

## 4.4.7 Housing

### 1. Overview

Most of the housing and infrastructure have suffered severe damage post-September 1999 riots, especially in the capital-city Dili which more than 70% of the buildings were destroyed and damaged. In urban areas such as Dili and the other, reconstruction of the destroyed buildings done regularly and independently by owning families due the absence of government assistance both financing and building materials.

Until now, impact of the riots can still be felt, it is predicted about a third of the number of housing and buildings are must to be repaired. In addition to the destruction of most of the housing problems of basic infrastructure, especially infrastructure that supports the settlement such as: roads, bridges, clean water, electricity, and others also were damaged, causing further decline in the quality of residents mainly who live in urban areas.

Overall figure of the settlement can be seen on the following data housing conditions, such as: the type of construction (permanent and semi permanent). Based on data TLSLS (Timor-Leste Survey Level of the Standard, in 2007), see Table.... and Graph.... it can be concluded that: percentage of the permanent housing for National is 49.9%, while semi-permanent is 32.6%. Distribution in each district showing the highest number of permanent housing is: Liquica district (75.5%), while the smallest was in the Baucau district (20%). In the case of an emergency housing-type conditions the highest percentage in the district of Baucau (25.5%).

Other than the grouping of housing based on the type of its constructions (semi-permanent and permanent), a general description of the housing conditions in the Timor-Leste also can be assessed based on the using certain materials for its floor, such as: marble, ceramics, cement, bricks, earth, clay, and others.

It can be indicated that using earth/clay floor are very simple houses which are occupied by the poor people especially in rural areas. Based on existing data shows: in the National level percentage is still quite high, which is about 60.8% of total households in Timor-Leste. Whereas the distribution in various

districts show: the district of Aileu has a highest percentage (88.6%), and the second largest is district of Oecussi (80.6%).

Housing with the marble or ceramic floor, which is an indicator of the well housing condition, the highest percentage was in Dili district (20%) and the second largest is districts of Liquica (18%).

Table 4.45 - Type of Dwelling (in percentage)

|           | Total Percentage | Permanent house | Semi-permanent | Traditional house | Emergency, tent | Other |
|-----------|------------------|-----------------|----------------|-------------------|-----------------|-------|
| National  | 100.0            | 49.9            | 32.6           | 7.6               | 7.6             | 2.2   |
| Aileu     | 100.0            | 65.1            | 23.1           | 7.6               | 2.9             | 1.4   |
| Ainaro    | 100.0            | 52.1            | 38.2           | 2.7               | 4.5             | 2.5   |
| Baucau    | 100.0            | 20.0            | 52.4           | 2.0               | 25.5            | 0.0   |
| Bobonaro  | 100.0            | 50.2            | 38.9           | 4.7               | 2.1             | 4.1   |
| Cova Lima | 100.0            | 39.2            | 32.1           | 26.3              | 1.7             | 0.7   |
| Dili      | 100.0            | 62.3            | 28.7           | 2.7               | 1.2             | 5.1   |
| Ermera    | 100.0            | 62.8            | 15.0           | 3.5               | 16.6            | 2.2   |
| Lautem    | 100.0            | 23.4            | 57.5           | 4.5               | 14.4            | 0.1   |
| Liquiça   | 100.0            | 75.5            | 8.7            | 0.8               | 13.9            | 1.2   |
| Manufahi  | 100.0            | 51.4            | 33.0           | 13.5              | 0.8             | 1.2   |
| Manatuto  | 100.0            | 58.7            | 23.7           | 17.7              | 0.0             | 0.0   |
| Oecussi   | 100.0            | 36.9            | 35.6           | 22.7              | 0.5             | 4.3   |
| Viqueque  | 100.0            | 49.1            | 29.6           | 18.8              | 2.5             | 0.0   |

Source : 2007 TLSLS.

Figure 4.17 - Graph of Type of Dwelling

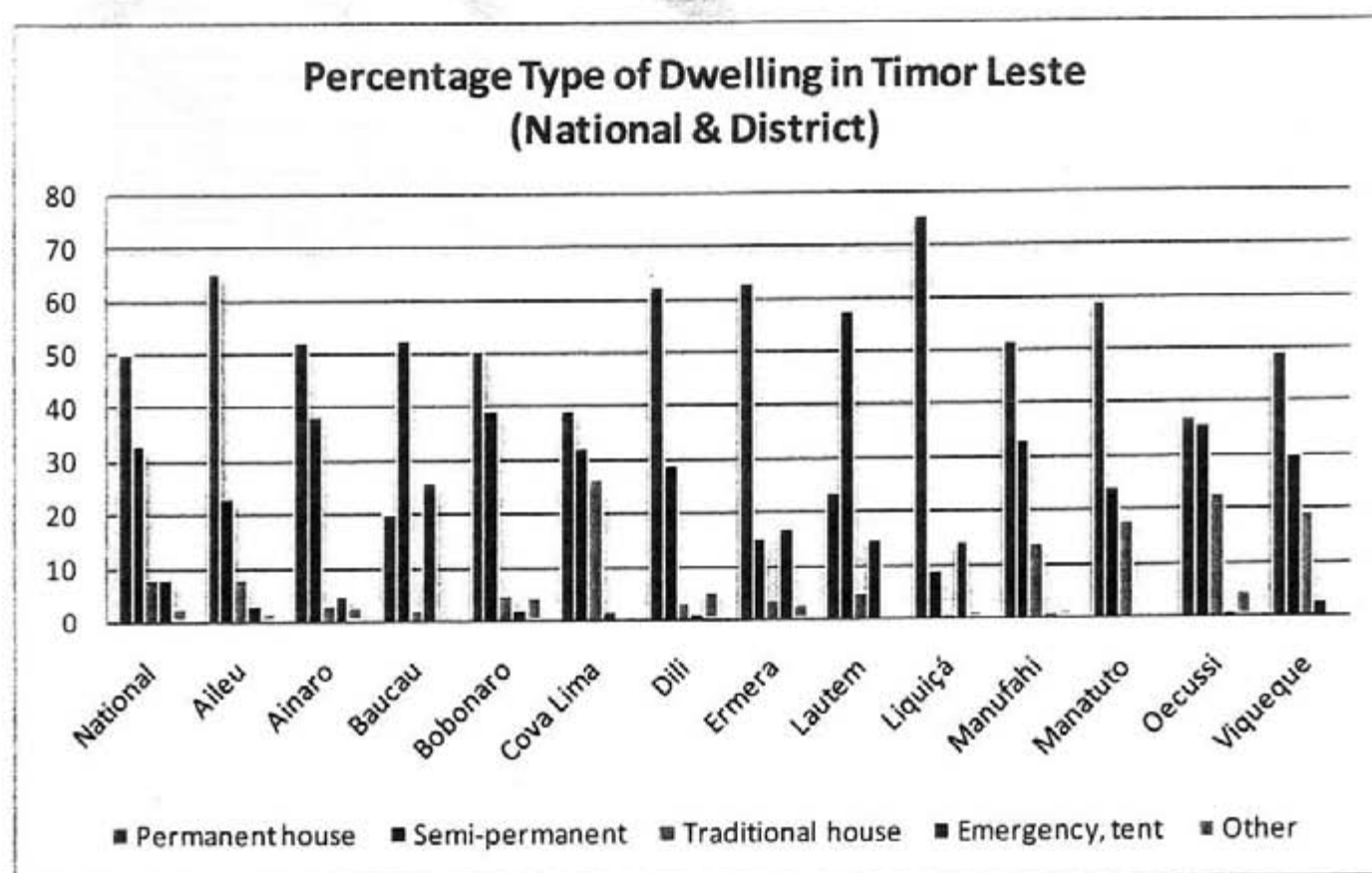


Table 4.46 - Main Material of the Floor (in Percentage)

|           | Total Percentage | Marble, ceramic, tiles | Concrete, brick | Earth, clay | Other |
|-----------|------------------|------------------------|-----------------|-------------|-------|
| National  | 100.0            | 9.4                    | 26.7            | 60.8        | 3.2   |
| Aileu     | 100.0            | 3.2                    | 7.8             | 88.6        | 0.5   |
| Ainaro    | 100.0            | 7.8                    | 12.9            | 77.1        | 2.3   |
| Baucau    | 100.0            | 2.3                    | 16.6            | 78.7        | 2.5   |
| Bobonaro  | 100.0            | 2.8                    | 31.1            | 64.2        | 1.9   |
| Cova Lima | 100.0            | 8.1                    | 36.0            | 39.2        | 16.7  |
| Dili      | 100.0            | 20.0                   | 52.8            | 27.0        | 0.2   |
| Ermera    | 100.0            | 14.3                   | 12.9            | 70.3        | 2.5   |
| Lautem    | 100.0            | 2.7                    | 43.9            | 51.4        | 2.0   |
| Liquiçá   | 100.0            | 18.0                   | 11.5            | 66.6        | 3.8   |
| Manufahi  | 100.0            | 11.7                   | 21.1            | 58.5        | 8.6   |
| Manatuto  | 100.0            | 10.3                   | 22.4            | 55.4        | 12.0  |
| Oecussi   | 100.0            | 1.4                    | 17.4            | 80.6        | 0.6   |
| Viqueque  | 100.0            | 5.2                    | 15.2            | 77.8        | 1.8   |

Source : 2007 TLSLS.

Figure 4.18 - Graph of Main Material of the Floor

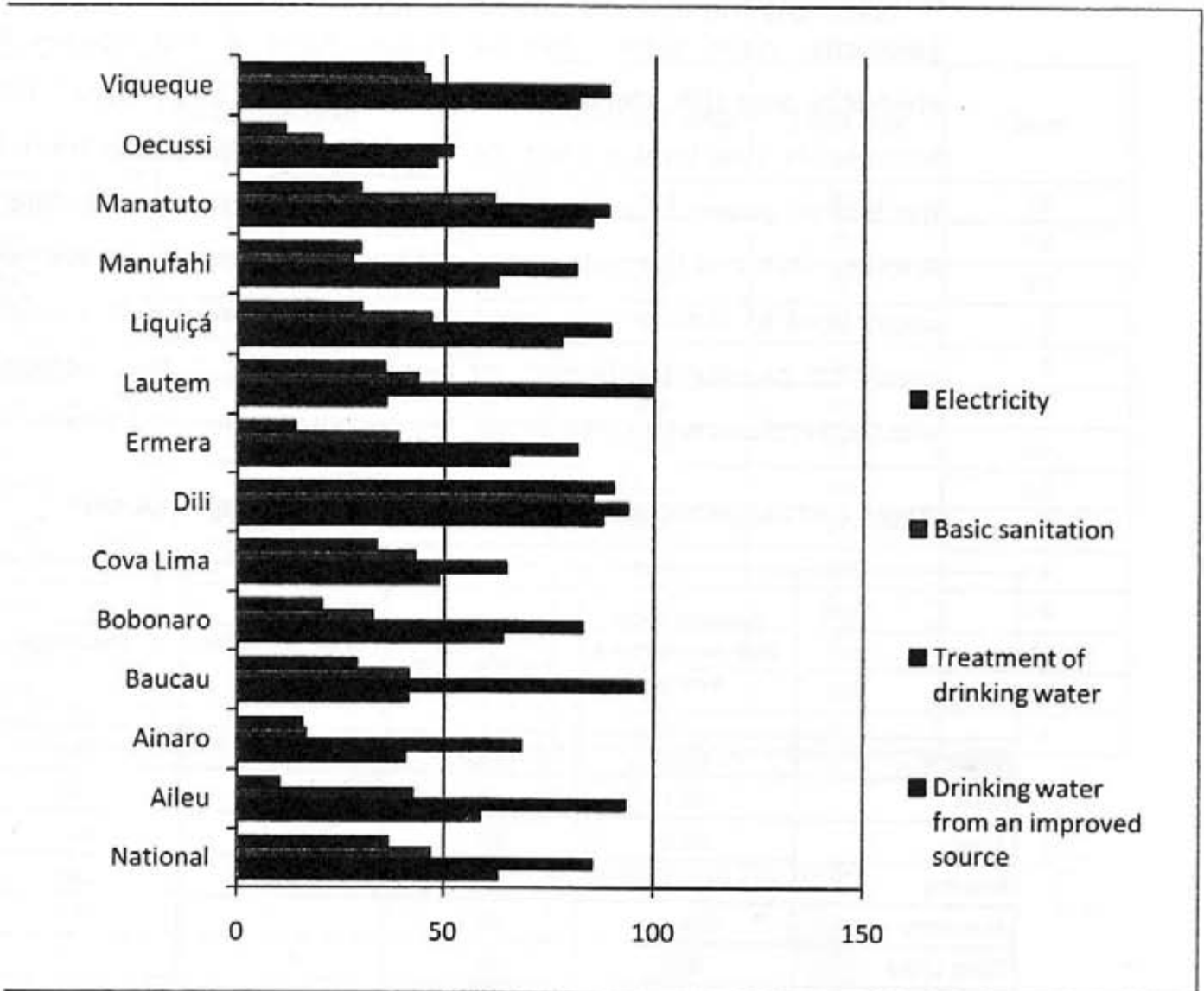
Based on result of the survey it can be seen there are still many houses in various districts have not obtained basic infrastructure services, namely: electricity, clean water, and sanitation. Aeliu district houses that have electricity only 10%, Oecussi 11,2%, Ermera 13.9% and Ainaro 15.7% of total households. Low level of electricity services still apparent in Timor-Leste due the limited power capacity provided by the government (existing: 47 MW). Another factor is the patterns of settlement location in various districts or sucos tend to scatter (not concentrated). Associated with efficiencies, the condition causing inefficiency of service network system utilities such as electricity, clean water, sanitation, telecommunication and others.

**Table 4.47 - Main Infrastructure Services of the Dwelling by District**

|           | Drinking water from an improved source | Treatment of drinking water | Basic sanitation | Electricity |
|-----------|--|-----------------------------|------------------|-------------|
| National  | 63.1                                   | 85.5                        | 46.8             | 36.6        |
| Aileu     | 58.9                                   | 93.3                        | 42.4             | 10.2        |
| Ainaro    | 40.6                                   | 68.5                        | 16.5             | 15.7        |
| Baucau    | 41.3                                   | 97.5                        | 41.4             | 28.9        |
| Bobonaro  | 64.2                                   | 83.1                        | 32.7             | 20.5        |
| Cova Lima | 48.8                                   | 65.0                        | 42.9             | 33.6        |
| Dili      | 88.0                                   | 93.8                        | 85.5             | 90.4        |
| Ermera    | 65.5                                   | 81.8                        | 38.9             | 13.9        |
| Lautem    | 35.9                                   | 100.0                       | 43.5             | 35.6        |
| Liquiçá   | 78.0                                   | 89.6                        | 46.8             | 29.9        |
| Manufahi  | 62.7                                   | 81.4                        | 27.6             | 29.5        |
| Manatuto  | 85.1                                   | 89.0                        | 61.8             | 29.5        |
| Oecussi   | 48.0                                   | 51.7                        | 20.1             | 11.2        |
| Viqueque  | 81.7                                   | 89.1                        | 46.1             | 44.5        |

Source : 2007 TLSLS.

Figure 4.19 - Graph of Main Infrastructure Services of the Dwelling by District



The low quality of settlements in general does not only exist in the rural areas, but also occur in urban areas such as Dili and Baucau. The main factors caused increasing of urbanization of the rural people into cities to find the jobs. They generally occupy pockets of informal area without formal permission from the authorities. The number of pockets of urban slums area, especially the city of Dili has increased every year, in line with increasing of urbanization flow to Dili. There are approximately 100 plots slum areas in Dili, which can cause potential danger physically, social, and economics of the people.

## 2. Problem and Challenges

Problems and challenges facing the housing sector is the low average density of the building in Timor-Leste (National density is 13 hh/km<sup>2</sup>, while the district of Dili as the densest in Timor-Leste is 88 hh/km<sup>2</sup>). Another major

problem is the scatter pattern of settlements around the district centres and the sucos which are slightly isolated with poor road access.

The data shows that number of districts still have very low population density (below 10 hh per km<sup>2</sup>, below the National population density 13 hh/km<sup>2</sup>). Some districts that still have a low density are: Manatuto (5 hh/km<sup>2</sup>), Lautem (7 hh/km<sup>2</sup>), Manufahi (7 hh/km<sup>2</sup>), Viqueque (8 hh/km<sup>2</sup>) and Covalima district (10 hh/ km<sup>2</sup>). For more details see the following table.

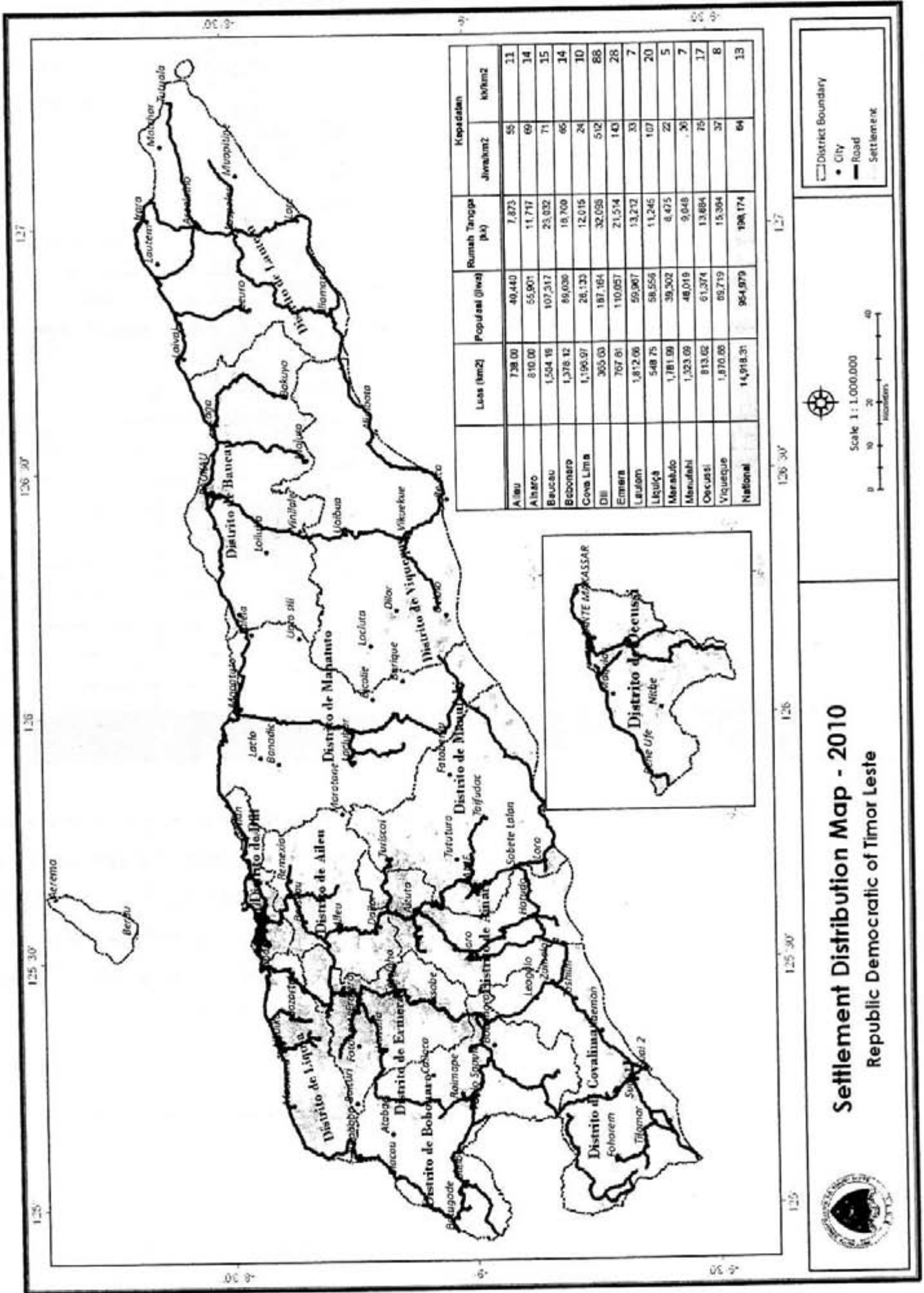
Table 4.48 - Population Density by District

| District  | Area (km <sup>2</sup> ) | Population (people) | Household (hh) | Density                |                    |
|-----------|-------------------------|---------------------|----------------|------------------------|--------------------|
|           |                         |                     |                | people/km <sup>2</sup> | hh/km <sup>2</sup> |
| Aileu     | 738.00                  | 40,440              | 7,873          | 55                     | 11                 |
| Ainaro    | 810.00                  | 55,901              | 11,717         | 69                     | 14                 |
| Baucau    | 1,504.19                | 107,317             | 23,032         | 71                     | 15                 |
| Bobonaro  | 1,378.12                | 89,030              | 18,700         | 65                     | 14                 |
| Cova Lima | 1,196.97                | 28,133              | 12,015         | 24                     | 10                 |
| Dili      | 365.63                  | 187,164             | 32,095         | 512                    | 88                 |
| Ermera    | 767.81                  | 110,057             | 21,514         | 143                    | 28                 |
| Lautem    | 1,812.66                | 59,967              | 13,212         | 33                     | 7                  |
| Liquiçá   | 548.75                  | 58,556              | 11,245         | 107                    | 20                 |
| Manatuto  | 1,781.99                | 39,302              | 8,475          | 22                     | 5                  |
| Manufahi  | 1,323.69                | 48,019              | 9,048          | 36                     | 7                  |
| Oecussi   | 813.62                  | 61,374              | 13,884         | 75                     | 17                 |
| Viqueque  | 1,876.88                | 69,719              | 15,364         | 37                     | 8                  |
| National  | 14,918.31               | 954,979             | 198,174        | 64                     | 13                 |

Source : 2007 TLSLS.

From the settlements distribution pattern, it can be clearly seen that there is tends a radial-centris pattern with the city of Dili as the orientation centre for the West neighbouring districts following the national road, such as: Liquica , Aileu, Ermera to Bobonaro. The influence of the other district city such as Baucau is also seen in some sub-districts, but not as large as the influence of Dili to the West and Southwest.

Figure 4.20 - Settlement Distribution Map



From the description of the general condition of settlements and housing above, it can be concluded that the main challenges faced in the development of the housing sector is low population density and scatter pattern of the current housing locations which are unfavourable for the provision of infrastructure services. The other challenges for the housing sectors are as follows:

- a) Policy framework for spatial plan and building code: lack of urban spatial plan documents as the reference zoning plan, land-use plan, and building regulation on safety and the environment.
- b) Land status issues; security of land tenure is also an important issue for housing in urban areas, especially in Dili. Riots in September 1999 resulted in land conflicts and building ownership to the present. This condition requires the regulation that governs the rights of land ownership through the comprehensive policy and legal status approach to ensure the security for all residents. These efforts are also expected to accelerate the private sector to invest in land property in Timor-Leste.
- c) Regional development issues: increasing of slums area in Dili caused by urbanization. To reduce this situation, economic activities in rural areas must be enabled (decentralization of economic activities from urban to rural areas).
- d) Disparity access between urban and rural : the government is also facing problems in developing basic infrastructure and adequate services in the rural area, since the communities still maintain their traditional lifestyle that tend to form of scatter settlement patterns which is inefficient infrastructure provision.
- e) Programs issues: urban area in Timor-Leste only about 1.3% of the total land area, but it holds 22.3% of the whole population. Furthermore, the urban population is expected to increase approximately 5.0 to 5.2% per year to reach 357,000 by 2015. This condition leads to the domination of informal housing, particularly in Dili, where a total of 18,000 from 20,000 houses have not been planned. The new housing needs in



Timor-Leste are predicted to reach 5,500 per year, which is still not achieved since 2005.

- f) Problems of financing and purchasing power : Timor-Leste is also facing financial problems, on the financial institutions are not established, while the people's purchasing power even to buy a small houses very limited. The poor, low-income and even the majority of middle-income people unable to pay instalments for housing units. The home financing initiative depends entirely on government subsidies.

### 3. Policy Framework

The policy framework of the housing sector is determined by the level of urgency of the problem which is adjusted to the capacity of Timor-Leste governments to implement it. Some points of these policies are as follows:

#### a) Short Term (2011 - 2015)

Short-term policy for the housing sector is addressed to solve urgent problems in the housing sector in a 2-5 years time frame. If the problems are not solved immediately it can lead to further and more complex problems. Some short-term policies are:

- i) Formulation of laws and regulations for the housing sector; the regulations are needed immediately to be used as a reference for all parties (stakeholders) related to the housing sector development.
- ii) The fulfilment of housing needs for veteran independence fighters; the policy is needed immediately to honour the veterans' heroic deeds for the independence of Timor-Leste.
- iii) Immediate establish of financial institutions that can facilitate the provision of mortgages for the common people and government officials.
- iv) Order and inventory land ownership, especially for state own land, which can be used as a state asset and the other public interest.

#### b) Medium-term (2016 - 2020)

- i) Fulfilment of housing needs for government officials (civil and military) with subsidized mortgages (home ownership loan); as an effort to assist government employees with low wages and are unable to purchase in cash must be assisted by financial institutions /banks with low interest (subsidies) and long time period of payment (20 years). This can only be possible if financial institutions /banks already been operation in 2-5 years.
  - ii) Housing development for the general public, through a mortgage; as an effort to fulfil the needs of the public houses it is necessary to develop a variety of housing types (simple, medium, and luxury) in accordance with public demand.
  - iii) Improved environmental quality of the slums in urban areas, with several policies such as : improvement of human settlement , infrastructure, and sanitation.
  - iv) Home improvement assistance policy in the rural area, especially for the traditional and temporary houses with the earth floor (approximately 60% of all households in Timor-Leste), so their condition houses become healthy and comfortable to live.
- c) Long Term (2020 – 2030)

Long-term policy should be directed to restructuring settlements pattern to be more decentralized with the various new economic centres in the rural area. Some policies that can be implemented are:

- i) Opening the new settlement area with the location is not too far from the city centre which is equipped with the basic infrastructure (local road, water supply and electrical) and trade centre
- ii) Opening the new settlement area that are integrated with the people business activities (agriculture, plantation, livestock, or fisheries), with a significant distance from city and district centre since it requires a relatively large area. In the long term this site will become a centre of a new economic zone development in each district as "agropolitan area".

#### 4. Development Strategy

The development strategy of the housing sector has the main goal of implementing the policies determined by the government of Timor-Leste so that the goals of the policies can be achieved. Some points that can be elaborated in the development strategy are:

a) Institutional Development

The restoration of an institution is one of the strategic priority. Without an authorized institution in planning, implementing and supervising, the target of housing development in Timor-Leste is difficult to be achieved. Some strategies relevant with institutional development are: preparation of policies, establish rules and regulations, establishment of the institution, personnel training, and others.

b) Land Status

The development of housing must be supported by the clarity of land ownership. For this reason, a land ownership clarification strategy must be implemented immediately because land ownership is a sensitive and conflict plagued issues. Strategies relevant with this process are: to implement personal approach to residents, provide free of charge program to land certification process, and to arrange adjudication for land public.

c) Financial Support Mechanism Development

The main problem in housing is the people's lack of purchasing power to own a liveable and healthy house. The strategy to solve this problem involves the government, which can establish a special financial institution / bank for the housing sector. Through this financial institution / bank, the government is expected to immediately help the people who do not own homes or fix the homes they have through various financing schemes, such as: grants, interest loan subsidies, cross subsidies for some groups, revolving fund from one group to other groups, another financing schemes.

d) Settlement Development

The main strategies relevant with settlements in Timor-Leste are the efforts of: decreasing slum areas in cities, increase the quality of rural settlements, decrease the flow of urbanization through new integrated settlements, and fulfilment of housing needs for: veterans, civil and military personnel, and general public.

e) Capacity Building

To create an environmentally aware society and a healthy living environment, there is a need for social empowerment and education program through: social campaigns, classical and on job trainings for skill development, and opportunities for jobs in the housing sector.

## 5. Program

To implement the strategies elaborated above, various programs and projects are needed, which are

- a) Preparation of rules and regulation relevant with the housing sector
- b) Establishment and empowerment of housing sector institutions
- c) Clarification of land status
- d) Establishment and development of financial institutions that can support the housing sector
- e) Capacity building for skilled human resources for the housing sector

## 6. Projects

For the short term activities (2-5 years) ahead, the main priority is the construction of houses for veterans (independence fighters of Timor-Leste), which amount to 100 units. The locations of the houses are spread among several districts, but most are cantered on Dili and Baucau. Civil and military personnel housing is spread around the 13 districts. To obtain a favourable location, a temporary master plan for the development of the housing project must be arranged. Various activities/projects related to the housing sector in Timor-Leste are as follows:

Table 4.49 - Program Description, Housing Sector Project &amp; Total Cost

|   | Program  | Project  | Target Finished | Estimated Cost (\$ US) |
|---|--|--|-----------------|------------------------|
| 1 | Preparation of the Rules and Regulations related to the Housing Sector                                 | Formulation of the National Housing Policy for the State of Timor-Leste  | 2010-2011       | 100,000                |
|   |  | Determination Act of Settlement and Housing  | 2010-2011       | 100,000                |
|   |  | Formulation of rules / regulations for the implementation of zoning plans and layout of the building (building code)                             | 2010-2011       | 150,000                |
| 2 | Formation and strengthening of institutions for the development of National Housing                    | Institutional study for the establishment of the organization, the mechanisms of planning, implementation, and supervision of the housing sector | 2010 - 2012     | 150,000                |
|   |  | Training of personnel and related staff planning, implementation, and supervision of the housing sector  | 2010 - 2011     | 200,000                |
| 3 | Solving problems of land ownership status  | Project mediation (approach) to people who have evidence of land rights  | 2010 – 2012     | 500,000                |
|   |  | Mass certification assistance projects (national)  | 2011 - 2015     | 3,250,000              |
| 4 | The establishment and development of financial institutions to support development of national housing | The establishment of financial institutions / specialized housing banks  | 2010 – 2011     | 150,000                |
|   |  | Project assistance for housing soft loans (low interest and long repayment time to 20 years) for government employees                            | 2011-2015       | 6,500,000              |
|   |  | Development project with housing finance system Revolving Fund Scheme for community groups   | 2011-2015       | 650,000                |

|   |   |   |           |             |
|---|---|---|-----------|-------------|
| 5 | Environmental Quality Improvement Program for Settlements, Housing Repair, New Housing and Resettlement | Housing project for veterans of the independence of Timor-Leste fighters  | 2010-2011 | 7,100,000   |
|   |   | Quality improvement project slums areas (slum) in urban areas.  | 2011-2015 | 5,000,000   |
|   |   | Subsidy for home improvement projects for poor families in rural areas (rural)  | 2011-2020 | 6,500,000   |
|   |   | Housing projects (5500 units / year) are scattered throughout the territory of Timor-Leste  | 2011-2020 | 180,125,000 |
|   |   | Project development of new settlements in rural areas with the concept of integrated settlement for: residential, business land, and product marketing area (agropolitan) | 2015-2020 | 65,000,000  |
| 6 | Human Resources Improvement program for the Housing Sector  | To maintain public awareness to have a healthy and comfortable homes  | 2011-2015 | 1,300,000   |
|   |   | Field training project (on the job training) to community groups in terms of building a house (improving skills)  | 2011-2015 | 1,300,000   |
|   |   | Field pilot projects to help increase people's income   | 2011-2015 | 2,600,000   |