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SUMMARY OF KEY FINDINGS

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SUMMARY OF KEY FINDINGS

CHAPTER 3. DEMOGRAPHIC CHARACTERISTICS

The population groups included in the survey and the number of participants surveyed for the indicators are summarized in Table 3.1.

Table 3.1 Survey sample size by indicator and population group, National Nutrition Survey, Papua New Guinea 2005

Indicator	Preschool Children 6-59 months	Non-pregnant women 15-49 years	Adult men >18 years	Household
ANTHROPOMETRY*				
Weight and height/length	930	779	789	-
IODINE				
Urinary iodine	-	690	-	-
Salt (WYD Checker)	-	-	-	820
STOOL				
Hookworm**	363	-	-	-
VITAMIN A				
Retinal binding protein (DBS)	875	756	-	-
INFLAMMATION				
CRP (DBS)	874	756	-	-
AGP (DBS)	874	756	-	-
ANEMIA AND IRON DEFICIENCY				
Hb	910	760	778	-
TfR (DBS)	872	753	-	-

* One or more anthropometric measures

** Children 24-59 months

3.1 Preschool children

The age and sex distribution of the 937 children 6-59 months of age who were surveyed are presented in Table 3.2. The mean age of the children was 31 months with a median age of 30 months. The children were proportionally distributed by age groups (see Table 3.2) except for the children aged 48-59 months. The number of children in this age group was lower than expected. The survey was household based so some of the children in this age group may have been attending school and not available to participate.

Although the proportion of boys (54.6%) was slightly higher than that of girls (45.4%), the sex ratio of boys to girls was 1.2, and a ratio between 0.8 and 1.2 indicates that the sampling of boys compared to girls in the survey is likely not biased (Prudhon 2001).

Table 3.2 Age and sex distribution of children 6 through 59 months of age by region, PNG National Nutrition Survey 2005 (N=934)

Age group (months)	Southern		Highlands		Mamose		Islands		National*	
	N	%	N	%	N	%	N	%	N	%
6-11	29	12.9	23	11.0	25	9.8	29	11.8	106	11.2
12-23	54	24.0	51	24.4	68	26.8	56	22.8	229	24.8
24-35	60	26.7	49	23.4	58	22.8	68	27.6	235	24.6
36-47	52	23.1	45	21.5	48	18.9	53	21.5	198	21.1
48-59	30	13.3	41	19.6	55	21.7	40	16.3	166	18.4
Sex										
Male	121	54.0	122	58.7	134	52.5	127	51.4	504	54.6
Female	103	46.0	86	41.3	121	47.5	120	48.6	430	45.4

*Weighted analysis to account for complex survey design

3.2 Women of childbearing age

A total of 850 women aged 15 through 49 years participated in the survey and their age distribution is shown in Table 3.3. The largest proportion of women (20.2%), were 25-29 years old, while 40-44 year old women represented the smallest proportion (8.0%). Overall, the women surveyed were more likely to be younger (54.7% were <30 years old).

The majority of women (72.6%) had some form of education, with 44.4% of women education between grades 4 and 8. The survey did not include questions about literacy.

Out of the 850 women included in the survey, 71.8% of women had ever been pregnant. At the time of the survey 8.1% of women were currently pregnant. These women were included in the survey but they were not measured and did not have any blood or urine specimens collected. Just over half of the women (57.9%) had delivered a child within the previous three years. Where possible, the interviewer confirmed this by looking at the woman's Meri book¹.

Almost a quarter of women smoked cigarettes. In Mamose region the proportion of women who smoke rose to just over a third of women. Most women were light smokers with the majority smoking less than 10 cigarettes per day on average. Table 3.3 summarizes the demographic characteristics of women surveyed.

¹ Meri book is a women's health card.

Table 3.3 Distribution of demographic characteristics of women 15 through 49 years by region, PNG National Nutrition Survey 2005

Characteristics	Southern		Highlands		Mamose		Islands		National	
	N	%	N	%	N	%	N	%	N	%
Age groups										
15-19	49	19.0	37	18.4	25	13.2	30	16.9	141	16.9
20-24	60	22.1	31	15.4	38	20.0	23	13.0	152	17.6
25-29	50	17.3	47	23.4	32	16.8	38	21.5	167	20.2
30-34	34	12.1	36	17.9	32	16.8	40	22.6	142	17.1
35-39	26	9.6	22	10.9	28	14.7	16	9.0	92	11.4
40-44	30	11.0	10	5.0	18	9.5	18	10.2	76	8.0
45-49	24	8.8	18	9.0	17	8.9	12	6.8	71	8.6
Highest grade of education										
No formal education	44	16.1	69	34.3	60	34.1	17	9.7	190	27.4
Grades 1-3	18	6.9	23	11.4	27	15.3	22	12.6	90	11.7
Grades 4-8	136	51.1	80	39.8	73	41.5	96	54.9	385	44.4
Grades 9-12	66	24.4	28	13.9	15	8.5	38	21.7	147	15.7
Higher education	5	1.5	1	0.5	1	0.6	2	1.1	9	0.8
Ever been pregnant										
Yes	196	70.9	137	68.2	147	77.0	135	74.2	615	71.8
No	80	29.1	64	31.8	44	23.0	47	25.8	235	28.2
Currently pregnant										
Yes	16	5.6	19	9.5	15	7.9	14	7.7	64	8.1
No	258	94.1	181	90.5	176	92.1	168	92.3	783	91.9
Delivery within past 3 years										
Yes	102	51.6	82	57.7	88	59.9	85	63.0	357	57.9
No	96	48.4	60	42.3	59	40.1	50	37.0	265	42.1
Smokes cigarettes										
Yes	41	13.6	43	21.4	66	34.6	32	17.7	182	22.9
No	234	86.4	158	78.6	125	65.4	149	82.3	666	77.1
Average no: cigarettes per day										
1-9	38	94.0	35	83.3	52	81.3	30	93.8	155	84.8
10-19	2	6.0	4	9.5	3	4.7	1	3.1	10	6.5
20+	0	0.0	3	7.1	9	14.1	1	3.1	13	8.6

Weighted analysis to account for complex survey design

3.3 Adult men

Table 3.4 shows the demographic characteristics of men surveyed. The greatest proportion of men included in the survey were between 18 and 29 years of age. Almost a quarter of the men surveyed had no formal education. Just over half of the men had received some education between grades 1-8. Approximately the same proportion of men as women had education between grades 4-8. Just over half of all men smoked tobacco. Most men smoked less than 10 sticks per day but almost a fifth of men smoked more than 10 sticks per day.

Table 3.4 Distribution of demographic characteristics of men 18 years and older by region, PNG National Nutrition Survey 2005

Characteristics	Southern		Highlands		Mamose		Islands		National	
	N	%	N	%	N	%	N	%	N	%
Age groups										
18-29 years	74	34.6	76	36.0	69	35.2	62	34.6	281	35.3
30-39	48	23.3	45	21.3	58	29.6	53	29.6	204	25.0
40-49	48	23.0	38	18.0	30	15.3	31	17.3	147	18.2
50-59	26	12.1	28	13.3	27	13.8	17	9.5	98	12.6
60-69	14	7.0	17	8.1	11	5.6	14	7.8	56	7.2
70+	0	0	7	3.3	1	0.5	2	1.1	10	1.6
Highest grade of education										
No formal education	16	8.2	66	31.6	33	17.8	14	7.9	129	20.0
Grades 1-3	15	7.2	28	13.4	29	15.7	14	7.9	86	11.9
Grades 4-8	104	48.3	78	37.3	90	48.6	94	52.8	366	44.6
Grades 9-12	67	35.2	31	14.8	30	16.2	51	28.7	179	21.2
Higher education	2	1.2	6	2.9	3	1.6	5	2.8	16	2.2
Smokes cigarettes										
Yes	117	54.6	105	50.5	129	65.9	112	61.5	463	56.9
No	91	45.4	103	49.5	66	34.1	70	38.5	330	43.2
Average no: cigarettes per day										
1-9	96	80.8	78	74.3	105	80.8	102	91.1	381	80.1
10-19	13	11.0	16	15.2	17	13.1	7	6.3	50	12.4
20+	10	8.2	11	10.5	8	6.2	3	2.7	32	7.5

Weighted analysis to account for complex survey design

3.4 Household characteristics

A summary of the household data is presented in Table 3.5. Less than a fifth of survey respondents lived in urban areas of Papua New Guinea. The highest proportion of people living in urban areas was in the Southern region as the National Capital District falls within this region. Urban and rural areas were defined using information from the National statistics bureau and the census, which had determined if a census unit was considered urban or rural.

Just half of all households (47.5%) had at least one preschool child (6-59 months of age). The average number of children per household did not differ much between regions. The Mamose region had the highest proportion of children 6-59 months per household compared to the other three regions.

Nearly all the households had at least one adult man residing there (95.0%). There were more men living in households in the Southern region compared to the other three regions and nationally. Overall, compared to households without men, there were a greater proportion of households that did not have a woman residing there (13.4%). The average number of women per household was lower in the Highlands and Island regions.

Table 3.5 Household demographic characteristics, PNG National Nutrition Survey 2005

Demographic characteristic	Southern		Highlands		Mamose		Islands		National	
	N	%	N	%	N	%	N	%	N	%
Location										
Urban	124	36.3	39	10.9	53	15.0	27	7.8	243	16.8
Rural	218	63.7	320	89.1	301	85.0	321	92.2	1160	83.2
Number of preschool children (6-59 months) per household										
0	171	50.1	177	49.3	153	43.2	159	45.7	660	47.2
1	106	31.1	135	37.6	133	37.6	126	36.2	500	36.0
2	55	16.1	39	10.9	62	17.5	58	16.7	214	14.7
3	6	1.8	6	1.7	6	1.7	5	1.4	23	1.7
>4	3	0.9	2	0.6	0	0	0	0	5	0.4
Average No. per HH	0.73		0.67		0.78		0.74		0.72	
Number of women (15-49 years) per household										
0	43	12.6	57	15.9	41	11.6	42	12.1	183	13.4
1	182	53.4	205	57.1	203	57.3	215	61.8	805	57.1
2	68	19.9	62	17.3	71	20.1	61	17.5	262	18.6
3	34	10.0	22	6.1	32	9.0	23	6.6	111	7.8
4	8	2.3	10	2.8	5	1.4	3	0.9	26	2.0
5	5	1.5	1	0.3	2	0.6	3	0.9	11	0.7
6	0	0	2	0.6	0	0	1	0.3	3	0.2
>7	1	0.3	0	0	0	0	0	0	1	0.1
Average No. per HH	1.42		1.26		1.33		1.26		1.31	
Number of men (18-60 years) per household										
0	18	5.3	19	5.3	15	4.2	18	5.2	70	5.0
1	174	51.0	215	59.9	228	64.4	224	64.4	841	60.0
2	87	25.5	87	24.2	73	20.6	68	19.5	315	22.8
3	37	10.9	29	8.1	26	7.3	27	7.8	119	8.4
4	17	5.0	6	1.7	9	2.5	5	1.4	37	2.6
5	8	2.3	0	0	2	0.6	4	1.1	14	0.8
6	0	0	2	0.6	1	0.3	1	0.3	4	0.3
≥7	0	0	1	0.3	0	0	18	0.3	2	0.1
Average No. per HH	1.66		1.45		1.42		1.42		1.48	

Weighted analysis to account for complex survey design

3.5 House structure

Using the national census definition for types of house structure the survey interviewers classified the structure occupied by each household participating in the survey. Table 3.6 summarizes the prevalence of different housing structures of survey respondents. Most respondents live in traditional style housing (Table 3.6).

Table 3.6 Distribution of households by type of housing structure and by region, PNG National Nutrition Survey 2005

Type of House	Southern		Highlands		Mamose		Islands		National	
	N	%	N	%	N	%	N	%	N	%
High cost house	10	2.9	12	3.3	6	1.7	21	6.1	49	3.2
Low cost house	7	2.1	13	3.6	13	3.7	20	5.8	53	3.7
Flat	9	2.6	0	0	1	0.3	0	0	10	0.6
Duplex	8	2.4	3	0.8	2	0.6	15	4.3	28	1.6
Domestic Quarters	1	0.3	0	0	2	0.6	0	0	3	0.2
Makeshift	22	6.5	5	1.4	2	0.6	27	7.8	56	3.0
Traditional	198	58.2	285	79.4	274	77.4	163	47.2	920	70.7
Self-help High cost	20	5.9	6	1.7	8	2.3	50	14.5	84	4.3
Self-help low cost	65	19.1	35	9.7	45	12.7	49	14.2	194	12.8
Other	0	0.0	0	0.0	1	0.3	0	0.0	1	0.1

Weighted analysis to account for complex survey design

3.6 Household water supplies

Survey respondents accessed water from many different sources. Surface water was the most commonly used form of water, but in the Southern region almost a third of households' accessed water from a well. In the Highlands and Mamose region the most common source of household water was from rivers and streams and for the Islands the most common source was rainwater (Table 3.7).

Table 3.7 Distribution of main source of household drinking water by region, PNG National Nutrition Survey 2005

Source of drinking water	Southern		Highlands		Mamose		Islands		National	
	N	%	N	%	N	%	N	%	N	%
Piped	99	28.9	47	13.1	77	21.8	33	9.5	256	18.3
Well	99	28.9	-	-	44	12.4	18	5.2	161	10.3
Surface	53	15.5	280	78	168	47.5	110	31.6	611	49.7
Communal tank	20	5.8	26	7.2	30	8.5	4	1.1	80	6.4
Rainwater	44	12.9	5	1.4	33	9.3	180	51.7	262	13.5
Other Source	26	7.6	-	-	2	0.6	1	0.3	29	1.9

Weighted analysis to account for complex survey design

3.7 Household sanitary facilities

Table 3.8 summarizes the different types of sanitary facilities used in households included in the survey. Approximately half of all households nationally and regionally used latrines as their primary sanitary facility. The only exception was the Highlands region where an open pit was more commonly used. In the Southern region about one fifth of households did not use any facilities at all. The use of septic tanks was more common in the Islands and Southern region.

Table 3.8 Distribution of households by type of sanitary facilities and by region, PNG National Nutrition Survey 2005

Type of Sanitary facility	Southern		Highlands		Mamose		Islands		National	
	N	%	N	%	N	%	N	%	N	%
No facilities - bush or field	73	21.4	24	6.7	28	7.9	86	24.7	211	12.6
Flush to sewage system or septic tank	43	12.6	22	6.1	14	4.0	58	16.7	137	8.4
latrine (water, traditional or VIP)	217	63.5	69	19.2	247	69.8	174	50.0	707	47.1
Pit/bucket/overhang	9.0	2.6	244	68	65	18.4	29	8.3	347	31.6
Other	-	-	-	-	-	-	1	0.3	1	0.3

Weighted analysis to account for complex survey design

3.8 Frequency of listening to the radio

The purpose of asking a question on listening to the radio was to be able to ascertain if radio would be a good medium for communicating health messages. Table 3.9 presents the frequency with which households in PNG listen to the radio.

Just under half of all the households interviewed never listen to the radio. Only 16.9% of households listen to the radio on a daily or weekly basis. People in the Islands have more access to the radio than people in the other regions.

Table 3.9 Distribution of frequency of radio listening by region, PNG National Nutrition Survey 2005

Frequency of radio listening	Southern		Highlands		Mamose		Islands		National	
	N	%	N	%	N	%	N	%	N	%
Never	116	34.2	205	58.2	144	40.8	72	21.1	537	44.1
Every day	45	13.3	54	15.3	49	13.9	26	7.6	174	13.5
Every week	12	3.5	3	0.9	5	1.4	51	14.9	71	3.4
Occasionally	103	30.4	90	25.6	123	34.8	149	43.6	465	31.4
Other	63	18.6	352	58.2	32	9.1	44	12.9	139	7.5

Weighted analysis to account for complex survey design