



INTER-REGIONAL SEMINAR ON SMALLPOX ERADICATION

Lagos, Nigeria, 13-20 May 1969

COUNTRY REPORT



1.0 DEMOGRAPHIC DATA

1.1 Estimated population (July 1969)

Age		%
0-4	601 380	19.3
5-14	819 470	26.3
15-44	1 296 180	41.6
45+	398 830	12.8
TOTAL	3 115 860	100.0

1.2 Population by geographic subdivision (Table 1)

1.3 Population density by geographic subdivision (Table 1)

1.4 Population density by geographic subdivision (Figure 1)

2.0 SMALLPOX INCIDENCE AND VACCINATION DATA

2.1 Smallpox cases by month and geographic subdivision - Jan. 1968 - Feb. 1969 (Table 2)

2.2 Location of smallpox outbreaks.

Oct. 68 - Dec. 68 (Figure 2)

Jan. 69 - Feb. 69 (Figure 3)

2.3 Incidence rates per 100 000 population by geographic subdivision and by quarter.

Jan. 68 - Mar. 68 (Figure 4)

Apr. 68 - Jun. 68 (Figure 5)

Jul. 68 - Sep. 68 (Figure 6)

Oct. 68 - Dec. 68 (Figure 7)

Jan. 69 - Feb. 69 (Figure 8)

2.4 Monthly distribution of smallpox cases by age and sex - Jan. 1969 - Feb. 1969  
(Table 3)

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- 2.5 Smallpox vaccinations performed by quarter and geographic subdivision - January 1968 through February 1969 (Table 4)
- 2.6 Areas vaccinated since inception of the programme (Figure 9)
- 2.7 Smallpox vaccination targets by geographic subdivision - July 1969 through June 1970 (Table 5)
- 2.8 Method for recording of vaccinations:

Tally sheet: Yes  No

Other registry system (specify) Daily team reports and individual vaccination cards

- 2.9 Youngest age for beginning smallpox vaccination:  
Birth  6 months  Other \_\_\_\_\_

3.0 MEASLES INCIDENCE AND VACCINATION DATA (for countries engaged in measles vaccination programmes)

- 3.1 Reported measles cases by month and geographic subdivision (Table 6)
- 3.2 Measles immunizations by quarter and geographic subdivision (Table 7)
- 3.3 Areas vaccinated against measles since inception of the programme and areas where maintenance vaccination programmes have been initiated (Figure 10)

4.0 NUMBER OF PERSONNEL ENGAGED IN VACCINATION PROGRAMME

4.1 Vaccinators:	Regular teams	<u>30 approx. )</u>	The vaccination programme is integrated in the activities of the mobile health teams
	Maintenance teams	<u>- )</u>	
	Other (Specify)	<u>- )</u>	
	TOTAL	<u>30 approx. )</u>	

Other field staff, including recorders, drivers, etc. 40 approx.

Supervisory personnel (paramedical) 10 approx.

- 4.2 Number of vaccinators directly supervised by one supervisor 30
- 4.3 Average number of vaccinations performed daily by each team:  
Regular teams 1 000  
Maintenance teams \_\_\_\_\_  
Other (specify) \_\_\_\_\_

5.0 PROGRAMME EXECUTION

5.1 Supervision

5.1.1 Proportion of time spent in field by supervisory staff and technical advisory staff checking directly on the work of vaccinators and assessors and lower level supervisors:

By country staff reviewing work of - Vaccination team: 20 days per mo.

Other levels: \_\_\_\_\_ days per mo.

By advisory staff reviewing work of -

Vaccination team: \_\_\_\_\_ days per mo.

Other levels: \_\_\_\_\_ days per mo.

5.1.2 Measures taken when vaccinator or assessor performance is unsatisfactory

Reprimand

5.2 Assessment

5.2.1 Vaccine "take rates"

Proportion of primary vaccinations in 0-4 year old children which are checked after seven days to determine takes 1 per 1 000 approximately

Steps taken when the proportion of successful primary vaccination falls below 95% None, the 'take rates' for children less than 4 years averages 97.8%

5.2.2 Vaccination coverage:

Number of vaccinations performed in each area are compared with the population estimate for the area (e.g. village register, census, etc.)

Yes

No

5.2.3 Assessment of coverage:

An assessment of coverage is regularly performed in a sample of the population

Yes  (5 000 assessed in 1968) No

Level of coverage in the 0-4 and 5-14 year age group which is considered acceptable

85%

80%

Other \_\_\_\_\_

Proportion of assessment surveys which fall below the level noted above.

\_\_\_\_\_ %

Steps taken if the coverage is not acceptable (i.e. revaccinate the area etc.) \_\_\_\_\_

Changes which have been made in the programme as a direct result of assessment \_\_\_\_\_



6.0 COMMODITIES

6.1 Vaccine use: Col. 1 Number of Doses Recd. Col. 2 Number of Doses in Inventory Col. 3 Number of Doses Used (Col.1-Col.2) Col. 4 Number of Vacc. performed Reasons for Difference between Col.3 and Col.4

Year	Col. 1	Col. 2	Col. 3	Col. 4	Reasons for Difference between Col.3 and Col.4
1967	2 200 000	600 000	1 600 000	1 386 215	
1968	1 650 000	50 000	1 600 000	1 345 412	Normal Loss
1969*	567 200	317 200	250 000	204 712	
1967	269 000	36 000	233 000	202 795	
1968	220 200	-	220 200	196 684	Normal Loss
1969*	73 600	41 600	32 000	28 029	

Smallpox vaccine

Measles vaccine

\* January and February only 25 000 doses of expired measles vaccine are being held awaiting testing results

6.2 Equipment:

<u>Item</u>	<u>Number Supplied</u> *	<u>Number in Operation</u>	<u>Comment</u>
Trucks	11	11	USAID
Ped-o-Jets	60	55	USAID
Refrigerators	20	20	USAID
Motorbikes	-	-	-

\* Since inception of the programme.

Has a warehouse with rotating inventory system for spare parts been established? Yes  No

TABLEAU 1. DONNEES DEMOGRAPHIQUES PAR DIVISION GEOGRAPHIQUE  
(Utiliser les divisions indiquées par les cartes)

TABLE 1. DEMOGRAPHIC DATA BY GEOGRAPHIC SUBDIVISION  
(Use Subdivisions as shown on Country Maps)

Division géographique	Population approximative en 1969	Superficie (en km <sup>2</sup> )	Densité de population au km <sup>2</sup>
Geographic Subdivisions	Est. 1969 Population	Area (Square kms)	Population density per square km
Chari Baguirmi	357 511	82 910	4,31
Mayo Kebbi	446 404	30 105	14,82
Tandjile	251 222	18 045	13,92
Logone Occidental	232 055	8 695	26,68
" Oriental	257 077	28 035	9,16
Moyen Chari	384 692	45 180	8,51
Salamat	67 675	63 000	1,07
Guera	171 571	58 950	2,91
Batha	260 336	88 800	2,93
Kanem	161 381	114 520	1,40
Lac	94 949	22 320	4,25
Ouaddai	248 385	76 240	3,25
Biltine	114 525	46 850	2,44
Bet	68 077	600 350	0,11
Total	3 115 860	1 284 000	2,42

TABLEAU 2. CAS DE VARIOLE PAR MOIS ET PAR DIVISION GEOGRAPHIQUE (JUSQU'A FEVRIER 1969)  
TABLE 2. SMALLPOX CASES BY MONTH AND GEOGRAPHIC SUBDIVISION (TO FEBRUARY 1969)

Division géographique	Nombre de cas pas mois/Number of cases by month														
	1968											1969			
Geographic Subdivisions	J	F	M	A	M	J	J	A	S	O	N	D	Total	J	F
Semaines/Weeks	1-5	6-9	10-13	14-17	18-22	23-26	27-31	32-35	36-39	40-44	45-48	49-52		1-5	6-9
Chari Baguirmi	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-
Autres Préfectures					NEANT										

N.B. - les 4 cas déclarés en juillet 1968 dans la Préfecture du Batha n'étaient surement pas d'authentiques varioles  
- the 4 cases declared in July 1968 for Batha Prefecture were not actually smallpox



TABLEAU 4. VACCINATIONS ANTIVARIOLIQUES EFFECTUEES, PAR DIVISION GEOGRAPHIQUE  
(Divisions indiquées par les cartes)

TABLE 4. SMALLPOX VACCINATIONS PERFORMED BY GEOGRAPHIC SUBDIVISIONS  
(those shown on country maps)

Division géographique	1967	1er trim. 1968	2ème trim. 1968	3ème trim. 1968	4ème trim. 1968	J-F 1969	Total général *
Geographic Subdivisions		First Quarter	Second Quarter	Third Quarter	Fourth Quarter		Grand total *
Chari Baguirmi	332 089	75 074	43 434	128 495	25 977	50 454	655 523
Mayo Kebbi	280 642	113 589	135 774	14 143	98 699	61 939	704 786
Tandjile	57 351	21 314	58 639	-	21 901	-	159 205
Logone Occident.	97 893	52	32	60 775	45 618	-	204 370
" Oriental	88 756	40 573	17 126	-	51 312	42 223	239 990
Moyen Chari	127 084	60 389	93 995	64 398	40 945	22 256	409 067
Salamat	16 024	-	-	-	8 944	-	24 968
Guera	55 642	-	-	-	-	-	55 642
Batha	32 559	-	1 663	12 533	14 304	7 787	68 846
Kanem	70 373	8 501	12 653	13 010	10 082	9 557	124 176
Lac	81 697	-	787	4 441	-	-	86 925
Ouaddai	87 809	2 609	1 056	22 497	1 235	1 926	117 132
Biltine	36 270	2 319	-	15 803	-	7 720	62 112
Bet	22 026	-	761	-	-	850	23 637
Total	1 386 215	324 420	365 920	336 095	319 017	204 712	2 936 379

\* Englobant le total depuis la mise en oeuvre du programme.

\* Includes the total since the inception of the programme.



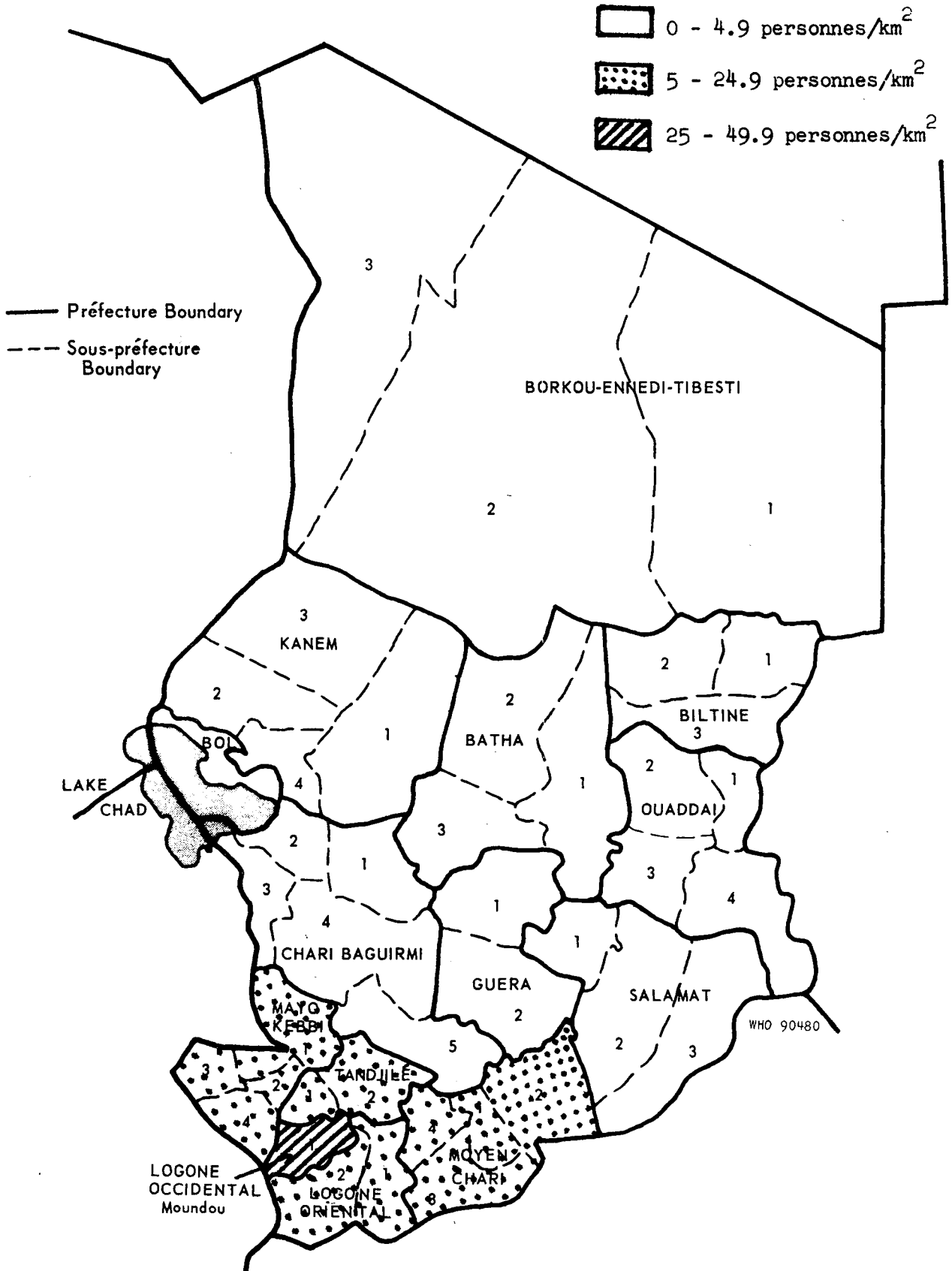
TABLEAU 6. CAS DE ROUGEOLE DECLARES DE JANVIER 1968 JUSQU'A FEVRIER 1969 COMPRIS  
TABLE 6. REPORTED MEASLES CASES JANUARY 1968 (THROUGH FEBRUARY 1969)

Division géographique	Nombre de cas par mois/Number of cases by month														1969		
	1968														Total	J 1-5	F 6-9
	J 1-5	F 6-9	M 10-13	A 14-17	M 18-22	J 23-26	J 27-31	A 32-35	S 36-39	O 40-44	N 45-48	D 49-52					
Semaines/Weeks	1-5	6-9	10-13	14-17	18-22	23-26	27-31	32-35	36-39	40-44	45-48	49-52			1-5	6-9	
Chari Baguirmi		8	10	27	10	2	4	26		9	22	14	132	79	561		
Mayo Kebbi	3			1							3		7		3		
Tandjile	67	138	123	88	18	6	20				24	179	663	78			
Logone Occidental	8	11	10	20	7	7	3	9	5	28	21	-	129	36	7		
" Oriental	6	29	51	63	36	18	6	9	11	8	1	9	247	10	5		
Moyen Chari		13	18	5	3	2	1	5		63	7	17	134	36	4		
Salamat					14	1		6	6	9	5	3	44	1	6		
Guera			4	9	46	104	87	27	4	1	45		327	8	17		
Batha					14	6		127	58	1	3	11	220	28	30		
Kanem									27				27		7		
Lac		1											1	2	48		
Ouaddai				93	66	90	73	17	8	8	2		357	1			
Biltine				74	65	153	23	13	7	6	7		348	1	2		
Bet				2	1	5	7	1	218	70	31	77	412	46	16		
Total	84	200	216	382	280	394	224	240	344	203	171	310	3 048	326	706		



Figure 1  
(1.4)

CHAD



## CHAD

### LEGEND

#### PRÉFECTURES

##### BORKOU-ENNEDI-TIBESTI

1. Ennedi
2. Borkou
3. Tibesti

##### BILTINE

1. Iriba
2. Arada
3. Biltine

##### BATHA

1. Oum Hadjer
2. Djada
3. Ati

##### KANEM

1. Moussoro
2. le Lac
3. Nord-Kanem
4. Mao

##### CHARI BAGUIRMI

1. Bokoro
2. Massakory
3. Fort-Lamy
4. Massanya
5. Bousso

##### MAYO KEBBI

1. Bongor
2. Fianga
3. Léré
4. Pala

##### MOYEN CHARI

1. Fort-Archambaumi
2. Kyabd
3. Molesala
4. Kograra

##### LOGONE OCCIDENTAL

1. Moundou

##### LOGONE ORIENTAL

1. Doba
2. Baibokoum

##### TANDJILÉ

1. Kélo
2. Laï

##### GUERA

1. Mongo
2. Malfi

##### SALAMAT

1. Abou-Daïa
2. Am-Timan
3. Harazi

##### OUADDAI

1. Adré
2. Abeche
3. Am-Dam
4. Goz-Baïda

Figures 9 and 10  
(2.6 and 3.3)

