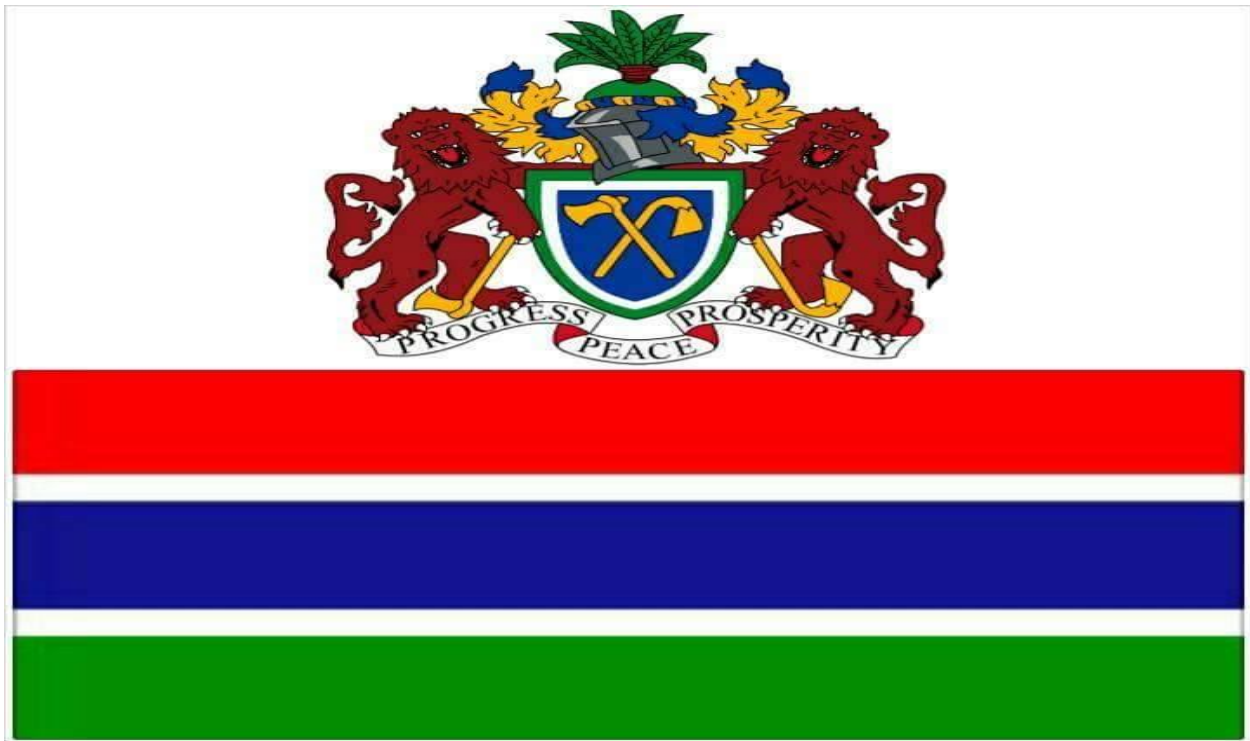


**THE REPUBLIC OF THE GAMBIA
NATIONAL DEPLOYMENT AND VACCINATION
PLAN FOR COVID-19 VACCINES**



MINISTRY OF HEALTH

EXPANDED PROGRAMME ON IMMUNISATION

JANUARY-FEBRUARY 2021

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Acronyms

CBOs	Community Based Organizations
CCEOP	Cold chain Equipment Optimization Platform
DHIS2	District Health Information Software 2
GBoS	Gambia Bureau of Statistics
GDP	Gross Domestic Product
GRCS	Gambia Red Cross Society
HePDO	Health Promotion and Development Organization
ICC	Inter-agency Coordinating Committee
MCA	Medicine Control Agency
MCNHRP	Maternal and Child Nutrition and Health Results Project
NITAG	National Immunization Technical Advisory Groups
MoH	Ministry of Health
NDMA	National Disaster Management Agency
NHEC	National Health Emergency Committee
NGO	Non -Governmental Organization
NPHL	National Public Health Laboratories
POEs	Points of Entry
PPEs	Personal Protective Equipment
RCCE	Risk Communication and Community Engagement
RCH	Reproductive and Child Health
RFH	Riders For Health
RHDs	Regional Health Directorate
RMNCAH	Reproductive Maternal Neonatal Child and Adolescent Health
TAC	Technical Advisory Committee
WAHO	West African Health Organization

Executive summary

The Gambia registered its first COVID-19 case on March 17, 2020 and as of 31st January 2021, 4109 cases have been confirmed with 131 deaths. The initial confirmed COVID-19 cases were few and were mainly imported cases (25 confirmed cases during March to May 2020) but subsequently The Gambia experienced local transmission with an average of 100 confirmed COVID-19 cases a day between July and August 2020. There has been a sharp decline in October 2020 with an average of 2 cases per day between October 1, 2020 and November 30, 2020. As of 31st January 2021, there is an upsurge of total number of cases recorded signifying the second wave of the pandemic as it is being seen in other parts of the world.

The global pandemic has already caused the loss of hundreds of thousands of lives and disrupted the lives of billions more. As well as reducing the tragic loss of life and helping to get the pandemic under control, introduction of a vaccine will prevent the losses in both global and national economies.

With the availability of different vaccines the aim of this plan is to develop strategies to protect the health status and economic livelihoods of the population of The Gambia, by ensuring affordable and equitable access to COVID-19 vaccine to priority groups. Given the unprecedented pace of vaccine development, and the need for both speed and prudence, the Gambia will consider as the threshold for eligibility for vaccine purchase either (i) approval by three Stringent Regulatory Authorities (SRA) in three regions or (ii) WHO prequalification or Emergency Use List (EUL) and approval by one SRA.

Looking at the youthful nature of the country, the country intends to vaccinate 1,389,110 people. The 20% COVAX facility allocation will be able to vaccinate all aged 41 years and above including priority groups summing up to 487,780 based on projected population (2013 census). The choice of the target to be vaccinated was spearheaded by NITAG since the vaccine at this time cannot suffice the entire population in the country. This is guided by risk level of the different targets intended to be vaccinated. Considering that the majority of COVID-19 cases and the population are in Western regions 1 and 2, vaccination will begin in these two regions and based on lessons learned, it will rolled out in the 5 regions using fixed and outreach/mobile strategy.

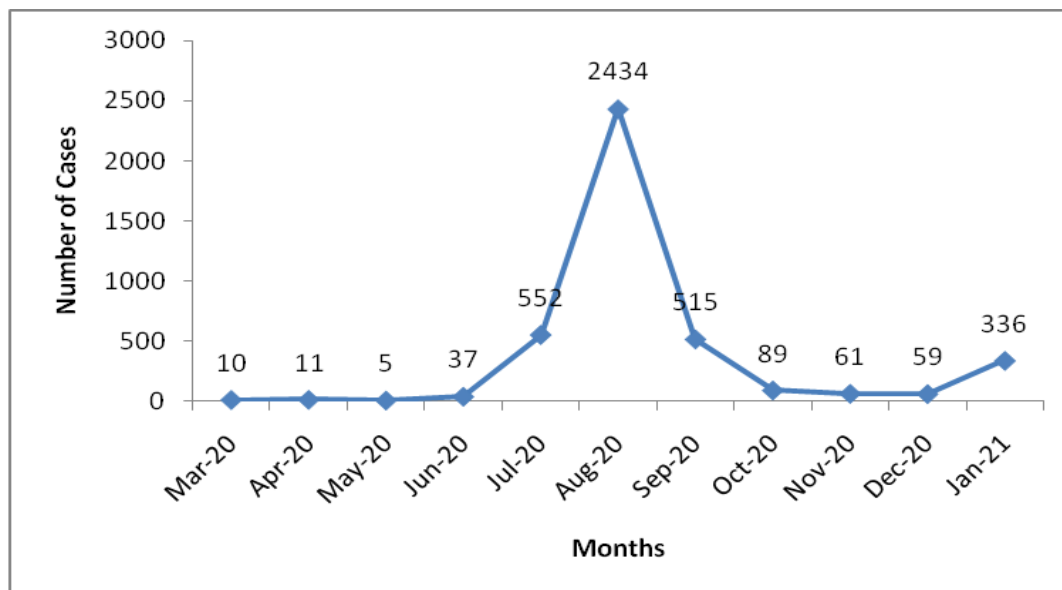
The EPI programme maintains a good cold chain network country wide. At national level, vaccines are stored in a walk-in cold room and Walk-in freezer room before transported to the regions on a quarterly basis using a refrigerated truck. The same mode of transport will be used for the COVID vaccine if the vaccine of choice can be stored between +2°C to +8°C.

Introduction

The Gambia has a population of about 2.4 million people, of which 51 percent are female, a total of 792,065 are children aged 0-15 years¹ and 58,055 are elderly aged 65 years and above(GBOS, 2013). The GDP per capita income is US\$540 and almost half the population (48.40 percent) is considered poor. The country is surrounded by the Republic of Senegal on all sides with the Atlantic Ocean to the West. Although The Gambia has nine designated official Points of Entry (PoEs) but there are wide areas which are porous making it challenging to curb imported Corona virus Disease 2019 (COVID-19) virus cases.

The Gambia registered its first COVID-19 case on March 17, 2020 and as of 31st January 2021, 4109 cases have been confirmed with 131 deaths. The initial confirmed COVID-19 cases were few and were mainly imported cases (25 confirmed cases during March to May 2020) but subsequently The Gambia experienced local transmission with an average of 100 confirmed COVID-19 cases a day between July and August 2020. There has been a sharp decline in October 2020 with an average of 2 cases per day between October 1, 2020 and November 30, 2020. However given that there were inadequate testing facilities across the country, it is likely that there were more cases and also deaths but remained unaccounted for as not seeking medical attention. As of 31st January 2021, there is an upsurge of total number of cases recorded signifying the second wave of the pandemic as it is being seen in other parts of the world. The distribution of cases by region and age are shown in figure 1, table 1 and table 2 respectively.

Fig. 1: Distribution of COVID-19 cases by month 17th March 2020 to 31st January, 2021



¹ The Pfizer-BioNTech COVID-19 vaccine is recommended for people aged 16 years and above

AGE	CRR	LRR	NBE	NBW	URR	WR1	WR2	2020 – Gambia
0 – 4	1	0	3	0	0	53	3	60
5 – 14	1	0	7	1	0	92	9	110
15 – 24	26	8	9	6	3	357	35	444
25 – 34	52	16	25	11	3	937	96	1140
35 – 44	36	10	15	6	0	600	59	726
45 – 54	13	8	7	3	3	402	52	488
55 – 64	14	8	5	3	0	255	22	307
65 – 74	6	1	0	2	0	137	10	156
75 – 84	4	1	0	0	0	62	2	69
85+	0	1		1	0	21	2	25
Total	153	53	71	33	9	2916	290	3525

Age Group	Male	Females	Total	% of cases among age groups
≤ 20	163	166	329	8.9
21 – 30	510	492	1002	27.1
31 – 40	621	370	991	26.8
41 – 50	402	218	620	16.8
51 – 60	240	140	380	10.3
61 – 70	148	87	235	6.4
> 70	90	53	143	3.9
Total	2174	1526	3700	100.0

In March 2020, the Ministry of Health worked closely with stakeholders to develop The Gambia COVID-19 Plan. The overall objective of the Plan is to protect the health status and economic livelihoods of the population of The Gambia, by enhancing national capacities to prevent COVID-19 exposure. The components are:

- a. Strengthening coordination at the national, regional and community levels;
- b. Intensifying active epidemiology and laboratory surveillance;
- c. Prompt case detection, management and effective infection prevention and control;
- d. Risk communication, social mobilization and community engagement including de-stigmatisation;
- e. Psychosocial support to the affected and non-affected’
- f. Security and safety issues including establishing effective system for logistics management and allocation.

The multi-sectoral National Health Emergency Committee (NHEC) has responsibility for overall coordination of the implementation and monitoring of the COVID-19 Plan. The NHEC is chaired by the Honourable Minister of Health and co-chaired by the World Health Organization (WHO) Country Representative, and its members comprise representatives of United Nations (UN) agencies, Medical Research Council, line ministries, non-governmental organizations (NGOs), National Disaster Management Agency (NDMA), the Gambia Red Cross Society (GRCS), The Gambia Medical Research Council Unit, World Bank, and others. The six technical committees that report to the NHEC are: a) coordination; b) epidemiology and laboratory surveillance; c) case management; d) Risk communication and Community Engagement (RCCE); e) psychosocial support; and f) logistics and safety. The NHEC meets every third Monday, a strategic coordination group meets on the Mondays when there are no NHEC meeting, and a technical working group meets every Thursday.

The Government's COVID-19 response efforts were initially patchy but have improved over time. There was continuous community engagement as well as strengthening of surveillance at the Points of Entry and health facilities to ensure timely detection and response to possible COVID-19 exposure. In March 2020, there was no public health laboratory for COVID-19 testing and Medical Research Council (MRC) was the only testing site but currently the National Public Health Laboratories are conducting most COVID-19 tests in the country. Similarly, in March there was no public health facility adequately equipped to treat COVID-19 cases. As such the MRC clinical Services in the country was used to test and treat patients. The Sanatorium in Banjul and the Ndemban clinic were later equipped to serve as COVID-19 treatment center.

Rationale for COVID-19 vaccine

The global pandemic has already caused the loss of hundreds of thousands of lives and disrupted the lives of billions more worldwide. As well as reducing the tragic loss of life and helping to get the pandemic under control, introduction of a vaccine will prevent the losses in both global and national economies. Global equitable access to a vaccine, particularly protecting health care workers and those most-at-risk is the only way to mitigate the public health and economic impact of the pandemic. With the high expectation of availability of COVID-19 vaccine, which would inevitably generate high demand, it is prudent for developing countries like the Gambia to adequately prepare for the introduction of the vaccine.

The United Kingdom and United States of American along with other High-Income countries started the use of the Pfizer-BioNTech COVID-19 vaccine in December 2020 and global production capacity is being ramped while other large-scale phase-3 clinical trials are underway (Table 3). COVID-19 vaccination, along with improved diagnostics and therapeutics, is essential to protecting lives and enabling the world to reopen safely. The global economy will not recover fully until people feel they can live, socialize, work, and travel with confidence. Given the centrality of limiting the spread of COVID-19 to both health and economic recovery, providing

access to COVID-19 vaccines will be critical to accelerate economic and social recovery in the Gambia.

Table 3: Available vaccines and approval status

Vaccine	VCI	Approval status	Efficacy (percent)	Price per dose (US\$)
Pfizer-BioNTech COVID-19 vaccine	mRNA-based	UK, Bahrain, Canada, Mexico, US, Singapore, Oman, Saudi Arabia, Kuwait	95	TBD
Moderna's COVID-19 vaccine	mRNA-based	US	94.1	TBD
AstraZeneca's COVID-19 vaccine	Non-replicating vector-based	Phase 3 trial		TBD
Janssen's COVID-19 vaccine	Non-replicating vector-based	Phase 3 trial		TBD
Novavax	Nnaoparticle-based			TBD

Aim: To protect the health and economic livelihoods of the population of The Gambia, by ensuring affordable and equitable access to COVID-19 vaccine to priority groups.

Specific Objectives

- To develop and implement a national COVID-19 vaccine purchase and deployment plan
- To augment the existing EPI structure to deliver the COVID-19 vaccine to priority population.
- To reduce the COVID-19 transmission rate in the community and create herd immunity by December 31, 2021
- To implement a national risk-communication and community engagement plan for COVID 19 vaccination

The National Expanded Programme On Immunization

The Expanded Programme on Immunization (EPI) is one of the frontline public health intervention programmes under the Directorate of Health Services within the Ministry of Health (MoH). Immunization services are provided to the communities through an integrated Reproductive Maternal Neonatal Child and Adolescent Health (RMNCAH) clinics monitored and supervised by the Regional Health Directorates. This is one of the high impact child survival and development programmes of the Ministry of Health. The EPI programme started in the Gambia in May 1979 issuing BCG, OPV, DPT, Measles and Yellow fever vaccines, with the

ultimate goal of reducing childhood morbidity and mortality due to vaccine-preventable diseases. The primary vaccination target age groups are children aged less than five years, adolescent girls (9-14 years) and women of childbearing age (15-49 years). Since its inception, services have been integrated into the (RMNCAH) and are delivered through static and outreach strategies. To increase access to immunization services, the Ministry of health's effort is complemented by a host of NGOs (local and international specifically health-oriented) and other private clinics. The EPI has made steady progress in implementing and attaining global initiatives such as Polio Eradication, Maternal & Neonatal Tetanus (MNT) and Measles Elimination as well as Reaching Every District (RED)/Reaching Every Child strategy as envisioned in the WHO AFRO Strategic Plan.

The programme has been introducing new and underused vaccines into the routine services. Among the new vaccines introduced include hepatitis B (1990), Haemophilus influenza type b (1997), Pneumococcal (2009), Measles second dose (2012), Rota-virus (2013), IPV (2015), switched to Measles-Rubella (2017) MenAfrivac and HPV (2019). The same existing programme structure would put into context to vaccinate against COVID 19.

Lessons Learned From Previous Vaccine Introductions and Pandemics

Experiences or lessons learnt from previous vaccine introductions and H1N1 pandemic will serve as good resources for the effective preparation, planning and implementation of the COVID 19 vaccination. Some of the lessons learnt include the following

Lessons learnt in previous vaccine introductions	Action points for upcoming COVID 19 vaccination
The local authorities such as alkalooos, chairmen/mayors, Technical advisory committees had been good and dependable partners in community sensitization, mobilization and participation in past vaccine introductions especially during the H1N1 vaccination in August 2010 to address vaccine hesitant groups/individuals.	Such structures will also be used during the COVID 19 vaccination
The national assembly members and Area councilors have been seen to be keenly participating in immunisation mobilisation efforts for their respective constituencies and wards.	This will be pursued to harness political support and maximum participation of their communities in COVID 19 vaccination
Early preparation and planning lead to better and effective vaccine introduction.	This will be sustained as preparatory activities will be conducted. The EPI and partners will monitor national and district level preparation of the COVID 19 vaccination.

Effective waste management system prevents backlog of sharp boxes at facility level and communities.	During the vaccination, district and regional supervisors will be collecting and transporting filled safety boxes to incineration sites. There will be an incinerator attendant to incinerate all safety boxes brought to the site.
Timely availability of logistics for the campaign is important to the success of any vaccine introduction	There will be a logistics team at national level that will be responsible of timely distribution of materials. At regional level, there will be a logistics officer in each region and will be supported by the EPI Regional Operations Officers to manage and distribute logistics
The availability of technical and financial support from partners is crucial in ensuring quality COVID 19 vaccine introduction.	The traditional EPI partners will be utilized for support and financial gaps identified. They will also support in monitoring and supervision during the COVID 19 vaccine introduction.
Proper transport arrangement with Riders for Health (RFH) has been helpful in successful vaccinations	The existing transport system would be used during the COVID 19 vaccination.

Regulatory Preparedness

National Regulatory Agency

The Gambia has established a National Regulatory Authority (NRA) called Medicines Control Agency (MCA) mandated to regulate the quality, safety and efficacy of medicines (including vaccines) and related products. They are responsible for product registration and marketing authorization hence certify and license vaccines and pharmaceuticals. The MCA would require documentation from the manufacturers before any new vaccine is shipped into the country. The process of licensure will include a dossier from the manufacturer to the WHO country office. This will then be sent to the national regulatory authority for review and verification for the final licensing. Since it's an emergency situation, efforts would be done to expedite the registration process by the MCA. Given the unprecedented pace of vaccine development, and the need for both speed and prudence, The Gambia will consider as the threshold for eligibility for vaccine purchase either (i) approved and being used by three Stringent Regulatory Authorities (SRAs)² in

²The following is the list of the countries whose National Regulatory Authorities are designated as SRAs by WHO: Australia, Austria, Belgium, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom, and United States of America.

three regions or (ii) WHO prequalification or Emergency Use List (EUL) and approval by one SRA and being used in their region. Further, The Gambia Medicines Control Agency, which regulates all vaccines and medicines in The Gambia will be responsible for approval of COVID-19 vaccines for importation and use in the country.

National Customs and Regulations

Currently vaccines and other EPI supplies are procured through UNICEF and the same mechanism will continue. The government co-financing for other vaccines will also be channeled through UNICEF. Vaccines are airfreight while injection materials are transported by sea and received at the seaports. All importation of medicines including vaccines must be processed and authorized by the MCA before entry into The Gambia. The clearing agent of the MoH has an MoU with the customs department on clearing vaccines through the air and sea ports and other supplies for the MoH. The same process would be utilized in the procurement and clearing of the COVID 19 vaccine.

Planning and coordination of the vaccine introduction

Coordination and partnerships

Effective coordination for central and regional levels is critical to the successful implementation of quality vaccination programmes especially in the case of COVID 19 vaccine.

Vaccination programmes are coordinated at two levels, central and regional levels. Central level coordination is through the Inter-agency Coordinating Committee (ICC) which is chaired by the Honourable Minister of Health with representation from key government Ministries, UN agencies (WHO and UNICEF), bi-lateral agencies, NGOs such as Rotary International, Child Fund, The Gambia; The Gambia Red Cross Society. This body is tasked with the responsibility of coordinating and monitoring activities that are implemented both for supplementary immunization activities (SIAs) and routine through quarterly meetings. In addition, they are also responsible for coordinating and mobilizing resources for the National EPI. The same structure would be used in the implementation of the COVID-19 vaccination plan. The newly established National Immunization Technical Advisory Group (NITAG) would also help in evidence based technical decision making for the country. Given that COVID-19 vaccination is part of the overall MoH COVID-19 response, updates on the implementation of the COVID-19 vaccine plan will be provided at NHEC and strategic coordination meetings. The ICC will oversee the development of After Action Report with recommendations and lessons learned and share the findings with NHEC.

Regional coordination issues are spearheaded by the Regional Health Directorates (RHDs) through the Regional Technical Advisory Committees (TACs) chaired by the Regional

Governors. The TAC comprises of heads of government institutions, Non-Governmental Organizations (NGOs) and civil society organizations such as community media houses, and Community-based organisations (CBOs). There is strong partnership between the RHDs and the communities in terms of human resources in the form of volunteers, social mobilization for participation in SIAs and in any vaccine introduction. The same community support will be solicited in the COVID 19 vaccination.

Communication Task Force

In order to achieve quality Covid-19 vaccination, effective advocacy, social mobilization and communication need to be planned and implemented to get the support and participation of decision makers, individuals, families and communities.

Communication Task Force Committees already exist at both central and regional levels comprising of communication actors from the Government, civil society and district authorities. The communication taskforce would also work very closely with the Risk Communication and Community Engagement (RCCE) committee dealing with COVID19 to utilize the new platforms that might have been created or revitalized to support social mobilization activities and ensure national cohesion as there are clear linkages. The Communication Task Force is chaired by the Health Communication Programme Manager, while the Risk Communication and Community Engagement Committee is chaired by the Director of Health Promotion and Education at the Ministry of Health.

Advocacy and Social Mobilization

A process that helps brings together key stakeholders to raise awareness and increase demand for action. Social mobilization is a mechanism for strengthening community sense of ownership, participation and empowerment. The approach is used to mobilize communities or interest groups for action in a quest to address an issue that affects or concerns them. It empowers people and communities to chart out ways and means of addressing an issue on a sustainable basis in a spirit of self-reliance and determination, thus promoting ownership and sustainability.

Mobilizing support and securing the commitment of policy and key decision-makers at various levels with regard to an issue requires rigorous advocacy. Relevant policy and key decision makers in Government, NGO, and civil society and community will be engaged through different approaches including seminars; direct personal contact, including lobbying; workplace sessions; use of electronic and print media; production and dissemination of advocacy kits to solicit their support for immunization.

The conduct of effective social mobilization activities is crucial to the success of any vaccination. In this regard, series of activities will be conducted with a view to increase

community awareness. The National Communication Task Force and the Risk Communication and Community Engagement Committees in collaboration with the Regional Committees will spearhead all communication, social mobilization and community engagement activities.

Some of the social mobilization activities that will be conducted for the COVID-19 vaccination will include:

- Engagement and sensitization of communities using radio and TV, chiefs and opinion leaders about the vaccination
- Appropriate, reliable and consistent messages will be developed and pre-tested before producing communication support materials.
- A step-down orientation by all the chiefs and RHDs with support from the Multidisciplinary Facilitation Teams, village health services Community Health Nurses and Public Health Officers.
- Communication support materials such as banners, leaflets and T-shirts will be produced and distributed at all levels
- House-to-House sensitization campaign by the Red Cross, Community Health Workers, Village Support Groups, Traditional Communicators, Community Drama Group Members, Village Development Committee Members and other community volunteers
- Orientation of both print and electronic media on upcoming COVID-19 vaccination (Media briefing)
- Pre & post social mobilization meetings by the National Communication Task Force for social mobilization
- The use of immunization communication caravans for community-to-community mobilization and engagement
- Launching of the National COVID-19 immunization campaign at the national and regional levels

The communication task force would also anticipate rumours, misconceptions and misinformation before, during and after the vaccination. Therefore, effective and proactive strategies will be developed to address the situation. This will be done in the form of:

- Preparing appropriate media materials in advance to facilitate a rapid response to such negative claims
- Having a trained focal person in the media who responds to questions and reviews materials before publishing
- Using a credible spokesperson in the ministry/community to quell the rumours and reassure the community
- The existing WHATSAPP platform created by the Directorate of Health Promotion and Education for traditional communicators across the country will be used to share information on COVID-19 vaccination. The platform will allow voice messages on COVID-19 including the vaccine to be sent to the trained traditional communicators for onward circulation in their communities for wider coverage.

Logistic Task Force

Planning logistics is important to the success of any vaccination/campaign. Critical logistics includes cold chain equipment, vaccines and injection materials, vaccine carriers, safety boxes, transport, temperature monitoring devices and waste management/incinerators etc. The COVID-19 logistics and safety committee will support the EPI programmes in managing the vaccination logistics. The ongoing collaboration between the COVID-19 logistics and safety committee will be strengthened to meet the transportation needs of the vaccination campaign.

Pre-vaccination supervisory visits will be conducted by the logistics team to determine the level of preparedness at the regional levels starting two months before the vaccination exercise. Similar activities will be conducted by the regions at district level. Logistics would be distributed to the regions at least 3 weeks before the exercise. Post vaccination review meetings will be conducted to review the strengths and constraints realized during the vaccination as well as document best practices.

Resources and funding

COVID-19 Vaccine Financing Assessment

In October 2020, The Gambia carried out an assessment on the readiness of The Gambia to deploy the COVID-19 vaccine when it becomes available. It examined the planning and management, supply and distribution, program delivery, and support systems and infrastructure. A summary of the strengths and weaknesses of the country's readiness is shown in Box 1. An intense focus on expanding immunization capacity and building resilient and sustainable health systems (RSSH) to effectively implement a comprehensive COVID-19 vaccine deployment will be required.

Box 1. The Gambia COVID-19 Vaccine Readiness Assessment, October 2020

STRENGTHS

Table 4. Planning and Management

Vaccination objectives and targets

- Accountable body and leadership, such as the Expanded Program on Immunization (EPI) governance and management structure, exist and are functioning

Regulation and Standards

- Standard Operating Procedures for delivery of vaccines are developed
- A mechanism for certification of facilities is approved
- A mechanism for monitoring performance and service quality has been agreed upon

Performance management and monitoring & evaluation (M&E)

- A gap analysis of immunization delivery capacity has been conducted, and potential bottlenecks, capacity deficiencies and recommendations for improvement have been identified
- A feedback system for gathering information from facilities participating in vaccine delivery has been established
- Human resource capacity is in place for monitoring, evaluating and reporting on progress at the central level

2. Supply and Distribution

Logistics and cold chain

- A distribution strategy – from points-of-entry to the front-line, including transport, stocking and other components of the supply chain – has been developed and operationalized
- Systems and protocols for tracking and monitoring the distribution of vaccines and key supplies are in place through the existing GAVI Cold Chain Equipment Optimization Platform (CCEOP)
- Adequate human resources are available to support the distribution of vaccines and supplies to the frontlines

- An Effective Vaccine Management (EVM) assessment of the cold-chain system accounting for additional capacities required for the COVID-19 vaccine has been conducted
- Cold storage infrastructure is in place in all program participating facilities

3. Program Delivery

Point of delivery

- An electronic data management system (Stock Management Tool, Vaccine Visibility System, My Child Solution and DHIS2) to monitor progress and coverage exist
- Adequate and trained human resources, for example in safe injection practices, are available in all participating facilities

WEAKNESSES

Table 4. Planning and Management

Vaccination objectives and targets

- Program objectives are not defined and agreed to by key stakeholders
- Priority target populations have not been identified
- COVID-19 vaccine program costs (vaccine procurement and deployment) have not been developed

Regulation and Standards

- Adequate regulatory capacity are not in place for monitoring quality and safety of COVID-19 vaccines and related supplies in the supply chain
- Target populations have not been defined, identified, profiled and scheduled through micro-planning for vaccination
- An M&E framework for program roll-out has not been developed, including the specification of key indicators

2. Supply and Distribution

Vaccines, PPEs and other supplies

- A procurement plan and purchasing strategy for a COVID-19 vaccine has not been developed
- A procurement plan for ensuring adequate supply of PPE for frontline health care workers in the immunization Program has not been developed and operationalized

3. Program Delivery

Community engagement and advocacy

- A social mobilization and engagement strategy has not been developed to generate vaccine confidence and demand, including provisions for engaging with national and local media, non-governmental organizations, social platforms, and other engagement and advocacy modalities

Point of delivery

- Points of vaccine delivery, both static and outreach (e.g., health facilities, community centers, by appointments, house-to-house), have not been identified and do not sufficiently cover target

population areas

Vaccine safety surveillance

- Protocols for adapting surveillance systems for Vaccine Preventable Diseases and adverse events following immunization (AEFI) to conduct surveillance of events attributable to immunizations have not been developed and disseminated to surveillance facilities/sites

Target Population

Looking at the youthful nature of the country, the country intends to vaccinate 1,389,110 people. The 20% COVAX facility allocation will be able to vaccinate all aged 41 years and above including priority groups summing up to 487,780 based on projected population (2013 census).

The choice of the target to be vaccinated was spearheaded by NITAG since the vaccine at this time cannot suffice the entire population in the country. This is guided by risk level of the different targets intended to be vaccinated. The target groups will be prioritized and vaccinated depending on stock availability as shown in table 4 below.

Priority Population

The WHO Allocation Framework target for priority immunization proposes an initial proportional allocation to enable all countries to cover 20 percent of their population. In The Gambia, depending on vaccine availability, the initial priority population will cover health personnel, community workers (community birth companions, village health workers and social workers), older people aged 65 years and above, people with pre-existing conditions (co-morbidity) that places them at higher risk for death, such as diabetes, hypertension, cardiovascular disease, chronic respiratory disease, and obesity, teachers, workers at hotels, restaurants and bars, and security forces (Table 4). Subsequently, the rest of the population will be considered if there are balances after vaccinating the priority groups. It is envisaged that the support under the COVID-19 Vaccines Global Access Facility (COVAX Facility) will provide vaccine to cover about 20 percent of the population of 2.4 million (about 487,000) and the World Bank and other partners will finance the cost of additional vaccines to cover the remaining population (909,110) and the operational cost of vaccines deployment.

Table 4. Priority groups and sequencing of COVID-19 vaccination

Priority	Group*	Estimated number
1a	Health personnel	15,000
1b	People with pre-existing conditions (co-morbidity) that places them at higher risk for death, such as diabetes, hypertension, cardiovascular disease, chronic respiratory disease, and obesity (BMI>30)	300,000
1c	Community workers (community birth companions, village health workers and social workers)	2500
1d	Older people aged 65 years and above,	75,117
2a	Workers at hotels, restaurants and bars	10000
2b	Teachers	19,329
2c	Security forces	25000
3	Rest of the population living within the country age 41yrs and above	40,834
4	Population 18-40yrs (non priority group)	909,110
Total to be vaccination		1,389,110

*Some people may belong to more than 1 group and children aged 0-15 years are excluded

Although there remains considerable uncertainty about final prices of COVID-19 vaccines, it is hoped that manufacturers and development partners engaged in mobilizing COVID-19 vaccines for developing countries will offer low prices. The cost of different vaccine coverage scenarios can be estimated using initial market indications of vaccine prices.³ Based on cost estimates at US\$4 per dose in low- and lower-middle income countries and US\$6.5 in upper-middle income and high-income countries and incremental costs for deployment⁴estimated at US\$1 per dose, the estimated total vaccine dose plus delivery in low- and lower-middle income countries is US\$5, and US\$7.5 in upper-middle income and high-income countries. It is expected that a two-dose vaccine regimen may be required for most vaccines. Table 5 shows the estimated cost for The Gambia.

Table 5. Estimated total vaccine dose plus delivery cost for The Gambia

Gambia, The	Doses needed (million)	Total cost (US\$ million)
20% coverage	0.94	\$4.70
30% coverage	1.41	\$7.05
50% coverage	2.35	\$11.74
70% coverage	3.29	\$16.43

Assuming cost per dose and delivery of \$5 for low income countries

³One frontrunner vaccine is already priced at below US\$3 to US\$5 per dose in high-income countries. This vaccine candidate and another prominent one are both priced at up to US\$3 per dose in low-income countries. The manufacturer of another leading candidate has agreed to US\$10 per dose in the U.S. (for what is hoped to be a single-dose regimen); their price for developing country purchase is not yet confirmed. Vaccines using innovative technologies such as mRNA vaccines may cost \$20-40 per dose.

⁴Incremental deployment costs include expanded cold chain capacity, needles and syringes, training of vaccinators, additional vaccinators, registration and communication campaigns. In practice, deployment costs will vary over time, possibly with lower initial costs as the vaccine is provided first to health workers, who may be reached inexpensively, then rise until economies of scale and scope and other delivery efficiencies reduce delivery costs, before rising again for the last mile.

The Gambia has chosen to participate in COVID-19 Vaccines Advance Market Commitment (COVAX AMC) (an advance purchase mechanism) for COVID-19 vaccine purchase. The available options for COVID-19 vaccine purchase include: i) direct purchases by countries from vaccine manufacturers, either individually or jointly with other countries; ii) purchase of excess stocks from other countries that reserve excess doses; and/or iii) advance purchase mechanisms such as participating in COVAX. The World Bank participates in the COVAX Facility⁵, which is co-led by Gavi, the Coalition for Epidemic Preparedness Innovations (CEPI) and WHO. Its aim is to accelerate the development and manufacture of COVID-19 vaccines and to promote equitable access to COVID-19 vaccines. By negotiating prices on behalf of countries, providing upfront reservations and commitments to manufacturers through advance purchase agreements or advance purchase options, the COVAX Facility expedites the process of bringing vaccines to market at-scale. The facility invests in a diverse and actively managed portfolio of candidates, thereby maximizing the probability of success. International Development Association (IDA) resources would not be used to make at-risk advance payments. As such, no pre-payment of IDA funds is envisaged. Since The Gambia is eligible for the COVAX AMC, IDA resources could be used to finance copayments of vaccines once available that meet the Gambia eligibility requirements. The COVAX Facility is working with the Independent Allocation Validation Group (IAVG) and the Joint Allocation Taskforce (JAT) on a mechanism for allocating available vaccine doses to countries for use. Accordingly, The Gambia will know its allocation of fully subsidized donor-funded doses in 2021.

Given the above context, a phased and evidence-based approach to COVID-19 vaccination will be critical, with focus on the following stages.

- **The planning stages**, already underway in The Gambia, will need to continue throughout the vaccination campaign. Planning phase accomplishments to-date include developing a national COVID-19 vaccination plan including determining priority populations for vaccination based on risk of exposure and risk of morbidity and mortality and establishing national and sub-national coordination mechanisms.
- **The implementation stages** will begin when the first, initially limited, vaccine doses are allocated, and will focus on the logistics required to receive and administer vaccines to prioritized populations.
- **The adjustment/transition stages** will begin when larger amounts of vaccines are available to immunize all those who want to be vaccinated through more established service delivery approaches. It will focus on enhancing capacity of providers to deliver vaccines to meet increased demand.

⁵COVAX is co-led by Gavi, the Coalition for Epidemic Preparedness Innovations (CEPI) and WHO. Its aim is to accelerate the development and manufacture of COVID-19 vaccines, and to guarantee fair and equitable access for every country in the world.

Vaccination Strategy

Considering that the majority of COVID-19 cases and the population are in Western regions 1 and 2, vaccination will begin in these two regions and based on lessons learned, it will be rolled out in the 5 regions. COVID-19 vaccination will follow the prioritization and sequencing of groups noted in Table 4. Health facilities would set out to vaccinate the target groups in their respective catchment areas.

1. Fixed teams: Vaccination teams will be based at hospitals, major and minor health centers.
2. Mobile teams: Vaccination teams will go to remote communities and POEs as necessary.

Each team would have two vaccinators (trained health workers- Nurses and Public Health Officers) and two recorders, one of whom would be a nurse to monitor any possible AEFI. In addition each team there will be two canvassers to mobilize eligible target groups. The teams would be supervised by MOH regional staff.

Supply chain management and health care waste management

The EPI programme maintains a good cold chain network country wide. At national level, vaccines are stored in a walk-in cold room and Walk-in freezer room before transported to the regions on a quarterly basis using a refrigerated truck. The same mode of transport will be used for the COVID vaccine if the vaccine of choice would be stored between +2°C to +8°C.

Expansion of the national cold room has been completed with the installation of a new 40M3 cold room, providing additional 10,000 liters of net vaccine storage capacity at the national level.

There are regional vaccine stores in all the seven health regions that are equipped with refrigerators adequate to store the COVID 19 vaccines if the choice is to be stored between +2C to +8C. In addition, CRR is also equipped with a 10 M3 cold room to support the furthest region in vaccine storage. The biggest regions WR1 and WR2 are all recently equipped to store the vaccine needs for their respective regions if COVID vaccine s to be added to the cold chain.

The Gambia applied for the Gavi Cold Chain Equipment Optimization Platform (CCEOP) in 2017 following the cold chain inventory conducted in 2017 which reported that the majority of health facilities are equipped with RCW 50 solar refrigerators that have passed their 10-year lifespan and were obsolete. In addition to this, about 68 percent of total equipment in the country had reached the 10-year lifespan and needed to be replaced. There were also 19 Service Points, mainly private offering immunization services with no proper cold chain storage capacity. The CCEOP was approved in 2018 and an Operational Deployment Plan (ODP) was developed for Year 1. A Project Management Team (PMT) was instituted to oversee implementation of the CCEOP. Following the CCEOP procurement process, B-Medical was contracted for all the

CCEOP equipment and they identified SWEGAM (a local solar company) as their local agent responsible for all in-country activities.



Figure 2: A map of the Gambia showing locations of the newly installed Grade A CCE

Eighty new equipment have been procured and installed in the first year in 2019 (Table 7) and additional 34 equipment will be installed in the second year (2021) of the CCEOP. Installation of all the CCEOP Year 1 supported equipment have been completed with all public health facilities and some private health facilities have been equipped with Grade A Solar Direct Drive (SDD) fridge through the CCEOP (Figure 3). This has provided enough storage capacity to accommodate vaccines for both the routine and COVID 19 vaccine. TFW40 (Freezers) are also installed in key strategic health facilities that are far from the regional store for ice packs production during campaigns.

Table7: Distribution of CCEOP equipment by Region in the Gambia

Region	CCE type	Qty	CCE type	Qty	CCE type	Qty	CCE type	Qty	Total
CRR	TCW 15 SDD	6	TCW 40 SDD	1					7
LRR	TCW 15 SDD	7	TCW 40 SDD	1	TCW 3043 SDD	1			9
NRER	TCW 15 SDD	5	TCW 40 SDD	2	TCW 3043 SDD	1			8
NBWR	TCW 15 SDD	5	TCW 40 SDD	2	TCW 3043 SDD	5			12
URR	TCW 15 SDD	4	TCW 40 SDD	5			TFW	2	11
WHR1	TCW 15 SDD	9	TCW 40 SDD	6	TCW 2043 SDD	6	VLS064RF	2	23
WHR2	TCW 15 SDD	5	TCW 40 SDD	4	TCW 2043 SDD	1			10
	TOTAL	41		21		14		4	80

Preventive maintenance of the cold chain is a routine activity of the cold chain technicians and would be further carried out at least 3 weeks before the COVID vaccine introduction to check on the state of the cold chain equipment nationwide by the national EPI cold chain technicians. An

additional 31 new Grade A equipment are expected in country for the year 2 of the CCEOP grant.

If the COVAX facility chooses to supply vaccines to be stored at Negative temperatures, then the country would have to apply for the Gavi CCE for the COVID-19 vaccine introduction. Alternatively, domestic freezers would be procured to serve the same purpose. Given the above, the Gambia will prioritize purchase of the vaccines that do not require ultra-cold storage. For instance, the Pfizer-BioNTech COVID-19 vaccine which requires to be kept at -80°C and -60°C (-112°F to -76°F) may be challenging to deploy in the Gambia.

Waste Management

Waste generated such as sharps and syringes are initially disposed of in safety boxes at the injection site and are later transported to the incineration sites by the respective health facility staff and in some instances by the regional health teams during supervisory visits. There are incinerator attendants in each region for the management of the sharps under the supervision of the Regional Health Directorates.

There are incinerators built, one in each region, for the management of wastes. The MCHNRP has constructed some incinerators in some health facilities and these incinerators will be fully utilized for this campaign.

Due to the large volume of waste generated during vaccination, adequate and efficient waste disposal plan with clear assignment of responsibilities in waste management will be developed. Daily monitoring would be in place to ensure immediate corrective actions are taken. Safety boxes will be used for disposal of used syringes and needles during the vaccination. The estimation of the safety boxes will also enable the supervisors to estimate how many full boxes will require disposal and arrange for daily collection and disposal. Filled safety boxes will be collected from the health facilities to the regional level for management by incineration.

The MOH Environmental Health Department will work closely with the RHDs to ensure proper disposal of sharps and syringes and vaccine waste. Due to the large volume of waste that will be generated during vaccination, adequate and efficient waste disposal plan with clear assignment of responsibilities in waste management will be developed. Daily monitoring would be in place to ensure immediate corrective actions are taken. Safety boxes will be used for disposal of used syringes and needles during the vaccination. The estimation of the safety boxes will also enable the supervisors to estimate how many full boxes will require disposal and arrange for daily collection and disposal. Filled safety boxes will be collected from the health facilities to incineration sites or waste treatment centers.

The World Bank-financed COVID-19 project procured two state-of-the-art healthcare waste treatment machines, AMB Ecosteryl 250 (www.ecosteryl.com) and an AMB Ecosteryl 75 plus and the construction of two waste treatment centers (at Farato and Banjul) is expected to be completed by March 2021. In addition, the project procured four medical waste disposal trucks for the collection of healthcare waste from health facilities to the clinical waste treatment centers. These will cater for the vaccination waste disposal in the Western regions.

Additionally, the World Bank-financed Maternal and Child Nutrition and Health Results Project supported the construction of 35 incinerators in five other regions. These incinerators will be under maintenance to ensure they are fully functional for the vaccination.

Human resources management and training

Proper and timely planning are critical to the implementation of quality COVID-19 vaccination. It is therefore prudent for proper and timely micro-planning to be conducted at regional and district level, thereby emphasizing the bottom-up approach in micro-planning. The role of micro-planning is important in determining the target population, and the resources (human, financial and material) needed in the vaccination.

District level COVID 19 Micro-planning

The health facilities will conduct micro-planning at their respective regional health directorates and compile their plans to be validated and finalized at the central level. During the micro-planning sessions, which will be conducted two months before the campaign, the RHDs and the basic health facility staff will identify and quantify the target populations, vehicles, motor cycles, cold chain requirements, injection materials and safety boxes for the effective and efficient implementation of the vaccination. During this level of the micro-planning the following are discussed and planned for:

Target Population – The determination of the target population is important to the entire micro planning exercise given the fact that it is the basis for all other estimates.

Supplies – The quantities of vaccines, injection materials, and other supplies will be calculated based on the target populations and acceptable wastage figures.

Personnel – The guideline used during the micro planning exercise will help to estimate the different types and numbers of personnel (central team leaders, core facilitators, regional supervisors, district supervisors, trained staff and volunteers) required. Gaps identified during the micro-planning will be addressed using the health training institutions.

Cold Chain –Estimates will be calculated based on the number of cold boxes and vaccine carriers, which will be compared with the current available stock. In addition,

the availability of refrigerators, deep freezers, ice packs and stand-by generators will also be assessed.

All district micro-plans will be consolidated at the regional to form a regional micro-plan. The regional micro-plans will be validated and finalized at national level.

Vaccine acceptance and uptake (demand)

Advocacy and Social Mobilization

The advocacy and social mobilization approach will be used to mobilize communities or interest groups for action in a quest to address an issue that affects or concerns them. It empowers people and communities to chart out ways and means of addressing an issue on a sustainable basis in a spirit of self-reliance and determination, thus promoting ownership and sustainability.

The Technical Advisory Committees (TAC) and their governors, Ward development committees, Community base organizations, CSOs, Religious groups, Area councils, will be key stakeholder targets for social mobilization as part of this strategy.

Mobilizing support and securing the commitment of policy and key decision-makers at various levels with regard to an issue requires rigorous advocacy. Relevant policy and key decision makers in Government, NGO, and civil society and community will be engaged through different approaches including seminars; direct personal contact, including lobbying; workplace sessions; use of electronic and print media; production and dissemination of advocacy kits to solicit their support for immunization.

The conduct of effective social mobilization activities is crucial to the success of any vaccination. In this regard, series of activities will be conducted with a view to increase community awareness. The National Communication Task Force in collaboration with the regional committees will spearhead all communication and social mobilization activities.

Some of the social mobilization activities that will be conducted for the COVID-19 vaccination will include:

- Sensitization of communities using radio and TV, chiefs and opinion leaders about the vaccination.
- A step-down sensitization by all the chiefs and RHDs with support from the village health services Community Health Nurses and Public Health Officers.
- Communication materials such as banners, leaflets and T-shirts will be produced and distributed at all levels
- House-to-House sensitization campaign by the Red Cross and HePDO Volunteers

- Orientation of both print and electronic media on upcoming COVID-19 vaccination (Media briefing)
- Pre & post social mobilization meetings by the National Communication Task Force for social mobilization
- Launching Ceremony at the national and regional levels

The task force would also anticipate for rumours and misconceptions before, during and after the vaccination. Therefore, effective and proactive strategies will be developed to address the situation. This will be done in the form of:

- Preparing appropriate media materials in advance to facilitate a rapid response to such negative claims
- Having a trained focal person in the media who responds to questions and reviews materials before publishing
- Using a credible spokesperson in the ministry/community to quell the rumours and reassure the community
- There already exist 2 trained Crisis Communication and Rumour Management Focal Persons at the Directorate of Health Promotion and Education at the Ministry of Health.

Vaccine safety monitoring and management of AEFI and injection safety

The administration of vaccines requires safe injection practices to reduce the risks of Adverse Events following Immunization (AEFI). The objective of AEFI surveillance is to monitor, detect, report, investigate and classify all AEFIs until 42 days after the vaccination. There would be AEFI focal persons at health facility level, who would be supervised by the regional AEFI Focal persons. At central level, national AEFI committee will serve as Coordinators for AEFI surveillance. They will be responsible for training Regional AEFI supervisors and officers at regional and district levels. During the COVID-19 vaccination, AEFI surveillance would be strengthened at all levels. The following would be enhanced during the campaign:

- Use of sterile needle & syringe for every injection
- Use one reconstitution syringe for each vial/ depending on vial presentation
- Reconstitute only with specific diluent/right diluent/ depending on vial presentation
- Ensure that all reconstituted vaccines are discarded after six hours or at the end of the session whichever comes first/ depending on vial presentation
- Ensure that drugs & other medicines are not stored in the same fridge with the vaccines and diluents
- Train & supervise health workers to ensure safe injection practices
- Monitor, Investigate and manage reported AEFIs

Immunization monitoring system

Pre- implementation activities such as staff training social mobilization would be carried out. This will help to strengthen the delivery of quality routine immunization services and coverage while improving health worker knowledge about COVID-19 and immunization delivery practices. There will also be pre- and post-campaign supervisory visits at regional and facility level to determine the state of preparedness and campaign implementation processes including routine immunization services. Social mobilization activities will focus not only on the COVID-19 vaccination activities but will also address social mobilization gaps existing in the routine immunization services.

These are very critical activities for ensuring safety, high coverage and quality service during COVID-19 vaccination like any other vaccination. These activities will be conducted by all supervisors and monitors at different levels and these include central and regional supervisors. There will also be pre assessment visit before the COVID-19 vaccination to ascertain the level of preparedness at all levels. This will look at how well the staff are prepared for the planning and implementation of the vaccination, for instance, how well the staff identified and vaccinated the entire target aged group as well as how well they addressed quality and safety of vaccination services.

Data Management:

Given the two-dose vaccine regimen, electronic recording of the vaccinations using tablets and/or laptops will be required to facilitate real-time data capture to feed into the program monitoring and also to help send SMS reminders for the second dose.

There currently exists a national electronic immunization registry system (MyChild) being rolled out to all the health facilities and this system will be a great opportunity to address some of the anticipated challenges. The system uses smart paper forms with pre-filled unique identification numbers that are later scanned to generate a registry and data reports. The data collection tools could be customized to capture the COVID-19 vaccination. However, real-time electronic system that automatically sends reminders the second dose with Unique Identifiers to track them, the World Bank-financed The Gambia Essential Health Services Strengthening Project is finalizing the recruitment of an international enterprise architect who will provide guidance on improving the system with linkage to the civil registration system.

Reporting of AEFIs will also be integrated into the system. The AEFI reporting forms will be customized and cases will be identified with their original identification numbers. The toll-free number for the COVID-19 response will also be utilized for reporting AEFI cases by community members.

Disease surveillance

The national surveillance programme is coordinated by the Epidemiology and Disease Control Programme (EDC) with support from the EPI and National Public Health Laboratory (NPHL). There is a strategy and work plan including for the implementation of IDSR which is updated on annual basis. The central level provides guidelines, data collection and analysis tools for the field staff. At national level surveillance trainings are conducted by resource persons drawn from EPI, EDC and the NPHL. In each of the health regions, the RPPHO serves as the focal person for surveillance. The case investigators in all the public health facilities investigate and transport samples collected from both IDSR priority diseases including Vaccine Preventable Diseases (VPD) to the national laboratory. Surveillance training will be conducted and surveillance tools will be reviewed and updated.

Evaluate introduction of COVID-19 vaccines

These are very critical activities for ensuring safety, high coverage and quality service during mass campaigns. These activities will be conducted by all supervisors and monitors at different levels and these supervisors include national coordinators, central team leaders, central core facilitators, and regional supervisors, central and regional AEFI supervisors.

There will also be independent monitoring during and immediately after the campaign by development partners. This will look at how well the staff are prepared for the planning and implementation of the campaign; for example how well the staff identified and vaccinated all the target groups as well as how well they addressed quality and safety of vaccination services. This will guide the supervisors in identifying communities with number of missed children to conduct revisits or mop-up activities.

Pre-vaccination supervisory visits will be conducted by the logistics team to determine the level of preparedness at the regional levels starting two months before the vaccination exercise. Similar activities will be conducted by the regions at district level. Vaccines and its related logistics would be distributed to the regions at least 3 weeks before the exercise.

Post vaccination review meetings will be conducted to review the strengths and constraints realized during the vaccination as well as document best practices.

This will concentrate on the immediate observable achievements of the campaign activities measured by percentage vaccination coverage obtained in the post campaign coverage survey. The vaccination coverage will be obtained through the administrative figures validated by a Post Campaign Coverage Survey to be conducted by an independent evaluator within one (1) month after the second dose of the campaign using the revised WHO cluster Sampling Technique. Among the objectives of the PCCS will be to independently determine the number/percentage of the target population that received COVID-19 vaccine.

Table 5 illustrating the results frame work

Objectives	Activities	Indicators	Means of verification	Timeline	Person responsible
To adequately prepare for the introduction of the Covid-19 vaccine when available	<ul style="list-style-type: none"> • Support Covid-19 communication taskforce meetings • Readiness assessment for the COVID 19 vaccine delivery • Monitoring and Supervision • Review, update and validation of data collection tools 	<ul style="list-style-type: none"> • No of task force meetings held • No of readiness assessments conducted • No of monitoring visits conducted • Review workshop on data collection tools conducted 	<ul style="list-style-type: none"> • Meeting minutes • Monitoring and assessment reports • Copy of a final data collection tools 	Nov 2020 to March 2021	EPI / TWG
To identify resources required for the effective delivery of the vaccine	<ul style="list-style-type: none"> • Workshop on concept and target population note finalization at Bwiam Lodge 	<ul style="list-style-type: none"> • Workshop conducted on concept and target population note finalization at Bwiam Lodge 	Finalized document on concept note and target population	Nov 2020 to March 2021	EPI / TWG
To identify the most vulnerable and at risk population to be prioritized for the vaccine	<ul style="list-style-type: none"> • Workshop on concept note and target population finalization at Bwiam Lodge 	<ul style="list-style-type: none"> • Workshop conducted on concept and target population note finalization at Bwiam Lodge 	Finalized document on concept note and target population	November – December 2020	NITAG
To reduce the COVID 19 transmission rate in the	<ul style="list-style-type: none"> • PPEs for health workers • COVID vaccine 	<ul style="list-style-type: none"> • Number of PPE sets procured • Number of health care 	<ul style="list-style-type: none"> • Delivery notes • Training and implement 	November 2020 to March 2021	COVID-19 Logistics working group

community and create herd immunity	<p>delivery Micro-planning and Implementation</p> <ul style="list-style-type: none"> • Training on injection safety, and AEFI surveillance 	<p>providers trained on COVID 19 vaccine delivery</p> <ul style="list-style-type: none"> • Number of health care providers trained on injection safety and AEFIs 	<p>ation reports</p>		
To raise awareness on the prevention and control of COVID 19 in the community	<ul style="list-style-type: none"> • District Sensitization (Regions) • Regional Mobilization of TACS/District Chiefs/Alikalos (Regional) • Radio and TV spots • Orientation of CSOs to support COVID sensitization activities • Launching of COVID -19 Vaccination Campaign • Orientation of Faith base organization (Regional & Central) • Sensitization of organized groups (mothers club, women groups, VSGs, Youth and TCs)Region • TV and 	<ul style="list-style-type: none"> • Proportion of districts sensitized on COVID 19 • Number of TACs oriented on COVID 19 • Number of radio and TV spots produced • Number of CSOs oriented • Number of community members sensitized on COVID 19 • Number of media personnel oriented • Number of communication support materials produced • Launching on COVID 19 vaccination conducted 	<ul style="list-style-type: none"> • Sensitization and orientation reports • Number of radio and TV spots aired • Delivery note of the communication support materials 	December 2020 to December 2021	Communication Taskforce / EPI

	<p>Radio panel discussion</p> <ul style="list-style-type: none"> • Covid -19 Vaccination campaign Caravan • Production of communication support materials 				
<p>To strengthened the health system in preparation for any future pandemic</p>	<ul style="list-style-type: none"> • Infrastructure (standby generators) • Waste management training 	<ul style="list-style-type: none"> • Number of generators procured • Number of health care workers trained on waste management 	<ul style="list-style-type: none"> • Delivery note of the generators • Training reports 	<p>Health system strengthened</p>	<p>Logistics Taskforce / EPI</p>