissau

2.1.1. Guinea-Bissau's three-year vision to reduce zero-dose children by 2025

Vaccination is a proven tool for controlling and eliminating life-threatening infectious diseases and is estimated to prevent between 2 and 3 million deaths each year. It is one of the most cost-effective health investments, with proven strategies that make it accessible to even the hardest-to-reach and vulnerable populations (MICS19).

The national immunisation program in Guinea-Bissau is in the process of developing its national immunisation strategy as the 2018-2022 cMYP is coming to an end. The vision of Guinea-Bissau is aligned with the Global Immunisation Agenda 2030 to develop a national strategy to leave no one behind with immunisation.

The IRMMA analysis framework used in Guinea-Bissau enabled identifying zero-dose and under-immunised children as well as missed communities in the country. The key findings of the IRMMA analysis are the foundation of the expected changes in Guinea-Bissau. The number of ZD children is estimated considering multiple sources of data, their location and profile are also described, as well as the reasons for ZD in Guinea-Bissau.

Some critical interventions have been identified to complement the existing ones. Guinea-Bissau's vision is to target districts where the highest number of ZD children are.

In Guinea-Bissau, the health region is the operational entity for the implementation of primary health care. Thus, the identification of ZD and under-vaccinated children is done by the health region.

The pathway for reducing zero-dose and under-immunised children relies on targeting the EAF support to the regions/districts cumulating the following prioritisation criteria:

1. Highest number of ZD children
2. Low immunisation coverages (Penta1 and Penta3)
3. Highest number of under immunised children

Using these prioritisation criteria led to the selection of six districts including one urban and five rural districts/regions: SAB, CACHEU, TOMBALI, OIO, QUINARA and BIOMBO. In 2021, the six districts are the home of 97% of ZD children and 83% of under-immunised children in Guinea Bissau. The DHIS-2 2021 data revealed the urgent need for introducing new approaches to identify and reach the ZD and under-immunised children in priority in these districts.

The vision of Guinea-Bissau is to invest into these districts to introduce, test and learn on new approaches and innovations to reach the children left behind with immunisation during a three-year period (2023-2025). As a catalytic funding targeted to reach zero-dose, the EAF supported interventions will be implemented with new partnerships with CSOs and the private sector, as well as an increased engagement of the communities. By 2025, successful interventions will be documented to prepare for deployment at a larger scale with additional funding.

Guinea Bissau envisions the zero-dose strategy to serve as a platform for broader integrated primary healthcare over the life course. The Guinea-Bissau zero-dose will support increasing coverage and equity by:

- Reducing dropout.
- Increasing timeliness.
- Reducing missed opportunities to vaccinate with integration platforms with other health programmes (maternal and child health, malaria, nutrition, etc.) and likewise with other sectors (education, WASH, etc.)
- Build population resilience against vaccine safety scares, rumours, and misinformation.

2.1.2. Overall level of Ambition level for reaching ZD and under-immunised children in Guinea-Bissau

By 2025, Guinea-Bissau aims to reduce 50% of zero-dose children (6,159 children - DHIS2 data) nationwide by targeting the EAF-supported interventions to 55% (06 out of 11) of the districts.

- By the end of 2023, Guinea-Bissau will reach 25% (3,080) of ZD children.
- By the end of 2024, Guinea-Bissau will reach 40% (4,900) of ZD children.

- By the end of 2025, Guinea-Bissau will reach 50% (6,159) ZD children.

Table 13: *Guinea-Bissau Level of ambition to reach ZD children in the next 3 year*

	# of ZD children) (DHIS 2 2021)	% of ZD children nationwide
• **Nationwide**	12,679	100%
• **EAF supported 6 districts (55% of health districts) will reach:**	6,159	50%

Figure 11: *Prioritised districts in Guinea-Bissau.*

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2.2. Targeting Gavi support to specific geographies and sub-populations

Gavi EAF support will prioritise the six regions with the highest number of zero-dose and low coverage, during three years (2023-2025). This support will have a huge impact in hard-to-reach areas with special populations, enabling the adaptation of more effective strategies. From the IRMMA analysis, “Identify”, The following table describes the top six regions with the highest number of zero-dose, context/settings, and the multilayer strategy to systematically identify and reach zero-dose and under-immunised children. However, in 2020, the Covid-19 has impacted on the routine immunisation activities. Also in 2021, the health facility access and utilisation have been disrupted for one year because of a general strike of the public servants.

Table 14: *Prioritised districts and its description*

Regions	Districts	Geographical areas and sub-population	Hard-to-reach communities (*)	Geographic accessibility	Zones/Settings	Multilayer ZD Approach
SAB	SAB	**Ranking #1 Highest number of ZD** with 6198 ZD children	data not available	-	Urban/Peri-urban	13 interventions including 5 interventions targeted to urban/peri-urban and 8 cross-cutting interventions
CACHEU	CACHEU	**Ranking #2 Highest number of ZD** with 1963 ZD children	data not available	-	Rural/remote	15 interventions including 3 interventions targeted to remote/rural context, 4 interventions targeted to subpopulation and 8 cross-cutting interventions
TOMBALI	TOMBALI	**Ranking #3 Highest number of ZD** with 1357 ZD children	data not available	-	Rural/remote	
OIO	OIO	**Ranking #4 Highest number of ZD** with 1090 ZD children	19,783	**30%**	Rural/remote	
QUINARA	QUINARA	**Ranking #5 Highest number of ZD** with 900 ZD children-	5,658	**36%**	Rural/remote	
BIOMBO	BIOMBO	**Ranking #6 Highest number of ZD** with 810 ZD children	1777	**46%**	Rural/remote	

*(*) Nomads, migrants, Poor in urban and peri-urban areas, Scattered/remote populations)*In each region, the interventions and implementing organisations will be coordinated by the Ministry of Health. EPI expenses are mainly covered by financial, material, and logistical resources allocated by partners in the health sector (GaviI, UNICEF, WHO, Solina and Instituto Valle Flor). The coordination of the targeting of investments with the partners for the health regions will be carried out at the level of the Inter-Institutional Commission for the Coordination of the Expanded Vaccination Program (CCIA), which is chaired by the Minister of Health and is composed of the majority of the partners.

2.3. Tailoring of Gavi EAF support request

This section describes how Guinea-Bissau has tailored approaches to identify and reach zero-dose children and missed communities to different geographies or populations that are differentiated to the country context. Guinea-Bissau has used available social data from existing assessments and reports, to better understand barriers and enablers to uptake, and to design effective evidence-based interventions.

Based on the relevant evidence, a set of priority activities have been identified to address inequities in immunisation with the gender lens as a cross-cut component of the country's zero-dose strategy.

2.3.1. Tailored interventions to overcome barriers and root causes to reach ZD communities

Guinea-Bissau has prioritised the key challenges and root causes for reaching the ZD community. The EAF-supported activities are specifically designed to overcome these challenges, with the principle of complementing existing successful interventions to reach all target populations and likewise introducing new approaches that would transform the situation of inequity in immunisation in the 6 regions with the highest number of zero-doses in Guinea-Bissau.

Table 15: *Tailored approaches for each challenge in reaching ZD children*

What are the Key Challenges?	What are the root causes?	What changes are expected?
Services delivery		
Insufficient quantity of service delivery	• Long distance from home to health facilities. • Fixed strategy not regularly carried out. • Lack of advanced strategy (between 5 and 15 km). • Absence of mobile strategy in routine immunisation. • Insufficient planning with low capacity of actors in micro-planning. • Inadequate capacity building in micro-planning, monitoring, and supervision. • Low Commitment of local leaders in micro planning and IPC. • Poor integration of child survival activities.	• Extend immunisation services to reach zero-dose, under-immunised children and missed communities. • Integrate delivery of services to improve efficiency, regularity, and/or reliability of planned immunisation activities with a focus on ZD and under-immunised children and missed communities. • Establish and/or continue partnerships with civil society organisations to provide immunisation services. • Establish and/or continue partnerships with (for-profit) private sector actors, including professional associations, to reach ZD, under-immunised children, and missed communities. • Increase capacity and quality of vaccine storage and distribution to improve vaccine availability, especially in the last mile.
Insufficient quality of service delivery	• Insufficient qualified human resources in the EPI (ACD, EVM, Follow-up of guidance, operational management of activities).	• Improve service quality and user experience of immunisation services, including bringing a strong gender lens.

What are the Key Challenges?	What are the root causes?	What changes are expected?
	• Low-quality supervision: lack of follow-up on recommendations, voluminous supervision package. • Poor working conditions.	• Ensure the immunisation health workforce is regularly supported by performance management systems and good working conditions, including supportive supervision and continuous professional development.
Health Information Systems and Monitoring & Learning		
Lack of a rapid system at local levels for identifying and reaching zero-dose and under-immunised children	• Absence of an automation/electronic system to record immunisation, track immunisation status, and reach zero-dose and under-immunised children in health centres.	• Strengthen relevant information systems for the identification and reach of zero-dose and under-immunised children.
Predominantly paper-and-pen system	• Multiple forms to be filled in by frontline health workers, creating overload and risk of data errors. • Absence of digital environment at local levels.	• Scale up digital health information interventions based on country needs, priorities, plans, strategies, and readiness.
Insufficient detection, evaluation, and response to serious AEFI	• Insufficient capacity to manage properly serious AEFI.	• Strengthen country's capacity to detect, evaluate, and respond to serious adverse events following immunisation.
Demand generation and community engagement		
Insufficient immunisation uptake and demand because of economic barriers	• Transport costs, time allocated to vaccination is a missed opportunity to earn money for the mothers → lost wages as a result of absence from work.	• Extend immunisation services to reach zero-dose, under-immunised children and missed communities, including integrated local micro-planning, community engagement to identify barriers and solutions, partnering with CSOs to complement immunisation activities.
Rejection of vaccines and immunisation	• Insufficient knowledge and practices: low interest and devaluation, fears, rumours, low risk-benefit communication, AEFI. • Insufficient involvement of communities in planning immunisation activities. • Language barriers.	• Design and implement social and behaviour change interventions. • Strengthen partnerships with local and community actors to improve demand for immunisation.
Gender and inclusivity		
Financial dependence of	• Exclusive authority of the father	• Address gender considerations in

What are the Key Challenges?	What are the root causes?	What changes are expected?
the mother who cannot bring the baby without permission	• Lack of fathers' involvement to bring babies to the health centre for immunisation. • Less influence in household decision making such as access and utilisation of health and immunisation services.	the planning and implementation of immunisation services • Assure gender equality, inclusion, and protection considerations are addressed in management structures, immunisation policies, guidelines, practices, and accountability measures
Overload of mothers who do not have time to bring the baby to get vaccinated	• No adaptation of immunisation schedule and time to accommodate working time of mothers and fathers. • Lack of advanced and mobile strategies.	
Young pregnancy and low interest in immunisation	• Low education levels of women are associated with lower immunisation coverage of children. Mothers with secondary-level education or higher tend to have more knowledge of health and vaccination.	

The programmatic strategy is based on the distribution and concentration of ZD children in Guinea-Bissau characterised by a high concentration of ZD children and low coverage. Pro-equity interventions are defined to identify and reach ZD children (valid for all health regions/districts) and other pro-equity interventions are aimed at districts with a higher concentration of ZD children. In line with the Gavi 5.0 strategy, Guinea-Bissau systematically considered interventions aimed at: (1) overcoming gender-related barriers (and their causes), new approaches and innovations, and (2) maximising partnerships with the communities, CSOs/CBOs/FBOs, private sector and other sectors.

2.3.1.1. Cross-cutting interventions

The cross-cutting interventions are intended to be implemented in the 6 prioritised regions and districts/sectors. Guinea-Bissau has identified eight (08) cross-cutting activities mainly to extend and reach zero-dose and under-immunised children and missed communities. The following table shows the distribution of the EAF-supported interventions to operate changes and to contribute to reaching the Gavi outcomes in the 5.0 strategic period:

Table 16: *Cross-cutting interventions in reaching ZD children*

Expected Changes	Interventions	Gavi Outcomes
1. Extend immunisation services to reach ZD, under-immunised children and missed communities	• Organise micro plan synthesis workshops at the level of health regions (bottom-up planning), involving the community in the planning of immunisation activities. • Identify and train associations of young girls and people with disabilities in vaccination activities.	Extend and Reach
2. Improve service quality and user experience of immunisation services, including bringing a strong gender lens	• Update, produce and disseminate communication kits for vaccination, adapting communications to local gender dynamics, languages and cultures.	Extend and Reach

Expected Changes	Interventions	Gavi Outcomes
3. Establish and/or continue partnerships with (for profit) private sector actors, including professional associations, to reach ZD, under-immunised children and missed communities	• Train members of women-led community health professional associations to ensure that the design, implementation and monitoring of service delivery has a strong gender perspective.	Extend and Reach
4. Ensure the immunisation health workforce is regularly supported by performance management systems, including supportive supervision and continuous professional development	• Establish and/or continue partnerships with (for profit) private sector actors, including professional associations, to reach ZD, under-immunised children and missed communities.	Extend and Reach
5. Strengthen partnerships with local and community actors to improve demand for immunisation	• Organise two advocacy roundtables with key stakeholders and decision-makers to ensure social and political commitment to equitable immunisation at all levels. • Recognise/reward the participation of community and religious representatives, teachers, traders in vaccination actions and performant health workers.	Extend and Reach
6. Assure gender equality, inclusion and protection considerations are addressed in management structures, immunisation policies, guidelines, practices and accountability measures	• Develop a strategy to overcome gender related obstacles in immunisation.	Commit and sustain

2.3.1.2. Urban/peri-urban

The urban/peri-urban interventions are intended to be implemented in SAB, predominantly urban. The DHIS-2 2021 data revealed that the highest concentration of zero-dose is in urban/peri-urban areas. SAB is the home of 6,198 zero-dose children representing 49% of total zero-dose children in Guinea-Bissau. Gavi commissioned Solina and UNICEF to support the DRS SAB in the leadership, management and coordination capacity to implement the urban strategy to reach all communities. To implement the urban strategy, it is necessary to develop a plan that ensures effective work and documents the lessons learned. The strategy has been approved in 2022.

The urban strategy in SAB aims to improve immunisation coverage with following areas of efforts: services delivery, demand generation, human resources, coordination, supervision/M&E, and logistics.

The following activities for urban/peri-urban interventions to reach zero-dose children are aligned with the urban strategy implemented in SAB.

Table 17: *Urban/peri-urban interventions in reaching ZD children*

Expected Changes	Interventions	Gavi Outcomes
. Extend immunisation services to reach ZD, under-immunised children and missed communities	• Identify and train associations of young girls and people with disabilities in vaccination activities.	Extend and Reach
8. Strengthen information systems relevant for the identification and	• Implement electronic Individual immunisation registry in the health centres	Extend and Reach

Expected Changes	Interventions	Gavi Outcomes
reach of ZD and under-immunised children	of the 6 districts, use the time sheets for active search and follow-up of children (today the data on vaccines are aggregated data). • Train MAPI focal points in the 6 priority health districts (they will serve as key elements to clarify doubts regarding possible adverse effects).	
9. Strengthen country capacity to detect, evaluate and respond to serious adverse events following immunisation	• Train MAPI focal points in the 6 priority health districts (they will serve as key elements to clarify doubts regarding possible adverse effects).	Extend and Reach
10. Scale up digital health information interventions based on country needs, priorities, plans, strategies, and readiness	• Equip the 6 districts with computers, tablets, telephones, printers, Internet.	Extend and Reach
11. Design and implement social and behaviour change interventions	• Organise Community Theatre Sessions to raise awareness of community leaders, mothers, about the benefits of vaccines, especially at ceremonies and markets to reach children by CSOs.	Extend and Reach

2.3.1.3. Rural/Remote

***Table 18**:Rural/remote interventions in reaching ZD children*

Expected Changes	Interventions	Gavi Outcomes
2. Extend immunisation services to reach zero-dose, under-immunised children and missed communities	• Working in partnership with NGOs/CSOs to identify ZD children, including understanding and overcoming underlying barriers, providing input to a focal point that supports identification.	Extend and Reach
13. Increase capacity and quality of vaccine storage and distribution to improve vaccine availability, especially in the last mile	• Facilitate access by technical assistance providers to previously inaccessible areas to ensure vaccine supply and service delivery.	Extend and Reach
14. Strengthen partnerships with local and community actors to improve demand for immunisation	• Introduce a financial and/or non-financial incentive system to get children vaccinated.	Extend and Reach

2.3.1.4. Subpopulation - special population

Table 19: Subpopulation - special population interventions in reaching ZD children

Expected Changes	Interventions	Gavi Outcomes
15. Integrate delivery of services to improve efficiency, regularity and/or reliability of planned immunisation activities with a focus on zero-dose and under-immunised children and missed communities	• Create mixed and multi-ministerial groups for nomads (education, health and livestock, humanitarian) and organise quarterly coordination meetings with these services to vaccinate nomadic and dispersed populations.	Extend and Reach
16. Establish and/or continue partnerships with civil society organisations to provide immunisation services	• Map and train the institutions that govern nomads to organise integrated activities.	Extend and Reach
17. Establish and/or continue partnerships with (for profit) private sector actors, including professional associations, to reach ZD, under-immunised children and missed communities	• Engage private and religious health structures to deliver immunisation services with accountability.	Extend and Reach
18. Address gender considerations in the planning and implementation of immunisation services	• Engaging female nurse midwives to immunisation to manage potential gender-related issues.	Extend and Reach

2.3.2. Opportunities to increase access to ZD children in the long term and innovations

The coordination of interventions at the national level is ensured by the Inter Institutional Coordination Commission (ICCA), chaired by the Minister of Health and composed of the majority of partners who support the EPI. This Committee is supported by a Technical Committee made up of technicians from the EPI, UNICEF and WHO, who have prepared technical files on the various aspects (technical, communication, finance and logistics). The ICC meets 3 times a year to validate, monitor and evaluate the programme's annual action plan. There are plans to increase the participation of civil society.

The EAF will help target improved or new interventions to districts with the highest number of ZD children. For reasons of sustainability, these interventions will be tested and documented to ensure the subsequent maintenance of successful interventions, with a view to future expansion for the benefit of all health districts. Some interventions, aimed at support via the EAFs, are cross-cutting and can benefit other health districts.

Several innovations have been identified to sustainably reach ZD children:

1. Improve the follow-up strategy for dropouts or absentees (digitalization of this intervention), follow-up and evaluation (Y2-3).
2. Design a community-centred monitoring and learning system to document good practices and innovations to reach ZD children (Y3).
3. Introduce m-learning for vaccinators and supervisors including gender and inclusivity module (Y1).

Thus, the theory of change developed for this period of the Gavi EAF grant will focus on the 7 areas of Gavi investment, namely:

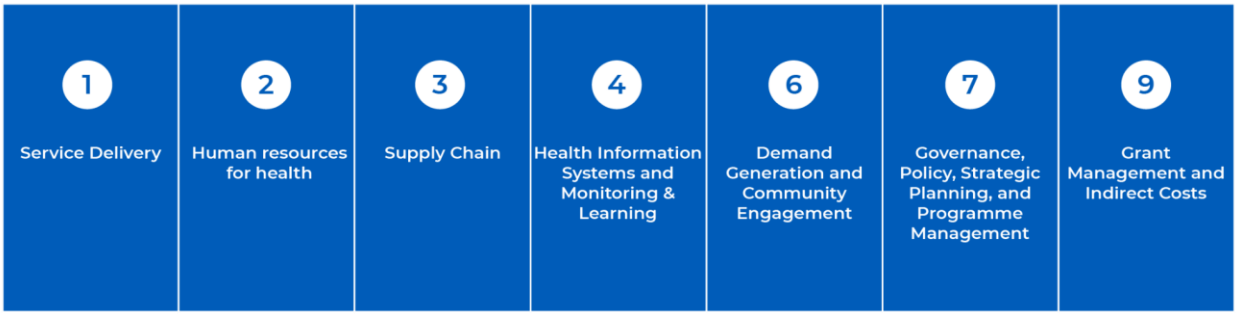


Figure 12: *Gavi's Investment domains*

There were no activities for the following Gavi investment areas:

1. Monitoring of VPDs (note that none of the objectives in this investment area are eligible for EAF).
2. Health financing.
3. Results-Based Funding.

The investments in these 7 areas contribute to strengthening the systematic identification and reaching of ZD and under-immunised children in Guinea-Bissau. By 2025, Guinea-Bissau is aiming for the following strategic outcomes:

- Immunisation services are community-centred for the systematic inclusion of all target populations.
- The performance of the EPI health information, monitoring, and learning system is strengthened with a focus on innovation.
- The sustainable commitment of national and sub-national actors in terms of planning, policy, and financial resources is intensified for the sustainability of the EPI.

2.3.3. Description of the key activities to reduce ZD children

The following section provides an overview of the key interventions and targeting across the six prioritised regions/districts in Guinea-Bissau. The Key activities are described by Gavi's investment area and objectives (expected changes). For each activity, targeted districts as well as the number of zero-dose children to be reached are presented.

All activities have been customised by Guinea-Bissau and its partners to overcome priority challenges and bottlenecks in systematically identifying and reaching zero-dose children in the six districts with the highest number of zero-dose and under-immunised children. Guinea-Bissau has introduced a more deliberate approach to engaging a broader set of partners, including CSOs, community-based organisations (CBOs), faith-based organisations (FBOs), and humanitarian partners. The EAF-supported activities are designed to maximise the existing investments in the NIP/SIVE and to introduce new approaches and models.

GAVI INVESTMENT AREA 1 - **SERVICE DELIVERY** (Strategic Result 2)

Guinea-Bissau prioritises the Gavi "Service Delivery" investment area into the following main interventions:

- Tailoring service delivery to meet local community needs, in partnership with community representatives (micro-planning).
- Service integration of immunisation with other health programmes and other programmes.
- Equipping frontline workers with interpersonal and community engagement skills (introducing and testing mobile learning).
- Providing recognition and performance support to frontline workers to improve motivation (rewarding and celebration of performance to identify and reach ZD and under-immunised communities).

Guinea-Bissau intends to use differentiated immunisation delivery strategies to effectively reach women, men, and gender-diverse people. The interventions under the Gavi investment "Service Delivery" will address gender-related barriers to vaccine enrolment/registration and follow-up.

The service delivery strategies in Guinea-Bissau are differentiated with the targeting of population groups missed by routine immunisation as well as tailored to overcome specific barriers to reaching zero-dose, under-immunised children

and missed communities. Under the EAF, Guinea-Bissau has initiated a more deliberate approach to engaging a broader set of partners, including CSOs, community-based organisations (CBOs), faith-based organisations (FBOs), and humanitarian partners.

Objective 1.1 Extend immunisation services to reach zero-dose, under-immunised children and missed communities

Activity 1.1.1 Organise micro-plan synthesis workshops at the level of health regions (bottom-up planning), involving the community in the planning of immunisation activities

Targeted districts: All Prioritised Districts (SAB, CACHEU, TOMBALI, OIO, QUINARA and BIOMBO)

Targeted number of ZD children: 12,318 children

Description: This activity consists of Tailoring service delivery to meet local community needs, in partnership with the community representatives. *Local bottom-up planning (micro-planning) will foster effective implementation and monitoring of health and immunisation services delivery. In this approach, health workers will ensure that immunisation services will reach every community. Priority community will be identified, barriers will be addressed through workplans and solutions. As a critical component of the micro-plans at sector/district and regional levels, the representatives from communities will participate in identifying obstacles and possible solutions. The micro-planning will be the opportunity to also to involve communities in the implementation and monitoring of immunisation activities.*

The micro-planning for immunisation service delivery will be compliant and aligned with the Reach Every Child (REC) strategy. The participation of the communities will enable locating of hard-to-reach villages, and special populations with a focus on systematically identifying and reaching the ZD, under-immunised and missed communities in the six prioritised regions and sectors.

Local micro-planning will enhance service quality and accountability, ensuring that parents and caregivers have a positive experience and access to immunisation services through fixed, advanced and mobile immunisation strategies in the 06 EAF supported regions/districts.

Activity 1.1.2 Identify and train associations of young girls and people with disabilities in vaccination activities

Targeted districts: SAB (Urban/peri-urban setting)

Targeted number of ZD children: 6 198

Description: *This activity intends to increase the uptake of routine immunisation for the children of teen mothers and people living with disabilities in urban settings. The key activity will consist of identifying relevant associations, CSOs, CBOs, and FBOs working with young and/or mothers and fathers in an urban/peri-urban region/sector in Guinea-Bissau. After profiling relevant organisations (location, members, strength in delivering health and immunisation services, capacity strengthening requirements), they will be capacitated to promote immunisation and deliver immunisation activities where health workers, frontline health workers and health community agents are not enough to deliver timely those activities. During the period of the EAF support, this activity will be designed and tested mainly in an urban region (SAB). This activity will be monitored to learn about the success and barriers of this approach and prepare for potential replication and scale-up in other regions and settings.*

Objective 1.2 Integrate delivery of services to improve efficiency, regularity and/or reliability of planned immunisation activities with a focus on zero-dose and under-immunised children and missed communities

Activity 1.2.1 Create mixed and multi-ministerial groups for nomads (education, health and livestock, humanitarian) and organise quarterly coordination meetings with these services to vaccinate nomadic and dispersed populations

Targeted districts: All Prioritised Districts (SAB, CACHEU, TOMBALI, OIO, QUINARA and BIOMBO)

Targeted number of ZD children: 12,318

Description: *The purpose of this activity is to increase vaccination coverage by reducing Missed Opportunities for Vaccination (MOV) in missed communities. This activity consists of the integration of vaccination with other (health) services, e.g. home visits or child well-being visits. With little effort or cost (compared with reaching children who have no access to the health system), this approach will ensure that all visitors to health centres are vaccinated; it will have a major impact on vaccination coverage and equity in the prioritised regions/districts. Due to the changing epidemiology of some diseases and the availability of new vaccines, there is an increasing need to reach and deliver immunisation services to other population groups, such as older children and adolescents, with new vaccines and booster doses. Therefore, the "immunisation platforms" will be designed to deliver a range of services over the life course. Several integration opportunities are the following:*

- *immunisation as part of antenatal and postpartum care;*
- *immunisation as part of caring for the child's healthy growth and development;*
- *immunisation as part of Integrated Management of Childhood Illness;*
- *vitamin A supplementation with routine infant immunisation;*
- *disease-specific interventions along the life course, for example,*
- *comprehensive cancer control strategies might include the provision of HPV*
- *vaccine in adolescence followed by cervical cancer screening in later life.*

The selection and design of platforms to deliver immunisation and related services will be determined at the national and/or sub-national level, depending on the national vaccination schedule and the local context, including the strength of the health system.

Objective 1.3 Improve service quality and user experience of immunisation services, including bringing a strong gender lens

Activity 1.3.1 Update, produce, and disseminate communication kits for vaccination, adapting communications to local gender dynamics, languages, and cultures.

Targeted districts: All Prioritised Districts (SAB, CACHEU, TOMBALI, OIO, QUINARA, and BIOMBO)

Targeted number of ZD children: 12,318

Description: *The purpose of this activity is to enhance the quality and acceptability of services, building the capacity of frontline health workers to communicate more effectively with caregivers and communities, and involving communities in the planning and delivery of services so they are responsive to local needs. This key activity includes communication and community engagement skills to build strong dialogue, partnership, and confidence with the communities they serve. The health workers will improve community awareness and knowledge, creating and continually reinforcing positive social norms towards immunisation, as well as providing individualised reminders on where/when to go for services and timely motivational 'nudges' (e.g. through positive messaging and motivational content through SMS, social media and interpersonal communication) will help bridge the 'intention to action' gap.*

Objective 1.4 Establish and/or continue partnerships with civil society organisations to provide immunisation services

Activity 1.4.1 Map and train the institutions that govern nomads to organise integrated activities

Targeted districts: All Prioritised Districts (SAB, CACHEU, TOMBALI, OIO, QUINARA and BIOMBO)

Targeted number of ZD children: 12,318

Description: *The purpose of this activity is to extend partnerships with the civil society organisations, community-based organisations, faith-based organisations to systematically identify and reach the zero-dose and under-immunised children in the nomad population, especially those where the ZD, under-immunised and missed children are. Mapping of relevant organisations will be conducted to identify which organisations should be empowered and capacitated to integrate immunisation services into their existing interventions. Training and capacity building will be instrumental to implement and facilitate integrated services to the It is also anticipated that this activity includes providing integrated immunisation services with other health programmes, and integration with animal health and/or education programmes.*

Objective 1.5 Establish and/or continue partnerships with (for profit) private sector actors, including professional associations, to reach zero-dose, under-immunised children and missed communities

Activity 1.5.1 Engage private and religious health structures to deliver immunisation services with accountability

Targeted districts: All Prioritised Districts (SAB, CACHEU, TOMBALI, OIO, QUINARA and BIOMBO)

Targeted number of ZD children: 12,318

Description: *The purpose of this activity is to intensify (for profit) private sector actors, including professional associations, to reach zero-dose, under-immunised children and missed communities in ethnic minority groups, migrants, nomads, and displaced by conflict or affected by disasters. After determining which CSOs, humanitarian agencies, private for-profit sector, and non-health sector actors have a comparative advantage in reaching difficult-to-access communities, the SIVE will establish suitable mechanisms to engage these organisations. The accountability framework will be suggested.*

Activity 1.5.2 Train members of women-led community health professional associations to ensure that the design, implementation, and monitoring of service delivery has a strong gender perspective

Targeted districts: All Prioritised Districts (SAB, CACHEU, TOMBALI, OIO, QUINARA and BIOMBO)

Targeted number of ZD children: 12,318

Description: *The purpose of the activity is to ensure that the attitude, respect, language or ethnicity of health and immunisation service providers of professional organisations can facilitate communication with caregivers or can reduce the distance in interactions. The training of the women-led community health professional associations will prevent judgemental approaches or disrespect of care giver's time from health and immunisation service providers. The activity consists of providing gender and diversity-sensitive training for vaccination workers and community health professional associations: (a) respectful and responsive to the diverse health beliefs, practices, and cultural and linguistic needs of women and men; (b) effective communicators, especially to address vaccine hesitancy and to respond to reports of serious adverse events following immunisation, in order to maintain trust and allay fears.*

Activity 1.5.3 Working in partnership with NGOs/CSOs to identify ZD children, including understanding and overcoming underlying barriers, providing input to a focal point that supports identification

Targeted districts: Cacheu, Tombali, Oio, Quinara, Biombo

Targeted number of ZD children: 6 120

Description: *The objective of this activity is to intensify collaboration with NGOs/CSOs already in place in the rural regions. This strategy will enable extending immunisation services when there are not enough health workers and health community workers in rural areas. The NGOs/CSOs that partner with the SIVE are a diverse group of organisations independent of the public and for-profit sectors. These organisations meet communities where they are in rural and remote areas. This approach will enable working closely with families and community decision-makers because NGOs/CSOs can mobilise public opinion and build momentum for change. With their local connections and knowledge, NGOs/CSOs will be used as trusted immunisation advocates for the most underserved communities.*

Objective 1.6 Address gender considerations in the planning and implementation of immunisation services

Activity 1.6.1 Engaging female nurse midwives to immunisation to manage potential gender-related issues.

Targeted districts: All Prioritised Districts (SAB, CACHEU, TOMBALI, OIO, QUINARA and BIOMBO)

Targeted number of ZD children: 12,318

Description: *The purpose of this activity is to cope with underlying cultural barriers that prevent female caregivers from seeking immunisation services from male health workers. This activity will consist of the use of female community health workers for facilitating enhanced immunisation service acceptance and uptake by female caregivers. This activity will increase vaccine coverage, especially for girls and women in general. Female CHWs will contribute to the communication process, and/or directly as an immunisation deliverer.*

Guinea-Bissau prioritises the Gavi "Human Resources for Health" investment area to design, implement and learn on the following main innovative interventions:

- **Develop and test mobile apps for learning strategy for improving the quality of immunisation services and supporting demand generation in the districts/region facing challenges to reach the communities left behind with immunisation.**

Guinea-Bissau intends to develop and disseminate digital tools for improving the technical as well as gender & inclusivity capacities of the health workers.

The Human resources for health (HRH) in Guinea-Bissau are critical for immunising every child, particularly in the most marginalised communities that are home to the largest number of zero-dose and under-immunised children. The COVID-19 pandemic has worsened the situation with shortages of qualified and motivated health workers available to reach missed communities. Under the EAF, Guinea-Bissau will introduce, test, and prepare for the scale-up of promising innovative approaches, including digitally enabled solutions, for learning and performance management (LPM) to strengthen health workers' skills, motivation, and behaviour for improving the performance of immunisation services delivery.

Objective 2.3 Ensure the immunisation health workforce is regularly supported by performance management systems, including supportive supervision and continuous professional development

Activity 2.3.1 Develop and test online and offline m-learning solution for on-the-job training.

Targeted districts: SAB and Cacheu

Targeted number of ZD children: 8 161

Description: The purpose of this activity is to develop and disseminate digital tools for on-the-job training. A learning mobile app will be customised to improve the technical capacities of healthcare workers to plan, implement and monitor immunisation services. The mobile app should include a peer learning and collaborative platform for facilitating communication among the health workers and likewise, collaboration of vaccinators with their supervisors.

The mobile learning content will include gender and inclusivity knowledge to adapt immunisation services so that zero-dose, under-immunised children and missed communities receive the full range of recommended vaccines. The mobile app will be tested in rural and urban settings. SAB is the region/district with the highest number of zero-doses (6,198) and is predominantly urban/peri-urban. Cacheu is the second region/district with the highest number of zero-doses (1,963) and is predominantly rural/remote. If the test is successful, Guinea-Bissau will prepare for replication and scale up in the other regions and districts.

GAVI INVESTMENT AREA 3 - **SUPPLY CHAIN** (Strategic Result 2)

Guinea-Bissau prioritises the Gavi "Supply Chain" investment area into the following main interventions:

- **Facilitate access by technical assistance providers to previously inaccessible areas to ensure vaccine supply and service delivery**

Guinea-Bissau intends to use differentiated immunisation delivery strategies to effectively reach women, men and gender-diverse people. The interventions under the Gavi investment "Supply chain" will address gender-related barriers to vaccine enrolment/registration and follow-up.

Strong and resilient supply chains are critical for ensuring potent vaccine availability where and when needed to reach zero-dose, under-immunised children and missed communities. In 2019, Guinea-Bissau conducted an effective vaccine management assessment and developed its continuous improvement plan. The implementation of the improvement plan was updated in January and attached to the EAF application.

Under the EAF, Guinea-Bissau has prioritised the distribution of vaccines to previously inaccessible areas in remote and hard-to-reach areas in three rural regions/districts with the highest numbers of zero-dose children and missed communities.

Objective 3.3 Increase capacity and quality of vaccine storage and distribution to improve vaccine availability, especially in the last mile

Activity 3.3.1 Facilitate access by technical assistance providers to previously inaccessible areas to ensure vaccine supply and service delivery.

Targeted districts: Cacheu, Tombali, Oio

Targeted number of ZD children: 4,410

Description: The purpose of this activity is to increase the delivery of vaccines to the rural areas where the majority of zero-dose children are located. Cacheu, Tombali and Oio are the rural/remote regions with the highest number of zero-doses. The insufficient number of health facilities and the isolated or dispersed populations require urgent investment in transportation (boats and cars) to deliver vaccines and immunisation services to the missed communities in remote hard-to-reach areas.

GAVI INVESTMENT AREA 4 - **HEALTH INFORMATION SYSTEMS AND MONITORING & LEARNING** (Strategic Result 2)

Guinea-Bissau prioritises the Gavi "Health Information Systems and Monitoring & Learning" investment area into the following main interventions:

- **Implement electronic records of individualised immunisation in the health centres of the SAB Region, use the time sheets for active search and follow-up of children.**
- **Train MAPI focal points in the 6 priority health districts (they will serve as key elements to clarify doubts regarding possible adverse effects)**

Guinea-Bissau intends to use differentiated immunisation delivery strategies to effectively reach women, men and gender-diverse people. The interventions under the Gavi investment "Supply chain" will address gender-related barriers to vaccine enrolment/registration and follow-up.

Objective 4.3 Strengthen information systems relevant for the identification and reach of zero-dose and under-immunised children

Activity 4.3.1 Implement electronic records of individualised immunisation in the health centres of the SAB Region, use the time sheets for active search and follow-up of children.

Targeted districts: All Prioritised Districts (SAB, CACHEU, TOMBALI, OIO, QUINARA and BIOMBO)

Targeted number of ZD children: 12,318

Description: The purpose of this activity is to introduce the electronic registry of individual immunisation records, especially children living in the most impoverished communities. Immunisation records provide a history of all the vaccines the child received, but today the immunisation data is aggregated data. Therefore, this activity will enable Guinea Bissau to migrate from non-individualised immunisation registry to individualised immunisation registry. Consequently, the individual registry is ordered by the origin of data on each vaccinated person. Upon administering each vaccine, the unique ID of the individual will be recorded, as well as his or her name and other general data, such as contact information for reminders, the date of administration of each vaccine, and other data on the vaccination (facility, vaccinator, etc.). This key activity is crucial to determine whether a child is up to date on immunisation schedule for his/her age and even to determine if he/she has been vaccinated in a timely and correct manner. The individualised registries will be electronic and introduced in 60 immunisation centres across the 6 prioritised regions/districts (10 immunisation centres per region/district). Guinea-Bissau will seek specific characteristics of the electronic records of individualised immunisation:

- ***Registration of Individuals***: exhaustive inclusion of all people who are targets of the program, ideally at birth. And unique identification of individuals.
- ***Reports and Individual Monitoring***: data and charts of the EPI indicators, data aggregation by geographical and/or administrative levels. Data and information on unimmunised individuals. Data to support visualisation through figures and risk maps. Online access to vaccination records is given to parents and caregivers, who can download the vaccination card and keep a hard copy.

- ***Registration of Immunisation Adverse Events Following Immunisation***: Information on the administered vaccine. Inclusion of all vaccination events. Support for traceability of biologicals. Support for monitoring and evaluation of AEFI.

Objective 4.4 Strengthen country's capacity to detect, evaluate and respond to serious adverse events following immunisation

Activity 4.4.1 Train MAPI focal points in the 6 priority health districts (they will serve as key elements to clarify doubts regarding possible adverse effects).

Targeted districts: All Prioritised Districts (SAB, CACHEU, TOMBALI, OIO, QUINARA and BIOMBO)

Targeted number of ZD children: 12,318

Description: The purpose of this activity is to improve the management of serious AEFI cases. Poor management could be the origin of rumours and doubts about immunisation services. Immunisation staff and MAPI focal points will be trained on how to evaluate and respond to signals of new rare, potential safety problems. In this activity, the crisis communications plans will be prepared. This activity will be articulated with activity 4.3.1. related to the introduction of EIR and its specific characteristic for the monitoring and evaluation of AEFI: information about the administered vaccine. description of the AEF and vaccine-related events, and traceability of biologicals. About 14 AEFI and immunisation staff in each EAF-supported region/district will be trained at least once per year during the three years. The AEFI SOP will be established and updated regularly during the EAF grant period (2023-2025).

Objective 4.5 Scale up digital health information interventions based on country needs, priorities, plans, strategies, and readiness

Activity 4.5.1 Equip the 6 districts with computers, tablets, telephones, printers, and Internet access.

Targeted districts: All Prioritised Districts (SAB, CACHEU, TOMBALI, OIO, QUINARA and BIOMBO)

Targeted number of ZD children: 12,318

Description: With this key activity, Guinea-Bissau intends to support the digitalisation of immunisation interventions in the 06 prioritised districts. This will be instrumental to create the necessary local digital ecosystem (equipment/infrastructure, people, and process) for introducing digitally-enabled solutions for systematically identifying and reaching the zero-dose and missed communities: mobile application for learning, electronic immunisation registry of individual information, peer-learning and performance management.

GAVI INVESTMENT AREA 6 - **DEMAND GENERATION AND COMMUNITY ENGAGEMENT** (Strategic Result 2)

Guinea-Bissau prioritises the Gavi "Health Information Systems and Monitoring & Learning" investment area into the following main interventions:

- **Organise Community Theatre Sessions to raise awareness of community leaders, mothers, about the benefits of vaccines, especially at ceremonies and markets to reach children by CSOs.**
- **Organise two advocacy roundtables with key stakeholders and decision-makers to ensure social and political commitment to equitable immunisation at all levels.**
- **Introduce a financial and/or non-financial incentive system to get children vaccinated.**

Guinea-Bissau intends to use differentiated demand generation and community engagement strategies to effectively reach women, men and gender-diverse people. The interventions under the Gavi investment "Supply chain" will address gender-related barriers to vaccine enrolment/registration and follow-up, likewise increased partnership with CSOs to deliver immunisation services.

Demand generation is a vital and integral component of the national immunisation programmes in Guinea-Bissau. It aims to ensure that parents, caregivers, communities, and other key in-country stakeholders:

- **value** immunisation;
- **trust** the safety and efficacy of vaccines;
- have **confidence** in the quality and reliability of the services and the authorities providing them;
- have the necessary **information, capacity and motivation** to seek out immunisation and complete the schedule on time.

Demand-related barriers are one of the major reasons for zero-dose or under-immunised children. There is growing recognition of the role that demand-generation interventions can play in helping countries increase the coverage and equity of immunisation, as well as making progress towards the universal health coverage targets in the Sustainable Development Goals.

Under the EAF, Guinea Bissau intends to test and scale innovative CSO-led approaches in immunisation service delivery.

Objective 6.2 Design and implement social and behaviour change interventions

Activity 6.2.1 Organise Community Theatre Sessions to raise awareness among community leaders and mothers, about the benefits of vaccines, especially at ceremonies and markets to reach children by CSOs.

Targeted districts: All Prioritised Districts (SAB, CACHEU, TOMBALI, OIO, QUINARA and BIOMBO)

Targeted number of ZD children: 12,318

Description: The purpose of this activity is to intensify CSO-led efforts to address weak demand for immunisation and poor community linkage for Immunisation. The approach consists of the engagement of caregivers and communities on Vaccine Preventable Diseases & Immunization, using community theatre that showcases real stories. The content for the theatre will be developed with the communities, using a human-centred design approach. The community theatre sessions are intended to empower caregivers to seek and fully utilise immunisation services. The CSOs will engage caregivers and communities on Vaccine Preventable Diseases, Immunization and Social Determinants of Health. The community theatre sessions will showcase real stories. Communities will be engaged to take the lead in identifying some of the demand side challenges and barriers to demanding immunisation, such as AEFI, awareness of the routine immunisation schedule, awareness of the availability of sessions, and knowledge about Vaccine-Preventable Diseases. These topics then form the foundational issues around which the content of the drama and theatre performances will be co-created with the communities. Additionally, drama series are co-created with communities on income level and educational level of caregivers, and how these drive interactions with immunisation services.

The community theatre sessions will be performed in public places like markets, traditional meeting spaces, community dialogue settings, schools, and religious houses. The caregivers, traditional leaders, opinion formers, and influencers will be invited to watch and play. The sessions may be recorded, for potential dissemination in local theatres and on television.

This activity is to be implemented by 18 CSOs (03 per region/district) in the 6 prioritised districts. The plan is to have monthly community theatre sessions in 2024-2025.

Objective 6.4 Increase advocacy for social and political commitment as well as increased accountability for equitable immunisation at all levels

Activity 6.4.1 Organise two advocacy roundtables with key stakeholders and decision-makers to ensure social and political commitment to equitable immunisation at all levels.

Targeted districts: All Prioritised Districts (SAB, CACHEU, TOMBALI, OIO, QUINARA and BIOMBO)

Targeted number of ZD children: 12,318

Description: The objective of this activity is to influence key audiences and decision-makers on equitable immunisation and the importance of reaching the zero-dose, under-immunised and missed communities. The activity consists of organising roundtables in close collaboration with CSOs, CBOs, and FBOs. The SIVE will develop evidence-based advocacy roundtables twice a year in 2024 and 2025.

Objective 6.5 Strengthen partnerships with local and community actors to improve demand for immunisation

Activity 6.5.2 Recognise/reward the participation of community and religious representatives, teachers, traders in vaccination actions and performant health workers

Targeted districts: All Prioritised Districts (SAB, CACHEU, TOMBALI, OIO, QUINARA, and BIOMBO)

Targeted number of ZD children: 12,318

Description: The purpose of this activity is to stimulate and motivate the community representatives and staff in the systematic identification and reach of the zero-dose, under-immunised children and the missed communities. The activity consists of celebrating successful work performed by the community as well as immunisation staff. The community performance will be rewarded through an intrinsic reward system consisting of social recognition (such as public praise during ceremonies) and a form of validation. This will provide more inspiration to the rewarded individuals but likewise, this also could inspire his/her peers.

The activity will include quarterly ceremonies to be implemented in the 6 districts from 2023 to 2025.

Objective 6.5 Strengthen partnerships with local and community actors to improve demand for immunisation

Activity 6.5.3 Introduce a financial and/or non-financial incentive system to get children vaccinated.

Targeted districts: Cacheu, Tombali, Oio

Targeted number of ZD children: 6 120

Description: The purpose of this activity is to accelerate the reach of zero-dose and under-immunised children with extrinsic rewards which include financial and non-financial incentive systems. A clear SOP and performance criteria for financial and non-financial incentives will be defined and approved.

The plan is to test the quarterly incentives for up to five health workers and community champions in three districts.

GAVI INVESTMENT AREA 7 - **GOVERNANCE, POLICY, STRATEGIC PLANNING, AND PROGRAMME MANAGEMENT** (Strategic Result 2)

Guinea-Bissau prioritises the Gavi "Health Information Systems and Monitoring & Learning" investment area into the following main interventions:

- **Develop a strategy to overcome gender-related obstacles in immunisation.**

Guinea-Bissau intends to use differentiated demand generation and community engagement strategies to effectively reach women, men, and gender-diverse people. The interventions under the Gavi investment "Governance, policy, strategic planning, and programme management" will address gender-related barriers to vaccine enrolment/registration and follow-up, likewise increased partnerships with CSOs to deliver immunisation services.

Objective 7.3 Assure gender equality, inclusion and protection considerations are addressed in management structures, immunisation policies, guidelines, practices and accountability measures

Activity 7.3.1 Develop a strategy to overcome gender-related obstacles in immunisation.

Targeted districts: All Prioritised Districts

Targeted number of ZD children: 12,318

Description: This activity intends to ensure the immunisation programme will include a gender equality strategy to address the gender-related obstacles to reaching zero-dose and under-immunised children in Guinea Bissau. The solutions and strategy to address the many gender-related barriers will be prioritised:

- Mother has a lower status in the household and community which limit their capacity to act on their own.
- Women are acutely affected by physical and time barriers to accessing immunisation services.
- Women lacking health literacy can have a limited understanding of immunisation.

- Women's experience of quality of service may refrain them from using health services: responsiveness of services, services available, provider attitude, skills and behaviours, and availability of female providers.

This activity will be conducted in the first year of the EAF support.

GAVI INVESTMENT AREA 9 - **GRANT MANAGEMENT** (Strategic Result 2)

Guinea-Bissau prioritises the Gavi "Health Information Systems and Monitoring & Learning" investment area into the following main interventions:

- **Manage and coordinate Gavi EAF supported activities, PMU cost and coordination of partners.**

GAVI INVESTMENT AREA 9 - Grant Management and Indirect Costs (Strategic Result 4)

Objective 9.1 Gavi grant management costs

Activity 9.1.1 Manage and coordinate Gavi EAF supported activities, PMU cost and coordination of partners.

Targeted districts: All Prioritised Districts

Targeted number of ZD children: 12,318

Description: This activity intends to strengthen the capacity of governance/technical bodies for planning, coordination and tracking progress at all levels, particularly for reaching zero-dose children. This activity consists of a series of PMU meetings and consultations led by the SIVE and in close collaboration with the partners.

2.3.4. Partners for implementing the ZD strategy

For the implementation of the ZD strategy, Guinea-Bissau will collaborate with communities, CSOs, UN agencies, private sector, academics, and local partners, to support activities targeting ZD children and integrate these activities to strengthen the total health system.

Community representatives are one of the major change agents, parents, caregivers, and traditional leaders will co-design, monitor and evaluate the annual integrated micro-plans at the local level. They will also participate in immunisation activities as health community workers, immunisation champions, and ambassadors who identify and reach the ZD communities, promote immunisation benefits and share successful experiences in community theatre sessions. They also will be empowered for immunisation demand and accountability.

CSOs, CBOs, FBOs They will play a vital role in involving communities in rebuilding trust and demand, providing services where there are gaps in government action and overcoming gender barriers.

UN agencies, particularly UNICEF and WHO, will play a core role in supporting Guinea-Bissau to achieve immunisation purposes for children. UNICEF will provide technical support for the strengthening of the EVM, improvement of routine immunisation for children, data quality management, and decision-making process. On the other hand, UNICEF and the Red Cross of Guinea-Bissau assist in technical aspects of implementing Urban Strategy including immunisation content.

WHO will support the country to develop and implement the National Immunization Strategy (NIS) and content related to ZD children. They will also provide technical assistance to support training on the DHIS2 platform, and monitoring and evaluation of the data quality improvement plan. The vaccination coverage survey will be conducted by WHO in collaboration with Solina and will be a very important base for determining the strategy for reaching ZD children.

Solina - A consulting group will participate in many steps and processes (including enhancing human resources, leadership, management, and governance) to provide technical support to both identifying and reaching ZD children and the Health system strengthening to the EPI team in Guinea-Bissau.

The University of Oslo, in the effort of enhancing the health care system, can support transitioning of technology (DHIS2 for EPI implementation). Besides, they can also assist planning, configuration, and management of immunisation registries. With COVID-19 surveillance, the University of Oslo will support Guinea-Bissau in planning, configuration, and management of the process.

Health workers from the public and private sectors are also key actors in the changes and transformations to operate in the country: vaccinators, neurologists, specialists, nurses, etc. Their commitment and motivation are key to the success of the strategy

Gavi Secretariat will be instrumental in the EAF and the possible Gavi levers. WHO and UNICEF as core partners will support the implementation of the activities coordinated with the other Gavi-supported interventions, other donors such as the World Bank, and partners beyond the health sector.

2.4. Monitoring, Measurement, & Evaluation

In close collaboration with stakeholders and partners, a list of key performance indexes and learning questions will be answered. The SIVE team will seek to generate answers to barriers (diagnostic), progress in designing and implementing interventions aligned with IRMMA, the effectiveness of IRMMA-aligned interventions, and generate information to inform sustainability and scale. Some indicators and variables will be discussed:

- Supply and demand-related barriers (diagnostic).
- Progress in designing and implementing interventions aligned with the IRMMA framework.
- Effectiveness of IRMMA-aligned interventions.
- Informing sustainability and scale.
- Details of the number, proportion, and location of zero-dose children.
- Known barriers.
- Effectiveness and barriers of interventions including monitoring and data use.
- Gaps and learning priorities.
- Improved outcome measures of the number and proportion of zero-dose children.
- Number and proportion of partially-immunised and fully-immunised children.
- Key demand and gender measures and cost data.
- Digitalisation of health interventions and impact to reduce zero-dose children.
- Impact of a new learning and performance management system.

Six learning questions will be reviewed progressively and answered by 2025:

- Are specific approaches designed to reach zero-dose children and missed communities working, what worked well, what did not work as well and why?
- What are effective ways to engage with other partners to reach the marginalised, missed communities and zero-dose children?
- What are the key barriers, and enabling factors, including gender and demand-related, to close immunity gaps?
- What are the key enablers or bottlenecks to rapid scale-up/update of new and underused vaccines? Specifically, to increase the proportion of Fully Immunised Children (FIC)?
- Are the approaches to addressing gender-related barriers effective to increase immunisation coverage, why or why not?
- How have approaches influenced vaccine hesitancy, vaccine uptake, and vaccine choices? (Incl. to address gender-related barriers, dropouts, provision of product information, C&E).

2.5. Ensuring political will

Guinea-Bissau has in recent years registered significant progress towards peacebuilding, democratisation, and institutional reforms. Building upon partnerships with its development stakeholders, especially the United Nations, the country has firmly positioned itself to capitalise on opportunities from recent transitional events and processes. Its aim is to reap significant developmental benefits, consolidate them and lay a foundation to jump-start the economy and build back better. The Government plans to invest heavily in health, education, and infrastructure[13].

The national, subnational and community leaders, including civil society and development partners in and beyond immunisation will be committed to prioritise zero-dose and missed communities. Capacity building to address gender-related and other barriers to immunisation will be built across the different change agents: health workers, CSOs/CBOs/FBOs, traditional leaders.

The insufficient investment in immunisation requires the SIVE department to conduct evidence-based activities to ensure commitments are reflected in the policies, planning, budgets, and coordination. An advocacy strategy will be

[13] UNITED NATIONS SUSTAINABLE DEVELOPMENT COOPERATION FRAMEWORK FOR GUINEA-BISSAU 2022–2026

developed with the support of stakeholders and partners to secure commitments in immunisation and the priority to reach zero-dose and under-immunised children

UNICEF is the core partner with very strong expertise and experience in communication and advocacy for raising the awareness on the critical importance of immunisation to save life and the absolute necessity to invest in immunisation and vaccines. Reliable information and evidence will be translated into advocacy materials and key messages to constantly advocate towards the decision makers, opinion-formers and influencers. A profiling of the target audience will be conducted as part of the advocacy strategy development.

Guinea-Bissau will build new partnerships with organisations that understand and reflect the views of missed communities. They will create links between those communities and immunisation services.

Part 3 – Prioritisation of interventions: process

The prioritisation of interventions was carried out through a process including the identification of ZD children (situation analysis/IRMMA analysis map), the prioritisation of interventions made on the basis of the analysis of the challenges and their root cause (ideation sessions), and identification of complementary supports.

3.1. Conducting the rapid situational analysis

The process includes several steps, the first being the creation of the Guinea-Bissau Zero-Dose Group. The latter is made up of representatives of the Ministry of Health, WHO, and UNICEF. The whole process was led by the ZD Guinea-Bissau Group, with technical support from GaneshAID. The diagram below summarises the different steps:

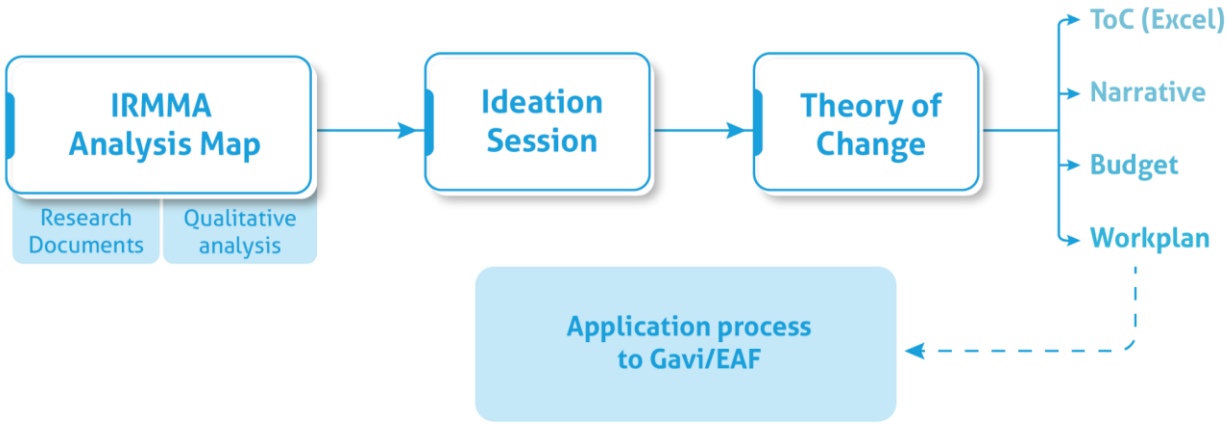


Figure 13: *Process of situation analysis*

The second step was to establish the IRMMA analysis card through the documentary review including the analysis of secondary data and the reunification of all data sources/references. All documents are organised and easily accessible to all members of the Zero-Dose Group. Answers have been provided to the questions “How much”, “who”, “where” and “why”. Analysis work was shared with disconnected remote sessions and virtual work sessions.

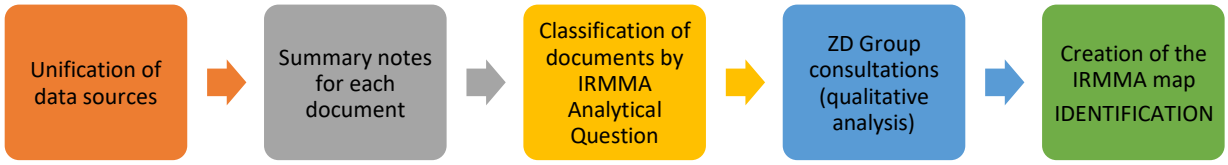


Figure 14: *Methodology for the documentary review and qualitative analysis*

Table 20: *List of shared documents*

Category	Title	Date	Institution / author
Investigations	Inquérito aos Indicadores Múltiplos 2018-2019	2019	National Institute of Statistics
	ESTUDIO SOBRE BEHAVIOR NO ÂMBITO DA VACINAÇÃO (KAP)	2018	UNICEF
	Immunization Equity Analysis in Guinea-Bissau, August 2018	2018	WHO-UNICEF
	Evaluation of Effective Vaccine Management in Guinea-Bissau From March 25 to April 30, 2019	2019	WHO-UNICEF-Gavi
	Immunisation Equity Analysis in Guinea-Bissau, August 2018	2018	WHO-UNICEF
	DEMOGRAPHIC PROJECTIONS IN Guinea-Bissau 2009 - 2030	2009	National Institute of Statistics
Statistic data	The WHO/UNICEF Estimates of National Immunisation Coverage (WUENIC) 2020	2020	WHO-UNICEF
	Analyze dos Dados da Vacinação de Rotina 2021 SIVE Guinea-Bissau	2022	EVIS
	Vaccination coverage	2022	Bandim Health Project (BHP)
Articles	Disregarding the restrictive via-opening policy for BCG vaccine in Guinea-Bissau: impact and cost-effectiveness for tuberculosis mortality and all-cause mortality in children aged 0–4 years	2021	Bandim Health Project (BHP)
	Household costs of seeking BCG vaccination in rural Guinea-Bissau	2019	Bandim Health Project (BHP)
	BCG coverage and barriers to BCG vaccination in Guinea-Bissau: an observational study	2014	Bandim Health Project (BHP)
	Household costs of seeking BCG vaccination in rural Guinea-Bissau	2019	Bandim Health Project (BHP)

3.2. Prioritisation of interventions

During the ideation phase, many interventions have been identified. However, to ensure, the key activities will be prioritised, we have considered multiple criteria:

1. New approaches and innovations to address identified key obstacles and root causes.
2. Feasibility of the innovative activities within three years of implementation.
3. Activities should not be a duplication of existing funded activities (HSS, CCEOP, TCA, etc.)
4. Activities eligibility under the EAF grant as per the Gavi budget eligibility guidelines.
5. The EAF budget ceiling (USD 1 million).

Several sessions were facilitated to ensure prioritisation of interventions aligned with the multiple criteria. Then with consideration of the budget, different strategies were implemented to stay within the EAF budget envelope/

- Removing or reallocating an activity to other sources of funding.
- Reducing the duration of the activity implementation.
- Reducing the scale of the activity in terms of number of districts/regions.
- Decreasing the scope of the activity (removing some sub-activities.

The 6 prioritised districts with the highest numbers of ZD represent 97% of the total districts in Guinea-Bissau and with the EAF support, Guinea-Bissau will reach 50% of ZD children nationwide by 2025.

The prioritised interventions as reflected in the theory of change include the following expected changes:

- gender considerations in the planning and implementation of immunisation services.
- partnerships with the CSOs and private sector.
- Improving the technical and managerial capacity of healthcare workers to plan, implement and monitor immunisation services.
- Ensure the immunisation health workforce is regularly supported by performance management systems, including supportive supervision and continuous professional development.
- Ensure timely, fit-for-purpose information is available at all levels of the system, and is used regularly and systematically to improve programmatic reach and performance.
- Design and implement social and behaviour change interventions.
- Manage the activities, coordinate with panthers and monitor the use of the EAF grants.

3.3. Additional support

Additional support (both funding and operational) currently exists and is available to the MISAP from partners (WHO, UNICEF), and other donors:

For example, the World Bank supports the Strengthening of Maternal and Child Health Service Delivery Project for Guinea-Bissau[14]. The purpose is to improve coverage of essential maternal and child health services.

Also, The Global Fund (TGF) currently has two core grants active in Guinea-Bissau, with funding totalling up to €51 million allocated for 2021-2023. The investments aim to strengthen the country's health systems and extend hard-won progress in the fight against HIV, tuberculosis (TB) and malaria. TGF provides investments in community systems, laboratory networks, information systems, procurement and supply chain management, and monitoring and evaluation.

A mapping of partners, CSOs and donors could be conducted for better understanding of the opportunities for additional support in immunisation in Guinea Bissau.

[14] https://projects.worldbank.org/en/projects-operations/project-detail/P163954

Annexes

Annex 1 - Synthesis of the strengths and weaknesses of the Guinea-Bissau EPI

Table 1: *Summary of the strengths and weaknesses of the Guinea-Bissau EPI*

Sources: Equity Analysis in Immunization in Guinea-Bissau, 2018; Evaluation report of the impact of COVID-19 at SIVE in Guinea-Bissau, 2021; Evaluation of Effective Vaccine Management in Guinea-Bissau.

EPI areas	Forces	Weaknesses
Immunisation service delivery	• Reinforcement of Health Technicians in the various Health Structures and Central Level • Guinea-Bissau has placed at least one health provider in each health area • Availability of Facilitators and service providers	• Low coverage • Lack of training of technicians recently placed in the field of effective vaccine management • Insufficient and low-quality staff • Vaccinations in the distant areas (between 5 and 15 km) are insufficient, accentuated by the frequent damage to rolling stock.
Vaccine supply and quality	• The vaccine arrival reports (VAR) are well prepared and sent to UNICEF on time and with the related documents.	• The absence of a continuous temperature recording system with an alarm system and the option of an autodialled.
Logistics, Cold chain, Injection safety, Means of transport	• Installation of 112 refrigerators	• 90% of stock-outs in Guinea-Bissau are related to traditional vaccines. • Syringe receipt forms are not used to document the receipt of these consumables. • The operational level team does not know how to control thermostats and refrigerators. • Lack of training on work safety for agents • Absence of qualified and specialised refrigeration personnel to carry out preventive maintenance and monitoring of curative maintenance, which will be provided by a contracted private supplier
Epidemiological surveillance	• Periodic meetings with data production, especially during the COVID-19 pandemic. • Holding of monitoring meetings • Archiving quality	• Lack of a mechanism for tracking down EPI irregulars, insufficient reporting of vaccinations in the registers, and poor planning are a brake on the use of vaccination services.
Social mobilisation	• Outreach system to encourage community members to access immunisation services • Knowledge of nomadic and refugee populations in each district	• Lack of training and awareness of mothers, community and religious leaders, CHWs, neighbourhood associations, and community radio regarding vaccination. • The development of micro-plans is not systematised and, where appropriate, does not involve the community.

EPI areas	Forces	Weaknesses
Surveillance		• Lack of oversight and data quality control
Funding		• Unavailability of the Fund for the purchase of vaccines, realisation of advanced and mobile strategies. • Non-execution of the structured incentive plan for vaccine employees provided for in the PAV.
Coordination / Management	• The holding of monthly meetings makes it possible to evaluate, analyse the data, correct, follow up and evaluate the quality of the data and to acquire new knowledge,	• The non-existence of the National Regulatory Agency. • Absence of standard operating procedure (SOP) or memorandum of understanding (MOU) for customs procedures • Insufficient planning with low capacity of actors in micro-planning
Capacity development	• New technician hires	• Absence of mobile vaccination teams

Annex 2 - Synthesis of the Synthesis of IRMMA analysis card

GB_IRMMA Card Synthesis .pptx

Annex 3 - EVM Assessment Report

GUB_EVM_Rapport GEV_2019_25mai201

Annex 4 – Updated Improvement Plan

EVALUATION DE NIVEAU DE REALISA

Annex 5 - IRMMA CARD

Portugal Version

Mapa de analise IRMMA em PT GB

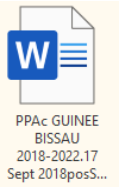
English Version

IRMMA Analyse card - EN

Annex 6 – Ideation Report

Ideation report

Annex 7 - National immunisation strategy or equivalent



Annex 8 - Latest EPI review

Annex 9 – Implementation of the Urban Strategy

3. Estrategia Urbana Gavi 2022.pı