



Preliminary Report – 2

Census of Buildings and Persons Affected by the Tsunami – 2004

(In this report, statistics are given only for the
affected Grama Niladhari divisions)

MANMUNAI NORTH DS DIVISION

BATTICALOA DISTRICT

Department of Census and Statistics - 2005

Preliminary Report – 2

Census of Buildings and Persons Affected by the Tsunami – 2004

Data collection of the Census on the Buildings and Persons Affected by the Tsunami – 2004 was conducted in two stages. During the stage one data on some key indicators related to the number of damaged buildings were collected. Damaged houses were categorized into completely damaged, partially damaged and usable, and partially damaged and not usable. Indicators compiled at various administrative divisions based on the data collected at the first stage have been released in the first set of preliminary reports.

During the second stage of the census, data on many other areas related to the disaster was collected. Characteristics of the buildings (both housing units and other buildings), occupants and dead and missing persons are some of such areas. Data collected are being computerized. Arrangements were made to give priority to compile some indicators, immediately needed for decision making. Indicators compiled on priority basis are listed below.

1. Average distance between the building and beach
2. Materials used for construction of buildings
3. Ownership of buildings
4. Floor area of buildings
5. Housing units by income category
6. Housing units by number of families
7. Population by age group
8. Number of people disabled/injured/sick due to tsunami
9. Number of persons engaged in fishing before and after the disaster
10. Number of persons engaged in other fishing related employments before and after the disaster
11. Number of persons engaged in coir industry before and after the disaster
12. Number of persons engaged in tourism industry before and after the disaster
13. Number of persons engaged in government employment before and after the disaster
14. Number of persons engaged in other employment before and after the disaster

The above indicators at GN level are presented in this report for the Manmunai North DS division of the Batticaloa district.

NOTE

During the first stage of the census all affected buildings were listed. With regard to the buildings where there was no person available to collect information, details of a contact person were obtained by inquiring the people living in the neighborhood. Irrespective of all these attempts, some eligible respondents could not be enumerated during the second stage of the census.

For Manmunai North DS division of Batticaloa districts 3 percent of the eligible respondent could not be enumerated. Arrangements are being made to collect information from all eligible respondents of these housing units as well.

Concepts and Definitions Used

Housing Unit

The following 3 conditions should be satisfied in order to consider a building unit as a housing unit.

- (i) It should be a place of dwelling of human beings.
- (ii) It should be separated from other places of dwelling.
- (iii) It should have separate entrance.

Under the definition, any building unit or a part of a building or any structure whether permanent or temporary such as huts, shanties, sheds etc., which are in fact used as place of residence were regarded as housing units.

Number of persons usually living in the housing unit

A person was considered as a member of the housing unit if he/she was a usual resident of the housing unit when the Tsunami disaster occurred. They may be presently living in the housing unit or elsewhere such as a welfare center or a friend's/ relative's house.

Employment prior to the Tsunami and whether the employment can be continued after the Tsunami ?

This information was collected from those persons who were engaged in an employment before the Tsunami. Further information was collected on whether they could continue their employment after the Tsunami.

Materials used for the construction of the housing unit

Materials used for the construction of housing unit was considered permanent, if the roof, the walls and the floor were constructed using Permanent material.

Roof is considered Permanent, if constructed using tiles / asbestos etc. Roof is considered Temporary, if constructed using cadjan / tin sheets etc.

Walls are considered Permanent, if constructed using bricks / cement blocks etc. Walls are considered Temporary, if constructed using mud, wood / tin sheets etc.

Floor is considered Permanent, if constructed using cement/ tiles / granite etc. Floor is considered Temporary, if constructed using mud / dung etc.

Distance from the beach to the housing unit:

This distance was estimated by the enumerator at the time of the data collection.

Income of the housing unit

This includes the total income of all income earners of the housing unit from all sources, before the Tsunami.

Size of Housing unit

This refers to the total number of the members of the housing unit, who are alive after the Tsunami, and were usually residing in the housing unit, before the Tsunami. They may be living in the housing unit or elsewhere now.

Disability, Injury or Sickness due to Tsunami

If a person was disabled or injured or had a sickness due to Tsunami, information on such persons was collected at this census.

Table 1: Number of damaged housing units in affected GN divisions* by material used for construction of the housing unit**

Manmunai North DS division of Batticaloa District - April 2005

Affected GN Division		Total no. of damaged* * housing units	Material used for construction		
Name	No.		Permanent	Other ^α	Not reported
Amirthakali	173	484	420	64	0
Arasadi	177A	8	8	0	0
Dutch Bar	172C	226	205	21	0
Kallady	171	170	150	20	0
Kallady Mugathuvaram	172A	209	170	39	0
Kallady Uppodai	171B	222	100	122	0
Kallady Velloor	171C	420	268	152	0
Koolavadi East	173I	6	6	0	0
Kootaimunnar	178	9	7	2	0
Mamangam	173A	24	16	7	1
Manjanthoduvai South	168A	154	95	59	0
Navalady	172	427	314	112	1
Navatkudah East	168C	202	109	92	1
Nochchimunai	171A	155	69	86	0
Palameen Madu	173C	186	141	45	0
Periya Uppodai	178A	590	508	77	5
Thiruchendhoor	172B	768	480	288	0
Total		4260	3066	1186	8

*Statistics are given here only for the affected GN divisions

**Damaged - Fully damaged, Partially damaged (unusable) and Partially damaged (usable) housing units only were considered damaged

α If any combination of materials other than 'Permanent' is considered as 'Other'

Note : In some DS divisions, number of housing units surveyed in stage 2 were greater than the number of housing units listed in stage 1 because some housing units were identified as damaged at later stage. In some other DS divisions, number of housing units surveyed in stage 2 were slightly less than the number of housing units covered in stage 1, because there was a small percentage of housing units which were not surveyed due to unavailability of a suitable respondent.

Source : Department of Census & Statistics

Table 2: Number of damaged housing units in affected GN divisions* by ownership of the land**

Manmunai North DS division of Batticaloa District - April 2005

Affected GN Division		Total no. of damaged* * housing units	Ownership of the land				
Name	No.		Belongs to the family	Rent/Lease	Coast reservatio	Other	Not reported
Amirthakali	173	484	415	31	0	37	1
Arasadi	177A	8	7	1	0	0	0
Dutch Bar	172C	226	216	6	0	4	0
Kallady	171	170	119	8	0	43	0
Kallady Mugathuvaram	172A	209	192	3	0	14	0
Kallady Uppodai	171B	222	79	5	0	138	0
Kallady Veloor	171C	420	330	10	0	79	1
Koolavadi East	173I	6	6	0	0	0	0
Kootaimunnar	178	9	6	3	0	0	0
Mamangam	173A	24	20	3	0	1	0
Manjanthoduvai South	168A	154	152	0	0	2	0
Navalady	172	427	417	1	0	9	0
Navatkudah East	168C	202	196	2	0	4	0
Nochchimunai	171A	155	88	0	0	67	0
Palameen Madu	173C	186	125	2	0	59	0
Periya Uppodai	178A	590	503	67	0	17	3
Thiruchendhoor	172B	768	711	3	0	48	6
Total		4260	3582	145	0	522	11

*Statistics are given here only for the affected GN divisions

**Damaged - Fully damaged , Partially damaged (unusable) and Partially damaged (usable) housing units only are considered damaged.

Note : In some DS divisions, number of housing units surveyed in stage 2 were greater than the number of housing units listed in stage 1 because some housing units were identified as damaged at later stage. In some other DS divisions, number of housing units surveyed in stage 2 were slightly less than the number of housing units covered in stage 1, because there was a small percentage of housing units which were not surveyed due to unavailability of a suitable respondent.

Source : Department of Census & Statistics

Table 3: Number of damaged housing units in affected GN divisions* by income category of the housing unit before Tsunami**

Manmunai North DS division of Batticaloa District - April 2005

Affected GN Division		Total no. of damaged* * housing units	Monthly Income of the Housing Unit (Rs)			
Name	No.		Less than 5000	5000 - 9999	10000 & above	Not reported
Amirthakali	173	484	112	173	193	6
Arasadi	177A	8	2	2	4	0
Dutch Bar	172C	226	64	100	61	1
Kallady	171	170	48	46	76	0
Kallady Mugathuvaram	172A	209	46	87	75	1
Kallady Uppodai	171B	222	63	113	46	0
Kallady Veloor	171C	420	121	205	90	4
Koolavadi East	173I	6	3	0	3	0
Kootaimunnar	178	9	1	3	4	1
Mamangam	173A	24	14	9	0	1
Manjanthoduvai South	168A	154	117	31	5	1
Navalady	172	427	180	195	47	5
Navatkudah East	168C	202	84	104	13	1
Nochchimunai	171A	155	91	47	16	1
Palameen Madu	173C	186	90	66	27	3
Periya Uppodai	178A	590	113	236	231	10
Thiruchendhoor	172B	768	299	325	131	13
Total		4260	1448	1742	1022	48

*Statistics are given here only for the affected GN divisions

**Damaged - Fully damaged , Partially damaged (unusable) and Partially damaged (usable) housing units only are considered damaged.

Note : In some DS divisions, number of housing units surveyed in stage 2 were greater than the number of housing units listed in stage 1 because some housing units were identified as damaged at later stage.

Source : Department of Census & Statistics

Table 4: Number of damaged housing units by number of families[@] in affected GN divisions***

Manmunai North DS division of Batticaloa District - April 2005

Affected GN Division		Total no. of damaged* * housing units	Number of families			
Name	No.		1 Family	2 Families	3 or more	Not reported
Amirthakali	173	484	455	26	3	0
Arasadi	177A	8	7	1	0	0
Dutch Bar	172C	226	223	3	0	0
Kallady	171	170	148	19	3	0
Kallady Mugathuvaram	172A	209	193	15	1	0
Kallady Uppodai	171B	222	213	7	2	0
Kallady Veloor	171C	420	406	10	4	0
Koolavadi East	173I	6	6	0	0	0
Kootaimunnar	178	9	8	1	0	0
Mamangam	173A	24	19	5	0	0
Manjanthoduvai South	168A	154	153	1	0	0
Navalady	172	427	421	6	0	0
Navatkudah East	168C	202	181	19	2	0
Nochchimunai	171A	155	152	2	1	0
Palameen Madu	173C	186	179	6	1	0
Periya Uppodai	178A	590	519	64	7	0
Thiruchendhoor	172B	768	738	26	4	0
Total		4260	4021	211	28	0

*Statistics are given here only for the affected GN divisions

**Damaged - Fully damaged , Partially damaged (unusable) and Partially damaged (usable) housing units only are considered damaged.

[@] 'Number of families' is defined as the number of families usually living in that housing unit after the Tsunami 2004

Note : In some DS divisions, number of housing units surveyed in stage 2 were greater than the number of housing units listed in stage 1 because some housing units were identified as damaged at later stage.

Source : Department of Census & Statistics

Table 5: Number of damaged housing units in affected GN divisions* by size of housing units**

Manmunai North DS division of Batticaloa District - April 2005

Affected GN Division		Total no. of damaged* * housing units	Size of housing units			
Name	No.		Less than 5 members	5 to 7 members	8 or more members	Not reported
Amirthakali	173	484	280	179	25	0
Arasadi	177A	8	6	2	0	0
Dutch Bar	172C	226	171	55	0	0
Kallady	171	170	91	73	6	0
Kallady Mugathuvaram	172A	209	104	93	12	0
Kallady Uppodai	171B	222	127	83	12	0
Kallady Velloor	171C	420	238	164	18	0
Koolavadi East	173I	6	6	0	0	0
Kootaimunnar	178	9	2	6	1	0
Mamangam	173A	24	12	10	2	0
Manjanthoduvai South	168A	154	96	58	0	0
Navalady	172	427	358	66	3	0
Navatkudah East	168C	202	102	84	16	0
Nochchimunai	171A	155	86	57	12	0
Palameen Madu	173C	186	117	64	5	0
Periya Uppodai	178A	590	344	211	35	0
Thiruchendhoor	172B	768	472	276	20	0
Total		4260	2612	1481	167	0

*Statistics are given here only for the affected GN divisions

**Damaged - Fully damaged , Partially damaged (unusable) and Partially damaged (usable) housing units only are considered damaged.

Note : In some DS divisions, number of housing units surveyed in stage 2 were greater than the number of housing units listed in stage 1 because some housing units were identified as damaged at later stage. In some other DS divisions, number of housing units surveyed in stage 2 were slightly less than the number of housing units covered in stage 1, because there was a small percentage of housing units which were not surveyed due to unavailability of a suitable respondent.

Source : Department of Census & Statistics

Table 6: Distribution of population in affected GN divisions* by the age group

Manmunai North DS division of Batticaloa District - April 2005

Affected GN Division		Affected Population #	Age Group (Years)			
Name	No.		Less than 5	5 - 14	15-29	30 or more
Amirthakali	173	1950	149	302	583	916
Arasadi	177A	30	1	4	8	17
Dutch Bar	172C	774	59	141	246	328
Kallady	171	745	53	116	206	370
Kallady Mugathuvaram	172A	945	57	151	287	450
Kallady Uppodai	171B	957	87	194	289	387
Kallady Veloor	171C	1830	172	330	555	773
Koolavadi East	173I	20	3	4	2	11
Kootaimunnar	178	50	0	6	22	22
Mamangam	173A	109	11	19	36	43
Manjanthoduvai South	168A	596	62	139	182	213
Navalady	172	1230	65	230	451	484
Navatkudah East	168C	832	102	220	297	213
Nochchimunai	171A	679	66	145	239	229
Palameen Madu	173C	768	67	157	224	320
Periya Uppodai	178A	2644	176	413	777	1278
Thiruchendhoor	172B	3114	254	648	948	1264
		17273	1384	3219	5352	7318

*Statistics are given here only for the affected GN divisions

Affected population - Total number of persons living in the damaged housing units.

Source : Department of Census & Statistics

Table 7: Number of persons who were disabled/injured/sick^{##} due to Tsunami 2004 in affected GN divisions*

Manmunai North DS division of Batticaloa District -
April 2005

Affected GN Division		Affected Population #	No of persons disabled/injured/sick [#]
Name	No.		
Amirthakali	173	1950	148
Arasadi	177A	30	1
Dutch Bar	172C	774	35
Kallady	171	745	25
Kallady Mugathuvaram	172A	945	46
Kallady Uppodai	171B	957	39
Kallady Velloor	171C	1830	79
Koolavadi East	173I	20	0
Kootaimunnar	178	50	0
Mamangam	173A	109	0
Manjanthoduvai South	168A	596	2
Navalady	172	1230	298
Navatkudah East	168C	832	9
Nochchimunai	171A	679	35
Palameen Madu	173C	768	11
Periya Uppodai	178A	2644	83
Thiruchendhoor	172B	3114	232
Total		17273	1043

*Statistics are given here only for the affected GN divisions

Affected population - Total number of persons living in the damaged housing units.

##-Of the persons living in the damaged housing unit

Source : Department of Census & Statistics

**Table 8: Number of persons[?] engaged in fishing⁺
before and after Tsunami in affected GN
divisions***

Manmunai North DS division of Batticaloa District -
April 2005

Affected GN Division		No. of persons engaged	
Name	No.	Before Tsunami	After Tsunami
Amirthakali	173	35	13
Arasadi	177A	0	0
Dutch Bar	172C	10	7
Kallady	171	7	2
Kallady Mugathuvaram	172A	25	10
Kallady Uppodai	171B	14	5
Kallady Velloor	171C	26	11
Koolavadi East	173I	0	0
Kootaimunnar	178	2	1
Mamangam	173A	1	1
Manjanthoduvai South	168A	10	10
Navalady	172	274	24
Navatkudah East	168C	16	13
Nochchimunai	171A	62	16
Palameen Madu	173C	86	46
Periya Uppodai	178A	45	13
Thiruchendhoor	172B	115	41
Total		728	213

*Statistics are given here only for the affected GN divisions

+ Fishing - Persons engaged in fishing for selling (not only for home consumption) as employers, employees & own account workers are included here

? Persons engaged in the activity in the damaged housing units

Source : Department of Census & Statistics

Table 9: Number of persons [?] engaged in other fishery related industries⁺ before and after Tsunami in affected GN divisions*

Manmunai North DS division of Batticaloa District -
April 2005

Affected GN Division		No. of persons engaged	
Name	No.	Before Tsunami	After Tsunami
Amirthakali	173	0	0
Arasadi	177A	0	0
Dutch Bar	172C	0	0
Kallady	171	0	0
Kallady Mugathuvaram	172A	0	0
Kallady Uppodai	171B	0	0
Kallady Veloor	171C	10	1
Koolavadi East	173I	0	0
Kootaimunnar	178	0	0
Mamangam	173A	0	0
Manjanthoduvai South	168A	21	21
Navalady	172	50	25
Navatkudah East	168C	0	0
Nochchimunai	171A	3	2
Palameen Madu	173C	5	1
Periya Uppodai	178A	6	2
Thiruchendhoor	172B	23	7
Total		118	59

*Statistics are given here only for the affected GN divisions

+ Fishery related industries - Persons engaged in preparing dry fish, repairing of fishing nets and other implements etc. are

? Persons engaged in the activity in the damaged housing units

Source : Department of Census & Statistics

Table 10: Number of persons[?] engaged in coir industry before and after Tsunami in affected GN divisions*

Manmunai North DS division of Batticaloa District -
April 2005

Affected GN Division		No. of persons engaged	
Name	No.	Before Tsunami	After Tsunami
Amirthakali	173	0	0
Arasadi	177A	0	0
Dutch Bar	172C	0	0
Kallady	171	0	0
Kallady Mugathuvaram	172A	0	0
Kallady Uppodai	171B	0	0
Kallady Velloor	171C	0	0
Koolavadi East	173I	0	0
Kootaimunnar	178	0	0
Mamangam	173A	0	0
Manjanthoduvai South	168A	0	0
Navalady	172	0	0
Navatkudah East	168C	0	0
Nochchimunai	171A	0	0
Palameen Madu	173C	0	0
Periya Uppodai	178A	1	1
Thiruchendhoor	172B	0	0
Total		1	1

*Statistics are given here only for the affected GN divisions

? Persons engaged in the activity in the damaged housing units

Source : Department of Census & Statistics

Table11: Number of persons[?] engaged in tourism industry before and after Tsunami in affected GN divisions*

Manmunai North DS division of Batticaloa District -
April 2005

Affected GN Division		No. of persons engaged	
Name	No.	Before Tsunami	After Tsunami
Amirthakali	173	1	1
Arasadi	177A	0	0
Dutch Bar	172C	0	0
Kallady	171	0	0
Kallady Mugathuvaram	172A	0	0
Kallady Uppodai	171B	0	0
Kallady Velloor	171C	0	0
Koolavadi East	173I	0	0
Kootaimunnar	178	0	0
Mamangam	173A	0	0
Manjanthoduvai South	168A	0	0
Navalady	172	0	0
Navatkudah East	168C	0	0
Nochchimunai	171A	0	0
Palameen Madu	173C	0	0
Periya Uppodai	178A	0	0
Thiruchendhoor	172B	1	1
Total		2	2

*Statistics are given here only for the affected GN divisions

? Persons engaged in the activity in the damaged housing units

Source : Department of Census & Statistics

Table 12: Number of persons[?] engaged in government employment⁺ before and after Tsunami in affected GN divisions*

Manmunai North DS division of Batticaloa District -
April 2005

Affected GN Division		No. of persons engaged	
Name	No.	Before Tsunami	After Tsunami
Amirthakali	173	232	232
Arasadi	177A	4	4
Dutch Bar	172C	32	32
Kallady	171	124	120
Kallady Mugathuvaram	172A	93	92
Kallady Uppodai	171B	61	61
Kallady Velloor	171C	112	108
Koolavadi East	173I	4	4
Kootaimunnar	178	10	10
Mamangam	173A	2	1
Manjanthoduvai South	168A	8	8
Navalady	172	46	46
Navatkudah East	168C	37	32
Nochchimunai	171A	11	11
Palameen Madu	173C	44	41
Periya Uppodai	178A	288	272
Thiruchendhoor	172B	181	170
Total		1289	1244

*Statistics are given here only for the affected GN divisions

+ Persons employed in public sector, provincial public sector and semi government are included here.

? Persons engaged in the activity in the damaged housing units

Source : Department of Census & Statistics

Table 13: Number of persons[?] engaged in other employment⁺ before and after Tsunami in affected GN divisions*

Manmunai North DS division of Batticaloa District -
April 2005

Affected GN Division		No. of persons engaged	
Name	No.	Before Tsunami	After Tsunami
Amirthakali	173	462	356
Arasadi	177A	8	8
Dutch Bar	172C	223	189
Kallady	171	128	110
Kallady Mugathuvaram	172A	221	165
Kallady Uppodai	171B	231	175
Kallady Veloor	171C	435	319
Koolavadi East	173I	6	6
Kootaimunnar	178	11	11
Mamangam	173A	21	21
Manjanthoduvai South	168A	186	167
Navalady	172	140	65
Navatkudah East	168C	233	180
Nochchimunai	171A	157	102
Palameen Madu	173C	131	96
Periya Uppodai	178A	567	438
Thiruchendhoor	172B	677	469
Total		3837	2877

*Statistics are given here only for the affected GN divisions

+ Which includes all other employment not specified in the previous tables.

? Persons engaged in the activity in the damaged housing units

Source : Department of Census & Statistics