



Ministry for Higher Education,
Science and Culture
(MESCC)

FDCH



Human Capital Development Fund
(FDCH)

RESULT OF THE DATA SURVEY OF THE EXISTING **HUMAN RESOURCES** AND MAIN KEY AREAS OF TRAINING



**MANATUTO
MUNICIPALITY**

LD RHE

DATA COLLECTION OF EXISTING
HUMAN RESOURCES

LD RHE REPORT 2018

Result of Data Collection of Existing Human Resources and The Main Key Areas of Training

Municipality of Manatuto

Fundo do Desenvolvimento do Capital Humano (FDCH)
(Human Capital Development Fund – HCDF)

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Through this opportunity we would like to extend our gratitude to:

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Thank you.

MESSAGE FROM THE MINISTER



I am grateful for the honor bestowed on me in this report entitled "Data Collection of Existing Human Resources in Timor-Leste". It is a fundamental work where it provides information pertinent to the formulation of the National Strategic Plan for the Development of Human Resources of the Country. It will contribute to know, understand and strengthen the capacity of the Human Capital Development Fund (FDCH) in terms of identifying the existing human resources and try to bridge the gaps through greater awareness of budgeting based on the country's real needs.

Achieving the goals and targets outlined in the Strategic Plan for National Development 2011-2030 requires a commitment from all. It requires forming partnerships, focusing on areas of greatest need, improving the effectiveness of actions. I am convinced that this report will make a significant contribution to our effort to mobilize resources and engage in partnerships and collaboration with all segments of society in order to achieve the objectives set out efficiently and effectively.

The current social and economic environment characterized by increasing globalization and technological advances requires a society composed of competent and qualified individuals capable of responding to the unpredictability of the market, characteristics of changing contexts and innovation.

The pertinence of this report emerges from the relevance attributed to ongoing training and development in the current context of individual institutions or organizations, societies and individuals. It is in this context that FDCH plays a pivotal role in the development of human resources through training and capacity building to help people to acquire and systematically improve the skills and knowledge needed to carry out their professional functions and, consequently, and institutions or organizations to make the most of their human capital.

In this systematic search to optimize human capacity, training and continuous training of human capital emerge as strategies directly related to the construction of techniques and skilled labor, continuously adjusted to the demands of the surrounding contexts. Human resource development (HRD) is an intentional process necessary for people who are professionally active or who wish to enter the labor market to add value in an increasingly sustainable way to the social fabric of work, contributing to the economic, social and institutional or organizational prosperity of the Parents.

In this sense, it is fundamental that public and private institutions, labor market institutions, and the municipal economic and social system, develop strategies for human resource development so that they can manage their workforce in an organized way and in line with their missions and goals.

The data presented in the report indicate that some specialized training areas of existing human resources remain limited, such as agriculture, construction, hospitality and tourism, the private sector, technical and vocational education and training (TVET) and adult education, especially for women, and workplace training.

The integration of these priority areas into a National Human Development Strategy for Timor-Leste will ensure the development of appropriate government policy responses, civil society desires, educational institution programs, and the needs of business and industry work will be well aligned and work together in a coordinated way to increase the capabilities of all human resources.

It is hoped that this report will become an instrument that should be part of everyone's daily life for those who seek to contribute to the training, education and improvement of the different categories of personnel required, by optimizing opportunities within or outside the country and promoting planning of human resources, namely in relation to the needs of the Municipalities and the Country as a whole.

Finally, to promote equity in attention to human resources training, reduce training inequalities, increase the availability of training actions, guaranteeing universal access to the most affected of social inequalities, gender, race, ethnicity, generation, vulnerable are the challenges posed so that the right ceases to be more declarations and becomes part of the daily life of the Timorese.

Dili, December 2018



Longinhos dos Santos, M.M.

Minister of Higher Education, Science and Culture (MESCC)

INTRODUCTION FROM THE EXECUTIVE SECRETARY OF FDCH



In order to assist the Government in implementing the Policy Based Evidence, the Council of Administration of Human Capital Development Fund (CA-FDCH: acronym in Portuguese language) directed to the Technical Secretariat of Human Capital Development Fund (ST-FDCH: acronym in Portuguese language) in May 2016 to conduct a study throughout the country to identify the number of human resources existence in Timor-Leste.

After sufficient preparation with adequate budget and trained staff, ST-FDCH immediately coordinated with the General Directorate of Statistics of the Ministry of Finance and with the joint work team of the Ministry of State Administration (MAE - acronym in Portuguese language) and the National Program for Village Development team (PNDS-acronym in Portuguese language) in the training of the team of enumerators for each village with a minimum of 5 people out of 452 Village (Suco) in Timor-Leste.

The process of data collection has undergone several challenges due to the geographical area that must be overcome to remote areas throughout Timor-Leste. Residences distanced from each other crossing mountains, rivers and streams from one village to another. As well as the difficulty the team has faced in collecting data, especially in rainy weather and other challenges. Due to the challenges mentioned, the team took a few months to complete and was finally completed in February to March 2017.

In April 2017, the team began the data cleaning process that took 3 to 4 months and ended in the month of August until September 2017, then the data reconciliation was done by the team together with the General Directorate of Statistics of the Ministry of Finance.

Later ST-FDCH Office began to analyze the data and to prepare the report, as a result of this survey, the office saw that it still needed more information, consulting the Municipalities to know better which potentials exist in each Municipality including RAEOA-Oecusse. And what are the aspirations, ideas or suggestions

coming from Youth, Women, Disabled People and all stakeholders presented through discussions in groups running through the country. The Program was held from March to April 2018, due to the budget constraints that was only available at the beginning of the fiscal year of 2018, as well as after coordination between the ST-FDCH and PNDS team and the Municipal Authorities and RAEOA-Oecusse.

In the end, the report was prepared in Tetum as the official language, and translated into Portuguese as well as English.

Finally, let us hope that the data, information and the analysis developed in this report will be useful in common, as this information will be useful to assist the government, the private sector and all parties such as public, private, civil, police and military organizations. The international development partners they can use for appropriate planning and better implementation in Timor-Leste in achieving the National Strategic Development Plan 2011-2030.

My deep appreciation for the attention, collaboration and teamwork with the goal of developing and strengthening human resources in Timor-Leste for the well being of the people and for the contribution of the stability and prosperity of this noble nation.

Dili, December 2018



Isménio Martins da Silva

Secretary of HCDF/ FDCH-MESCC

EXECUTIVE SUMMARY

Justification of the importance of the subject

This report has two complementary lines of work, the first one based on the data collection of human resources existing in each municipality carried out by the Human Capital Development Fund (HCDF/FDCH) and the second, the identification of the natural resources and the economic potential of the municipality, the priority programs related to their potential based on the four pillars of the Municipal Strategic Plan (MSP/PEM) and key human resources that need training in the development of priority programs.

The key to the effective development of the Municipality's human resources is not only identify the natural and economic potential for development and priority areas of training, but also have prior knowledge of human resources and to segment appropriate funds for the needs of human resources development (HRD), ensuring different phases of MSP/PEM to be successfully implemented.

data at the Municipal and Administrative Posts carried out by the Human Capital Development Fund (FDCH) and the second, the identification of natural resources and economic powers of the municipality with related priority programs, based on the 4 pillars of the Municipal Strategic Plan (MSP/PEM) and the key human resources needed for training to develop the same priority programs.

The key to the effective development of the Municipality's human resources is not only to identify natural and economic potential for development and priority areas of training, but also to have prior knowledge of existing human resources and to segment appropriate funds for the needs of identified, ensuring different phases of the MSP/PEM to be implemented successfully.

The formulation of a human resource development strategy requires an integrated and multifaceted understanding of a complexity of subjects such as population demographics, especially the current human resources of the municipality, development the workforce in the public and private sector, vocational education and/training system as well as development, current and future labor market issues including employer and market needs and the tertiary education system

(higher education) and their ability to produce skilled human resources at all levels.

The lack of information on policies, plans, information systems and vocational training, availability, composition, distribution, density, sources of funding, labor market forces and many other aspects related to the development of human resources linked to the economic and natural resources available in the municipality are scarce and are often dispersed through many sources. The integration of these issues into a human resource development strategy for the municipality will ensure the development of appropriate local government (municipal) policy responses, civil society desires, educational institution programs, and the needs of business and industry will be well aligned and work together in a coordinated way to increase the capabilities of all human resources.

The fact that the aforementioned subjects are not sufficiently integrated into a set of human resources development work programs and that there is no comprehensive study on the subject is one of the reasons for this work.

Thus, this work was carried out with the aim of 1) identifying and analyzing the current human resources situation and its distribution in Sub District Administrates, 2) identifying the natural resources and economic potentials and priority programs of the municipality based on the 4 pillars of the Municipality Strategic Plan (PEM); 3) identify key human resources that training need in the development of priority programs; and 4) also try to analyze and compare the existence of the current human resources and the need for training/training required by the municipality based in their priority programs to allocate funding efficiently and effectively.

Methodology

The methodology is used and applied with the following phases: **in the first phase**, the data were collected from individuals aged 17 or over by means of census of the resident population in the Municipality of Manatuto with the completion of a questionnaire, carried out from September 5 to 5 of November 2016 and **in the second phase**, was done through *"Focus Group Discussion-FGD"* held on March 21,

2018 to the Municipal Administrator, Administrative Officers, Directors and also with the participation of representatives of other entities , in order to assess the accuracy of the information given, but also the pertinence of the programs identified as necessary for the development of the human resources of the municipality.

Summary of Result

The data presented here show that the majority of the respondent population in Manatuto Municipality are young people aged 17-36 years. At the level of knowledge, there are a large number of people with no education level (illiterate), followed by those with complete secondary, pre-secondary and basic education.

This dispersion of schooling, together with the rapid growth of the population in the relevant age groups, shows the essence of the challenge faced by the Manatuto Municipality. One aspect of this challenge is the balance between those who have completed general secondary education and academic education are predominant compared to those who have completed vocational technical courses, either at the secondary technical school level or at higher technical level - polytechnics. The ideal balance between academic and technical education is a key issue in the development process. In addition, the data also indicate a very small number of people who had taken part in one of the vocational training courses with a skilled labor prepared for self-employment or institutional strengthening.

Those who had already taken part in one of the short-term professional courses in most of them are generic professional courses geared more towards administrative work and the public servant such as courses in leadership, administration, finance, planning, management and languages, which in practical technical terms do not support the creation of their own jobs (self-employment).

It is further aggravated by a large number of job seekers, including those who have completed their degree program in Computer Science, Management Law, Accounting and Civil Engineering - Civil Construction and more graduates. in other areas (see table 15), without being exploited in the labor market. The work preference of the graduates is in the public sector while the non-graduated have

preference in the non-public sector such as agriculture, domestic work, industrial activity and civil construction.

Analyzing the training preference based on the priority programs (Table 25) with the current human resources (Table 5), the data show that Manatuto Municipality has a high number of graduates in several areas, however it is verified that there are still deficiencies in some specialized areas. In relation to the current human resources, the question is how to take advantage of and employ them. However, it is important to note that there are still serious concerns about quality not only in technical knowledge but also languages skills and this can become a challenges.

Language training activities are intended to provide the beneficiaries with fluency in reference languages and to enable them to be more effective in carrying out their tasks in particular when traveling to work overseas. In this sense, it is important to unite language training with the additional training at postgraduate level directed at the priority technical areas and professional internship programs.

Another challenge demonstrated in the work presented was the existence of a large number of public and private employees including entrepreneurs with very low levels of education. This may possibly imply a lack of productivity and competitiveness in companies or organizations. It is evident that with this very low level of qualification the municipality will not be able to overcome the serious problems that it faces nor the future challenges.

Private sector growth is constrained by skill gaps in the workforce of both employers and workers. The private sector contributes to economic development by generating jobs and income, as well as through investment, new technologies, knowledge transfer and increased productivity. This has been observed in some countries in Asia, where much of the recent success in poverty reduction is due to robust economic growth stimulated by the private sector. In this sense, it is crucial to strengthen the private sector by promoting the development and adequacy of the qualification of workers and employers, with a view to improving their employability and increasing the productivity and competitiveness of the business.

Equipping workers with certain skills will enable them to continue to take advantage of the opportunities for growth expansion in a non-agriculture in the private sector. A high school diploma or higher is increasingly an indicator of employment opportunities in the urban private sector. The municipality identified skills shortages in the following sectors: Information Technology and communication, electronics, health, tourism, aviation, manufacturing, waste treatment and financial services (banks, insurance and securities). It also identified a lack of skills in the following areas: English, nursing, pharmacy, hospitality, pilot training, accounting and auditing, machine operation, component manufacturing and assembly, engineering (design and development), literacy, software engineering and management (decision making, leadership, delegation, motivation). Thus, it is considered that academic ability and professional technical training should be provided for the most crucial areas in the implementation of its priority program as shown in table 25.

Based on the data presented above it becomes evident the need for training and the development of people's skills as a means to provide qualitative and quantitative benefits. It is important to emphasize that skills development can not be seen only as formal technical and vocational education and training. It comprises skills acquired through all levels of education and training, taking place in formal, non-formal and vocational training contexts. It enables individuals in all sectors of the economy to engage fully and productively in livelihoods and to be able to further enhance and adapt their skills to meet new demands and opportunities in the economy and the labor market. Skill development should not be characterized by the source of education or training itself, but by the skills that are acquired through this process.

With regard to people with disabilities, data show that there are quite a large number of people with disabilities and many of them have stopped in primary and secondary education due to various difficulties, and this makes it difficult to get a job, to earn a higher salary than the subsidy received from the government. Employers have some concerns about hiring people with disabilities because they feel they may not have adequate professional qualifications. This issue can be

minimized if there are some inclusive policies such as developing initial and continuing vocational training for people with disabilities and disabled people to enable them to acquire the knowledge and skills necessary to obtain a vocational qualification to help overcome the concerns of employers so that they can have more opportunities and their entry into the labor market is easier.

The data also point out the need to reduce or combat illiteracy by creating opportunities and mobilizing municipal managers to increase literacy provision for all young people, adults and older people who did not have access or stay in elementary education, especially the small business people and medium-sized enterprises and farmers. Education and training for entrepreneurship is also fundamental to encourage creativity and the realization of new local economic initiatives.

Intensive training, in service and/or postgraduate (specialization), should be intensified as key elements for the quality of the human resources currently possessing the Secondary and Bachelor's level of education.

It also reveals the need for a demand-driven secondary-vocational education and demand-driven post secondary technical education area of secondary and post-secondary education.

And finally, in the scope of preparation of human resources for the creation of municipalities, it is important to strengthen the training in the areas of Urbanization and Regional Planning, Planning and Territorial Planning.

Conclusion and Recommendations

Based on the data presented and discussed above, it is concluded that, in developing human capital resources and achieving sustainable development in the future, the Manatuto Municipality needs to pay more attention to the development opportunities identified in the Municipality Development Plan (MDP) and to the following five dimensions : **1) economic** (increase efficiency of the production system), **2) social** (improvement of the levels of income distribution of the population), **3) ecological** (preservation of the environment), **4) spatial** (balance

in distribution and occupation of population rural and urban) and **5) cultural** (respect to the ways of thinking and acting of society, focusing on the construction of an environmental consciousness linked to consumption).

According to the results obtained, it is considered pertinent to conclude and recommend the following:

- a) The commitment to education should give priority to technical and professional training on academic, focusing more on the opening of vocational training centers (or Polytechnic institutes) to the detriment of the opening of more universities.
- b) Complementary to academic training, the creation of specialization courses can increase the employability and professional capacity of those who finish the formal education.

Based on the data analyzed, we reinforce the need to train other areas where there are notable shortages of qualified human resources and areas of greater importance according to the priority programs found in table 25.

Most respondents wish to work in the non-public (private) sector than in the public sector. The desire for the private sector was slightly higher among young people aged 17-36 and the preference for work is mainly in the area of agriculture, household chores, industry and construction.

The most unemployed graduates and postgraduates are in the areas of Computer Engineering, Management, Civil Engineering – Construction, Mathematic, Oil Engineering, management and more in other areas (table 15). Intensive training, in service and postgraduate (specialization), should be intensified as key elements for the quality of the human resources currently possessing the Secondary and Bachelor's level of education.

There are quite a large number of people with disabilities who are job-poor and have inadequate professional qualifications, or very limited practical professional knowledge. It is recommended the need to develop initial and continuing vocational training for people with disabilities and incapacity, especially gestural training for

those with visual and hearing disabilities, so that they can have more opportunities in the labor market.

To complete this general conclusion, we highlight five main points:

- 1) Education and training opportunities remain limited in some of the major areas highlighted by SDP, such as agriculture, construction and hospitality and tourism. It should focus more focused on human capital development:
 - **Agriculture** is the heart of the municipality's economy and critical to the well-being of its people. A sustainable agricultural development path will require greater investment in building innovation and skills on small-scale farms through many routes: training and technology transfer; a strong expansion of the number and skills of extension workers; through better education and training for members of rural families, including women; and increased investment in vocational and tertiary education programs Research and Development (R&D) centers, closely related to the needs of agriculture in the Manatuto municipality.
 - **Construction** with a limited infrastructure inherited from the Indonesian government period and the continuous needs to consolidate the infrastructures namely the roads thus offering the population of the benefited region, better conditions of transport, easy access and allows local farmers to transport their products to the market quickly and effectively.
 - **Tourism** in Manatuto Municipality remains a future opportunity, but taking advantage of this opportunity will require the development of a trained workforce, from the entry-level team to senior managers, as well as investment in R & D, development and policy planning and Capacity planning.
- 2) **Private sector** - Survey data shows that private sector growth is constrained by skills gaps in the workforce both employers and workers. In this regard, it is crucial to strengthen the private sector by promoting the development and adequacy of the qualification of workers and employers with a view to improving their employability and increasing the productivity and competitiveness of the business.

- 3) **Technical and vocational education and training (TVET).** FDCH's study shows a lower level of TVET qualifications than university qualifications in the municipality, and increased investment in the expansion of TVET should be a high priority. This expansion should cover technical secondary schools, the polytechnic system, and the community-based non-formal vocational training system. In doing so, it is important that the boundary between academic and technical education remains fluid, with easy articulation between the two areas.
- 4) **Adult education** (literacy for all young people, adults and the elderly), especially for women, and on-the-job training. In our view, these three areas are of considerable importance for the future. In particular, the increasing role of women, especially in agriculture, and with a higher skill level due to improved training, may contribute to household and national income growth, and to more jobs in general.
- 5) In the preparation of Human Resources for the creation of the municipality (decentralization process) it is important to strengthen the training in the areas of Urbanization and Regional Planning, Planning and Territorial Planning.
- 6) It also reveals the need for a demand-driven secondary-vocational education and demand-driven post secondary technical education area-level provision of secondary and post-secondary education.

PART A: INTRODUCTION, OBJECTIVES AND METHODOLOGY

1. Introduction, Objectives and Methodology

1.1. General Introduction

Manatuto Municipality is located in the central zone of the country, in the lap of mountains between the central massif punctuated by Matebian to the West and the Lost World to the East, to the north the Sea of Wetar and to the South the Sea of Timor. Manatuto population is essentially young, being 58% under 25 years, which contributes to strong pressure on education, health, vocational training and the labor market systems. The individual proportion is under 17 years 45.3%, 17-64 years of 47.6%, and 7.1% over 64 years, with an average life expectancy of 57 years (Census, 2015).

In 2017, the population was estimated at 46 619 inhabitants, with 23,752 men and 22,867 women, one of the counties with the lowest demographic density in the country and the lowest number of inhabitants. With a lower urban concentration of 3703 (7.9%) and a density of 26.1 per km², its demographic growth rate was estimated at 1.74 per year in the period from 2010 to 2015.

The dominant religion in the territory of Manatuto Municipality is the Catholic religion being the languages with well defined areas are spoken four main languages, : in the north speak *galolen*, in the center-east is *habun*, in the center-west is *idaté* and in the south is *tétun*. In addition to these four languages, in the mountains of Lacló in Ilimano above all speak *mambae* and *dadu'a*, while in Cairui speak *midiki*.

Sub Districts, villages and Sub Villages

Manatuto Municipality is divided into 6 Sub Districts, 29 Villages and 99 Sub Villages dispersed throughout the territory according to the table below:

Sub District's Area	
Sub District's Area	Surface (Km ²)
Lacló	368,74
Laclubar	226,09
Laleia	392,00
Manatuto Vila	271,38

Sub District's Area	
Natarbora/Barique	397,40
Soibada	130,34
Total	1785,95

Sub Districts, Villages and Number of Sub Villages

Sub Districts Administrations	Number of Villages	Number of Sub Villages (hamlets/Aldeia)
Laclo	4	16
Laclubar	5	25
Laleia	3	13
Manatuto Vila	6	20
Natarbora/Barique	5	11
Soibada	5	10

Source: Census, 2015

Climate, Relief and Hidrography

The description of the climatic and environmental situation presented here is based on the classification of Schmidt and Ferguson, we have the following climatic areas:

Thus, Manatuto municipality can distinguish in 4 types of climate:

- a) Climate Type C, mountainous region of Laclubar and Soibada - climate of greater precipitation of Timor-Leste, with monthly values that can exceed 400mm between December and February and less than 60 mm between June and September. Average temperatures fluctuate very little during the year (19° to 21°),
- b) Type D climate, east and south central regions, including areas of Manatuto, Soibada and Laclubar Sub District. This is the climatic type of greatest extension in the Municipality - Humid climate with values of monthly precipitation lower than 260mm, with period of greater precipitation

- between December and March. Five dry months with precipitation less than 100mm from June to November. The temperature has a low amplitude, varying between 22° in July-August and 26° in March.
- c) Climate Type E, west and north center; Lacló, Manatuto and Laleia - Dry climate, with average monthly rainfall less than 200mm. Only 5 months with precipitation exceeding 100mm. The temperatures oscillate between 23° and 26°, demonstrating a low annual thermal amplitude;
 - d) Climate Type F, North Region. North coast and Lacló, Manatuto and Laleia valleys - Very dry climate, with precipitation not exceeding 150mm. High number of dry months (eight). High temperatures throughout the year ranging from 27 June to 30 November.

The relief of Manatuto is characteristically mountainous, being nevertheless a neck in the central mountainous cordilheria that runs east-west. With lower altitudes, the central mountain range, allows to be constituted like a passage linking the region north of the country to the plains of the south. The north coast presents either high and steep coasts, namely between Dili and Manatuto (Ilimano and Cabo Subão), or from the planicies like those of the Lacló valley and towards Laleia, being the southern region of the municipality characterized by extensive planicies.

The main water courses are *Mota Lacló* and *Ribeira de Laleia*. The Lacló River is the 2nd largest watercourse in Timor-Leste and its wide valley marks the landscape of the northwest region of the municipality.

Economic Potential and Natural Resources for the Development of the Manatuto Municipality:

The strategic plan of the Manatuto Municipality aims to promote the progress and sustainable development of the territory, defining strategies and guidelines, creating conditions of competitiveness, innovation and modernity, ensuring the public interest through an efficient, transparent and rigorous management and allocation of resources.

The strategic plan identifies five (5) potential areas of economic development to be carried out, with a view to implementing the decentralization process and the creation of the Manatuto Municipality. The potential areas of economic development identified in the map depicted in the figure below.

- 1) **Agriculture** - Lacló river valley, Manatuto, Laleia and Natarbora;
- 2) **Forests** - Fatumaquerec, Manufahi, Manelima, Orlalan, Leihat, Barique / Natarbora, Manehat and Abat Oan);
- 3) **Protected Areas** - Ilimano - Kuri, Funar-Manelima, Diatuto, Abat Oan-Barique and Foz do Laleia-Kampung Baru;
- 4) **Tourism Areas** - Behau-Ilimano Coast, Mte Maubere-Diatuto, Laleia Landscape Area and South Coast Beaches;
- 5) **Industry** - Carlilo-Aiteas and Lifau-Laleia.

Economic Activities and Natural Resources

a). Tourism

The tourism of a beginner way goes in Manatuto manifesting some expression in face of its immense potentialities and beautiful landscape of the region, in special, given the proximity of Díli, the coastal zone of Behau-Ilimano was chosen like one of the best for the sport practice diving, being much sought after by the accredited divers and diving schools based in the capital for the practice of this modality. Likewise, Praia de Dólar, with its white and soft sands, its translucent waters where you can observe beautiful species of coral by the practice of snorkeling, is one of the favorite and most popular national beaches. On this beach, tourists (visitors) can find facilities and support structures, which make an important contribution to the well-being of visitors.

The local benefits resulting from tourism are verified through indirect impacts, ie through suppliers in the tourist industry (such as food, handicrafts, etc.). This is particularly evident in terms of employment.

The tourism sector has been gaining significant importance in recent years in Manatuto, evidencing a tendency to become a strategic sector that could contribute to boost the economy of the municipality.

b). Trade

The Trade in Manatuto occupies a significant part of the population especially in Manatuto town. The roadside markets and the marketing of agriculture and fishing products, as well as local crafts, are some of the manifestations of this activity.

Production of the main crops in Manatuto compared to the national level.

Production	Manatuto	National
Rice	3026	71541
Corn	4607	142361
Manioc	4271	130670
Sweet potato	3628	112425
Vegetables	3991	106435
Beans	3316	103034
Coffee	2918	76848
Coconuts	3530	103334
Fruits (permanent)	4005	100716
Fruit (temporary)	3868	100881
Wood trees	2213	76304
Others	1277	48504

Although Manatuto is one of the largest municipal territories in Timor-Leste, the contribution to the national production of the main crops is reduced. This fact highlights the enormous agricultural potential of the territory that is still to be explored and which may in the future make an important contribution to the satisfaction of the national consumption.

Manatuto has important production, such as rice, found in Manatuto Town and Barique, corn in Natarbora, and coffee in the region of Laclubar, and its potential is very significant.

c). Forest

Forests play a key role for the municipality of Manatuto, providing useful resources for subsistence of families (especially fruit, firewood and coal) and can be a great outlet for precious timber exports.

According to data from the Ministry of Agriculture, the forests in Manatuto occupy 24,319 Hectares. Degradation of forest cover gave rise to areas of herbaceous and arboreal savanna and prairie cover, such as that in the Laclubar region and the steppes in the driest region between Manatuto and Laleia. The forests of commercial value that occupy an area of 8,100 Hectares, are mainly in the central mountainous region and the slopes of the south coast. Among the species of commercial value and economic interest are aiteka, ai-naa, nitas, kiaar, mahoni. The problems that give rise to the degradation of existing forests are shifting agriculture, firewood harvesting, forest fire, indiscriminate logging, lack of policies and regulations, and lack of forestry information.

d). Livestock

Livestock farming is a complementary activity of agriculture and constitutes an important resource for the populations and source of animal proteins, being one of the municipalities of great cattle and buffalo production.

Almost all rural families are dedicated to the raising of chickens, pigs, goats, and about 1/3 have cattle and buffaloes. Livestock farming is characterized by family exploitation and is an important complement to household income.

e). Fishing

The fishing activity is of particular importance in the Ilimano and Manatuto Vila areas, with important fish resources identified. Due to its geographic location, the Municipality of Manatuto is located between the Wetar Sea (*Tasi Feto*) and the south coast of the Timor Sea (*Tasi Mane*), the fishing activity should be developed as a strategic sector for the economic development of the municipality, mainly as

an occasional or even complementary activity of agriculture and livestock. Nevertheless, the municipality has not fully exploited its fishing potential.

f). Mineral Resources

In the municipality of Manatuto there are important deposits of several minerals of great economic value - Petroleum (Pualaca and Cribas), Ouro (Fatumakerek-Soi), Marble (Ilimano), Chromium (Fatumakerek), Clays (Beady), Magnesium (Laleia), Zinc (Laleia), Gypsum (Laleia), Iron (Behedan) and Ornamental Stones (Behadic), Salt (Balak).

Anticipating the implementation of the decentralization process and the creation of the municipality, it was identified as the main challenge of the economy: increasing the competitiveness of the economy through diversification of the economy; bets on the poles of development; investment in human capital, in infrastructure and in research and innovation. The challenge is also the need to develop 4 fundamental pillars, namely:

- 1) Human capital development (market-oriented training, institution and expansion of vocational education and improvement of health and social protection standards).
- 2) Development of production-based infrastructures (infrastructure investment and planning: industrial parks, EEZs, aquaparkes, thermal power stations, roads, ports, definition of housing areas and State reserves).
- 3) Research, innovation and technological development (creation of specialized R & D centers) in the following areas: agriculture, livestock and fisheries, energy, mineral resources, water resources management and Information and Communication Technology (ICT).
- 4) Articulation and institutional coordination (improvement of public institutions, improvement of coordination and intersectoral coordination, reform of legislation and institution building that serves the industrialization strategy – ex. Development Bank).

In order to materialize the challenges inherent in the priority areas of economic development, we identified two main instruments: (1) private sector development, with an emphasis on mobilizing resources for investment in the development of small and medium-sized enterprises; and (2) mechanisms for financing public investment. For the development of the Private Sector are considered crucial factors to create a business environment favorable to the municipal private sector and the mobilization of resources for private investment. Developing financial instruments that improve funding conditions and facilitate access to municipal private sector financing is essential.

In this context, the development of human resources in public and private sector institutions is indispensable in increasingly knowledge-based and globalized economies of the world (Analoui, 2007).

It is imperative to build local capacities of Sub District Administrations as the vanguard of the municipal strategic development agenda. The lack of necessary skills and well-run public and private institutions for long-term sustainable growth is a priority to be included in all development activities in Manatuto because of their implications for improving governance and development management.

Given the importance of human resources as an engine of economic development, it is fundamental and strategic to identify priority areas for training and the number of people in the public and private sector. In this sense it is necessary to make a survey of existing human resources data at the municipal level.

The key to the effective development of human resources should not only identify priority training areas but also prior knowledge of existing human resources and segmentation of funds appropriate to the identified HRD needs, ensuring different phases of the strategic development plan to be successfully implemented in the future.

The fact that there is not yet a human resources census in the municipality of Manatuto **is one of the reasons for this work.**

1.2. Objectives

The overall objective of this study is to identify and analyze the current human resources situation and its distribution throughout the territory. Some specific objectives were stipulated in order to achieve this.

1. Describe the current situation of the municipality's human resources and each Sub District Administration;
2. Inform the number of graduates seeking work or unemployed;
3. Promote the planning of human resources, particularly with regard to the needs of the Municipality;
4. Contribute to the training and improvement of different categories of personnel, through the optimization of opportunities inside and outside the country;
5. Strengthen cooperation between the public and private sectors and professional associations;
6. Promote an efficient allocation of FDCH funding for human resources development programs in priority areas in the coming years;
7. Identify strategic occupations and strategic areas for training; and
8. Identify economic potential, natural resources and related priority programs.

Thus, through the achievement of the objectives, it is intended to obtain relevant results that will strengthen and clarify the issue under study.

1.3. Methodology

The research methodology that supports the theme developed basically from a comprehensive analysis of primary data, and was essentially focused on two vectors of the quantitative and qualitative methodological approach. The first, the data were collected from individuals aged 17 years or over through the census of

the resident population in the Municipality of Manatuto with the completion of a questionnaire, conducted between September 5 to November 5, 2016 and the second was done through the Focus Group Discussion (FGD) held on March 21, 2018.

The population census is the only source of information on the life situation of the population in administrative posts and villages. The census produces information essential for the definition of public policies of the state at the level of administrative posts and for decision-making in relation to the investment, whether they come from private initiative or any level of government.

The data in the questionnaires collected were complemented with the FGD method with discussion questions (Annex 1) based on the 4 development pillars according to the National Development Strategic Plan (PEDN 2011-2030), to Municipal Administrator, Administrative Officers, Directors (list of participants in Annex 2), in order to assess the accuracy of the information given, but also the relevance of the programs identified as necessary for the development of the municipality's human resources.

To simplify the analysis, we also collected additional secondary data for the study. The documentary source was made through the review of several documents related to the development of human resources and decentralization. The primary data collected based on the instruments answered by the respondents were tabulated and analyzed statistically, as well as the secondary data collected from the documentation analysis. The data were treated with specialized CS-Pro software for this area.

PART B: ANALYSIS AND RESULT FOUND

This part of the report intends to analyze the results of the FDCH survey and other relevant data and elaborate its implications for the development of the human resources strategy of the Manatuto Municipality, continues in four sections.

Section 1 is mainly based on the FDCH survey and census statistical data from 2010 and 2015 to analyze the current human capital situation of Manatuto Municipality in various dimensions as a basis for the development of a human resources strategy.

Section 2 starts from the four pillars of the municipality's Strategic Development Plan, describing the priority programs and the main training areas.

Section 3 briefly discusses and analyzes the data presented here.

Section 4 provides conclusions and recommendations.

2. Understandin the Human Resources of the Manatuto Municipality

2.1. Presentation and Analysis of Data

This section briefly reviews data on the level of human resources in Manatuto County and its distribution to Sub District Administration , as well as providing a basis for human resource strategy decisions. The main source of information presented here is the results of the FDCH survey and statistical data from the Directorate General of Statistics (DGE-official acronym in Portuguese Language).

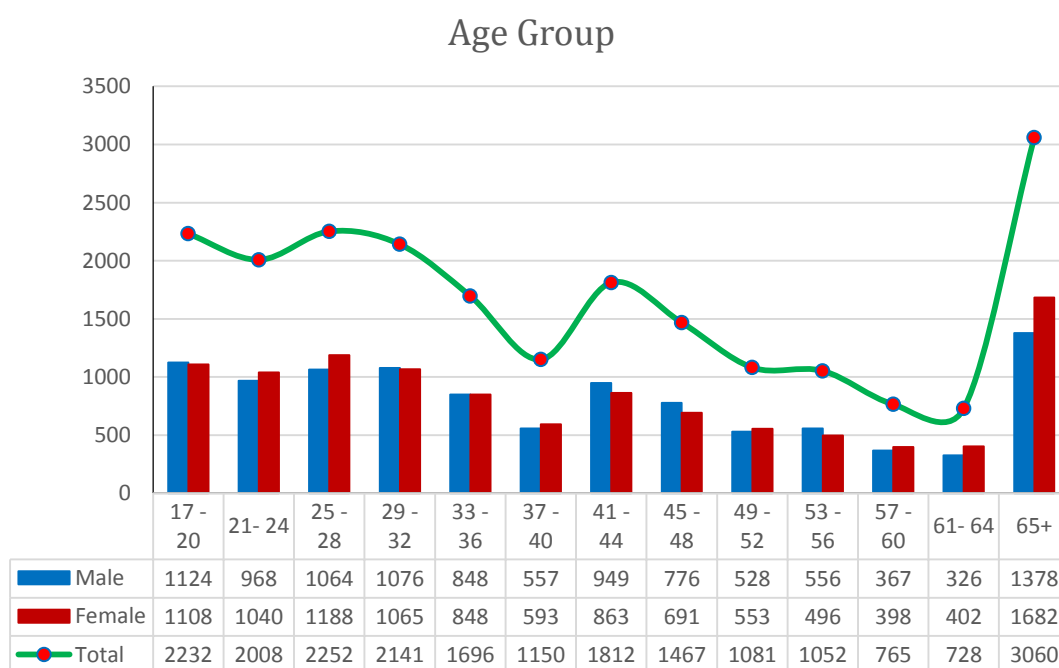
2.2. Profile of Respondents

The first part of the collection tool outlined the profile of the respondents and, as shown below, the results were represented in percentage graphs. Parallel to the graphical presentation of these results an analysis of the obtained data is made, aiming to reach the objectives already listed initially.

The survey involved 21,444 respondents, of which 49% are male and 51% female. The other aspects of the profile are arranged in the graphs below.

Most of them are between 17 and 44 years of age in both sexes, representing 62%, followed by the age group from 45 to 64 years old, with 23.8% of those surveyed and 14.3% with more than 65 years. The female sex is the largest number in the age group between 17 - 40 years old (Figure 1).

Figure 1 . Distribution of respondents by age group and by sex



2.3. People with Disability

Table 1 presents the evaluation distribution of the existence of people with disabilities in the Municipality of Manatuto. In the evaluation of the existence of people with disabilities, a total of 469 respondents corresponded to 2.2% of the total number of respondents distributed by 6 Sub District Administrations (table 1):

Table 1. Distribution of existence disabled of people disability

Sub District Administrations	Have Deficiency?		TOTAL
	YES	NO	
Barique	107	2,515	2,622
Lacló	89	3,034	3,123
Laclubar	64	5,165	5,229
Laleia	97	2,490	2,587
Manatuto Vila	61	6,524	6,585

Sub District Administrations	Have Deficiency?		TOTAL
	YES	NO	
Soibada	51	1,247	1,298
Manatuto	469	20,975	21,444
Percentage (%)	2,2	97,8	100,0

The highest number of people with disability was registered in the Sub District Administration of Barique and Laleia, but the differences are not significant in relation to the other Sub District Administration (Table 2).

Table 2. Distribution of the people with disability by Sub District Administrations

Sub District Administrations	Frequency	Percentage (%)
Barique	107	23
Lacló	89	19
Laclubar	64	14
Laleia	97	21
Manatuto Vila	61	13
Soibada	51	11
Total	469	100

Among of the 469 people with disability, the main difficulties were related to physical mobility (39.4%), vision or eyes (32%), hearing impairment (11.7%), psychosocial or mental (16.6%) and cognitive (0.4%) (Table 3).

Table 3. Distribution of the people with disability by type of disability and by Sub District Administration

Sub District Administrations	Type of disability					Total
	Physics/ Mobility	View	Deaf / Mute	Psychosocial/ Mental	Cognitive / intellectual	
Barique	33	46	10	17	-	106
Lacló	59	10	9	10	1	89
Laclubar	28	13	9	16	-	66
Laleia	28	43	10	15	1	97
Manatuto Vila	30	10	11	10	-	61
Soibada	7	28	6	10	-	51
Total	185	150	55	78	2	470

2.4. Education Level

As for the level of education of illiterate respondents, adult literacy and incomplete primary education account for 47.4% of all respondents. Basic (primary) and pre-secondary education accounts for 26.5% and secondary education account for 21.2%. Vocational Education Courses and other levels of education occupy 0.9% and 1.1%, respectively. At the tertiary or higher level, 3.0% of the respondents have the level of higher education (Table 4).

Among of these 652 (3.0%) of respondents, 71.6% have undergraduate degrees followed by Diploma III or Bachelor Degree 21.6%, Master Degree (2.7%), Diploma I (2.6%), and other academic levels have a percentage of less than 2% (Table 4).

Table 4. Distribution by level of education and by Sub District Administration

Degree of Education/ Level of Education	MANATUTO	Barique	Lacló	Laclubar	Laleia	Manatuto	Soibada
Can not read/write	8,454	887	1,341	2,792	707	2,260	467
Do not read/write (did not finish primary School)	1,696	173	416	482	150	345	130
Sub Total	10,150	1,060	1,757	3,274	857	2,605	597
Primary	2,648	325	513	709	284	621	196
Pre-Secondary	3,037	459	422	581	344	1,022	209
Secondary	4,541	375	500	697	799	1,861	309
Technical Vocational (High) School	188	61	5	31	22	67	2
Others	99	7	7	10	32	34	9
Sub Total	10,513	1,227	1,447	2,028	1,481	3,605	725
1 st Cycle (1 st class-4 th class)	111	-	3	15	28	54	11
2 nd Cycle (1 st Year, 2 nd Year)	13	-	1	-	3	5	4
3 rd Cycle (3 rd Year-9 th Year/3 rd Year Up)	5	-	-	-	1	2	2
Sub Total	129	-	4	15	32	61	17
DI	17	2	2	7	1	5	-
DII	15	3	6	-	1	4	1
DIII	141	13	25	13	16	63	11
DIV	4	1	-	-	-	3	-
Bachelor's Degree (S1)	467	52	32	33	116	214	20
Master (S2)	7	-	-	1	-	5	1

Degree of Education/ Level of Education	MANATUTO	Barique	Lacló	Laclubar	Laleia	Manatuto	Soibada
PhD (S3)	1	-	-	-	-	1	-
Sub Total	652	71	65	54	134	295	33
Total	21,444	2,358	3,273	5,371	2,504	6,566	1,372

Regarding the distribution of the knowledge of the respondents by study area (study program) and by administrative post, of the 652 who hold the higher degree only 364 (55.8%) answered this question. The details given can be seen in Table 5, below.

Table 5. Distribution of education level of respondents by study program and by Sub District Administration

Program Study	Education Level							Total	Sex	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master (S2)	PhD (S3)		Male	Female
Total	12	7	78	3	258	5	1	364	226	138
Medicine – Clinical Medicine (General Medicine)	-	-	1	-	21	-	1	23	12	11
Civil Engineering – Civil Construction	-	-	3	-	13	1	-	17	15	2
Nursing	-	-	1-	-	7	-	-	17	6	11
Public Health	1	-	3	-	12	-	-	16	9	7
Management	-	-	3	1	12	-	-	16	10	6
Computer Technology Engineering (Computer)	-	-	3	-	11	-	-	14	8	6
Mathematics	-	1	7	-	4	-	-	12	7	5
Law	-	-	-	-	12	-	-	12	10	2
Public Law	-	-	-	-	11	-	-	11	7	4
Teaching Biology	-	1	2	-	8	-	-	11	3	8
Engineering Architecture	-	-	1	-	9	-	-	10	9	1
English Language	-	-	-	-	8	1	-	9	8	1
Real Estate Management	-	-	2	-	7	-	-	9	7	2
Education	-	-	6	-	2	-	-	8	5	3
Accounting	-	-	1	-	7	-	-	8	4	4
Mathematics of Teaching	-	-	1	-	7	-	-	8	5	3
Mining Engineering	-	-	-	-	6	1	-	7	3	4
Economy	-	1	1	-	5	-	-	7	4	3

Program Study	Education Level							Total	Sex	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master (S2)	PhD (S3)		Male	Female
Midwife	4	-	3	-	-	-	-	7	1	6
Aquaculture	-	-	-	-	7	-	-	7	7	-
Physics of Teaching	-	-	-	-	7	-	-	7	3	4
Teacher Training	1	-	4	-	2	-	-	7	4	3
International, bilateral and multilateral realations	-	-	1	-	4	-	-	5	3	2
Agronomy	-	-	-	-	4	-	-	4	2	2
Agricultural Engineering	-	-	-	-	4	-	-	4	4	-
Sociology	-	-	1	-	3	-	-	4	3	1
Portuguese Language	1	-	2	-	1	-	-	4	4	-
Geology	-	-	-	-	4	-	-	4	2	2
Mechanical Engineer	-	-	1	-	3	-	-	4	4	-
Pharmacy	1	-	2	-	1	-	-	4	3	1
Tourism and Hospitality	-	-	2	-	2	-	-	4	-	4
Sociology of Education	-	1	-	-	3	-	-	4	4	-
Physics	2	-	1	-	-	-	-	3	1	2
Management	1	-	-	-	2	-	-	3	2	1
Philosophy	-	-	-	-	2	1	-	3	3	-
Nutrition	-	-	1	1	1	-	-	3	2	1
Food Technology	-	-	-	-	3	-	-	3	2	1
Human Resource Management	-	-	-	-	2	1	-	3	2	1

Program Study	Education Level							Total	Sex	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master (S2)	PhD (S3)		Male	Female
Economics of Finance/Financial Management – Banking Economics	-	-	-	-	3	-	-	3	2	1
Computer Management	-	-	1	-	2	-	-	3	1	2
Teaching Chemistry	-	-	-	-	3	-	-	3	2	1
Governmental Sciences	-	-	2	1	-	-	-	3	2	1
Catechism	-	1	1	-	1	-	-	3	1	2
Geotechnical Engineering	-	-	-	-	2	-	-	2	1	1
Engineering Ore Treatment	-	-	-	-	2	-	-	2	1	1
Agricultural Social Economy	-	-	1	-	1	-	-	2	2	-
History and Geography	-	-	2	-	-	-	-	2	1	1
Political Science	-	-	1	-	1	-	-	2	2	-
Geodesy	-	-	-	-	2	-	-	2	-	2
Physical Education / Sports Education	-	-	1	-	1	-	-	2	1	1
Agro-business	-	-	-	-	2	-	-	2	1	1
Technology and Use of Forest Products	-	-	-	-	2	-	-	2	2	-
Public Policy	-	-	1	-	1	-	-	2	1	1
Education Pre-Primary and Primary	-	1	-	-	1	-	-	2	1	1
Chemistry	-	-	-	-	1	-	-	1	-	1
Geosciences	-	-	-	-	1	-	-	1	1	-
Pharmacology	-	-	-	-	1	-	-	1	-	1

Program Study	Education Level							Total	Sex	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master (S2)	PhD (S3)		Male	Female
Electrical Engineering	-	-	-	-	1	-	-	1	1	-
Mechanical Engineering	-	-	-	-	1	-	-	1	1	-
Clinical Analysis	1	-	-	-	-	-	-	1	-	1
Specialist in Gastroenterology Surgery	-	-	-	-	1	-	-	1	1	-
Psychology	-	-	-	-	1	-	-	1	-	1
Theology	-	-	1	-	-	-	-	1	-	1
Applied Linguistics	-	-	1	-	-	-	-	1	1	-
Indonesians Language	-	-	-	-	1	-	-	1	1	-
Religious Career	-	1	-	-	-	-	-	1	-	1
Chemical Engineer	-	-	-	-	1	-	-	1	-	1
Physiotherapy and Occupational Therapy	-	-	1	-	-	-	-	1	1	-
Environmental Health	-	-	1	-	-	-	-	1	1	-
Soil Science	-	-	1	-	-	-	-	1	1	-
Fishing Engineering	-	-	-	-	1	-	-	1	1	-
Gastronomic Science	-	-	-	-	1	-	-	1	1	-
Public Administration	-	-	-	-	1	-	-	1	1	-
Development Study	-	-	-	-	1	-	-	1	1	-
Economy – Cooperative – Market	-	-	-	-	1	-	-	1	1	-
Moral Theology	-	-	-	-	1	-	-	1	1	-
Others	-	-	1	-	2	-	-	3	2	1

Program Study	Education Level							Total	Sex	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master (S2)	PhD (S3)		Male	Female
Barique										
Total	2	1	11	-	32	-	-	46	34	12
Aquaculture	-	-	-	-	5	-	-	5	5	-
Sociology	-	-	1	-	3	-	-	4	3	1
Medicine – Clinical Medicine (General Medicine)	-	-	-	-	3	-	-	3	3	-
Real Estate Management	-	-	1	-	2	-	-	3	2	1
Sociology of Education	-	1	-	-	2	-	-	3	3	-
Civil Engineering – Civil Construction	-	-	1	-	1	-	-	2	1	1
Education	-	-	2	-	-	-	-	2	2	-
Public Health	1	-	-	-	1	-	-	2	1	1
Food Technology	-	-	-	-	2	-	-	2	2	-
Management	-	-	-	-	2	-	-	2	2	-
Biology of Education	-	-	-	-	2	-	-	2	-	2
Mathematics	-	-	1	-	-	-	-	1	1	-
Agronomy	-	-	-	-	1	-	-	1	1	-
Agricultural Social Economy	-	-	-	-	1	-	-	1	1	-
Law	-	-	-	-	1	-	-	1	1	-
History and Geography	-	-	1	-	-	-	-	1	1	-
Applied Linguistics	-	-	1	-	-	-	-	1	1	-
Physical Education/Sports Education	-	-	1	-	-	-	-	1	-	1

Program Study	Education Level							Total	Sex	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master (S2)	PhD (S3)		Male	Female
Nursing	-	-	1	-	-	-	-	1	-	1
Nutrition	-	-	1	-	-	-	-	1	1	-
Midwife	1	-	-	-	-	-	-	1	-	1
Fishing Engineering	-	-	-	-	1	-	-	1	1	-
Public Law	-	-	-	-	1	-	-	1	1	-
Accounting	-	-	-	-	1	-	-	1	-	1
Human Resource Management	-	-	-	-	1	-	-	1	-	1
Mathematics of Teaching	-	-	-	-	1	-	-	1	-	1
Education/Pre-Primary and Primary	-	-	-	-	1	-	-	1	1	-
Lacó										
Total	1	2	13	-	13	-	-	29	18	11
Nursing	-	-	2	-	1	-	-	3	2	1
Public Health	-	-	-	-	3	-	-	3	1	2
Teacher Training	-	-	3	-	-	-	-	3	3	-
Civil Engineering – Civil Construction	-	-	-	-	2	-	-	2	2	-
Portuguese Language	1	-	-	-	1	-	-	2	2	-
Agronomy	-	-	-	-	1	-	-	1	-	1
Law	-	-	-	-	1	-	-	1	-	1
Philosophy	-	-	-	-	1	-	-	1	1	-
History and Geography	-	-	1	-	-	-	-	1	-	1
Education	-	-	1	-	-	-	-	1	1	-

Program Study	Education Level							Total	Sex	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master (S2)	PhD (S3)		Male	Female
Theology	-	-	1	-	-	-	-	1	-	1
Religious Career	-	1	-	-	-	-	-	1	-	1
Geodesy	-	-	-	-	1	-	-	1	-	1
Mechanical Engineering	-	-	1	-	-	-	-	1	1	-
Pharmacy	-	-	1	-	-	-	-	1	1	-
Phisiotherapy and Accupational Therapy	-	-	1	-	-	-	-	1	1	-
Management	-	-	1	-	-	-	-	1	-	1
Human Resource Management	-	-	-	-	1	-	-	1	1	-
International, Bilateral and Multinateral Relations	-	-	-	-	1	-	-	1	1	-
Education Pre-primary and primary	-	1	-	-	-	-	-	1	-	1
Others	-	-	1	-	-	-	-	1	1	-
Laclubar										
Total	5	-	8	-	16	1	-	30	19	11
Medicine – Medical Practice (General Medicine)	-	-	1	-	4	-	-	5	3	2
Physics	2	-	-	-	-	-	-	2	-	2
Law	-	-	-	-	2	-	-	2	2	-
Nursing	-	-	1	-	1	-	-	2	1	1

Program Study	Education Level							Total	Sex	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master (S2)	PhD (S3)		Male	Female
International, Bilateral and Multilateral Relations	-	-	1	-	1	-	-	2	1	1
Mathematics	-	-	1	-	-	-	-	1	1	-
Mining Engineering	-	-	-	-	-	1	-	1	1	-
Agricultural Social Economy	-	-	1	-	-	-	-	1	1	-
Management	-	-	-	-	1	-	-	1	1	-
Education	-	-	1	-	-	-	-	1	1	-
Portuguese Language	-	-	1	-	-	-	-	1	1	-
English Language	-	-	-	-	1	-	-	1	1	-
Indonesian Language	-	-	-	-	1	-	-	1	1	-
Pharmacy	1	-	-	-	-	-	-	1	-	1
Midwife	1	-	-	-	-	-	-	1	-	1
Public Law	-	-	-	-	1	-	-	1	1	-
Computer Management	-	-	1	-	-	-	-	1	1	-
Pedagogical Biology	-	-	-	-	1	-	-	1	-	1
Physics of Teaching	-	-	-	-	1	-	-	1	1	-
Teaching Chemistry	-	-	-	-	1	-	-	1	1	-
Catechism	-	-	-	-	1	-	-	1	-	1
Teacher Training	1	-	-	-	-	-	-	1	-	1
Laleia										
Total	-	-	9	-	64	-	-	73	47	26

Program Study	Education Level							Total	Sex	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master (S2)	PhD (S3)		Male	Female
Computer Engineering and Technology (Computer)	-	-	-	-	7	-	-	7	4	3
Nursing	-	-	4	-	3	-	-	7	3	4
Public Law	-	-	-	-	7	-	-	7	4	3
Management	-	-	1	-	5	-	-	6	4	2
Civil Engineering	-	-	-	-	4	-	-	4	3	1
Physics of Teaching	-	-	-	-	4	-	-	4	2	2
Engineering Architecture	-	-	-	-	3	-	-	3	3	-
Mining Engineering	-	-	-	-	3	-	-	3	2	1
Agricultural Engineering	-	-	-	-	3	-	-	3	3	-
Medicine – Medical Practice (General Medicine)	-	-	-	-	3	-	-	3	2	1
Accounting	-	-	1	-	2	-	-	3	3	-
Law	-	-	-	-	2	-	-	2	2	-
Midwife	-	-	2	-	-	-	-	2	-	2
Technology and Use of Forest Products	-	-	-	-	2	-	-	2	2	-
Computer Management	-	-	-	-	2	-	-	2	-	2
Mathematics of Teaching	-	-	-	-	2	-	-	2	1	1
Mathematics	-	-	-	-	1	-	-	1	-	1
Agronomy	-	-	-	-	1	-	-	1	-	1
English Language	-	-	-	-	1	-	-	1	1	-

Program Study	Education Level							Total	Sex	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master (S2)	PhD (S3)		Male	Female
Geology	-	-	-	-	1	-	-	1	1	-
Pharmacy	-	-	-	-	1	-	-	1	1	-
Aquaculture	-	-	-	-	1	-	-	1	1	-
Public Administration	-	-	-	-	1	-	-	1	1	-
Development Study	-	-	-	-	1	-	-	1	1	-
Teaching Chemistry	-	-	-	-	1	-	-	1	-	1
Sociology of Education	-	-	-	-	1	-	-	1	1	-
International, Bilateral and Multilateral Relations	-	-	-	-	1	-	-	1	1	-
Moral Theology	-	-	-	-	1	-	-	1	1	-
Teacher Training	-	-	1	-	-	-	-	1	-	1
Manatuto										
Total	4	3	3-	3	123	4	1	168	98	7-
Public Health	-	-	3	-	7	-	-	10	6	4
Civil Engineering – Civil Construction	-	-	2	-	6	1	-	9	9	-
Mathematics	-	1	4	-	3	-	-	8	4	4
Medicine – Medical Practice (General Medicine)	-	-	-	-	7	-	1	8	4	4
Engineering Architecture	-	-	1	-	6	-	-	7	6	1
Economy	-	1	1	-	5	-	-	7	4	3
English Language	-	-	-	-	6	1	-	7	6	1
Law	-	-	-	-	6	-	-	6	5	1

Program Study	Education Level							Total	Sex	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master (S2)	PhD (S3)		Male	Female
Computer Engineering and Technology (Computer)	-	-	3	-	3	-	-	6	3	3
Management	-	-	-	1	5	-	-	6	3	3
Biology of Education	-	-	1	-	5	-	-	6	2	4
Mathematics of Teaching	-	-	1	-	4	-	-	5	4	1
Education	-	-	2	-	2	-	-	4	1	3
Nursing	-	-	2	-	2	-	-	4	-	4
Real Estate Management	-	-	-	-	4	-	-	4	4	-
Accounting	-	-	-	-	4	-	-	4	1	3
Tourism and Hospitality	-	-	2	-	2	-	-	4	-	4
Mining Engineering	-	-	-	-	3	-	-	3	-	3
Geology	-	-	-	-	3	-	-	3	1	2
Mechanical Engineering	-	-	-	-	3	-	-	3	3	-
Economics of Finance / Financial Management – Banking Economics	-	-	-	-	3	-	-	3	2	1
Governmental Sciences	-	-	2	1	-	-	-	3	2	1
Geotechnical Engineering	-	-	-	-	2	-	-	2	1	1
Ore Treatment	-	-	-	-	2	-	-	2	1	1
Nutrition	-	-	-	1	1	-	-	2	1	1
Midwife	2	-	-	-	-	-	-	2	-	2
Agro-business	-	-	-	-	2	-	-	2	1	1
Public right	-	-	-	-	2	-	-	2	1	1

Program Study	Education Level							Total	Sex	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master (S2)	PhD (S3)		Male	Female
Physics of Teaching	-	-	-	-	2	-	-	2	-	2
Catechism	-	1	1	-	-	-	-	2	1	1
Teacher Training	-	-	-	-	2	-	-	2	1	1
Chemistry	-	-	-	-	1	-	-	1	-	1
Geosciences	-	-	-	-	1	-	-	1	1	-
Pharmacology	-	-	-	-	1	-	-	1	-	1
Electrical engineering	-	-	-	-	1	-	-	1	1	-
mechanical Engineering	-	-	-	-	1	-	-	1	1	-
Business Analyst	1	-	-	-	-	-	-	1	-	1
Specialist in Gastroenterology Surgery	-	-	-	-	1	-	-	1	1	-
Agronomy	-	-	-	-	1	-	-	1	1	-
Agricultural engineering	-	-	-	-	1	-	-	1	1	-
Management	1	-	-	-	-	-	-	1	1	-
Philosophy	-	-	-	-	-	1	-	1	1	-
Psychology	-	-	-	-	1	-	-	1	-	1
political science	-	-	-	-	1	-	-	1	1	-
Portuguese language	-	-	1	-	-	-	-	1	1	-
Geodesy	-	-	-	-	1	-	-	1	-	1
Chemical engineer	-	-	-	-	1	-	-	1	-	1
Physical Education / Sports Education	-	-	-	-	1	-	-	1	1	-
Pharmacy	-	-	1	-	-	-	-	1	1	-

Program Study	Education Level							Total	Sex	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master (S2)	PhD (S3)		Male	Female
Environmental health	-	-	1	-	-	-	-	1	1	-
Soil Science	-	-	1	-	-	-	-	1	1	-
Aquaculture	-	-	-	-	1	-	-	1	1	-
gastronomic science	-	-	-	-	1	-	-	1	1	-
Food Technology	-	-	-	-	1	-	-	1	-	1
Human resource Management	-	-	-	-	-	1	-	1	1	-
Economy - Cooperative – Market	-	-	-	-	1	-	-	1	1	-
Teaching Chemistry	-	-	-	-	1	-	-	1	1	-
Public Policy	-	-	1	-	-	-	-	1	1	-
International, bilateral and multilateral relations	-	-	-	-	1	-	-	1	-	1
Others	-	-	-	-	2	-	-	2	1	1
Soibada										
Total	-	1	7	-	1-	-	-	18	10	8
Medicine - Medical Practice (General Medicine)	-	-	-	-	4	-	-	4	-	4
Real Estate Management	-	-	1	-	1	-	-	2	1	1
Biology of Education	-	1	1	-	-	-	-	2	1	1
Mathematics	-	-	1	-	-	-	-	1	1	-
Physics	-	-	1	-	-	-	-	1	1	-
Management	-	-	-	-	1	-	-	1	-	1
Philosophy	-	-	-	-	1	-	-	1	1	-

Program Study	Education Level							Total	Sex	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master (S2)	PhD (S3)		Male	Female
political science	-	-	1	-	-	-	-	1	1	-
Computer Engineering and Technology (Computer)	-	-	-	-	1	-	-	1	1	-
Public health	-	-	-	-	1	-	-	1	1	-
Midwife	-	-	1	-	-	-	-	1	1	-
Management	-	-	1	-	-	-	-	1	1	-
Public policy	-	-	-	-	1	-	-	1	-	1

2.5. Vocational Training Certificate Level I - Certificate IV

Among of the 21,444 respondents who participated in this research, about 2.2% who had already participated in one of the Certificate I - Certificate IV courses. Of those who completed the Certificate courses, 48% completed the Certificate I course, 23.1% Certificate II, 10.3% Certificate III and 18.6% Certificate IV (Table 6). The predominant areas of the formation of Certificate I - Certificate IV are Computer, Portuguese Language and English Language courses. Other areas of training represent very little. The data also show the lack even of the lack of qualifications in some areas, which requires more attention and investment (Table 6). However the investment of training of human resources must be aligned with the local need. The data details of Certificate I training - Certificate IV can be seen in table 6.

Table 6. Number and areas of Certificate I-IV training by Sub District Administration

Municipality/ Sub District Administration	Total	Certificate (Cert. I)	Cert. II	Cert. III	Cert. IV	Training area requiring more attention
MANATUTO						Physiotherapy / Massage;
Total	467	224	1-8	48	87	Solar Production;
Construction Business (General)	172	82	29	16	45	Coffee Production;
Improve business	70	39	15	11	5	Training for entrepreneurs (IADE).
Plumbing	63	19	22	8	14	Hospitality (General);
Police investigation	41	16	19	4	2	Small machine;
General Administration for the Office	21	9	6	1	5	Hospitality (Food production);
Carpentry	18	6	2	1	9	Bricklayer;
Automotive and Maintenance	11	9	-	2	-	Training and Evaluation;
Hair stylist	1-	6	1	1	2	Course of Aesthetics (Manicure and Pedicure)
Agricultural Course	8	6	1	1	-	Course Piano and Music
Automotive and Maintenance	6	1	4	-	1	Painter of: arts, paintings, tattoo
Construction Business (General)	5	2	1	1	1	
Improve business	4	3	-	-	1	
Plumbing	4	2	2	-	-	
Police investigation	3	3	-	-	-	
General Administration for	3	1	1	-	1	

Municipality/ Sub District Administration	Total	Certificate (Cert. I)	Cert. II	Cert. III	Cert. IV	Training area requiring more attention
the Office						
Carpentry	3	3	-	-	-	
Automotive and Maintenance	3	2	1	-	-	
Hair stylist	3	1	2	-	-	
Agriculture	2	1	1	-	-	
Hospitality (General)	2	1	-	1	-	
Welding	2	2	-	-	-	
(Diploma) in Training and Evaluation	2	1	-	-	1	
Tailor / Seamstress	2	2	-	-	-	
Culinary	2	1	-	1	-	
Rural water supply	1	1	-	-	-	
Social Communication to Public Sector Study (SEFTEK);	1	1	-	-	-	
Tourism and Tourist Guide	1	1	-	-	-	
Financial Services (Micro Finance and Banking)	1	-	1	-	-	
Photographer	1	1	-	-	-	
Management for Police	1	1	-	-	-	
Fishing	1	1	-	-	-	
Barique						
Total	187	70	55	20	42	
Others	72	29	11	9	23	
Computer	27	8	9	7	3	
Portuguese Language	26	8	11	1	6	
English language	22	6	14	1	1	
Agriculture/Horticulture	16	6	5	1	4	
Improve business	3	1	-	1	1	
Construction (General)	3	3	-	-	-	
Agricultural	3	1	2	-	-	
General Administration for the Office	2	-	-	-	2	
Technology Information	2	1	-	-	1	
Carpentry	2	1	-	-	1	
Police investigation	2	2	-	-	-	

Municipality/ Sub District Administration	Total	Certificate (Cert. I)	Cert. II	Cert. III	Cert. IV	Training area requiring more attention
Automotive and Maintenance	1	-	1	-	-	
Financial services (Micro Finance and Banking)	1	-	1	-	-	
Electricity	1	1	-	-	-	
Bad management police	1	1	-	-	-	
Tailor/Seamstress	1	1	-	-	-	
Hair stylist	1	-	1	-	-	
Fishing	1	1	-	-	-	
Lacló						
Total	59	34	7	5	13	
Others	24	13	3	-	8	
Portuguese Language	7	4	1	2	-	
General Administration for the Office	5	2	-	-	3	
Computer	5	3	1	-	1	
Information technology	4	3	-	1	-	
English language	4	1	2	1	-	
Plumbing	2	2	-	-	-	
(Diploma) for Training and Evaluation	2	1	-	-	1	
Social Communication to Public Sector Study (SEFTEK)	1	1	-	-	-	
Tourism and Tourist Guide	1	1	-	-	-	
General Administration for the Office	1	1	-	-	-	
Photographer/film	1	1	-	-	-	
Electricity	1	1	-	-	-	
Culinary	1	-	-	1	-	
Laclubar						
Total	40	18	7	8	7	
Others	15	8	3	2	2	
Portuguese Language	10	2	3	3	2	
Computer	5	3	-	1	1	
English language	3	2	1	-	-	
Automotive and Maintenance	2	2	-	-	-	
Agriculture/Horticulture	2	1	-	-	1	

Municipality/ Sub District Administration	Total	Certificate (Cert. I)	Cert. II	Cert. III	Cert. IV	Training area requiring more attention
General Administration for the Office	1	-	-	1	-	
Technology Information	1	-	-	-	1	
Electricity	1	-	-	1	-	
Laleia						
Total	35	13	6	3	13	
Others	15	4	2	2	7	
General Administration for the Office	5	2	-	-	3	
Plumbing	2	1	-	-	1	
Computer	2	-	2	-	-	
Portuguese Language	2	-	-	-	2	
Improve business	1	1	-	-	-	
Construction Business (General);	1	1	-	-	-	
Hospitality (General)	1	-	-	1	-	
General Administration for the Office	1	1	-	-	-	
Construction (General)	1	-	1	-	-	
Electricity	1	1	-	-	-	
Automotive and Maintenance	1	1	-	-	-	
Cooker	1	1	-	-	-	
English language	1	-	1	-	-	
Manatuto Vila						
Total	94	55	25	7	7	
Others	29	18	8	1	2	
Computer	15	13	1	1	-	
Portuguese Language	8	1	4	1	2	
English language	8	4	1	2	1	
Electricity	6	5	-	1	-	
Construction Business (General)	5	-	4	-	1	
Construction (General);	4	3	-	1	-	
Information technology	3	2	1	-	-	
Agriculture/Horticulture	3	2	1	-	-	
General Administration for	2	-	1	-	1	

Municipality/ Sub District Administration	Total	Certificate (Cert. I)	Cert. II	Cert. III	Cert. IV	Training area requiring more attention
the Office						
Welding	2	2	-	-	-	
Police investigation	2	-	2	-	-	
Rural Water Supply	1	1	-	-	-	
Improve business	1	-	1	-	-	
Automotive and Maintenance	1	1	-	-	-	
Hospitality (General)	1	1	-	-	-	
General Administration for the Office	1	1	-	-	-	
Carpentry	1	-	1	-	-	
Tailor/Seamstress	1	1	-	-	-	
Soibada						
Total	52	34	8	5	5	
Others	17	10	2	2	3	
Computer	16	12	2	2	-	
Portuguese Language	1-	4	3	1	2	
General Administration for the Office	3	2	1	-	-	
English language	3	3	-	-	-	
Hair stylist	2	2	-	-	-	
Electricity	1	1	-	-	-	

2.6. Professional Occupation in the Public Sector

2.6.1. Permanent Public Servants

The table 7 shows that public servants and teachers are the main occupations of the public sector and together account for 85.9% of positions. 36.3% of teachers held their positions between 6 - 10 years, 13.4% more than 15 years, 14.3% between 11 - 15 years and less than 6 years corresponds to 36%. As for public servants, the data indicate that most maintained their services between 1-5 years and 6-10 years.

Table 7. Distribution of permanent public servants by occupation and years of service

Occupation	<1 Year	1-5 Years	6 - 1- Years	11-15 Years	More than 15 Years	Total	Percentage (%)
Public Servants	8	110	119	47	44	328	43,9
Teachers	6	16	101	84	107	314	42,-
Doctor/Medical Specialist	3	26	9	7	11	56	7,5
Chief Department	2	2	6	5	3	18	2,4
National Director	-	-	4	2	1	7	0,9
General Director	-	1	3	2	-	6	0,8
Defenders/Judges	-	1	2	1	-	4	0,5
Others	-	4	6	4	-	14	1,9
Total	19	160	250	152	166	747	100,0
Percentage (%)	2,5	21,4	33,5	20,3	22,2	100,0	

Regarding the grade/level of respondents, the majority are in the positions between grade F (level 1, & 2) - grade D/level 5, together corresponds to 97.1%. The servants with a level above 6 are very few, registering about 1.34% and those with special regime 1.6% (Table 8).

Table 8. Grade and level of permanent public servants interviewed

Grade/Level	Frequency	Percentage (%)
Grade A / Level 7	2	0,27
Grade B / Level 6	8	1,07
Grade C / Level 5	74	9,91
Grade D / Level 4	194	25,97
Grade E / Level 3	329	44,04
Grade F / Level 1,2	128	17,14
Special Regime	12	1,61
Total	747	100

2.6.2. Temporary Public Servants

Table 9 shows temporary public servants by occupation and years of service. The occupational pattern is similar to the permanent public servants with the mastery of teachers and staff. Teachers and public servants are those who have a large

number of contracted employees. Both represent 88.8% of the temporary public servants while hiring the specialized technicians only 4.5%. The standard of length of service is similar to that of permanent public servants, the highest proportion of whom have maintained public servants between 1-5 years and 6-10 years and together represent 84.3% compared to those who have maintained the service more than 10 years (6.6%).

Table 9. Distribution of temporary public servants by occupation and years of service

Years of service	Public servants	Specialized technical	Teachers	Others	Total	Percentage (%)
<1 Year	13	1	8	4	26	9,1
1-5 Years	72	6	54	7	139	48,6
6 - 10 Years	55	4	34	9	102	35,7
11-15 Years	12	1	3	-	16	5,6
>15	3	-	-	-	3	1,0
Total	155	12	99	20	286	100,0
Percentage (%)	54,20	4,20	34,62	6,99	100,00	

2.7. Level of Education of Temporary Public Servants

At the level of schooling, 63.4% of temporary public servants have a secondary education level, 17.9% Bachelor's Degree, secondary (6.7%) and primary (3.2%). Other levels of education have a percentage less than 3% (Table 10).

Table 10. Distribution of temporary public servants by levels of education.

Level of Education	Number of public servants	Percentage (%)
Primary	12	3,2
Pre-secondary	25	6,7
Secondary	237	63,4
Vocational Technician	9	2,4
Others	5	1,3
Diploma I (DI)	1	0,3
Diploma II (DII)	-	0,0
Diploma III (DIII)	17	4,5
Diploma IV (DIV)	1	0,3

Level of Education	Number of public servants	Percentage (%)
Bachelor's Degree	67	17,9
Master	-	0,0
PhD	-	0,0
Total	374	100

2.8. Non-Public Sector (Private sector)

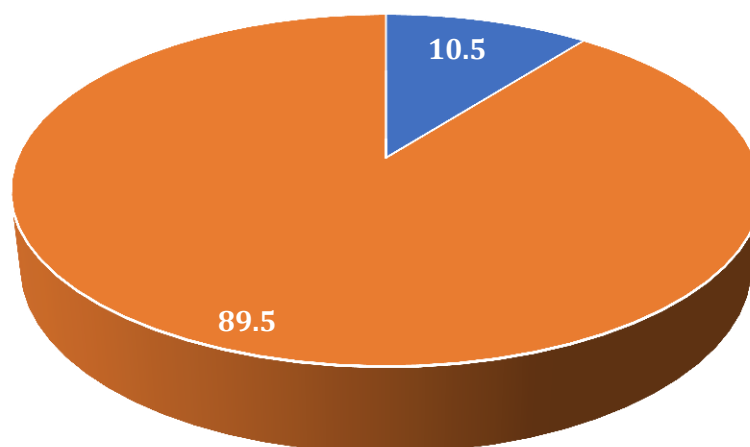
The non-public sector (private sector) in the municipality of Manatuto persists small in comparison with the public sector. This despite the growth of the non-public sector being one of the government's main goals and the majority of those who do not currently work expressed an interest in working in the non-public sector. However, despite the desire to work in the non-public sector, much of this work requires good educational qualifications. The result of this work provides several relevant evidence.

2.8.1. Non-Governmental Organizations (NGOs) and Private Universities.

Figure 1 shows data for staff working in Non-Governmental Organizations (NGOs). Among the 19 respondents, 10.5% hold positions as Director or Deputy Directors of the organizations and the highest percentage are employees 89.5%.

Figure 2. Staff of Non-Governmental Organizations (NGOs) by position

Non Governmental Organization (%)



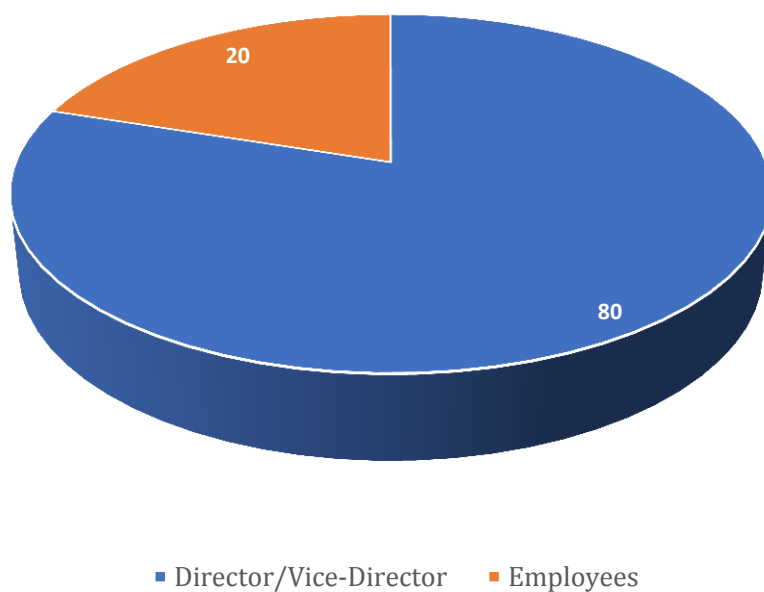
■ Director/Vice-Director ■ NGOs Employees

2.8.2. Entrepreneurs (Businessmen)

Entrepreneurs play an important role through their investments, increasing the prosperity of the population in the municipality. Thus, citizens have the opportunity to take a job through investment, services and increased trade, in addition to the municipality grow economically. In this sense, it is essential to understand the human resources involved in this process and try to empower them efficiently and effectively. Figure 3 shows the distribution of the personnel involved in the company by level of education and by position in which it currently assumes. 80% of the respondents are employed as director / vice directors and 20% assume the role of simultaneous director as an employee of the same company.

Figure 3. Distribution of entrepreneurs by position

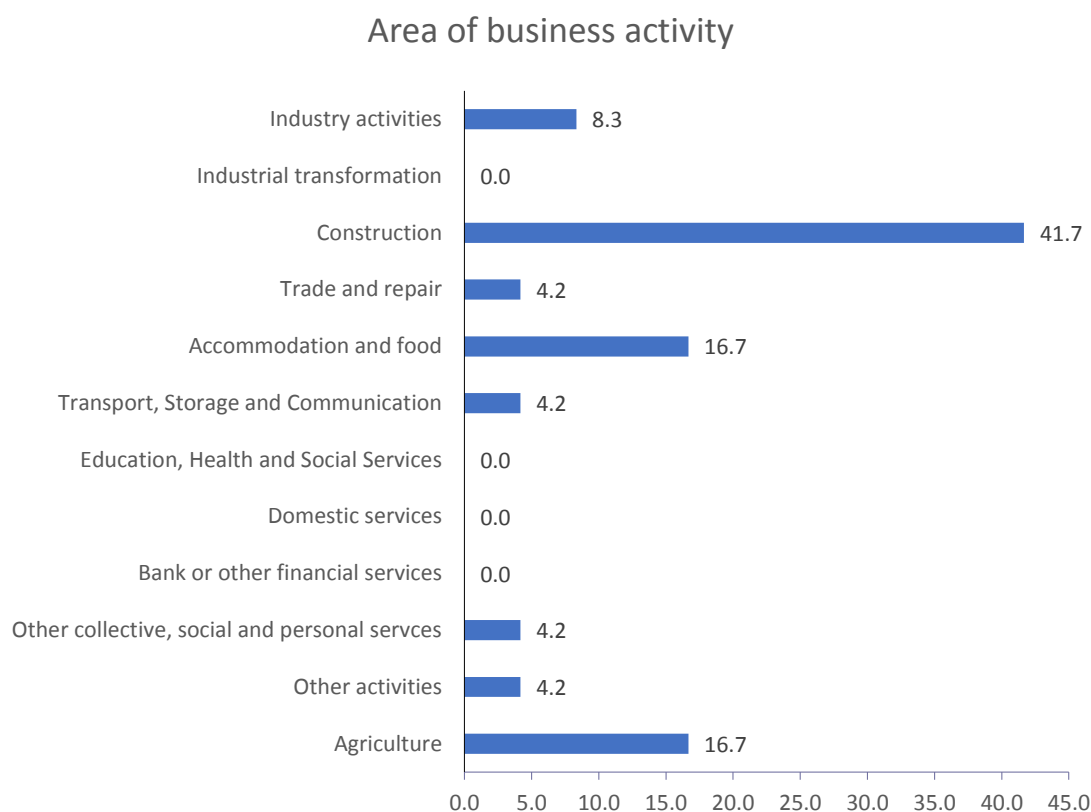
Entrepreneurs (%)



2.8.3. Activity sector

The largest proportion of the companies' areas of activity are related to Construction, Accommodation - Food and Agriculture. Other sectors of activity are less than 10% (Figure 4).

Figure 4 . Distribution of business areas of business



2.8.4. Education Level of Entrepreneurs

The data also show that most of the people involved have no level of education (38.2%), secondary education (22.3%), pre-secondary (14.5) and Primary (10.8). Other levels of schooling have a percentage less than 10% (Table 11).

Analyzing the presence of entrepreneurs and their qualifications is essential for the growth of the municipality. Raising the level of education, the municipality inserts its citizens into a productive economy, giving them the opportunity to be entrepreneurs or innovators, through a good education. Thus, the presence of entrepreneurs and the formation of qualified personnel, are crucial for the municipality.

Table 11 . Distribution of entrepreneurs and level of education

Degree of Knowledge / Level of education	Number of entrepreneurs	Percentage (%)
Can not read / write	2079	38,2
Secondary	1214	22,3
Pre-secondary	790	14,5
Primary	588	10,8
Do not read / write (did not finish primary)	558	10,2
Bachelor's Degree (S1)	104	1,9
1 st . Cycle (1 st class - 4 th class)	45	0,8
Secondary Technical School	21	0,4
DIII	18	0,3
Secondary School (SMEA)	10	0,2
Secondary School Agriculture (SPP)	4	0,1
Secondary School Social Assistance (SMKK)	4	0,1
2 ^o . Cycle (1 st Year, 2 nd Year)	2	0,0
3 ^o . Cycle (3 rd year - 9 th year / 3 rd year)	2	0,0
Secondary School Sports (SGO)	2	0,0
Diploma IV	2	0,0
Secondary Nursing School (SPK)	1	0,0
Others	1	0,0
Diploma I	1	0,0
Master (S2)	1	0,0
Diploma II	-	0,0
PhD (S3)	-	0,0
Total	5447	100,0

2.9. Areas of Work Preference

This work also asked people aged 17 or over who had never worked, in which sector they wanted to work and where they would like to work if they could get a job. The responses in table 12 show that the majority opted for the non-public sector (private) with 75.7% compared to the public sector 24.3%. The Sub District Administration of Laclubar has a higher percentage of individuals seeking employment in the non-public sector, while in the public sector the majority was registered in the Manatuto Sub District (Table 12).

Table 12. Number of total respondents in the municipality of Manatuto looking for a job and intends to work in the public or private sector

Sub District Administrations	Public Sector	Percentage (%)	Non-Public Sector	Percentage (%)	Total	Percentage (%)
Barique	1	0,1	586	15,7	587	11,9
Laclo	91	7,6	293	7,9	384	7,8
Laclubar	335	28,0	1388	37,3	1723	35,0
Laleia	47	3,9	572	15,4	619	12,6
Manatuto	709	59,2	647	17,4	1356	27,5
Soibada	15	1,3	240	6,4	255	5,2
Total	1198	100,0	3726	100	4924	100,0

2.10. Business Sector which is Intend to Work in

Table 13 indicates that in the private sector, the preference is mainly for agriculture (58.2%), domestic tasks (13%), industrial activity (8.7%) and construction (6.8%). Other sectors of activity have a percentage less than 5%.

Table 13. Distribution of areas of activity that respondents wish to work

Activity sector	Sub Districts						Total	Percentage (%)
	Barique	Laclo	Laclubar	Laleia	Manatuto	Soibada		
Agriculture	893	243	901	400	383	203	3023	58,2
Industrial Activity	150	9	212	18	48	16	453	8,7
Manufacturing industry	8	3	54	8	22	2	97	1,9
Construction	79	3	184	44	39	6	355	6,8
Trade and Repair	14	1	17	9	34	2	77	1,5
Accommodation and Food	11	3	19	6	16	2	57	1,1
Transport, Storage and Communication	5	1	10	13	9	7	45	0,9
Education, Health and Social Work	15	3	48	36	30	10	142	2,7
Domestic Service	100	46	283	99	132	14	674	13,0

Activity sector	Sub Districts						Total	Percentage (%)
	Barique	Lacló	Laclubar	Laleia	Manatuto	Soibada		
Bank or other financial services	4	1	17	8	15	2	47	0,9
Other collective, social and personal services	14	4	60	65	56	3	202	3,9
Other activities	3	1	9	3	2	0	18	0,3
Total	1296	318	1814	709	786	267	5190	100
Percentage (%)	25,0	6,1	35,0	13,7	15,1	5,1	100,0	

2.11. Age group (age) and job seekers

Regarding the age group, the largest number of respondents seeking employment are young people aged 17-36 years, representing around 51.1% (Table 14).

Table 14. Age range of respondents looking for a job

Age Group	Non-Public Sector	Percentage (%)
17 – 20	241	6,5
21- 24	394	10,6
25 – 28	508	13,6
29 – 32	428	11,5
33 – 36	332	8,9
37 – 40	220	5,9
41 – 44	344	9,2
45 – 48	226	6,1
49 – 52	163	4,4
53 – 56	160	4,3
57 – 60	117	3,1
61- 64	89	2,4
65+	504	13,5
Total	3726	100

2.12. Licensed to job search "Unemployment"

The data also provide information on the number and qualifications of people with higher education to job search (Table 15). The figures show that of the 76 respondent licensees, 60.5% intend to work in the public sector and 39.5% intend to work in the non-public (private) sector. Graduates want more work in the public sector rather than the private sector.

The areas of higher education courses with the highest number of job seekers are "Unemployment" in the areas of Computer Technology Engineering, Civil Engineering - Civil Construction, Mathematics, Mining Engineering and Management. Graduates in other areas are very few less than 5%, so this data is key to municipal government, business and other employer partners how to take advantage of and employ them.

Table 15. Number and areas of knowledge of higher education courses seek job search and wish to work.

No.	Study Program / Area of Expertise	Do not work and want to work?		Total	Percentage (%)
		Public sector	Private sector		
1	Computer Technology Engineering (Computer)	3	5	8	10,5
2	Civil Engineering - Civil Construction	6	1	7	9,2
3	Mathematics	4	1	5	6,6
4	mining engineering	4	1	5	6,6
5	Management	-	4	4	5,3
6	Pharmacy	2	1	3	3,9
7	Agricultural engineering	-	2	2	2,6
8	Law	1	1	2	2,6
9	Education	2	-	2	2,6
10	Portuguese language	2	-	2	2,6
11	English language	-	2	2	2,6
12	Geology	2	-	2	2,6
13	Public health	2	-	2	2,6
14	Nutrition	1	1	2	2,6
15	Public Law	1	1	2	2,6

No.	Study Program / Area of Expertise	Do not work and want to work?		Total	Percentage (%)
		Public sector	Private sector		
16	Accounting	1	1	2	2,6
17	Tourism and Hospitality	1	1	2	2,6
18	Government Science/Comparative Government Systems	2	-	2	2,6
19	Catechism	1	1	2	2,6
20	Geosciences	1	-	1	1,3
21	Engineering Architecture	-	1	1	1,3
22	mechanical Engineering	1	-	1	1,3
23	Agronomy	-	1	1	1,3
24	Administration	1	-	1	1,3
25	Economy	-	1	1	1,3
26	Theology	1	-	1	1,3
27	Geodesy	-	1	1	1,3
28	Engineering Industry	1	-	1	1,3
29	Others	1	-	1	1,3
30	Medicine - Medical Practice (General Medicine)	1	-	1	1,3
31	Food Science	1	-	1	1,3
32	Food Technology	-	1	1	1,3
33	Human Resource Economics	1	-	1	1,3
34	Economy of Finance / management of finances	-	1	1	1,3
35	Computer Management	1	-	1	1,3
36	International, Bilateral and Multilateral Relations	-	1	1	1,3
37	Teacher training	1	-	1	1,3
Total		46 (6-,5%)	30 (39,5%)	76	100,0

2.13. Number and areas of study of students who are currently attending courses

Table 16 shows the number of students surveyed in the municipality of Manatuto who are currently attending higher education in different study programs. The numbers show that some areas of study, where their graduates have more

"unemployment" (Table 15), still remain areas with higher numbers of students (Table 16). It is hoped that decentralization of local power will be implemented by the government and the development of the private sector in the municipality there will be opportunities to absorb the graduates in the labor market. Failure to do so may increase the number of job seekers in particular in the areas identified above in table 15.

Table 16. Distribution of the number of students who are currently attending courses in higher education

No.	Study areas	Frequency	Percentage (%)
1	Civil Engineering - Civil Construction	38	9,7
2	Public health	25	6,4
3	Computer Technology Engineering (Computer)	24	6,1
4	Law	22	5,6
5	Management	21	5,3
6	Accounting	20	5,1
7	Public law	19	4,8
8	International, Bilateral and Multilateral Relations	16	4,1
9	mining engineering	15	3,8
10	Portuguese language	13	3,3
11	Electrical engineering	10	2,5
12	Education	9	2,3
13	Animal Production (Livestock)	9	2,3
14	Public administration	9	2,3
15	Nursing	7	1,8
16	Engineering Architecture	6	1,5
17	English language	6	1,5
18	Geology	6	1,5
19	Tourism and Hospitality	6	1,5
20	Economy of Finance / management of finances	6	1,5
21	Physics	5	1,3
22	political science	5	1,3
23	Teacher training	5	1,3
24	General / Environmental Biology	4	1,0
25	mechanical Engineering	4	1,0
26	Agronomy	4	1,0

No.	Study areas	Frequency	Percentage (%)
27	Social Economy Agricultural	4	1,0
28	Sociology	4	1,0
29	Agricultural Product Processing Engineering	4	1,0
30	Teaching biology	4	1,0
31	Mathematics	3	0,8
32	Anesthetist	3	0,8
33	Medicine - Medical Practice (General Medicine)	3	0,8
34	Midwife	3	0,8
35	Forestry Management	3	0,8
36	Clinical and Animal Surgery	3	0,8
37	Public policy	3	0,8
38	Biochemistry	2	0,5
39	Gastroenterology Surgery Specialist	2	0,5
40	Geodesy	2	0,5
41	Engineering Industry	2	0,5
42	Agribusiness (Agribisniss)	2	0,5
43	Aquaculture	2	0,5
44	Development Study	2	0,5
45	Human Resource Economics	2	0,5
46	Communication - Journalism and Publishing	2	0,5
47	Teaching chemistry	2	0,5
48	Sociology of Education	2	0,5
49	Chemistry	1	0,3
50	Biophysics	1	0,3
51	Business Analyst	1	0,3
52	veterinary Medicine	1	0,3
53	Psychology	1	0,3
54	Theology	1	0,3
55	Statistic	1	0,3
56	Forestry	1	0,3
57	Technology and Use of Forest Products	1	0,3
58	fishing engineering	1	0,3
59	Government Planning and Policy	1	0,3
60	Regional and Urban Economics	1	0,3
61	Social service	1	0,3

No.	Study areas	Frequency	Percentage (%)
62	Business Administration	1	0,3
63	Teaching mathematics	1	0,3
64	Teaching Physics	1	0,3
65	Government Science / Comparative Government Systems	1	0,3
66	Moral Theology	1	0,3
67	Others	2	0,6
Total		393	100,0

2.14. Year the course ends

Regarding to the estimation of the numbers of higher education students who will graduate or finish their courses in the next 6 years, the data in Table 17 show that the areas of Civil Engineering - Civil Construction, Computer Technology Engineer, Public Health, Accounting, Public Law, General Law and Management are the ones that have the most graduation numbers. Other areas have a few number of graduations per year, so it is important to highlight the need to anticipate not to contribute more to the number of unemployed graduates.

Table 17. Distribution of the number of students who are currently attending the courses and prediction of the year in which they will finish the course.

No.	Areas of Study	Year the course ends							Total
		2017	2018	2019	2020	2021	2022	2023	
1	Civil Engineering - Civil Construction	17	9	1	5	4	-	-	36
2	Computer technology engineer	14	3	5	1	1	-	-	24
3	Public health	9	5	6	-	-	-	-	20
4	Accounting	12	-	3	2	1	-	-	18
5	Public Law	5	7	1	4	-	-	-	17
6	General Law	6	5	1	3	-	-	-	15
7	Management	7	3	3	1	1	-	-	15
8	Mining engineering	7	3	3	1	-	-	-	14
9	Portuguese language	2	2	3	2	1	-	1	11
1-	International, Bilateral and	5	4	1	1	-	-	-	11

No.	Areas of Study	Year the course ends							Total
		2017	2018	2019	2020	2021	2022	2023	
	Multilateral Relations								
11	Electrical engineering	7	2	1	-	-	-	-	10
12	Livestock Production	5	2	2	-	-	-	-	9
13	Public administration	2	1	2	3	1	-	-	9
14	Education	2	1	2	1	1	-	-	7
15	Engineering Architecture	1	1	3	-	1	-	-	6
16	Nursing	1	1	3	1	-	-	-	6
17	Economy of Finance/management of finances	3	2	-	1	-	-	-	6
18	Physics	2	1	1	-	1	-	-	5
19	Geology	1	1	1	2	-	-	-	5
2-	Teacher training	2	2	-	1	-	-	-	5
21	General/Environmental Biology	-	2	2	-	-	-	-	4
22	Agronomy	2	1	-	1	-	-	-	4
23	Social Economy Agriculture	-	3	-	-	1	-	-	4
24	Sociology	1	2	-	1	-	-	-	4
25	Political science	1	1	1	1	-	-	-	4
26	English language	-	1	1	1	1	-	-	4
27	Agriculture Product Processing Engineering	4	-	-	-	-	-	-	4
28	Tourism and Hospitality	-	3	1	-	-	-	-	4
29	Teaching biology	1	-	-	1	2	-	-	4
30	Mathematics	1	1	-	-	1	-	-	3
31	Medicine - Medical Practice (General Practitioner)	-	3	-	-	-	-	-	3
32	Forestry Management	3	-	-	-	-	-	-	3
33	Public policy	1	-	2	-	-	-	-	3
34	Gastroenterology Surgery Specialist	1	1	-	-	-	-	-	2
35	Geodesy	2	-	-	-	-	-	-	2
36	Midwife	-	-	2	-	-	-	-	2
37	Agro-business	1	-	1	-	-	-	-	2
38	Clinical and Animal Surgery	1	1	-	-	-	-	-	2
39	Development Study	1	-	-	1	-	-	-	2

No.	Areas of Study	Year the course ends							Total
		2017	2018	2019	2020	2021	2022	2023	
40	Human Resource Economics	1	1	-	-	-	-	-	2
41	Communication - Journalism and Publishing	-	-	1	1	-	-	-	2
42	Teaching chemistry	-	-	2	-	-	-	-	2
43	Sociology of Education	-	-	2	-	-	-	-	2
44	Chemistry	-	-	-	-	1	-	-	1
45	Mechanical Engineering	-	-	1	-	-	-	-	1
46	Analyst, Medical Assistant	-	-	-	-	1	-	-	1
47	Psychology	-	-	1	-	-	-	-	1
48	Statistic	-	1	-	-	-	-	-	1
49	Forestry	-	-	1	-	-	-	-	1
50	Technology and Use of Forest Products	1	-	-	-	-	-	-	1
51	Aquaculture	1	-	-	-	-	-	-	1
52	fishing engineering	-	-	-	1	-	-	-	1
53	Regional and Urban Economics	1	-	-	-	-	-	-	1
54	Social service	-	1	-	-	-	-	-	1
55	Business Administration	1	-	-	-	-	-	-	1
56	Teaching mathematics	1	-	-	-	-	-	-	1
57	Teaching Physics	-	1	-	-	-	-	-	1
58	Government Science/Comparative Government Systems	1	-	-	-	-	-	-	1
59	Moral Theology	-	-	1	-	-	-	-	1
60	Others	1	1	-	-	-	-	-	2
Total		138	79	61	37	19	-	1	335

2.15. The demand of training for personal and institutional

2.15.1. Training in areas of generic and specialized competences

One of the fundamental results of this work is that the data show a considerable level of professional development activity in several training areas in the Municipality of Manatuto. Table 18 below indicates the size of the professional development training performed by training area and the duration of the course. In

response to this question, respondents were asked to select up to three options for the courses taken, so the table refers to the number of courses taken and not to trainees.

Among the 1,037 respondents represent a substantial level of training activity, since 52.6% have a duration of 1 - 6 months, 38% less than one month and 9.4% have been for more than 6 months. It is also notable that the main courses were in the areas of Leadership, Finance, Planning and Administration. Other areas of training have a percentage of less than 10%. There are no indications of training in areas considered as priority areas for the municipality, such as agriculture, construction and hospitality and tourism.

Table 18. Professional development courses carried out by training area and duration of the course.

Training Area	Duration				Total	Percentage (%)
	Less than 1 month	1 - 6 months	7 months - 1 year	More than 1 year		
Leadership	100	120	20	7	247	23,8
Business	61	68	5	3	137	13,2
Planning	46	78	10	5	139	13,4
Management	35	35	9	2	81	7,8
Human Resources	39	38	3	2	82	7,9
Information technology	24	71	6	2	103	9,9
Procurement and Logistics	7	19	-	-	26	2,5
Administration	44	65	11	3	123	11,9
Information System and Business Management	13	25	1	-	39	3,8
Media and Public Relations	2	1	-	-	3	0,3
Specialist Technician	6	7	3	1	17	1,6
Others	17	18	4	1	40	3,9
Total	394	545	72	26	1037	100,0
Percentage (%)	38,0	52,6	6,9	2,5	100,0	

2.15.2. Languages Training

Table 19 shows the proportion of vocational training in language areas and the duration of the course. There are a remarkable number of people who have already taken part in a language course. As expected, the Portuguese language as the official language has the highest percentage (54.9%) following the English language with 26.9%. The Tetum language has a participation of 13.1% of the respondents and other languages with a participation of less than 5%. 63.8% of the courses have duration between 1 - 6 months, 5.5% less than one month and another 30.7% are longer than 7 months. The Portuguese language and English language courses are the main courses conducted by the respondents in the municipality of Manatuto.

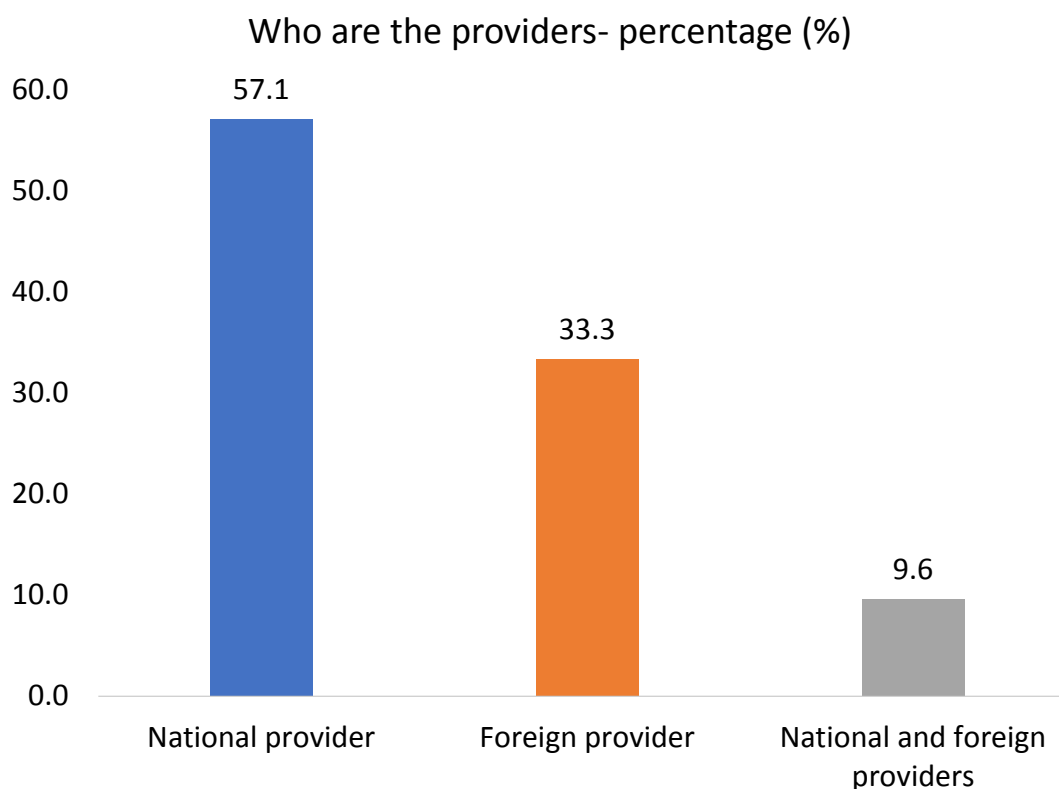
Table 19. Language training and course duration

Training Areas	Duration				Total	Percentage (%)
	Less than 1 month	1 - 6 months	7 months - 1 year	More than 1 year		
Portuguese	67	787	182	166	1202	54,9
English	31	405	88	66	590	26,9
Tetum	18	142	54	74	288	13,1
Indonesia	4	34	12	24	74	3,4
Korea	-	14	2	-	16	0,7
Others	1	15	2	3	21	1,0
Total	121	1397	340	333	2191	100,0
Percentage (%)	5,5	63,8	15,5	15,2	100,0	

2.16. Supplier Institution and Financing

As for the institutions providing language training, 57.1% of the training providers are national institutions, 33.3% provided by foreign institutions and 9.6% promoted by national and foreign institutions (Figure 5).

Figure 5 . Provider of language training



2.17. Training Financing

Of the total number of respondents who have already done language training, 45.2% was funded by the trainee himself, by the government 29.6% and the training supported by the private sector 11.9%. Training with government support in cooperation with international partners and only by international partners corresponds to 9.1% and 4.2%, respectively (Table 20).

Table 20 . Funders of language training

Sub Districts	Government	Privat sector	Pay by own self	Government & International Partners	International Partners	Total
Barique	42	10	54	7	1	114
Lacló	84	28	59	20	10	201
Laclubar	55	14	79	17	6	171
Laleia	79	32	197	10	6	324
Manatuto	103	71	182	57	27	440
Soibada	42	8	47	13	7	117
Total	405	163	618	124	57	1367
Percentage (%)	29,6	11,9	45,2	9,1	4,2	100

2.18. Future training plan

2.18.1. Personal Development Training

The training plan for the future desired by the respondents was also the subject of an investigation in this work. In order for the training to generate capital gains, it is necessary to respond to the needs of the municipality and, consequently, the needs of the trainees themselves. For this it is important to make a study of the training needs, before starting the investment.

The study of training needs is one of the most common ways to identify the needs of the municipality, since it allows, on the one hand, to see if the training is the answer to the problems and, on the other hand, to identify which type of training which serves to fill them. In addition, it allows identifying the individual training needs, particularly those that do not yet have and are seeking employment.

In the context of the desire for training for the future, two questions were asked for those who are not yet employed or looking for work and those who are already employed in the public or non-public sector. In relation to the first, you were asked what kind of training you want to do so you can increase your personal skills, get a greater job opportunity and make it easier for you to find a job. The data in table 21, show that the majority of respondents want to raise their knowledge in the specific areas of other varieties, training of Teachers and Professionals of education and Languages (English, Portuguese). The longing for training in specific areas such as agriculture, tourism, fisheries, livestock, in industries was found in few respondents compared to generic training areas. This is due, of course, to the lower number of employees in this area and a lack of knowledge on the part of respondents about the importance of training for self-employment. Check out training to broaden general knowledge are more preferred compared to specialized areas.

Table 21. Areas of training desired by non-employed respondents

No.	Training Areas	Frequency	Percentage (%)
1	Other Varieties *	16	23,9
2	Teachers and Education Professionals	14	20,9
3	Languages (English, Portuguese, etc.)	8	11,9
4	Medicine and Health Professionals	6	9,0
5	Human Resource Management	6	9,0
6	Agriculture	6	9,0
7	Management, Administration and Leadership	3	4,5
8	Law and Justice	2	3,0
9	General Skills Development- Induction	1	1,5
10	Information Technology, Database, Web, Software and Electronic Filing (registration) - computer	1	1,5
11	Information System & Business Management;	1	1,5
12	Real Estate Management	1	1,5
13	Professional, Research in Development Knowledge (based on the intervention sector)	1	1,5
14	Police, Defense, Security (employee training)	1	1,5
Total		67	100

*) Items that by their nature could not be classified in a category of their own. This category includes all data that could not be integrated into any of the training categories, as well as very specific training.

2.18.2. Development training and institutional strengthening

As regards the second question - the personal development training and institutional / organizational strengthening applied to the employed respondents, the data in Table 22 also show that the specific areas of other varieties, training of Teachers and Education Professionals and Languages (English, Portuguese) are more preferred areas desired by the respondents while in other areas the desire was less than 10% (Table 22).

Table 22. Areas of training desired by non-employed respondents

No.	Training Areas	Frequency	Percentage (%)
1	Other Varieties *	31	23,7
2	Teachers and Education Professionals	23	17,6
3	Medicine and Health Professionals	16	12,2
4	Languages (English, Portuguese, etc.)	14	10,7
5	Police, Defense, Security (employee training)	13	9,9
6	Information Technology, Database, Web, Software and Electronic Filing (registration) – computer	7	5,3
7	Finance, Budget, Accounting and Planning	7	5,3
8	Agriculture	7	5,3
9	Management, Administration and Leadership	5	3,8
10	Real Estate Management	3	2,3
11	Project Management / Cases	2	1,5
12	Human Resource Management	1	0,8
13	Monitoring and Evaluation	1	0,8
14	Professional, Research in Development Knowledge (based on the intervention sector)	1	0,8
Total		131	100

*) Items that by their nature could not be classified in a category of their own. This category includes all data that could not be integrated into any of the training categories, as well as very specific formations

2.19. Category and Academic Degree of Formation

2.19.1. Vocational or Academic Training

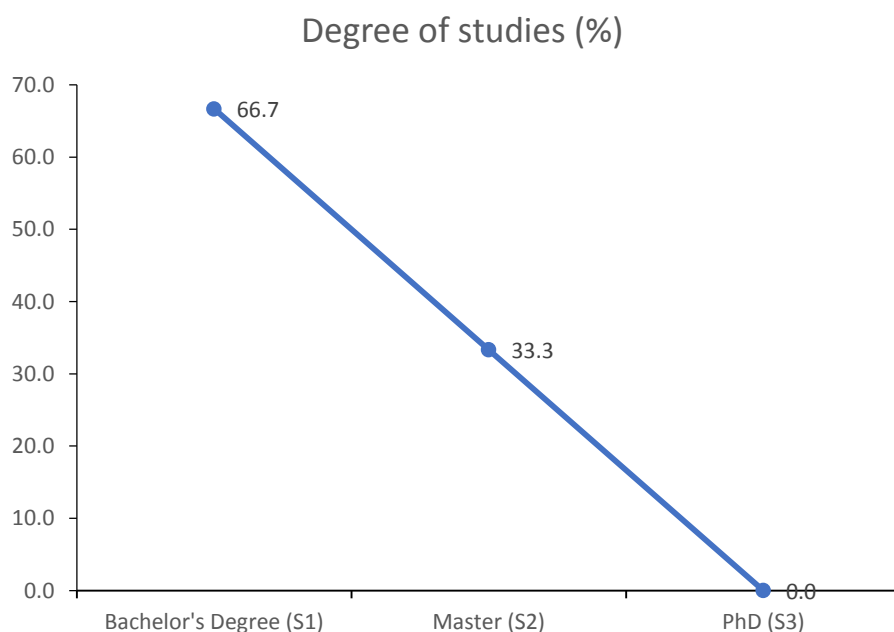
When asked about the training category, of the total of 1310 respondents, 74% of respondents intend to develop their knowledge through the vocational or vocational training course and 26% in the academic - higher education course (Figure 23). The Administrative Post of Manatuto has a greater number of those who wish to have vocational or professional training as well as academic or university training.

Table 23. Category of training - Academic or Vocational Training

Sub Districts Administration	Academic/University	Vocational / Vocational Training	Total
Barique	28	88	116
Lacló	49	152	201
Laclubar	33	119	152
Laleia	75	125	200
Manatuto	132	340	472
Soibada	24	145	169
Total	341	969	1310
Percentage (%)	26,0	74,0	100

Among of the 341 (26%) respondents who wish to take the course in higher education, 66.7% plan to increase their knowledge in undergraduate and 33.3% masters programs (Figure 6).

Figure 6. Degrees of studies that wish to continue



The details of the training areas and the academic degrees desired can be seen in table 24.

Table 24 . Academic degrees and areas of study that wish to pursue

Training Areas	Academic level courses (University)			Total
	Bachelor's	Master	PhD	
Teachers and Education Professionals	4	1	-	5
Agriculture	3	-	-	3
Varieties *	2	1	-	3
Medicine and Health Professionals	1	1	-	2
Information Technology, Database, Web, Software and Electronic Filing (registration) - computer	1	1	-	2
Finance, Budget, Accounting and Planning	-	1	-	1
Real Estate Management	1	-	-	1
Police, Defense, Security (employee training)	-	1	-	1
Total	12	6	-	18
Percentage (%)	66,7	33,3	-	100

*) Items that by their nature could not be classified in a category of their own. This category includes all data that could not be integrated into any of the training categories, as well as very specific training.

3. Development of Human Resources within the Strategic Development Plan of the Municipality

3.1. The four pillars of the Municipal Strategic Plan (PEM)

The Manatuto Municipal Strategic Plan (PEM), aligned with the Timor-Leste Government's Strategic Development Plan for 2011-2030, aims to promote the progress and sustainable development of the territory by defining strategies and guidelines, creating conditions of competitiveness, innovation and modernity, ensuring the public interest through an efficient, transparent and rigorous management and allocation of resources.

Like the PEDN, the PEM is built around four pillars:

1. Social capital: health, education and social protection.

2. Infrastructure: transport, telecommunications, energy and water supply and sanitation.
3. Economic fundamentals: targeting three sectors for development - agriculture, tourism and petrochemicals - to generate growth, jobs and new sources of public revenue beyond oil.
4. Institutional framework: focus on macroeconomic management and improvement of the capacity and effectiveness of government institutions.

The development of the municipality's human resources must take into account these four pillars and also the current situation of the economy and society as a whole. In addressing key human resource developments, this section builds on the four pillars and begins with a summary of the county's economic structure and the recent growth in various sectors.

The Municipality of Manatuto identified the following generic training needs in order to develop the capacity and competence of its human resources for the implementation of its strategic priority programs and municipal development, in line with the strategic development objectives.

Development of Social Capital	
Education and training	<ol style="list-style-type: none"> 1) Build, equip and maintain pre-school education establishments, primary and secondary schools guaranteeing the development and requalification of the school park in the municipality and the conditions for the quality training of the young people of Manatuto. As a reference institution where important cadres and intellectuals from Timor-Leste were formed, the municipality should proceed with the rehabilitation and recovery of the College of Soibada, valuing this unique patrimony, integrating it in the network of educational institutions of the municipality. 2) Support the development of complementary activities of educational action in pre-school education and in primary to secondary education promoting and integrating initiatives in the area of culture (theater, ...) and sports, among others. 3) Also guaranteeing the conditions for the teaching of students with special needs with the introduction of sign language among other supports. 4) Participate in support for out-of-school education by creating a mobile library service that can take reading and culture to the most remote and isolated places in the territory, serving all citizens. The municipality should also promote and support non-formal education initiatives and the work carried out in this area by NGOs and religious institutions. 5) Manage non-teaching staff in pre-school and primary education by empowering them for their support and follow-up functions. 6) Ensure the creation and management of cafeterias of pre-school and basic education establishments under a direct or concession regime, guaranteeing a quality service and a careful diet for young students who attend the municipal schools. 7) To approve and execute the municipal plan of recurrent education, guaranteeing the literacy of the population. This plan could integrate the participation of private agents, religious institutions and NGOs, competing the municipality to articulate the various initiatives. <p>In the Health sector, the Municipality of Manatuto identified the training priorities programs, categorizing them into two areas, training programs for employees and scholarships for medical professionals. The programs are listed below:</p> <ol style="list-style-type: none"> 1) Ensure access to quality health care for all citizens
Health Sector	

	<ol style="list-style-type: none"> 2) Training program in the development of knowledge in the area of the Promotion of Mother and Child Health and Family Planning 3) Develop the SISCA program 4) TBC and MHRS elimination program 5) Training in hospital nursing management 6) Management of documentation systems 7) Management training 8) Portuguese course 9) English course
Social Protection (Inclusion)	<ol style="list-style-type: none"> 1) Increase people's capacity through peacebuilding and social cohesion, improve technical assistance, and increase people's capacity to support domestic violence centers by providing effective and available support to participate in various related areas (Conflict Resolution Training , Training in conflict awareness (Forum theater), Training in monitoring and evaluation, Training in dialogue and mediation and among others) and lastly gender equality training. 2) Development program Uma Mahon (Creation of rehabilitation centers for the disabled and the elderly, Creation of youth centers and coexistence centers)
Environment	<ol style="list-style-type: none"> 1) Enhancing climate change management 2) Promote knowledge of people in the areas of climate change and biodiversity, pollution control, environmental impact analysis, waste recycling and improve service centers in the area of climate change at municipal level and administrative posts.
Culture and Heritage	<ol style="list-style-type: none"> 1) Language training program - English and Portuguese 2) Provide knowledge in the field of cultural arts and creative industries, museum development and libraries, identification and rehabilitation of cultural heritage. 3) Technical training in decoration, curator and museum preservation, cultural heritage and threats in the architectural and archaeological heritage. 4) Training in digitization and development of cultural heritage collection (photographic production etc). 5) SGP Socialization Program
Infrastructure (transport, telecommunications, energy and water supply and sanitation). The term infrastructure has broad meaning, but is usually associated with the basic structure of	

society, such as communications media, transportation (roads, vehicles, traffic, etc.), electricity, fuels (production, distribution, , etc.), basic sanitation (drinking water supply, sewage network, etc.), among others, which guarantee the functioning of a municipality or region.

Infrastructure is the foundation needed to leverage development. Without it, economic growth is compromised by the difficulty of generating goods and services, since production depends on the supply of energy, communication, means and transport routes, among others, as well as compromises the quality of life of the population, especially health, when it is lacking in basic sanitation and drinking water, and urban mobility. Therefore, from the infrastructure axis, the public power must pay close attention, since the inadequacy of this compromises the development of the Municipality. In the area of Infrastructure, the Municipality of Manatuto identified the following priority training programs:

Road and Bridges	<ol style="list-style-type: none"> 1) Rural and Urban Roads Development Program 2) Roads Maintenance Program 3) Housing and Buildings Development Program 4) Employee Training Program in Administration and Finance 5) Traffic Signals Program (Priorities in the City of Manatuto)
Water and sanitation	<ol style="list-style-type: none"> 1) Potable Water Development Program in Rural in Urban 2) Program Maintenance and Ease of Drinking Water (Urban and Rural) 3) Basic Sanitation Program 4) Program System Drinking water supply 5) Drinking Water Plan Program 6) Human Resources Management Program 7) Contagerx Readers Program 8) Reforestation Program
Electricity	<ol style="list-style-type: none"> 1) Program Installing electricity in rural and urban areas 2) Electricity Maintenance Program (Protection and Maintenance of power distribution lines) 3) Prepaid system program 4) City Street Lighting Program 5) Pusat Listrik Tenaga Air Program
Maritime Ports	<ol style="list-style-type: none"> 1) Development Program of the Maritime Port in the City of Manatuto 2) Maritime Transport Management Program 3) Port Security Program
Airport and Telecommunication	<ol style="list-style-type: none"> 1) Natarbora Airport Construction Program 2) Aviation Security 3) Program Management Plan and territory 4) Airport Traffic Controllers Program 5) Telecommunications network in rural areas in urban areas
Economic fundamentals - targeting three sectors for development - agriculture, tourism,	

rural development and the private sector.	
Rural development	<ol style="list-style-type: none"> 1) Construct rural extracts 2) Building drinking water in rural areas 3) Building the Rural Market 4) Building Rural Electricity 5) Build Rural Health Post 6) Small Industries Development Program in priority areas such as (Coffee, Honey, Balisaun, Tua Sabu, Au Betun (Bamboo) and salt. 7) Rural Education Program with learning center
Agriculture	<ol style="list-style-type: none"> 1) Fisheries 2) Livestock - Poultry breeding program and dairy cow production 3) Forest Plants and Industry 4) Food production (agriculture) 5) Program comparative study in Agriculture
Tourism	<ol style="list-style-type: none"> 1) Data Collection Program 2) Protection and development program Tourism 3) Program Promotes Tourism Promotion
Private sector	<ol style="list-style-type: none"> 1) Development of the cooperative sector 2) Increase knowledge and train employees in the following areas: <ul style="list-style-type: none"> ○ Strategies to develop the cooperative sector; ○ Training of trainers in the area of cooperatives; ○ Training in management of cooperatives; ○ Training in audit of cooperatives; ○ Formation in decrees-law and statute of the cooperative society. 3) Development of micro and small enterprises 4) Increase knowledge in micro and small businesses to support entrepreneurs in running their business in the future: <ul style="list-style-type: none"> ○ Training of SME trainers; ○ Training in accounting and business administration; ○ Training in family business plan; ○ Training in business software (IT).
Institutional framework - focus on macroeconomic management and improvement of the capacity and effectiveness of government institutions.	
Public Sector Governance and	<ul style="list-style-type: none"> • Establish the necessary legal framework for the

<p>Good Governance</p>	<p>development of the Municipality</p> <ul style="list-style-type: none"> • Accelerate the implementation of local power by empowering the Municipality, bringing the public service closer to citizens and promoting public service professionalism in the municipality; • Ensure implementation of the land and property law • Strengthen the performance and service • Promote the favorable business environment to attract investment within the municipality; • Strengthen the presence of community policing in juices • Promote continuous dialogue on conflict prevention • Ensure public order, environmental health, rights and freedom of expression of all people. • Strengthen the implementation of the PNDS & MDP program • Reinforce Local Government Administration- Public Administration through training: <ul style="list-style-type: none"> ○ Supply management ○ File Management ○ Accounting Management ○ Human Resource Management ○ the Spatial Planning
<p>Justice Sector</p>	<ol style="list-style-type: none"> 1. Training for private lawyers, Notaries, Registration and lawyers 2. Training for magistrates and defense lawyers Specific training for magistrates and public defense lawyers 3. Management of public administration for employees involved in social / community development. 4. Digital archive training in the area of logistics 5. Training for Civil Justice Officers 6. Language training

3.2. Main Areas of Training

The Municipality of Manatuto presented the following distribution of training needs per training area required for each pillar and development sector in relation to the immediate period 2019-2022, and then in relation to the period 2023-2025 and in the long term to end of 2030. Training needs were subdivided into two categories: the first refers to scholarships for vocational and technical education, bachelor's, master's and doctorate degrees, and the second refers to professional development through participation in workshops, seminars and development in a work context. Data from the main training areas are presented only in the form of the following table taking into account the short, medium and long term priorities.

Table 25. Distribution of training needs in the short, medium and long term

Main areas of training	Category of training you wish to pursue (Academic / Vocational)		Training Priorities		
	Academic	Professional Technician	Short Term (2019-2022)	Medium Term (2023-2025)	Long Term (To 2030)
Mechanical Engineer	✓	✓	✓	✓	✓
Horticulture Engineer	✓	✓	✓	✓	✓
Mechanical Engineer	✓	✓	✓	✓	✓
Forestry Engineer	✓	✓	✓	✓	✓
Anthropology	✓	✓	✓	✓	✓
Sociology	✓	✓	✓	✓	✓
English and Portuguese language	✓	✓	✓	✓	✓
Comparative study	✓	✓	✓	✓	✓
Comparative study	✓	✓	✓	✓	✓
Academic Sports and training adventures	✓	✓	✓	✓	✓
Tour Guide Training	✓	✓	✓	✓	✓
Technical industry	✓	✓	✓	✓	✓
Geology	✓	✓	✓	✓	✓
Vocational Training, Rotan Industry		✓	✓		
Geology (Pertambangan)		✓	✓		
Geology		✓	✓		
Nutrition provider training		✓	✓	✓	
Management Training		✓	✓	✓	
Training Planning		✓	✓	✓	
Literacy Training		✓	✓	✓	
Pedagogy	✓	✓	✓	✓	

Main areas of training	Category of training you wish to pursue (Academic / Vocational)		Training Priorities		
	Academic	Professional Technician	Short Term (2019-2022)	Medium Term (2023-2025)	Long Term (To 2030)
Methodology	✓	✓	✓	✓	
Comparative study		✓	✓	✓	
Formation of Ethics and Morals		✓	✓	✓	
Language Training (English and Portuguese)		✓	✓	✓	
Management training for managers		✓	✓	✓	
Immunization Training	✓	✓	✓	✓	
Training for mothers	✓	✓	✓	✓	
Training for handicapped technicians	✓	✓	✓	✓	
Dentist Training	✓	✓	✓	✓	
Formasaun TBC	✓	✓	✓	✓	
Comparative study	✓	✓	✓	✓	
Psychology	✓	✓	✓	✓	
Nutrition Training	✓	✓	✓	✓	
Psychiatrist	✓	✓	✓	✓	✓
Psychiatrist	✓	✓	✓	✓	✓
Psychology	✓	✓	✓	✓	✓
Geology Engineer	✓		✓	✓	✓
Chemical Engineer	✓		✓	✓	✓
Environmental Technical Training		✓	✓	✓	
Biology	✓	✓	✓	✓	
Geology	✓	✓	✓	✓	
Forest	✓	✓	✓	✓	
English		✓	✓		
Portuguese		✓	✓		
Management Technician Recycling		✓	✓		
Archeology		✓	✓		
Architectural		✓	✓		
Anthropology	✓	✓	✓	✓	
Anthropology		✓	✓		
Civil engineer	✓	✓	✓	✓	✓
Geology Engineer	✓	✓	✓	✓	✓
Plumbing technician	✓	✓	✓	✓	✓
Chemical technician	✓	✓	✓	✓	✓
Training Management	✓	✓	✓	✓	✓
Technical Installation	✓	✓	✓	✓	✓

Main areas of training	Category of training you wish to pursue (Academic / Vocational)		Training Priorities		
	Academic	Professional Technician	Short Term (2019-2022)	Medium Term (2023-2025)	Long Term (To 2030)
Electrical Technician	✓	✓	✓	✓	✓
Nurse	✓	✓	✓	✓	✓
Midwife	✓	✓	✓	✓	✓
Nursing	✓	✓	✓	✓	✓
Professional Training for Protection	✓	✓	✓	✓	✓
Training on access to the production market (Management)	✓	✓	✓	✓	✓
Teacher Education Training	✓	✓	✓	✓	✓
Fishing Technician	✓	✓	✓	✓	
Animal Health Technician	✓	✓	✓	✓	
Forest Formation	✓	✓	✓	✓	
Agricultural technician	✓	✓	✓	✓	
Agricultural Technician	✓	✓	✓	✓	
Training on State Patrimony	✓	✓	✓	✓	
Tourism Training	✓	✓	✓	✓	
Anthropology	✓	✓	✓	✓	
Guide	✓	✓	✓	✓	
Computer Technology	✓	✓	✓	✓	
Graphic Design	✓	✓	✓	✓	
Management Training		✓	✓	✓	
Civil engineer	✓	✓	✓	✓	✓
Architecture Engineer	✓	✓	✓	✓	✓
Field Engineer	✓	✓	✓	✓	✓
Laboratory Engineer	✓	✓	✓	✓	✓
Geotechnical Engineer	✓	✓	✓	✓	✓
Hydrology Engineer	✓	✓	✓	✓	✓
Degree in Economics	✓	✓	✓	✓	✓
Technical Quantity & Surveyor	✓	✓	✓	✓	✓
Water Management Engineer	✓	✓	✓	✓	✓
Hydrological Engineer	✓	✓	✓	✓	✓
Laboratory Engineer	✓	✓	✓	✓	✓
Civil engineer	✓	✓	✓	✓	✓
Laboratory technician	✓	✓	✓	✓	✓
Technical Quantity & Surveyor	✓	✓	✓	✓	✓
Management and Economics	✓	✓	✓	✓	✓
Technical Contagerx (meteran)	✓	✓	✓	✓	✓

Main areas of training	Category of training you wish to pursue (Academic / Vocational)		Training Priorities		
	Academic	Professional Technician	Short Term (2019-2022)	Medium Term (2023-2025)	Long Term (To 2030)
Forestry Engineer	✓	✓	✓	✓	✓
Electrical Engineer	✓	✓	✓	✓	✓
Electrical Engineer	✓	✓	✓	✓	✓
Electrical Engineer	✓	✓	✓	✓	✓
Engineer Distribution System Protection	✓	✓	✓	✓	✓
Engineer Protection and maintenance of the electricity line	✓	✓	✓	✓	✓
Electrical Engineer	✓	✓	✓	✓	✓
Degree in Management in the Porto area	✓	✓	✓	✓	✓
Mechanical Engineer	✓	✓	✓	✓	✓
Security Engineer	✓	✓	✓	✓	✓
Aeronautical Engineer	✓	✓	✓	✓	✓
Aviation Safety Engineer	✓	✓	✓	✓	✓
Aviation Electricity Technology Engineer	✓	✓	✓	✓	✓
Airplane pilot	✓	✓	✓	✓	✓
Electrical Engineer and Telecommunication	✓	✓	✓	✓	✓
Governmental Sciences		✓	✓	✓	
Public Administration		✓	✓	✓	
Management		✓	✓	✓	
Archive		✓	✓	✓	
Accounting and Auditing		✓	✓	✓	
Management		✓	✓	✓	
Governmental Sciences		✓	✓	✓	
Social Equipment Via Communication		✓	✓	✓	
Computer Technology		✓	✓	✓	
Civil Registration Training		✓	✓	✓	
Law	✓	✓	✓	✓	
Geodesy	✓	✓	✓	✓	
Mapping	✓	✓	✓	✓	
Geography	✓	✓	✓	✓	
Mediation	✓	✓	✓	✓	
Law	✓	✓	✓	✓	

4. Discussion and Analysis

This study has two complementary lines of work, the first being the identification of the distribution of existing human resources at the Municipal level and Administrative Posts. With the data collected, the levels of education and areas of study, occupations and their intentions of training and employment in the desired areas were subsequently analyzed. The second is the identification of priority municipal programs based on the four pillars of the Municipal Strategic Plan (MSP) and key human resources that need training to develop the same priority programs. Attempts have been made to analyze and compare the existence of current human resources and the need for training or training required by the municipality based on its priority programs to allocate funding efficiently and effectively.

The data presented here show that the majority of the respondent population in Manatuto municipality are young people aged 17-36 years. At the level of knowledge, there are a large number of people with no education level (illiterate), followed by those with complete secondary, pre-secondary and basic education respectively.

This dispersion of schooling, together with the rapid growth of the population in the relevant age groups, shows the essence of the challenge faced by the Manatuto municipality. One aspect of this challenge is the balance between those who have completed general secondary education and academic education are predominant compared to those who have completed vocational professional courses, either at the secondary technical level or at the higher technical level - polytechnics. The ideal balance between academic and technical education is a key issue in the development process. In addition, the data also indicate a very small number of people who had taken part in one of the vocational training courses with a skilled labor prepared for self-employment or institutional strengthening.

Those who had already taken part in one of the short-term professional courses are mostly generic professional courses geared more towards administrative work and the civil service such as courses in leadership, administration, finance,

planning, management and languages, which in practical technical terms do not support the creation of their own jobs (self-employment).

There are also a large number of job seekers, including those who have completed their degree programs in Computer Engineering, Management, Law, Accounting and Civil Engineering – Civil Construction, and more graduates in other areas (see table 15), without being exploited in the labor market. The work preference is in the public sector while the non-graduates prefer the non-public sector such as agriculture, domestic work, industrial activity and civil construction.

Analyzing the preference for training based on the priority programs (Table 25) with the current human resources (Table 5), the data show that the Municipality of Manatuto has a high number of graduates in several areas, even though it is verified that there are still needs in some specialized areas. In relation to the current human resources, the question is how to take advantage of and employ them. However, it is important to emphasize that there are still serious concerns about quality not only in technical knowledge but knowledge of languages and this can become one of the challenges. Language training activities are intended to provide the beneficiaries with fluency in reference languages and to enable them to be more effective in carrying out their tasks in particular when traveling to international work. In this sense, it becomes important to unite with the language training with additional training at postgraduate level directed to the specialized technical priority areas and Professional internships.

Another challenge demonstrated in the presented work was the greater number of public and private employees including entrepreneurs with very low levels of education. This may possibly imply a lack of productivity and competitiveness in companies or organizations. It is evident that with this very low level of education the municipality will not be able to overcome the serious problems which are facing right now even the future challenges.

Private sector growth is constrained by skills gaps in the workforce of both employers and workers. The private sector contributes to economic development by generating jobs and income, as well as through investment, new technologies,

knowledge transfer and increased productivity. This has been observed in some Asian countries, where much of the recent success in poverty reduction is due to robust economic growth stimulated by the private sector. In this regard, it is vital to strengthen the private sector by promoting the development and adequacy of the qualification of workers and employers with a view to improving their employability and increasing the productivity and competitiveness of the enterprise.

Equipping workers with certain skills will enable them to continue to take advantage of opportunities for growth expansion in a non-farm private sector. A high school diploma or higher is increasingly an indicator of employment opportunities in the urban private sector.

The municipality identified skills shortage in the following sectors: electronics engineering, health, tourism, aviation, manufacturing, waste treatment and financial services (bank, insurance and securities). It also identified a lack of skills in the following areas: English, nursing, pharmacy, hospitality, pilot training, accounting and auditing, machine operation, component manufacturing and assembly, engineering (design and development), literacy and software programming and management (decision making, leadership, delegation, motivation). Thus, it is considered that academic skill and professional technical training should be provided for the most crucial areas in the implementation of its priority program as set out in table 25.

Based on the data presented above, it becomes evident the need for training and the development of people's ability as a means to provide qualitative and quantitative benefits. It is important to emphasize that skills development can not be seen only in formal technical and vocational education and training. It comprises skills acquired through all levels of education and training, taking place in formal, non-formal and vocational training contexts. It enables individuals in all sectors of the economy to engage fully and productively in livelihoods and to be able to further enhance and adapt their skills to meet new demands and opportunities in the economy and the labor market. Skills development should not

be characterized by the source of education or training itself, but by the skills that are acquired through this process.

With regard to people with disabilities, data show that there are a large number of people with disabilities and many of them have stopped at primary and secondary due to various difficulties, and this makes it difficult to get a job and to earn a higher salary than benefit from the government. Employers have some concerns about hiring people with disabilities because they feel they may not have adequate professional qualifications. This issue can be minimized if there are some inclusive policies such as developing initial and continuing vocational training for people with disabilities to enable them to acquire the knowledge and skills necessary to obtain a vocational qualification to help overcome the concerns of employers so that they can have more opportunities and easier to entry into the labor market.

The data also point out the need to reduce or combat illiteracy by creating opportunities and mobilizing municipal managers to increase literacy provision for all young people, adults and older people who did not have access or stay in basic education, especially small and medium-sized enterprises and farmers. Education and training for entrepreneurship is also principal key to encouraging creativity and the realization of new local economic initiatives.

Intensive training, in service and postgraduate (specialization), should be intensified as key elements for the quality of the human resources currently possessing the Secondary and Bachelor's level of education.

It also reveals the need for a demand-driven secondary-vocational education and demand-driven post-secondary technical education area of secondary and post-secondary education.

And finally, in the scope of preparation of human resources for the creation of municipalities, it is important to strengthen the training in the areas of **Urbanization and Regional Planning, Planning and Territorial Planning.**

PART C: CONCLUSION AND RECOMMENDATIONS

5. Conclusion and Recommendations

Based on the data presented and discussed above, it is concluded that in order to develop human capital resources and achieving sustainable development in the future, the Manatuto Municipality needs to pay more attention to the development opportunities identified in the PDM and to the following five dimensions : 1) economic (increase efficiency of the production system), 2) social (improvement of the levels of income distribution of the population), 3) ecological (preservation of the environment), 4) spatial (balance in distribution and occupation of population rural and urban) and 5) cultural (respect to the ways of thinking and acting of society, focusing on the construction of an environmental awareness linked to consumption).

According to the results obtained, it is considered pertinent to conclude and recommend the following:

- a) The commitment to education should give priority to technical and professional training on academic, focusing more on the opening of vocational training centers (or Polytechnic institutes) to the detriment of the opening of more universities.
- b) Complement to the academic formation, the creation of specialization courses can increase the employability and professional capacity of those who finish the formal education.

Based on the data analyzed, we reinforce the need to train other areas where there are notable shortages of qualified human resources and areas of greater importance according to the priority programs found in table 26.

Most respondents wish to work in the non-public (private) sector than in the public sector. The desire for the private sector was slightly higher among young people aged 17-36 and the preference for work is mainly in the area of agriculture, domestic tasks, industry and construction.

The most unemployed graduates and postgraduates are in the areas of Computer Engineering, Management, Law, Accounting and Civil Engineering - Civil Construction and more licensed in other areas (table 16).

Intensive training, in service and postgraduate (specialization), should be intensified as key elements for the quality of the human resources currently possessing the Secondary and Bachelor's level of education.

There are a large number of people with disabilities of productive age who are looking for work and have inadequate professional qualifications, or very limited practical professional background. It is recommended the need to develop initial and continuing vocational training for people with disabilities and incapacity, in particular the gestural training for those with visual and hearing disabilities, is recommended so that they can have more opportunities in the labor market.

To complete this general conclusion, we highlight five main points:

- 1) Education and training opportunities remain limited in some of the major areas highlighted by the SDP, such as agriculture, construction and hospitality and tourism. It should focus more on the development of human capital:
 - **Agriculture** is the heart of the municipality's economy and critical to the well-being of its people. A sustainable agricultural development path will require greater investment in building innovation and skills on small-scale farms through many routes: training and technology transfer; a strong expansion of the number and skills of extension workers; through better education and training for members of rural families, including women; and increased investment in vocational and tertiary education programs and R & D centers, closely related to the needs of agriculture in the Municipality of Manatuto.

- **Construction** with a limited infrastructure inherited from the Indonesian government period and the continuous needs to consolidate the infrastructures namely the roads thus offering the population of the benefited region better conditions transport, easy access and enables local farmers to transport their products to the market quickly and effectively.

- **Tourism** in Manatuto Municipality continues to be a future opportunity, but taking advantage of this opportunity will require the development of a trained workforce, from entry-level staff to senior managers, as well as investment in R & D, development and planning policies and planning capabilities.
- 2) **Private Sector** - Survey data show that private sector growth is constrained by skill gaps in the workforce of both employers and workers. In this regard, it is crucial to strengthen the private sector by promoting the development and adequacy of the qualification of workers and employers with a view to improving their employability and increasing the productivity and competitiveness of the enterprise.
 - 3) Technical and vocational education and training (TVET). FDCH research shows a lower level of TVET qualifications than university qualifications in the municipality, and increased investment in the expansion of TVET should be a high priority. This expansion should cover technical secondary schools, the polytechnic system, and the community-based non-formal vocational training system. In doing so, it is important that the boundary between academic and technical education remains fluid, with easy articulation between the two areas.
 - 4) Adult education (literacy for all young people, adults and the elderly), especially for women, and on-the-job training. In our view, these three areas are of considerable importance. In particular, the increasing role of women, especially in agriculture, and with a higher skill level due to improved training, may contribute to the growth household and national income, and to more jobs in general.
 - 5) In the preparation of Human Resources for the creation of municipalities (decentralization) it is important to strengthen the training in the areas of **Urbanization and Regional Planning, Planning and Territorial Planning**.
 - 6) It also reveals the need for a supply of study areas at secondary and post-secondary levels that are geared to the needs of the municipality's (demand-driven secondary-vocational education and demand-driven post secondary technical education).

6. References

- Data collection of Existing Human Resources in Timor-Leste - Human Capital Development Fund (FDCH), 2016.
- General Directorate of Statistics - Ministry of Finance, Population and Housing Census, 2010.
- General Directorate of Statistics - Ministry of Finance, Population and Housing Census, 2015.
- Strategic Plan for National Development 2011-2030.
- Strategic Plan for Municipal Development 2016.

Annex 1. Questions for group discussion

QUESTIONS FOR GROUP DISCUSSION - GROUP I - GENERAL QUESTIONS

Identify the Powers (Natural Resources) that the Municipality / RAEOA has as priorities to develop!	Related to the powers (Natural Resources) that exists, What kind of Human Resources do you want to train (train) to develop the existing potentialities?	What level of Human Resources do you want to train?		Training priority for (Short, Medium and Long Term)		
		Academic	Professional Technician	Short term (2019-2021)	Medium Term (2022-2025)	Long Term (2026 - 2030)
Tourism						
Agriculture						
Identify other potentials						

QUESTIONS FOR GROUP DISCUSSION - GROUP II - SOCIAL CAPITAL

Social Capital	What are the priority programs related to the sectors below that the Municipality / RAEOA has to develop? Describe according to each industry!	Related to the powers (Natural Resources) that exists, What kind of Human Resources do you want to train (train) to develop the existing potentialities?	What level of Human Resources do you want to train?		Training priority for (Short, Medium and Long Term)		
			Academic	Professional Technician	Short Term (2019-2021)	Medium Term (2022-2025)	Long Term (2026 - 2030)
EDUCATION AND TRAINING							
HEALTH							
SOCIAL INCLUSION							
ENVIRONMENT							

CULTURE AND HARITAGE							

QUESTIONS FOR GROUP DISCUSSION - GROUP III - ECONOMIC DEVELOPMENT

Economic development	What are the priority programs related to the sectors below that the Municipality / RAEOA has to develop? Describe according to each industry!	Related to the powers (Natural Resources) that exists, What kind of Human Resources do you want to train (train) to develop the existing potentialities?	What level of Human Resources do you want to train?		Training priority for (Short, Medium and Long Term)		
			Academic	Professional Technician	Short Term (2019-2021)	Medium Term (2022-2025)	Long Term (2026 - 2030)
Rural development							
AGRICULTURE							
PRIVATE SECTOR							

QUESTIONS FOR GROUP DISCUSSION - GROUP IV - INFRASTRUCTURE DEVELOPMENT

INFRASTRUCTURE DEVELOPMENT	What are the priority programs related to the sectors below that the Municipality / RAEOA has to develop? Describe according to each industry!	Related to the powers (Natural Resources) that exists, What kind of Human Resources do you want to train (train) to develop the existing potentialities?	What level of Human Resources do you want to train?		Training priority for (Short, Medium and Long Term)		
			Academic	Professional Technician	Short Term (2019-2021)	Medium Term (2022-2025)	Long Term (2026 - 2030)
ROADS AND BRIDGES							
WATER AND SANITATION							
ELECTRICITY							
MARITIME PORTOS (if applicable)							
AIRPORT AND TELECOMMUNICATIONS							

QUESTIONS FOR GROUP DISCUSSION - GROUP V - INSTITUTIONAL FRAMEWORK

INSTITUTIONAL FRAMEWORK	What are the priority programs related to the sectors below that the Municipality / RAEOA has to develop? Describe according to each industry!	Related to the powers (Natural Resources) that exists, What kind of Human Resources do you want to train (train) to develop the existing potentialities?	What level of Human Resources do you want to train?		Training priority for (Short, Medium and Long Term)		
			Academic	Professional Technician	Short Term (2019-2021)	Medium Term (2022-2025)	Long Term (2026 - 2030)
MANAGEMENT AND GOOD GOVERNANCE OF THE PUBLIC SECTOR							
Justice							

Annex 2. Attendance list of the participants in the discussion of groups

List attendance of participants in the discussion of groups on identification of natural resources and economic potencies, related priority programs and key areas of training in the municipality of Manatuto

No.	Name	Position	Institution
1	Natalina M.Carvalho	Laclubar Administrator	MAE
2	Evarísto Lima	Barique Administrator	MAE
3	António de Jesus	FSPA	PNDS
4	Sales Luís	Journalist	Media RTTL
5	João Paulo Leong	Staff	Tak-kong
6	Miguel Soares	Staff	Justice Department
7	Estevão Guterres	Staff	Education Department
8	António V. Fernandes	Dept. Chief	Education Department
9	Theta Santos	Secretary	Comp. Sinptech Eng. Const.
10	Amaro Bino	Office Manager	Comp. SINOTECH
11	Tomás Morais	Staff	CNE
12	Isaúro de J. Lopes	Staff	CNE
13	Firmínio da Costa	Chief of Dept.	Agriculture Department
14	Elvis Miguel Gonzaga	Coord. Civil Protection	MDS
15	Pedro C. Costa	Personnel Staff	CSSM
16	Agostinha Mária da Silva	Trainer	IADE
17	Cósme dos Santos	Staff	DPPEC
18	Gaspar H. da Silva	Manatuto Administrator	MAE
19	Rita S. Sarmiento	Staff	Sepfope
20	Moises Anibal da Cruz	FSPA	MAE
21	Marcelina C. Paula	FSPA	MAE
22	Gaspar H. da Silva	Director	MAE
23	Luís Alves dos Reis	Tecnician Officer	Comp. Maclais
24	Vicente Soares	Director	STAE
25	Andre P.C.O.	OGL Lacló	MAE
26	Francisco Borgês	Director	Land and Property of Manatuto
27	Arthur N. Belo	Dept. Chief	DNSPP.M.M
28	Achmad Fadil	Staff	F. Moris Rasik

29	Julio da C. Soares	Staff	STAE
30	Duarte da Costa	Chief Dept.	MDHOA-Ambiente
31	Luís Vicente Correia	Koordinator	MDS
32	Juliana de S.H.B.S	Veterans	
33	Boaventura Soares	Vice of President	Manatuto Veterans Association
34	Julio Soares lay	Director	Sahan Comp. Lda
35	Joaquina da Cunha	Dept. Chief	AC
36	Januario N. S. da Silva	Koordinator	Moris Foun Foundation
37	Salvador Serpa Soares	Staff	Art and Culture Dept.
38	Domingas G.da. C. Soares	FSPA	PNDS
39	Joanica do Rosário	Staff	SEDPAC
40	Elias J. Soares	FSPA	PNDS
41	Estevânia V. S. Correia	Finance Officer	DMSASA
42	Alda M.J.D.S.	Director	MJ Registo Civil
43	Joana M. S. de. Carvalho	Staff	Estatistica
44	Rosália do E. S. da Cruz	Dept. Chief	MAE
45	Sebastião S. K.	Veteran	
46	Armando O. Pires	Staff	MOP/DSOP
47	Fernanda de S. G.	FSPA	PNDS
48	Simão da Costa	Laleia Administrator	MAE
49	Agripino da Silva A. Costa	Sectetary of Manatuto	MAE
50	Lucio J. G.	Director	PNDS Manatuto
51	Filomeno Lay	Koord. Gappefiv	FDCH-MDRI
52	Maria Luisa	Staff	FDCH-MDRI
53	José Bento	Driver	FDCH-MDRI
54	Natalino Amaral	Staff	PNDS