Joint Appraisal report 2019

Country	**CAMEROUN**
Full JA or JA update[1]	☑ **full JA** ☐ JA update
Date and location of Joint Appraisal meeting	30/09-03/10/2019
Participants / affiliation[2]	See list in Annex
Reporting period	Annual
Fiscal period[3]	2018
Comprehensive Multi Year Plan (cMYP) duration	6 years
Gavi transition / co-financing group	Preparatory transition phase

1. RENEWAL AND EXTENSION REQUESTS

Renewal requests were submitted on the country portal

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

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 $
			%	Children	
Yellow Fever Introduction	2004	78%	91%	737,029	638,500
Yellow Fever Campaign	2009	78%			
Penta	2009	86%	91%	780,745	1,233,000
MenA Campaign	2011				
PCV	2011	84%	91%	780,745	7,348,500
IPV	2015	76%	80%	780,745	1,084,200
Rota	2014	83%	90%	722,166	2,531,500
MR Campaign	2016	77%	91%	735,470	829,000

	Date	Comments
M2 dose and MR Campaign	2019	T4 2019
HPV	2019	HPV demo conducted in 2015, single cohort planned for date to be determined in 2020
MenA	2020	The country considers putting up application in 2020

[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.

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
HSS2	WHO	2016-2019	For CCEOP for country	23.5	5.6	1,07			
CCEOP	UNICEF SD	2018	2018	2.9	2.9	1.07	31%		
PCV 13	Govt.	2014-2018	2019	0.27	0.27	0.27	48%		
IPV	Govt.	2014	2014	0.68	0.68	0.68	86%		
Rota	Govt.	2015	2015	0.75	0.75	0.75	97%		
MR Campaign	Govt.	2015	2015	5.8	5.8	5.8	50%		Audit 2016
	WHO	2019	2019	1.8	1.8	1.8	100%	MA Report	

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	Programme	Expected application year	Expected introduction year
		2020	2021
		2020	2021

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

Intermediate results indicator	Target	Actual
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.			
TOTAL main partners	2017	492,333	492,333	489,595	5 / 5	25 / 27	
	2018	884,535	884,535	255,200	3/3	22/26	
	2019	950,202	-	-	-	-	
UNICEF	2017	375,000	375,000	374,971	5 / 5	8 / 8	
	2018	375,000	375,000	224,287	2 / 2	10 / 10	
	2019	405,000	405,000	-	-	-	

[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.

WHO	2017	117,333	117,333	-	-	-	
	2018	509,535	509,535	70,879	1 / 1	16 / 16	
	2019	545,202	545,202	-	-	-	
TOTAL additional partners	2017	389,931			-	4/4	
	2018	351,309			-	7/7	
	2019	779,561			-	-	
CHAI	2017	352,992			-	1/1	Assistance for the HPV, Equipment cold chain, urban interventions, planning / management
	2018	6,930			-	1/1	
	2019	420,797			-	-	
Dalberg	2018	194,256			-	4/4	LMC: Capacity Strengthening
JSI	2019	213,072			-	-	Vaccine Management Support

3. RECENT CHANGES IN COUNTRY CONTEXT AND POTENTIAL RISKS FOR NEXT YEAR

Cameroon is home to 380,899 Nigerian and Central African refugees[5], spread across the Adamaoua, Central, Eastern, Far North and Coastal regions. In addition to insecurity in the Northern and Eastern Regions, the country has been experiencing socio-political disruptions in the North-West and South-West since 2016[6]. This situation has led to the disintegration of the local health fabric and caused 262,831 internally displaced persons (Far North[7]) and 530,000 (North-West and South-West[8]). As a result of insecurity, approximately 40% of the vaccination posts in the North-West and South-West regions were no longer functional by December 2018. Of the 348 health facilities that vaccinate in the North West, 38% (131) did not report and the situation was similar in the South West where only 62% (159/256) of the health facilities that vaccinate transmitted vaccination data to the region. In addition, the island areas of the Far North, Littoral, West and North regions account for 8264 of the target children[9]. However, there is no need to adjust the country's vaccine order.

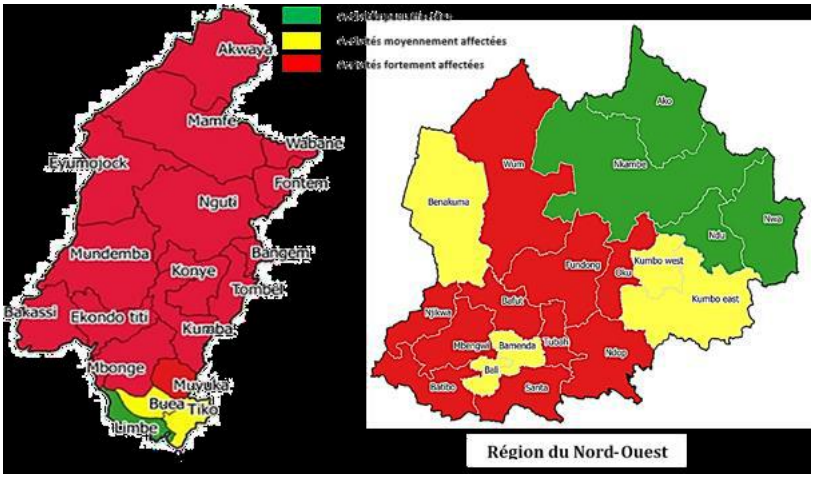

Figure 1: Influence of insecurity on immunisation activities in the North-Western and South-Western regions.

[5] UNHCR: Cameroon Factsheet – June 2019. https://reliefweb.int/report/cameroon/unhcr-cameroon-factsheet-june-2019

[6] MINAT: Plan d'assistance humanitaire d'urgence dans les régions du Nord-Ouest et du Sud-Ouest 2018-2019. https://www.prc.cm/fr/multimedia/documents/6515-plan-d-assistance-humanitaire-d-urgence-nw-sw-20-06-2018

[7] IOM: Displacement Tracking Matrix. Cameroon, Far-North Region. Dashboard 18.

[8] OCHA : Humanitarian snapshot in South-West and North-West regions (June 2019) https://reliefweb.int/report/cameroon/cameroon-humanitarian-snapshot-south-west-and-north-west-regions-june-2019

[9] Informations received from Coordonnateurs des Groupes Techniques Régionaux du PEV.

The slowing economy in previous years has led to a decline in funding for immunisation. The country, which is growing positively, is expected to reach a real GDP of 4.4% in 2019 and 4.7% in 2020[10].

From 4 in 2018, the number of districts with measles epidemics increased to 34 at the 34th epidemiological week for a total of 1170 positive cases in 2019 against 108 in 2018[11]. The number of reported cholera cases increased from 645 (October 2018) to 1470 (July 2019)[12]. The Far North and Northern regions are the most affected. Although no cases of wild poliovirus have been detected in the country since 2016, 2019 was marked by some major polio-related developments. In May, he was isolated in an environmental sample from the collection site of the District Hospital of Mada in the Far North region, a cVDPV2 which motivated the declaration by the Minister of Health of a polio epidemic with the development of a response plan and the implementation of this plan. The vaccination response involved a total of four health districts located in the Logone and Chari departments, namely the health districts of Goulfey, Kousseri, Mada and Makari. In November, another case of cVDPV2 was confirmed in an environmental sampling at the Relai Touristique site, located in the Kousseri Health District, Far North Region. It is important to note that during this year, confirmed cases of cVDPV2 in the neighbouring countries of Chad and CAR have necessitated vaccination responses in certain HDs in Cameroon bordering the affected districts in the countries concerned. It was that case of the polio epidemics following following the confirmation of a human case of cVDPV2 Chad, which motivated the conduct of two rounds of monovalent response in the DS of Maga and Kousseri in Cameroon.

As part of the implementation of the polio transition plan (objectives 1 and 2) GAVI support is required for the acquisition of inactivated polio vaccine (IPV) and inputs for routine, particularly for the implementation of the RED approach.

Potential future issues (risks)

1. **Decrease in immunisation performance in the North-West** and South-West regions: The country has developed a specific plan for the North-West and South-West regions, integrating the monitoring of IDPs. This plan takes into account the contribution of host communities in monitoring and accompanying displaced persons in health activities, including vaccination. The strategies of Hit&Run and Firewalling usually applied to conflict areas and the involvement of community-based organizations and more tolerated denominations in the conflict are being considered.
2. **Insufficient funding for immunisation** due to increased urgent funding requirements for defence and security. The country is on track for the effective start of HSS2. A forum for relaunching immunisation aimed at mobilizing alternative financing is being prepared.
3. **Persistence and extension of epidemics**: A measles and rubella response vaccination campaign is planned for December, coupled with the introduction of the 2nd dose of the MR vaccine. Polio response plans for the Lake Chad Basin are regularly reviewed and implemented. Epidemiological surveillance will be intensified and routine immunisation strengthened, particularly in priority districts supported by HSS 2 and other partners. In addition, the country must submit its Full Documentation for certification to the Regional Certification Commission in Africa.

   (CRCA) for the eradication of polio in March 2020.

4. PERFORMANCE OF THE IMMUNISATION PROGRAMME

4.1. Coverage and equity of immunisation

4.1 Immunisation coverage and equity

Coverage: DTP3, MCV2, etc.	The number of districts with at least 80% Penta 3 immunisation coverage decreased from 135 (71.4%) in 2017 to 100 (52.9%) in 2018. The number of DS with CV Penta 3<50% increased from 4 (2.1%) in 2017 to 19 (10.1%) in 2018, i.e. 5 times more. However, the distribution of SDs has varied significantly. The Littoral region, which used to have three, now has only one;

[10] Groupe de la Banque Africaine de Développement : Perspectives économique au Cameroun. https://www.afdb.org/fr/countries/central-africa/cameroon/cameroon-economic-outlook/

[11] MINSANTE : Cameroon_weekly measles_update SE 33 2019.

[12] MINSANTE : SITREP 47 Gestion de l'épidémie de choléra au Cameroun.

	the South-West region, which used to have one, now has 12 (63.2%), while the Northwest which had none increased to 6 (31.6%). The improvement in performance in the Littoral could be explained by the improvement in reporting, data, the support of the CHAI partner within the framework of strengthening routine immunisation in certain priority HDs and the ongoing support of WHO consultants in support of the region. The Northwestern and Southern Regions- The situation in the West, affected by insecurity, has deteriorated. National immunisation coverage in Penta 3 was 79.1% compared to 85.5% in 2017; that in MR was 71.0% in 2018 compared to 77.4% in 2017. In both cases, there was a 6-point drop[13]. A comparison of the results obtained in the MICS 2014[14] and the EDS 2018[15] shows a drop in survey immunisation coverage in Penta 3 (from 79.6% to 71.5%), MR (from 79.9% to 65.3%) and Td2+ (from 73.9% to 71.1%). This downward trend is global, and the percentage of children fully vaccinated before the age of 12 months has fallen from 64.4% to 41.5%.
Coverage: Absolute numbers of un- or under-immunised children	In 2018, 143,518 children did not receive their dose of Penta 1 and 189,336 did not receive their dose of Penta 3. The Far North Region is the one that has missed the most of children for both Penta 1 and Penta 3 (37,310 and 53,318 respectively). The vaccination system lost 45,818 children between these two contacts. All regions are to varying degrees affected by this problem, hence the failure to meet the 7%[16] specific abandonment target.
Equity: • Wealth (e.g. high/low quintiles) • Education (e.g. un/educated) • Gender • Urban-rural • Cultural, other systematically marginalised groups or communities e.g. from ethnic religious minorities, children of female caretakers with low socioeconomic status, etc.	The latest Demographic and Health Survey (DHS)[17] shows that immunisation coverage of children in Penta 3 is influenced by the level of economic well-being of the household and the educational level of their mothers. Indeed, it increases from 70.1% in the lowest quintile of households to 95.1% in the highest quintile. Moreover, it increases with the educational level of the mother, rising from 53.9% among those whose mothers have no education at all to 82% among those whose mothers have lower secondary education and 90.3% among those whose mothers have higher education. Immunisation coverage in Penta 3 is higher in urban areas (86.7%) than in rural areas (63.5%) and varies greatly from one region to another; it is highest in the North-West (88.5%), in contrast, the regions of Adamaoua (55.6%), the North (55.6%) and the Far North (61.9%) record the lowest percentages. There is no significant gender disparity (CV penta 3 of 70.0% for boys versus 73.1% for girls). Few data are available on immunisation status among ethnic minorities and hard-to-reach groups. However, efforts are regularly made to provide them with immunisation services. This is the case through the strategy of joint vaccination of livestock and children in nomadic communities, for which the mapping of camps and routes has been completed, and the strategies advanced in health districts with pygmy populations or other hard-

[13] MINSANTE (2019). Rapport annuel 2018 du programme Elargi de Vaccination.
[14] INS et MINSANTE (2015) : Enquête en Grappe à Indicateurs Multiple 2014.
[15] INS et MINSANTE (2019) : Enquête démographique et de santé 2018. Indicateurs clés. Pp. 71.
[16] MINSANTE (2019). Rapport annuel 2018 du programme Elargi de Vaccination.
[17] INS et MINSANTE (2019) : Enquête démographique et de santé 2018. Indicateurs clés. Pp. 71

	to-reach communities. The data collection system does not devote a specific component to them. The Multiple Indicator Cluster Survey (MICS) conducted in 2014 had shown the same disparities in 3rd dose pentavalent immunisation coverage according to poverty quintiles (58% for the poorest quintile versus 98% for the poorest quintile), place of residence (75% in rural areas versus 92% in urban areas), the mother's level of education (64% without education versus 94% for secondary level) and according to place of residence (58% in EN, 73% in the North, 75% in the South versus 96% in the city of Douala, 95% in the Centre and 96% in NW)[18].

The country has not achieved the programmatic objective of 90% Penta 3 immunisation coverage set at the beginning of the year in alignment with GVAP. At the national level, the VC dropped from 85.5% in 2017 to 79.1% in 2018, i.e. more than 6 points lost. The MR CV is 71%, down 6 points from 2017, accentuating the downward trend observed since 2014 (Figure 1). As shown in Table 2, only the Northern region experienced an increase in VC in Penta 3 in 2018. Despite the decline in their performance, the Central, Eastern and Southern regions reached the national target of 90%. The North West and South West regions have seen the largest declines, each losing more than 20 points in immunisation coverage. These two regions concentrate 18 of the 19 health districts (HDs) with less than 50% CV in Penta 3 in the country.
As for the MR, the Coastal and Northern regions recorded an increase in coverage in 2018 (Figure 2).

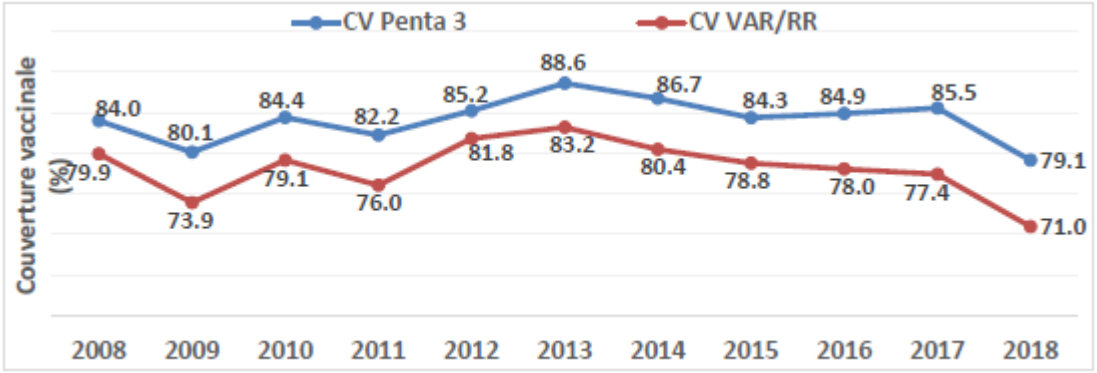

Figure 2. Evolution of Penta 3 and Measles / MR immunisation coverage from 2009 to 2018 in Cameroon

Table 1. Comparison of Penta 3 and MR immunisation coverage between 2017 and 2018 by region

	Couverture vaccinale Penta 3			Couverture vaccinale RR		
	2018	2017		2018	2017	
ADAMAOUA	90,20%	84,00%	-6,20%	76,60%	72,30%	-4,30%
CENTRE	94,90%	92,10%	-2,80%	85,10%	76,70%	-8,40%
EST	99,50%	98,50%	-1,00%	92,70%	89,20%	-3,50%
EXTREME-NORD	78,30%	73,90%	-4,40%	73,00%	68,70%	-4,30%
LITTORAL	86,60%	84,70%	-1,90%	72,50%	74,30%	1,80%
NORD	81,90%	82,30%	0,40%	72,30%	74,00%	1,70%
NORD-OUEST	78,30%	57,30%	-21,00%	73,30%	54,40%	-18,90%
OUEST	83,10%	79,70%	-3,40%	74,80%	69,80%	-5,00%
SUD	101,10%	93,00%	-8,10%	89,80%	85,10%	-4,70%
SUD-OUEST	89,60%	54,60%	-35,00%	89,60%	57,00%	-32,60%
CAMEROUN	85,50%	79,10%	-6,40%	77,40%	71,00%	-6,40%

[18] Institut National de Statistique, Enquête en Grappe à Indicateurs Multiple 2014.

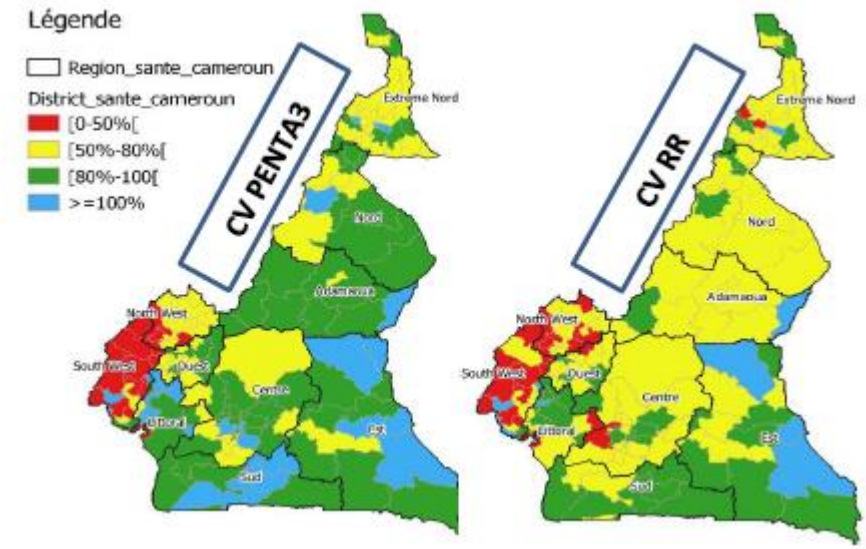

Figure 3: Mapping of immunisation performance by health district for Penta 3 and MR antigens in 2018 in Cameroon

The number of districts having achieved at least 80% Penta 3 immunisation coverage increased from 135 (71.4%) in 2017 to 100 (52.9%) in 2018. The number of HDs with Coverage <50% increased from 4 (2.1%) in 2017 to 19 (10.1%) in 2018, i.e. 5 times more districts with unacceptable coverage (Figure 3).

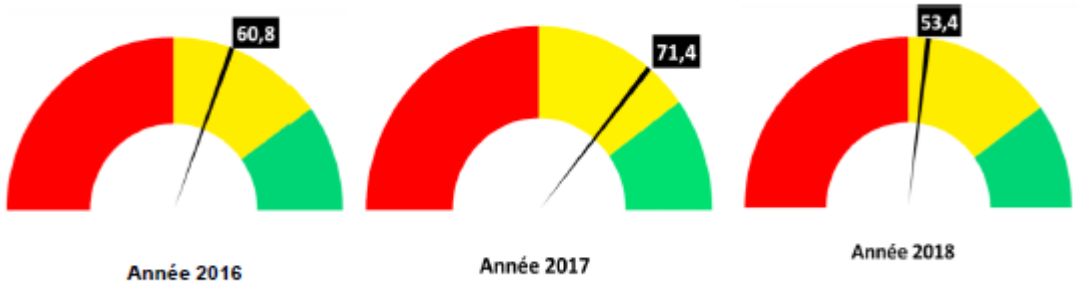

Figure 4: Evolution of the proportion of Districts with Coverage Penta 3 greater than 80% from 2016 to 2018

In 2018, there are approximately 189 336 children unvaccinated at Penta 3. The Far North region is the region that has missed the most (Figure 4). Nearly 23% of children missed at Penta 3 are concentrated in 10 HDs. Although receiving additional support as part of the response to the polio epidemic in the Lake Chad Basin, some priority HDs in the Far North Region, including Kousseri, Koza and Mora, are among the 10 HDs that missed the most children in 2018 (Table 3).

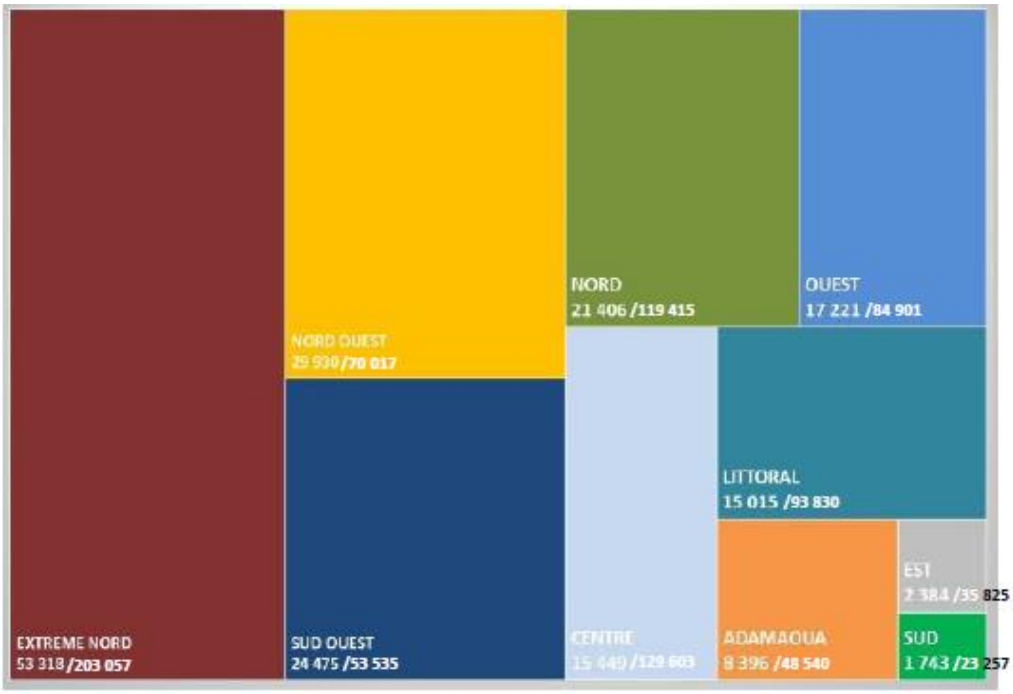

Figure 5: Ranking of regions according to children who were missed at the Penta

Table 2. Top 10 districts with the highest number of children missed in 2018 in Cameroon

Régions	Districts	Evolution du DS par rapport au mois précédent	# cumulé de mois dans le TOP 10	Manqués	% (par rapport au total des enfants manqués)	% cumulé croissant	Complétude du rapport des FOSA
TOTAL PAYS				189 336	100,0	100,0	
EXTREME NORD	KOUSSERI	→	12	6 224	3,3	3,3	97,5
SUD OUEST	KUMBA	→	8	4 770	2,5	5,8	75,6
NORD OUEST	NDOP	→	9	4 498	2,4	8,2	76,4
CENTRE	NKOLNDONGO	→	12	4 277	2,3	10,4	100,0
EXTREME NORD	MORA	↑	8	4 160	2,2	12,6	94,8
EXTREME NORD	KOZA	↓	7	4 096	2,2	14,8	100,0
NORD OUEST	BAMENDA	↑	6	4 036	2,1	16,9	91,7
LITTORAL	BOKO	↓	12	4 030	2,1	19,1	99,8
LITTORAL	DEIDO	↓	12	3 976	2,1	21,2	99,8
NORD	GAROUA 1	↓	4	3 683	1,9	23,1	100,0

4.2. Key drivers of sustainable coverage and equity

- **Health personnel**

The last Health Human Resources Survey was conducted in 2011[19]. In 2018, 138 staff worked full time for the Programme, including 53 at the central level and 85 in the branches of the 10 Regions of the Country. In districts and health facilities where integration of activities is the norm, health staff work for the EPI on a part-time basis. In many health facilities, particularly in rural areas, the entire package of health activities is provided by a single staff member, which limits the availability of immunisation. In addition, the

[19] MINSANTE (2012). Plan de développement des ressources humaines du système de santé au Cameroun 2013-2017. http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/cameroon/plan_strategique_de_developpement_des_ressources_humaines_en_sante.pdf

assessment of staff training needs in immunisation revealed many training deficiencies[20]. However, the staff capacity building plan[21] developed as a result of this evaluation has been implemented only very tentatively due to the unavailability of funding.

The evaluation of the Programme's capacities carried out at the end of 2016 by Gavi identified some major bottlenecks in the functioning of the Programme. In the area of Programme Management, delays in the provision of counterpart funds by the Government and insufficient human resources in terms of quantity and quality were noted. However, at the beginning of 2018, the organizational chart was reviewed, staff were assigned according to the needs of the Programme and since then, capacity building has been ongoing. With regard to monitoring and evaluation, the absence of a monitoring and evaluation plan for the cMYP was noted; this plan is being developed as part of the mid-term review of the cMYP.

The aggravation of socio-political unrest in the North-West and South-West regions could accentuate the movement of populations in search of security, and the abandonment of health structures by personnel who are often victims of the insurgents' distrust of institutions. In the northern part of the country, although residual, the exactions of the terrorist group Boko Haram coupled with widespread banditry persist, creating an unfavourable climate for both health personnel and beneficiaries, with effects similar to those described above.

- **Supply chain**

Nationally, the required score of 80% was not achieved for any of the 9 EGV criteria. Only the categories relating to "Buildings" and "Storage capacity" reached 81% and 85% respectively.

The EPI is engaged in a process of introducing new vaccines (HPV, MR2, MenAfrivac, HepB0), which are more expensive and require large storage volumes. An Effective Vaccine Management Assessment (EVMA) was conducted in 2013, at the end of which 48 activities were planned. As of May 2019 37 activities (77%) have been completed, 7 (21%) were in progress and 2 (4%) remained unrealized. Among the activities not carried out are the provision of logbooks for Central and Regional level vehicles, and the provision of all regional and district depots with annually tested fire extinguishers for the prevention of possible fires.

- **Service delivery and demand generation**

The average number of vaccinators per health facility at the national level is 3, varying from 2 to 5 depending on the region. However, field observations show that in rural areas, there is very often only one staff per health facility. It is 7 in the Far North region, 4 for the North-West and 2 for the South-West[22]. In 2018 3,811 health facilities offered immunisation services out of the 5,548 listed health facilities. The number of health facilities providing immunisation increased by 38 in 2018 compared to 2017[23].

Table 3. Supply of immunisation services in the regions of Cameroon

REGION	Moyenne de séances de vaccination par mois	% stratégies fixes réalisées	% stratégies avancées réalisées	% enfants vaccinés en stratégie fixe	% enfants vaccinés en stratégie avancée et mobile
ADAMAOUA	3	97	91	66	34
CENTRE	1	85	68	90	10
EST	3	94	77	64	36
EXTREME NORD	7	93	82	53	47
LITTORAL	7	89	81	97	3
NORD	4	95	90	61	39
NORD OUEST	4	95	47	74	26
OUEST	2	88	98	90	10
SUD	4	90	62	76	24
SUD OUEST	2	98	102	86	14
CAMEROUN	3	91	86	74	26

[20] MINSANTE et CHAI (2017). Évaluation des besoins en formation du personnel du Programme Élargi de Vaccination (PEV) : Aperçu des résultats obtenus aux niveaux central, régional et district de santé

[21] MINSANTE (2017). Plan stratégique de renforcement des capacités 2018-2020.

[22] Les structures d'/fre de services sont insuffisantes dans la Région de l'Extrême où on dénombre 378 structures sanitaires pour une cible de 215 234

[23] MINSANTE (2019). Rapport annuel 2018 du Programme Elargi de Vaccination

The number of immunisation sessions offered by the trainings is on average 3 per month nationwide. Conflict and insecurity negatively affect immunisation coverage. Thus, the largest number of unvaccinated children is found in the Far North (29.4%), North-West (16.6%), South-West (13.5%) and North (11.8%) regions. These targets could be to be sought in neighbouring regions or further afield, having moved from their areas of habitual residence to safer locations. Figure 5 illustrates the sharp drop in the contribution of the North-West and South-West regions to immunisation coverage, a drop of 4.5 points since the onset of socio-political unrest in 2016. In addition, since the beginning of the crisis in NOSO, the demand and supply of services has declined sharply due to movement restrictions imposed by "dead town" operations and the movement of people fleeing insecurity and limited accessibility. In the SO Region, of the 491 existing health facilities, 256 offer immunisation services, of which 121 are fully functional, 21 partially functional and the rest are non-functional (114). In the NW Region out of 410 existing health facilities, 318 were offering immunisation services but 38 are now non-functional and 15 are only partially functional. Of the 431 existing health facilities in the Far North Region, 378 offer vaccination services. 19 health facilities located in insecure areas operate periodically. Supply capacity is also diminished because of the departure of health workers from insecure areas, insufficient cold chain equipment and, above all, financial resources for advanced and mobile vaccination sessions.

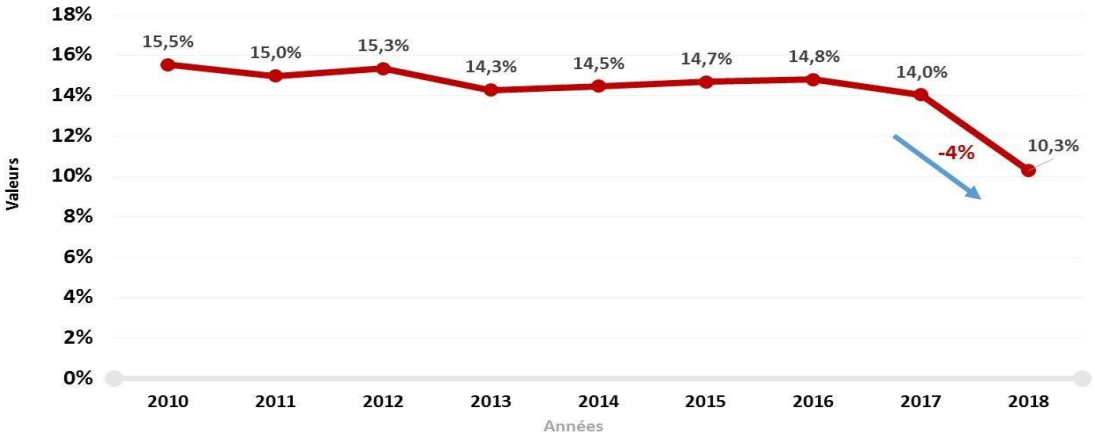

Figure 6: Evolution of the contribution of the North-West and South-West regions to the number of children vaccinated in Cameroon between 2010 and 2018

- **Information system**

In January 2018, the Ministry of Public Health officially adopted the District Health Information Software (DHIS2) as the national system for the collection, analysis, transmission and storage of health data. However, the adoption of this platform has been laborious for the reporting of immunisation data as for other data. On the strength of the low completions recorded in the platform as of June 2018 (43%), the Programme, with the agreement of the Minister of Public Health, has resumed the use of the DVDMT while reinforcing the use of DHIS2. By the end of 2018, completions were 83% and 96% in DHIS2 and DVDMT respectively. The North-West and South-West regions recorded the highest number of missing reports, at 1056 and 613 respectively; this is due to the gradual closure of several health facilities during 2018 due to the security situation.

- **Leadership, management and coordination**

As part of the implementation of the plan resulting from the evaluation of the Programme's capacities carried out at the end of 2016 by Gavi[24], the organizational chart was reviewed at the beginning of 2018 and staff was assigned according to the Programme's needs. Since 2016, 16 logistics personnel have benefited from Logivac training, including 2 in 2018. However, for many staff at the various levels, and even more so at the operational level, there are very few opportunities for training in immunisation management. The Programme promotes online training, especially those offered through the platform

Scholar. In terms of planning and monitoring-evaluation, a monitoring-evaluation plan was developed following the revision of the cMYP. All regions have produced their 2018 annual reports and a 2019 ATP. These work plans were evaluated and reviewed mid-term at the monitoring and evaluation meeting held in July 2019. Only 21% (40/189) health districts have developed an ACD micro plan for 2018. Supervision is also very irregular, in particular due to the scarcity of funding. Other challenges

[24] *Gavi – The Vaccine Alliance (2017). Cameroon Program Capacity Assessment. Final Report*

include insufficient human resources in terms of quantity and quality and delays in the provision of counterpart funds by the Government, resulting in a funding shortfall in 2018.

- **Data/information system**

In 2018, the immunisation information system underwent a lot of change with the migration from DVMDT to DHIS2. To ensure a smooth transition, the program monitored the use of both systems. The Central Region used DHIS2 exclusively.

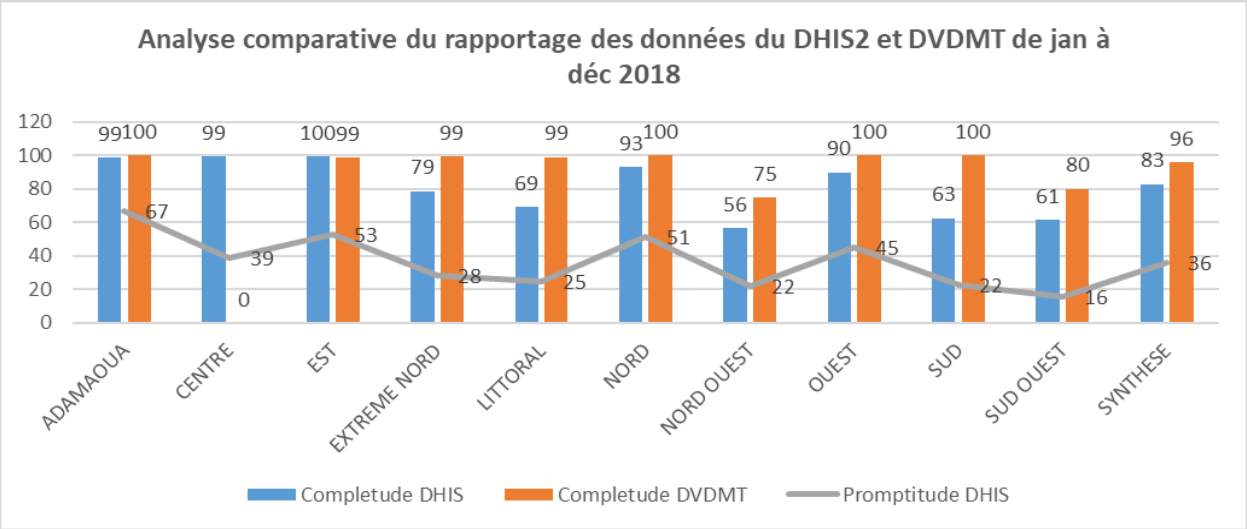

Figure 7. Analysis of DVMT and DHIS2 completioned in 2018

In 2018, the national completeness of data from health facilities was 96% for the DVDMT against 83% for DHIS2. Five of the 10 regions had more than 90% completeness at DHIS2, including Adamaoua, Centre, East, North and West. Promptness remained very low, down by 50%, due in particular to the low level of ownership of DHIS2 and the technical difficulties of implementation, i.e. access to electricity and the Internet, and the training needs of hospital staff. Only 30% (2000/6300) of the health facilities have been trained. For the majority of cases, the data is entered at the level of the Health Districts and these structures do not have sufficient human resources to carry out this task. At the end of 2018, DHIS2 did not have a module for analysing immunisation data, which posed the problem of evaluating performance at the sub-national level. However, strategies have been found to enable Health Regions and Districts to calculate their performance in DHIS2, notably through extraction and conversion to DVDMT format.

Passive monitoring data is reported through DHIS2; however, case-by-case monitoring follows a different circuit. Nevertheless, discussions are underway with the Health Information Unit in order to integrate it into the platform through its Event module.

At the points of delivery, the scarcity of harmonized EPI utilities (immunisation register, tallying register, mother-child immunisation records) poses a problem of primary data collection, as vaccination acts are poorly or inadequately documented.

- **Other critical aspects**

The equity analysis conducted in 5 health districts (Ebolowa, Edéa, Moloundou, Mora and Yoko) in June 2018 found lower immunisation coverage for these groups. The main bottlenecks in reaching these populations are :

- Inadequate access to immunisation services due to the lack of human resources and the poor implementation of immunisation sessions planned in advanced and mobile strategies (insufficient consideration of these groups during planning, lack of means of travel and fuel, insecurity, seasonal inaccessibility);
- Insufficient sustained use of immunisation services due to, among other things, low involvement of dialogue structures, insufficient community engagement, irregularity of immunisation sessions, failure of parents to keep appointments, mobility of nomadic populations, and inadequate operational mechanism for tracking lost to follow-up.

Budgeted corrective actions have been identified and validated by the CFIC. Resources are still being mobilized. However, the districts have incorporated innovative activities in their respective CDA microplans. However, there is still the problem of effective financing of these microplans.

4.3. Immunisation financing

The 2017-2019 Medium Term Expenditure Framework (MTEF) integrates the needs arising from the planning of immunisation activities at the regional and national levels, in order to improve the financial viability of the EPI. At the operational level, activities are integrated and budget planning does not take into account the specificities of the Programme.

The country has updated its cMYP for the period 2015-2020 and intends to develop its cMYP 2021-2025 in 2020. The budgeted annual work plans are developed in alignment with the cMYP and integrate the planned activities into the MTEF. The ATP 2019 underwent a mid-term review in August.

For the past 5 years, the share of the MINSANTE budget in the national budget has been around 4-7% and remains below the 15% target adopted at the Abuja conference. The proportion of the MINSANTE's budget allocated to the EPI is barely 2%, essentially devoted to the purchase of traditional vaccines and the payment of counterpart funds; thus, only 5% of this funding is allocated to the operational costs of the Programme. This is insufficient to implement the full range of immunisation activities. Resource mobilization remains a major challenge given the economic context in the country.

EPI financing is 70% supported by the partners (GAVI, Unicef, WHO, CHAI). Given the context of transition, the country is committed to setting up mechanisms to ensure the sustainability of immunisation financing. The Polio Transition Plan developed in 2017 is the first step in this process. On the other hand, efforts are being made to reduce vaccine wastage and improve the overall framework for vaccine administration in health facilities, in order to make the Program more effective and efficient . The following actions undertaken to improve vaccine management include (1) restructuring the logistics section and the logistics committee; (2) developing and producing SOPs on the supply chain; (3) strengthening the capacity of central and regional managers; (4) implementing specific logistics supervisions and strengthening the monitoring of stock management through the analysis of MTS. At the end of this process, vaccine wastage was reduced by more than 95%.

In order to facilitate the payment of counterpart funds, MINEPAT has shortened the circuit of funds, as attested by the Letter of the Minister of Economy, Planning and Territorial Development (MINEPAT) dated 09/07/2018 and registered under number 2953 in the Courier of the Ministry of Public Health. Indeed, it is no longer a question of beneficiaries of counterpart funds waiting for cash to be supplied to their bank accounts before committing to payment. As soon as the decision is received, the EPI can already send the mobilization file for the purchase of vaccines to the MINEPAT for payment. Since 2019, payments are made directly from the Ministry of Public Health as soon as the expenditure is validated. However, the funds intended to honour the co-financing for the year 2018, were transferred in 2019, hence the delay and the occurrence of the default. Efforts are being made to limit or even eliminate late payments by the country.

5. PERFORMANCE OF GAVI SUPPORT

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

As part of the process of normalization of relations with Gavi, the country has improved its financial management, the management of vaccines and has begun to reimburse the amounts due. A transitional management mechanism has been put in place, which makes it possible to envisage a more fluid disbursement of Gavi support, including HSS 2 support.

5.2. Vaccine support performance

During 2018, the country organized a reactive cholera campaign in response to the cholera epidemic in the Northern, Central and Far North regions. The latter took place in the Makary health district and mainly in the Sagme and Fotokol health areas. The target population for this campaign was 62,532 people aged 1 year and older, including pregnant women. A total of 37,888 people have been vaccinated, representing 60.6% immunisation coverage for HD. Vaccination coverage in the Sagme and Fotokol health areas was 78.8% and 53% respectively. A total of 37,905 doses of vaccine were used, representing a wastage rate close to 0.04%.

During 2018, the country experienced a total of 4 measles epidemics. The latter were rampant in the DS of Rey Bouba, Ngong, Garoua 1 and Kousseri. Vaccination responses took place in the health districts of Rey Bouba, Ngong and Kousseri. In the health districts of Rey Bouba and Ngong, a total of 71,932 children aged between 9 months and 5 years were vaccinated with a CV of 110.9% during the months of May and June 2018. The response to the epidemic in the Kousséri Health District took place from 5 to 9 January 2019. A total of 58,886 children aged 9-59 months vaccinated with MR with a CV of 112%. No outbreaks of cVDPV2 were detected in 2018.

In 2019, a total of 47 Health Districts were declared measles epidemics in Epidemiological Week 49, some of which benefited from local vaccine responses, namely those of Kousséri, Mada, Makary, Goulfey, Limbe and Bakassi. The results of the response in the health districts of Goulfey, Mada and Makary show that 77,550 children aged 9-59 months have been vaccinated with MR with a CV of 115.3%. In the Limbe DS, 11043 children were vaccinated, representing 90% immunisation coverage. The other responses were concomitant with the MR monitoring campaign organized throughout the country.

With regard to polio, an outbreak of cVDPV2 was declared in Cameroon during the month of May 2019 which, according to the SOPs, motivated the implementation of three rounds of response in the health districts of Goulfey, Kousséri, Mada and Makary. In round 0, which concerned the health districts of Mada and Makary alone, 123,382 children aged 0-59 months were vaccinated with a CV of 102.69%. For the round

1, 265,694 children aged 0-59 months were vaccinated with a CV of 102.9%. In round 2; 265,694 children from

0-59 months were vaccinated, i.e. a CV of 105.72%. The country also responded in synchronization with the

Chad; to the epidemic that occurred in the Mandelia health district in Chad, bordering on the health districts of Maga and Kousseri. For round 1 of this response, 172,067 children aged 0-59 months were vaccinated, i.e. a CV of 100.66%. The final results of Round 2 are still pending.

In 2018, 681,976 infants were vaccinated with Penta 3, down from 2017. SNV support has ensured a fairly good availability of vaccines (Tables 7 and 8). However, analysis of the MTS shows out-of-stock periods of more than 7 days for IPV, DTP-HepB-Hib, Rota.

The immunisation coverage targets set by the cMYP have not been met over the past 5 years, resulting in under-consumption of vaccines. Thus, four out of five vaccines have had a distribution rate of less than 80% in 2017 and 2018. This low consumption has led to accumulation of stocks and overstocking with a high risk of expiry as well as significant financial losses, leading the country to postpone vaccine arrivals several times. The stock-outs observed for certain vaccines in the Adamaoua, Extreme North and North regions were due to insufficient supplies linked to the low capacity of vaccine delivery vehicles.

In view of the current financial challenges of the programme in particular, in relation to co-financing, the country has revised the quantities of vaccines for 2020 using the more realistic vaccine coverage targets, the rate of consumption and the stock available at the end of the year.

Table 4. Doses received in 2018

Vaccine	Total Approved Doses 2018[25]	Doses total received 2018	Doses carried over from previous years and received in 2018	Out of stock for more than 7 days at all levels in 2018
VPI	1 084 200	1 084 200	578 600	**Yes** : Far North, North Adamaoua
Penta	1 820 000	2 382 000	78 900	**Yes** : Far North, North Adamaoua
Rota	1 500 000	1 093 700	517 300	**Yes** : Far North, North Adamaoua
YF	648 700	641 200	512 400	**No**

[25] See the decision letters

PCV-13	2 631 900	2 670 200	1 232 600	**No**

Sources: Decision Letters 2018, SMT 2018

Table 5. Stock level for each vaccine supported

Vaccine	Central level		Regional level	
	Reserve stock (months)	**Inventory carried forward to 2018**	**Reserve stock (months)**	**Inventory carried forward to 2018**
Penta (10 doses)	3	78 900	1	78 900
IPV (10 doses)		578 600		578 600
Rota (1 dose)		517 300		517 300
PCV-13 (4 doses)		1 232 600		1 232 600
Yellow fever (10 doses)		512 400		512 400

Source: *SMT 2018*

5.3. Performance of support to CCEOP in Gavi (for the countries concerned)

A working group exists and has been operational since August 2018, with members holding regular meetings. All stages of the procurement process were followed, including sending three cost proposals to the selected country. The implementation phase continues with distribution and installation. The level of completion is 65%, i.e. 414 of the 629 pieces of equipment installed as of July 31, 2019. The fourth phase will be launched with the supervision of the installations by EPI teams.

In terms of achievements, Cameroon has succeeded in removing and clearing customs of the first 629 pieces of equipment in just 2 weeks, which is a record so far. The sites were evaluated using an ODK application installed on smartphones.

Some difficulties were encountered in the installation phase, namely the problem of installations in private health structures. To solve this problem, a contract is signed between the Ministry of Public Health and the private health facilities, regulating the management of these facilities and setting out the obligations to be fulfilled by these health facilities.

To ensure that equipment is properly installed and to propose corrective measures in the event of problems, the country has developed a plan for supervising installations. The results of this activity will be shared with the manufacturer, particularly in the event that certain equipment has abnormal temperatures.

It is difficult at present to assess the contribution of the CCEOP to improving vaccination performance in terms of vaccine availability. Post-installation evaluations (post-installation supervision, study on the CCEOP process, use of cold water accumulators) will give an idea of the short and medium-term impact of the CCEOP on immunisation performance.

5.4. Financial management performance

- ***Financial absorption and utilization rate of all Gavi cash support grants***

Grants	Budget approved in FCFA (2013)	Approved budget in USD	Budget implemented at the end 2018 in FCFA	Execution at the end 2017	Expenditure in 2018	Balance available at At the end of 2018 in FCFA	Execution at the end 2018	Expenditure in 2019	Balance available at June 30, 2019 in F CFA	Balance available at June 30, 2019 in $$.	Implementation rate as at June 2019
Remaining SSV and Intro PCV-13	39,785,207	66,309	20,877,840	48%	0	20,877,840	48%	0	20,877,840	34,796	48%
Award 2008- 2010	675,939,675	1,126,566	456,073,171	33%	20577447	435,495,724	36%	9198112	426,297,612	710,496	37%
HPV	95,794,760	159,658	627,428	99%	0	627,428	99%	0	627,428	1,046	99%
VPI	339,364,590	565,608	43,983,539	87%	-2194400	46,177,939	86%	0	46,177,939	76,963	86%
ROTAVIRUS	367,816,047	613,027	10,031,698	97%	0	10,031,698	97%	0	10,031,698	16,719	97%
INTRO-MR	378,960,000	631,600	378,960,000	0%	0	37,8960,000	0%	0	378,960,000	631,600	0%
MR CAMPAIGN	2,801,743,583	4,669,573	59,804,381	98%	6619880	53,184,501	98%	16605000	36,579,501	60,966	99%
MR exchange gain	636,378,300	1,060,631	636,378,300	0%	0	636,378,300	0%	0	636,378,300	1,060,631	0%
Total	5,335,782,162	8,892,970	1,606,736,357		25,002,927	1,581,733,430			1,555,930,318	2,593,217.197	71%

1USD=585frs

- ***Compliance with financial reporting and audit requirements for each grant***

To date, all financial reports due per grant in 2018 and up to June 2019 have been submitted via the Gavi portal. The audit report for the 2017 financial year has been produced and sent to GAVI. As for the year 2018, the audit has not yet taken place due to lack of funding.

- Level of implementation of the solutions recommended to address the Main problems arising from audits of liquidity programmes or evaluations of programme capacities ○ **EPI internal audit As** part of the improvement of internal control, accounting managers are experienced in the use of harmonised

management tools (budget monitoring, financial management, electronic payment) developed by the JWG-EPP. Since 2017, the results of this work will make it possible to control the monitoring of financial information, to justify activities within deadlines and to considerably reduce cash payments by introducing electronic means of payment (Orange Money and MTN Mobile Money). The country is considering contracting with money transfer agencies to supplement electronic payments in areas without networks. ○ **Audits and evaluations of Gavi**

Following the conclusions of the GAVI audits (programme audit, PCA) that resulted in a freeze on disbursements, the country implemented risk mitigation measures with a view to restoring confidence. It's about:

Table 6. Status of implementation of Gavi audit and evaluation recommendations

FIELD	PROBLEM IDENTIFIED	PREFERRED SOLUTION	Level of implementation
Management budget	**Weakness in the control of the budgetary process** : 1. Drawing up budgets without good micro-planning that integrates several variables such as the geographical distribution of the target populations, the realities of the decentralised level and distances to be covered. 2. In the implementation of activities, there were unauthorized budget adjustments as well as unjustified budget overruns. 3. Poor budget monitoring during the implementation of activities limiting any budget refocusing process.	1. Micro planning should be a prerequisite for a budget allocation or submission for mass activities. 2. Budgets will be developed by level of implementation and responsibility centre with mitigation measures for identified management risks. 3. The use of accounting software for budget management at central and regional level. 4. Systematic design of budget monitoring masks for the district and health area levels for each activity.	1. Microplanning is effective before the implementation of any mass activity. 2. The budgets drawn up are distributed by level of implementation taking into account the management risks identified (central, regional, district, health area). 3. Awaiting acquisition by Gavi. 4. Budget monitoring masks are available for the implementation of activities
Financial Management	**Failure to keep program accounts and monitor cash flow:** 1. Impossibility of tracing the daily use of the funds made available to the decentralized level (Absence of books, bank journal and cash mists)	1. Effective implementation of the accounting system (TOMPRO) as soon as possible, through capacity building of financial managers at the central and regional levels;	2. Awaiting acquisition by GAVI. 3. Implementation and effective use of the electronic payment mechanisms Orange Money and MTN Mobile Money Elaboration of a cartography of the zones (district, health area) networks in order to identify the type of payment suitable for mass activities,

	2.. Absence of an accounting system tracing all the transactions related to programmatic activities under the TOMPRO software available at the GTC-EPI or in another form. 3. Failure in the completeness, quality and timeliness of supporting documents	2. Reducing as much as possible the handling of species through contractualization with the structures of Electronic funds transfers; 3. Systematic and regular deployment of financial supervision missions at all levels of the health pyramid to ensure the quality and completeness of documents and to minimize delays in the transmission of documents; 4. Training of all the stakeholders in the financial chain in the districts in the essential procedures taken from the EPI administrative, financial and accounting procedures manual.	Development of a tool for real-time monitoring of electronic payments. Three and four. Two financial overviews during which the following activities were carried out in 2018 and 2019: Reviewing supporting documents; assessing the quality of financial reports; training in essential justification and procurement procedures; training in the use of the new harmonized budgetary and financial management tools. District chiefs are systematically edified during briefings during mass activities.
Commitment of expenses	**Expenditure was effected without complying with the rules on commitment, validation, authorisation and payment:** Commitment of expenditure without prior authorization and without budgetary provision, Exceeding/modifying the budgetary provision or ineligible expenditure.	1. Spot-checking of the execution of expenditure to ensure compliance with commitment procedures. 2. Dissemination of budgets to all stakeholders at the decentralized level in order to limit fraud and deviations from the guidelines for the implementation of activities	1. Audit performed during financial supervision. Systematic dissemination of budgets to all stakeholders with a reminder of the basic principles of budget management (no modification of the provision, overruns of prohibited lines, eligibility of expenditure).
Procurement and contracting	**Purchasing and contracting procedures were not followed:** Non-compliance with the thresholds and non-compliance with the call for tenders	The effective application of the manual, which provides a sufficient framework for the aspects relating to procurement and the awarding of contracts with an emphasis on transparency and competitive tendering.	Strengthening the capacities of the actors in the expenditure chain (Gescom, cashiers, and coordinators) in procurement procedures during financial supervision.

- ***Repayment of funds to GAVI***

By letter No. E8-10/L/MINSANTE/SG/IGSA of 15 April 2019, Cameroon undertook to reimburse GAVI the sum of USD 1,586,166, the amounts decided following the EPI audits. A repayment schedule has been defined, providing for repayment in 04 installments, spread over the months of June, September and December (2 installments). The implementation of this schedule is underway, although some delays in the process are caused by the State's cash flow tensions due to the external and internal economic situation .

- ***Financial Management System***

The TomPro-1 accounting system available at the EPI is not usable due to outdated licenses, versions and functions. In addition, almost all of the accounting staff on duty have not received any related training. However, the GTC-EPI's financial management system has improved, although the acquisition and training of staff on the TomPro-2 accounting software is still awaited. Through the use of structured Excel applications, the system is currently characterized by a traceability of flows and a regular and timely production of the financial information required, particularly with regard to cash management. However, the availability of the TOM2PRO software, the training of financial chain staff in its use and the effective start of permanent bookkeeping are the major challenges to be met if the EPI accounting system is to meet the required international standards. To this end, technical assistance is planned to strengthen the system over a period of 18 months. During this period, the transitional grant management mechanism for which the tripartite agreement has been signed between the country, GAVI and WHO will be implemented

5.5. Monitoring of the transition plan (applies if the country is in an accelerated transition phase)

The country bears the gradual increase in its counterpart for the purchase of vaccines, which it enters in the budget every year. A draft business case for vaccination exists; it has yet to be finalized and validated. The mid-term evaluation of the polio transition plan is currently underway and the lessons learned will inform the development of the transition plan for immunisation independence. It is planned to set up a working group, conduct a financial analysis of the system and develop the transition plan, taking into account the lessons learned from the preparation and implementation of the polio transition plan and the activities already included in the plan.

5.6. Technical Assistance (TA) (Progress under the current Targeted Country Assistance Plan)

Within the framework of technical assistance to the country, the Programme has benefited from the support of WHO, UNICEF, CHAI and JSI partners. Some of this support was directed towards the sub-national level as agreed at the last JA.

WHO's support has focused on AEFI surveillance, improving data quality, strengthening the cold chain, vaccine management, introduction of new vaccines, the MR monitoring campaign and communication support. Training was organized with technical and financial support from WHO to build the capacity of AEFI expert committee members and the 10 regional surveillance focal points on AEFI reporting, investigation and accountability. The WHO/IST/AFRO teams with HIP/OSLO conducted a situational analysis at the end of which analysis modules developed for immunisation were installed on the DHIS2 platform, parameterised as desired by the country and made accessible to stakeholders at different levels. In addition, WHO staff regularly took an active part in data review meetings as well as meetings of the country data quality group which met four times between June 2018-June 2019; the group validated its 2019 work plan and prepared the 2018 JRF. WHO provided technical support for the organization of a workshop for the 2018 literature review as part of the JRF development. It also supported the preparation of training materials and the implementation of activities related to the introduction of the MR and HPV vaccines, as well as the measles response. WHO supported the celebration of Africa Immunisation Week through advocacy activities, production of communication tools and materials, media briefing and a media campaign. It has taken an active part in customs clearance operations and the deployment of CCEOP equipment from the Port to the installation sites, and participates in follow-up activities within the framework of the Monitoring Committee meetings of which it is a member. Through the EPI logistics committee, WHO continues to support the improvement of vaccine quality at all levels. It has organized the training of central and regional logisticians in the use of the multi-year MTS, which the country plans to use from January 2020, and is involved in the preparation of the VGEV alongside the country. Overall, out of 12 activities, 5 are completed, 1 partially completed, 2 in progress and 4 not completed. At the sub-national level, with regard to improving data quality, about 297 regional and district staff have been trained in the use of the immunisation analysis, data quality and periodic data quality reviews modules. The technical support of the consultants deployed in 7 regions was done through joint formative supervision with the regional level actors, documented through the electronic tool (ODK) ISS and concerning routine immunisation, surveillance and vaccine management in the health facilities. Thus, in 2019, more than 9,000 supervision visits to health facilities were carried out by all actors (Ministry, WHO, and partners), 67% of which were carried out jointly with national and WHO actors to strengthen the transfer of skills.

UNICEF provided technical and financial support to the country in the areas of routine immunisation, data management, vaccine management and C4D. It has thus contributed to improving the promptness and quality of the MTS reports and vaccine arrival reports through the reinforced monitoring of document production, and to improving all *procurement* processes. In addition, it is involved in the Data Quality Group and the Logistics Committee. It participated in the integration of the EPI's logistics management information system (SIGL) into the ELMIS currently being implemented at the level of the Directorate of Drug Pharmacy and Laboratories (DPML), in the development of the investment plan for

immunisation (in progress), in the development of the concept note on immunisation, in the consideration of DISC indicators for monitoring the vaccine supply chain, and in the integration of additional variables relating to logistics into DHIS 2. At the subnational level, support for strengthening the supply chain has made it possible (1) to train the management teams of the 72 health districts and the 4 regional teams of Adamaoua, the East, the Far North and the North on GEV criteria, (2) the implementation of two rounds of formative logistical peer supervision in the 10 regions of the country, (3) the organization of two monitoring meetings of regional and central level logisticians and the monthly analysis of the MTS of the 6 priority regions of Unicef. Support for strengthening data management for action has made possible (1) monthly data analysis with mapping of the geographical equity of the health areas and districts of the 6 priority regions and (2) formative supervision in the priority districts. Support for the strengthening of service provision has made it possible (1) to organize and implement advanced strategies in several health areas, (2) to analyze equity and to draw up ACD microplans for priority health districts in Unicef regions.

Support from the Clinton Health Access Initiative (CHAI) focused on cold chain management, stock management, introduction of new vaccines and programme management. Within this framework, CHAI provided support for the evaluation of the sites to receive the equipment of year 2 of the PEOCF, the development of the deviation management plan, the revision of the strategic plan and an operational maintenance plan, and the training of the members of the MTP, the GTR-PEV and District Chief on the CCEOP. CHAI has also supported the development of stock analysis and temperature monitoring tools, the use of which is already being monitored in 3 regions. It supports the EPI in improving operational planning in order to have an evidence-based action plan to which the sub-national plans are aligned, through support for the organization of monitoring meetings and the development of a programme management mask. In collaboration with the EPI, CHAI conducted a study to understand and mitigate the challenges related to the introduction of the Hepatitis B vaccine at birth dose and another to identify the program's performance management processes as well as the bottlenecks preventing the achievement of its objectives.

SID provided technical support in the areas of communication for the introduction of HPV in routine immunisation. Within this framework, SID accompanied the country in the analysis of data on Knowledge, Attitudes and Practices, the revision of key messages, the development of the communication plan, as well as the development of communication tools and training modules for the introduction of HPV. The SID also contributed, along with the other partners gathered around the EPI team, to the development of the crisis communication plan in response to the rumours and misinformation campaign on HPV vaccination.

As part of their technical assistance to the country, WHO and UNICEF have developed a unique joint plan. The inclusion of all technical assistance activities in the AWP of the programme has strengthened its coordination and improved the leadership of the GTC-EPI in this area. However, there are still shortcomings in the implementation of the TCA, particularly with regard to transparency in operations (failure to share consultants' terms of reference, failure to involve the EPI in the recruitment of experts, uncoordinated changes in the use of certain lines, low activity of consultants recruited at the subnational level, etc.).

6. UPDATE OF THE RESULTS OF THE PREVIOUS JOINT EVALUATION

Prioritized actions from the previous Joint Assessment	Current Status
Immunisation coverage and equity are improved	

1. Carry out equity analysis in priority districts (Districts with special populations: Refugees, difficult geographical access, nomads, IDPs, insecure areas, slums and peri-urban areas,...).	**Partially Achieved**: Activity carried out in 11 of the 39 priority HDs identified. Scarcity of resources did not allow the coverage of the remaining DS. Furthermore, the impact of this activity is not evident, as the budgeted plans from previous analyses were not implemented until that day
2. Implement the strategy to reduce missed immunisation opportunities in priority HDs	**Not achieved**: the HSS2 funds on which this activity was planned have not yet been disbursed.

3. Hold a consultation meeting with local stakeholders to develop and validate the plan for strengthening immunisation in the NW & SW regions to complement the humanitarian emergency plan.	**Achieved**: A specific plan for strengthening routine immunisation has been developed. As the plan is the result of consultations with the regional level, work should be carried out with the HDs and NGOs active in the region to define more specific and operational approaches.
4. Implementing Phase IV polio immunisation activities	**Achieved**
5. Reinforce monitoring for action at all levels and set up an EPI input depot in Kousseri to supply the 04 HDs of Logone and Chari.	**Ongoing:** The completeness and timeliness of the Regional GTS and national GTS are 100% Deployment of the multi-year GTS is initiated. The ODK form for tracking inventory at the operations level is being deployed. The establishment of an EPI input depot in Kousseri will be implemented as part of the ongoing polio epidemic response plan.

6. Ensure communication in support of routine immunisation, especially in urban and other priority areas	**Achieved**: In urban areas -''A survey on the perceptions and interventions of communities around the introduction of new vaccines in Cameroon'' was carried out in all the major cities of the country's Regions it made it possible to develop messages on the promotion of immunisation not only for the introduction of new vaccines, but also for the routine EPI; a concept note on the communication strategy in urban areas. Tools and supports for communication (awareness posters, pamphlets and stickers) on the promotion of immunisation have been produced for the routine EPI in general, including urban areas. These communication media have made it possible to disseminate information to the target audiences on the EPI target diseases, the involvement of men in the vaccination of children and the importance of keeping the vaccination record. In priority areas: In the NOSO Western Region hosting IDPs, 6 advocacy meetings were organized towards administrative and religious authorities for the vaccination of IDP targets.
7. Promoting community participation and advocacy for immunisation	**Partially achieved**: Localized community participation actions were implemented through the 38 women's associations active in Logone and Chari. Preparations are under way for the organization of the forum for the re-launch of routine immunisation. A concept note has been developed on this topic and the

	The search for funding for its implementation is ongoing. The revitalization of community participation in partnership with the PROVARESSC is dependent on the disbursement of HSS2 funds. Nevertheless, activities to promote community participation are only supported during SIAs and, with the exception of Logone and Chari, are rarely implemented on a routine basis.

8. Mapping of hard-to-reach areas, team routes, tracking of actors and revaccination in poorly covered areas.	**Achieved**: Mapping of hard-to-reach areas is available and current. Team itineraries are developed as part of the preparations for the AHV. The tracking of the actors is only done in the area of Logone and Chari. Revaccination of poorly covered areas is often not planned as part of the campaigns and has only been considered as part of the response to the Logone and Chari cVDPV2. However, these areas are prioritised in the following campaigns.
9. Organize the introduction of HPV, MR 2 and the follow-up campaign against MR	**Partially achieved**: both campaigns have been planned for 2019, to date the country has set up Task Forces to prepare both activities. The MR campaign coupled with the introduction of the 2nd dose was held from 04 to 08 November 2019, the introduction of HPV was postponed to the semester 2 2020.
The management of the supply chain, in particular the stocks of vaccines and inputs, is satisfactory, with a strengthening of logistics capacities and the performance of the EPI supply chain.	
1. Implement the activities of the Cold Chain Equipment Optimization Platform (CCEOP)	**Achieved:** Year 1 equipment is being deployed in the country. To date, a total of '414 pieces of equipment (65% of the allocation for year 1) were deployed and started up. The cost estimate for the 842 items of equipment to be acquired for year 2 was submitted for signature by MINSANTE officials.
2. Implementing the EGV activities (Training central, regional and district actors on the EGV criteria and conducting the evaluation of the EGV)	**Achieved:** Central actors and those from the Far North, North, Adamaoua, East and Yaounde regions were trained in GEV criteria in November 2018. Actors in the other 6 regions have not been trained due to the delay in disbursement of HSS 2 funds. The evaluation of the GEV originally scheduled for August 2019 has been postponed to November 2019 for technical adjustment needs, in particular in relation to the use of the EVM 2 tool for electronic data capture.
3. Conduct an assessment of the supply system	**Not achieved**: As a result of the Abidjan workshop, new orientations were given and its implementation now includes assistance to

	This activity will be coupled with the EGEV, which is planned for November 2019.

4. Set up the Viva platform in the Regions	**Not achieved**: With the deployment of the multi-year MTS and the gradual establishment of regional logistics committees, the national logistics committee did not consider it appropriate to deploy Viva in the regions.
5. Finalizing the 2019 forecast and developing the 2020 forecast	**Achieved**: The 2019 forecast has been finalized and submitted in October 2018. The 2020 forecast was prepared and submitted on September 27, 2019.
6. Improve visibility on vaccine stocks at the district and health facility levels	**Achieved**: An ODK form has been developed for this purpose and the actors at the DS level are being trained in its use as part of the training in the analysis of immunisation data on DHIS 2 (the Far North, the North, the South, the East and the West remain the main focus). West and Southwest)
7. Conduct a study on vaccine wastage over the last five years (vaccine use losses in health facilities)	**Unrealized**: The activity was delayed due to the unavailability of financing. A draft protocol is nevertheless available.
8. Deploy the multi-year MTS at the level of central and regional	**Achieved**: From June 25 to 28, 2019, central and regional staff were trained in the use of the multi-year GTS and regional files were populated at that time. However, concerns have been expressed about the functioning of the file on the available computer terminals and its use by the regions will be effective from 2020 onwards.
9. Conducting formative supervision Quarterly reports specific to logistics from the Regions to the districts and health areas.	**Achieved**: Two rounds of logistical formative supervision were conducted in December 2018 and July. 2019. The quarterly frequency was not respected due to insufficient funds available for this purpose.
10. Acquire and install 2000 fridge tags to replace those that are already outdated in order to maintain a quality cold chain.	**Partially Achieved**: The equipment acquired under the CCEOP is arriving with fridge tags and is being installed and commissioned in the FOSAs across the country (629 pieces of equipment). The cost estimate for the acquisition of 2,500 fridge-tags is available, pending the disbursement of funds under HSS 2.
11. Expand the remote temperature control system in 7 regions (Far North, North, East, North-West, Central, South and West).	**Not Achieved**: A request to UNICEF for cost estimates is submitted for signature by MINISANTE officials.
Data quality is improved	

1. Develop the DHIS2 dashboard module accessible by level with data transfer in DVDMT/RIM format.	**Partially Achieved:** The analysis dashboard and the Immunisation and Data quality tools have been integrated into the DHIS-2 platform for the analysis of data. However, data transfer to DVDMT/RIM formats is not included in the functionality. In addition, the operation of the

	DHIS 2 platform poses coordination difficulties
2. Conducting an annual review documenting the quality of Program data	**Achieved**: The literature review was conducted in February and submitted as part of the development of the JRF. It was taken to the portal of Gavi
3. Establish a codified/normative archiving system (for sharing electronic and physical data centrally)	**Not achieved**: The archiving system has yet to be set up. The activity has been foreseen in the ATP but there is a lack of resources for its implementation.
4. Improving data collection and consolidation	**Not achieved: An** estimate of the costs related to the production of immunisation registers and immunisation map scoring is made, but the resources are not available.
5. Strengthen the use of data for action (capacity building, data review and validation meeting, monthly for the HD, quarterly for the Regions and biannually at the national level).	**Partially achieved:** the training of responsible for the Health Districts and Regions in the analysis of immunisation data in the DHIS2 is under construction and runs from August 19 to September 15, 2019. Monthly data review and validation meetings were not reported by ROs. No meetings quarterly was organized in the regions and in 2018, only one meeting was held at the national level.
6. Expand the electronic system for weekly transmission of vaccine and input data to the health district level.	**Achieved:** An electronic form has been disseminated to the Health District for the transmission of vaccine data and inputs at the District Health District level.
7. Updating the health map by geolocation	**Not achieved:** funding not available.
8. Record historical immunisation data for the last three years (2015-2017) in DHIS2	**In progress:** aggregated historical data (Health District level) have been integrated into the

	DHIS2. However, historical data for all facilities for the period is not available.
Surveillance of polio and other vaccine-preventable diseases is strengthened	
1. Strengthening polio surveillance	
2. Strengthen monitoring of AEFI	**Partially achieved**: The national AEFI expert committee has been renewed and its members trained. The surveillance focal points of the 10 regions and the surveillance actors at the central level have been trained in AEFI surveillance. AEFI monitoring data are analyzed as part of the monthly data review at all levels. The investigation and management of serious AEFI cases remains difficult and irregular.
3. Supplying reference laboratories with reagents and consumables	**Achieved**: Laboratories were supplied with reagents and consumables. No ruptures have been reported to date.
4. Hold monitoring meetings of the monitoring focal points at all levels	**Not carried out**: Since the last joint evaluation, no monitoring meeting of the focal points has been organised, although planned in the EPI AWP, due to lack of funding. This activity has been included in the implementation plan for the recommendations of the external review of supervision
5. Ensuring payment of the costs of transporters of biological samples	**Achieved**: Transportation costs are paid; however, there are frequent breakdowns of funds resulting in delays that discourage carriers who are faced with them.
Funding	
1. Set up accounting on TOMPRO 2 (acquisition of the software and capacity building of central and regional finance officers) to replace TOMPRO 1.	**Not achieved**: The acquisition of Tom2Pro software is still pending. The training of financial managers will only come after the acquisition
2. Organize a biannual workshop to review and harmonize financial data.	**Achieved**: Workshop held in the 2nd quarter of 2018
3. Revise the administrative, financial and accounting procedures manual	**Not done**: the review will be done in the framework of HSS2;
4. Improving the working environment in the Units Regional	**Not Achieved**
5. Valuing fixed assets to be expertly assessed	**Not done:** will only be done after the migration of the accounting databases to Tom2Pro.
Transition plan for immunisation independence is developed and implemented	

1. Developing the immunisation business case	**Achieved:** A retreat was organized for this purpose the June 28 and 29, 2019. The final version of the investment file to achieve the objectives of immunisation in Cameroon is already available.
2. Identify lessons learned from the development and implementation of the polio transition plan	**Not Achieved:** The mid-term evaluation of the polio transition plan is being implemented. Lessons learned will be extracted from the report
3. Conducting a Transition Assessment (analysis of Gavi's support and possible financial and institutional bottlenecks)	**Not Achieved**
4. Development of the transition plan	**Not Achieved**
5. Establish a framework for consultation with the Countries that have completed the Gavi transition.	**Not Achieved**
6. Continue the implementation of the transition plan and harmonize the 2 transition plans	**Ongoing:** the polio transition plan is being implemented and during the preparation of the transition plan for immunisation independence the harmonization of these 2 plans will be ensured.

The activities related to the transition to immunisation independence are sequential and have just started with the development of the Immunisation Investment Case; the others will follow gradually and will be taken into account in the new action plan. This business case complements the GFF's Investment Case, which did not include the vaccination aspect in its development. As for the other areas, the non-implementation of most of the activities is linked to the unavailability or delay in mobilizing the necessary funding. They will also be taken into account in the new action plan according to their relevance.

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

Overview of the main activities planned for next year and necessary modifications to Gavi support:

The activities presented in the table below are the result of an in-depth analysis of the performance of the immunisation programme by area:

Main result/share 1	**Improving VC and equity (supply and demand)**

Current situation	1. Decrease in poor accessibility and use of immunisation services Decrease in Penta 1 CV from 87% in semester 1 2018 to 80% in semester 1 2019, more marked in the Far North, North West and South West Regions. Decrease in Penta 3 VC from 79% in semester 1 2018 to 74% in semester 1 2019, more marked in the Far North, North West and South West Regions where the instability of the target populations makes it difficult to continue the vaccination schedule. Very high overall dropout rate, at 21% in the first half of 2019, especially in urban centres. The influx of the 530,000 IDPs from the north-west and south-western regions to the major urban centres and the HDs bordering these regions is not reflected in immunisation coverage. 31 HDs in areas not affected by insecurity have been identified as priorities: Centre, 8 HDs (Yaoundé, Yoko, Ngog Mapubi); Littoral, 11 HDs (Douala, Manoka, Ndom, Edéa); West, 5 HDs (Dschang, Mifi, Foumban, Mbouda, Bandjoun); Adamaoua, 2 HDs (Tignère, Bankim); East, 5 HDs (Abong-Mbang, Bertoua, Messamena, Doume, Lomié).
	Low geographical equity Decrease in the number of districts with CV Penta 3 ≥ 80% from 135 in 2017 to 100 in 2018. In 2018, 54/67 (81%) of the HDs in the Far North, North West and South West Regions recorded Penta CVs 3<80% in 2018; 34/67 (51%) HDs recorded Penta CVs 3 <50% in semester 1 2019.
	Missed Opportunities for Immunisation (MOV): A significant number of children are presumed to be unvaccinated due to VMO. However, there is no evidence about VMOs at both national and regional levels.
	Insufficient capacity to offer service: The skills of immunisation providers in immunisation in practice are insufficient, particularly in the 31 priority districts identified above. In the Far North, North-West and South-West Regions, 207/973 health facilities that were offering immunisation are at a standstill; the operational IHCs are operating with 1 or 2 health personnel, and the already inadequate equipment has been broken into or destroyed in the context of insecurity.
	Decline in confidence in public services since 2017: Rumours against vaccination and public health actions have spread in the North West and South West Regions.
Country agreed actions	1. Conduct immunisation micro-planning exercise in SAs with displaced populations in NW and SW and in problem SAs in NE, based on local realities and evidence [target mapping and enumeration (NW,SW), appropriate immunisation strategies, appropriate input supply system, resources including CTDs, FMOs and vigilance committees, development of C4D capacity of implementing actors], integrating immunisation in places of worship with the collaboration of religious leaders
	2. Strengthen the offer of immunisation services through the implementation of intensified immunisation activities (3 rounds per semester) in the SAs regrouping displaced populations in the NW and SW and in the problem SAs in EN with the involvement of local CSOs (NGOs, CBOs, etc.).

	3. Strengthen monitoring and evaluation (joint formative supervision of all stakeholders; monitoring with feedback for action, restitution to local traditional/religious leaders; use of the integrated community monitoring register of children and pregnant women with the collaboration of Community Health Workers) in the SAs grouping displaced populations in the NW and SW and in the problem SAs in the EN.
	4. Introduce meningitis vaccine, the birth dose of hepatitis B vaccine and HPV vaccine in routine immunisation
	5. Extend the use of the timetables (production of utilities, training of implementing actors in its use) to the HDs with high specific and general drop-out rates in the Far North region, based on the experience of the Eastern region.
	6. Integrate the complete EPI vaccine package into the interventions offered by the humanitarian actors operating in the North-West and South-West regions.
	7. Elaborate the communication strategy for urban and peri-urban areas (mass communication, participatory community approach...)
	8. Strengthen the skills of operational level actors in practical immunisation, strategies to reduce missed immunisation opportunities and risk communication, particularly in the Far North, North West and South West Regions.
	9. Implement the validated activities of the joint national *Scholar* project based on the SPMVS and the reduction of inequalities in immunisation.
	10. Establish/strengthen the partnership with learned societies (SOCAPED, etc.) Programmes and other institutions working in the field of immunisation (advocacy, memorandum of understanding, budgeted work plan, joint implementation of activities, etc.; joint work plan, monitoring and evaluation, joint supervision, etc.).
	11. Develop the EPI 2021-2025 strategic communication plan
Products/results	1. At least 80% of the targeted SAs in the Far North, North West and South West regions have a micro plan with a budget, an operational communication plan and an implementation schedule.
	2. At least 80% of targeted SAs achieve their immunisation coverage targets by the year 2020.
	3. At least 80% of the targeted SAs have held at least 80% monitoring meetings with feedback for action.
	4. Three new vaccines are introduced and post-introduction evaluations are conducted.
	5. At least 80% of targeted ROs use the timeline.
	6. The complete EPI vaccine package is offered by humanitarian actors in response to the humanitarian crisis in the NOSO
	7. At least 80% of the planned activities of the communication strategy in urban and peri-urban areas are implemented.
	8. At least 80% of the health actors in the Health Districts of the North-West and South-West regions have strengthened skills in practical immunisation, VMO reduction strategies and crisis communication.
	9. At least 80% of the activities selected in the national joint *Scholar* project are implemented.
	10. At least 80% of the activities in the work plans developed within the partnership are implemented.
	11. Strategic Communication Plan 2021-2025 available

Associated Calendar	January to December 2020
Resources/support and technical assistance required	**1. Microplanning of immunisation in the SAs regrouping displaced populations from the NW and SW and in the SAs with problems in the EN:** *Technical support **(i) for** mapping (with geolocation) and counting of targets; **(ii)** for the implementation of alternative strategies adapted to insecure areas.*
	2. Strengthening the supply of immunisation services: *Technical support for the organization of IAs*
	3. Technical support for the development of communication approaches specific to populations in insecure, disaster-stricken and vulnerable areas: *Technical support for the implementation of alternative strategies adapted to insecure areas.*
	4. Introducing meningitis vaccine, the birth dose of hepatitis B vaccine and the vaccine against HPV infections in routine immunisation: *Technical support for **(i)** planning, **(ii) implementation** and **(iii)** post-introduction evaluation of new vaccines*
	5. Extending the use of timetables: *Technical support for the extension of the use of timetables in routine immunisation*
	7. Elaborate the communication strategy for urban and rural areas. peri-urban: *Technical support for the development of the strategy*
	8. Strengthen the skills of operational level actors in practical immunisation, missed opportunity reduction strategies and risk communication: *Technical support for **(i)** capacity building and **(ii)** implementation of the missed opportunity reduction strategy.*
	9. Implement the validated activities of the national joint *Scholar* project: *Technical assistance in support of the implementation of the joint national Scholar project*
	11. Develop the EPI's 2021-2025 strategic communication plan: *Technical assistance in the preparation of the plan*

Main result/share 2	**Improving supply chain management performance**
Current situation	1. Non-optimal temperature monitoring in 90% of the Health Districts.
	2. The country failed to achieve the composite score of 80% in the last GEV assessment. In addition, 30% of the recommendations from the last EGV have not been implemented to date.
	3. Weak control of loss rates at the operational level
	4. CCEOP's activities are not monitored in 40% of the Health Districts. (facility monitoring, site assessment)
	5. The EPI has had a functional logistics working group since 2015, but there is no formal working framework
	6. 65% of the service providers are not trained in the management of CDF's equipment.
Country agreed actions	1. Strengthen the skills on the use of fridges-tags and temperature monitoring of all actors in 40 Health Districts with poor performance
	2. Implement the recommendations from the last EGV and 80% for those of 2019.
	3. Conduct a study on vaccine wastage Health districts and health facilities

	4. Extend the monitoring in the Health Districts of the implementation of CCEOP activities in the remaining 40% (monitoring of facilities, site evaluation)
	5. Formalize the establishment and TORs of the Logistics Committee at central and regional levels.
	6. Strengthen the skills of those involved at the sites that have benefited from CCEOP equipment in vaccine management through integrated training supervision.
Products/results	1. Improved temperature monitoring in 40 low-performing health districts
	2. At least 80% of the GEV recommendations are implemented.
	3. The vaccine wastage rate is known at the health district and health facility levels.
	4. The activities in 40% of Health Districts within the framework of the CCEOP are under control (monitoring of facilities, site evaluation).
	5. The Logistics Committee at the central and regional levels is functional and operational
	6. Preventive maintenance aspects of newly acquired equipment, temperature monitoring and efficient vaccine management are mastered.
Associated Calendar	1, 3 to 6: January to December 2020
	2. December 2019 to December 2020
Resources/ support and assistance	**1. Strengthen the capacities of the actors on the use of fridge-tag and the monitoring of temperatures of all actors in all Health Districts**
required techniques	*(1) technical support in CCL for regional temperature monitoring*
	2. Conducting a vaccine wastage study at the operational level: *technical support in the implementation of the vaccine wastage study.*
	3. Formalize the establishment and the TOR of the logistics committee at the central regional level: *Technical support for the functioning of the logistics committees in the 10 regions, the GEV and the CCEOP.*
	4. Strengthen the capacities of the actors of the sites that have benefited from CCEOP equipment in the management of vaccines through integrated training supervision: ***(i)*** *Provide technical support for the specific monitoring of the supply and procurement of the ongoing Gavi grants (CCEOP, HSS2);* ***(ii) Technical support for the implementation of the*** *GEV recommendations at the central level;* ***(iii)*** *Technical support for the extension of remote temperature monitoring in the remaining regions.*

Main result/share 3	**Improvement of EPI data quality**
Current situation	1. Monitoring of data quality and performance is insufficient at the regional and district levels.
	2. An electronic e-DQS tool available for data quality monitoring but not used
	3. Lack of a mechanism for the preservation and management of physical and electronic records
	4. There is no interoperability between DHIS2 and other EPI data management systems (surveillance, AVS, e-DQS, logistics).

	5. Each year the country must submit to the GAVI Alliance partners important documents such as the data quality literature review, the analysis of programme performance, the JRF, and conduct a thorough quality system assessment every three years, the last of which was held in 2017.
Country agreed actions	Strengthen the skills of the 189 HD teams in monitoring data quality and the use of e-DQS during formative supervision and quarterly monitoring meetings.
	Develop and implement a plan for physical and digital archiving of documents at the JWG-EPA
	Make available to the HDs/OFSAs the electronic utilities and tools for managing immunisation data, surveillance, SIAs and logistics and ensure follow-up (DHIS2, LMIS integration).
	Conduct an in-depth data quality assessment with the 2021-2025 data quality improvement plan.
	Submit annual performance monitoring-evaluation documents (data quality document review, program performance analysis, JRF, etc.) to Gavi Alliance partners.
	Organize periodic performance reviews at the central level with the 10 regions with work plans
Products/results	1. The 189 EDCs are trained in data quality monitoring and in the use of the e-DQS
	2. A physical and electronic archiving plan is available and implemented at the GTC-EPI.
	3. Electronic immunisation data collection utilities and forms including logistics are available in the 189 HDs.
	4. A strategic plan for data quality improvement 2021-2025 is available
	5. The documents (data quality literature review, analysis of program performance, JRF, etc.) are submitted to the Gavi Alliance partners within the following deadlines
	6. Biannual evaluations are used for planning activities in the 10 regions of the country.
Associated Calendar	1. January 2020 to June 2021
	2. June 2020 to June 2022
	3. December 2019 to December 2020
	4. June 2020 to December 2020
	5. February 2020 to March 2020
	6. June 2020-June 2021
Resources/support and technical assistance required	**1- Strengthen the skills of the teams of the 189 HDs in monitoring data quality and the use of the e-DQS during training supervision and quarterly monitoring meetings:** *Technical support **(i) for training in the** use and analysis of e-DQS data and **(ii) for the** manual development of EPI data management procedures.*
	2- Elaborate and implement a plan for physical and digital archiving of documents at the GTC-EPI: *Technical support for the elaboration of the archiving plan of the GTC-EPI.*

	3- Make available to the DS/FOSAs the utilities and electronic tools for managing immunisation data, surveillance, SIAs and logistics and ensure follow-up (DHIS2 integration, LMIS): *Technical support **(i) for the implementation of** LMIS (**ii) for the** integration of SIA data and monitoring into DHIS2 **(iii)** for monitoring the use of electronic tools and coordination of DHIS2*
	4- Conducting an in-depth data quality assessment with the data quality improvement plan 2021-2025: *Technical support (**i) to the** in-depth data quality assessment (**ii) to the** development of the data quality improvement strategic plan 2021-2025*
	5 - Ensure annual submission of documents (data quality literature review, analysis of programme performance, JRF, etc.) to Gavi Alliance partners: *Technical support for the data quality and performance review workshop, development of JRF 2019.*
	6 - Hold periodic performance evaluations at the central level with the 10 regions with a work plan: *Technical support for the preparation and organization of monitoring meetings.*

Main result/share 4	**Validation of the country's complete documentation, strengthening and maintenance of indicators for the elimination of other preventable diseases through validation**
Current situation	1. Monitoring of AEFI is poorly conducted (01 serious AEFI reported in 2018)
	2. Rupture of measles and yellow fever laboratory reagents
Country agreed actions	1. Strengthen sentinel surveillance activities for new vaccines
	2. Supplying measles and yellow fever laboratories with reagents
	3. Revitalizing the Measles Elimination Verification Committees and AEFI Experts
Products/results	1. Sentinel surveillance plan for new vaccines is implemented taking and integrating the supply of laboratory reagents and consumables
	2. At least 95% of samples are tested on time in measles and yellow fever laboratories.
	3. Members of Measles Elimination Verification Committees and AEFI experts are trained and hold regular meetings.
Associated Calendar	June 2020-June 2021
Resources/support and technical assistance required	**1. Strengthen sentinel surveillance activities for new vaccines; 2. supply measles and yellow fever laboratories with reagents:** *technical support for **(i)** revision of the plan and **(ii)** acquisition of laboratory reagents and consumables.*
	3. Revitalizing the Measles Elimination Verification Committees and AEFI experts: *Technical support for the start-up and operation of the Measles Elimination Verification Committee*

Main result/share 5	**Improved program funding and management**
Current situation	1. Inadequate budget resource mobilization for immunisation at sub-national level
	2. The compliant expenditure justification rate was 57% at the last internal audit conducted in 2016, the problem being mainly at the sub-national level.

	3. The manual of administrative, financial and accounting procedures applied to the EPI is not adapted to the realities of the context.
	3. Loss of information due to the lack of a robust financial and accounting data management tool
	4. Unstructured local resource mobilization
	5. The current cMYP will expire in 2020.
Country agreed actions	1. Strengthen the capacities of sub-national immunisation stakeholders in planning, mobilization and management of financial resources allocated to immunisation activities.
	2. Conduct semi-annual spot checks of subnational Program dismemberments
	3. Revise procedures manual
	4. Deploy the Tom2Pro vi application centrally and in the regions
	5. Strengthen the skills of central and sub-national actors in local resource mobilization and accountability
	6. Develop the cMYP 2021-2025 with its monitoring and evaluation plan.
Products/results	1. Increased and timely financial allocations for immunisation at the sub-national level
	2. Increase in the level of properly justified funds (from 57% to 80%)
	3. Manual revised and adapted to local realities
	4. Improving the completeness, timeliness and reliability of financial data
	5. Documenting and scaling up locally mobilized additional resources for immunisation
	6. cMYP 2021-2025 available with a monitoring and evaluation plan
Associated Calendar	1 to 6: January to December 2020
Resources/support and technical assistance required	**1. Strengthen the capacities of sub-national immunisation actors in planning, mobilization and management of financial resources allocated to immunisation activities:** *Technical assistance for budget planning at the sub-national level, mobilization and allocation of government funding (analysis of bottlenecks, strengthening of planning skills in the MTEF/PBF, multipartite consultation on mechanisms for the adequacy and allocation of budget resources).*
	2. Carry out biannual spot checks of the subnational divisions of the Programme: Technical support to strengthen the skills of the administrative and financial managers of the JWG-VEP and the RWG-VEP in the implementation of financial audits.
	3. Revise the manual of procedures: Technical assistance for **(i)** recruitment of a consultancy firm in charge of drafting the revised draft manual, finalization, validation of the revised manual, and **(ii)** production of the revised manual.
	4. Deploy Tom2Pro vi application at central level and in the regions: Technical support for **(i)** deployment of financial and accounting management software, capacity building and **(ii)** reconstitution of historical financial databases.
	5. Strengthen the skills of central and sub-national actors in local resource mobilisation and accountability: *Technical support **(i) for the** development of a fundraising guide, **(ii) for** proposal writing, **(iii)** and the organisation of advocacy meetings for the CTDs to take into account immunisation support in their planning.*

	6. Elaborate the cMYP 2021-2025 with its monitoring and evaluation plan: *Technical support for **(i) the** drafting, **(ii) the** costing of the cMYP 2021-2025 and **(iii) the** elaboration of the Monitoring and Evaluation Plan.*

8. JOINT ASSESSMENT PROCESS, ENDORSEMENT BY THE NATIONAL COORDINATION FORUM (CCIA, CCSS OR EQUIVALENT) AND ADDITIONAL COMMENTS

Preparations for the 2019 joint assessment were led by the Working Group set up by the Minister of Public Health in July 2018 in preparation for the 2018 assessment. This group was made up of officials from the Ministry of Health, the heads of the GTC-PEV, representatives of the partner Ministries, the civil society platform and the partners WHO, Unicef, CHAI, CDC. The terms of reference of this group were the preparation of the Joint Assessment Report (JAR), the draft of which is expected to be sent to Gavi in early September, one month before the joint assessment workshop. This group held weekly coordination meetings in the conference room of the GTC-EPI. Meeting agendas focused on ownership of the Joint Assessment Guidelines, the Joint Assessment Report Preparation Guide, and the division of labour among sub-groups based on themes from EC's report preparation guide. These meetings were shared during teleconferences with Gavi, national immunisation officials and the Programme's technical and financial partners. As recommended in the Gavi guidelines, the country submitted the draft EC report on September 03, 2019. After this stage, the workshop preparation teleconferences continued. From September 30 to October 3, 2019, the EC workshop took place in Yaoundé and a restitution was made on October 4, 2019, during a session of the ICC.
The session of the IACC devoted to the restitution of the work of the EC workshop was attended by the Secretary General of MINSANTE, the representatives of the Development Partners (WHO, UNICEF), CHAI, HKI,), the Director General of the Centre Pasteur of Cameroon, the General Inspector of Administrative Services, the Technical Adviser n°1, the Director of Family Health, the Assistant Directors (SDDRH/SDBF, ONSP and PLMI Coordinators, Representatives of the partner Ministries (Ministry for the Promotion of Women and the Family, Ministry of Economy, de la Planification et de l'Aménagement du Territoire), the President and Vice-President of the National Technical Advisory Group on Immunisation, the President of the National Committee of Polio Experts (CNEP), the Executive Secretary of PROVARESSC, representatives of the Confessional Organizations (OCEAC, CEPCA, OCASC, Ad Lucem Foundation), the EPI Permanent Secretary and the staff of the CWG-PEV.

The session began with the introductory words of Mr. Technical Adviser No. 1, representative of Madam Secretary General, who apologized. In essence, he welcomed the participants and recalled the objectives of the joint assessment. Turning to the items on the agenda of the meeting, the floor was given to the person in charge of the country portfolio in Gavi.

ITEM 1: THE RESTITUTION OF THE JOINT GAVI-COUNTRY 2019 EVALUATION MISSION The presentation covered the following key points :

Subsidies: Several types of subsidies were mentioned which are either in progress or awaiting start-up:

The purchase of vaccines, amounting to 12.6 million USD, an ongoing annual support ;

Support to the Supply Chain Optimization Platform (SCOP), $2.9 million USD, for the first two years. It was indicated that the first batches of equipment have already been received by the country, and that the second year is conditional on the reimbursement of Gavi funds.

Financing for Health System Strengthening (HSS2): the WHO/GAVI/MINSANTE tripartite agreement has been signed since July 2019 for an amount of USD 2.3 million. But this subsidy is blocked due to the non-respect of the payment plan transmitted by the country to Gavi ;

The operational costs of the MR campaign, and the package for introducing the second dose into the routine: agreement signed with WHO in June 2019 for USD 2.3 million. This is an exceptional disbursement authorized by Gavi in view of the seriousness of the epidemic;

HPV vaccine introduction package in routine immunisation: grant agreement signed in June with WHO for USD 0.77m, currently blocked for reasons mentioned above.

Audits of cash grants: it was recalled that the State has committed to reimburse the expenses questioned during the audits for an amount of USD 1.586 million with a repayment schedule;

Vaccine support audits: it was noted that the conclusions of these audits and the request for reimbursement were communicated to the country in July 2019, and that the partner is still waiting for the option (cash or vaccines) and the deadline for reimbursement of the 1.26 million UDS disputed.

Co-financing 2018: in summary, Cameroon is in default of payment for 2018, i.e. $2.54 million. In this regard, the country had proposed a payment plan over the three years, 2019 (244,715 USD), already honoured, 2020 (1,148,715 USD) and 2021 (1,148,715 USD)**;**

Co-financing for **2019:** for an amount of USD 3.39 million, the country has paid the 50%, and if nothing is done for the rest, there is a risk of disruption in vaccines and inputs**;**

Consequences: Three major consequences were noted by the Country Portfolio Manager at Gavi; vaccine stockouts, the country will no longer be eligible for new grants, the suspension of Gavi support for vaccines**.**

At the end of the presentation several interventions were recorded:
Permanent Secretary of the EPI: she regretted the situation described by Gavi, before acknowledging that there were errors of date in the reimbursement schedule transmitted to Gavi with regard to the expenses questioned in the framework of the audits. She went on to say that 550 million CFA francs are being mobilized. With regard to the remaining $350 million, the Minister has made arrangements to mobilize the remaining $350 million by December 2019. Moreover, it provided an update on the 2018 default, reassuring that 900 million is being mobilized and that the shares to be paid in 2020 and 2021 will be included in the MTEF. Concerning the option of reimbursement of vaccines in cash or in vaccine, she noted that the file had fallen behind schedule in view of the change in the Cooperation Division. She undertook to relaunch the file in order to prepare a response to Gavi.

Deputy Representative of Unicef: he expressed concern about the prevailing situation and proposed that the country reassess the issues and urgently find solutions to avoid an exit from the country of Gavi subsidies. In conclusion, he asked for the commitment of the country's high authorities to resolve the situation.

CHAI Country Director: For this speaker, the topics raised by Gavi have been discussed more than once during the ICC meetings at the end of Gavi's visits to the country. Because of the failure to meet its commitments, he regretted that the country was losing important subsidies, in this case those for the campaign against cervical cancer, on which the Minister had already communicated. If nothing is done," he continued, "the Ministry of Health will lose credibility with the people who are waiting to protect their children.

Representative of PROVARESSC: he found the situation too critical and questioned whether the country is in control of the situation or does not really have the financial capacity to honour its commitments. Continuing his remarks, he mentioned the consequences on the ground, marked by the drop in vaccination coverage.

WHO Consultant (in charge of routine immunisation): she wanted to know if the country could hope for a release of HSS2 and HPV funds if the 550 million currently being mobilised were to be paid to Gavi**.** She also proposed to the country and Gavi to agree on the contradictions observed on the payment deadlines.

SP/PEV: Taking the floor, she said that there is no longer any question of going back on the errors noted in the payment plan, the country will have to take responsibility and seek solutions.

For Gavi: the release of funding will only be possible once the country meets its commitments. With regard to the errors highlighted, only the timetable sent by the country is authentic.

WHO: Another WHO consultant advocated for a consensus for the good of Cameroonian children.

PBF Coordinator: he advocated with partners to take into account the socio-political and economic context of the country by requesting more flexibility from Gavi.

Vice-president of the National Technical Advisory Group on Immunisation (NITAG): he wanted to know if there is someone in the room who can speed up the process of payment of Gavi funds.

Director of Family Health: he suggested advocating to the Minister so that from now on certain key officials are invited to the CCIAs, notably those in the financial chain (those in charge of the specialized treasury of the MINSANTE.

Cameroonian Red Cross: In view of the security situation, can the country expect from Gavi a partial or total cancellation of debts?

ITEM 2: RECOMMENDATIONS/ACTION POINTS FROM THE GAVI-COUNTRY JOINT ASSESSMENT WORKSHOP 2019;

The presentation was given by the Head of the EPI Monitoring and Evaluation Unit, and highlighted the main recommendations made at the end of the joint evaluation workshop**:**

1. To deepen the reflections on the use of the LMIS (Logistic Management Information System) and its interoperability with the DHIS2 ;
2. Develop and deploy alternative tools for the collection of vaccine management data at the operational level pending the effectiveness of the LMIS;
3. Mapping the availability and gaps in computer terminals for data management in the Districts;
4. Provide technical support to the GTC-EPI, RWG-PEV and district teams for local resource mobilization;
5. Systematically document local contributions in support of EPI activities in reports transmitted to higher hierarchical levels;
6. To carry out in-depth analyses in order to precisely target the problems and identify concrete activities to be implemented in the regions with compromised security and in the priority Districts in the framework of the HSS2;
7. Develop a plan to reach special and hard-to-reach populations;

The main points of discussion were:

NITAG Vice-Chair: In order for participants to master the outlines of the recommendations, he proposed to recall the problems in one column. He then stressed the need for several studies and questioned whether local resource mobilization should be the responsibility of the EPI.

Chairperson: Resource mobilization should be done at the district level.

JSI partner: it advocated regular data analysis with regard to the mobility of certain populations (how to access immunisation services). It regrets the low rate of financing of the operational costs of immunisation in Cameroon, 4%. The situation in other regions must also be of concern to the health authorities.

Inspector General of Administrative Services: he regretted that the recommendations made did not include financial measures to honour the government's commitments, given that the country is on the verge of a major crisis with Gavi and many other donors such as the Global Fund. As consequences, he stressed, he fears the break-up of a strategic partnership, so the consequences will be unfortunate. In order to show the government's commitment, interest and readability on the repayment file, it made three recommendations, namely, to clarify the situation of individual files, to establish an updated disbursement schedule, and to send correspondence with a payment projection to Gavi in advance.

The Director of Family Health: he wished that the IGSA take its responsibilities to find solutions and proposed to continue advocacy with the Minister.

Vice-president GTCNG: for him, it is time for the CCIA to play its full role by imagining a petition scenario to meet with the Head of Government.

NITAG Chair: As for her, the situation is deplorable. The urgency requires action to be taken by CFIC members. In this regard, it recommended the establishment of an ICC Sub-Committee to address immunisation financing issues.

The Assistant Director of Budget and Finance: he gave an update on the measures underway to end the crisis. He confirmed the 550 million being mobilized, and received instructions from the Minister to absorb Gavi's repayments by December 2019. With regard to the 2018 Counterparty Funds, negotiations for payments are ongoing.

President of the CNEP: he expressed his shame at the country's insolvency situation and recommended a global analysis of the co-financing mechanism to avoid falling into the same flaws in future years. Finally, he called on PROVARESSC to play its role as a civil society.

Polio Coordinator in the Lake Chad Basin: she reiterated for her part, the setting up of a platform of actions with very precise TORs.

The action points and recommendations identified during the discussions are summarized in the table below:

Action items/recommendations	Responsible persons	Deadline
1. Establish an ICC subcommittee for high-level advocacy on immunisation financing issues.	IGSA	02 weeks
2. Clarify the status of individual Gavi funding applications;	SP/EPV	02 weeks
3. Establish an updated disbursement schedule and transmit it to Gavi;	DRFP	02 weeks
4. Send correspondence with a payment projection in advance to Gavi.	SP/EPV	02 weeks

5. Advocacy with the Minister so that certain key officials are henceforth invited to the ICCs, notably those in the financial chain (those in charge of the specialised treasury of the MINSANTE.	DCOOP	continuous
6. Relaunch the file on the reimbursement of vaccines in order to prepare a response to Gavi.	SP/EPV	01 week

9. APPENDIX: Compliance with Gavi reporting requirements

	Yes	No	Not applicable
Year-end Stock Level Report (due March 31)*	X		
Grant Performance Framework (GPF - Grant Performance Framework) * Reporting on all mandatory indicators	X		
Financial Reports*			
Periodic Financial Reports	X		
Annual Financial Statement	X		
Annual financial audit report	X		
Campaign reports*			
Supplementary Immunisation Activity Technical Report			X
Report on Campaign Coverage Surveys			X
Information on immunisation financing and expenditures	X		
Data Quality and Survey Reports			
Annual Data Quality Literature Review	X		
Data Improvement Plan (DIP)	X		
Progress report on the implementation of data improvement plans	X		
In-depth evaluation of the data (conducted over the past five years)	X		
Nationally representative coverage survey (conducted over the past five years)	X		
Annual progress update on the Effective Vaccine Management (EVM) Improvement Plan (EVMIP)	X		
(CCEOP): Updated inventory of CCEs	X		
Post-Introduction Evaluation (PPE) (specify vaccines)			X
Situation analysis and five-year measles-rubella plan	X		
Operational plan for the vaccination programme	X		
HSS end-of-grant evaluation report			X
Results of the HPV vaccine demonstration program			
Coverage Survey			X
Cost analysis			X
Adolescent Health Assessment Report			X
Partner reports on the functions of the TCA and EFP	X		