

APPENDIX

Table 1. Number of households by level of agricultural activity by region

Region	Level of Agricultural Activity			
	Total	Non Agricultural	Mainly for Home Consumption	Mainly for Sale
<i>Total</i>	23,261	4,799	17,573	889
Apia Urban Area	5,499	2,875	2,519	105
North West Upolu	7,247	1,601	5,473	173
Rest of Upolu	5,132	220	4,633	280
Savaii	5,383	104	4,948	331

Table 2. Number of households growing crops by type of crops grown before Cyclone Heta (Jan, 2004) by Region

Type of Crops Grown	Region				
	Total	Apia Urban Area	North West Upolu	Rest of Upolu	Savaii
Coconut	14,418	1,322	3,807	4,154	5,135
Cocoa	11,543	1,007	3,613	2,596	4,327
Taro	15,977	1,847	4,327	4,773	5,031
Taro Palagi	5,682	693	2,012	1,218	1,760
Taamu	13,811	1,112	4,218	3,614	4,865
Cassava	2,264	210	433	379	1,242
Yam	13,177	1,259	3,916	3,654	4,348
Banana	17,246	2,435	5,473	4,473	4,865
Breadfruit	13,521	1,742	4,024	3,614	4,141
Papaya	3,023	273	887	1,118	745
Cucumber	3,687	168	1,298	978	1,242
Head Cabbage	416	63	130	120	104
Chinese Cabbage	1,344	210	606	260	269
Pumpkin	2,821	231	1,082	639	870
Tomato	2,944	399	1,233	339	973

**Table 3. Number of households growing crops by Type Crop Status before Cyclone Heta,
(Jan, 2004) - Apia Urban Area**

Type of Crop	Crop Status					
	Total Hoseholds Reporting	Less than 3 months	more than 3 months & less than 5 months	more than 6 months & less than 8 months	more than 8 months	Not Stated
<i>Total</i>	8,626	1,091	2,561	1,427	3,316	231
Taro	1,847	147	798	504	357	42
Taro Palagi	693	147	294	105	126	21
Taamu	1,112	105	315	210	462	21
Cassava	210	0	63	63	63	21
Yam	1,259	21	273	189	756	21
Banana	2,435	0	525	336	1,490	84
Cucumber	168	126	21	0	21	0
Head Cabbage	63	42	0	0	21	0
Chinese Cabbage	210	189	21	0	0	0
Pumpkin	231	63	126	0	21	21
Tomato	399	252	126	21	0	0

**Table 3. Number of households growing crops by Type Crop Status before Cyclone Heta,
(Jan, 2004) - North West Upolu**

Type of Crop	Crop Status					
	Total Hoseholds Reporting	Less than 3 months	more than 3 months & less than 5 months	more than 6 months & less than 8 months	more than 8 months	Not Stated
<i>Total</i>	<i>24,705</i>	<i>3,353</i>	<i>6,576</i>	<i>4,154</i>	<i>10,059</i>	<i>562</i>
Taro	4,327	541	1,860	1,038	757	130
Taro Palagi	2,012	281	606	498	606	22
Taamu	4,218	151	1,320	757	1,882	108
Cassava	433	22	173	65	173	0
Yam	3,894	151	498	519	2,682	43
Banana	5,473	130	692	736	3,699	216
Cucumber	1,298	692	411	130	43	22
Head Cabbage	130	65	43	0	22	0
Chinese Cabbage	606	411	130	65	0	0
Pumpkin	1,082	260	454	195	173	0

Tomato	1,233	649	389	151	22	22
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Table 3. Number of households growing crops by Type Crop Status before Cyclone Heta, (Jan, 2004) - Rest of Upolu

Type of Crop	Crop Status					
	Total Hoseholds Reporting	Less than 3 months	more than 3 months & less than 5 months	more than 6 months & less than 8 months	more than 8 months	Not Stated
<i>Total</i>	<i>20,448</i>	<i>1,937</i>	<i>2,576</i>	<i>5,332</i>	<i>10,124</i>	<i>479</i>
Taro	4,773	280	879	2,915	599	100
Taro Palagi	1,218	120	120	339	619	20
Taamu	3,614	240	399	759	2,137	80
Cassava	379	100	0	100	180	0
Yam	3,654	60	220	499	2,816	60
Banana	4,473	20	220	559	3,594	80
Cucumber	978	419	399	80	40	40
Head Cabbage	120	60	40	0	0	20
Chinese Cabbage	260	140	80	0	0	40
Pumpkin	639	320	120	60	140	0
Tomato	339	180	100	20	0	40

Table 3. Number of households growing crops by Type Crop Status before Cyclone Heta, (Jan, 2004) - Savaii

Type of Crop	Crop Status					
	Total Hoseholds Reporting	Less than 3 months	more than 3 months & less than 5 months	more than 6 months & less than 8 months	more than 8 months	Not Stated
<i>Total</i>	<i>25,569</i>	<i>1,946</i>	<i>3,830</i>	<i>5,714</i>	<i>13,437</i>	<i>642</i>
Taro	5,031	269	1,346	2,484	807	124
Taro Palagi	1,760	186	290	621	642	21
Taamu	4,865	124	352	870	3,416	104
Cassava	1,242	104	228	207	683	21
Yam	4,348	166	352	559	3,168	104
Banana	4,865	21	145	311	4,244	145
Cucumber	1,242	497	435	248	21	41
Head Cabbage	104	41	41	0	0	21

Chinese Cabbage	269	145	124	0	0	0
Pumpkin	870	62	104	228	435	41
Tomato	973	331	414	186	21	21

**Table 3. Number of households growing crops by Type Crop Status before Cyclone Heta,
(Jan, 2004) - Samoa**

Type of Crop	Crop Status					
	Total Hoseholds Reporting	Less than 3 months	more than 3 months & less than 5 months	more than 6 months & less than 8 months	more than 8 months	Not Stated
<i>Total</i>	<i>79,348</i>	<i>8,328</i>	<i>15,543</i>	<i>16,627</i>	<i>36,936</i>	<i>1,914</i>
Taro	15,977	1,236	4,882	6,942	2,520	396
Taro Palagi	5,682	734	1,309	1,563	1,993	83
Taamu	13,811	620	2,386	2,595	7,897	313
Cassava	2,264	225	464	435	1,099	42
Yam	13,155	398	1,342	1,766	9,421	228
Banana	17,246	170	1,582	1,941	13,028	525
Cucumber	3,687	1,734	1,266	458	125	103
Head Cabbage	416	208	125	0	43	41
Chinese Cabbage	1,344	885	355	65	0	40
Pumpkin	2,821	704	804	482	769	62
Tomato	2,944	1,412	1,029	379	42	82

Table 4. Number of Households growing crops before Cyclone Heta Mainly for Home Consumption by Type of Crops grown, by Region

Type of Crop	Region				
	Total Hoseholds Reporting	Apia Urban Area	North West Upolu	Rest of Upolu	Savaii
Coconut	11,369	1,175	2,899	3,195	4,099
Cocoa	7,163	861	1,774	1,837	2,691
Taro	8,066	1,490	2,985	1,458	2,132
Taro Palagi	3,889	567	1,298	699	1,325
Taamu	7,954	965	3,093	1,617	2,277
Cassava	2,077	168	411	359	1,139
Yam	9,235	986	2,812	1,937	3,499
Banana	12,206	1,910	3,721	3,055	3,520
Breadfruit	12,273	1,574	3,613	3,235	3,851
Papaya	2,563	252	671	978	663
Cucumber	1,531	126	324	459	621
Head Cabbage	124	21	22	40	41
Chinese Cabbage	314	84	108	60	62
Pumpkin	1,261	168	303	459	331
Tomato	1,139	294	454	80	311

Table 5. Number of Households growing crops before Cyclone Heta Mainly for Sale by Type of Crops Grown, by Region

Type of Crop	Region				
	Total Hoseholds Reporting	Apia Urban Area	North West Upolu	Rest of Upolu	Savaii
Coconut	233	0	130	0	104
Cocoa	609	21	238	40	311
Taro	474	42	65	160	207
Taro Palagi	168	0	87	40	41
Taamu	394	21	65	60	248
Yam	186	21	65	80	21
Banana	420	105	151	60	104
Breadfruit	21	21	0	0	0

Papaya	62	0	22	20	21
Cucumber	358	0	216	80	62
Head Cabbage	106	21	65	20	0
Chinese Cabbage	315	84	151	80	0
Pumpkin	342	21	238	0	83
Tomato	359	63	173	40	83

**Table 6. Number of households growing crops before cyclone Heta partly for sale
and partly for home consumption by type of crops grown by region**

Type of Crop	Region				
	Total Households reporting	Apia Urban Area	North West Upolu	Rest of Upolu	Savaii
Coconut	2,567	105	736	899	828
Cocoa	3,497	105	1,493	699	1,201
Taro	7,247	294	1,190	3,155	2,609
Taro Palagi	1,457	105	541	459	352
Taamu	5,210	84	952	1,897	2,277
Cassava	144	21	0	20	104
Yam	3,479	189	887	1,637	766
Banana	4,263	399	1,449	1,318	1,097
Breadfruit	729	105	281	260	83
Papaya	376	21	173	120	62
Cucumber	1,755	42	736	439	538
Head Cabbage	186	21	43	60	62
Chinese Cabbage	693	42	324	120	207
Pumpkin	1,135	21	519	160	435
Tomato	1,405	42	584	220	559

**Table 7. Number of households growing crops by types of crops grown
by crop use before Cyclone Heta**

Type of Crop	Total households reporting	Mainly for home consumption	Mainly for sale	Partly for home consumption & partly for sale	Not Stated
Coconut	14,418	11,369	233	2,567	250
Cocoa	11,543	7,163	609	3,497	273
Taro	15,977	8,066	474	7,247	190
Taro Palagi	5,682	3,889	168	1,457	169
Taamu	13,811	7,954	394	5,210	252
Cassava	2,264	2,077	0	144	43
Yam	13,177	9,235	186	3,479	277
Banana	17,246	12,206	420	4,263	357
Breadfruit	13,521	12,273	21	729	499
Papaya	3,023	2,563	62	376	22
Cucumber	3,687	1,531	358	1,755	42
Head Cabbage	416	124	106	186	0
Chinese Cabbage	1,344	314	315	693	22
Pumpkin	2,821	1,261	342	1,135	83
Tomato	2,944	1,139	359	1,405	42

Table 8.1 Estimated single crop equivalent area (acres) grown before Cyclone Heta by type of crop by region

Type of Crop	Region				
	Total households reporting	Apia Urban Area	North West Upolu	Rest of Upolu	Savaii
Coconut	45,166	898	4,342	13,280	26,646
Cocoa	10,665	642	2,745	937	6,341
Taro	13,680	1,023	2,281	1,534	8,841
Taro Palagi	4,516	216	1,405	187	2,708
Taamu	11,783	494	2,246	594	8,449
Cassava	1,389	63	223	72	1,031
Yam	10,309	757	2,384	231	6,938
Banana	15,178	1,329	5,030	984	7,836
Breadfruit	11,752	803	2,330	910	7,709
Papaya	2,200	5	546	92	1,557
Cucumber	3,367	131	1,323	120	1,793
Head Cabbage	1,059	43	953	21	42
Chinese Cabbage	1,250	111	532	146	462
Pumpkin	2,234	86	995	3	1,150
Tomato	2,801	148	954	71	1,628

Table 8.2 Estimated damage of single crop equivalent area(acres) grown before Cyclone Heta by type of crop by region

Type of Crop	Region				
	Total households reporting	Apia Urban Area	North West Upolu	Rest of Upolu	Savaii
Coconut	25,866	665	1,319	8,975	14,907
Cocoa	4,260	254	1,004	572	2,430
Taro	4,341	564	536	478	2,763
Taro Palagi	1,073	102	368	82	521
Taamu	3,603	351	507	157	2,588
Cassava	600	0	43	1	556
Yam	2,422	409	796	114	1,103
Banana	1,949	494	820	21	614

Breadfruit	2,455	378	535	88	1,454
Papaya	289	0	124	0	165
Cucumber	798	0	510	65	223
Head Cabbage	650	21	629	0	0
Chinese Cabbage	182	0	182	0	0
Pumpkin	528	12	359	2	155
Tomato	713	22	379	10	302

Table 8.3 Estimated single crop equivalent area (acres) damaged after cyclone Heta by type of crop by region

Type of Crop	Region														
	Samoa			Apia Urban Area			North West Upolu			Rest of Upolu			Savaii		
	Total Grown	Total Damaged	% Damage d	Total Grown	Total Damaged	% Damage d	Total Grown	Total Damaged	% Damage d	Total Grown	Total Damaged	% Damage d	Total Grown	Total Damaged	% Damage d
Coconut	45,166	25,866	57.3	898	665	74.0	4,342	1,319	30.4	13,280	8,975	67.6	26,646	14,907	55.9
Cocoa	10,665	4,260	39.9	642	254	39.6	2,745	1,004	36.6	937	572	61.1	6,341	2,430	38.3
Taro	13,680	4,341	31.7	1,023	564	55.1	2,281	536	23.5	1,534	478	31.2	8,841	2,763	31.3
Taro Palagi	4,516	1,073	23.8	216	102	47.4	1,405	368	26.2	187	82	43.9	2,708	521	19.2
Taamu	11,783	3,603	30.6	494	351	71.1	2,246	507	22.6	594	157	26.5	8,449	2,588	30.6
Cassava	1,389	600	43.2	63	0	0.0	223	43	19.4	72	1	1.1	1,031	556	54.0
Yam	10,309	2,422	23.5	757	409	54.1	2,384	796	33.4	231	114	49.2	6,938	1,103	15.9
Banana	15,178	1,949	12.8	1,329	494	37.2	5,030	820	16.3	984	21	2.2	7,836	614	7.8
Breadfruit	11,752	2,455	20.9	803	378	47.1	2,330	535	23.0	910	88	9.7	7,709	1,454	18.9
Papaya	2,200	289	13.1	5	0	0.0	546	124	22.8	92	0	0.0	1,557	165	10.6
Cucumber	3,367	798	23.7	131	0	0.0	1,323	510	38.5	120	65	54.2	1,793	223	12.5
Head Cabbage	1,059	650	61.4	43	21	49.8	953	629	65.9	21	0	0.0	42	0	0.0
Chinese Cabbage	1,250	182	14.6	111	0	0.2	532	182	34.2	146	0	0.0	462	0	0.0
Pumpkin	2,234	528	23.6	86	12	13.7	995	359	36.1	3	2	66.7	1,150	155	13.5
Tomato	2,801	713	25.4	148	22	14.6	954	379	39.8	71	10	14.0	1,628	302	18.5

Table 9. Number of households already/will replant at time of visit by type of crop, by region

Type of Crop	Region							
	Apia Urban Area				North West Upolu			
	Now	Next Month	2 to 5 months	6 months or more	Now	Next Month	2 to 5 months	6 months or more
Taro	1,616	882	420	420	4,089	2,791	1,774	1,385
Taro Palagi	693	378	252	252	1,644	1,017	736	584
Taamu	882	378	273	210	3,613	2,834	1,622	1,125
Banana	2,330	1,259	693	588	4,478	2,747	1,493	1,276
Cassava	147	42	21	0	411	238	87	87
Yam	923	525	336	252	2,488	1,731	1,060	844

**Table 9. Number of households already/will replant at time of visit by type of crop, by region
(cont)**

Type of Crop	Region							
	Rest of Upolu				Savaii			
	Now	Next Month	2 to 5 months	6 months or more	Now	Next Month	2 to 5 months	6 months or more
Taro	4,633	3,614	3,335	839	4,886	4,617	3,913	3,292
Taro Palagi	839	719	519	100	1,615	1,366	807	621
Taamu	3,175	2,516	1,558	240	4,617	4,244	2,526	1,677
Banana	3,534	2,516	1,637	300	4,431	3,333	1,760	1,056
Cassava	280	280	120	0	828	580	228	186
Yam	2,816	1,917	1,238	140	3,747	2,671	1,284	1,222

**Table 9. Number of households already/will replant at time of visit by type of crop,
Samoa (cont)**

Type of Crop	Time of replanting			
	Now	Next Month	2 to 5 months	6 months or more
Taro	15,224	11,904	9,442	5,936
Taro Palagi	4,791	3,480	2,314	1,725
Taamu	12,287	9,972	5,979	3,252
Banana	14,773	9,855	5,583	2,842

Cassava	1,666	1,140	456	273
Yam	9,974	6,844	3,918	2,206

Table 10. Number of households that are aware of pre-cyclone

crop preparation by region

Region	Total	Yes	No
Total	18,462	8,483	9,979
Apia Urban Area	2,623	1,133	1,490
North West Upolu	5,646	1,925	3,721
Rest of Upolu	4,913	2,816	2,097
Savaii	5,280	2,609	2,671

Table 11. Number of households that are aware of post-cyclone

method to recover by region

Region	Total	Yes	No
Total	18,462	10,964	7,498
Apia Urban Area	2,624	1,259	1,365
North West Upolu	5,646	3,137	2,509
Rest of Upolu	4,912	3,255	1,657
Savaii	5,280	3,313	1,967

Table 12. Number of households with damaged stockyard and fences

Region		Stockyard			Fences		
	Total Households Reporting	Damage	No Damage	No Stockyard	Damage	No damage	No Fence
Total	5,011	496	1,094	3,419	2,362	870	1,777
Apia Urban Area	378	84	84	210	210	105	63
North West Upolu	497	87	22	389	195	65	238
Rest of Upolu	1,880	160	140	1,578	1,378	100	399
Savaii	2,256	166	849	1,242	580	600	1,077

Table 13. Number of households and impact of cyclone Heta on food supply by region.

Impact on food supply	Region				
	Total	Apia Urban Area	North West Upolu	Rest of Upolu	Savaii
No Impact	6,812	1,574	2,185	1,438	1,615
Poor quality of food (susu talo etc.)	3,509	861	498	639	1,511
Short supply	10,026	1,721	3,634	2,476	2,194
Buy more tinned food	44	0	44	0	0
Can't keep perishable food	22	0	22	0	0
Increased prices of food	1,415	1,028	325	20	41
Increase consumption of rice and flour	4,116	1,491	996	1,238	393
Too much stealing results to less food available for consumption	383	0	238	0	145

Table 14. Number of households and impact of cyclone Heta on household income by region.

Impact on household income	Region				
	Total	Apia Urban Area	North West Upolu	Rest of Upolu	Savaii
No impact	12,836	4,576	4,391	1,777	2,091
Increase income from sale of crops	986	42	108	339	496
Decrease income - short supply of food crops and fish	8,370	462	2,466	2,876	2,567
Decrease income from business e.g shops	166	21	43	60	41
Decrease income from business e.g shops and restaurants	314	105	87	40	83
Decrease income because of job influence from cyclone	295	126	87	20	62
Decrease income because expenditure on food is increasing	191	126	65	0	0

Table 15. Number of households and impact of cyclone Heta on household expenditure by region.

Impact on household expenditure	Region				
	Total	Apia Urban Area	North West Upolu	Rest of Upolu	Savaii
No Impact	5,328	1,133	1,882	739	1,573
Increase expenditure on food e.g rice, flour, tinned food	13,292	2,855	3,808	3,255	3,375
Increase expenditure on food crops	3,876	1,784	1,623	180	290
Increase expenditure on farming materials	1,764	336	585	699	145
Increase expenditure on fuel and water supply	354	63	87	80	124
Increase expenditure on family and church events eg, church and village donation	1,087	105	216	579	186
Increase expenditure on housing repairing	786	315	152	320	0
Decrease expenditure due to the effect of income from farming	355	42	173	140	0