



**Preliminary Statistics of the Census of Buildings and
Persons Affected by the Tsunami – 2004**

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

PUTTALAM DISTRICT

Department of Census and Statistics - 2005

P R E F A C E

The December 26th earthquake and tsunami that hit many parts of Asia and East Africa was the most devastating natural disaster to occur in years. Sri Lanka is one of the badly affected countries in Asia.

In order to provide information on the impact of Tsunami on Sri Lanka, the Department of Census and Statistics is conducting a census covering the census blocks affected by the disaster. This census has been designed to provide much needed information for planning of rebuilding Tsunami affected areas and it is being conducted in two stages. During the stage 1, all the buildings in the affected census blocks are listed. Data on a few key indicators on the affected buildings and persons are also collected at this stage. Detail information is collected during the second stage. Statistics compiled for the Puttalam district, based on the data collected during the listing stage are given in this publication. Comprehensive report giving detail information on the impact will be released shortly.

I am thankful to the staff of my department at all levels, who got involved in this census, for their contributions to conduct the census successfully. Willingly, they worked so hard making it possible to releases the statistics within very short period of time. To provide quick access, these statistics are also published in the department's website (www.statistics.gov.lk).

I hope the information presented in this publication, would be useful for planners and decision makers for rebuilding the country devastated by the Tsunami – 2004.

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Census of Buildings and Persons Affected by the Tsunami – 2004

1. Introduction

26th of December 2004, was an unforgettable day for all Sri Lankans as well as for the whole world. On that fateful day, tidal waves struck the Eastern and Southern coasts of Sri Lanka as well as parts of Northern and Western coasts sweeping people away, causing flooding and destruction of infrastructure. The tidal waves were caused by a series of earthquakes, measuring 8.9 on the Richter scale that occurred in the sea near Sumatra, Indonesia. The other neighboring countries affected by this Tsunami were Indonesia, India, Maldives, Somalia and Thailand. Since many Sri Lankans did not have any previous experience of this nature, the damage caused to their lives were unbelievable. Thousands of people were displaced and disappeared or killed within a very short time.

Many institutions have adopted various methods to measure the damage caused by this calamity soon after the disaster. As there was no uniformity in the methodologies adopted the figures were found to be different from each other. As such, the Department of Census and Statistics (DCS), as the main government institution responsible in collecting, compiling, analysing and disseminating unbiased and reliable information in Sri Lanka, decided to conduct this special Census to collect information on people, housing units and other buildings, affected. For proper planning to rebuild the areas devastated by Tsunami and to assist the people affected, it is essential to have reliable information down to the lowest possible administrative units and even at individual level. The information collected in the census will be extremely useful to the policy makers, planners, international agencies and other donor agencies as well as other authorised agencies, which are genuinely interested in helping to rebuild the affected areas and in assisting the people affected to restart their normal lives. While the infrastructure development should benefit everyone, in the affected areas, it is essential to ensure that any assistance to families or individuals, goes to the right people, who are really affected and deserving. As such, DCS is taking every effort to collect the information as accurate as possible to ensure that no genuine person or family will be missed from the enumeration.

As the objective of this census is to assist the people affected and to develop the areas devastated, it may be necessary to use the information collected at individual level. As such this Census is not conducted under the 'Census Ordinance', like in the case of any normal census. If the information is collected under the 'Census Ordinance', it will not be possible to use any individual information and therefore will not be useful in assisting the people affected.

Following Districts in the five Provinces have been affected.

- Southern Province : Galle, Matara, Hambantota
- Western Province : Kalutara, Gampaha, Colombo
- Eastern Province : Ampara, Batticaloa, Trincomalee
- Northern Province : Jaffna, Mullativu, Killinochchi
- North Western Province : Puttalam

Altogether 13 Districts out of the 14 Districts in the coastal belt of Sri Lanka have reported to be affected by the waves. The DCS is conducting this Census only in the areas directly affected by Tsunami. However, there are affected people from different areas who were living outside the areas directly affected. (i) The people who were unfortunately travelling in the coastal belt in the Western, Southern, Eastern or Northern regions, (ii) The People who were staying in **Hotels or with friends/ relatives** in the affected areas, at the time of the disaster, (iii) The people from areas closer to the affected areas, who happened to be in the affected areas at the time of disaster, are also innocent victims of this natural disaster, which has affected lives of many people.

Administrative setup of the country

For administrative convenience, Sri Lanka has been divided to 9 Provinces. These Provinces are again sub divided in to 25 Districts. Each District is divided in to Divisional Secretariat (DS) Division depending on the population size of the area. Each DS Division consists of several Grama Niladhari (GN) Divisions, which is the lowest level of administrative area. Currently there are 324 DS Divisions and 14,008 GN Divisions.

2. Method of Data Collection:

Data collection of a natural disaster of this scale is a new challenge and experience even to the Department of Census and Statistics (DCS). Due to the complexity of the Tsunami disaster, several steps had to be planned and adopted to collect accurate and reliable data.

The procedure adopted to conduct the Census in the affected areas is described below.

- ◆ DCS has identified all the Grama Niladhara Divisions (GND) in each District, affected by Tsunami (Already all such (GND) have been marked on maps electronically).
- ◆ The lists (F1 - From) of Housing Units and Other Buildings (which were prepared for the Census 2001) pertaining to the affected Census Blocks of the affected GN Divisions, have been extracted and photocopied from the available records.

Census Block and F1 form

In order to conduct the Census of Population and Housing in 2001, the GN Divisions were again sub divided in to several Census Blocks (CB). CB is an area within the GN Division which consists of about 80 housing units in Urban areas and about 65 units in Rural or Estate areas. The criteria for developing a CB is that one enumerator could visit all the units in one CB within 6 hours to take counts in those units in the census night. Lists of units for each CB with sketch map were prepared and stored in the DCS for conducting surveys in the future. The sketch map helps to identify the Housing Units and other Buildings, because the Serial Number of the Units are indicated in the map and the units are numbered in a sequence according to the lie of land. This list is called 'F1' form. The total number of such F1 forms prepared for entire Sri Lanka in this manner is around 125,000 and these are referred as CB frame. If one needs to do a survey, the selected lists should be extracted and updated before conducting the survey.

The **F1- Form** has the following basic information

- a. Census Units No:
- b. Postal Address:
- c. Name of the Chief Occupant/Person in-charge of the Business/Owner
- d. Description of the Unit (Whether a 'Housing Unit'; 'Collective Living Quarters'; Institute or Non – Housing Unit.)
- e. Number of Persons usually spending the night in the unit.
- f. Whether any one residing in the unit operates Agricultural Land or Livestock
- g. Whether any one residing in the unit is engaged in Fishing as an Occupation.
- h. Whether any one residing in the unit engaged in Non – Agricultural Economic Activities. (If so details)

Updating F1 form

F1 form prepared as at 2001 contains names (name of head of household or owner of the business unit) and addresses of all the buildings in the CB. This has to be updated to contain all the units as at 26th of December 2004, just before Tsunami disaster. Updating has to be done by visiting the GN Division where CB is located. First, the boundaries of the CB is identified according to the map given in F1 form. One has to start from the first building unit in the block identifying the buildings according to the serial number given in the form. It has to be updated by including new buildings which were built after 2001 and deleting the buildings which were demolished between 2001 and just before Tsunami. While this operation is being done, buildings are identified as one of the categories out of four, Housing Units, Collective Living Quarters, Institutions or Non-Housing Units.

3. New listing form

A New List of Units for Areas Affected by TSUNAMI was completed by the staff of the DCS. The copies of F1 – Forms were used as guides to identify the units. The New List of Units were prepared very carefully, by visiting the affected areas, with the copies of the F1 – Forms.

The contents of the New List of Units (RF1 - Form) for Areas Affected by TSUNAMI is given below.

- a. Postal Address before the disaster
- b. Name of the head before the disaster
- c. Description of the Unit before the disaster (i.e. Housing Unit (HU); Living Quarter other than Housing Unit (LQ); Institute (INS); Non – Housing Unit (NHU))
- d. Whether the Unit is still Existing
- e. Present Status of the Unit (Completely Damaged; Partially Damaged (Can not be used); Partially Damaged (can be used); not Damaged)
- f. No. of Persons lived (Before Tsunami)
- g. No. of Persons presently living
- h. Where do the usual residents of the Unit now living (In the unit; With friends/relatives; Camp; other)
- i. Economic Activity (EA) of the unit
- j. Whether the EA still being carried –out
- k. Address if living elsewhere

Once the preparation of the above list is completed for each District, following more detailed information is collected.

4. Detail information collected from Housing Units

A. Information on Persons Currently living in the Unit

- a. Name of each person currently living in the HU
- b. Relationship to Head of Household (HH)
- c. Sex.
- d. Age (years)
- e. Whether the person got injured/disabled or ill due to Tsunami
- f. If so, the nature of disability, injury or illness
- g. Occupation before the disaster
- h. Whether the person is able to engage in the Occupation after the disaster
- i. Whether Studying in school or other Educational Institute (for persons aged 3-34 years)
- j. Whether the parents of child (for children below 18 years): (1- Both parents living; 2- father has died; 3 – mother has died; 4- both have died)

B.Information on persons who have died or still considered missing due to Tsunami

- a. Name of the person
- b. Whether dead or missing
- c. Relationship to Head (before disaster)
- d. Sex/
- e. Age (years)
- f. Whether missing or dead person had been physically disabled
- g. Occupation or Economic Activity before the disaster
- h. Whether attended school or educational institute before the disaster

C. Housing Information

- a. Present status of the Unit (1-Completely Damaged; 2- Partially damaged (can not be used); 3- Partially damaged (can be used); 4- Not damaged)
- b. Distance from the beach to the Housing Unit
- c. The height which the Housing Unit was submerged
- d. Condition of the Housing Unit
- e. Number of rooms in the Housing Unit
- f. Total floor area of the Housing Unit
- g. Time since the Housing Unit was constructed
- h. Whether sanitary facilities available
- i. Whether drinking water is currently available in the Housing Unit
- j. Size of the land in which the Housing Unit is located
- k. Ownership of the land
- l. Whether the head of household has an alternative land to build a house
- m. Properties destroyed due to Tsunami (belonging to the members of the former Housing Unit)
- n. Total cost of the damaged property

5. Detail information collected from Non-Housing Units

Information of the building

- a. Address of the location of the building
- b. Information on the unit according to RF1 column 4.
- c. Activities carried out in the unit
- d. Ownership of the unit
- e. Current condition of the building
- f. Distance between the building unit and the beach
- g. The height which the building unit was submerged
- h. Condition of the building
- i. Number of storeys in the building
- j. Number of rooms in the building
- k. Total floor area of the building
- l. Size of the land in which the building is located
- m. Ownership of the land
- n. Is there any alternative land to build a new building
- o. The damage caused to the building and the economic activity carried out in the building

6. Definitions of 'Housing Unit' and 'Non Housing Unit'

(Same definitions used in Census of Population and Housing - 2001)

Housing unit

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

- a. It should be a place of dwelling of human beings.
- b. It should be separated from other places of dwelling.
- c. It should have separate entrance.

Under this definition any building 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.

Collective Living Quarters

A place where two or more unrelated persons share common living arrangement is considered as a collective living quarter.

Institution

This is a special case of collective living quarters, designed to house groups of persons who are bound by either a common public objective or a common personal interest under the supervision of a central authority sharing common living arrangements.

Non-Housing Unit

Every building or part of a building which is not used as a place of dwelling is a non housing unit.

eg : office, petrol filling station, shop etc.

7. What is captured by this Census

The main objective of this Census is to collect detail information on housing units and other buildings (hospitals, schools, hotels and restaurants, shops etc.) which were damaged

Tsunami devastation. This information will be useful for policy makers and planners to decide how many new houses have to be constructed, in which area and for whom etc. Similarly using the information collected from other buildings (specially buildings in which economic activities were carried out), the extent of damage caused by Tsunami to these economic activities and loss of employment can be evaluated in order to use in the rebuilding process of this area.

Following are captured by this Census

- a. Buildings (Housing Units and other buildings) damaged by Tsunami
- b. Persons who died and who were residing in damaged houses
- c. Persons whose houses are damaged and lost employment
- d. Household assets of those whose houses are damaged
- e. Assets of their economic activity (eg. boats, fishing nets etc. of fisherman) of those whose houses are damaged
- f. Children who were residing in damaged houses at the time of Tsunami and lost their parents (mother, father or both)
- g. Attempts will also be made to fill the gaps using administrative records available in other institutions.

Table 1 : Number of housing units of affected census blocks, before and after Tsunami 2004 by DS divisions*:Puttalam District (Provisional)

DS Division	No of GN Divisions		Number of census blocks in the affected GN		Number of housing units in affected census blocks				
	Total GN Divisions	Affected GN Divisions	Number of census blocks in the affected GN		Before the disaster	Completely damaged	Partially damaged and cannot be used	Partially damaged and can be used	Not damaged
			Total	Affected					
Wennappuwa	52	4	25	7	319	12	16	27	264
Total	52	4	25	7	319	12	16	27	264

*Statistics are given here only for the affected GN divisions, Source: Department of Census and Statistics

Table 1.1a : Number of housing units before and after Tsunami 2004 by affected GN divisions*: Wennappuwa DS Division of Puttalam District (Provisional)

Affected GN Division					Number of housing units in affected census blocks				
Name	No.	Code	Number of Census Blocks		Before the disaster	Completely damaged	Partially damaged and cannot be used	Partially damaged and can be used	Not damaged
			Total	Affected					
Aluthota	481A	230	5	1	45	0	0	1	44
Sindathriya	481	235	9	4	151	5	13	25	108
Kammala	481B	215	7	1	80	1	3	0	76
Wellamankaraya	486B	150	4	1	43	6	0	1	36
Total			25	7	319	12	16	27	264

*Statistics are given here only for the affected GN divisions, Source: Department of Census and Statistics

Table 2 : Number of buildings other than housing units of affected census blocks, before and after Tsunami 2004 by DS divisions* :Puttalam District (Provisional)

DS Division	No of GN Divisions		Number of census blocks in the affected GN		Number of buildings other than housing units in affected census blocks				
	Total GN Divisions	Affected GN Divisions	Total	Affected	Before the disaster	Completely damaged	Partially damaged and cannot be used	Partially damaged and can be used	Not damaged
Wennappuwa	52	4	25	7	30	1	0	4	25
<i>Total</i>	<i>52</i>	<i>4</i>	<i>25</i>	<i>7</i>	<i>30</i>	<i>1</i>	<i>0</i>	<i>4</i>	<i>25</i>

*Statistics are given here only for the affected GN divisions, Source: Department of Census and Statistics

Table 2.1a :Number of buildings other than housing units before and after Tsunami 2004 by affected GN divisions*:Wennappuwa DS Division of Puttalam District (Provisional)

Affected GN Division				Number of buildings other than housing units in affected census blocks					
Name	No.	Code	Number of Census Blocks		Before the disaster	Completely damaged	Partially damaged and cannot be used	Partially damaged and can be used	Not damaged
			Total	Affected					
Aluthota	481A	230	5	1	12	0	0	1	11
Sindathriya	481	235	9	4	4	1	0	1	2
Kammala	481B	215	7	1	11	0	0	2	9
Wellamankaraya	486B	150	4	1	3	0	0	0	3
Total			25	7	30	1	0	4	25

*Statistics are given here only for the affected GN divisions, Source: Department of Census and Statistics

Table 3 : Population in the affected census blocks before and after Tsunami 2004 by DS Divisions*: Puttalam District (Provisional)

DS Division	No of GN Divisions		Number of census blocks in the affected GN		Number of persons in the affected census		
	Total GN Divisions	Affected GN Divisions			Before the disaster	Presently living within the GN division	Presently living outside the GN division
			Total	Affected			
Wennappuwa	52	4	25	7	1571	1214	104
Total	52	4	25	7	1571	1214	104

*Statistics are given here only for the affected GN divisions, Source: Department of Census and Statistics

Table 3.1 a : Population in the affected census blocks before and after Tsunami 2004 by affected GN Divisions*: Wennappuwa DS Division of Puttalam District (Provisional)

Affected GN Division				Number of persons in affected census			
Name	No.	Code	Number of Census Blocks		Before the disaster	Presently living within the GN division	Presently living outside the GN division
			Total	Affected			
Aluthota	481A	230	5	1	163	205	0
Sindathriya	481	235	9	4	597	520	77
Kammala	481B	215	7	1	654	354	5
Wellamankaraya	486B	150	4	1	157	135	22
Total			25		1571	1214	104

*Statistics are given here only for the affected GN divisions, Source: Department of Census and Statistics