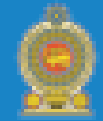




Rapid Impact Assessment Report

Date released: 01 June 2017 | Version 01

GLIDE #: FL-2017-000057-LKA | May 2017



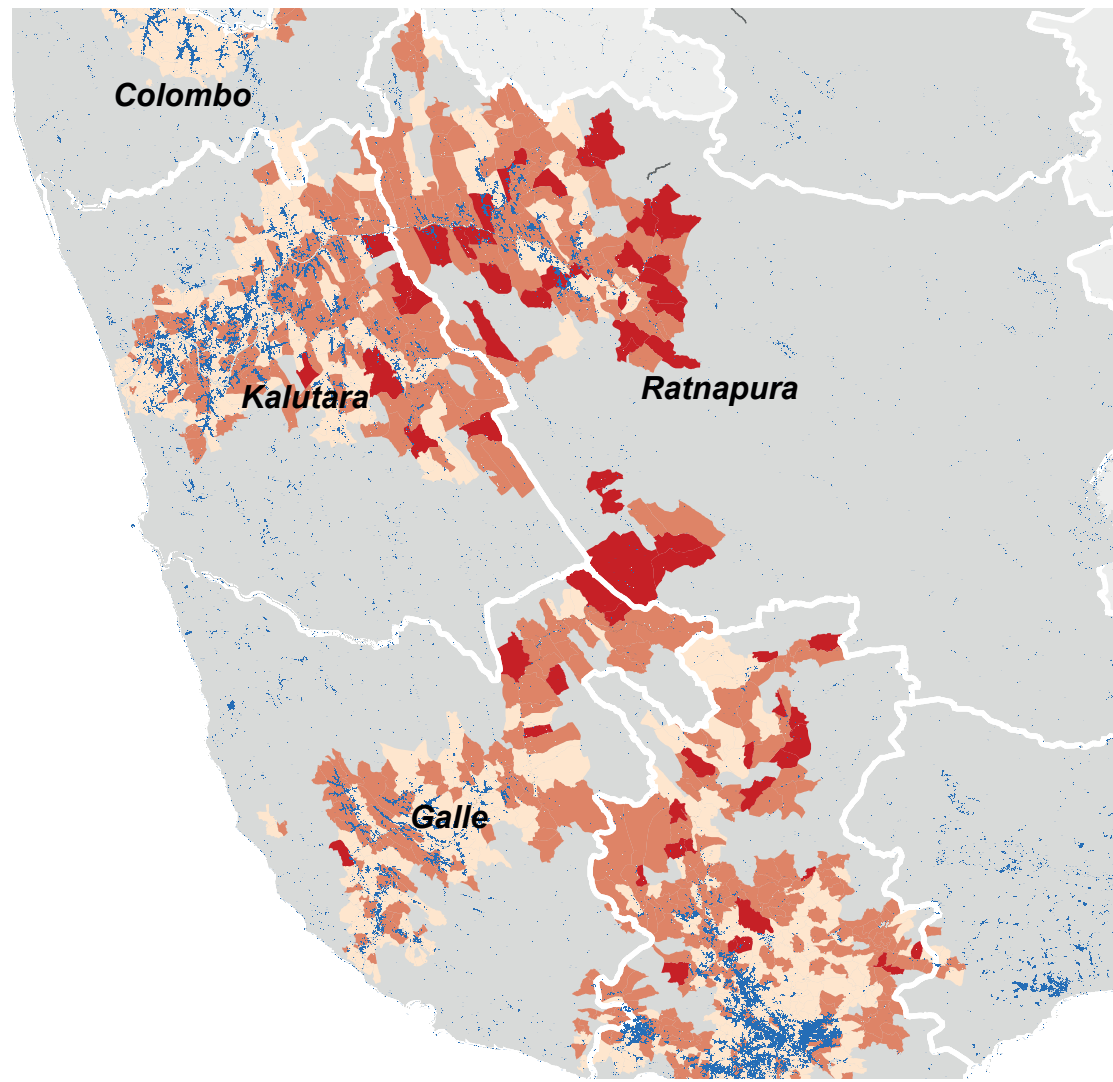
All the below are Initial estimates
All information needs to be verified
and may change

Disaster Management Centre

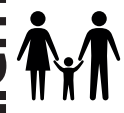
wfp.org

Geographic Impact

South-west monsoon was activated over Sri Lanka from 24 May 2017 and a very low upper air wind convergence was formulated over the eastern sea of Sri Lanka which was absorbing westerly winds. As a result of this, heavy rains were received on 25 of May to the South-western watersheds in the country. Large amount of rains were received within 12 hours in SW regions including Namunuthanna (619mm) of, Bulathsinghela (419mm), Morawaka (406mm) and Walasmulla (437mm) leading riverine floods of the Kalu, Nilwala and Gin rivers.



HIGHLIGHT



70,000 Severely Affected

465,000 Moderately Affected



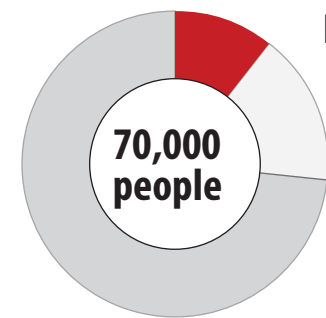
290,000 Women directly affected



138,000 Children directly affected

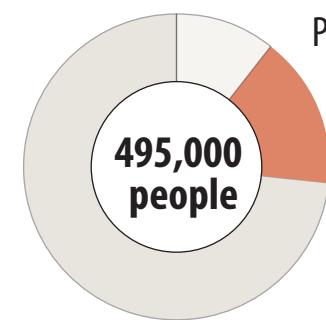


20,792 Houses Impacted



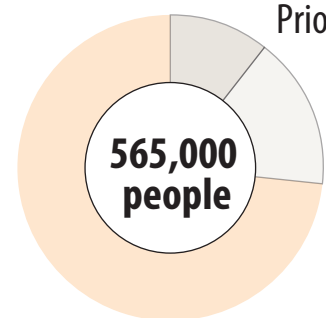
Priority 1

70,000 people have been classified as severely affected. The key criteria used for this classification was the exposure level to the flood inundation, level of poverty, housing conditions and access to basic water and sanitation facilities. Any rapid response programme should be able to target this category, and primarily the programmes on immediate food, shelter or sanitation assistance could be planned using the above estimated figure.



Priority 2

The impact analysis model has estimated approximately 495,000 people as moderately affected population. Same vulnerability criteria not with a moderate level of flood exposure have been used for this classification. Post disaster recovery assistance in particular the livelihood improvement support, community based asset creation to enhance the resilience, livelihood diversifications, disaster risk reduction activities to mitigate or minimize risks would be the most appropriate and recommended interventions among this group.

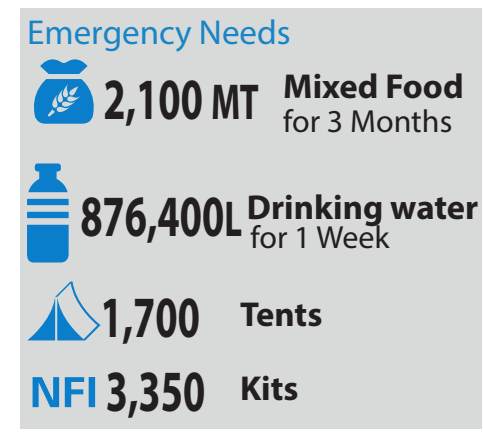
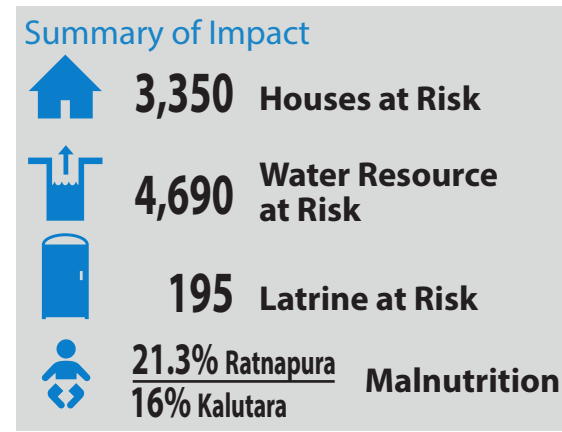
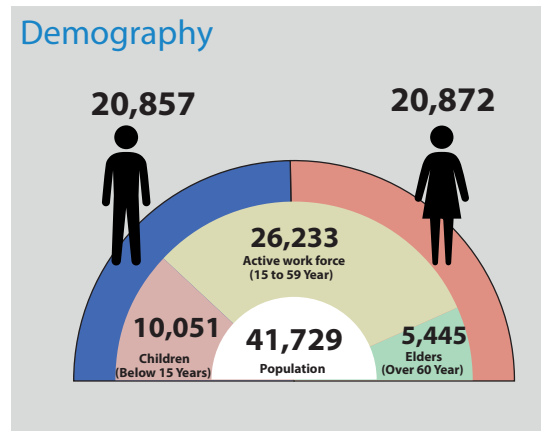
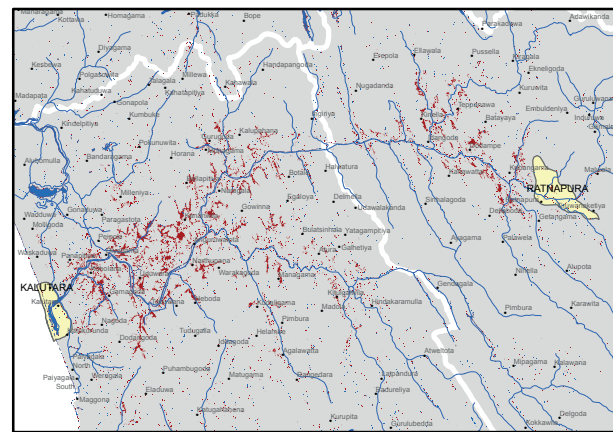


Priority 3

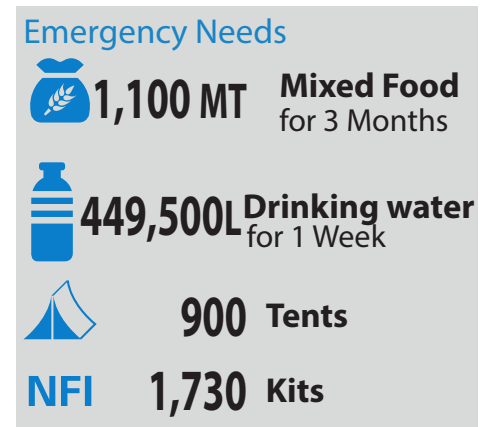
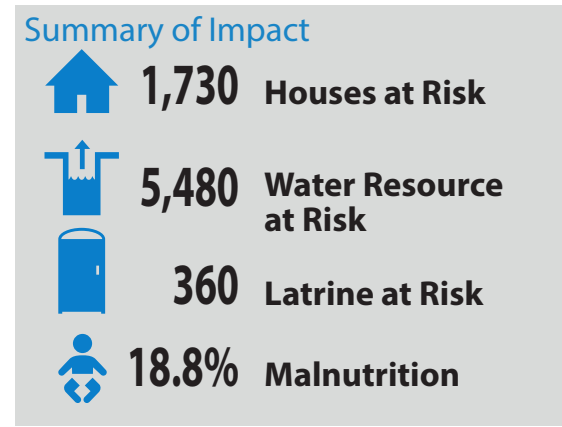
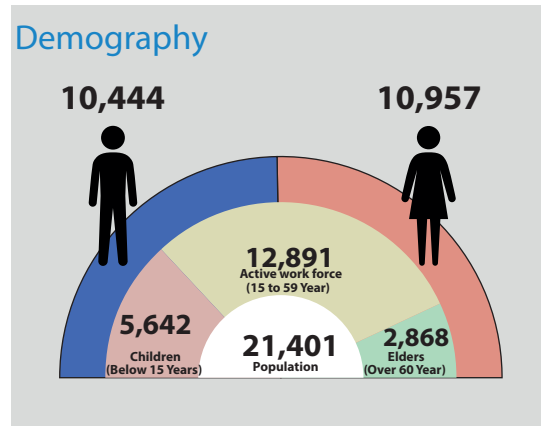
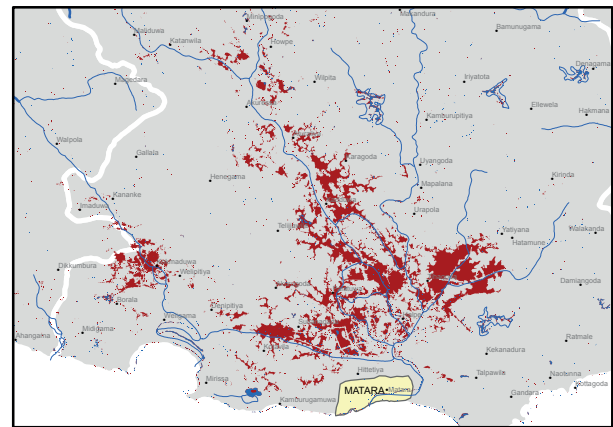
The model has estimated that 565,000 people who are living in the flood affected areas as the indirectly affected population mainly due to lack of access to facilities such as hospitals, markets, schools and other public services and the communities who had to face burdens to host the displaced populations. There are no major response or recovery actions recommended for this group. However, the economic impacts for this population need to be accounted during the Post Disaster Needs Assessment.

PROFILE OF SEVERELY AFFECTED

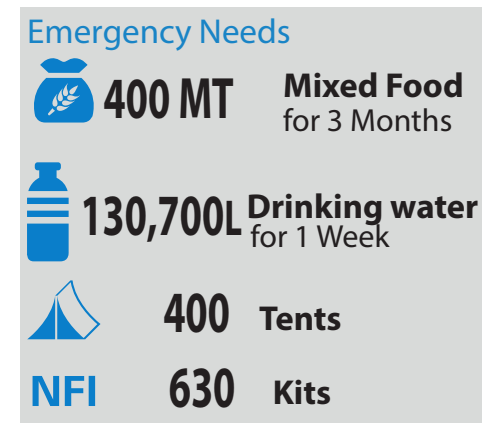
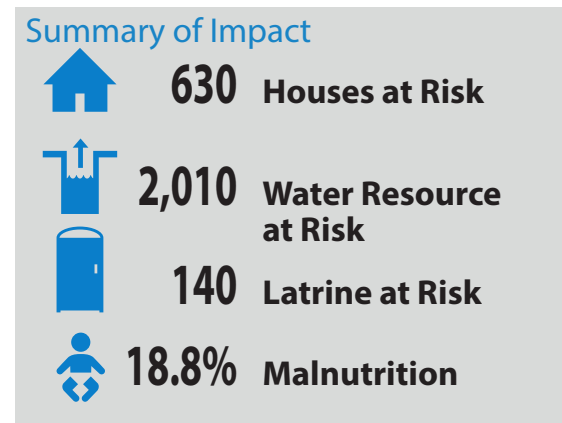
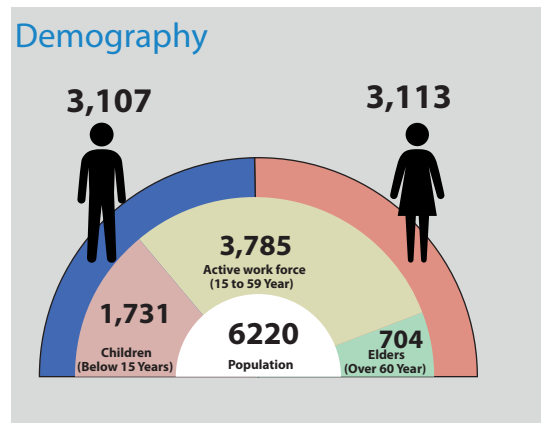
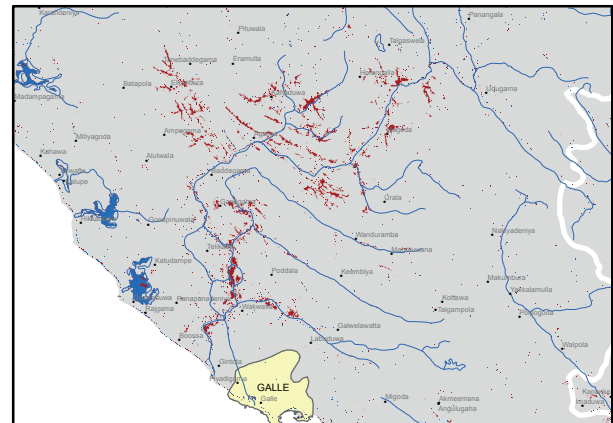
Kalu Ganga River Basin (Ratnapura and Kalutara District)



Nilwala River Basin (Matara District)



Gin River Basin (Galle District)



OVERVIEW

Market Functionality and Road Access

Based on the field verifications conducted by the district officials of the Market Information and Agribusiness Division of Hector Kobbekaduwa Agrarian Research & Training Institute of the Ministry of Agriculture, over 75% markets in the flood affected areas were not functional from 26 May 2017 onwards as a result of the interruptions to the food supply chain, blocked transportation systems and the inundations within the market premises.

A large number of retailers have experienced damages to existing food stocks or to their outlets. As a result of lack of supply of food items, the price of rice, lentils and vegetables were exceptionally high. Fresh marine fish and meat supply was almost zero in all flood affected areas. Retail price of long-grain local rice varieties were reported as 100 LKR/kg and the price of imported rice varieties were reported as 80-90 LKR/KG, compared to 72 to 80 LKR/KG before the flood.

Generally, most of the people who live in these flood affected districts are purchasing their food items in a weekly fair. The weekly fairs hold a large share of the total retail sale of vegetables, lentils and rice in these regions. However, during the last five days, all weekly fairs were not functional.

Super-market chains, Multi-Purpose Cooperative Societies (MPCS) and Outlets of Ceylon Wholesale Establishment in the flood affected zones were also reported as exhausted with their current stocks due to supply of food to feed the displaced and affected communities. The food movements during the emergency were mainly handled by military in the areas where the access was completely clogged.

Large number of A and B class roads are not passable due to the inundation. Further to this, high-way transportation was also disrupted mainly the entrance to the Colombo- Matara high-way was not functional continuously for 5 days. The high-way was also blocked in few other entry points specially in Dodangoda and Welipenna interchanges.

Contacts

DMC :

Anoja Senavirathna | anoja@dmc.gov.lk

WFP Country office:

Asela Bandara | asela.bandara@wfp.org

Laksiri Nanayakkara | laksiri.nanayakkara@wfp.org

WFP Regional Bureau:

Siemon Hollema | Siemon.hollema@wfp.org

Yingci Sun | yingci.sun@wfp.org

Coordination and Collaborations

Srimal Samansiri | srimal@dmc.gov.lk

Indu Abeyratne | indu.abeyratne@wfp.org

Resilience Profile:

The affected areas contain mainly four major livelihood zones i.e. LK17- Mixed perennial plantation (tea & rubber), LK-18 (Gem mining), LK 19 Small holder tea plantation, LK 20 Mixed farming cinnamon (CLEAR, 2015).

LKA 17 is located in the southwestern part of the country, and mainly dominated by rugged hills and mountainous landscape. Given the rugged terrain and agro-climatic patterns, larger scale rice and vegetable agriculture are not feasible. Mainly tea and rubber plantations are prominent in this zone and the rubber plantations are being replaced by tea as result in increasingly climate sensitive income as households cannot tap rubber during the rainy season. Soil erosion, deforestation and cutting failures triggers the repeated natural disasters in particular long-spell dry weather periods, landslides and floods.

LKA 18 zone experiences a bi-modal rainfall pattern, with most of the rainfall occurring between May and September as a result of the southwest monsoon. The rainfall facilitates limited small-scale rain-fed paddy cultivation while Gem mining is a major activity that contributes significantly to household incomes. However the major concerns with mining include damage to agricultural lands, riverbanks, induced cutting failures and landslides. The relative resilience levels have been classified as low in this region.

LKA 19 is located in the mid-country areas of Galle and Matara, consists of small-scale tea plantations. The landscape of this zone is mainly suitable for tea plantation. Therefore, this zone consists almost entirely of small-scale tea plantations (between 0.25 and 1.5 ha). Given the high population density of the area, recent years have seen increasing land fragmentation leading to high rates of soil degradation. As a result, in recent years, heavy rainfall has been linked to landslides. This region also reported as one of the regions with greater disparity in poverty and classified as low resilience levels.

LKA 20 the cinnamon belt is defined mostly by smallholder cinnamon production with less than 10 percent of total cinnamon production in larger holdings of 8 to 10 hectares. The poorest households are wage labourers engaged in the cinnamon industry, either as peelers or processors of the cinnamon. Many are landless although some households may own small homesteads where they grow paddy, tea, and/or coconut.

Assumptions:

- Flood impact: Impact of flood is considered equal for the whole inundation area.
- Housing type Semi-permanent, improvised and Unclassified are less resilience to the flood than permanent houses.
- If a person monthly income is less than LKR 4,244 considered he or she is poor. Poverty percentage is calculated as the total number of poor divided by the total population.
- Source of drinking water such as wells, Tube wells, water bowser and river/tanks/stream are considered at risk in terms of flood disaster.

Data Sources

www.riskinfo.lk, WFP SDI, Department of Census and Statistics, and Department of Survey in Sri Lanka

STATISTICAL PROFILE - Priority 1

District/ DSD	Population	Male	Female	0 To 14 Years population	15 To 59 Years population	Over 60 Years population	Total Semi-permanent	Total Improvised	Total Un-classified	Protected well within premises	Protected well outside premises	Unprotected well
Galle	6,220	3,107	3,113	1,731	3,785	704	609	21	-	1,532	414	66
Baddegama	2662	1334	1328	841	1530	291	304	20	0	433	88	7
Neluwa	837	434	403	206	555	76	62	1	0	205	120	14
Thawalama	2721	1339	1382	684	1700	337	243	0	0	894	206	45
Kalutara	5,775	2,869	2,906	1,423	3,681	671	556	10	1	544	418	29
Bulathsinhala	5775	2869	2906	1423	3681	671	556	10	1	544	418	29
Matara	21,401	10,444	10,957	5,642	12,891	2,868	1,692	36	-	3,110	1,892	479
Akuressa	2802	1361	1441	744	1705	353	321	3	0	581	246	114
Athuraliya	2865	1406	1459	784	1731	350	190	5	0	520	266	163
Hakmana	1942	918	1024	449	1183	310	140	1	0	216	241	9
Kirinda Puhulwella	960	441	519	238	561	161	55	1	0	86	228	55
Kotapola	8517	4213	4304	2291	5119	1107	616	19	0	1201	552	92
Mulatiyana	1011	479	532	235	598	178	87	0	0	194	96	2
Pitabeddara	3304	1626	1678	901	1994	409	283	7	0	312	263	44
Ratnapura	35,954	17,988	17,966	8,628	22,552	4,774	2,756	29	-	2,484	879	339
Ayagama	4794	2433	2361	1144	2911	739	439	5	0	233	127	18
Elapatha	4047	2047	2000	991	2571	485	279	2	0	457	88	49
Kiriella	3373	1684	1689	821	2134	418	299	2	0	18	79	0
Kuruvita	5871	2940	2931	1322	3729	820	317	6	0	562	268	46
Nivithigala	3430	1705	1725	825	2147	458	254	5	0	125	36	126
Pelmadulla	5702	2803	2899	1310	3654	738	395	4	0	364	131	51
Ratnapura	8737	4376	4361	2215	5406	1116	773	5	0	725	150	49
Grand Total	69,350	34,408	34,942	17,424	42,909	9,017	5,613	96	1	7,670	3,603	913

STATISTICAL PROFILE - Priority 2

Districts/ DSD	Population	Male	Female	0 To 14 Years population	15 To 59 Years population	Over 60 Years population	Total Semi-permanent	Total Improvised	Total Un-classified	Protected well within premises	Protected well outside premises	Unprotected well
Galle	70,625	34,522	36,103	17,645	42,559	10,421	2,982	52	-	9,187	4,669	1,425
Baddegama	15,620	7,509	8,111	3,832	9,064	2,724	562	20	-	1,457	1,285	285
Elpitiya	6,139	3,041	3,098	1,496	3,602	1,041	222	2	-	960	378	257
Hikkaduwa	1,219	614	605	276	724	219	28	2	-	254	84	7
Nagoda	14,931	7,148	7,783	3,722	9,064	2,145	794	5	-	1,643	814	303
Neluwa	12,836	6,454	6,382	3,240	8,147	1,449	528	8	-	1,144	686	271
Niyagama	2,463	1,189	1,274	606	1,503	354	83	-	-	965	125	10
Thawalama	10,226	5,109	5,117	2,543	6,318	1,365	495	9	-	1,513	725	210
Welivitiya-Divithura	5,638	2,683	2,955	1,482	3,220	936	209	4	-	869	486	72
Yakkalamulla	1,553	775	778	448	917	188	61	2	-	382	86	10
Hambantota	1,591	744	847	401	960	230	65	1	-	140	166	108
Beliatta	1,591	744	847	401	960	230	65	1	-	140	166	108
Kalutara	107,377	52,888	54,489	25,781	66,116	15,480	4,874	99	-	9,309	6,133	1,783
Bulathsinhala	29,908	14,624	15,284	6,863	18,264	4,781	1,609	20	-	2,369	1,939	596
Dodangoda	11,825	5,750	6,075	3,053	7,083	1,689	532	5	-	1,355	620	282
Horana	7,106	3,536	3,570	1,703	4,434	969	274	11	-	171	77	116
Ingiriya	22,917	11,209	11,708	5,557	14,371	2,989	1,160	21	-	1,293	875	144
Kalutara	12,277	6,348	5,929	2,748	7,950	1,579	329	7	-	1,596	656	299
Madurawala	8,723	4,268	4,455	2,059	5,288	1,376	367	15	-	1,213	1,028	43
Millaniya	9,954	4,883	5,071	2,523	5,966	1,465	317	16	-	953	671	234
Palindanuwara	4,667	2,270	2,397	1,275	2,760	632	286	4	-	359	267	69
Matara	183,607	88,496	95,111	46,681	109,500	27,426	6,842	182	6	18,082	10,536	3,156
Akuressa	25,075	12,190	12,885	6,448	14,865	3,762	812	25	-	727	612	291
Athuraliya	18,480	8,900	9,580	4,728	10,901	2,851	578	25	-	1,979	1,039	82
Devinuwara	2,620	1,271	1,349	620	1,561	439	121	2	-	648	258	31
Dickwella	1,694	786	908	469	935	290	54	1	-	730	457	17
Hakmana	18,432	8,759	9,673	4,657	11,020	2,755	843	6	-	1,750	1,306	827
Kamburupitiya	9,463	4,604	4,859	2,362	5,606	1,495	281	6	-	609	236	111
Kirinda Puhulwella	7,071	3,363	3,708	1,713	4,170	1,188	370	1	-	1,238	868	180
Kotapola	19,334	9,328	10,006	5,081	11,605	2,648	1,171	20	-	842	616	216
Malimbada	5,795	2,758	3,037	1,382	3,344	1,069	160	7	-	871	526	139
Matara Four Gravets	11,721	5,558	6,163	2,922	7,054	1,745	332	17	-	1,127	638	93
Mulatiyana	19,955	9,595	10,360	5,070	11,861	3,024	563	5	-	2,364	1,516	397
Pasgoda	3,338	1,679	1,659	814	2,050	474	132	1	-	321	215	100
Pitabeddara	14,886	7,286	7,600	3,831	9,187	1,868	719	14	-	992	450	284
Thihagoda	6,483	3,116	3,367	1,580	3,853	1,050	227	9	-	1,237	616	231
Weligama	8,447	4,078	4,369	2,156	5,052	1,239	224	29	6	1,132	696	118
Welipitiya	10,813	5,225	5,588	2,848	6,436	1,529	255	14	-	1,515	487	39
Ratnapura	130,134	64,518	65,616	30,354	81,844	17,936	5,593	91	5	6,618	2,825	851
Ayagama	3,497	1,723	1,774	860	2,097	540	344	8	1	30	20	4
Eheliyagoda	11,880	5,810	6,070	2,769	7,240	1,871	695	10	1	1,401	277	100
Elapatha	8,861	4,442	4,419	1,984	5,605	1,272	411	14	-	134	49	10
Kiriella	20,431	10,147	10,284	4,529	12,705	3,197	968	13	1	1,146	408	239
Kuruvita	31,700	15,689	16,011	7,347	19,965	4,388	1,266	17	1	1,676	779	314
Nivithigala	2,312	1,153	1,159	482	1,553	277	68	-	-	46	115	18
Pelmadulla	7,940	4,029	3,911	1,894	5,064	982	366	4	1	448	103	59
Ratnapura	43,513	21,525	21,988	10,489	27,615	5,409	1,475	25	-	1,737	1,074	107
Grand Total	493,334	241,168	252,166	120,862	300,979	71,493	20,356	425	11	43,336	24,329	7,323

SAFETY SHELTERS ESTABLISHED IN AFFECTED DISTRICTS

