Joint Appraisal report 2019

Country	**Comoros**
Full JA or JA update[1]	**☑ Full JA ☐ JA update**
Date and location of Joint Appraisal meeting	**8 to 9 September 2019 at the Hotel Retaj Moroni**
Participants / affiliation[2]	**See attached attendance list**
Reporting period	
Fiscal period[3]	**January to December**
Comprehensive Multi Year Plan (cMYP) duration	**2017-2021**
Gavi transition / co-financing group	**parex. self-financing**

1. RENEWAL AND EXTENSION REQUESTS

Renewal requests were submitted on the country portal

Vaccine (NVS) renewal request (by 15 May)	Yes ☐X	No ☐	
Does the vaccine renewal request include a switch request?	Yes ☐	No X☐	N/A ☐
HSS renewal request	Yes ☐	No X☐	N/A ☐
CCEOP renewal request	Yes ☐	No ☐	N/A ☐X

2. GAVI GRANT PORTFOLIO

Existing vaccine support *(to be pre-filled by Gavi Secretariat)*

Introduced / Campaign	Date	2017 Coverage (WUENIC) by dose	2018 Target		Approx. value USD	Comment
			%	Children		
Insert						
Insert						

Existing financial support *(to be pre-filled by Gavi Secretariat)*

Grant	Channel	Period	First disb-ursement	Cumulative financing status @ June 2018				Compliance	
				Comm.	Appr.	Disb.	Util.	Fin.	Audit
Insert									

[1] Information on the differentiation between full JA and JA update can be found in the Guidelines on reporting and renewal of Gavi support, https://www.gavi.org/support/process/apply/report-renew/
[2] If taking too much space, the list of participants may also be provided as an annex.
[3] If the country reporting period deviates from the fiscal period, please provide a short explanation.

Insert									
Comments									

Indicative interest to introduce new vaccines or request Health System Strengthening support from Gavi in the future[4]

Indicative interest to introduce new vaccines or request HSS support from Gavi	Program	Expected year of application	Year of introduction planned
	MR 2	Ongoing	11/2020
	PCV13	2021	2022
	HSS3	2022	2023

Grant Performance Framework – latest reporting, for period 2018 *(to be pre-filled by Gavi Secretariat)*

Intermediate results indicator	Objective	Realized
Insert		
Insert		
Comments		

PEF Targeted Country Assistance: Core and Expanded Partners at [insert date] *(to be pre-filled by Gavi Secretariat)*

	Year	Funding (US$m)			Staff in-post	Milestones met	Comments
		Appr.	Disb.	Util.			
Insert							
Insert							
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3. RECENT CHANGES IN COUNTRY CONTEXT AND POTENTIAL RISKS FOR NEXT YEAR

1.1. Recent Changes in the Country Context

[4] Providing this information does not constitute any obligation for either the country or Gavi, it merely serves for information purposes.
Countries are encouraged to highlight in subsequent sections, and particular in the Action Plan in Section 7, key activities and potentially required technical assistance for the preparation of investment cases, applications and vaccine introductions, as applicable.

On 30 July 2018, the country adopted a new constitution that makes substantial changes to the institutions and their functioning. The President is now elected for a renewable 7-year term and the posts of Vice-Presidents are abolished.

In the health sector, island police stations are being replaced by delegates. The process of setting up the new institutions continues with the organization of legislative elections scheduled for the coming months. During this transitional period of setting up and establishing the coordination mechanisms of the new institutions, the implementation of planned activities of health projects and programmes could be slowed down in particular due to protest actions or public unrest resulting from political disagreements.

Several immunisation posts have not been operational during the past year and at the beginning of 2019 due to the unavailability of health personnel, the majority of whom (over 60%) are still volunteers. In addition, the supervisions carried out during the previous period showed a lack of basic training on the EPI, particularly among officers newly assigned to the Programme and new volunteers.

The quality and leadership, management and planning capacities of the Programme officers at the district level still need to be greatly improved.

In the Comoros archipelago, climate change is likely to result in increasingly significant cyclonic phenomena. Small islands are often overwhelmed by these disaster situations, which can have a very heavy human and material toll. The passage of cyclone Kenneth on 24 April 2019 increased the vulnerability of the population, particularly on the island of Ngazidja, which was the most affected by the phenomenon. Many houses were destroyed on the island, leading to overcrowding due to the fact that host families were staying with the cyclone victims' neighbors. In addition, 95% of the crops were destroyed by the cyclone, leading to a deterioration in food security and an increased risk of nutritional insufficiency, itself a risk factor for outbreaks.

The outward and inward flow of migrants to neighbouring countries, although not very large in number, remains a risk factor. In this migratory game of communicating vessels, the uncertainties are great and significant variations in the size of certain populations, particularly in very sparsely populated localities, can be noted. These movements also increase the risk of importing diseases with epidemic potential.

The measles outbreak recorded from 27 May 2019 onwards, combined with the response to Hurricane Kenneth, had a significant impact on the implementation of the regular programme. Indeed, many health workers at the central, intermediate and operational levels have been mobilized within the emergency response teams. Several technical assistance activities were also delayed due to the unavailability of the teams mobilized for emergency management.

For the coming program period, the volume of activities will have to take into account the occurrence of this type of event and the calendars of activities will have to be designed proactively by anticipating foreseeable periods of disruption. Furthermore, these activities will be rescheduled as required and as circumstances dictate.

1.2. Summary of potential future problems/risks

The main anticipated risks are therefore related to :

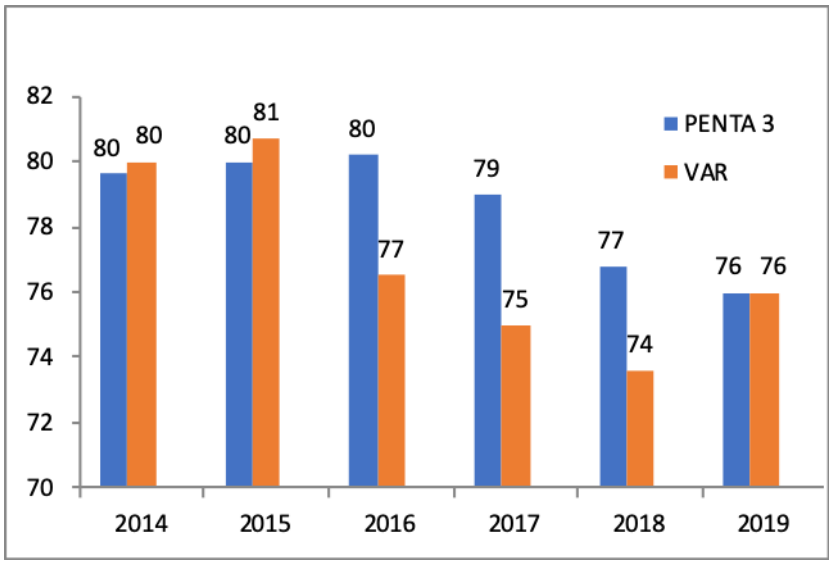
- ✓ Substantial changes in the institutions of the State and their functioning, particularly at the regional level.
- ✓ climate change-related natural disasters and population displacement
- ✓ departures of volunteer officers and non-coverage of certain health areas due to a lack of officers as a result of the freeze on public service recruitments

- ✓ Decreased quality of implementation due to training deficits of new staff (volunteers and/or newly assigned)

4. PERFORMANCE OF THE IMMUNISATION PROGRAM

4.1. Coverage and equity of immunisation

4.1.1 Evolution of Penta 3 and Measles vaccine coverage from 2014 to 2019

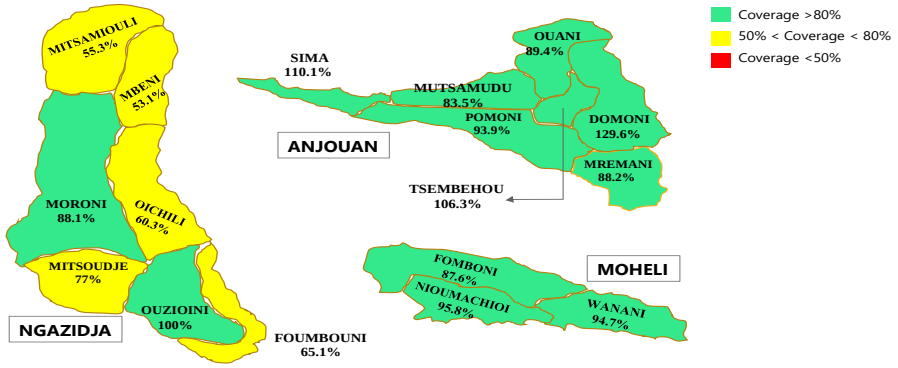


Source: EPI administrative data

Graph 1: Evolution of Penta 3 and Measles vaccine coverage from 2014 to 2019

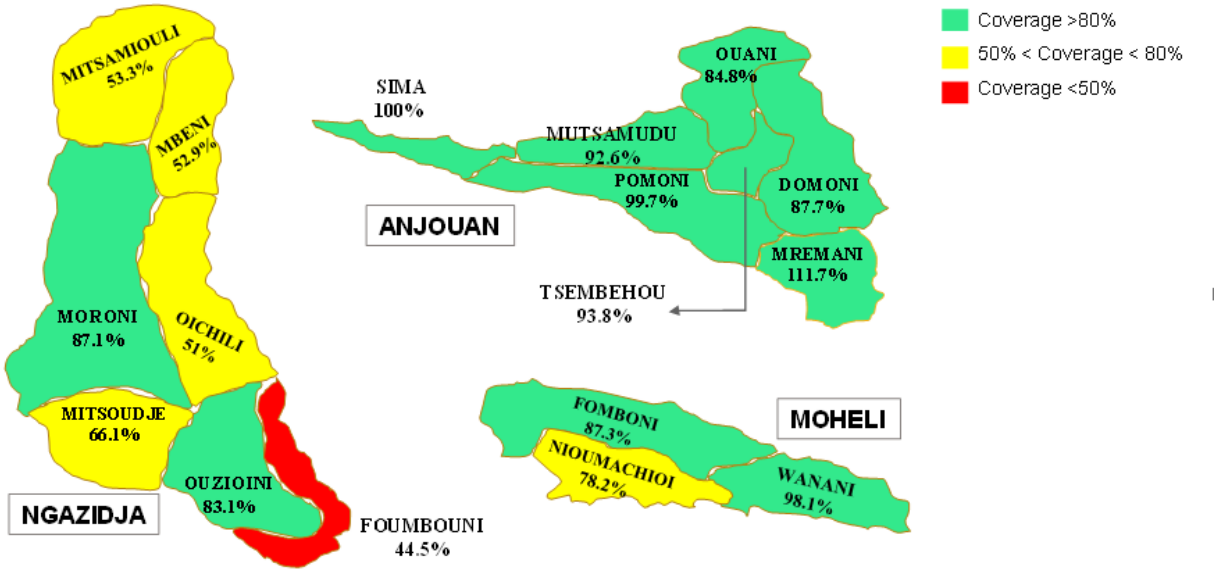
This graph shows the evolution of immunisation coverage in the Union of the Comoros over the last 5 years according to routine EPI administrative data. For the year 2019, coverage is from January to August. Thus, Penta 3 immunisation coverage remained at 80% from 2014 to 2016 and began to drop from 2017 onwards. That of the VAR, on the other hand, began to fall in 2016. For 2019, the 2 antigens are at 76% until August 2019.

4.1.2 Evolution of national Penta3 and Measles coverage by District and Region



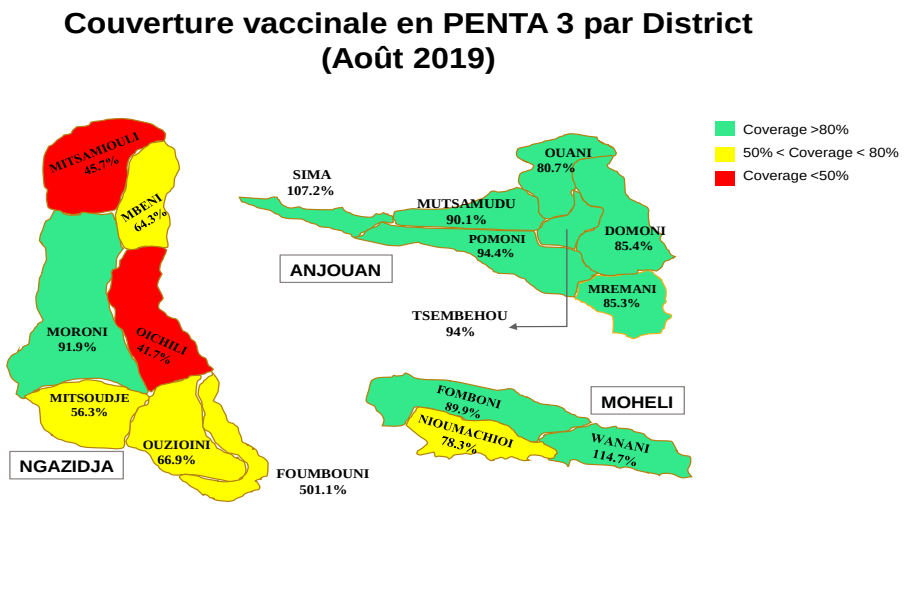
Source: EPI administrative data
Graph 2: Immunisation coverage in Penta 3 per District in 2017

In 2017, 12 districts had DTP3 coverage above 80%, or 71% in total. The 5 districts that had coverage between 50% and 80% are in Ngazidja, representing 71% of the districts on the island.



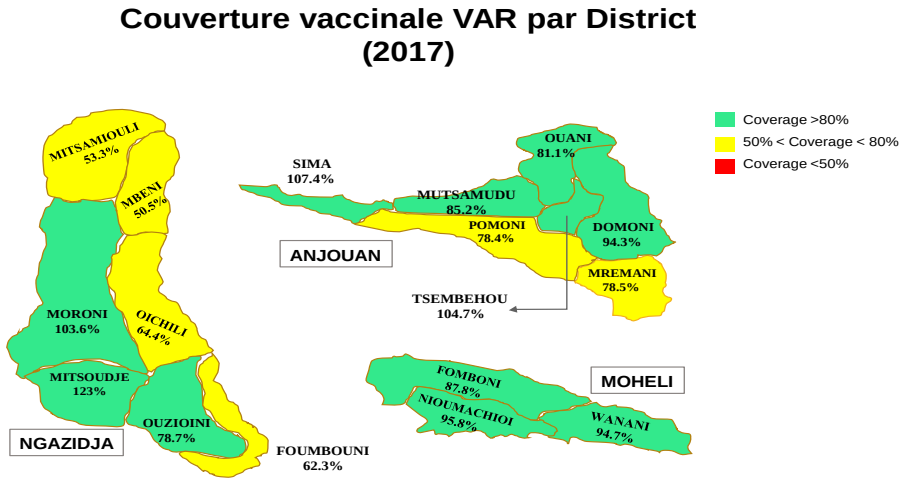
Source: EPI administrative data
Graph 3: Immunisation coverage in Penta 3 per District in 2018

In 2018, the island of Anjouan maintained a good performance with 100% of the districts having a DTC 3 coverage of more than 80%. In Moheli, Nioumachoi has regressed to between 50 and 80 per cent coverage, while in Ngazidja the Foumbouni district has fallen to less than 50 per cent.



Source: EPI administrative data
Graph 4: Immunisation coverage in Penta 3 per District in 2019

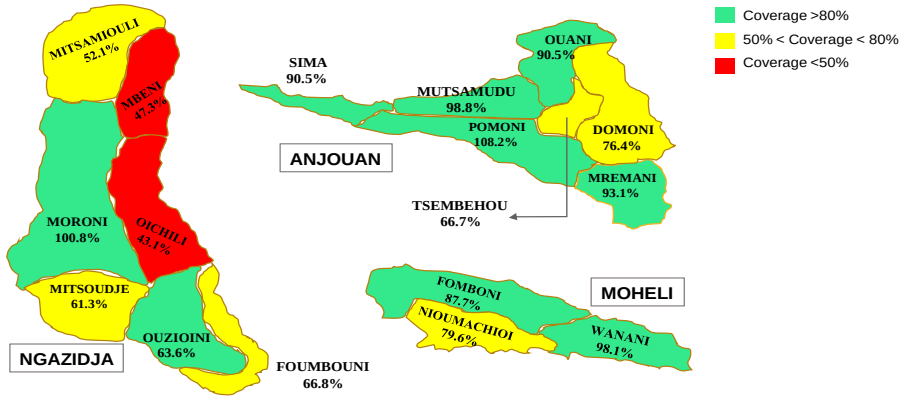
For 2019, until August, only 9/17 districts have DTP3 coverage above 80%, or 53% of districts. The worst performing districts are in Ngazidja representing 24% of the districts on the island. 1 district in Anjouan and 1 district in Moheli have a coverage between 50% and 80%.



Source: EPI administrative data
Graph 5: Immunisation coverage in Penta 3 per District in 2018

On this map we can see that in 2017, 11/17 districts had a VAR vaccine coverage of more than 80%, i.e. 65% of the districts. 4 districts in Ngazidja and 2 districts in Anjouan had between 50% and 80% VAR coverage. This represents 57% and 29% of the districts respectively. No district had coverage below 50%.

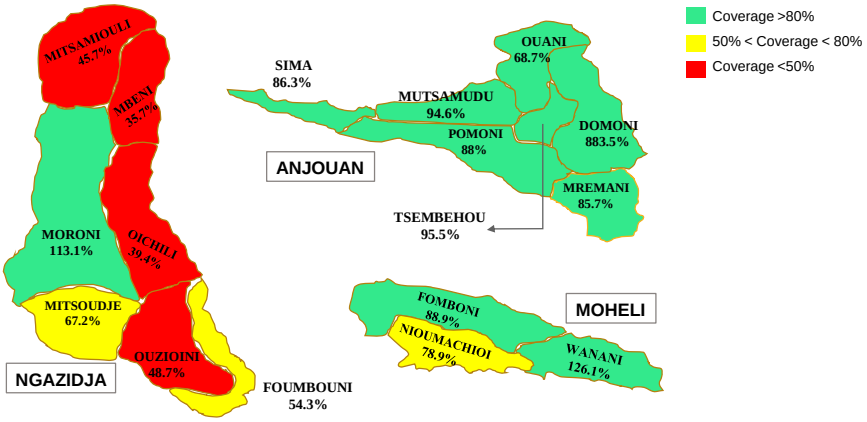
Couverture vaccinale VAR par District (2018)



Source: EPI administrative data
Graph 6: Immunisation coverage in Penta 3 per District in 2018

As for 2018, the performance of the districts has dropped for the VAR with some that were between 50 and 80% dropping to less than 50% coverage in Ngazidja (2/7), and others that were above 80% dropping to between 50 and 80% coverage (1/7 in Ngazidja, 2/7 in Anjouan and 1/3 in Moheli). 2 districts in Anjouan were able to improve their performance from coverage between 50 and 80% to coverage above 80%, while 7/17 kept their immunisation coverage above 80%.

Couverture vaccinale VAR par District (Août 2019)



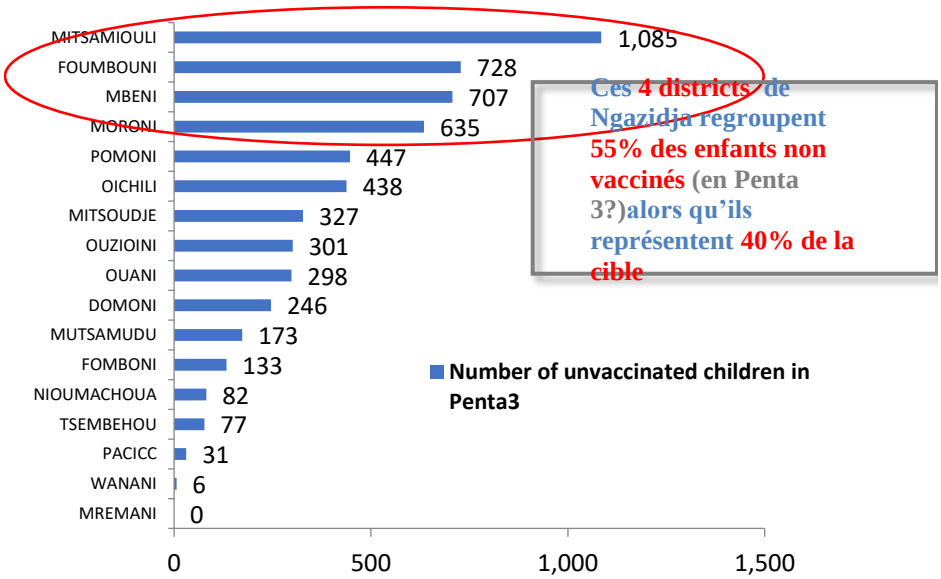
Source: EPI administrative data
Graph 7: Immunisation coverage in Penta 3 per District in 2018

In 2019, up to August, we note that 4 districts in Ngazidja have a VAR vaccination coverage of less than 50% and only one district has a coverage of more than 80%. Indeed, over the last 3 years only the district of Moroni (CENTRE) has been able to maintain its VAR coverage above 80%.

In Anjouan, where all districts are above 80%, there is an improvement in the performance of all districts compared to previous years.
In Moheli, the Nioumachoi district notes the same performance as in 2018, i.e. coverage between 50 and 80%.

4.1.3 Distribution of children not vaccinated in Penta 3 by district

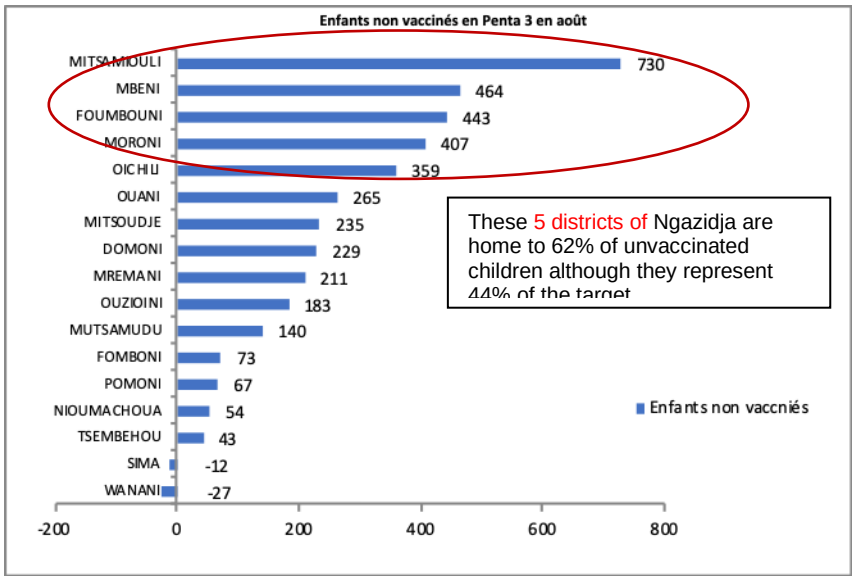
2018 situation



Source: EPI administrative data

Graph 8: Number of children not vaccinated at Penta 3 by District in 2018

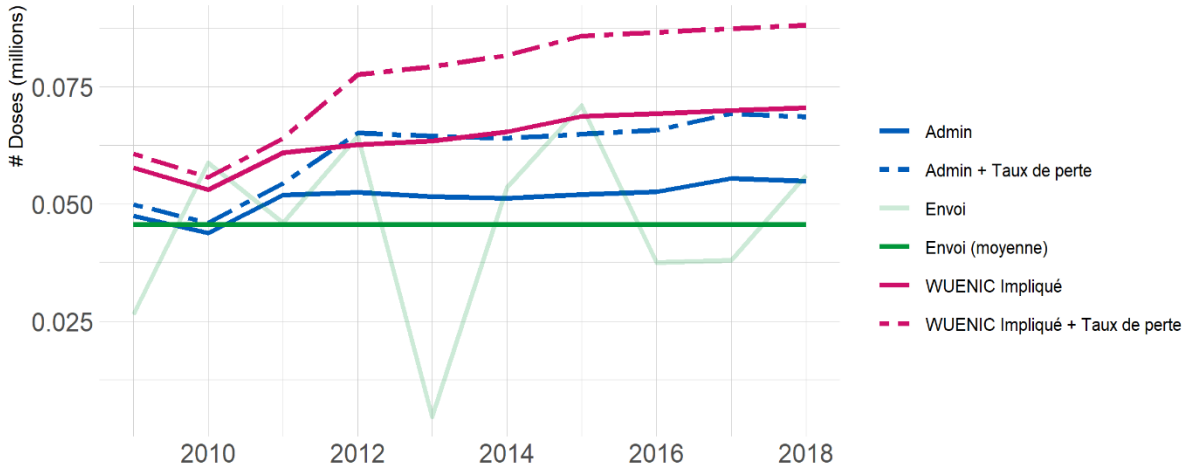
Situation in 2019



Source: EPI administrative data

Graph 8: Number of children not vaccinated at Penta3 by district in 2019

4.1.4 Number of pentavalent doses used (with/without loss rate) broken down by data source



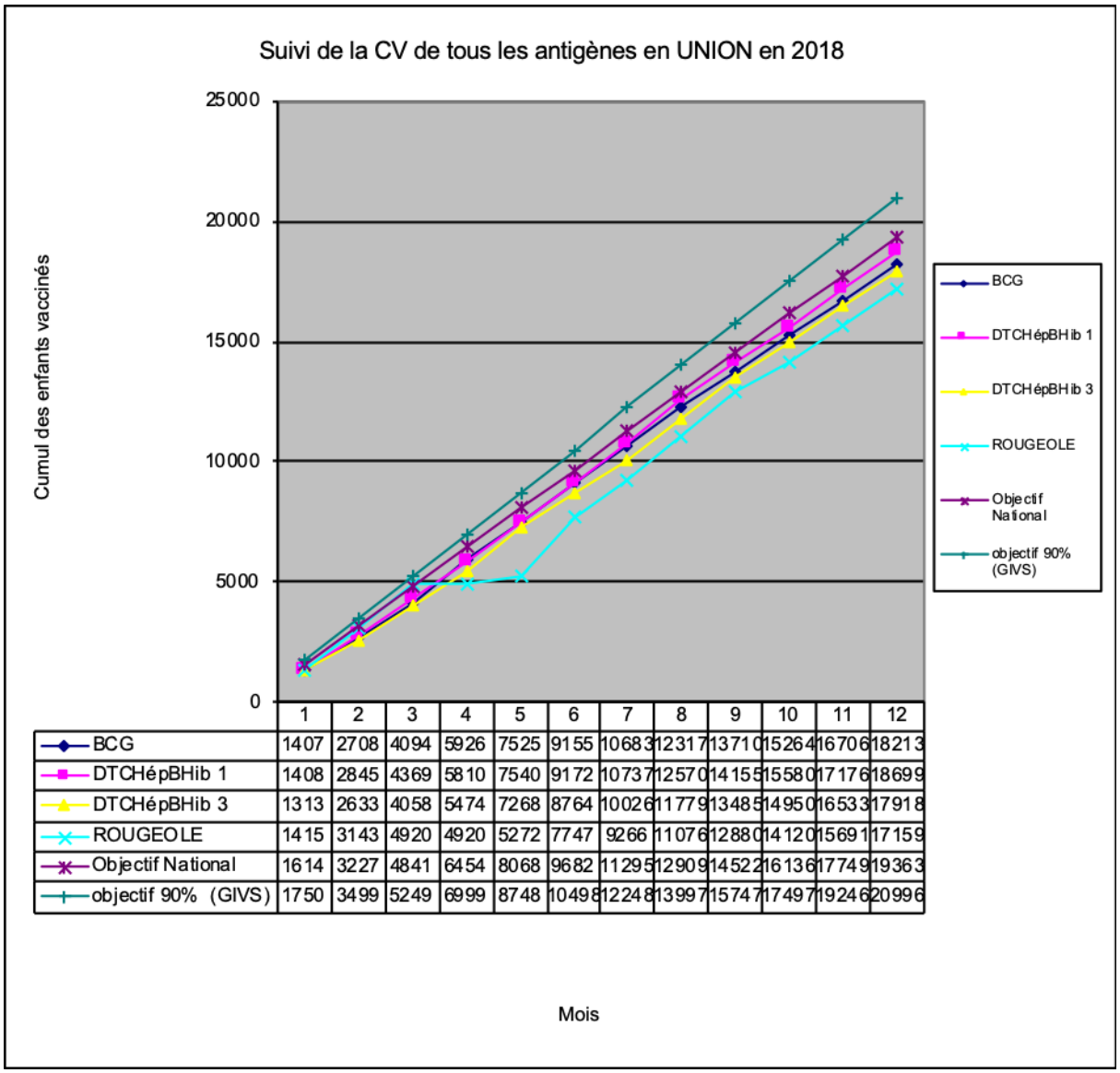
Source d'envoi: base de données des envois UNICEF

"When significant variations in the number of doses delivered are levelled out by averaging over the last 4 years, **the number of reported doses delivered appears to be greater than the number of doses delivered, especially when loss rates are taken into consideration.** "

There are two possible explanations for this situation:

- non-compliance with the doses to be administered per antigen and per child. In fact, it appears from interviews we had with the vaccinators that they would use a 10-dose vial to vaccinate 12 to 13 children.
- the counting of vaccinated children is not done at the time of the act. Some vaccinators wait until the end of the day to make an estimate of the number of children vaccinated based on the number of doses used.
- Faced with this situation, we intend to provide basic training on vaccination to all vaccination personnel and EPI actors.

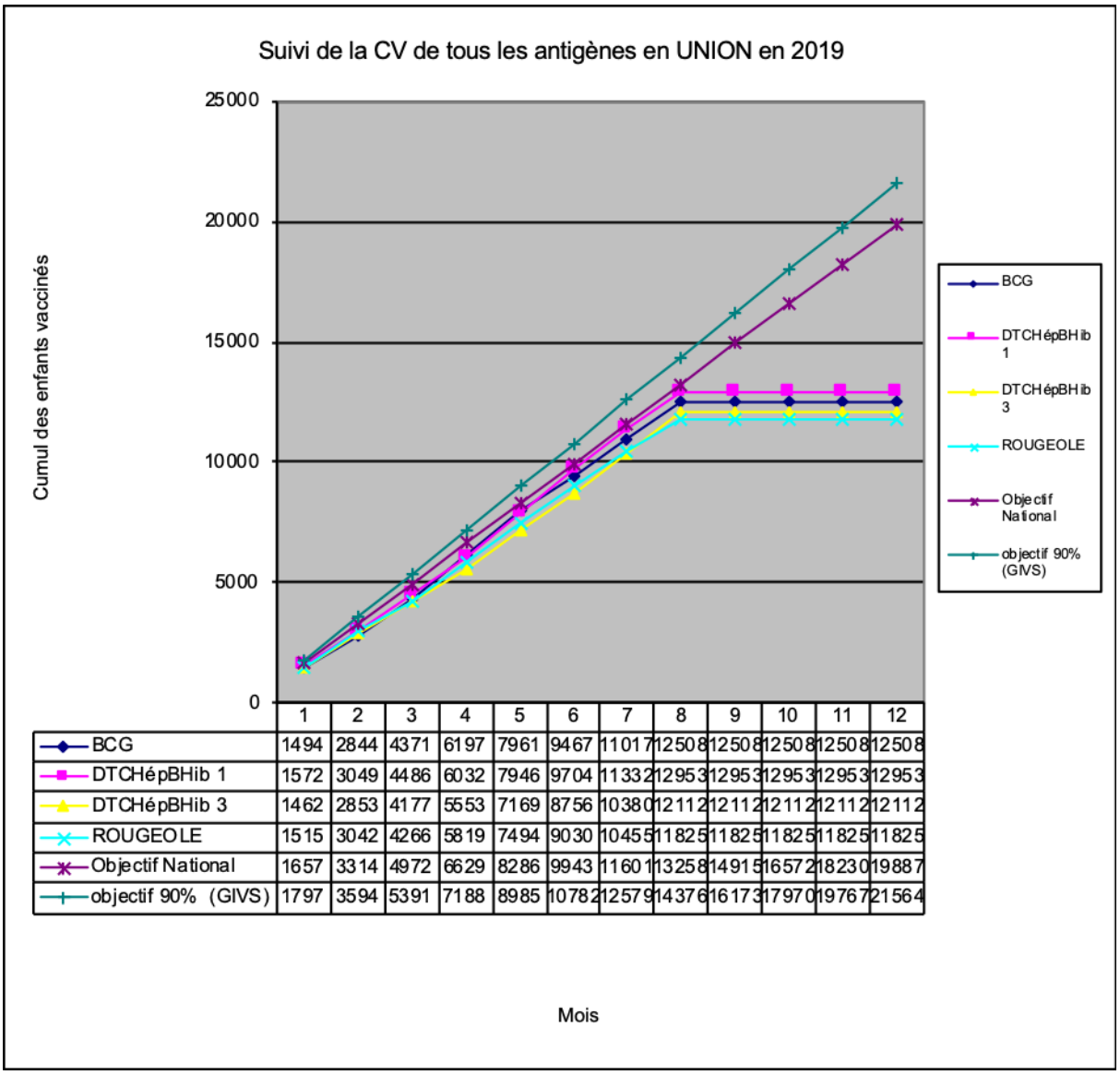
4.1.4 Assessment of achievement against agreed targets



	1	2	3	4	5	6	7	8	9	10	11	12
BCG	1407	2708	4094	5926	7525	9155	10683	12317	13710	15264	16706	18213
DTCHépBHib 1	1408	2845	4369	5810	7540	9172	10737	12570	14155	15580	17176	18699
DTCHépBHib 3	1313	2633	4058	5474	7268	8764	10026	11779	13485	14950	16533	17918
ROUGEOLE	1415	3143	4920	4920	5272	7747	9266	11076	12880	14120	15691	17159
Objectif National	1614	3227	4841	6454	8068	9682	11295	12909	14522	16136	17749	19363
objectif 90% (GIVS)	1750	3499	5249	6999	8748	10498	12248	13997	15747	17497	19246	20996

On this monitoring sheet we can see that during the year 2018, the target of 83%, which was set in the cMYP, could not be reached for all antigens. The same is true for the year 2019, where until August, no objectives could be achieved.
Three elements could explain this underperformance:

- The delay in making funds available at regional level for the implementation of EPI activities (advanced strategies, supervision, etc.).
- New vaccinators who have not sufficiently appropriated the basic EPI trainings
- Use of the RGPH since 2003



	1	2	3	4	5	6	7	8	9	10	11	12
BCG	1494	2844	4371	6197	7961	9467	11017	12508	12508	12508	12508	12508
DTCHépBHib 1	1572	3049	4486	6032	7946	9704	11332	12953	12953	12953	12953	12953
DTCHépBHib 3	1462	2853	4177	5553	7169	8756	10380	12112	12112	12112	12112	12112
ROUGEOLE	1515	3042	4266	5819	7494	9030	10455	11825	11825	11825	11825	11825
Objectif National	1657	3314	4972	6629	8286	9943	11601	13258	14915	16572	18230	19887
objectif 90% (GIVS)	1797	3594	5391	7188	8985	10782	12579	14376	16173	17970	19767	21564

In view of all the results presented in this section on the evolution of immunisation coverage and pockets of non-vaccinated children according to districts, we note that the administrative data decreases in 2018 and is maintained within the range in 2019 but the WUENIC and official estimates remain stable.

Two factors could explain this underperformance in 2019 :

- Delay in resumption of implementation of regular programme activities following Hurricane Kenneth and the measles epidemic (at least 3 months delay)
-

Faced with this situation, the Programme intends to conduct an in-depth analysis of immunisation coverage and equity with the technical and financial support of partners.

4.1.5 Performance Monitoring

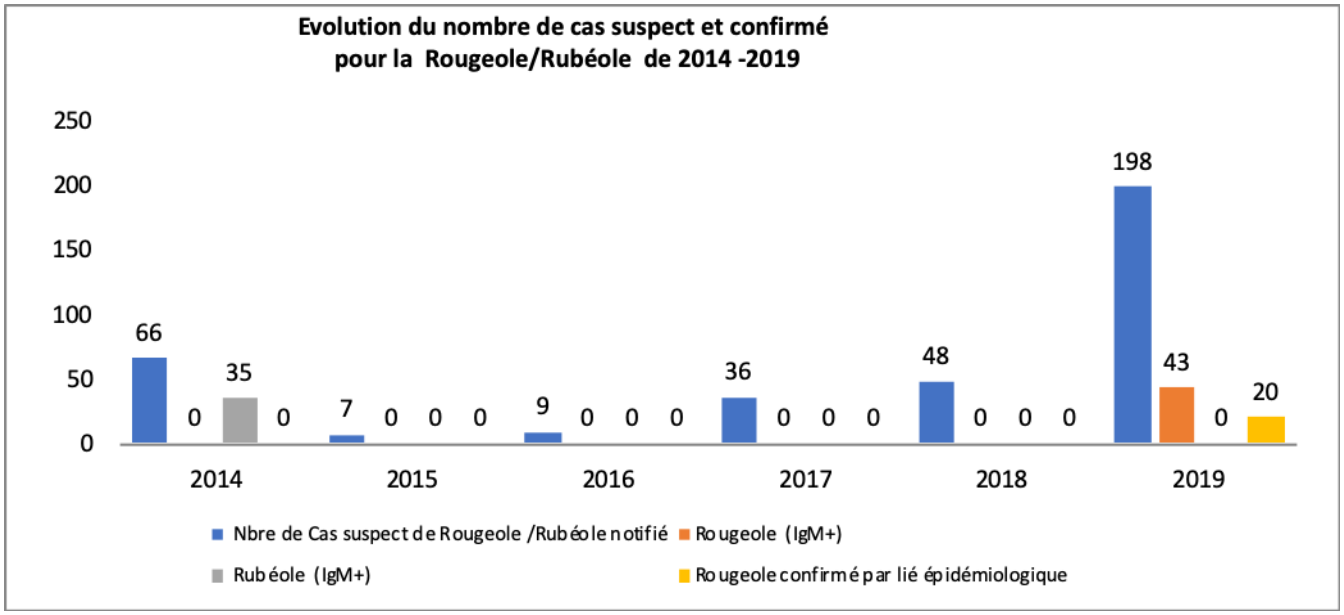
4.1.5.1 Major measles indicators

Table 1: Major Measles Indicators

Regions	Rate of non-measles rashes				Proportion of districts having collected and reported at least 1 case			
	Years				Years			
	2016	2017	2018	2019	2016	2017	2018	2019
Ngazidja	**2,2**	**5,7**	**7,2**	**16,6**	29	71	71	71
Ndzouani	0	1,1	**2,2**	**8,6**	0	43	43	43
Mwali	0	**2,3**	**15,8**	**18,8**	0	**100**	**67**	67
Union of Comoros	1,1	**4,3**	**5,6**	**11,7**	12	**65**	**59**	59

Source: EPI administrative data

Between 2017 and 2019, major measles surveillance indicators improved in those islands where the rate of non-measles rashes increased, especially in 2019, exceeding in all regions the expected threshold of 2 cases per 100,000 population.
The proportion of cases notified with blood sampling and the proportion of districts having notified at least 1 suspected measles case is below the target ≥ 80% than in the Moheli region in 2017.

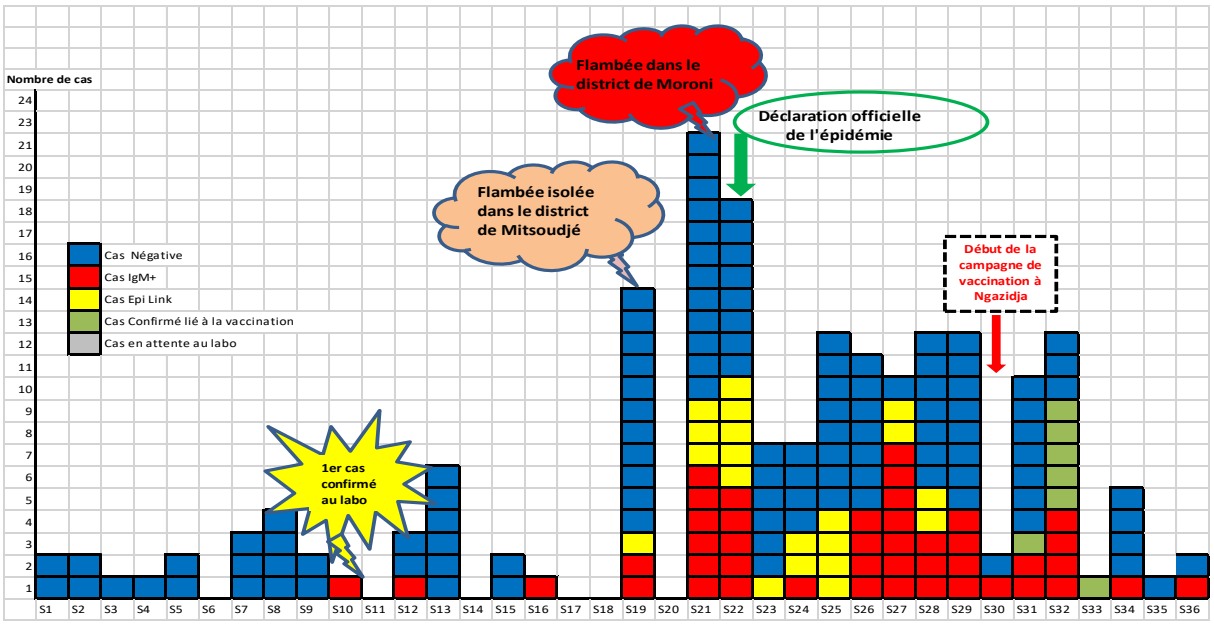


Source: EPI administrative data

Graph 9: Evolution of the number of suspected measles/rubella cases notified over the last 6 years

The last epidemic case of rubella dates back to 2014 and an outbreak of measles cases is recorded in 2019 in the Union of the Comoros. All notified cases have been classified.

4.1.5.2 Evolution of measles cases in 2019 in the Union of the Comoros



Source: EPI administrative data

Graph 10: Evolution of measles cases in 2019 in the Union of the Comoros

4.1.5.3 Outbreak, description and response

The surveillance system of the National EPI Coordination has detected a measles epidemic since the epidemiological week S21-S36 of 2019 in the island of Ngazidja. 39 cases were confirmed by the National Laboratory, including 28 cases in Moroni District (capital), 06 cases in Mitsamiouli District, 3 cases in Mbéni District, 1 case in Mitsoudjé District and 1 case in Oichili District. 19 cases confirmed by epidemiological link were recorded in Moroni District.

The latter notified 6 suspected cases related to measles vaccine, while 1 case was notified in the district of Mbéni.

As a reminder, 05 other positive cases confirmed by the laboratory had been identified between week 1 and week 20, including 1 case at week 10 (Moroni District), 01 cases at week 12 (Oichili District), 01 cases at week 16 (Moroni District) and 02 cases in Mitsoudjé District. Only 1 case was confirmed by epidemiological link at week 19 in Mitsoudjé district. A total of 180 suspicious cases have been reported since the beginning of 2019 and no deaths have been reported to date in connection with these cases.

A measles vaccination campaign was carried out in all districts of the island of Ngazidja, reaching 155,224 children aged between 6 months and 14 years, i.e. a vaccination coverage of 82.30% according to the 2003 RGPH estimate.

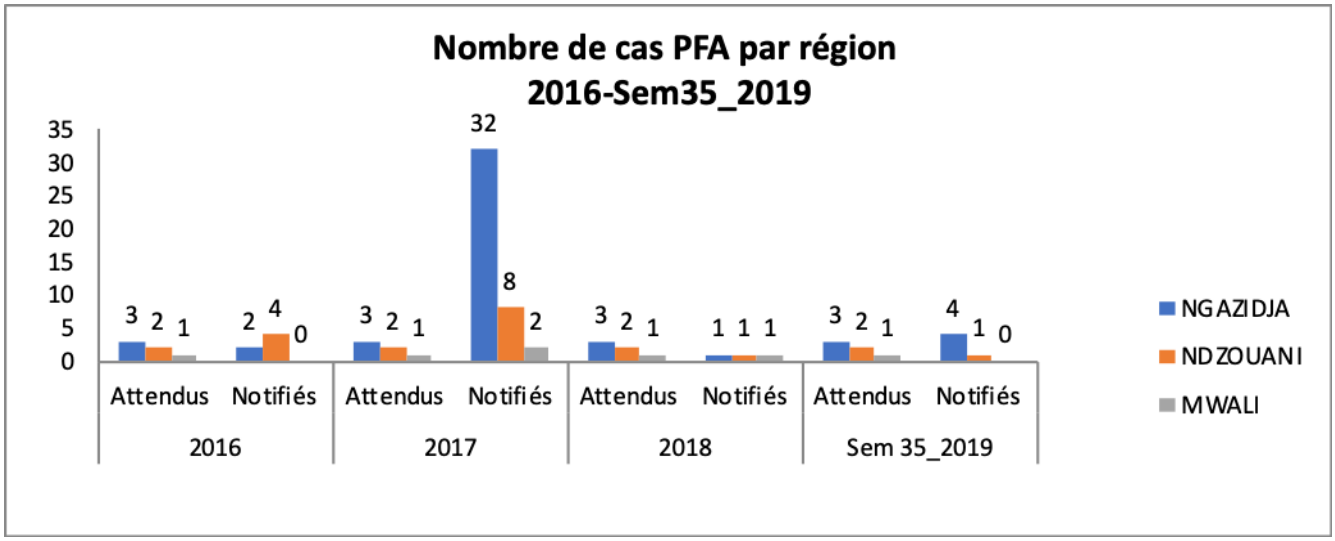
4.1.5.4 AFP Indicators

Table 2: AFP Indicators

Indicateurs majeurs de la surveillance PFA 2016- S35_2019					
Année		2016	2017	2018	2019
Population âgée < 15 ans		354 707	364 385	374 303	384439
Nombre de cas de PFA non-polio attendus		6	6	6	6
Total de cas de PFA notifiés		6	42	3	5
Taux de PFA non-polio (Cible ≥ 2/100000 Pop < 15 ans)		1,7	11,7	0,8	1,3
Cas de PFA avec échantillons de selles adéquats (cible ≥80%)	Nombre	4	39	3	5
	%	67	93	100	100

Source: EPI administrative data

In 2016, 2018 and 2019, the country did not meet the target for the non-polio AFP rate. Data for 2017 where the country had been supported by WHO and funding for surveillance. The same is true for notified AFP cases which have far exceeded the expected numbers at regional level.
For 2017, 2018 and 2019, AFP cases with adequate samples met the expected target of ≥ 80%.



Source: EPI/MEV administrative data

Chart 5: Number of AFP cases by region from 2016 to 2019

4.1.5.5 Neonatal Tetanus

In 2016 and 2017 no cases of neonatal tetanus were reported. In 2018, 2 cases were notified in the Centre district in the Ngazidja region and in 2019, 1 case was notified in the Ndzouani region.

4.1.6 Major surveillance challenges in the Union of the Comoros

Since 2017, an electronic surveillance system has been in place for epidemiological surveillance and

there are surveillance focal points at regional and district levels who have been trained on IRMR. However, there is no district umbrella team as recommended by WHO. In addition, there is a parallel system to this electronic surveillance which is more or less formal with data transmission by SMS from health facilities to the region, or through a weekly notification sheet of notifiable diseases. It should be noted, however, that hospital managers are not interested in monitoring, and that several smartphones provided when electronic monitoring was introduced are no longer functional. There is no computer tool available at the district level for data management and the district does not validate any data before transmission. As a result, the health posts and districts do not have archives or databases, and therefore do not carry out any analysis. So they can't detect epidemics. The Ministry of Health does not have a single template for data compilation and analysis, and feedback at the operational level is not provided.
Currently, the national epidemiological surveillance officer is undergoing training for 2 years and is not being replaced. The function is currently performed by the DLM, which is overloaded. SIMR activities are not sufficiently funded (data transmission, supervision, monitoring, reproduction of media, advanced strategy, transport of samples). Laboratories at the district level are not equipped for biological confirmation of bacterial diseases and there is no network of laboratories for surveillance of diseases with epidemic potential. Although the RSD organizes monthly meetings for service majors where the IRMR is also discussed, there is no elaborate activity report available on the IRMR. Data monitoring is not done at the district or regional level. The district does not supervise and the DRS does so irregularly.

4.2. Key drivers of sustainable coverage and equity

The latest national surveys do not show disparities according to the gender of the children, their place of residence (urban versus rural) or their socio-economic status.
However, it is important to point out that during the first half of 2019, the EPI Program has shown its determination to maintain vaccine coverage despite the exogenous factors that the union of the Comoros has experienced (Cyclone, measles epidemic).

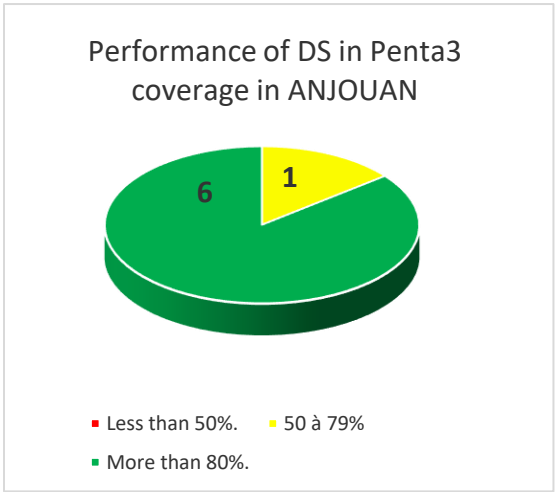
On the other hand, there is clearly a problem of geographical equity. The table below shows the evolution of immunisation coverage by district over the last three years for Penta 3 and VAR. The equity analysis conducted in 2017 and the situation analyses made during the development of the EPI microplans in 2018-2019 also suggest the existence of pockets of low or non-vaccination even within the performing districts. The graphs following the table show for each of the regions or islands of the Union, the distribution of districts according to their performance. It is easy to see that Ngazidja, the main island, has the highest number of non-performing districts and non-vaccinated children.

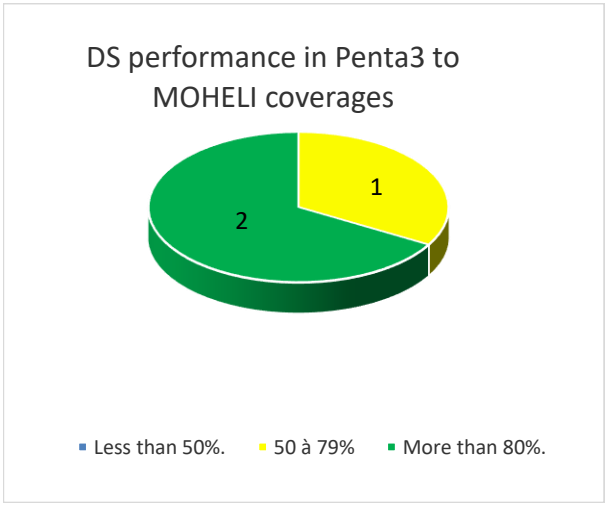
Table 1: **Evolution of vaccine coverage in Penta3 and Var from 2016 to 2018**

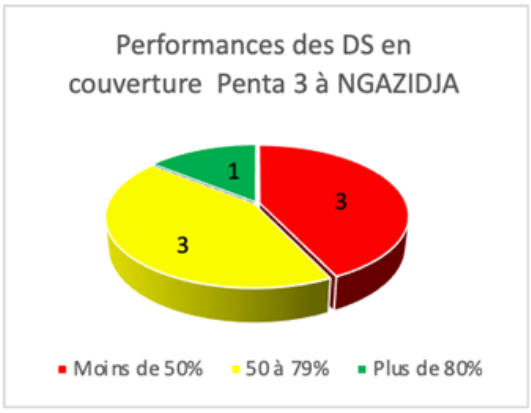
DTC HepB Hib 3	2016	2017	2018
MORONI	74,00%	88,10%	86,60%
MITSOUDJE	50,90%	55,30%	56,50%
OUZIOINI	68,50%	66,80%	61,70%
FOUMBOUNI	55,60%	57,70%	43,90%
OICHILI	60,90%	51,30%	51,00%
MBENI	49,10%	53,10%	46,20%
MITSAMIOULI	57,30%	53,40%	44,60%
MUTSAMUDU	89,60%	82,40%	90,90%
OUANI	82,40%	82,00%	78,60%
TSEMBEHOU	101,20%	93,20%	89,60%
DOMONI	84,60%	91,70%	86,70%
MREMANI	77,10%	88,20%	99,80%
POMONI	96,20%	93,10%	88,40%
SIMA	100,40%	102,30%	96,40%
NIOUMACHOUA	92,40%	85,80%	72,20%
WANANI	76,20%	94,70%	98,10%
FOMBONI	88,60%	86,90%	87,00%
UNION DES COMORES	75,30%	78,70%	76,80%

VAR	2016	2017	2018
MORONI	93,80%	95,40%	96,90%
MITSOUDJE	49,40%	52,30%	50,80%
OUZIOINI	58,60%	57,90%	45,00%
FOUMBOUNI	52,70%	49,60%	45,90%
OICHILI	45,90%	46,10%	34,40%
MBENI	48,40%	44,90%	44,80%
MITSAMIOULI	62,40%	44,50%	41,00%
MUTSAMUDU	79,20%	74,40%	89,40%
OUANI	77,30%	74,50%	69,00%
TSEMBEHOU	102,40%	95,60%	87,00%
DOMONI	86,60%	86,90%	85,60%
MREMANI	73,70%	87,80%	84,30%
POMONI	98,70%	85,60%	90,30%
SIMA	100,40%	102,30%	96,40%
NIOUMACHOUA	83,30%	98,60%	67,70%
WANANI	96,00%	84,10%	86,40%
FOMBONI	73,10%	71,10%	65,20%
UNION DES COMORES	76,50%	74,70%	73,60%

Source: EPI administrative data







La totalité des districts avec moins de 50% d'enfants vaccinés se trouve sur l'ile de Ngazidja qui regroupe par ailleurs plus de la moitié des districts entre 50 et 80% de couverture

Health personnel:

The availability of health personnel remains a programmatic concern. With more than 60% of its staff composed of volunteers, the EPI remains one of the most affected programmes.

Services provided

The microplans developed at the district level made it possible to better identify needs in terms of service provision and to organize them systematically.
In the islands of Moheli and Anjouan, implementation has been fairly regular despite some delays in making resources available for the microplans. These delays are mainly related to issues of justification of funds by the districts to the regional level.
This highlights the need to strengthen technical support at the operational level. This support will have to focus both on strengthening management and on programmatically seeking greater effectiveness and efficiency in the implementation of planned activities.
In Ngazidja Island, the implementation was largely thwarted by Cyclone Kenneth and the measles epidemic, which mobilized human resources for health.

Demand generation

The community mobilization activities foreseen in the microplans were only partially implemented. Preliminary contacts have taken place with Civil Society Organizations (CSOs) for the contracting of immunisation communication activities. Three CSOs have proposed projects that are being reviewed by the programme to support community activities in some districts of Ngazidja.

Data management and quality

The country has embarked on a process of developing a strategy for strengthening the national health information system and moving to DHIS2 as the single framework for consolidating and centralizing data. Within this framework, several analyses were conducted including an analysis of the health information system, a review of the data and a review of the National Health Development Plan. The EPI has specifically carried out a documentary review of data quality in the framework of the joint WHO-UNICEF report (JRF).
A logical framework for strengthening the national health information system, a Data Quality Improvement Plan (DQIP) and a roadmap for the transition to DHIS 2 have been developed.
Specifically, the programme has developed an annual data improvement action plan integrated into the annual work plan and is working to develop a protocol for validating EPI data that will serve as the basis for the development of a data management procedures manual.
The various Regional Health Directorates of the country nevertheless held monthly data validation meetings throughout 2019.

Leadership, management and coordination

The Inter-Agency Coordinating Committee for Immunisation is chaired by the Minister of Health and brings together representatives of the Ministry of Health, the Ministry of Finance, the three (3) Regional Directors of Health of the archipelago, development partners (UNICEF, WHO, UNFPA, UNDP) and CSOs (Comorian Red Crescent, Caritas). The ICC met 3 times in 2018 with the main agendas being the validation of the country's proposal for HSS 2 (proposal for additional funds), as well as the validation of the submission for the introduction of the second dose of measles and rubella vaccine preceded by a catch-up campaign. In 2019, the three statutory meetings planned were held and again focused on the submission for the measles and rubella vaccine, the additional proposal to HSS2 for strengthening vaccine equity and monitoring the implementation of the programme. The decree establishing the ICC was revised in 2019 to better take into account the current mapping of immunisation and Health System Strengthening partners.
The monthly technical meetings initiated in 2018 (05 meetings organized) were institutionalized in 2019. A monthly teleconference with the GAVI Secretariat has also been set up. Although the regularity of this teleconference remains a challenge, it provides an important opportunity for analysis, mutual exchange and monitoring of the implementation of the Programme.

The decree for setting up the NITAG has just been signed and the briefing of its members is planned for the last quarter of 2019.

In order to ensure better coordination of programmes, rationalize and pool resources, it is envisaged that the ICC and the Global Fund Country Grant Coordinating Mechanism (CCM) will merge. Preliminary meetings were held to this end and a methodological proposal for the merger process was discussed and approved by both bodies. Advanced discussions are under way to operationalize this approach. They should be strengthened with the support of Dalberg.

The capacities of programme managers at both national and regional levels have been strengthened in terms of vaccine logistics and management. Specific training courses in monitoring and evaluation are also planned. Terms of reference have been drawn up and are in the process of being validated for the establishment of a national coordinating body for health logistics.

A monitoring and accountability framework for vaccine logistics has been developed. Similar frameworks will be developed in late 2019 for immunisation equity and communication activities. The sharing of these frameworks will make it possible to make dashboards available that will be periodically analysed during monthly monitoring teleconferences with the regions as provided for in the work plan of the additional proposal to HSS2.

The coordination meeting held in August 2019 highlighted the inadequacy of monitoring and formative supervision from the central level to the operational level. The 2020 work plan and the subsequent technical assistance plan should clearly take into account the strengthening of these supervision and monitoring activities.

A framework agreement is being signed with CARITAS as part of the implementation of the strategies put forward and social mobilisation.

Supply chain and immunisation system:

The performance of the cold chain has improved. In fact, the cold chain equipment in all the districts operates on solar energy. At this date, the condition of the solar cold chain equipment is as follows:

Table 4: Situation of equipment at national level

Labels	Number	Coverage rate
Total equipment	72	100%
Functional	68	94%
Non-functional	4	6%
Operational	62	91%
Non-operational	6	9%

Source: EPI administrative data

Antigen situation in 2018

Antigens	Annual requirements	Carry forward at the beginning of the year	Entry Jan-Dec	distributed	Year-end stock
BCG	46,100	11,800	42,000	42,440	11,480
Dil BCG	46,100	11,800	42,000	42,440	11,480
OPV	97,500	47,000	57,000	89,000	15,000

Penta	73,100	13,000	56,100	57,100	12,000
IPV	24,500	0	16,400	16,000	0
Measles	37,800	16,030	27,000	41,730	1,300
VAT	56,200	26,800	33,500	45,300	15,000

Antigen situation in 2019

Antigens	Annual requirements	Carry forward at the beginning of the year	Entry Jan-August	Distributed	Current stock
OCG	47 300	11 480	28 000	31 480	7 900
Dil BCG	47 300	11 480	28 000	31 480	7 900
OPV	101 600	15 000	45 000	60 000	0
Penta	76 300	12 000	38 100	38 100	12 000
IPV	25 500	0	32 200	19 005	13 195
VAR	39 400	1 300	65 660*	18 900	48 060
Dil VAR	39 400	1 300	65 660*	18 900	48 060
VAT	66 700	15 000	0	15 000	0
Td	66 700	0	25 000		9 500

*15,000 (routine entry) and 50,660 (return campaign entry)

Table 5: Vaccination sites and frequency

Health regions	Number of cold chain vaccination sites	Frequency
Mwali	9	2 to 4 times a week
Ndzuwani	21	2 to 4 times a week
Ngazidja	32	2 to 4 times a week
Union of Comoros	**62**	

Source: EPI administrative data

Table 6: Immunisation staff by level

Health regions	Staff	Comments
Central	9	Including support staff
Mwali	11	DRS, CS, PS
Ndzuwani	26	DRS, CS, PS
Ngazidja	28	2 NF,
Union of Comoros	**64**	

Source: EPI administrative data

A rupture of the Inactivated Polio Vaccine (IPV) was noted at the global level with repercussions on the Union of the Comoros and also one month was recorded for the Measles due to a delay in supply.

Presentation of the main GEV indicators (2018 Assessment)

Critères et Catégories de la GEV	Objectifs Minimum	Niveau de la Chaine d'approvisionnement				
		National	Central	Régional	District	Poste de Santé
Critères			PR	DRS	LD	SP
E1: Procédures avant expéditions et réception vaccin	80%	78%	78%			
E2: Températures de stockage des vaccins correctes	80%	82%	84%	87%	90%	73%
E3: Capacités de stockage et de transport suffisantes	80%	73%	93%	80%	71%	71%
E4: Bâtiments, équipement, transport	80%	86%	87%	82%	79%	93%
E5: Maintenance	80%	70%	90%	68%	64%	74%
E6: Gestion de stock	80%	76%	74%	73%	89%	66%
E7: Distribution	80%	82%	66%	62%	78%	93%
E8: Gestion des vaccins	80%	88%	87%	90%	88%	87%
E9: SIG & fonctions d'appui	80%	61%	57%	59%	69%	55%
Catégories						
1 - Batiments	80%	86%	100%	89%	87%	83%
2 - Capacité	80%	69%	92%	80%	65%	67%
3 - Equipement	80%	92%	82%	72%	93%	96%
4 - Gestion	80%	74%	70%	70%	83%	67%
5 - Réparations/Maintenance	80%	70%	90%	68%	64%	74%
6 - Formation	80%	93%	100%	93%	94%	92%
7 - Véhicules	80%	15%	58%	75%	10%	0%

An improvement plan for the EPI was completed in October 2018. The recommendations made in this plan are being implemented.

- the national cold room is solarized;
- 20 new SDS equipment has been installed;
- To date, 73 facilities are in the country and 69 are operational with coverage of 62 offering vaccination services. The other 7 facilities were installed in posts not filled with qualified human resources.

The central EPI depot is integrated into the Comoros' central pharmacy OCOPHARMA. OCOPHARMA is the entity created by the Government to replace CAMUC which was a semi-private organization. This change in status has no impact on the management of EPI vaccine products.

We would like to add that a collaboration agreement on the management of vaccines and vaccine materials has been submitted to OCOPHARMA in order to better specify and clarify the nature of the relationship between the CN EPI and this organization.

Demand Analysis

Table 7: Dropout rates in the 17 districts

Dropout rates by district BCG/VAR

Districts	2016	2017	2018
MORONI	10,40%	6,00%	10%
MITSOUDJE	-11,30%	-12,00%	-108%
OUZIOINI	-4,80%	-1,00%	-4%
FOUMBOUNI	-0,50%	-4,00%	-32%
OICHILI	20,40%	-9,00%	-27%
MBENI	14,10%	-1,00%	24%
MITSAMIOULI	-19,60%	-5,00%	-53%
MUTSAMUDU	37,90%	16,00%	31%
OUANI	10,20%	6,00%	15%
TSEMBEHOU	-30,30%	6,00%	-17%
DOMONI	-1,50%	9,00%	0%
MREMANI	3,20%	8,00%	-2%
POMONI	-26,60%	5,00%	-16%
PACICC	2,50%	4,00%	2%
NIOUMACHOUA	-26,40%	8,00%	-8%
WANANI	-64,60%	2,00%	-19%
FOMBONI	26,80%	14,00%	39%
UNION OF THE COMOROS	6,50%	6,90%	4%

Drop-out rates by DTC 3/DTC 1 district

Districts	2016	2017	2018
MORONI	9,40%	11,00%	6%
MITSOUDJE	-1,00%	-65,00%	-48%
OUZIOINI	2,70%	-39,00%	-5%
FOUMBOUNI	4,10%	-15,00%	6%
OICHILI	3,90%	-32,00%	-49%
MBENI	9,90%	16,00%	11%
MITSAMIOULI	-0,60%	-9,00%	-11%
MUTSAMUDU	10,10%	43,00%	12%
OUANI	9,40%	14,00%	2%
TSEMBEHOU	10,10%	-15,00%	8%
DOMONI	16,10%	1,00%	10%
MREMANI	17,60%	-18,00%	0%
POMONI	-3,50%	-9,00%	5%
PACICC	4,40%	4,00%	7%
NIOUMACHOUA	7,60%	-15,00%	21%
WANANI	29,20%	1,00%	-6%
FOMBONI	16,60%	32,00%	12%
UNION OF THE COMOROS	9,40%	7,70%	6%

Source: EPI administrative data

Negative drop-out rates here indicate a problem in the quality of the data collected at these levels. And although we note that at the national level the 10% threshold is not exceeded, we notice that this is not the same finding when we do the analysis by district. This could also be explained by the high mobility of the population between the islands and from one district to another. It should be noted that many women travel to their islands to give birth, but return to the capital to continue their activities after giving birth. In addition, village women give birth in island capitals and have their children vaccinated with BCG before returning to the districts.

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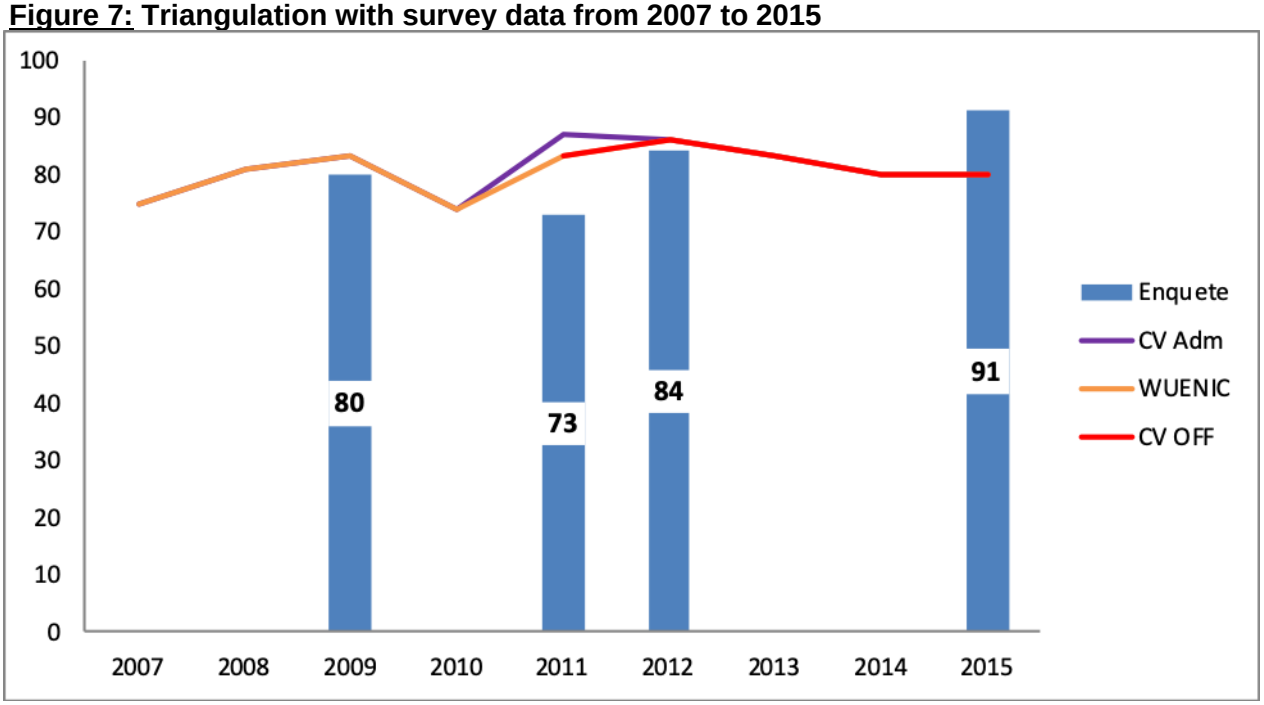
Table8: Promptness and completeness of data

Regions	Promptitude	Completeness
Mwali	>80%	100%
Ndzuwani	>80%	100%
Ngazidja	>80%	100%
Union of Comoros	**>80%**	**100%**

Source: EPI administrative data

On the 3 regions we note a promptness higher than 80% and a completeness at 100% in 2018.

Figure 7: Triangulation with survey data from 2007 to 2015



The 2009, 2012 and 2015 LCAs showed an increase while the 2012 DHS showed low coverage. The methodology of this survey has not been reviewed and validated with the Immunisation Program. This leaves doubts as to whether the investigators understood the data sought and whether the vaccination records were correctly used. In terms of comparisons with administrative coverage, we note that the VCA data are almost the same until 2012, however in 2015 there is a clear difference and since then the WHO-UNICEF (WUENIC) joint estimate data remain higher than the administrative coverage. This may reflect under-reporting of children who have been immunized; but it may also reflect an over-estimation of the denominator. This may be due to the fact that the population projections used exceed 13 years (RGPH 2003).

Table 9: Comparison between administrative data and WUENIC for 2018

Labels	OCG	PENTA1	PENTA3	VAR	POLIO3
Administrative CVs	71%	80%	77%	74%	77%
WUENIC CV	94%	96%	91%	90%	92%

The table shows that the WUENIC data are superior to the administrative data. This could be due to a denominator or data reporting problem. It should be noted, however, that the denominator used to date is a projection of the 2003 RGPH (more than 10 years old). A new RGPH is currently being validated and will make it possible to resolve the differences observed.

4.3. Immunisation financing

Availability of the health financing framework: The Union of the Comoros has drawn up the National Health Development Plan (NHDP) for a five-year horizon, i.e. 2015 to 2019. It does not

contain the health financing plan. The Comprehensive Annual Pluri-Pluriannual Plan (cMYP) of the Expanded Programme on Immunisation resulting from the PNDS 2017-2021 also does not refer to the method of financing immunisation but does mention the amount recorded in the Finance Act.

Allocation of resources: The Finance Laws contain the amounts allocated to health, more specifically to immunisation, the allocation of which has long stagnated at 20,000,000 Comorian francs since the EPI was set up. This amount, although insufficient, was used in particular to co-finance the purchase of Pentavalent vaccines. Since 2013, the country has always fulfilled its vaccine co-financing obligations.
In 2019, the budget allocation increased significantly from 20,000,000 ~a 210,000,000 Comorian francs. However, to date, no portion of this allocation has yet been disbursed to the Program.
The Ministry of Health continues to advocate with the government for the effective disbursement of this budget line in order to be able to take charge of the purchase of traditional vaccines, programme payments and the implementation of activities from 2019 onwards.

5. PERFORMANCE OF GAVI SUPPORT

5.1. Performance of Gavi HSS support (if country is receiving Gavi HSS support)

Implementation of HSS2 started in September 2018 and is scheduled to end in 2022.
The major achievements of the programme for the years 2018 and 2019 are as follows:

- Development of vaccination guidelines
- Formative supervision from the Central level to the Regions
- Cold chain inventory
- Development of the Reach Every Child Approach Guide
- Training of trainers on the Guide
- Holding of coordination meetings
- Holding of the brainstorming meeting on the establishment of NITAGs
- Reintroduction of IPV
- Maintenance and preparation of joint evaluation reports
- Preparation of the EPI newsletter
- Organization of ICC meetings
- Evaluation of the EPI
- Elaboration of the Micro plans of the districts
- Supervision in the islands to the districts

For the first two (2) years of implementation of the HSS2, a provisional envelope of $1,792,400 has been granted. As at August 31, 2019, $788,003 had been used, representing a utilisation rate of 44.58%.

Objective 1	
Objective of the HSS grant (as per the HSS proposal or PSR)	Strengthen the governance of the health system/EPI through the establishment of a strategic and normative framework, and the strengthening of health system management capacities by 2022.
Priority geographies / population groups or constraints to C&E addressed by the objective	Most of the activities proposed under this objective concern mainly the management and leadership of the governing bodies of the Expanded Programme on Immunisation at both national and regional levels.
% activities conducted / budget utilisation	69.46%

Major activities implemented & Review of implementation progress including key successes & outcomes / activities not implemented or delayed / financial absorption	
Major activities planned for upcoming period (mention significant changes / budget reallocations and associated **changes in technical assistance**[Error! Bookmark not defined.]	○ Organising the CCM/ICC merger ○ Organizing the NITAG meeting
Objective 2 :	
Objective of the HSS grant (as per the HSS proposal or PSR)	Achieve by 2022 a national immunisation coverage (PENTA 3) of 90% with a coverage in each district of at least 80% while favouring the equity approach.
Priority geographies / population groups or constraints to C&E addressed by the objective	○ Surviving children aged 0-11 months, ○ Populations in hard-to-reach urban and peri-urban areas ○ Populations in remote and underserved areas
% activities conducted / budget utilisation	32.19%
Major activities implemented & Review of implementation progress including key successes & outcomes / activities not implemented or delayed / financial absorption	○
Major activities planned for upcoming period (mention significant changes / budget reallocations and associated **changes in technical assistance**[Error! Bookmark not defined.]	
Objective 3 :	
Objective of the HSS grant (as per the HSS proposal or PSR)	Improve the average Effective Vaccine Management (EVM) score from 65% to 95% by 2022
Priority geographies / population groups or constraints to C&E addressed by the objective	Supply chain management, which defines the quality approach that forms the basis of all optimization strategies. ✓ Product quality (good product, good conditions) ✓ Quality of service (right place, right time) ✓ Quality of operations (good cost) Thus this objective sets standards for the vaccine supply chain.
% activities conducted / budget utilisation	65.74%

Major activities implemented & Review of implementation progress including key successes & outcomes / activities not implemented or delayed / financial absorption	○ Training in logistics and cold chain in Madagascar ○ Development of SOPs for the EPI ○ Installation of new cold chain equipment ○ Training on preventive maintenance of cold chain equipment - SOPs for the maintenance of cold chain equipment.
Major activities planned for upcoming period (mention significant changes / budget reallocations and associated **changes in technical assistance**	○ Training of Trainers on the use of SMT and DVDMT ○ EPI self-assessment
Objective 4 :	
Objective of the HSS grant (as per the HSS proposal or PSR)	Ensure the availability and use of reliable data for monitoring, evaluation, surveillance (VPD and active research) of immunisation coverage and equity in 17 districts by 2022
Priority geographies / population groups or constraints to C&E addressed by the objective	
% activities conducted / budget utilisation	15.98%
Major activities implemented & Review of implementation progress including key successes & outcomes / activities not implemented or delayed / financial absorption	○ Formative supervision
Major activities planned for upcoming period (mention significant changes / budget reallocations and associated **changes in technical assistance**	- Ongoing development of the DQIP - Development of the DQA

At the end of 2018, immunisation coverage in PENTA 3 was 77.3% in the Union of the Comoros, a coverage considered low in relation to the efforts made in terms of the multifaceted support provided by partners (technical and financial support...) to the Expanded Programme on Immunisation. In order to boost these blankets and bring a breath of fresh air to the regions and especially to the districts, micro-plans have been developed to reach the most remote areas and under-served communities.

All of the proposed activities have not only improved the rate of absorption of HSS funds through the financing of microplan activities, but have also made it possible to maintain the level of immunisation coverage within the same range (75.7% in August 2018 and 75.8% in August 2019).

The integration of immunisation activities with other activities financed by other donors such as the Global Fund has enabled us to train Community Health Workers who are used in the social mobilization framework for the strategies put forward to reach the targets for all antigens.

5.2. Performance of vaccine support

The Union of the Comoros has received the following quantities over the last two years:

Year	DTP hepB hib	IPV
2016	37,500	19,600
2017	35,000	0
2018	69,100	16,400

Since 2016, there has been a global break in the IPV vaccine. For the Union of the Comoros, the break was observed in 2017 in Ngazidja and Anjouan. For the reintroduction of this vaccine, our country received support from the GAVI Alliance for a resupply of this vaccine in March 2018 and a grant of $60,000 for its reintroduction in September 2018.

It should also be noted that the country experienced a disruption of the measles vaccine in March 2018 due to a delay in supply from Copenhagen to the country. The vaccine was received at the national level and distributed to all levels of the health pyramid in April 2018.

In spite of specific support by the GAVI HSS for the 7 districts of Ngazidja, the latter have not had any notable improvement in their immunisation coverage over the last three years, as shown in the table below. Indeed, the Ngazidja region is below the target of 80% regardless of the district. This could be related to the reporting problem as well as the denominator problem.

Immunisation coverage by district of DTP-HepBHib 3 (CV %) and IPV

	2017	**2018**	**2017**	**2018**	**Districts " GAVI " 2017**	**Districts " GAVI " 2018**
	DTPHepBHib3		**IPV**			
MORONI	88	86.6	48	99.3	**X**	**X**
MITSOUDJE	55.	56.5	49	54.7	**X**	**X**
OUZIOINI	66	61.7	45.1	63.6	**X**	**X**
FOUMBOUNI	57	43.9	34.1	58	**X**	**X**
OICHILI	51	51	28.7	43.1	**X**	**X**
MBENI	53	46.2	26.4	45.9	**X**	**X**
MITSAMIOULI	53.4	44.6	33.6	45.3	**X**	**X**
MUTSAMUDU	82.4	90.9	40.9	68.1		**X**
OUANI	82	78.6	53.3	75		**X**
TSEMBEHOU	93.2	89.6	55.9	61.6		**X**
DOMONI	91.7	86.7	57.2	76.4		**X**
MREMANI	88.2	98.8	38.6	65.3		**X**
POMONI	93.1	88.4	31.1	59.1		**X**
PACICC	102.3	96.4	46.1	64.2		**X**
NIOUMACHOUA	85.8	72.2	85.8	73.3		**X**
WANANI	94.7	98.1	94.7	98.1		**X**
FOMBONI	86.9	87	87.1	87.4	**X**	**X**

There was also a renewal of support for the IPV vaccine in its 5 doses/vial with preservative presentation as well as the renewal of support for the Pentavalent vaccine in its 10 doses/vial presentation.
The request for the introduction of the second measles dose was made in the first half of 2018.

5.3. Performance of Gavi CCEOP support (if country is receiving Gavi CCEOP support)

NA

5.4. Financial management performance

The Union of the Comoros has obtained financial support of $3,000,000 from GAVI for the implementation of HSS2 for a period of 5 years (2018/2022). This support aims to improve coverage and equity, quality service offer/community demand for immunisation and community involvement in immunisation activities.
The priority axes for the implementation of the HSS2 are:

- Governance
- Provision of services
- Cold chain
- The information/monitoring system.

In addition, an additional $750,000 was recommended for approval by the IRC in June 2019 to complement HSS2 to sustainably improve immunisation coverage and equity and introduce innovations.

5.5. Transition plan monitoring (applicable if country is in accelerated transition phase)

NA

5.6. Technical Assistance (TA) (progress on ongoing TCA plan)

Technical and financial support for the EPI is provided by the following three major partners:

- UNICEF
- WHO
- Dalberg Advisors, as an additional partner.

Other activities from UNICEF own resources include the following:

- Purchase of vaccines and consumables
- Customs clearance of vaccines and delivery of vaccines and consumables to the islands
- Strategies advanced in the 17 districts
- Preparation of the HSS2 submission
- Consultation of the cold chain
- Evaluation of Spot Check
- Diagnosis and follow-up of the rehabilitation works of 7 health posts.
- Salary payment for DRS Ngazidja driver's salary

For 2018, only one activity has not yet started. The others are all in progress.

TCA activities UNICEF 2018	*Budget*	*Status*	*Comments*
Supporting the implementation of the Reach Every Child (REC) approach	73 000	Completed	
Conducting the Effective Vaccine Management Assessment (EVMA)	53 000	Completed	

Support the development and implementation of standard operating procedures (SOPs) on injection safety and management of expired vaccines.	32 000	Completed	
Technical Assistance UNICEF	200 000	Completed	P3 immunisation recruited

TCA activities UNICEF 2019	*Budget*	*Status*	*Comments*
Implementation of microplans Equity	39 000	Ongoing	Contract in the process of being finalised; Mission in Q4
Optimization of vaccine logistics	57 500	Completed	The 02 missions planned for 2019 are carried out
Technical support for the implementation of the measles-rubella campaign	31 500	Completed	Support from the Unicef regional adviser
Technical Assistance UNICEF	230 000	Ongoing	P3 immunisation ongoing

With regard to WHO, the ACT funds were received in April 2019 and made it possible to launch the recruitment process for the medical consultant who is to support the establishment of community-based surveillance in the Union of the Comoros. The latter started work at the end of July 2019. He was able to follow the measles vaccination campaign and started to implement active search for cases of VMEs in the islands.

WHO TCA activities	Level of achievement	Observation
Supporting the implementation and functionality of the NITAG	Not yet started	NITAG not formally established
Support the organization of a DQS	ToR of activity available	Activity to be carried out at the end of October/beginning of November
Supporting the implementation of community-based monitoring	In progress	The medical consultant has been recruited since July 2019. It will support the establishment of EU-based monitoring, which will continue until June 2020.
Planned amount		**US$146,000**

Concerning the activities of the TCA 2018, which had been delayed in the implementation of activities, 3/5 activities could be fully implemented. The 2 others which required the involvement and implementation by the DISS could not be carried out due to scheduling problems and were cancelled at the beginning of 2019. Nevertheless, 89% of the allocated funds have been used.

WHO TCA activities	Level of achievement	Observation

Supporting the development of the MOH staff training plan for monitoring and evaluation	Unrealized	DISS scheduling problem
Support the development of training curricula on data quality and monitoring & evaluation.	Unrealized	DISS scheduling problem
Support the preparation of a data quality improvement plan harmonized with the SIS strengthening plan.	Completed	
Supporting the implementation of the SIS strengthening plan	Completed	
To conduct studies on the epidemiological situation of rubella in the country.	Completed	
Amount used/planned		**US$ 74677/84,000**

WHO's own-funded activities included preparation of the annual polio report, quarterly polio risk analyses, inventory of polio laboratories, active search for cases of VMEs, routing and shipment of samples, accreditation of the national reference laboratory for measles, preparation of the report on containment of potentially infectious materials containing wild poliovirus, and support for the investigation of suspected measles cases.

Following the recommendations of the previous joint audit and evaluation to strengthen the EPI's capacities, in terms of organization and strategic planning, Dalberg Advisors has been providing additional technical assistance financed by Gavi since June 2018 within the framework of the EFP TCA. Its activities also consist in supporting the CN EPI in the implementation of its action plan and its organization.

Dallberg TCA Operations 2018 - 2019	**Level of achievement**	**Observation**
Updating and strengthening the governance bodies of the CN EPI	Realized	Continuous support
Improvement of the organizational structure of the EPI	Realized	Complete the analysis of the organizational structure by including the islands.
Strengthening the leadership, management, strategic planning and monitoring capacities of EPI teams	Realized	Continuation of "day by day" accompaniment
Strengthening fiduciary mechanisms	Realized	Plea for the opening of the sub-account in stand by
Set up the accounting team	Completed, assignment of a member of the accounting team to RSD activities	Terms of reference for the preliminary analysis of the system prior to the acquisition

		of the accounting software developed and disseminated
Setting up the accounting organization	Realized	Extend this accounting organisation to the islands, taking into account the amounts made available and the obligation to report financially and narratively.
Strengthen coordination between the Bn and TFPs	Realized	Quarterly follow-up meeting on activities with the Ministry of Health to be proposed and planned
Develop programmatic monitoring tools	Realized	Ineffective ownership of the Accountant and the CSR
Designing the organizational structure and processes required for a well-functioning trust mechanism to hold Gavi funds and building capacity to implement the processes.	Realized	
Supervise the development of work plans and operational / EPI budgets for the implementation of the Gavi HSS (Health Systems Strengthening) grant and the EPI programme, linked to the action plan, and strengthen capacities for monitoring implementation	In progress	Activity carried out on a continuous basis
Actively participate in the strengthening of collaboration between the CNPEV and civil society organizations (CSOs)	In progress	
To support the follow-up of the implementation of micro-planning with the Regional Health Directorates in the three islands.	In progress	

TCA Dallberg Operations 2019 - 2020	**Level of achievement**	**Observation**
Support the Ministry of Health in establishing strong fiduciary mechanisms for the transfer of fund management to the national level.	Not started	

Oversee the development of the Ministry of Health's real estate asset inventory procedures	Not started	
Contribute to the physical inventory of the Ministry's equipment in general and, more specifically, equipment acquired in the context of health system strengthening.	Not started	
Strengthen the implementation of administrative and accounting procedures at the level of regional health directorates.	In progress	
LMC accompaniment of the DRS of Ngazidja	In progress	
Participation in the implementation of the differentiated strategy in reaching children	In progress	

6. UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL

Prioritized actions from previous Joint Appraisal	Current Status
1. **Vaccine support** ○ Organize a feasibility study on the introduction of pneumococcal and rotavirus vaccines ○ Renewal of immunisation support for the year 2016 (PENTA and IPV). The exact calculation of doses will be done by Gavi in collaboration with the country.	- Unrealized. Relaunch planned for 2020 - Unrealized. Awaiting TDR and consultant...
2. **HSS support** ○ Offer diploma courses for EPI actors	- Training courses on vaccination and cold chain logistics (4 people: 1 central, 3 regional)
3. **Elaborate and validate essential normative documents** ○ cMYP 2017-2021 ○ Injection Safety Policy and Biomedical Waste Disposal Plan	- Validated in use - Document (SOPs) developed with an international consultant awaiting validation
4. **Improving surveillance, monitoring and data quality** ○ Systematically analyze data in collaboration with the Statistics Branch and the Monitoring Branch. ○ Ensure data analysis for action and provide regular feedback to regions, districts and health posts.	- Systematic analyses of the data are done just at the regional level on a monthly basis. A systematic analysis at the central level has not yet been established. - An analysis of the data was done during the

	development of the DQIP by the Health Information and Statistics Directorate and a DQR (data quality review) is planned for the SARA survey to be conducted shortly.
5. **Cold chain supports** ○ Provide the regions and CSDs with a budget for the cold chain; ○ Implementation of the cold chain renewal plan coupled with maintenance training.	- Achieved (support for PUSH PUSH system) - Achieved (installation of new refrigerators, extension of the cold chain, cascade training in maintenance for the benefit of EPI agents...)
6. **Peripheral level reinforcement** ○ Support advanced strategies ○ Support for micro-planning ○ Contract with CSOs for the implementation of community strategies (prioritize districts, etc.).	- In progress - In progress - Discussions are under way with CSOs for the signing of contracts.
7. **Miscellaneous** ○ Improve financial monitoring of Gavi grants ○ To set up a feasibility study for a better collection and management of sharps waste. ○ Construct additional incinerators that meet standards in health districts	- Existence of quarterly financial reports, monthly bank reconciliations available, pending EPI procedure manual and software - Existence of a biomedical waste management plan - We have contacted the FM but they have a problem with their supplier so we are looking for an optional supplier.
Additional significant IRC/HLRP recommendations (if any)	**Current Status**
NA	NA

7. ACTION PLAN: SUMMARY OF FINDINGS, ACTIONS AND RESOURCE/SUPPORT NEEDS IDENTIFIED AND AGREED DURING THE JOINT APPRAISAL

Overview of the main activities planned for next year and necessary changes to GAVI support:

- **Strengthen the coordination, integration, accountability and programmatic and financial management capacities of HSS and EPI actors at all levels:**
    - Carry out the mapping of stakeholders and interventions in the area of Health System Strengthening (HSS) and promote operational synergies, complementarities and the pooling of resources between partners.
    - Operationalize, pool and strengthen the coordination bodies between the partners of the HSS
    - Implement a more effective advocacy strategy for the effective mobilisation of resources allocated to the EPI in the State Budget.
    - Restructure, after an institutional diagnosis, the Administrative and Financial Department (DAF) of the Ministry of Health.

- Rapidly draw up a manual of procedures for managing GAVI grants and then, as part of the restructuring, draw up an integrated manual of management procedures for all levels working under the responsibility of the Ministry of Health.
- Assess capacities and gaps and implement a strategy to strengthen the Regional Health Directorates (DRS) including dedicated technical assistance, adequate human resources and appropriate management tools with a priority focus on the Ngazidja DRS.
- Put in place an accountability framework at all levels, including dashboards, performance contracts and periodic monitoring deadlines.
- Operationalize and strengthen the health districts in management bodies (Boards of Directors), human resources, material, supervision tools and management tools (a pilot approach of this process in 02 districts is possible).
- Elaborate a mapping of human resource needs and contract staff in critical positions for a limited period of time, within the State's salary margins and according to the Government's capacity to take over staff after the contractual period.
- Organizing the campaign and the introduction of the Measles Rubella vaccine

- **To implement in a reinforced and differentiated manner according to the districts the "Reach Every Child" approach centred on equity in immunisation through the following interventions:**

  - Review of microplans after equity analysis
  - Refocusing of the programmatic approach from the notion of priority districts to that of a differentiated strategy by district
  - Implementation of the urban strategy defined in the proposal for the additional HSS funds with in particular:
    - The design and deployment of Digital Vaccination Registries (DVRs)
    - Improving community participation through the transfer of skills in communication for development using Civil Society Organizations (CSOs), Community Health Workers (CHWs) and immunisation sponsorship.
    - Contractualization of CSOs to provide additional and mobile immunisation opportunities in underserved urban and peri-urban centers.
  - Basic training on immunisation for EPI actors at the peripheral level; a pool of 60 agents has been identified (MLM training).
  - Monitoring of the implementation of the REC micro plans of islands and districts

- **Optimize Vaccine Logistics by continuing the implementation of the Improvement Plan resulting from the GEV 2018 with a focus on:**

  - The validation of the Terms of Reference and the operationalization of the Technical Group for Logistics Coordination in Healthcare.
  - Validation and dissemination of Standard Operating Procedures
  - The implementation of inventory management tools at all levels
  - Equipping health workers at the operational level with high-performance computers
  - Further computerization of logistics management with the training of district officers.
  - Prioritizing health post workers for capacity building
  - The adoption of the monitoring framework for vaccine logistics and its monthly follow-up with feedback to operational actors.
  - Improving the quality of supervision
  - Contractualisation for the maintenance of cold chain equipment

- **Improve the quality and reliability of the system for collecting, processing and reporting health information.**

- Finalize and share the in-depth system and data quality review report and Improvement Plan.
- Conduct an in-depth analysis of immunisation performance in 2018
- Revise the collection tools for the operational level to make them simpler and more efficient and train agents in their use.
- Perform in-depth data analysis at monthly validation meetings at all levels
- To document the contribution of the Digital Immunisation Registry (DIR) to data quality optimization.
- Secure SMT, DVD-MT and DIR to DHIS 2
- Strengthening the community-based component of surveillance
- Setting up geo-location systems

Key finding / Action 1	The coordination, integration, accountability and programmatic and financial management capacities of HSS and EPI actors at all levels are improved.
Current response	Significant progress has been made in the institutional strengthening of the National Coordination of Pev, in the holding of coordination meetings at all levels and in the drafting of normative documents, especially in the area of vaccine logistics. However, the multiplicity of coordinating bodies, the non-functionality of certain essential organs and the weakness of integration between partners reduce the synergy and efficiency of Health System Strengthening interventions. The weakness in human resources, the absence of a procedures manual and structural issues prevent the DAF of the Ministry of Health from effectively carrying out all its missions, particularly for the mobilization of State resources. The technical and managerial capacities of the health regions and districts are insufficient to support the implementation of high-impact health interventions at the operational level. Weak accountability mechanisms, the absence of a standardized framework for supervision, and insufficient quantity and quality of human resources at all levels hamper the performance of health programmes.
Agreed country actions	• Carry out a mapping of stakeholders and SSR interventions to be validated during a national workshop which will also study operational synergies and coordination issues. • Finalize the process of merging the CFIC and the MAC • Making the NITAG functional • Organize monthly and quarterly integrated coordination meetings of the partners within the framework of the institutional bodies that are the National Health Committee and the National Technical Health Committee. • Formalize the advocacy strategy for the mobilization of State resources for the EPI • Prepare and submit quarterly to the Ministry of Finance reasoned requests for EPI funding. • Carry out an institutional diagnosis of the functioning of the DAF • Strengthen the capacities of central-level managers in financial management, results-based management, programmatic monitoring and budget monitoring. • Rapidly draw up a manual of procedures for managing GAVI grants and then, as part of the restructuring, draw up an integrated manual of management procedures for all levels working under the responsibility of the Ministry of Health. • Carry out an institutional diagnosis of the RSDs • Strengthening capacity and governance at the regional and district levels • Install videoconferencing facilities at national and regional level • Finalize the implementation of dashboards for the continuous monitoring of immunisation activities. • Establish performance contracts with the regions and districts. • Operationalize the health districts, starting with at least two of them in a pilot approach. • Finalize supervision guides and grids

	• Systematize and strengthen the quality of formative supervision missions and monitoring of activities by the central and regional levels. • Mapping of human resources needs and contracting for critical positions
Expected outputs/ results	• The mapping of stakeholders and interventions in terms of Health System Strengthening (HSS) is carried out and validated. • CFIC and CJC governance frameworks merged • NITAG is functional • All coordinating bodies between HSS partners are functional and integrated. • At least 75% of the ENP allocation in the State's 2020 budget is mobilised • the Administrative and Financial Directorate (DAF) of the Ministry of Health is restructured after an institutional diagnosis, • The GAVI grant management procedures manual and the Ministry of Health's integrated management procedures manual are available and disseminated. • The leadership and programmatic and financial management capacities of programme actors at the national, regional and district levels are strengthened. • The capacities of the Regional Health Directorates (DRS), in particular the DRS of Ngazidja, are evaluated and specific reinforcement plans are put in place. • An accountability framework at all levels, including dashboards, performance contracts and periodic monitoring deadlines, is put in place. • Videoconferencing devices and integrated dashboards are available and used for continuous monitoring of the program. • Monthly and quarterly integrated coordination and accountability meetings are held between the national and regional levels. • At least two (02) Health Districts are fully operational • Formative supervision missions and monitoring of activities are organized systematically and efficiently. • A mapping of human resource needs is available and contracts are in place to fill critical positions for the implementation of the Program. •
Associated timeline	First semester for institutional diagnostics, mapping of HSS interventions and the implementation of the accountability framework. Quarterly CFIC and NITAG meetings
Required resources / support and TA	✓ TA provided jointly by the GAVI Secretariat and the Global Fund for the institutional diagnosis and restructuring of the DAF as well as the Ministry of Health's procedures manual. ✓ Continued technical support from Dalberg under the EFP/TCA for the diagnosis and strengthening of RSDs ✓ Dedicated technical TA provided by UNICEF within the framework of the PEF/TCA for the programmatic strengthening of regions and districts. ✓ TA provided by WHO for capacity building of VCTG members ✓ Contractualization for the maintenance of videoconferencing devices within the framework of the additional funds

Key finding / Action 2	The "Reach Every Child" approach focused on equity is implemented in a strengthened and differentiated way.
Current response	Geographical inequities and those linked to the level of wealth remain very marked. 04 districts of Ngazidja with 11% of the target population alone concentrate 54% of children not vaccinated at penta 3. While nearly 80% of children from the richest families receive the third dose of the pentavalent vaccine, only 62% of children from the poorest quintile benefit from this intervention. The analyses conducted during the development of the microplans identified four (04) risk factors for non-vaccination which are; gaps in knowledge, attitudes and practices leading to low community participation, low immunisation in urban and peri-urban environments, geographical remoteness and inappropriate scheduling of immunisation services.
Agreed country actions	• Review the microplans based on the equity analysis data. • Developing and deploying Digital Vaccination Registries (DVRs) • Contract with CSOs to provide additional immunisation opportunities in urban and peri-urban areas • Working with districts to fill the gaps in human resources for immunisation in health posts • Contract with CSOs for communication and community mobilization activities • Establishing community sponsorship of immunisation • Improve the working environment and supervision of Community Health Workers • Systematic monitoring of the implementation of microplans
Expected outputs/results	• Microplans are reviewed on the basis of the equity analysis data. • Digital Vaccination Registries (DVRs) are developed and deployed • CSOs are contracted to provide additional immunisation opportunities in urban and peri-urban areas. • District managers are mobilized to fill the gaps in human resources for immunisation in health posts. • CSOs are contracted for communication and community mobilization activities. • The working framework and supervision of Community Health Workers is strengthened. • Regular and effective monitoring of the implementation of the microplans is ensured • Disparities between regions and quintiles are reduced
Associated timeline	Ongoing programme for the year 2020
Required resources / support and TA	TA provided by Unicef within the framework of the PEF/TCA and specialized in communication for development (C4D) to support the implementation of communication and community mobilization strategies for immunisation.
Key finding / Action 3	Vaccination logistics are optimized
Current response	With the contribution of HSS funding, the capacity and quality of cold chain equipment has improved substantially in recent years. 40% of the actions of the 2018 Effective Vaccine Management (EVM) Improvement Plan have been implemented and the 2019 EVM self-assessment showed an overall increase in performance with a national composite score rising from 77 to 85%. However, recurring problems in maintenance and inventory management persist and are the areas where progress is still expected. Triangulation of immunisation data (reported doses) and vaccine consumption data at the national level

	indicates that the country reports more children vaccinated than doses received. Standard Operating Procedures (SOPs) have been developed for all GEV criteria, but are not yet disseminated due to lack of validation. A framework for monitoring logistics performance is proposed as well as Terms of Reference for a National Technical Group for Health Logistics Coordination.
Agreed country actions	• Validate the Terms of Reference and operationalize the Health Logistics Coordination Technical Group. • Validate and disseminate the Standard Operating Procedures. • Put in place inventory management tools at all levels • Equipping health workers at the operational level with high-performance computers • To continue the computerization of logistics management with the training of district officers. • Adopt the monitoring framework for vaccine logistics and ensure monthly monitoring with feedback to operational actors. • Triangulation of immunisation and vaccine consumption data at regional and district levels. • Contract with local and international consortiums of companies for the curative maintenance of equipment. • Ensuring the installation of new refrigerators and the return to service of non-functional equipment • Continue and optimize the implementation of the vaccine distribution system (Push-Push) •
Expected outputs / results	• The Technical Group for Logistics Coordination is functional • SOPs are validated and disseminated • Inventory management is improved and computerized at all levels • The performance indicators of the logistics system are monthly collected, analysed and feedback given to the operational actors. • The triangulation of immunisation and vaccine consumption data is done at the regional and district levels. • Consortiums of local and international companies are contracted for the curative maintenance of equipment. • New refrigerators are installed and non-functional equipment is put back into service. • The system of vaccine distribution by allocation (Push-Push-Push) is efficient
Associated timeline	First semester for the implementation of the OWGL, the dissemination of SOPs and the computerization of inventory management. Second half of the year for contractualisations.
Required resources / support and TA	Continuation of technical TA provided by UNICEF in the framework of the 2019 EFP/TCA
Key finding / Action 4	The quality of immunisation data is improved
Current response	Reported administrative data fall short of survey and joint estimation data. The health data management system remains largely to be modernized, as it is based on paper forms and an Excel tool.
Agreed country actions	• Finalize and share the in-depth system and data quality review report and Improvement Plan. • Conduct an in-depth analysis of immunisation performance in 2018

	• Revise the collection tools for the operational level to make them simpler and more efficient and train agents in their use. • Perform in-depth data analysis at monthly validation meetings at all levels • To document the contribution of the Digital Immunisation Registry (DIR) to data quality optimization. • Secure GTS, DVD-MT and NVR to DHIS 2 • Strengthening the community-based component of surveillance • Setting up geolocation systems
Expected outputs / results	• Finalized versions of the in-depth review and data improvement plan are now available. • Health information collection tools are revised and operationalized • In-depth analysis and regular validation of immunisation data is ensured at all levels • DVD-MT and NVR are operationalized, improve the quality of immunisation data and are DHIS2-anchored. • The Geographic Information System (GIS) for monitoring cases of VMEs and those lost to immunisation is functional. • Community-based surveillance is strengthened
Associated timeline	First half of 2020 for the revision of data collection tools, the operationalization of the DVD-MT in all districts and the pilot phase for the implementation of the NVR. Second semester for the implementation of the GIS
Required resources / support and TA	• Support to the districts included in the contract for the design and deployment of NRVs under the leadership of UNICEF (additional HSS funds) • Technical assistance by WHO for securing the GTS and DVD-MT to DHIS2 • Technical assistance by WHO for the implementation of GIS
Key finding / Action 5	
Current response	
Agreed country actions	•
Expected outputs / results	
Associated timeline	
Required resources / support and TA	•

8. JOINT APPRAISAL PROCESS, ENDORSEMENT BY THE NATIONAL COORDINATION FORUM (ICC, HSCC OR EQUIVALENT) AND ADDITIONAL COMMENTS

9. ANNEX: Compliance with Gavi reporting requirements

	Yes	No	Not applicable
End of year stock level report (due 31 March) *			
Grant Performance Framework (GPF) * reporting against all due indicators			

Financial Reports *			
Periodic financial reports			
Annual financial statement			
Annual financial audit report			
Campaign reports *			
Supplementary Immunisation Activity technical report			
Campaign coverage survey report			
Immunisation financing and expenditure information			
Data quality and survey reporting			
Annual data quality desk review			
Data improvement plan (DIP)			
Progress report on data improvement plan implementation			
In-depth data assessment (conducted in the last five years)			
Nationally representative coverage survey (conducted in the last five years)			
Annual progress update on the Effective Vaccine Management (EVM) improvement plan			
CCEOP: updated CCE inventory			
Post Introduction Evaluation (PIE) (specify vaccines):			
Measles & rubella situation analysis and 5 year plan			
Operational plan for the immunisation programme			
HSS end of grant evaluation report			
HPV demonstration programme evaluations			
Coverage Survey			
Costing analysis			
Adolescent Health Assessment report			
Reporting by partners on TCA			