

DATA 6 : COMMUNITY INVENTORY SURVEY

**THE STUDY ON STORM WATER DRAINAGE PLAN
FOR THE COLOMBO METROPOLITAN REGION
IN
THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA**

FINAL REPORT

VOLUME V : DATA BOOK

DATA 6 : COMMUNITY INVENTORY SURVEY

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1. Objectives

The community inventory survey is to obtain basic data for formulating a resettlement plan and an improvement for living conditions of low income communities.

2. Survey Area

The survey area consists of four basins in the Colombo Metropolitan Area such as lower Ja Ela basin, Kalu Oya basin, Greater Colombo basin, and Bolgoda basin. The survey area covers an area of 830 km².

3. Technical Specifications

The survey shall identify socio-economic conditions of inhabitants that might be affected by the implementation of the projects that will be proposed in the JICA Study. The areas to be surveyed shall be flood prone areas, low income residential areas, and shanty areas of which information be obtained from the relevant local authorities. The information and data to be collected and examined are shown in Table 1 and Survey Form 1.

4. Results of the Survey

The survey was conducted by subcontracting to the Lanka Hydraulic Institute. The full set of the survey report can be available in the SLLRDC office. Part of the survey results, especially collected data, were shown in the following.

Table 1 Scope of the Work

Items to be Surveyed	Data and Information to be Collected	Contents to be Examined
<p>a) Present social environment conditions: general inhabitants, the poor, illegal occupants, ethnicity, religion, living conditions</p> <p>b) Policy, laws, regulations, and guidelines on compensation and resettlement related to land acquisition for public project in central and local governments</p> <p>c) Households inventory to be potentially affected by future storm water drainage projects</p> <p>d) Housing for affected inhabitants: land price, low cost housing scheme for low income households</p> <p>e) Review of examples of issues and good practices on land acquisition for public projects</p>	<p>a) Socio-economic data at community level or smallest administrative level as availability of data, distribution of vulnerable dwellers such as the poor and illegal occupants, especially near water bodies such as canals and lakes</p> <p>b) Relevant laws, regulations and guidelines</p> <p>i) compensation rate</p> <p>ii) assistance of resettlement</p> <p>iii) assistance of income restoration</p> <p>iv) relevant procedures and necessary period</p> <p>c) Number and spatial distribution of households living in riverside and flood prone land, socio-economic data on the communities such as income source, income level, and unemployment rate.</p> <p>d) Real estate price, public housing scheme, low-income housing program</p> <p>e) Relevant reports in similar projects</p>	<p>a) Summary of the data, explanation of areal features</p> <p>b) Compensation and assistance, necessary procedures and periods</p> <p>i) eligibility of compensation, compensated assets and items, estimation method for compensation</p> <p>ii) resettlement site, housing development, assistance of transportation, etc.</p> <p>iii) prioritized employment in the project construction, income restoration program (vocational training program and facility, livelihood assistance for low income household, elder person, disable person, socially low ranking people who tend to get job with difficulty)</p> <p>iv) land acquisition, compensation and resettlement plan prepared by project implementation agency, explanation meeting and public hearing & consultations, public involvement process, socio-economic-survey (assets survey), sociological survey calculation method for compensation, standard of cut-off date, etc.</p> <p>c) Possible number and socio-economic characteristics of households/persons to be affected in each area, spatial distribution map of potential households to be affected</p> <p>d) Average price of land and house at each area, review of public housing scheme and low-income housing program</p> <p>e) Common items and lessons to be considered well in preparation of land acquisition and resettlement plan for priority projects</p>

15. Religious population rate	<input type="checkbox"/> Buddhist: _____ % <input type="checkbox"/> Hindu: _____ % <input type="checkbox"/> Christians: _____ % <input type="checkbox"/> Muslims: _____ % <input type="checkbox"/> others (_____) _____ % Total 100 %																																		
16. Ethnicity of household heads	<input type="checkbox"/> Sinhalese: _____ % <input type="checkbox"/> Sri Lankan Tamils: _____ % <input type="checkbox"/> Indian Tamils: _____ % <input type="checkbox"/> Sri Lankan Moors: _____ % <input type="checkbox"/> others (_____): _____ %																																		
17. Household income level	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 20%; text-align: center;">Average monthly income (Rp.)</th> <th style="width: 20%; text-align: center;">% of total household numbers</th> </tr> </thead> <tbody> <tr> <td>High income group</td> <td style="text-align: center;">_____ Rp.</td> <td style="text-align: center;">_____ %</td> </tr> <tr> <td>Middle income group</td> <td style="text-align: center;">_____ Rp.</td> <td style="text-align: center;">_____ %</td> </tr> <tr> <td>Low income group</td> <td style="text-align: center;">_____ Rp.</td> <td style="text-align: center;">_____ %</td> </tr> </tbody> </table>		Average monthly income (Rp.)	% of total household numbers	High income group	_____ Rp.	_____ %	Middle income group	_____ Rp.	_____ %	Low income group	_____ Rp.	_____ %																						
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18. Main occupation of household heads	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 20%; text-align: center;">% of total household numbers</th> </tr> </thead> <tbody> <tr><td><input type="checkbox"/> Senior official or manager:</td><td style="text-align: center;">_____ %</td></tr> <tr><td><input type="checkbox"/> Professionals:</td><td style="text-align: center;">_____ %</td></tr> <tr><td><input type="checkbox"/> Technicians or associate professionals:</td><td style="text-align: center;">_____ %</td></tr> <tr><td><input type="checkbox"/> Clerks:</td><td style="text-align: center;">_____ %</td></tr> <tr><td><input type="checkbox"/> Sales or service workers:</td><td style="text-align: center;">_____ %</td></tr> <tr><td><input type="checkbox"/> Skilled agriculture or fishery workers:</td><td style="text-align: center;">_____ %</td></tr> <tr><td><input type="checkbox"/> Unskilled agriculture or fishery workers:</td><td style="text-align: center;">_____ %</td></tr> <tr><td><input type="checkbox"/> Craft or related workers:</td><td style="text-align: center;">_____ %</td></tr> <tr><td><input type="checkbox"/> Plant or machine operators or assemblers:</td><td style="text-align: center;">_____ %</td></tr> <tr><td><input type="checkbox"/> Elementary occupation:</td><td style="text-align: center;">_____ %</td></tr> <tr><td><input type="checkbox"/> Self-employed storekeeper:</td><td style="text-align: center;">_____ %</td></tr> <tr><td><input type="checkbox"/> Owner farmer:</td><td style="text-align: center;">_____ %</td></tr> <tr><td><input type="checkbox"/> Unemployed:</td><td style="text-align: center;">_____ %</td></tr> <tr><td><input type="checkbox"/> others (_____): _____ %</td><td style="text-align: center;">_____ %</td></tr> <tr><td><input type="checkbox"/> others (_____): _____ %</td><td style="text-align: center;">_____ %</td></tr> <tr> <td style="text-align: right;">Total</td> <td style="text-align: center;">100 %</td> </tr> </tbody> </table>		% of total household numbers	<input type="checkbox"/> Senior official or manager:	_____ %	<input type="checkbox"/> Professionals:	_____ %	<input type="checkbox"/> Technicians or associate professionals:	_____ %	<input type="checkbox"/> Clerks:	_____ %	<input type="checkbox"/> Sales or service workers:	_____ %	<input type="checkbox"/> Skilled agriculture or fishery workers:	_____ %	<input type="checkbox"/> Unskilled agriculture or fishery workers:	_____ %	<input type="checkbox"/> Craft or related workers:	_____ %	<input type="checkbox"/> Plant or machine operators or assemblers:	_____ %	<input type="checkbox"/> Elementary occupation:	_____ %	<input type="checkbox"/> Self-employed storekeeper:	_____ %	<input type="checkbox"/> Owner farmer:	_____ %	<input type="checkbox"/> Unemployed:	_____ %	<input type="checkbox"/> others (_____): _____ %	_____ %	<input type="checkbox"/> others (_____): _____ %	_____ %	Total	100 %
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Total	100 %																																		
19. No. of houses located in riverside land	_____ (houses) _____ (% of total)																																		
20. No. of houses frequently inundated in flood season	_____ (houses) _____ (% of total) _____ (days in inundation duration) _____ (m in inundation depth)																																		
21. Infrastructure service coverage	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 20%; text-align: center;">% of total household numbers</th> </tr> </thead> <tbody> <tr><td><input type="checkbox"/> water supply</td><td style="text-align: center;">_____ %</td></tr> <tr><td><input type="checkbox"/> electricity</td><td style="text-align: center;">_____ %</td></tr> <tr><td><input type="checkbox"/> sewerage pipe</td><td style="text-align: center;">_____ %</td></tr> <tr><td><input type="checkbox"/> garbage collection</td><td style="text-align: center;">_____ %</td></tr> <tr><td><input type="checkbox"/> others (_____)</td><td style="text-align: center;">_____ %</td></tr> </tbody> </table>		% of total household numbers	<input type="checkbox"/> water supply	_____ %	<input type="checkbox"/> electricity	_____ %	<input type="checkbox"/> sewerage pipe	_____ %	<input type="checkbox"/> garbage collection	_____ %	<input type="checkbox"/> others (_____)	_____ %																						
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<input type="checkbox"/> others (_____)	_____ %																																		

*: The No. should be consistent with inventory location map.

5. Community Inventory Survey

Table 1 Basic Information Related to Methods Followed in Data Collection

Basin	DS divisions under the basins	Number of communities (flood affected or poor)	Number of GN divisions covered	Number of households surveyed
Bolgoda	Horana Bandaragama Millaniya Moratuwa Kalutara Panadura Ratmalana Kesbewa Dodangoda Homagama	23	102	330
Greater Colombo	Colombo Timbirigasyaya Dehiwala Kolonnawa Kotte Kaduwela Maharagama	12	61	169
Kalu Oya	Kelaniya Biyagama Mahara	3	28	61
Ja Ela	Ja Ela Wattala Gampaha	7	26	53
Total	23	45	217	613

Table 2 The Percentage of GN Divisions Covered under the Study

Basin	Total population in the basin	Total No of GN divisions in the basin	No of GN divisions under the identified project area	GN divisions in the project area as % of the total GN divisions
Bolgoda	1,311,532	651	102	16%
Greater Colombo	1,627,781	237	61	26%
Kalu Oya	432,609	178	28	16%
Ja Ela	509,169	208	26	12%
Total	3,881,091	1,274	217	17%

Table 3 Spreads of Communities Affected with Flood and Poverty in Each Basin

Basin	Information
Bolgoda	A large number of communities is affected with floods in DS divisions such as Moratuwa, Kalutara, Panadura, Ratmalana, Kesbewa and Homagama. The houses are located close to each other in these communities. Majority of this flood affected communities in these DS divisions belong to low-income groups. Most of their houses are temporary ones. The situation in DS divisions such as Horana, Bandaragama, Millaniya and Dodangoda is different from the DS divisions mentioned above. Majority of the locations that are affected with floods in these DS divisions are abandoned paddy lands, which has become wet lands (marshy) at present. There are perennial crops and permanent houses scattered in these flood prone areas.
Greater Colombo	The situation in Kaduwela DS division is different from all the other DS divisions in the Greater Colombo Basin. Permanent houses are scattered over the flood-affected locations. Permanent crops are grown in the flood prone lands. In other DS divisions low-income shanties facing flood problems are a common characteristic. The houses other than the shanties in these locations are also temporary huts, which too are located close to each other
Kalu Oya	Compared to the situation in other DS divisions the houses in flood affected locations in Mahara DS divisions are scattered and less populated. In DS divisions such as Kelaniya and Biyagama houses in flood affected areas are located close to each other. About 65% of the flood-affected communities are comparatively poor.
Ja Ela	Density of houses is high in flood affected locations in Wattala DS division. Majority of houses affected are permanent ones. The next densely populated flood affected areas are located in Ja Ela DS division. The houses in flood affected locations in Gampaha Division are scattered. Many households even in the flood affected areas in Gampaha DS division own large coconut lands and has permanent houses. Majority of paddy lands in Gampaha is affected with floods.

Table 4 Broad Categories of Communities in 4 basins

Basin	% of rural areas	% of urban areas	% of communities living in shanties	% of business areas	% of agricultural areas	% of densely populated	% of less populated areas
Bolgoda	50%	50%	60%	60%	40%	50%	50%
Greater Colombo	14%	86%	86%	100%	0	72%	28%
Kalu Oya	80%	20%	90%	97%	3%	45%	55%
Ja Ela	33%	67%	60%	95%	5%	67%	33%

Table 5 Percentage of Area Affected with Floods and Storm Water Drainage Problems

Basin	Area affected due to over flowing of natural water courses as %	Area affected due to storm water drainage as %
Bolgoda	45%	55%
Greater Colombo	25%	75%
Kalu Oya	40%	60%
Ja Ela	40%	60%

Table 6 History of Settlement of the Communities Identified as Low Income Earning and Flood-Affected

Basin	By descent		Settled before 20 years		Settled within the last 20 years		No of GN divisions
	Num	%	Num	%	Num	%	
Bolgoda	98	96	03	3	01	1	102
Greater Colombo	51	84	5	8	5	8	61
Kalu Oya	12	43	11	39	5	5	28
Ja Ela	16	62	5	19	5	5	26
Total	177	82	24	11	16	16	217

Table 7 Nature of Nearest Watercourse of the Communities Identified (surveyed)- Number of GN divisions responded and %.

Basin	Close to a river/stream –		Close to a reservoir or pond		Close to Wet land-marshy land		Total no of GN divisions studied
	Number	%	Number	%	Number	%	
Bolgoda	100	98	4	4	67	66	102
Greater Colombo	57	93	0		36)	59	61
Kalu Oya	28	100	11	39	5	18	28
Ja Ela	26	100	0		2	8	26
Total	211	97	15	7	129	59	217

Table 8 Categories of Communities Living in Areas Affected by Flood or Storm Water Drainage Problems (Number of GN divisions and %)

Basin	Low income shanties (flood affected)		Low income (flood affected)		Low income shanties but not affected by flood		Flood affected communities		No of GN divisions
	Num	%	Num	%	Num	%	Num	%	
Bolgoda	18	18	73	72	2	2	9	9	102
Greater Colombo	30	49	14	23	0	0	17	28	61
Kalu Oya	11	39	14	50	0	0	3	11	28
Ja Ela	10	38	14	54	0	0	2	8	26
Total	69	32	115	53	2	1	31	14	217

Table 9 Number of Communities, GN Divisions and Houses

Basin	No of communities surveyed (marked in the map)	No of GN divisions in the surveyed communities	No of houses in GN divisions
Bolgoda	5	102	63,586
Greater Colombo	3	61	110,101
Kalu Oya	1	28	19,515
Ja Ela	3	26	17,033
Total	12	217	210,235

Table 10 Categories of Houses as per the Household Survey (Number of houses and %)

Basin	Permanent houses		Semi-Permanent		Temporary		Total
	Num	%	Num	%	Num	%	
Bolgoda	212	64	77	23	41	12	330
Greater Colombo	75	44	70	41	24	14	169
Kalu Oya	20	33	36	59	5	8	61
Ja Ela	21	40	29	55	3	6	53
Total	328	54	212	35	73	12	613

Table 11 Category of Houses among 217 GN Divisions (12 communities) – Number of houses and %.

Basin	Category-1		Category- 2		Category-3		Category-4		Total
	Num	%	Num	%	Num	%	Num	%	
Bolgoda	3,946	6	3,686	6	50,430	70	5,551	9	63,586
Greater Colombo	8,230	7	9,350	8	72,489	66	20,032	18	110,101
Kalu Oya	1,313	7	1,536	8	15,882	81	784	4	19,515
Ja Ela	876	5	1,739	10	13,764	81	654	4	17,033
Total	14,365	7	16,311	8	152,538	73	27,021	13	210,235

Note: Category -1 - The temporary huts constructed with wooden planks

Category-2 - Permanent houses constructed with wooden planks

Category-3 - Single story houses constructed with bricks

Category-4 - Multi –story house constructed with concrete.

Table 12 Types of House Ownership (Number of households and %)

Basin	Reside in Own house		Mortgaged in houses		Rented in house		Total
	Num	%	Num	%	Num	%	
Bolgoda	324	98	0	0	6	2	330
Greater Colombo	157	93	7	4	5	3	169
Kalu Oya	61	10	0	0	0	0	61
Ja Ela	53	10	0	0	0	0	53
Total	595	97	7	1	11	2	613

Table 13 Population – Total Basin Area and the Project Area

Basin	Total population (basin area)	Population in identified project area	% of project area population against total population
Bolgoda	1,311,532	333,408	25%
Greater Colombo	1,627,781	523,475	32%
Kalu Oya	432,609	114,302	26%
Ja Ela	509,169	92,535	18%
Total	3,881,091	1,063,720	27%

Table 14 Family Size in the Basins. (Results of household survey)

Basin	Number of families with 1-3 members		Number of families with 4-6 members		Number of families with 7-9 members		Total number of families surveyed
	Num	%	Num	%	Num	%	
Bolgoda	37	11	262	79	31	9	330
Greater Colombo	9	5	141	83	19	11	169
Kalu Oya	2	3	46	75	13	21	61
Ja Ela	0	0	46	87	7	13	53
Total	48	8	49	81	70	11	613

Table 15 Population by Ethnicity (Number and %)

Basin	Sinhala		Sri Lanka Tamil		Indian Tamil		Muslim		Other		Total population
	Num	%	Num	%	Num	%	Num	%	Num	%	
Bolgoda	307,866	92	10,687	3	57	0.01	14,291	4	507	2	333,408
Greater Colombo	333,259	64	86,127	16	5,956	1	94,969	18	3,164	0.6	523,475
Kalu Oya	86,033	75	8,273	7	0	0	19,233	17	763	0.7	114,302
Ja Ela	64,634	70	18,127	20	338	0.4	8,466	9	970	1	92,535
Total	79,179	74	12,321	12	6,351	0.6	13,695	13	5,404	0.5	1,063,720

Table 16 Population by Religion

Basin	Buddhism		Hindu		Christian		Muslim		Total
	Num	%	Num	%	Num	%	Num	%	
Bolgoda	270,367	81	9,484	3	38,823	12	14,734	4	333,408
Greater Colombo	286,973	55	80,062	15	56,159	11	100,281	19	523,475
Kalu Oya	76,943	67	8,013	7	9,514	8	19,832	17	114,302
Ja Ela	24,824	27	14,881	16	42,927	46	9,903	11	92,535
Total	659,107	62	112,440	11	147,423	14	14,475	14	1,063,720

Table 17 Number of Households without Males as Chief Householders

Basin	Number of female headed households	% of female headed households	Total households in the project area
Bolgoda	4,046	6%	63,586
Greater Colombo	5,863	5%	110,101
Kalu Oya	1,631	10%	19,515
Ja Ela	1,021	6%	17,033
Total	12,561	6%	210,235

Table 18 Number of Households Having Males or Females as Chief Householders (household survey Results)

Basin	Number of male headed households	%	Number of Female headed households	%	Total households surveyed
Bolgoda	307	93	23	7	330
Greater Colombo	158	93	11	7	169
Kalu Oya	56	92	5	8	61
Ja Ela	46	87	7	13	53
Total	567	92	46	8	613

Table 19 Number of Samurdhi Households

Basin	Number of Samurdhi beneficiary households	%	Number of households surveyed
Bolgoda	154	47	330
Greater Colombo	91	54	169
Kalu Oya	48	79	61
Ja Ela	47	89	53
Total	340	55	613

Table 20 Number of Poor Families

Basin	Number of poor households	%	Number of total households in the project area
Bolgoda	22,347	35	63,586
Greater Colombo	26,931	24	110,101
Kalu Oya	7,218	37	19,515
Ja Ela	6,348	37	17,033
Total	62,844	30	210,235

Table 21 Income Categories at GN level (Number of household and %)

Basin	High income-		Moderate income		Low income		Total households in the project area
	Num	%	Num	%	Num	%	
Bolgoda	11,463	18	26,444	42	25,679	40	63,586
Greater Colombo	32,154	29	49,038	45	28,909	26	110,101
Kalu Oya	5,260	27	6,971	36	7,284	37	19,515
Ja Ela	4,622	27	6,264	37	6,147	36	17,033
Total	53,499	25	88,717	42	68,019	32	2,102,335

Table 22 Income Groups according to the Household survey (Income per month –Number of families and %).

Basin	Rs. 1,000-3,000		Rs. 3,000-5,000		Rs.5,000-7,000		Rs.7,000-9,000		Rs.9,000-10,000		> Rs 10,000		Total households
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	
Bolgoda	55	17	176	53	72	22	17	5	7	2	3	1	330
Greater Colombo	7	4	121	72	28	17	11	7	2	1	0	0	169
Kalu Oya	1	2	49	80	10	16	1	2	0	0	0	0	61
Ja Ela	4	8	44	83	5	9	0	0	0	0	0	0	53
Total	67	11	390	64	115	19	29	5	9	1	3	0.5	613

Table 23 Employment of Chief Householders (Number and %)

Employment	Bolgoda		Greater Colombo		Kalu Oya		Ja Ela		Total no of employed chief householders	
	Num	%	Num	%	Num	%	Num	%	Num	%
Manager & executive	1,355	2	7,518	7	219	1	370	2	9,462	5
Professional	848	1	3,947	4	115	0.6	149	0.9	5,059	2
Technical	634	1	2,204	2	76	0.4	77	0.5	2,991	1
Clerical/private sector employment	13,234	21	34,035	31	5,528	28	4,995	20	57,792	27
Marketing and other services	3,795	6	5,688	5	812	4	1,045	6	11,340	5
Agriculture and fisheries-skilled	581	1	60	0.01	0	0	226	1	867	0.4
Agriculture and fisheries-unskilled	8,304	13	2,494	2	240	1	965	6	12,003	6
Carpentry/masonry	3,409	5	3,772	3	380	2	318	2	7,879	4
Machine operators	908	1	1,629	1	185	1	122	0.7	2,844	1
Trainees	439	7	2,218	2	7	0.04	10	0.6	2,674	1
Self-employment	11,028	17	21,056	19	2,952	15	3,255	19	38,291	18
Unemployed	6,020	9	3,681	3	704	4	472	3	10,877	5
Labor	13,031	20	21,799	20	8,297	42	5,029	30	48,156	23
Total	63,586	100	110,101	100	19,515	100	17,033	100	210,235	100

Table 24 Business Centers- Number of Places

Basin	Offices	Industries	Shops	Ware houses	Other	Total
Bolgoda	120	520	2,057	54	13	2,764
Greater Colombo	234	387	3,613	132	3	4,369
Kalu Oya	10	126	291	24	0	451
Ja Ela	19	151	557	34	7	768
Total	383	1,184	6,518	244	23	8,352

Table 25 Service Delivery Centers in the Project Area (Number and %)

Basin	Hospitals		Schools		Community service centers		Govt. Service delivery centers		Religious centers		Total
	Num	%	Num	%	Num	%	Num	%	Num	%	
Bolgoda	12	3	74	17	60	14	120	28	163	38	417
Greater Colombo	24	4	87	15	66	12	190	33	201	35	568
Kalu Oya	3	2	19	15	14	11	40	32	48	39	124
Ja Ela	2	1	22	15	17	12	69	47	37	25	147
Total	41	3	202	16	157	12	419	33	449	35	1268

Table 26 Number of A and B Type Roads in the Basins

Basin	GN divisions with "A" grade roads		GN divisions with "B" grade roads		Total GN divisions in the project area
	Num	%	Num	%	
Bolgoda	46	45	56	55	102
Greater Colombo	23	38	38	62	61
Kalu Oya	19	68	9	32	28
Ja Ela	9	35	17	65	26
Total	97	45	120	55	217

Note: Type A road - These are the widest roads that run across province to province in the country.
Type B road - Second largest road but these roads run within provinces.

Table 27 Houses with Access for Water, Electricity, Sanitary Latrines and Solid Disposal Facilities (Number and %)

Basin	Drinking water		Electricity		Latrines		Solid waste disposal facilities		Total households
	Num	%	Num	%	Num	%	Num	%	
Bolgoda	50,054	79	57,304	90	49,092	77	17,718	28	63,586
Greater Colombo	97,818	89	71,232	65	94,313	86	54,755	50	110,101
Kalu Oya	17,395	89	17,425	89	15,503	79	7,982	41	19,515
Ja Ela	13,725	81	14,561	85	14,327	84	7,366	43	17,033
Total	178,992	85	160,522	76	173,235	82	87,821	42	210,235

Table 28 Households with Access to Water, Electricity etc as per Survey (Number and %)

Basin	Households with drinking water		Households with electricity		Households with good access roads		Total number of households surveyed
	Num	%	Num	%	Num	%	
Bolgoda	257	78	257	78	264	80	330
Greater Colombo	155	92	125	71	162	96	169
Kalu Oya	61	100	50	82	61	100	61
Ja Ela	41	41	44	83	51	96	53
Total	514	84	476	78	538	88	613

Table 29 Number of Houses Located close to Watercourses

Basin	No of houses	%	Total number of houses in each basin
Bolgoda	4,001	6	63,586
Greater Colombo	5,977	5	110,101
Kalu Oya	1,296	7	19,515
Ja Ela	1,316	8	17,033
Total	12,590	6	210,235

Table 30 Number of Houses that are Affected by Flood or Storm Water Drainage

Basin	Number of houses affected	% of affected houses	Total number of houses
Bolgoda	6,443	10	63,586
Greater Colombo	14,632	13	110,101
Kalu Oya	4,440	22	19,515
Ja Ela	2,118	12	17,033
Total	27,633	13	210,235

Table 31 Proximity of Houses to Natural Watercourses (River or Stream)

Distance of houses to the nearest watercourse.	Bolgoda	Greater Colombo	Kalu Oya	Ja Ela	Total no of houses	
					Number	%
No of houses less than 20 M	55	12	0	12	79	13
Between 20-50 M	87	19	11	14	131	21
Between 50-100 M	52	24	4	9	89	15
Between 100-250 M	57	60	32	17	166	27
Between 250-300 M	15	15	2	1	33	5
Between 300-500M	23	4	10	0	37	6
between 500-1000M	12	0	2	0	14	2
More than 1000 M	6	0	0	0	6	1

Source: Household survey

Table 32 Frequency of Flooding in the Residential Area (Number of persons responded and %)

Basin	1-2 times per year		3-4 times per year		5-6 times per year		Sample households surveyed
	Num	%	Num	%	Num	%	
Bolgoda	147	45	143	43	31	9	330
Greater Colombo	77	46	56	33	1	0.6	169
Kalu Oya	39	64	22	36	0	0	61
Ja Ela	22	42	31	58	0	0	53
Total	285	46	252	41	32	5	613

Table 33 Number of Days that Water Stagnate After a Flood – (Number of GN divisions and %)

Basin	< 5 days	5-10 days	10-15 days	15-20 days	> 20 days	Total GN divisions
Bolgoda	15	45	28	14	0	102
Greater Colombo	5	39	17	0	0	61
Kalu Oya	19	6	3	0	0	28
Ja Ela	0	14	9	1	2	26
Total	39(18%)	104(48%)	57(26%)	15(7%)	2(1%)	217

Table 34 Information on Height of Inundation – (Number of GNs responded and %)

Basin	< 1 ft		1-3 ft		3-5 ft		5-7 ft		7-9 ft		Total Number of GNs
	Num	%	Num	%	Num	%	Num	%	Num	%	
Bolgoda	3	3	69	68	27	26	2	2	1	1	102
Greater Colombo	0	0	48	48	11	18	1	2	1	2	61
Kalu Oya	0	0	23	82	5	18	0	0	0	0	28
Ja Ela	0	0	22	85	4	15	0	0	0	0	26
Total	3	1	162	75	47	22	3	1	2	1	217

Table 35 Height of Inundation of Residential Areas as per Household Survey (Number of respondents and %)

Basin	< 1 ft		1-3 ft		3-6 ft		6-8 ft		Total householders
	Num	%	Num	%	Num	%	Num	%	
Bolgoda	62	19	227	69	39	12	2	5	330
Greater Colombo	59	35	106	63	4	2	0	0	169
Kalu Oya	10	16	47	77	4	7	0	0	61
Ja Ela	16	30	35	66	2	4	0	0	53
Total	147	24	415	68	49	8	2	0.3	613

Table 36 Effects on Houses within a Year- (Number of respondents and %)

Basin	1-2 times		3-4 times		5-6 times		> 6 times	
	Num	%	Num	%	Num	%	Num	%
Bolgoda	177	54	134	41	18	5	1	0.3
Greater Colombo	86	51	77	46	6	4	0	0
Kalu Oya	47	77	14	23	0	0	0	0
Ja Ela	22	42	30	57	1	2	0	0
Total	332	54	255	42	25	4	1	0.2

Table 37 Responses of 613 Householders for Solving Storm Water Drainage and Flood Problem in their Areas

Basin	Agreed to suggestion 1	%	Agreed to sygestion-2	%	Total number of householders
Bolgoda	260	79	193	58	330
Greater Colombo	104	62	94	56	169
Kalu Oya	30	44	39	64	61
Ja Ela	32	60	36	68	53
Total	426	69	362	59	613

Table 38 Responses of 613 Householders to the Development Proposals (Number agreed and %)

Basin	Proposal 1		Proposal 2		Proposal 3		Proposal 4		Total householders responded
	Num	%	Num	%	Num	%	Num	%	
Bolgoda	56	17	46	14	27	8	4	19	330
Greater Colombo	29	17	38	22	35	21	48	28	169
Kalu Oya	0	0	17	28	2	3	4	7	61
Ja Ela	19	36	20	56	4	8	30	57	53
Total	104	17	121	20	68	11	146	24	613

Note: Proposal 1 - Supply of drinking water, Proposal 2 - Improving access road facilities,

Proposal 3 - Providing sanitary latrine facilities,

Proposal 4 - Introducing and helping for alternative income generation activities and also supporting for improving the current income generation activities.

6. Greater Colombo Basin

Table 1 Details on Divisional Secretary (DS) Divisions under the Basin and Communities Interviewed

DS division	Extent under the basin (%)	Number of communities	GN divisions involved	Number of persons interviewed
Colombo	100%	02	10	26
Tibirigasyaya	100%	01	09	34
Dehiwala	100%	02	06	12
Kolonnawa	100%	01	10	38
Kotte	100%	02	07	15
Kaduwela	100%	01	13	28
Maharagama	100%	03	06	16
Total	-	12	61	169

Table 2 Population Data of Total Basin Area

DS division	Extent in km ²	Population
Colombo	37.7	4,27,187
Tibirigasyaya	22.23	2,77,311
Dehiwala	21.17	2,07,993
Kolonnawa	27.3	2,04,585
Kotte	17.05	1,15,826
Kaduwela	87.7	2,09,741
Maharagama	39.4	1,85,138

Table 3 Population by Ethnic Group and Religion in the Basin

DS division	Population as per religion as a percentage				Population as per ethnic group as a percentage		
	Buddhist	Christian	Muslims	Hindu	Sinhala	Tamil	Muslims
Colombo	44	16	19	21	50	31	19
Tibirigasyaya	44	16	19	21	50	31	19
Dehiwala	80	7	7	6	85	8	7
Kolonnawa	35	35	10	20	40	50	10
Kotte	83	10	3	4	93	3	4
Kaduwela	85	7	5	3	90	5	5
Maharagama	90	5	3	2	93	4	3

Table 4 Economic Activities in the Basin Area

DS division	Economic activities as a percentage				
	Agriculture	Business	Self employed	Laborers	Public/private sector
Colombo	0	30	5	5	60
Tibirigasyaya	0	30	5	5	60
Dehiwala	0	27	8	10	55
Kolonnawa	0	15	20	25	40
Kotte	0	25	12	8	55
Kaduwela	0	25	15	10	50
Maharagama	0	30	10	5	55

Table 5 Income Categories in the Basin

DS division	Income %		
	> Rs.8,000	Rs.3,500 – 8,000	<Rs.3,500
Colombo	60	25	15
Tibirigasyaya	60	25	15
Dehiwala	55	30	15
Kolonnawa	40	35	25
Kotte	40	30	30
Kaduwela	40	35	25
Maharagama	45	35	20

Table 6 Infrastructure and Other Facilities Available in the Total Basin Area

DS division	Population with general public facilities	Population with other infrastructure facilities	Housing %		
			Permanent	Temporary	Semi permanent
Colombo	90	95	83	8	9
Tibirigasyaya	90	95	92	5	3
Dehiwala	80	95	88	4	8
Kolonnawa	75	80	82	8	10
Kotte	90	90	90	3	7
Kaduwela	80	90	93	3	4
Maharagama	85	90	90	3	7

Table 7 Details on Distribution of Population

DS division	Community Number	Details on distribution of population
Colombo	01	Densely populated area. Houses are located very close to one another. There is no sufficient space for storm water drainage.
	02	Similar to the situation mentioned above.
Tibirigasyaya	01	Houses have been constructed on lowland areas (marshy lands) by earth filling. Houses are made of wooden flanks and are located very close to one another. Residents have migrated to the area within the last 20 years or so. There are marshy lands with stagnating water in some places in this area. This area is also densely populated.
Dehiwala	01	Houses are located very close to one another.
	02	Houses are located very close to one another.
Kolonnawa	01	Same as in Tibirigasyaya above.
Kotte	01	People are settled less in flood prone areas compared to the other DS divisions.
	02	Same as above.
Kaduwela	01	There are about 8 –10 permanent houses per ha. Area is not densely populated compared to other areas studied.
Maharagama	01	In these 3 communities, houses are located close to one another, but not very close as in the case of areas like Colombo and Kolonnawa etc.
	02	
	03	

Table 8 Flood-prone Areas in the Basin

DS division	Area (km ²)	Number of GN divisions	Number of Flood prone communities	Number of GN divisions in flood prone areas	Flood prone GN divisions as a %
Colombo	37.7	35	02	10	29
Tibirigasyaya	22.23	20	01	09	45
Dehiwala	21.178	13	02	06	46
Kolonnawa	27.03	46	01	10	22
Kotte	17.05	20	02	07	35
Kaduwela	87.7	62	01	13	21
Maharagama	39.4	41	03	06	15
Total		237	12	61	26

Table 9 General Socio Economic Characteristics of the DS Divisions Studied

DS division	Socio economic characteristics (Yes/No)						
	Rural	Urban	Slums	Commercial areas	Agricultural areas	Densely populated	Less populated
Colombo	No	Yes	Yes	Yes	No	Yes	No
Tibirigasyaya	No	Yes	Yes	Yes	No	Yes	No
Dehiwala	No	Yes	Yes	Yes	No	Yes	No
Kolonnawa	No	Yes	Yes	Yes	No	Yes	No
Kotte	-	Yes	Yes	Yes	No	No	Yes
Kaduwela	Yes	-	-	Yes	No	No	Yes
Maharagama	No	Yes	Yes	Yes	No	Yes	No

Table 10 Settlement History of Communities

DS division	By decent		20 years back		Within 20 years		Total GN divisions
	Number	%	Number	%	Number	%	
Colombo	04	40	04	40	02	20	10
Tibirigasyaya	09	100	0	0	0	0	09
Dehiwala	06	100	0	0	0	0	06
Kolonnawa	06	60	01	10	03	30	10
Kotte	07	100	0	0	0	0	07
Kaduwela	13	100	0	0	0	0	13
Maharagama	06	100	0	0	0	0	06
Total	51	84	5	8	05	08	61

Table 11 Water Resources in the Vicinity of Communities

DS division	GN divisions close to streams/rivers		GN divisions close to tank/lake		GN divisions close to wetlands		Total GN divisions
	Number	%	Number	%	Number	%	
Colombo	10	100	0	0	0	0	10
Tibirigasyaya	09	100	0	0	06	67	09
Dehiwala	06	100	0	0	0	0	06
Kolonnawa	10	100	0	0	08	80	10
Kotte	07	100	0	0	05	71	07
Kaduwela	11	85	0	0	13	100	13
Maharagama	04	67	0	0	04	67	06
Total	57	93	0	0	36	59	61

Table 12 Conditions of Flood Prone Areas (Please see key below)

DS division	1		2		3		4		5		Total GN divisions
	Num	%	Num	%	Num	%	Num	%	Num	%	
Colombo	08	80	01	10	0	0	01	10	0	0	10
Tibirigasyaya	09	100	0	0	0	0	0	0	0	0	09
Dehiwala	0	0	02	33	0	0	04	67	0	0	06
Kolonnawa	10	100	0	0	0	0	0	0	0	0	10
Kotte	2	29	01	14	0	0	04	57	0	0	07
Kaduwela	0	0	09	69	0	0	04	0	0	0	13
Maharagama	01	0	01	0	0	0	04	31	0	0	06
Total	30	49	14	23	0	0	17	28	0	0	61

Note: 1. Low-income shanties facing flood problems, 2. Low-income areas facing flood problems, 3. Low-income shanty areas not facing flood problems, 4. Areas facing floods, 5. Low income areas

Table 13 Number of Houses in the Communities Affected by Flood or Storm Water Drainage

DS division	Number ascribed to the community	Number of houses	Total houses
Colombo	01	10,293	29,916
	02	19,623	
Tibirigasyaya	01	34,592	34,592
Dehiwala	01	1,440	9,130
	02	7,690	
Kolonnawa	01	9,395	9,395
Kotte	01	7,080	10,492
	02	3,862	
Kaduwela	01	9,345	9,345
Maharagama	01	3,790	6,781
	02	1,981	
	03	1,010	
Total	-	-	110,101

Note: The communities mentioned in second column in table 13 include people residing flood or storm water drainage affected areas. Some communities are not flood or storm water affected people but they are poor.

Table 14 Houses on Encroached Lands (GN level data)

DS division	Houses on encroached lands		Total number of houses
	Number	% of total houses	
Colombo	4,595	15	29,916
Tibirigasyaya	6,517	18	34,592
Dehiwala	0	0	9,130
Kolonnawa	2,293	24	9,395
Kotte	920	8	10,942
Kaduwela	104	1	9,345
Maharagama	255	4	6,781
Total	14,684	13	110,101

Table 15 Ownership Types

DS division	Self-owned		Leased in		Rented in		Total
	Number	%	Number	%	Number	%	
Colombo	20	77	4	15	2	8	26
Tibirigasyaya	30	88	2	6	2	6	34
Dehiwala	10	83	1	8	1	8	12
Kolonnawa	37	100	0	0	0	0	38
Kotte	15	100	0	0	0	0	15
Kaduwela	28	100	0	0	0	0	28
Maharagama	16	100	0	0	0	0	16
Total	156	94	07	4	5	3	169

Table 16 Conditions of Houses

DS division	Permanent		Semi Permanent		Temporary		Total
	Number	%	Number	%	Number	%	
Colombo	9	35	13	50	4	15	26
Tibirigasyaya	1	3	22	65	11	32	34
Dehiwala	10	83	2	17	0	0	12
Kolonnawa	11	29	23	61	4	11	38
Kotte	13	87	2	13	0	0	15
Kaduwela	20	71	5	18	3	11	28
Maharagama	11	69	3	19	2	13	16
Total	75	44	70	41	24	14	169

Table 17 Categories of Houses Based on Material Used

DS division	1		2		3		4		Total
	Number	%	Number	%	Number	%	Number	%	
Colombo	985	3	4,670	16	21,276	71	2,985	10	29,916
Tibirigasyaya	5,154	15	2,088	6	17,635	51	9,715	28	34,592
Dehiwala	45	0.5	30	0.3	5,635	62	3,420	37	9,130
Kolonnawa	1,095	11	1,577	17	5,909	63	814	9	9,395
Kotte	374	3	578	5	8,476	77	1,514	14	10,942
Kaduwela	504	5	287	3	7,960	85	594	6	9,345
Maharagama	73	1	120	2	5,598	83	990	15	6,781
Total	8,230	7	9,350	8	72,489	66	20,032	18	110,101

Note: 1. Cottages with plank walls, 2. Permanent houses with plank walls, 3. Brick walled one store, 4. Brick and concrete two store

Table 18 Population in Project Area

DS division	Total population	Population in the project area	Project area population as %
Colombo	427,187	154,770	36
Tibirigasyaya	277,311	143,242	52
Dehiwala	207,993	44,499	21
Kolonnawa	204,585	55,998	27
Kotte	115,826	49,855	43
Kaduwela	209,741	44,427	21
Maharagama	185,138	30,684	17
Total	1,627,781	523,475	32

Table 19 Population Density in the Houses Surveyed

DS division	1-3 persons		4-6 persons		7-9 persons		Total
	Number	%	Number	%	Number	%	
Colombo	2	8	24	92	0	0	26
Tibirigasyaya	0	0	26	76	8	24	34
Dehiwala	1	8	11	92	0	0	12
Kolonnawa	2	5	28	74	8	21	38
Kotte	1	7	13	87	1	7	15
Kaduwela	1	4	25	89	2	7	28
Maharagama	2	12	14	88	0	0	16
Total	9	5	141	83	19	11	169

Table 20 Population as per Ethnicity in the Project Area

DS division	Sinhalese		Sri-Lankan Tamil		Indian Tamil		Muslims		Other		Total
	Num.	%	Num.	%	Num	%	Num	%	Num	%	
Colombo	73,125	47	25,952	17	348	2	54,980	36	365	0.2	154,770
Tibirigasyaya	70,657	49	46,695	33	0	0	23,091	16	2,799	2	143,242
Dehiwala	40,582	91	1,103	2	0	0	2,814	6	0	0	44,499
Kolonnawa	31,500	56	10,214	18	4,216	8	10,068	18	0	0	55,998
Kotte	43,822	88	1,799	4	848	2	3,386	7	0	0	49,855
Kaduwela	43,210	97	332	1	544	1	341	1	0	0	44,427
Maharagama	30,363	99	32	0.1	0	0	289	1	0	0	30,684
Total	333,259	64	86,127	16	5,956	1	94,969	18	3,164	1	523,475

Table 21 Population as per Religion in the Project Area

DS division	Buddhist		Hindu		Christians		Muslims		Total
	Number	%	Number	%	Number	%	Number	%	
Colombo	55,019	36	18,471	12	24,314	16	56,966	37	154,770
Tibirigasyaya	60,827	42	44,263	31	11,922	8	26,230	18	143,242
Dehiwala	34,536	78	1,114	3	5,869	13	2,980	7	44,499
Kolonnawa	27,694	49	12,780	23	5,463	10	10,061	18	55,998
Kotte	40,077	80	2,647	5	3,745	8	3,386	7	49,855
Kaduwela	40,088	90	749	2	3,214	7	376	1	44,427
Maharagama	28,732	94	38	0.1	1,632	5	282	1	30,684
Total	286,973	55	80,062	15	56,159	11	100,281	19	523,475

Table 22 Surveyed Population as per Ethnicity

DS division	Sinhalese		Tamil		Muslims		Other		Total
	Num.	%	Num.	%	Num	%	Num	%	
Colombo	14	54	7	27	5	19	0	0	26
Tibirigasyaya	21	62	11	32	2	6	0	0	34
Dehiwala	12	100	0	0	0	0	0	0	12
Kolonnawa	20	53	13	34	3	8	2	5	38
Kotte	15	100	0	0	0	0	0	0	15
Kaduwela	28	100	0	0	0	0	0	0	28
Maharagama	15	94	1	6	0	0	0	0	16
Total	125	0	32	0	10	0	2	0	169

Table 23 Surveved Population as per Religion

DS division	Buddhist		Christians		Hindu		Muslims		Total
	Num.	%	Num.	%	Num	%	Num	%	
Colombo	12	46	2	8	7	27	5	19	26
Tibirigasyaya	17	50	4	12	11	32	2	6	34
Dehiwala	12	100	0	0	0	0	0	0	12
Kolonnawa	20	53	0	0	13	34	5	13	38
Kotte	15	100	0	0	0	0	0	0	15
Kaduwela	25	89	3	11	0	0	0	0	28
Maharagama	15	94	0	0	1	6	0	0	16
Total	116	69	9	5	32	19	12	7	169

Table 24 Houses without a Male Household Head

DS division	Without a Male Household Head		Total
	Num.	%	
Colombo	1,565	5	29,916
Tibirigasyaya	1,468	4	34,592
Dehiwala	480	5	9,130
Kolonnawa	1,073	11	9,395
Kotte	602	6	10,942
Kaduwela	425	5	9,345
Maharagama	250	4	6,781
Total	5,863	5	110,101

Table 25 Male or Female Headed Households as per Survey

DS division	Male Headed		Female Headed		Total
	Num.	%	Num.	%	
Colombo	24	92	2	8	26
Tibirigasyaya	33	92	1	3	34
Dehiwala	11	92	1	8	12
Kolonnawa	37	97	1	3	38
Kotte	13	87	2	13	15
Kaduwela	28	100	0	0	28
Maharagama	12	75	4	25	16
Total	158	93	11	7	169

Table 26 Employment

DS division	1		2		3		4		5		6		7	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Colombo	633	2	387	1	152	0.5	6,731	22	113	0.5	0	0	1,365	5
Tibirigasyaya	5,748	17	3,040	9	1,010	3	9,469	27	2,166	6	0	0	34	1
Dehiwala	252	3	169	2	816	9	3,805	42	1,310	14	0	0	0	0
Kolonnawa	133	1	62	0.5	47	1	2,359	25	876	9	46	0.5	39	0.5
Kotte	470	4	130	1	61	0.5	5,777	53	109	1	0	0	0	0
Kaduwela	253	3	130	1	118	1	2,500	27	1,042	11	0	0	1,006	11
Maharagama	29	0.5	29	0.5	0	0	3,394	50	72	1	14	0.1	50	1
Total	7,518	7	3,947	4	2,204	2	34,035	31	5,688	5	60	0.1	2,494	2

Note: 1. Management service/Administrative officers, 2. Professionals, 3. Technical Officers,
4. Clerks/Private sector employees, 5. Marketing sector employees, 6. Skilled farmers/fishermen,
7. Unskilled Farmers/Fishermen, 8. Carpenters/Mason etc., 9. Machine Operators,
10. Trainees for employment, 11. Self employment, 12. Unemployed,
13. Other, this other category include, various daily paid laborers.

Table 26A Employment (Continued)

DS division	8		9		10		11		12		13		Total
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	
Colombo	717	2	125	0.5	0	0	9,967	33	843	3	8,883	30	29,916
Tibirigasyaya	643	2	838	2	610	2	5,426	16	0	0	5,608	16	34,592
Dehiwala	257	3	190	2	646	7	616	7	434	5	589	6	9,130
Kolonnawa	212	2	135	1	0	0	2,130	23	109	1	3,293	35	9,395
Kotte	936	9	188	2	0	0	660	6	1,173	11	1,438	13	10,942
Kaduwela	174	2	113	1	395	4	1,666	18	382	4	1,552	17	9,345
Maharagama	833	12	40	0.5	567	8	591	8	740	11	436	6	6,781
Total	3,772	3	1,629	1	2,218	2	21,056	19	3,681	3	21,799	20	110,101

Table 27 Income Groups

DS division	1		2		3		Total
	Num.	%	Num.	%	Num	%	
Colombo	6,588	22	15,463	52	7,865	26	29,916
Tibirigasyaya	11,364	33	15,084	44	8,144	24	34,592
Dehiwala	5,247	57	2,100	23	1,783	20	9,130
Kolonnawa	1,374	15	4,130	44	3,891	41	9,395
Kotte	2,617	24	5,689	52	2,636	24	10,942
Kaduwela	2,600	28	4,095	65	2,650	28	9,345
Maharagama	2,364	35	2,477	37	1,940	29	6,781
Total	32,154	29	49,038	45	28,909	26	110,101

Note: 1. - High income groups –with a monthly income above Rs.8,000,
2. - Middle income groups –with a monthly income between Rs.3,500 – 6,000,
3. - Low income groups - earning below Rs.3,500

Table 28 Household Income Groups as per Survey

DS division	Rs. 1,000 – 3,000		Rs. 3,001 – 5,000		Rs. 5,001 – 7,000		Rs. 7,001 – 9,000		Rs. 9,001 – 10,000		Total
	Num	%	Num	%	Num	%	Num	%	Num	%	
Colombo	4	15	15	58	6	23	1	4	0	0	26
Tibirigasyaya	1	3	31	91	1	3	1	3	0	0	34
Dehiwala	0	0	6	50	3	25	3	25	0	0	12
Kolonnawa	0	0	34	89	4	11	0	0	0	0	38
Kotte	0	0	10	67	3	20	1	7	1	7	15
Kaduwela	0	0	18	64	8	29	2	7	0	0	28
Maharagama	2	12	7	44	3	19	3	19	1	6	16
Total	7	4	121	72	28	17	11	7	2	1	169

Table 29 Poor households

DS division	Poor households		Total households
	Num.	%	
Colombo	7,951	27	29,916
Tibirigasyaya	8,096	33	34,592
Dehiwala	1,265	14	9,130
Kolonnawa	4,125	44	9,395
Kotte	1,710	16	10,942
Kaduwela	2,269	24	9,345
Maharagama	1,515	2	6,781
Total	26,931	24	110,101

Table 30 Households Receiving Samurdhi Assistance as per Survey

DS division	Households receiving Samurdhi assistance		Total households
	Num.	%	
Colombo	13	50	26
Tibirigasyaya	24	71	34
Dehiwala	4	38	12
Kolonnawa	26	68	38
Kotte	5	33	15
Kaduwela	12	43	28
Maharagama	7	44	16
Total	91	54	169

Table 31 Business Places

DS divisions	Factories/Wor kshops	Shops	Stores complex	Other	Offices	Total
Colombo	107	1,555	29	0	79	1,770
Tibirigasyaya	39	473	10	3	21	546
Dehiwala	60	322	65	0	77	524
Kolonnawa	29	12	22	0	10	73
Kotte	32	482	0	0	31	545
Kaduwela	80	232	6	0	3	321
Maharagama	40	537	0	0	13	590
Total	387	3,613	132	3	234	4,369

Table 32 Public Facilities

DS division	Hospital		Schools		Community halls		Offices		Religious places		Total
	Num	%	Num	%	Num	%	Num	%	Num	%	
Colombo	7	4	24	14	21	12	51	30	68	40	171
Tibirigasyaya	11	7	25	16	14	9	58	38	45	29	153
Dehiwala	2	4	9	17	4	8	20	38	18	34	53
Kolonnawa	1	3	4	11	5	14	5	14	21	58	36
Kotte	0	0	7	14	8	16	18	36	17	34	50
Kaduwela	2	3	12	20	9	15	22	36	16	26	61
Maharagama	1	2	6	14	5	11	16	36	16	36	44
Total	24	4	87	15	66	12	190	33	201	35	568

Table 33 Facilities Available in the Households Surveyed

DS division	Drinking water		Electricity		Transport facilities		Total
	Num	%	Num	%	Num	%	
Colombo	22	85	20	77	25	96	26
Tibirigasyaya	33	97	16	47	33	97	34
Dehiwala	12	100	11	92	12	100	12
Kolonnawa	30	79	26	68	36	95	38
Kotte	15	100	15	100	15	100	15
Kaduwela	28	100	23	82	26	93	28
Maharagama	15	94	14	88	15	94	16
Total	155	92	125	74	162	96	169

Table 34 Other Infrastructure Facilities (Roads)

DS division	Main roads		Medium		Sub roads		Total
	Num	%	Num	%	Num	%	
Colombo	0	0	10	100	0	0	10
Tibirigasyaya	7	78	2	22	0	0	9
Dehiwala	3	50	3	50	0	0	6
Kolonnawa	5	50	5	50	0	0	10
Kotte	1	14	6	86	0	0	7
Kaduwela	6	46	7	54	0	0	13
Maharagama	1	17	5	83	0	0	6
Total	23	38	38	62	0	0	61

Table 35 Infrastructure Facilities Available for Supply of Services to Households

DS division	Drinking water		Electricity		Lavatories		Garbage disposal		Other		Total
	Num	%	Num	%	Num	%	Num	%	Num	%	
Colombo	25,341	85	25,791	86	26,098	87	19,125	64	9,847	33	29,916
Tibirigasyaya	33,276	96	31,042	90	29,877	86	17,398	50	0	0	34,572
Dehiwala	7,933	87	8,808	96	8,670	95	4,802	53	4,266	47	9,130
Kolonnawa	7,742	82	7,854	84	6,977	74	4,195	45	1,388	15	9,395
Kotte	9,563	87	9,534	87	9,362	86	4,369	40	6,159	56	10,942
Kaduwela	8,010	86	7,934	85	7,642	82	2,891	31	3,027	32	9,345
Maharagama	5,953	88	6,060	89	5,687	84	1,975	29	4,475	66	6,781
Total	97,818	89	71,232	65	94,313	86	54,755	50	29,162	26	110,101

Table 36 Houses Located Close to Rivers and Streams

DS division	Houses in the vicinity of rivers/streams		Total households
	Number	%	
Colombo	2,270	12	29,916
Tibirigasyaya	678	2	34,592
Dehiwala	315	3	9,130
Kolonnawa	718	8	9,395
Kotte	1,180	11	10,942
Kaduwela	491	5	9,345
Maharagama	325	5	6,781
Total	5,977	5	110,101

Table 37 Incidence of Floods as per the Survey in the Communities

DS division	1 – 2 times		3 – 4 times		5 – 6 times		Total occurrences
	Num	%	Num	%	Num	%	
Colombo	4	15	14	54	1	4	26
Tibirigasyaya	22	64	4	12	0	0	34
Dehiwala	1	8	4	33	0	0	12
Kolonnawa	16	42	18	47	0	0	38
Kotte	6	40	6	40	0	0	15
Kaduwela	23	82	5	18	0	0	28
Maharagama	5	31	5	31	0	0	16
Total	77	46	56	33	4	0.5	169

Table 38 Incidence of Inundation of Houses due to Floods

DS division	1 – 2 times		3 – 4 times		5 – 6 times		Total occurrences
	Num	%	Num	%	Num	%	
Colombo	5	19	20	77	1	4	26
Tibirigasyaya	17	50	15	44	2	6	34
Dehiwala	3	25	7	58	2	17	12
Kolonnawa	18	47	19	50	1	3	38
Kotte	8	53	7	47	0	0	15
Kaduwela	28	100	0	0	0	0	28
Maharagama	7	44	9	56	0	0	16
Total	86	51	77	46	6	4	169

Table 39 Flood Level at the Time of Floods

DS division	Less than 1 ft.		1 – 3 ft		3 – 6 ft		Total houses
	Num	%	Num	%	Num	%	
Colombo	0	0	26	100	0	0	26
Tibirigasyaya	29	85	5	15	0	0	34
Dehiwala	4	33	8	66	0	0	12
Kolonnawa	8	21	28	74	2	5	38
Kotte	6	30	9	60	0	0	15
Kaduwela	7	25	19	68	2	7	28
Maharagama	5	31	11	69	0	0	16
Total	59	35	106	63	4	2	169

Table 40 Houses Facing Flood Problems at Rainy Periods

DS division	Houses being flooded		Total households
	Number	%	
Colombo	5,330	18	29,916
Tibirigasyaya	1,355	4	34,592
Dehiwala	365	4	9,130
Kolonnawa	5,430	58	9,395
Kotte	890	8	10,942
Kaduwela	747	8	9,345
Maharagama	515	8	6,781
Total	14,632	13	110,101

Table 41 Distance from Houses to Rivers/Streams

DS division	> 20 meters		21 – 50 meters		51 – 100 meters		101 – 250 meters		251 – 300 meters		301 – 500 meters		Total number of houses
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	
Colombo	10	38	5	19	2	8	2	8	0	0	0	0	26
Tibirigasyaya	0	0	0	0	4	12	18	53	4	12	0	0	34
Dehiwala	0	0	3	25	2	17	0	0	0	0	0	0	12
Kolonnawa	0	0	1	3	9	24	19	50	5	13	0	0	38
Kotte	0	0	3	20	1	7	6	40	1	7	1	7	15
Kaduwela	2	7	4	14	5	18	13	46	4	14	0	0	28
Maharagama	0	0	3	19	1	6	2	12	1	6	3	19	16
Total	12	7	19	11	24	14	60	36	15	9	4	2	169

Table 42 Periods of Inundation (GN division)

DS division	< 5 day		5 – 10 days		10 – 15 days		Total houses
	Num	%	Num	%	Num	%	
Colombo	1	10	4	40	5	50	10
Tibirigasyaya	0	0	8	89	1	11	9
Dehiwala	2	33	4	66	0	0	6
Kolonnawa	0	0	7	70	3	30	10
Kotte	1	14	6	86	0	0	7
Kaduwela	0	0	5	38	8	62	13
Maharagama	1	17	5	83	0	0	6
Total	5	8	39	64	17	28	61

Table 43 Depth of Water Level during Flood Times

DS division	1 – 3 ft.		3 – 5 ft.		5 – 7 ft.		7 – 9 ft.		Total
	Num	%	Num	%	Num	%	Num	%	
Colombo	7	70	3	30	0	0	0	0	10
Tibirigasyaya	9	100	0	0	0	0	0	0	9
Dehiwala	5	83	1	17	0	0	0	0	6
Kolonnawa	7	70	1	10	1	10	1	10	10
Kotte	6	86	1	14	0	0	0	0	7
Kaduwela	10	77	3	23	0	0	0	0	13
Maharagama	4	66	2	33	0	0	0	0	6
Total	48	78	11	18	1	2	1	2	61

Table 44 Action Proposed for Addressing Flood Problems

DS division	1		2		Total houses
	Num	%	Num	%	
Colombo	15	58	12	46	26
Tibirigasyaya	8	24	22	65	34
Dehiwala	8	67	5	42	12
Kolonnawa	30	79	25	66	38
Kotte	8	53	13	87	15
Kaduwela	27	96	8	29	28
Maharagama	8	50	9	56	16
Total	104	62	94	56	169

Table 45 Other Development Activities Proposed

DS division	1		2		3		4		Total
	Num	%	Num	%	Num	%	Num	%	
Colombo	4	15	9	35	8	31	10	38	26
Timbirigasyaya	3	9	2	6	4	12	5	15	34
Dehiwala	1	8	0	0	3	25	5	42	12
Kolonnawa	15	39	21	55	12	32	15	39	38
Kotte	2	13	1	7	3	20	5	33	15
Kaduwela	1	4	3	11	0	0	4	14	28
Maharagama	3	19	2	12	5	31	4	25	16
Total	29	17	38	22	35	21	48	28	169

Note: 1. - Supply of drinking water facilities, 2. - Transport facilities (especially roads),
3. - Sanitary facilities, 4. - Introducing livelihood activities for income generation

7. Bolgoda Basin

Table 1 Details on Divisional Secretary (DS) Divisions under the Basin and Communities Interviewed

DS division	Extent under the basin (%)	Number of communities	GN divisions involved	Number of persons interviewed
Horana	100%	02	02	9
Bandaragama	100%	04	04	20
Millaniya	100%	01	11	35
Moratuwa	100%	05	18	72
Kalutara	100%	04	18	68
Panadura	100%	02	12	36
Ratmalana	100%	02	6	12
Kesbewa	100%	01	10	26
Dodangoda	100%	01	13	35
Homagama	100%	01	8	17
Total		23	102	330

Table 2 Population Data of Total Basin Area

DS division	Extent in km ²	Population
Horana	119	138,927
Bandaragama	Not available	86,625
Millaniya	Not available	44,781
Moratuwa	23	177,190
Kalutara	Not available	147,864
Panadura	Not available	167,112
Ratmalana	21	108,201
Kesbewa	55	214,111
Dodangoda	107	54,290
Homagama	95	172,431
Total		1,311,532

Table 3 Population by Race and Religion in the Basin

DS division	Population as per religion as a percentage				Population as per race		
	Buddhist	Christian	Muslims	Hindu	Sinhala	Tamil	Muslims
Horana	80	7	8	5	85	7	8
Bandaragama	80	8	6	6	85	9	6
Millaniya	88	4	2	6	90	8	2
Moratuwa	80	12	5	3	90	7	3
Kalutara	80	8	6	7	85	7	8
Panadura	80	8	6	7	85	7	8
Ratmalana	75	8	7	10	80	10	10
Kesbewa	87	4	6	3	90	4	6
Dodangoda	88	3	6	3	90	4	6
Homagama	90	5	3	2	95	2	3

Table 4 Economic Activities in the Basin Area

DS division	Economic activities as a percentage				
	Agriculture	Business	Self employed	Laborers	Public/ private sector
Horana	25	17	10	8	40
Bandaragama	23	17	10	10	40
Millaniya	18	15	25	12	30
Moratuwa	5	20	20	14	41
Kalutara	12	10	25	12	35
Panadura	12	17	18	13	41
Ratmalana	0	10	20	10	60
Kesbewa	3	15	14	8	60
Dodangoda	8	7	35	20	30
Homagama	8	7	35	20	30

Table 5 Income Categories in the Basin

DS division	Income %		
	> Rs.8000	Rs.8000 - 3500	<Rs.3500
Horana	45	50	5
Bandaragama	42	48	10
Millaniya	35	50	15
Moratuwa	40	45	15
Kalutara	40	48	12
Panadura	41	47	12
Ratmalana	40	45	15
Kesbewa	38	53	15
Dodangoda	42	43	15
Homagama	-		

Table 6 Infrastructure and Other Facilities Available in the Total Basin Area (% of people)

DS division	Population with general public facilities	Population with other infrastructure facilities	Housing %		
			Permanent	Temporary	Semi permanent
Horana	85	85	88	10	2
Bandaragama	80	80	78	18	4
Millaniya	65	70	67	25	8
Moratuwa	88	88	60	20	20
Kalutara	88	88	60	20	20
Panadura	87	87	61	21	18
Ratmalana	88	88	81	19	20
Kesbewa	85	85	70	20	10
Dodangoda	70	70	70	22	8
Homagama	85	85			

Table 7 Details on Distribution of Population

DS division	Community Number	Details on distribution of population
Horana	1	Number of houses in flood prone areas is less compared to other areas. There are cultivable lands that are affected due to floods.
	2	Number of houses in flood prone areas is more than that in Community 1 above. However, it is comparatively less when compared to the situation in the basin as a whole.
Bandaragama	1	Number of houses in flood prone areas is more than that in Horana, Cultivable lands faced with flood problem is very high in these four communities.
	2	
	3	
	4	
Millaniya	1	Both highland and lowland areas close to the Kalu River face floods. About 3 – 5 households are found in 1 ha of land. Cultivable lands facing flood problems are very high in this area too.
Moratuwa	1	Density of houses are very high in this area. There are a large number of stored houses in this community.
	2	Same as in Community 1, Moratuwa.
	3	Same as in Community 1, Moratuwa.
	4	Permanent houses are more in number. Density of houses is less compared to Community 1, Moratuwa. There are about 3-4 houses within an area of 20 perches.
	5	
Kalutara	1	Density of houses is around 1 house per 20 perch.
	2	As this community is close to the town, density of houses is very high.
	3	Same as in Community 1, Kalutara.
	4	Same as in Community 1, Kalutara.
Panadura	1	Low density of houses. There are about 15-20 houses within 1 ha of land. There are a significant number of permanent houses too.
	2	Same as in Community 1, Panadura.
Ratmalana	1	High density of houses. There are about 15-25 houses within 1 ha of land.
Kesbewa	1	More permanent houses. Density of houses is around 7 – 12 per 1 ha of land.
Dodangoda	1	Density of houses is 7-10 house per 1 ha of land. Land facing flood problems are mostly the abandoned paddy lands.
Homagama	1	Density of houses is 10-15 per 1 ha of land. There are cultivable lands faced with flood problems.

Table 8 Flood-prone Areas in the Basin

DS division	Area in km ²	Number of GN divisions	Number of Flood prone communities	Number of GN divisions in flood prone areas	Flood prone GN divisions as a %
Horana	119	92	2	2	2
Bandaragama	NA	49	4	4	8
Millaniya	NA	52	1	11	21
Moratuwa	23.5	88	5	18	20
Kalutara	NA	87	4	18	20
Panadura	NA	72	2	12	16
Ratmalana	20	13	2	6	46
Kesbewa	55	73	1	10	13
Dodangoda	107	44	1	13	29
Homagama	95	81	1	8	9
Total	-	-	23	102	15

Table 9 General Socio Economic Characteristics of the DS Divisions Studied

DS division	Socio economic characteristics (Yes/No)						
	Rural	Urban	Slums	Commercial areas	Agricultural areas	Densely populated	Less populated
Horana	Yes	No	No	No	Yes	No	Yes
Bandaragama	Yes	No	No	No	Yes	No	Yes
Millaniya	Yes	No	No	No	Yes	No	Yes
Moratuwa	No	Yes	Yes	Yes	No	Yes	No
Kalutara	No	Yes	Yes	Yes	No	Yes	No
Panadura	No	Yes	Yes	Yes	No	Yes	No
Ratmalana	No	Yes	Yes	Yes	No	Yes	No
Kesbewa	No	Yes	Yes	Yes	No	No	Yes
Dodangoda	Yes	No	No	No	Yes	No	Yes
Homagama	Yes	No	Yes	Yes	No	No	Yes

Table 10 Reasons for Floods (Percentage of DS Division)

DS division	Flood due to rivers or streams	Flood due to storm water drainage
Horana	80	20
Bandaragama	100	0
Millaniya	100	0
Moratuwa	30	70
Kalutara	25	75
Panadura	20	80
Ratmalana	25	75
Kesbewa	20	80
Dodangoda	75	25
Homagama	35	65

Table 11 Settlement History of Communities

DS division	By decent		20 years back		Within 20 years		Total GN divisions
	Number	%	Number	%	Number	%	
Horana	2	100	0	0	0	0	2
Bandaragama	4	100	0	0	0	0	4
Millaniya	11	100	0	0	0	0	11
Moratuwa	15	83	3	17	0	0	18
Kalutara	18	100	0	0	0	0	18
Panadura	12	100	0	0	0	0	12
Ratmalana	13	100	0	0	0	0	13
Kesbewa	5	83	0	0	1	17	6
Dodangoda	10	100	0	0	0	0	10
Homagama	8	100	0	0	0	0	8
Total	98	96	3	3	1	1	102

Table 12 Water Resources in the Vicinity of Communities

DS division	GN divisions close to streams/ivers		GN divisions close to tank/lake		GN divisions close to wetlands		Total GN divisions
	Number	%	Number	%	Number	%	
Horana	2	100	1	50	2	100	2
Bandaragama	4	100	1	25	2	50	4
Millaniya	11	100	1	9	11	100	11
Moratuwa	17	94	0	0	6	33	18
Kalutara	18	100	0	0	12	66	18
Panadura	12	100	1	8	9	75	12
Ratmalana	13	23	0	0	12	92	13
Kesbewa	6	100	0	0	0	0	6
Dodangoda	10	100	0	0	9	9	10
Homagama	7	87	0	0	4	50	8
Total	100	98	4	3	67	65	102

Table 13 Conditions of Communities in Flood Prone Areas

DS division	1		2		3		4		5		Total GN divisions
	Num	%	Num	%	Num	%	Num	%	Num	%	
Horana	0	0	2	100	0	0	0	0	0	0	2
Bandaragama	0	0	4	100	0	0	0	0	0	0	4
Millaniya	0	0	11	100	0	0	0	0	0	0	11
Moratuwa	7	39	7	39	0	0	4	22	0	0	18
Kalutara	9	50	6	33	0	0	3	17	0	0	18
Panadura	1	8	11	92	0	0	0	0	0	0	12
Ratmalana	0	0	13	100	0	0	0	0	0	0	13
Kesbewa	1	17	3	50	0	0	2	33	0	0	6
Dodangoda	0	0	8	80	2	20	0	0	0	0	10
Homagama	0	0	8	100	0	0	0	0	0	0	8
Total	18	18	73	72	2	2	9	9	0	0	102

Note: 1. Low-income shanties facing flood problems, 2. Low-income areas facing flood problems,
3. Low-income shanty areas not facing flood problems, 4. Areas facing floods, 5. Low income areas

Table 14 Number of Houses in Communities

DS division	Number ascribed to the community	Number of houses	Total houses
Horana	1	412	1,332
	2	920	
Bandaragama	1	164	1,444
	2	420	
	3	400	
	4	460	
Millaniya	1	2,650	2,650
Moratuwa	1	8,970	19,085
	2	1,120	
	3	3,345	
	4	2,700	
	5	2,950	
Kalutara	1	2,779	9,081
	2	3,625	
	3	1,845	
	4	832	
Panadura	1	3,575	6,244
	2	2,669	
Ratmalana	1	4,365	4,365
Kesbewa	1	3,675	7,790
		4,115	
Dodangoda	1	7,482	7,482
Homagama	1	4,113	4,113
Total	46	-	63,586

Table 15 Houses on Encroached Lands (GN level data)

DS division	Houses on encroached lands		Total number of houses
	Number	% of total houses	
Horana	4	0.3	1,332
Bandaragama	4	0.2	1,444
Millaniya	130	4	2,650
Moratuwa	1,911	10	19,085
Kalutara	394	4	9,081
Panadura	96	1	6,244
Ratmalana	10	0.2	4,365
Kesbewa	1,015	13	7,790
Dodangoda	50	1	7,482
Homagama	86	2	4,113
Total	3,700	5	63,586

Table 16 Ownership Types

DS division	Self-owned		Leased in		Rented in		Total
	Number	%	Number	%	Number	%	
Horana	9	100	0	0	0	0	9
Bandaragama	18	90	0	0	2	10	20
Millaniya	35	100	0	0	0	0	35
Moratuwa	68	94	0	0	4	6	72
Kalutara	68	100	0	0	0	0	68
Panadura	36	100	0	0	0	0	36
Ratmalana	35	100	0	0	0	0	35
Kesbewa	12	100	0	0	0	0	12
Dodangoda	26	100	0	0	0	0	26
Homagama	17	100	0	0	0	0	17
Total	324	98	0	0	6	2	330

Table 17 Conditions of Houses

DS division	Permanent		Semi Permanent		Temporary		Total
	Number	%	Number	%	Number	%	
Horana	7	77	2	22	0	0	9
Bandaragama	15	75	5	25	0	0	20
Millaniya	15	42	9	25	11	31	35
Moratuwa	54	75	14	19	4	55	72
Kalutara	47	69	10	14	11	16	68
Panadura	7	19	19	52	10	27	36
Ratmalana	28	80	4	11	3	8	35
Kesbewa	9	75	3	25	0	0	12
Dodangoda	17	65	7	26	2	7	26
Homagama	13	76	4	23	0	0	17
Total	212	64	77	23	41	12	330

Table 18 Categories of Houses Based on Material Used

DS division	1		2		3		4		5		Total
	Num	%	Num	%	Num	%	Num	%	Num	%	
Horana	31	2	58	4	1,228	92	15	1	0	0	1,332
Bandaragama	31	2	45	3	1,297	89	67	4	4	0.2	1,444
Millaniya	121	4	174	6	2,338	88	17	1	0	0	2,650
Moratuwa	1,232	6	1,991	10	12,821	67	2,923	15	118	1	19,085
Kalutara	1,304	14	550	6	7,008	77	219	2	0	0	9,081
Panadura	225	3	238	3	5,497	88	284	4	0	0	6,244
Ratmalana	174	3	400	9	3,768	86	23	1	0	0	4,365
Kesbewa	329	4	114	1	7,216	92	131	1	0	0	7,790
Dodangoda	391	5	58	1	5,384	71	1,649	22	0	0	7,482
Homagama	108	2	58	1	3,846	93	101	2	0	0	4,113
Total	3,946	6	3,686	5	50,403	79	5,429	8	122	0.1	63,586

Note: 1. Cottages with plank walls, 2. Permanent houses with plank walls, 3. Brick walled one store, 4. Brick and concrete two stores, 5. Other

Table 19 Population in Project Area

DS division	Total population	Population in the project area	Project area population as %
Horana	138,927	3,731	2
Bandaragama	86,625	7,205	8
Millaniya	44,781	16,500	36
Moratuwa	177,190	95,191	53
Kalutara	147,864	42,972	29
Panadura	167,112	33,774	20
Ratmalana	54,290	28,294	52
Kesbewa	108,201	50,159	52
Dodangoda	214,111	38,127	17
Homagama	172,431	17,455	10
Total	1,311,532	333,408	25

Table 20 Population Density in the Houses Surveyed

DS division	1-3 persons		4-6 persons		7-9 persons		Total
	Number	%	Number	%	Number	%	
Horana	2	22	6	66	1	11	9
Bandaragama	1	5	18	90	1	5	20
Millaniya	5	14	27	77	3	8	35
Moratuwa	10	13	56	77	6	8	72
Kalutara	9	13	55	80	4	5	68
Panadura	4	11	26	72	6	16	36
Ratmalana	2	5	30	85	3	8	35
Kesbewa	0	0	11	91	1	8	12
Dodangoda	4	15	20	76	2	8	26
Homagama	0	0	13	76	4	24	17
Total	37	11	262	79	31	9	330

Table 21 Population as per Ethnicity in the Project Area

DS division	Sinhalese		Sri-Lankan Tamil		Indian Tamil		Muslims		Other		Total
	Num.	%	Num.	%	Num	%	Num	%	Num	%	
Horana	3,702	99	29	0.02	0	0	0	0	0	0	3,731
Bandaragama	7,178	99	27	1	0	0	0	0	0	0	7,205
Millaniya	16,117	97	383	3	0	0	0	0	0	0	16,500
Moratuwa	83,126	87	5,993	6	23	0.5	6,037	6	12	5	95,191
Kalutara	41,847	97	261	1	0	0	864	2	0	0	42,972
Panadura	26,878	79	73	0.2	0	0	6,823	20	0	0	33,774
Ratmalana	25,404	89	2,805	9	0	0	85	1	0	0	28,294
Kesbewa	48,726	97	758	1	0	0	234	0.05	441	1	50,159
Dodangoda	37,622	98	237	1	34	0	180	1	54	0	38,127
Homagama	17,266	99	121	1	0	0	68	0	0	0	17,455
Total	307,866	92	10,687	3	57	0	14,291	4	507	1	333,408

Table 22 Population as per Religion in the Project Area

DS division	Buddhist		Hindu		Christians		Muslims		Total
	Number	%	Number	%	Number	%	Number	%	
Horana	3,655	97	30	1	46	1	0	0	3,731
Bandaragama	7,116	98	0	0	89	1	0	0	7,205
Millaniya	16,091	97	391	2	18	1	0	0	16,500
Moratuwa	63,018	66	4,601	4	21,478	22	6,094	6	95,191
Kalutara	31,782	73	336	1	9,990	23	864	2	42,972
Panadura	23,950	71	317	1	2,819	8	6,688	19	33,774
Ratmalana	25,019	88	2,805	10	385	1	85	0.5	28,294
Kesbewa	47,296	94	615	1	1,428	2	820	1	50,159
Dodangoda	35,795	93	270	1	1,947	5	115	1	38,127
Homagama	16,645	95	119	1	623	3	68	1	17,455
Total	270,367	81	9,484	3	38,823	12	14,734	4	333,408

Table 23 Surveyed Population as per Ethnicity

DS division	Sinhalese		Tamil		Muslims		Other		Total
	Num.	%	Num.	%	Num	%	Num	%	
Horana	9	100	0	0	0	0	0	0	9
Bandaragama	20	100	0	0	0	0	0	0	20
Millaniya	34	97	1	3	0	0	0	0	35
Moratuwa	71	98	1	2	0	0	0	0	72
Kalutara	66	97	2	3	0	0	0	0	68
Panadura	32	88	1	3	3	8	0	0	36
Ratmalana	34	97	1	3	0	0	0	0	35
Kesbewa	12	100	0	0	0	0	0	0	12
Dodangoda	25	97	1	3	0	0	0	0	26
Homagama	17	100	0	0	0	0	0	0	17
Total	320	96	7	2	0	31	0	0	330

Table 24 Surveyed Population as per Religion

DS division	Buddhist		Christians		Hindu		Muslims		Total
	Num.	%	Num.	%	Num	%	Num	%	
Horana	9	100	0	0	0	0	0	0	9
Bandaragama	20	100	0	0	0	0	0	0	20
Millaniya	35	100	0	0	0	0	0	0	35
Moratuwa	54	75	18	25	1	1	0	0	72
Kalutara	61	90	6	9	3	8	0	0	68
Panadura	32	89	1	3	1	3	0	0	36
Ratmalana	34	97	0	0	0	0	0	0	35
Kesbewa	12	100	0	0	1	4	0	0	12
Dodangoda	23	88	2	8	0	0	0	0	26
Homagama	16	94	1	6	0	0	0	0	17
Total	296	90	28	8	6	2	0	0	330

Table 25 Houses without a Male Household Head

DS division	Without a male household head		Total
	Num.	%	
Horana	40	3	1,332
Bandaragama	65	4	1,444
Millaniya	154	6	2,650
Moratuwa	1,202	6	19,085
Kalutara	991	10	9,081
Panadura	526	8	6,244
Ratmalana	218	4	4,365
Kesbewa	270	3	7,790
Dodangoda	330	4	7,482
Homagama	250	6	4,113
Total	4,046	6	63,586

Table 26 Male or Female Headed Households as per Survey

DS division	Male headed		Female headed		Total
	Num.	%	Num.	%	
Horana	8	88	1	12	9
Bandaragama	20	100	0	0	20
Millaniya	34	97	1	3	35
Moratuwa	64	89	8	11	72
Kalutara	60	88	8	11	68
Panadura	36	100	0	0	36
Ratmalana	33	94	2	6	35
Kesbewa	10	83	2	17	12
Dodangoda	25	96	1	4	26
Homagama	17	100	0	0	17
Total	307	93	23	7	330

Table 27 Employment

DS division	1		2		3		4		5		6		7		8		9		10	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Horana	26	1	13	1	13	1	65	4	30	2	13	1	242	18	47	3	17	1	41	3
Bandaragama	13	1	9	0.8	26	2	115	8	134	9	12		328	9	70	5	50	3	101	7
Millaniya	14	0.5	5	0.1	15	0.5	142	5	49	1	7	0.2	701	26	75	3	17	1	297	11
Moratuwa	84	4	514	3	378	19	2579	14	1135	6	95	4	1602	8	1979	10	393	2	0	0
Kalutara	1	0.0	5	0.05	4	0.0	1410	16	37	0.4	162	2	2631	29	491	5	10	1	0	0
Panadura	88	1	47	0.5	62	1	515	8	1273	20	87	1	834	13	182	3	77	1	0	0
Ratmalana	5	0.1	26	0.5	19	0.4	822	19	208	5	11	0.3	380	9	148	3	62	1	0	0
Kesbewa	0	0	0	0	0	0	4872	63	11	1	0	0	133	2	177	2	36	0.5	0	0
Dodangoda	327	4	200	3	92	1	1973	26	488	7	0	0	411	5	156	2	107	1	0	0
Homagama	40	1	29	0.7	25	0.6	744	18	430	10	194	5	1042	25	84	2	39	1	0	0
Total	1355	2	848	1	634	1	13234	21	3795	6	581	1	8304	13	3409	5	908	1	439	0.7

DS division	11		12		13		Total
	Num	%	Num	%	Num	%	
Horana	307	23	255	19	263	19	1332
Bandaragama	305	21	178	12	103	7	1444
Millaniya	325	12	397	14	606	22	2650
Moratuwa	4164	22	1909	10	3496	18	19085
Kalutara	1808	20	1158	13	1258	14	9081
Panadura	1188	19	584	9	1307	21	6244
Ratmalana	960	22	240	5	1484	34	4365
Kesbewa	627	8	833	11	1101	14	7790
Dodangoda	1075	14	308	4	2345	31	7482
Homagama	269	7	158	4	1068	26	4113
Total	11028	17	6020	9	13031	20	63586

Note: 1. Management service/Administrative officers, 2. Professionals, 3. Technical Officers, 4. Clerks/Private sector employees, 5. Marketing sector employees
6. Skilled farmers/fishermen, 7. Unskilled Farmers / Fishermen, 8. Carpenters / mason etc., 9. Machine operators, 10. Trainees for employment
11. Self employment, 12. Unemployed, 13. Other, this other category include, various (daily paid) laborers.

Table 28 Income Groups

DS division	1		2		3		Total
	Num.	%	Num.	%	Num	%	
Horana	26	2	768	58	538	40	1,332
Bandaragama	44	3	828	57	572	42	1,444
Millaniya	186	7	1,239	47	1,225	46	2,650
Moratuwa	3,038	16	8,504	44	7,543	39	19,085
Kalutara	1,365	15	2,551	28	5,165	56	9,081
Panadura	1,173	19	2,837	45	2,234	36	6,244
Ratmalana	409	9	2,006	46	1,950	45	4,365
Kesbewa	2,337	30	2,225	29	3,228	41	7,790
Dodangoda	2,140	29	3,369	45	1,973	26	7,482
Homagama	745	18	2,117	51	1,251	30	4,113
Total	11,463	18	26,444	42	25,679	40	63,586

Note: 1. - High income groups –with a monthly income above Rs.8,000,
2. - Middle income groups –with a monthly income between Rs.3,500 – 6,000,
3. - Low income groups - earning below Rs.3,500

Table 29 Household Income Groups as per Survey

DS division	Rs.1,000 – 3,000		Rs.3,001 – 5,000		Rs.5,001 – 7,000		Rs.70,01 – 9,000		>Rs.9,000		Total
	Num	%	Num	%	Num	%	Num	%	Num	%	
Horana	4	44	2	22	2	22	0	0	1	11	9
Bandaragama	2	10	13	65	5	25	0	0	0	0	20
Millaniya	3	9	31	89	1	2	0	0	0	0	35
Moratuwa	8	11	36	50	17	24	8	11	3	4	72
Kalutara	16	24	36	52	8	12	3	4	3	4	68
Panadura	15	42	15	42	6	16	0	0	0	0	36
Ratmalana	3	9	23	65	8	22	1	3	0	0	35
Kesbewa	0	0	3	25	6	50	2	17	0	0	12
Dodangoda	2	8	11	42	10	38	3	12	0	0	26
Homagama	2	12	6	35	9	53	0	0	0	0	17
Total	55	17	176	53	72	22	17	5	7	2	330

Table 30 Poor Households

DS division	Poor households		Total households
	Num.	%	
Horana	380	29	1,332
Bandaragama	665	46	1,444
Millaniya	1,372	52	2,650
Moratuwa	7,228	38	19,085
Kalutara	3,470	38	9,081
Panadura	2,083	33	6,244
Ratmalana	1,751	40	4,365
Kesbewa	2,510	32	7,790
Dodangoda	1,785	24	7,482
Homagama	1,103	27	4,113
Total	22,347	35	63,586

Table 31 Households Receiving Samurdhi Assistance

DS division	Households receiving Samurdhi assistance		Total households
	Num.	%	
Horana	4	44	9
Bandaragama	10	50	20
Millaniya	23	66	35
Moratuwa	21	29	72
Kalutara	39	57	68
Panadura	19	53	36
Ratmalana	18	51	35
Kesbewa	2	17	12
Dodangoda	10	38	26
Homagama	8	47	17
Total	154	46	330

Table 32 Business Places

DS divisions	Factories/Worshops	Shops	Stores complex	Other	Offices	Total
Horana	11	7	0	0	1	19
Bandaragama	18	0	1	5	0	24
Millaniya	9	22	1	1	3	36
Moratuwa	211	253	15	7	27	513
Kalutara	58	1,257	5	0	57	1,377
Panadura	56	74	9	0	0	139
Ratmalana	21	14	1	0	2	38
Kesbewa	44	371	10	0	20	445
Dodangoda	76	56	9	0	8	149
Homagama	16	3	3	0	2	24
Total	520	2,057	54	13	120	2,754

Table 33 Public Facilities

DS division	Hospital		Schools		Community halls		Offices		Religious places		Total
	Num	%	Num	%	Num	%	Num	%	Num	%	
Horana	0	0	1	4	0	0	5	71	1	14	7
Bandaragama	1	10	2	20	1	10	3	30	3	30	10
Millaniya	1	4	6	21	2	8	10	36	9	32	28
Moratuwa	6	66	16	18	13	14	25	27	31	34	91
Kalutara	2	2	16	18	12	13	40	42	25	27	95
Panadura	0	0	8	16	7	14	7	14	28	56	50
Ratmalana	1	3	6	18	8	24	5	15	14	41	34
Kesbewa	1	16	10	16	6	10	17	25	27	44	61
Dodangoda	0	0	4	17	4	17	4	17	12	50	24
Homagama	0	0	5	17	7	24	4	14	13	45	29
Total	12	3	74	18	60	14	120	19	163	40	407

Table 34 Facilities Available in the Households Surveyed

DS division	Drinking water		Electricity		Transport facilities		Total
	Num	%	Num	%	Num	%	
Horana	9	100	7	77	5	56	9
Bandaragama	13	65	14	70	15	75	20
Millaniya	30	85	15	43	22	62	35
Moratuwa	60	83	65	90	61	84	72
Kalutara	36	52	57	83	58	85	68
Panadura	22	61	21	58	28	78	36
Ratmalana	32	91	28	80	31	89	35
Kesbewa	12	100	12	100	11	92	12
Dodangoda	26	100	22	85	23	88	26
Homagama	17	100	16	94	15	88	17
Total	257	78	257	78	264	82	330

Table 35 Other Infrastructure Facilities (Roads) in GN Divisions

DS division	Main roads		Medium		Sub roads		Total
	Num	%	Num	%	Num	%	
Horana	1	50	1	50	0	0	2
Bandaragama	1	25	3	75	0	0	4
Millaniya	1	9	10	91	0	0	11
Moratuwa	10	56	8	44	0	0	18
Kalutara	8	44	10	56	0	0	18
Panadura	9	75	3	25	0	0	12
Ratmalana	3	23	10	77	0	0	13
Kesbewa	5	83	1	17	0	0	6
Dodangoda	4	40	6	60	0	0	10
Homagama	4	50	4	50	0	0	8
Total	46	45	56	55	0	0	102

Table 36 Infrastructure Facilities Available for Supply of Services to Households

DS division	Drinking water		Electricity		Lavatories		Garbage disposal		Total
	Num	%	Num	%	Num	%	Num	%	
Horana	1,178	88	1,035	78	994	74	174	13	1,332
Bandaragama	1,377	95	1,365	95	1,182	82	266	18	1,449
Millaniya	1,750	66	2,201	83	1,729	65	427	16	2,650
Moratuwa	16,559	87	16,220	85	14,028	74	6,748	35	19,085
Kalutara	6,759	74	7,998	88	6,685	74	1,160	12	9,081
Panadura	4,475	72	5,596	90	5,015	80	1,757	28	6,244
Ratmalana	3,459	79	3,833	88	3,598	82	1,216	28	4,365
Kesbewa	7,637	98	7,532	97	5,447	70	2,088	27	7,790
Dodangoda	6,860	92	7,057	94	6,867	92	2,521	34	7,482
Homagama	3,488	85	3,432	83	3,547	86	1,361	33	4,113
Total	50,054	79	57,304	90	49,092	77	17,718	28	63,586

Table 37 Houses Located Close to Rivers and Streams

DS division	Houses in the vicinity of rivers/streams		Total households
	Number	%	
Horana	65	5	1,332
Bandaragama	45	3	1,444
Millaniya	252	10	2,650
Moratuwa	1,186	6	19,085
Kalutara	752	8	9,081
Panadura	322	5	6,244
Ratmalana	465	11	4,365
Kesbewa	520	7	7,790
Dodangoda	333	4	7,482
Homagama	61	15	4,113
Total	4,001	6	63,586

Table 38 Incidence of Floods as per the Survey in the Communities

DS division	1 – 2 times		3 – 4 times		5 – 6 times		Total occurrences
	Num	%	Num	%	Num	%	
Horana	3	33	3	33	3	33	9
Bandaragama	8	40	11	55	1	5	20
Millaniya	11	31	24	68	0	0	35
Moratuwa	13	18	35	48	21	29	72
Kalutara	38	56	24	35	3	4	68
Panadura	15	42	21	58	0	0	36
Ratmalana	33	94	2	6	0	0	35
Kesbewa	1	8	6	50	2	16	12
Dodangoda	9	35	16	61	1	4	26
Homagama	16	94	1	6	0	0	17
Total	147	45	143	43	31	9	330

Table 39 Incidence of Inundation of Houses due to Floods

DS division	1 – 2 times		3 – 4 times		5 – 6 times		Total occurrences
	Num	%	Num	%	Num	%	
Horana	2	22	5	56	2	22	9
Bandaragama	12	60	8	40	0	0	20
Millaniya	19	54	16	46	0	0	35
Moratuwa	25	35	33	46	13	18	72
Kalutara	44	65	24	35	0	0	68
Panadura	11	31	22	61	3	8	36
Ratmalana	35	100	0	0	0	0	35
Kesbewa	3	25	9	75	0	0	12
Dodangoda	9	35	17	65	0	0	26
Homagama	17	100	0	0	0	0	17
Total	177	54	134	41	18	5	330

Table 40 Flood Level at the Time of Floods

DS division	Less than 1 ft.		1 – 3 ft		3 – 6 ft		6 – 8 ft		Total
	Num	%	Num	%	Num	%	Num	%	
Horana	1	11	8	88	0	0	0	0	9
Bandaragama	4	20	16	80	0	0	0	0	20
Millaniya	0	0	21	60	12	34	2	5	35
Moratuwa	17	24	51	70	4	5	0	0	72
Kalutara	9	28	36	52	13	19	0	0	68
Panadura	9	25	27	75	0	0	0	0	36
Ratmalana	3	9	22	62	10	28	0	0	35
Kesbewa	3	25	9	75	0	0	0	0	12
Dodangoda	1	3	25	97	0	0	0	0	26
Homagama	5	29	12	71	0	0	0	0	17
Total	62	19	227	69	39	12	0	21	330

Table 41 Houses Facing Flood Problems at Rainy Periods

DS division	Houses being flooded		Total households
	Number	%	
Horana	32	2	1,332
Bandaragama	41	3	1,444
Millaniya	218	8	2,650
Moratuwa	1,893	10	19,085
Kalutara	1,275	14	9,081
Panadura	418	7	6,244
Ratmalana	559	13	4,365
Kesbewa	1,150	15	7,790
Dodangoda	713	10	7,482
Homagama	144	4	4,113
Total	6,443	10	63,586

Table 42 Distance from Houses to Rivers/Streams

DS division	< 20 meters		21 – 50 meters		51 – 100 meters		101 – 250 meters		251 – 300 meters		301 – 500 meters		501 – 1000 meters		1001 – 1500 meters		Total number of houses
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	
Horana	5	55	4	45	0	0	0	0	0	0	0	0	0	0	0	0	9
Bandaragama	0		12	60	2	10	6	30	0	0	0	0	0	0	0	0	20
Millaniya	8	23	4	11	2	6	11	31	7	20	1	3	1	3	1	3	35
Moratuwa	16	22	12	17	16	22	9	12	8	11	7	10	2	3	2	3	72
Kalutara	6	9	12	18	9	13	5	73	0	0	12	18	10	15	4	6	68
Panadura	11	31	8	22	5	14	7	19	0	0	1	3	0	0	0	0	36
Ratmalana	5	14	14	40	7	20	9	25	0	0	0	0	0	0	0	0	35
Kesbewa	2	17	1	8	2	16	1	8	0	0	3	25	0	0	0	0	12
Dodangoda	1	4	20	77	3	4	2	8	0	0	0	0	0	0	0	0	26
Homagama	1	6	0	0	6	35	7	41	0	0	0	0	0	0	0	0	17
Total	55	17	87	26	52	16	57	17	15	5	24	7	13	4	7	2	330

Note: Out of the 330 houses only 307 are located close to the river or streams. Other houses are not located close to the river/streams but inundate because of their location in lowland areas.

Table 43 Periods of Inundation (GN Division)

DS division	< 5 day		5 – 10 days		10 – 15 days		15 – 20 days		Total houses
	Num	%	Num	%	Num	%	Num	%	Num
Horana	2	100	0	0	0	0	00	0	2
Bandaragama	0	0	2	50	1	25	1	25	4
Millaniya	3	27	2	18	4	36	2	18	11
Moratuwa	6	33	6	33	3	17	3	17	18
Kalutara	1	6	17	94	0	0	0	0	18
Panadura	1	8	1	8	5	42	5	42	12
Ratmalana	0	0	6	46	7	54	0	0	13
Kesbewa	1	17	5	83	0	0	0	0	6
Dodangoda	0	0	2	20	5	50	3	30	10
Homagama	1	13	4	50	3	37	0	0	8
Total	15	14	45	44	28	27	14	14	102

Table 44 Depth of Water Level during Flood Times

DS division	< 1 ft.		1 – 3 ft.		3 – 5 ft.		5 – 7 ft.		7 – 9 ft.		Total
	Num	%	Num	%	Num	%	Num	%	Num	%	
Horana	0	0	2	100	0	0	0	0	0	0	2
Bandaragama	2	50	2	50	0	0	0	0	0	0	4
Millaniya	0	0	4	36	5	45	1	9	1	9	11
Moratuwa	0	0	11	61	7	39	0	0	0	0	18
Kalutara	0	0	8	44	9	50	1	6	0	0	18
Panadura	1	8	11	92	0	0	0	0	0	0	12
Ratmalana	0	0	9	69	4	31	0	0	0	0	13
Kesbewa	0	0	5	83	1	17	0	0	0	0	6
Dodangoda	0	0	10	100	0	0	0	0	0	0	10
Homagama	0	0	7	88	1	12	0	0	0	0	8
Total	3	2	69	68	27	26	2	2	1	1	102

Table 45 Action Proposed for Addressing Flood Problems

DS division	1		2		Total houses
	Num	%	Num	%	
Horana	8	89	5	56	9
Bandaragama	12	60	16	80	20
Millaniya	30	86	20	57	35
Moratuwa	63	88	20	28	72
Kalutara	45	66	31	46	68
Panadura	18	50	32	89	36
Ratmalana	30	86	25	71	35
Kesbewa	12	100	9	75	12
Dodangoda	55	96	20	77	26
Homagama	17	100	15	88	17
Total	260	79	193	58	330

- Note: 1. - Construction of flood control bunds along rivers and streams and storm water drainage canals where necessary
2. - Rehabilitation and maintenance of existing drainage canals, action to stop disposal of garbage and waste matter into drainage canals

Table 46 Other Development Activities Proposed

DS division	1		2		3		4		Total
	Num	%	Num	%	Num	%	Num	%	
Horana	2	22	2	22			1	11	9
Bandaragama	4	20	2	10	2	10	6	30	20
Millaniya	8	23	2	6	8	23	11	31	35
Moratuwa	5	7	8	11	2	3	6	8	72
Kalutara	30	44	5	7	7	10	13	19	68
Panadura	2	6	2	6	0	0	12	33	36
Ratmalana	0	0	6	17	0	0	4	11	35
Kesbewa	3	25	2	17	1	8	0	0	12
Dodangoda	0	0	10	38	5	4	6	23	26
Homagama	2	12	7	41	2	12	5	29	17
Total	56	17	46	14	27	8	64	19	330

Note: 1. Supply of drinking water facilities, 2. Transport facilities (especially roads)
3. Sanitary facilities, 4. Introducing livelihood activities for income generation

8. Ja Ela Basin

Table 1 Details on Divisional Secretary (DS) Divisions under the Basin and Communities Interviewed

DS division	Extent under the basin (%)	Number of communities	GN divisions involved	Number of persons interviewed
Ja Ela	100	3	8	17
Wattala	100	2	11	22
Gampaha	100	2	7	14
Total		7	26	53

Table 2 Population Data of Total Basin Area

DS division	Extent in km ²	Population
Ja Ela	79.2	185,403
Wattala	54.6	153,477
Gampaha	97.5	170,289
Total	231.3	509,169

Table 3 Population by Race and Religion in the Basin

DS division	Population as per religion as a percentage				Population as per race		
	Buddhist	Christian	Muslims	Hindu	Sinhala	Tamil	Muslims
Ja Ela	85	10	3	2	95	3	2
Wattala	30	60	5	5	80	10	10
Gampaha	82	16	1	1	95	4	1

Table 4 Economic Activities in the Basin Area

DS division	Economic activities as a percentage				
	Agriculture	Business	Self employed	Laborers	Public/ private sector
Ja Ela	3	17	20	25	35
Wattala	0	10	30	25	35
Gampaha	20	20	25	15	20

Table 5 Income Categories in the Basin

DS division	Income %		
	> Rs.8,000	Rs.8,000 – 3,500	<Rs.3,500
Ja Ela	35	45	20
Wattala	30	50	20
Gampaha	40	45	15

Table 6 Infrastructure and Other Facilities Available in the Total Basin Area

DS division	Population with general public facilities	Population with other infrastructure facilities	Housing %		
			Permanent	Semi permanent	Temporary
Ja Ela	80	80	80	5	15
Wattala	70	70	80	10	10
Gampaha	85	85	90	5	5

Table 7 Details on Distribution of Population

DS division	Community Number	Details on distribution of population
Ja Ela	1	There are a large number of temporary houses occupied by low-income groups in these communities.
	2	
	3	
Wattala	1	There are a large number of poor families residing in temporary houses and well to do people owning permanent houses in the lowland areas. There are more people residing in lowland areas in Wattala than in other to DS divisions under Ja Ela basin.
	2	
Gampaha	1	It is the agricultural lands in the area that gets affected due to floods. There are several irrigation canals too in this area. Density of houses is comparatively low when compared with the other two DS divisions. There are permanent houses that get affected due to floods.
	2	

Table 8 Flood-prone Areas in the Basin

DS division	Area in km ²	Number of GN divisions	Number of Flood prone communities	Number of GN divisions in flood prone areas	Flood prone GN divisions as a %
Ja Ela	79.2	57	3	8	14
Wattala	54.6	46	2	11	24
Gampaha	97.5	105	2	7	7
Total	231	208	7	26	13

Table 9 General Socio Economic Characteristics of the DS Divisions Studied

DS division	Socio economic characteristics (Yes/No)						
	Rural	Urban	Slums	Commercial areas	Agricultural areas	Densely populated	Less populated
Ja Ela	No	Yes	No	Yes	No	Yes	No
Wattala	No	Yes	Yes	Yes	No	Yes	No
Gampaha	Yes	No	No	Yes	Yes	No	Yes

Table 10 Settlement History of Communities

DS division	By decent		20 years back		Within 20 years		Total GN divisions
	Number	%	Number	%	Number	%	
Ja Ela	4	50	0	0	4	50	8
Wattala	6	55	5	45	0	0	11
Gampaha	6	86	0	0	1	14	7
Total	16	62	5	19	5	19	26

Table 11 Water Resources in the Vicinity of Communities

DS division	GN divisions close to streams/rivers		GN divisions close to tank/lake		GN divisions close to wetlands		Total GN divisions
	Number	%	Number	%	Number	%	
Ja Ela	8	100	0	0	8	100	8
Wattala	11	100	0	0	10	91	11
Gampaha	7	100	0	0	3	43	7
Total	26	100	0	0	21	81	26

Table 12 Conditions of Flood-prone Areas

DS division	1		2		3		4		5		Total GN divisions
	Num	%	Num	%	Num	%	Num	%	Num	%	
Ja Ela	0	0	8	100	0	0	0	0	0	0	8
Wattala	10	91	0	0	0	0	1	0	0	0	11
Gampaha	0	0	6	86	0	0	1	14	0	0	7
Total	10	38	14	54	0	0	2	8	0	0	26

Note: 1. Low-income shanties facing flood problems, 2. Low-income areas facing flood problems, 3. Low-income shanty areas not facing flood problems, 4. Areas facing floods, 5. Low income areas

Table 13 Number of houses in communities

DS division	Number ascribed to the community	Number of houses	Total houses
Ja Ela	1	1,660	4,681
	2	2,511	
	3	510	
Wattala	1	10,384	10,864
	2	480	
Gampaha	1	1,170	1,488
		318	
Total	6		17,033

Table 14 Houses on Encroached Lands (GN level data)

DS division	Houses on encroached lands		Total number of houses
	Number	% of total houses	
Ja Ela	163	3	4,681
Wattala	1,672	15	10,864
Gampaha	2	0.1	1,488
Total	1,837	11	17,033

Table 15 Ownership Types

DS division	Self-owned		Leased in		Rented in		Total
	Number	%	Number	%	Number	%	
Ja Ela	17	100	0	0	0	0	17
Wattala	22	100	0	0	0	0	22
Gampaha	14	100	0	0	0	0	14
Total	53	100	0	0	0	0	53

Table 16 Conditions of Houses

DS division	Permanent		Semi Permanent		Temporary		Total
	Number	%	Number	%	Number	%	
Ja Ela	6	35	9	53	2	12	17
Wattala	4	18	17	77	1	5	22
Gampaha	11	79	3	21	0	0	14
Total	21	40	29	55	3	6	53

Table 17 Categories of Houses Based on Material Used

DS division	1		2		3		4		Total
	Number	%	Number	%	Number	%	Number	%	
Ja Ela	330	7	393	8	3,904	83	54	1	4,681
Wattala	541	5	1,317	12	8,426	78	580	5	10,864
Gampaha	5	0.3	29	2	1,434	96	20	1	1,488
Total	876	5	1,739	10	13,764	81	654	4	17,033

Note: 1. Cottages with plank walls, 2. Permanent houses with plank walls,
3. Brick walled one store, 4. Brick and concrete two stores

Table 18 Population in Project Area

DS division	Total population	Population in the project area	Project area population as %
Ja Ela	185,403	23,023	12
Wattala	153,477	62,782	41
Gampaha	170,289	6,730	4
Total	509,169	92,535	18

Table 19 Population Density in the Houses Surveyed

DS division	1-3 persons		4-6 persons		7-9 persons		Total
	Number	%	Number	%	Number	%	
Ja Ela	0	0	17	100	0	0	17
Wattala	0	0	15	68	7	32	22
Gampaha	0	0	14	100	0	0	14
Total	0	0	46	87	7	13	53

Table 20 Population as per Ethnicity in the Project Area

DS division	Sinhalese		Sri-Lankan Tamil		Indian Tamil		Muslims		Other		Total
	Num.	%	Num.	%	Num	%	Num	%	Num	%	
Ja Ela	22,468	98	367	2	0	0	188	1	0	0	23,023
Wattala	35,436	56	17,760	28	338	0.5	8,278	13	970	2	62,782
Gampaha	6,730	100	0	0	0	0	0	0	0	0	6,730
Total	64,634	70	18,127	20	338	0.3	8,466	9	970	1	92,535

Table 21 Population as per Religion in the Project Area

DS division	Buddhist		Hindu		Christians		Muslims		Total
	Number	%	Number	%	Number	%	Number	%	
Ja Ela	4,405	19	367	2	18,064	78	187	0.8	23,023
Wattala	15,532	25	14,514	23	23,020	37	9,716	15	62,782
Gampaha	4,887	73	0	0	1,843	27	0	0	6,730
Total	24,824	27	14,881	16	42,927	46	9,903	11	92,535

Table 22 Surveyed Population as per Ethnicity

DS division	Sinhalese		Tamil		Muslims		Other		Total
	Num.	%	Num.	%	Num	%	Num	%	
Ja Ela	17	100	0	0	0	0	0	0	17
Wattala	12	55	9	41	1	5	0	0	22
Gampaha	14	100	0	0	0	0	0	0	14
Total	43	81	9	17	1	2	0	0	53

Table 23 Surveyed Population as per Religion

DS division	Buddhist		Christians		Hindu		Muslims		Total
	Num.	%	Num.	%	Num	%	Num	%	
Ja Ela	3	18	14	82	0	0	0	0	17
Wattala	3	14	9	41	9	41	1	4	22
Gampaha	11	79	3	21	0	0	0	0	14
Total	17	32	26	49	9	17	1	2	53

Table 24 Houses without a Male Household Head

DS division	Without a male household head		Total
	Num.	%	
Ja Ela	205	4	4,681
Wattala	725	7	10,864
Gampaha	91	6	1,488
Total	1,021	6	17,033

Table 25 Male or Female Headed Households as per Survey

DS division	Male headed		Female headed		Total
	Num.	%	Num.	%	
Ja Ela	14	82	3	18	17
Wattala	22	100	0	0	22
Gampaha	10	71	4	29	14
Total	46	87	7	13	53

Table 26 Employment

DS division	1		2		3		4		5		6		7	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Ja Ela	12	0.3	0	0	0	0	1,736	37	66	1	0	0	6	0.1
Wattala	358	3	149	11	77	0.7	2,710	25	979	9	221	2	752	7
Gampaha	0	0	0	0	0	0	549	37	0	0	5	0.3	207	14
Total	370	2	149	1	77	0.5	4,995	29	1045	6	226	1	965	6

Table 26A Employment (Continued)

DS division	8		9		10		11		12		13		Total
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	
Ja Ela	107	2	0	0	0	0	1,518	32	113	2	1,123	24	4,681
Wattala	143	1	104	1	0	0	1,643	15	187	2	3,541	33	10,864
Gampaha	68	5	18	1	10	0.7	94	6	172	12	365	25	1,488
Total	318	2	122	0.7	10	0.1	3,255	19	472	3	5,029	30	17,033

Note: 1. Management service/Administrative officers, 2. Professionals, 3. Technical Officers, 4. Clerks/Private sector employees, 5. Marketing sector employees, 6. Skilled farmers/fishermen, 7. Unskilled Farmers / Fishermen, 8. Carpenters / Masons, 9. Machine Operators, 10. Trainees, 11. Self employed, 12. Unemployed, 13. Other – labour categories

Table 27 Employment in Houses Surveyed

DS division	Total
Ja Ela	13
Wattala	18
Gampaha	19
Total	60

Table 28 Income Groups

DS division	1		2		3		Total
	Num.	%	Num.	%	Num	%	
Ja Ela	870	19	1,756	38	2,055	44	4,681
Wattala	3,631	33	3,901	36	3,332	31	10,864
Gampaha	121	8	607	41	760	51	1,488
Total	4,622	27	6,264	37	6,147	36	17,033

Note: 1. High income groups –with a monthly income above Rs.8,000
2. Middle income groups –with a monthly income between Rs.3,500 – 8,000
3. Low income groups - earning below Rs.3,500

Table 29 Household Income groups as per Survey

DS division	Rs.1,000 – 3,000		Rs.3,001 – 5,000		Rs.5,001 – 7,000		Rs.7,001 – 9,000		>Rs.9,000		Total
	Num	%	Num	%	Num	%	Num	%	Num	%	
Ja Ela	2	10	14	82	1	6	0	0	0	0	17
Wattala	0	0	20	91	2	9	0	0	0	0	22
Gampaha	2	14	10	71	2	14	0	0	0	0	14
Total	4	8	44	83	5	9	0	0	0	0	53

Table 30 Poor Households

DS division	Poor households		Total households
	Num.	%	
Ja Ela	2,025	43	4,681
Wattala	3,596	33	10,864
Gampaha	727	49	1,488
Total	6,348	37	17,033

Table 31 Households Receiving Samurdhi Assistance

DS division	Households receiving Samurdhi assistance		Total households
	Num.	%	
Ja Ela	16	94	17
Wattala	21	95	22
Gampaha	10	71	14
Total	47	89	53

Table 32 Business Places

DS divisions	Office	Factories	Shops	Stores complexes	Other	Total
Ja Ela	7	19	148	1	1	176
Wattala	12	120	354	33	1	520
Gampaha	0	12	55	0	5	72
Total	19	151	557	34	7	768

Table 33 Public Facilities

DS division	Hospital		Schools		Community halls		Offices		Religious places		Total
	Num	%	Num	%	Num	%	Num	%	Num	%	
Ja Ela	0	0	5	10	6	12	28	56	11	22	50
Wattala	2	28	13	18	7	10	28	39	21	30	71
Gampaha	0	0	4	15	4	15	13	50	5	19	26
Total	2	1	22	15	17	12	69	47	37	25	147

Table 34 Facilities Available in the Households Surveyed

DS division	Drinking water		Electricity		Transport facilities		Total
	Num	%	Num	%	Num	%	
Ja Ela	5	29	16	94	17	100	17
Wattala	22	100	14	64	22	100	22
Gampaha	14	100	14	100	12	86	14
Total	41	77	44	83	51	96	53

Table 35 Other Infrastructure Facilities (Roads)

DS division	Main roads		Medium		Sub roads		Total
	Num	%	Num	%	Num	%	
Ja Ela	4	50	4	50	0	0	8
Wattala	5	45	6	55	0	0	11
Gampaha	0	0	7	100	0	0	7
Total	9	35	17	65	0	0	26

Table 36 Infrastructure Facilities Available for Supply of Services to Households

DS division	Drinking water		Electricity		Lavatories		Garbage disposal		Other		Total
	Num	%	Num	%	Num	%	Num	%	Num	%	
Ja Ela	2,808	60	4,165	89	4,138	88	2,129	45	0	0	4,681
Wattala	9,576	88	8,975	83	8,765	81	4,578	42	0	0	10,864
Gampaha	1,341	90	1,421	95	1,424	96	709	48	0	0	1,488
Total	13,725	81	14,561	85	14,327	84	7,366	43	0	0	17,033

Table 37 Houses Located Close to Rivers and Streams

DS division	Houses in the vicinity of rivers/streams		Total households
	Number	%	
Ja Ela	490	10	4,681
Wattala	723	7	10,864
Gampaha	103	7	1,488
Total	1,316	8	17,033

Table 38 Incidence of Floods as per the Survey in the Communities

DS division	1 – 2 times		3 – 4 times		5 – 6 times		Total occurrences
	Num	%	Num	%	Num	%	
Ja Ela	5	29	12	71	0	0	17
Wattala	6	27	16	73	0	0	22
Gampaha	11	79	3	2	0	0	14
Total	22	42	31	58	0	0	53

Table 39 Incidence of Inundation of Houses due to Floods

DS division	1 – 2 times		3 – 4 times		5 – 6 times		Total occurrences
	Num	%	Num	%	Num	%	
Ja Ela	6	35	11	65	0	0	17
Wattala	6	27	15	73	1	5	22
Gampaha	10	71	4	29	0	0	14
Total	22	42	30	57	1	2	53

Table 40 Flood Level at the Time of Floods

DS division	Less than 2 ft.		2 – 4 ft		34– 6 ft		Total houses
	Num	%	Num	%	Num	%	
Ja Ela	1	6	14	82	2	12	17
Wattala	1	5	21	95	0	0	22
Gampaha	14	100	0	0	0	0	14
Total	16	30	35	66	2	4	53

Table 41 Houses Facing Flood Problems at Rainy Periods

DS division	Houses being flooded		Total households
	Number	%	
Ja Ela	1,147	25	4,681
Wattala	724	7	10,864
Gampaha	247	17	1,488
Total	2,118	12	17,033

Table 42 Distance from Houses to Rivers/Streams

DS division	> 20 meters		21 – 50 meters		51 – 100 meters		101 – 250 meters		251 – 300 meters		301 – 500 meters		Total number of houses
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	
Ja Ela	6	35	6	35	2	12	3	18	0	0	0	0	17
Wattala	0	0	1	5	7	32	14	64	0	0	0	0	22
Gampaha	6	43	7	50	0	0	0	0	1	7	0	0	14
Total	12	23	14	26	9	17	17	32	1	2	0	0	0

Table 43 Periods of Inundation (GN division)

DS division	5 – 10 days		10 – 15 days		15 – 20 days		Above 20 days		GN divisions
	Num	%	Num	%	Num	%	Num	%	Num
Ja Ela	5	62	3	38	0	0	0	0	8
Wattala	2	18	6	55	1	9	2	18	11
Gampaha	7	100	0	0	0	0	0	0	7
Total	14	54	9	35	1	4	2	8	26

Table 44 Depth of Water Level during Flood Times

DS division	1 – 3 ft.		3 – 5 ft.		5 – 7 ft.		7 – 9 ft.		Total
	Num	%	Num	%	Num	%	Num	%	
Ja Ela	6	75	2	25	0	0	0	0	8
Wattala	10	91	1	9	0	0	0	0	11
Gampaha	6	86	1	14	0	0	0	0	7
Total	22	85	4	15	0	0	0	0	26

Table 45 Action Proposed for Addressing Flood Problems

DS division	1		2		Total houses
	Num	%	Num	%	
Ja Ela	14	82	9	53	17
Wattala	11	50	18	82	22
Gampaha	7	50	9	64	14
Total	32	60	36	68	53

Note: 1 - Construction of flood control bunds along rivers and streams and storm water drainage canals where necessary
2 - Rehabilitation and maintenance of existing drainage canals, action to stop disposal of garages and waste matter into drainage canals

Table 46 Other Development Activities Proposed

DS division	1		2		3		4		Total
	Num	%	Num	%	Num	%	Num	%	
Ja Ela	10	59	2	12	1	6	8	47	17
Wattala	9	41	9	41	3	14	18	82	22
Gampaha	-	6	9	64	-	-	4	27	14
Total	19	36	20	38	4	8	30	57	53

Note: 1 - Supply of drinking water facilities, 2 - Transport facilities (especially roads),
3 - Sanitary facilities, 4 - Introducing livelihood activities for income generation

9. Kalu Oya Basin

Table 1 Details on Divisional Secretary (DS) Divisions under the Basin and Communities Interviewed

DS division	Extent under the basin (%)	Number of communities	GN divisions involved	Number of persons interviewed
Kelaniya	100	1	12	29
Biyagama	100	1	11	22
Mahara	100	1	5	10
Total	100	3	28	61

Table 2 Population Data of Total Basin Area

DS division	Extent in km ²	Population
Kelaniya	1,398.95	109,824
Biyagama	61.90	161,879
Mahara	98.03	160,906
Total	258.86	432,609

Table 3 Population by Race and Religion in the Basin

DS division	Population as per religion as a percentage				Population as per race		
	Buddhist	Christian	Muslims	Hindu	Sinhala	Tamil	Muslims
Kelaniya	90	5	3	2	96	2	2
Biyagama	85	8	6	1	95	2	3
Mahara	86	7	6	1	97	2	1

Table 4 Economic Activities in the Basin Area

DS division	Economic activities as a percentage				
	Agriculture	Business	Self employed	Laborers	Public/ private sector
Kelaniya	1	15	20	10	54
Biyagama	0	15	15	10	60
Mahara	2	12	21	16	50

Table 5 Income Categories in the Basin

DS division	Income %		
	> Rs.8,000	Rs.8,000 – 3,500	<Rs.3,500
Kelaniya	35	45	20
Biyagama	40	45	15
Mahara	30	50	20

Table 6 Infrastructure and Other Facilities Available in the Total Basin Area

DS division	Population with general public facilities	Population with other infrastructure facilities	Housing %		
			Permanent	Temporary	Semi permanent
Kelaniya	85	80	85	8	7
Biyagama	90	85	85	8	7
Mahara	80	78	80	12	8

Table 7 Details on Distribution of Population Close to Rivers and Flood-prone Areas

DS division	Community Number	Details on distribution of population
Kelaniya	1	There are a large number of temporary houses close to the Kelani river. The old villages (where people have been living for generations) located close to the river too get affected due to overflowing of the river. Houses are located very close to one another even in these old villages due to population growth.
Biyagama	1	There are a large number of temporary houses occupied by low-income groups in flood prone areas. Density of houses is very high in these areas compared to those with permanent houses.
Mahara	1	Temporary houses occupied by low-income groups get affected due to floods. Also the houses of employees of private and public sector too get affected due to floods.

Table 8 Flood-prone Areas in the Basin

DS division	Area in km ²	Number of GN divisions	Number of Flood prone communities	Number of GN divisions in flood prone areas
Kelaniya	398.95	37	1	12
Biyagama	61.90	50	1	11
Mahara	98.03	91	1	5
Total	258.88	178	3	28

Table 9 General Socio Economic Characteristics of the DS Divisions Studied

DS division	Socio economic characteristics (Yes/No)						
	Rural	Urban	Slums	Commercial areas	Agricultural areas	Densely populated	Less populated
Kelaniya	Yes	No	Yes	Yes	No	Yes	No
Biyagama	Yes	Yes	Yes	Yes	No	Yes	No
Mahara	Yes	No	Yes	Yes	No	No	Yes

Table 10 Settlement History of Communities

DS division	By decent		20 years back		Within 20 years		Total GN divisions
	Number	%	Number	%	Number	%	
Kelaniya	9	75	1	8	2	17	12
Biyagama	7	64	1	9	3	27	11
Mahara	4	80	1	20	0	0	5
Total	20	71	3	11	5	18	28

Table 11 Water Resources in the Vicinity of Communities

DS division	GN divisions close to streams/rivers		GN divisions close to tank/lake		GN divisions close to wetlands		Total GN divisions
	Number	%	Number	%	Number	%	
Kelaniya	12	100	0	0	11	92	12
Biyagama	11	100	0	0	8	73	11
Mahara	5	100	0	0	4	80	5
Total	28	100	0	0	23	82	28

Table 12 Conditions of Flood-prone Areas

DS division	1		2		3		4		5		Total GN divisions
	Num	%	Num	%	Num	%	Num	%	Num	%	
Kelaniya	11	92	1	8	0	0	0	0	0	0	12
Biyagama	0	0	8	73	0	0	0	0	3	27	11
Mahara	0	0	15	100	0	0	0	0	0	0	5
Total	11	39	14	50	0	0	0	0	3	11	28

Note: 1. Low-income shanties facing flood problems, 2. Low-income areas facing flood problems, 3. Low-income shanty areas not facing flood problems, 4. Areas facing floods, 5. Low income areas.

Table 13 Number of Houses in Communities

DS division	Number ascribed to the community	Number of houses	Total houses
Kelaniya	1	10,326	10,326
Biyagama	1	6,089	6,089
Mahara	1	3,100	3,100
Total	3	19,515	19,515

Table 14 Houses on Encroached Lands (GN level data)

DS division	Houses on encroached lands		Total number of houses
	Number	% of total houses	
Kelaniya	1,704	17	10,326
Biyagama	125	2	6,089
Mahara	219	7	3,100
Total	2,048	10	19,515

Table 15 Ownership Types

DS division	Self-owned		Leased in		Rented in		Total
	Number	%	Number	%	Number	%	
Kelaniya	29	100	0	0	0	0	29
Biyagama	22	100	0	0	0	0	22
Mahara	10	100	0	0	0	0	10
Total	61	100	0	0	0	0	61

Table 16 Conditions of Houses

DS division	Permanent		Semi Permanent		Temporary		Total
	Number	%	Number	%	Number	%	
Kelaniya	4	14	21	72	4	14	29
Biyagama	12	55	9	41	1	5	22
Mahara	4	40	6	60	0	0	10
Total	20	33	36	59	5	8	61

Table 17 Categories of Houses Based on Material Used

DS division	1		2		3		4		Total
	Number	%	Number	%	Number	%	Number	%	
Kelaniya	1,080	10	1,360	13	7,481	72	405	4	10,326
Biyagama	173	3	73	1	5,721	94	122	2	6,089
Mahara	60	2	103	3	2,680	86	267	8	3,100
Total	1,313	7	1,536	8	15,882	81	784	4	19,515

Note: 1. Cottages with plank walls, 2. Permanent houses with plank walls, 3. Brick walled one store, 4. Brick and concrete two stores

Table 18 Population in Project Area

DS division	Total population	Population in the project area	Project area population as %
Kelaniya	109,824	63,331	58
Biyagama	161,879	30,121	19
Mahara	160,906	20,850	13
Total	432,609	114,302	26

Table 19 Population Density in the Houses Surveyed

DS division	1-3 persons		4-6 persons		7-9 persons		Total
	Number	%	Number	%	Number	%	
Kelaniya	0	0	24	83	5	17	29
Biyagama	2	9	17	77	3	14	22
Mahara	0	0	5	50	5	50	10
Total	2	3	46	75	13	21	61

Table 20 Population as per Ethnicity in the Project Area

DS division	Sinhalese		Sri-Lankan Tamil		Indian Tamil		Muslims		Other		Total
	Num.	%	Num.	%	Num	%	Num	%	Num	%	
Kelaniya	48,875	77	7,690	12	0	0	6,252	10	514	0.8	63,331
Biyagama	24,596	83	27	0.1	0	0	5,138	17	0	0	30,121
Mahara	12,202	59	556	3	0	0	7,843	38	249	1	20,850
Total	86,033	75	8,273	7	0	0	19,233	17	763	1	114,302

Table 21 Population as per Religion in the Project Area

DS division	Buddhist		Hindu		Christians		Muslims		Total
	Number	%	Number	%	Number	%	Number	%	
Kelaniya	42,646	67	7,420	12	6,662	11	6,603	10	63,331
Biyagama	23,974	80	54	0.1	955	3	5,138	17	30,121
Mahara	10,323	50	539	3	1,897	9	8,091	39	20,850
Total	76,943	67	8,013	7	9,514	8	19,832	17	114,302

Table 22 Surveyed Population as per Ethnicity

DS division	Sinhalese		Tamil		Muslims		Other		Total
	Num.	%	Num	%	Num	%	Num	%	
Kelaniya	24	83	5	17	0	0	0	0	29
Biyagama	20	91	0	0	2	9	0	0	22
Mahara	7	70	0	0	3	30	0	0	10
Total	51	84	5	8	5	8	0	0	61

Table 23 Surveyed Population as per Religion

DS division	Buddhist		Christians		Hindu		Muslims		Total
	Num.	%	Num.	%	Num	%	Num	%	
Kelaniya	23	79	1	3	5	17	0	0	29
Biyagama	20	91	0	0	2	9	0	0	22
Mahara	7	70	0	0	0	0	3	30	10
Total	50	82	1	2	7	11	3	5	61

Table 24 Houses without a Male Household Head

DS division	Without a male household head		Total
	Num.	%	
Kelaniya	850	8	10,326
Biyagama	425	7	6,089
Mahara	356	12	3,100
Total	1,631	8	19,515

Table 25 Male or Female Headed Households as per Survey

DS division	Male headed		Female headed		Total
	Num.	%	Num.	%	
Kelaniya	28	97	1	3	29
Biyagama	18	82	4	18	22
Mahara	10	100	0	0	10
Total	56	92	5	8	61

Table 26 Employment

DS division	1		2		3		4		5		6		7	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Kelaniya	166	2	80	1	49	0.5	2,845	28	627	6	0	0	49	0.5
Biyagama	0	0	0	0	0	0	1,685	27	0	0	0	0	0	0
Mahara	53	2	35	1	27	1	998	32	185	5	0	0	191	6
Total	219	1	115	0.1	76	0.4	5,528	28	812	4	0	0	240	1

Table 26A Employment (Continued)

DS division	8		9		10		11		12		13		Total
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	
Kelaniya	214	2	146	1	0	0	1,373	13	8	0.1	4,769	46	10,326
Biyagama	105	2	0	0	0	0	705	12	669	11	2925	48	6,089
Mahara	61	2	39	1	7	0.2	874	28	27	1	603	19	3,100
Total	380	2	185	0.1	7	0.03	2,952	15	704	4	8,297	43	19,515

Note: 1. Management service/Administrative officers, 2. Professionals, 3. Technical Officers, 4. Clerks/Private sector employees, 5. Marketing sector employees, 6. Skilled farmers/fishermen, 7. Unskilled Farmers / Fishermen, 8. Carpenters / masons, 9. Machine operators, 10. Trainees, 11. Self employment, 12. Unemployment, 13. Other / Labour category

Table 27 Family Members Employed as per the Survey

DS division	Total
Kelaniya	30
Biyagama	26
Mahara	13
Total	69

Table 28 Income Groups

DS division	1		2		3		Total
	Num.	%	Num.	%	Num	%	
Kelaniya	3,099	30	3,034	29	4,193	40	10,326
Biyagama	1,144	19	2,605	43	2,340	38	6,089
Mahara	1,017	33	1,332	43	751	24	3,100
Total	5,260	26	6,971	35	7,284	39	19,515

Note: 1. High income groups –with a monthly income above Rs.8,000,
2. Middle income groups –with a monthly income between Rs.3,500 – 8,000
3. 3. Low income groups - earning below Rs.3, 500

Table 29 Household Income Groups as per Survey

DS division	Rs.1,000 – 3,000		Rs.3,001 – 5,000		Rs.5,001 – 7,000		Rs.7,001 – 9,000		>Rs.9,000		Total
	Num	%	Num	%	Num	%	Num	%	Num	%	
Kelaniya	0	0	28	97	1	3	0	0	0	0	29
Biyagama	1	5	12	55	8	36	1	5	0	0	22
Mahara	0	0	9	90	1	10	0	0	0	0	10
Total	1	2	49	80	10	16	1	2	0	0	61

Table 30 Poor Households

DS division	Poor households		Total households
	Num.	%	
Kelaniya	4,146	40	10,326
Biyagama	2,367	39	6,089
Mahara	705	23	3,100
Total	7,218	37	19,515

Table 31 Households Receiving Samurdhi Assistance

DS division	Households receiving Samurdhi assistance		Total households
	Num.	%	
Kelaniya	25	86	29
Biyagama	14	64	22
Mahara	9	90	10
Total	48	79	61

Table 32 Business Places

DS divisions	Factories/Wor kshops	Shops	Stores complex	Other	Offices	Total
Kelaniya	94	130	23	0	9	256
Biyagama	22	156	0	0	1	179
Mahara	10	5	1	0	0	16
Total	126	291	24	0	10	451

Table 33 Public Facilities

DS division	Hospital		Schools		Community halls		Offices		Religious places		Total
	Num	%	Num	%	Num	%	Num	%	Num	%	
Kelaniya	2	3	8	13	9	15	16	26	27	44	62
Biyagama	1	2	9	16	5	9	24	44	16	29	55
Mahara	0	0	2	29	0	0	0	0	5	71	7
Total	3	2	19	15	14	11	40	32	48	39	124

Table 34 Facilities Available in the Households Surveyed

DS division	Drinking water		Electricity		Transport facilities		Total
	Num	%	Num	%	Num	%	
Kelaniya	29	100	23	79	29	100	29
Biyagama	22	100	19	86	22	100	22
Mahara	10	100	8	80	10	100	10
Total	61	100	50	82	61	100	61

Table 35 Other Infrastructure Facilities (Roads)

DS division	Main roads		Medium		Sub roads		Total
	Num	%	Num	%	Num	%	
Kelaniya	12	100	0	0	0	0	12
Biyagama	7	63	4	37	0	0	11
Mahara	0	0	5	10	0	0	5
Total	19	67	9	33	0	0	28

Table 36 Infrastructure Facilities available for Supply of Services to Households

DS division	Drinking water		Electricity		Lavatories		Garbage disposal		Other		Total
	Num	%	Num	%	Num	%	Num	%	Num	%	
Kelaniya	9,402	91	9,027	87	7,419	72	3,961	38	2,989	29	10,326
Biyagama	5,353	88	5,589	92	5,567	91	2,738	45	1,080	18	6,089
Mahara	2,640	85	2,809	91	2,517	81	1,283	41	958	31	3,100
Total	17,395	89	17,425	89	15,503	79	7,982	41	5,027	26	19,515

Table 37 Houses Located Close to Rivers and Streams

DS division	Houses in the vicinity of rivers/streams		Total households
	Number	%	
Kelaniya	700	7	10,326
Biyagama	516	8	6,089
Mahara	80	3	3,100
Total	1,296	7	19,515

Table 38 Incidence of Floods as per the Survey in the Communities

DS division	1 – 2 times		3 – 4 times		5 – 6 times		Total occurrences
	Num	%	Num	%	Num	%	
Kelaniya	10	34	19	66	0	0	29
Biyagama	22	100	0	0	0	0	22
Mahara	7	70	3	30	0	0	10
Total	39	64	22	36	0	0	61

Table 39 Incidence of Inundation of Houses due to Floods

DS division	1 – 2 times		3 – 4 times		5 – 6 times		Total occurrences
	Num	%	Num	%	Num	%	
Kelaniya	15	52	14	48	0	0	29
Biyagama	22	100	0	0	0	0	22
Mahara	10	100	0	0	0	0	10
Total	47	77	14	23	0	0	61

Table 40 Flood Level at the Time of Floods

DS division	Less than 2 ft.		2–4 ft		4 – 6 ft		Total houses
	Num	%	Num	%	Num	%	
Kelaniya	4	14	25	86	0	0	29
Biyagama	2	9	16	73	4	18	22
Mahara	4	40	6	60	0	0	10
Total	10	16	47	77	4	7	61

Table 41 Houses Facing Flood Problems at Rainy Periods

DS division	Houses being flooded		Total households
	Number	%	
Kelaniya	3,145	30	10,326
Biyagama	995	16	6,089
Mahara	300	10	3,100
Total	4,440	23	19,515

Table 42 Distance from Houses to Rivers/Streams

DS division	21 – 50 meters		51 – 100 meters		101 – 250 meters		251 – 300 meters		301 – 500 meters		501 – 1000 meters		Total
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	
Kelaniya	2	7	1	3	18	62	2	7	6	21	0	0	29
Biyagama	9	41	2	9	5	23	0	0	4	9	2	18	22
Mahara	0	0	1	10	9	90	0	0	0	0	0	0	10
Total	11	18	4	7	32	52	2	-3	10	16	2	3	61

Table 43 Periods of Inundation (GN division)

DS division	5 – 10 days		10 – 15 days		15 – 20 days		Total houses
	Num	%	Num	%	Num	%	
Kelaniya	4	33	6	50	2	17	12
Biyagama	11	100	0	0	0	0	11
Mahara	4	80	0	0	1	20	5
Total	19	68	6	21	3	10	28

Table 44 Depth of Water Level during Flood Times

DS division	1 – 3 ft.		3 – 5 ft.		5 – 7 ft.		7 – 9 ft.		Total
	Num	%	Num	%	Num	%	Num	%	
Kelaniya	10	83	2	17	0	0	0	0	12
Biyagama	8	73	3	27	0	0	0	0	11
Mahara	5	100	0	0	0	0	0	0	5
Total	23	82	5	18	0	0	0	0	28

Table 45 Action Proposed for Addressing Flood Problems

DS division	1		2		Total houses
	Num	%	Num	%	
Kelaniya	18	62	17	59	29
Biyagama	10	45	13	59	22
Mahara	2	20	9	90	10
Total	30	49	39	64	61

- Note: 1. - Construction of flood control dams along rivers and streams and storm water drainage canals where necessary
2. - Rehabilitation and maintenance of existing drainage canals, action to stop disposal of garages and waste matter into drainage canals

Table 46 Other Development Activities Proposed

DS division	1		2		3		4		Total
	Num	%	Num	%	Num	%	Num	%	
Kelaniya	0	0	5	17	0	0	0	0	29
Biyagama	0	0	8	36	2	9	4	18	22
Mahara	0	0	4	40	0	0	0	0	10
Total	0	0	17	28	2	3	4	7	61

- Note: 1. Supply of drinking water facilities, 2. Transport facilities (especially roads),
3. Sanitary facilities, 4. Introducing livelihood activities for income generation