



Ministry for Higher Education,  
Science and Culture  
(MESCC)

# FDCH



Human Capital Development Fund  
(FDCH)

## RESULTS OF DATA COLLECTION OF EXISTING HUMAN RESOURCES AND THE MAIN KEY AREAS OF TRAINING

LD RHE REPORT 2018



**AILEU  
MUNICIPALITY**

# LD RHE

DATA COLLECTION OF EXISTING  
HUMAN RESOURCES

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

## **Municipality of Aileu**

***Fundo do Desenvolvimento do Capital Humano (FDCH)***

**(Human Capital Development Fund – HCDF)**

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## CONTENT

CONTENT .....	1
LIST OF TABLES.....	2
LIST OF FIGURE .....	3
ACKNOWLEDGMENT .....	4
MESSAGE FROM THE MINISTER .....	6
MESSAGE FROM THE EXECUTIVE SECRETARY OF FDCH .....	9
EXECUTIVE SUMMARY .....	11
PART A: INTRODUCTION, OBJETIVES AND METHODOLOGY .....	20
1. INTRODUCTION, OBJECTIVES AND METHODOLOGY .....	20
1.1. General Introduction .....	20
1.2. Objective .....	32
1.3. Methodology.....	32
PART B : ANALYSIS AND RESULTS FOUND .....	34
2. OVERVIEW THE HUMAN CAPITAL OF THE MUNICIPALITY OF AILEU .....	34
2.1. Presentation and Analysis of data .....	34
2.2. Profile of Respondents .....	34
2.3. Peoples with Disability .....	35
2.4. Education Level .....	37
2.5. Vocational Training Certificate Level I - Certificate IV.....	57
2.6. Professional Occupation in the Public Sectors.....	62
2.7. Level of Education of Temporary Public Servants .....	64
2.8. Non-Public Sector (Private Sector) .....	64
2.9. Preferred Working Area .....	68
2.10. Business Sector preferred to work in.....	69
2.11. Age group (age) of respondents looking for a job.....	70
2.12. Graduates in job search "Unemployment".....	70
2.13. Number and areas of study of students who are currently attending courses .....	72
2.14. Year the course ends .....	75
2.15. The demand of training for personal and institutional .....	79
2.16. Institution Providers and Financing.....	80
2.17. Training Financing.....	81
2.18. Future training plan .....	82
2.19. Category and Academic Degree of Training.....	84
3. DEVELOPMENT OF HUMAN RESOURCES WITHIN THE STRATEGIC DEVELOPMENT PLAN OF THE MUNICIPALITY .....	87
3.1. The four pillars of the Municipality's Strategic Plan (PEM).....	87
3.2. The Main Areas of Training.....	93
4. DISCUSSION AND ANALYSIS .....	98
PART C: CONCLUSION, RECOMMENDATIONS AND NEXT STEPS .....	102
5. CONCLUSIONS AND RECOMMENDATIONS.....	102
6. BIBLIOGRAPHICAL REFERENCES .....	106
ANNEX 1. QUESTIONS FOR DISCUSSION OF GROUPS .....	107
ANNEX 2. LIST ATTENDANCE OF THE PARTICIPANTS IN THE DISCUSSION OF GROUPS .....	112

## LIST OF TABLES

TABLE 1 . DISTRIBUTION OF EXISTANCE OF PEOPLE OF DISABILITYBY SUB DISTRICT ADMINISTRATIONS.....	36
TABLE 2. DISTRIBUTION OF THE PEOPLEWITH DISABILITY BY SUB DISTRICT ADMINISTRATIONS .....	36
TABLE 3. DISTRIBUTION OF PEOPLE WITH DISABILITY BY TYPE OF DISABILITY AND BY SUB DISTRICT ADMINISTRATIONS .....	37
TABLE 4. DISTRIBUTION BY LEVEL OF EDUCATION AND BY SUB DISTRICT ADMINISTRATIONS.....	37
TABLE 5. DISTRIBUTION OF EDUCATION LEVEL OF RESPONDENTS BY STUDY PROGRAM AND BY SUB-DISTRICT ADMINISTRATIONS .....	39
TABLE 6. NUMBER AND AREAS OF CERTIFICATE I-IV TRAINING BY SUB-DISTRICT ADMINISTRATION.....	57
TABLE 7. DISTRIBUTION OF PERMANENT PUBLIC SERVANT OCCUPATION AND YEARS OF SERVICE .....	62
TABLE 8. GRADE AND LEVEL OF PERMANENT PERMANENT PUBLIC SERVANT INTERVIEWED.....	63
TABLE 9. DISTRIBUTION OF TEMPORARY PUBLIC SERVANTS BY OCCUPATION AND YEARS OF SERVICE. ....	63
TABLE 10. DISTRIBUTION OF TEMPORARY PUBLIC SERVANTS BY LEVELS OF EDUCATION.....	64
TABLE 11 . DISTRIBUTION OF ENTREPRENEURS AND LEVEL OF EDUCATION.....	68
TABLE 12. NUMBER OF TOTAL RESPONDENTS IN THE MUNICIPALITY OF AILEU LOOKING FOR A JOB AND WHERE THEY INTEND TO WORK IN THE PUBLIC OR PRIVATE SECTOR. ....	69
TABLE 13. DISTRIBUTION OF AREAS OF ACTIVITY THAT RESPONDENTS WISH TO WORK .....	69
TABLE 14. AGE GROUP OF RESPONDENTS LOOKING FOR A JOB .....	70
TABLE 15. NUMBER AND AREAS OF KNOWLEDGE OF HIGHER EDUCATION COURSES IN SEARCH OF EMPLOYMENT AND WISH TO WORK. ....	71
TABLE 16. DISTRIBUTION OF THE NUMBER OF STUDENTS WHO ARE CURRENTLY ATTENDING COURSES IN HIGHER EDUCATION	73
TABLE 17. DISTRIBUTION OF THE NUMBER OF STUDENTS WHO ARES CURRENTLY ATTENDING THE COURSES AND PREDICTION OF THE YEAR IN WHICH THEY WILL FINISH THE COURSE.....	76
TABLE 18. PROFESSIONAL DEVELOPMENT COURSES CARRIED OUT BY TRAINING AREA AND DURATION OF THE COURSE. ....	79
TABLE 19. LANGUAGE TRAINING AND THE DURATION OF THE COURSE .....	80
TABLE 20 . FUNDERS OF LANGUAGE TRAINING .....	81
TABLE 21. DESIRED TRAINING AREAS BY NON-EMPLOYED RESPONDENTS.....	83
TABLE 22. AREAS OF TRAINING DESIRED BY RESPONDENTS EMPLOYED FOR INSTITUTIONAL STRENGTHENING .....	83
TABLE 23. CATEGORY OF TRAINING - ACADEMIC OR VOCATIONAL TRAINING .....	84
TABLE 24 . TRAINING AREAS RELATED TO ACADEMIC DEGREES .....	85
TABLE 25 . DISTRIBUTION OF TRAINING NEEDS IN THE SHORT, MEDIUM AND LONG TERM.....	94

## LIST OF FIGURE

FIGURE 1. DISTRIBUTION OF RESPONDENTS BY AGE GROUP AND BY GENDER.....	35
FIGURE 2 . STAFF OF NON-GOVERNMENTAL ORGANIZATIONS (NGOs) BY POSITION.....	65
FIGURE 3. DISTRIBUTION OF ENTREPRENEURS BY POSITION .....	66
FIGURE 4. DISTRIBUTION OF THE AREAS OF ENTREPRENEURS ACTIVITIES .....	67
FIGURE 5 . PROVIDER OF LANGUAGE TRAINING.....	81
FIGURE 6 . ACADEMIC DEGREES THAT WISH TO CONTINUE .....	85



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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

A blue ink signature, appearing to be "Longuinhos dos Santos", is written over a horizontal line.

**Longuinhos dos Santos, M.M.**

Minister of Higher Education, Science and Culture (MESCC)

## MESSAGE 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

A blue ink signature of Isménio Martins da Silva, consisting of stylized, flowing letters.

**Isménio Martins da Silva**

Secretary of HCDF/ FDCH-MESCC

## EXECUTIVE SUMMARY

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 (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 to identify the 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 MSP/PEM to be implemented successfully.

The formulation of a human resources 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 of the workforce in the public and private sector, vocational education and training system as well as capacity development, current and future labor market issues including the 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 to the municipality are scarce and are often dispersed through many sources.

The integration of these issues into a human resources 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 capacities of all human resources.

The fact that the aforementioned subjects are not sufficiently integrated into a set of human resources development work programs and 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 Administrations. 2) identifying the natural resources and economic potential 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 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 a census of the resident population in the Municipality of Aileu, with the completion of a questionnaire, carried out from September 5 to 5 of November of 2016 and **in the second phase**, was done through "Focus Group Discussion-FGD" held on March 16, 2018 to the Municipal Administrators, Administrative Officers, Directors and also with the participation 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 Results

The data presented here show that the majority of the respondent population in the Municipality of Aileu are young people aged between 17 and 36 years. At the level of knowledge, there is a large number of people with no education level (illiterate), followed by those with complete secondary, pre-secondary and basic educational 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 Municipality of Aileu. 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 the higher technical level such as - 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 participated in one of the vocational training courses with 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 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 a bachelor's degree program in areas such as Mathematics in Education, Law, Accounting, International Relations and others in smaller numbers (see table 15). The work preference is in the public sector while the non-licensed are 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 the Municipality of Aileu 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 in language skills and this can become a challenge. 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 the language training with the additional training at postgraduate level directed to the priority technical areas and professional internship program.

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 educations. This may possibly imply a lack of productivity and competitiveness in companies or organizations. It is evident that with this very low level of qualifications the municipality will not be able to overcome the serious problems that it faces nor 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 countries in Asian, 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 the 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 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 a shortage in the following sectors: Forest Management, Animal Production, Aquaculture, Government Planning and Policy, Tourism and Hospitality, Human Resource Management, Social Work, Educational Policy and Educational Technology including Information Technology and Communication (ICT). 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, programing or software engineering 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 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 full and productively in livelihoods and have the ability to further refine 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 some 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 / 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 small business people and medium-sized enterprises and farmers. Education and training for entrepreneurship is also

fundamental 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.

### **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 Municipality of Aileu 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 conscience 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 m graduates and post-graduates most unemployed with highest number of job seekers are in the areas of Mathematics in Education, Law, Accounting, International Relations and more in other areas (see 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 of productive age who looking for work are 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. The following areas should be 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 and Research and Development (R & D) centers, closely related to the municipality's agricultural needs.

- **The Construction** with a limited infrastructure inherited from the Indonesian government period and the continuous development needs, the Municipality faces an important construction task. A substantial investment in the local construction workforce appears to be necessary.
- **Tourism** continues to be a future opportunity, rather than a current reality for the municipality. 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 Research and Development (R & D), policy development and planning, and capacity planning.

**2) Private Sector** - Survey data show that private sector growth is constrained by skills 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 business.

**3) Technical and vocational education and training (TVET).** FDCH's study shows a lower level of TVET qualifications than university qualifications in Aileu 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 municipalities (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 supply of study areas at the secondary and post-secondary level that is geared to the needs of the country (demand-driven secondary vocational education and demand-driven secondary technical education).

## PART A: INTRODUCTION, OBJETIVES AND METHODOLOGY

### 1. Introduction, Objectives and Methodology

#### 1.1. General Introduction

The municipality of Aileu is located in the northwest of the island of Timor-Leste, ie on the south coast of the capital Díli. It occupies an area of 737 km<sup>2</sup> with a mountainous topography and lies between 350 - 1500 m of the sea surface, 8 ° 33'33.41 "S-8 ° 51'4.39" S) and Longitude (125 ° 27'22.42 "E-125 ° 49'9.53" E).

The capital of the district is also called Aileu. It borders Dili to the north, Manatuto to the East, Manufahi to the southeast, Ainaro to the south, Ermera to the west and Liquiçá to the northwest. It was part of the Municipality of Dili, but was separated in the last years of the Portuguese administration. As part of the decentralization 56 programs of the Government of Timor-Leste, the former Aileu District is now organized as the municipality of Aileu, led by a Municipal Administrator.

Aileu emerges from a root "Ai abut" that is found in the juice of Liurai, Sub District Administrations Aileu Vila. This root grows without trunk and bough twisting bough resembling a chair. From the time of the ancestors that consider this root as unique and special, for that reason they designated the region of Aileu, that in Tetum language signals root wrapped around a tree. Thus the ancestors made the decision that this tree represented the symbol of Aileu, name of the place and the Municipality.

Aileu since the ancestors already had indigenous structures based on the existence of house usually "a lisan" in which each Lisan had a boss named Bei. Traditional or indigenous leaders called Kuku. These traditional leaders with higher rank were later chosen as regent of them named Liu Rai (Dat Rai Ubun). Formerly the ancestors were illiterate, but there was always someone as leader or leader to make decisions regarding the boundaries between one place (knua ida) and another.

Before the arrival of the Portuguese in Timor, the culture of Aileu already existed like the traditional wedding "barlakeadu" where they were legalized by the two houses "a fukun street", designated "a mane" and "a fetus". Traditional justice,

prohibition, and the form of punishment also existed according to traditional usage. As an example the fine of animal according to the degree of irregularity practiced.

In 1500 years ago, the population of Aileu lived under the governance of the Liurai and Dom system. Between 1942-1972, already in the period of the Portuguese occupation Aileu became an Sub District Administrations; Aileu Vila and Remexio were submitted to the Dili council. Lequidoe and Laulara before the liurais received order directly in the council of Díli without passing through the Sub District Administrations of Aileu Vila and Remexio.

Between 1973-1975, Aileu became the Council joining two other Sub District Administrations , Lequidoe and Laulara to fulfill the criteria as Administrative Council with the minimum of 4 Sub District Administrations. Aileu became Council from 1972 with the Board Administrator Mr. Alfredo Pires.

The Portuguese colonization delimited the territory of Timor for the first time with administrative division called Military Command, shared the structure of regiment the town with its positions and positions (colonel, lieutenant colonel, major, captain until ensign). Subsequently there was a Portuguese political change of military command to the Aileu Constituency Post that as a result of that also changed the positions and positions became Dom, Chief of Suco and Chief of Population. Finally, they became Administrative Council of Aileu where they are described and published in the official documents of the administration of the colonial government.

During the Indonesian occupation, East Timor was considered 27th province of Indonesia, consisting of 13 Kabupaten (Municipalities), Aileu was designated as a municipality called "Kabupaten Aileu" (Municipality of Aileu). In 1977, Aileu was established as one of the municipalities with 30 juices and 4 Sub District Administrations : Aileu Vila, Lequidoe, Remexio and Laulara.

This settlement led to the loss of 4 settlements, Balibar and Laulara settlement of Kotolau juice, Daralau village of Talitu juice and Kaisabe settlement of Assumau juice which became part of Dab Kabupaten (Dili Municipality).



After the referendum 1999 the transitional administration of the United Nations persecuted the administrative division left by the Indonesian, only changed the name of Kabupaten Aileu to Distrito of Aileu. Today the district designation is replaced by municipality.

The population is estimated at 48,554 inhabitants with a population density of 66.4 inhabitants / km<sup>2</sup> (Census, 2015). The population is distributed very irregularly by juices and Sub District Administrations Of the total, 48.4% of the population is female and 51.6% male. There are 43.03% of people of economically active age.

The population of Aileu is essentially young, with 63.9% under 25 years old, which contributes to strong pressure on the education, health, vocational training and labor market systems. The proportion of individuals under 15 years of age 39%, 15-64 years of 55.4%, and 5.6% over 64 years. The population density of Aileu is 66 / km<sup>2</sup> (170 / sq mi) (Census, 2015).

At religious level there are several beliefs. The dominant religion in the territory of the municipality of Aileu is the Catholic religion, followed by the Protestant Church and other religions with less percentage being the languages with well defined and spoken areas is the **language Mambae (99.9%)** and **Lolei with 1%** of speakers .

Sub-District Administrations, Villages (*Sucos*) and Sub-Villages (*Hamlets/Aldeias*)

The Municipality of Aileu is divided into 4 Sub District Administrations, 31 Villages (Sucos) and 135 Sub-villages (Aldeias)\_ scattered throughout the territory according to table 1 below:

## Sub-District Administrations, Villages and number of Villages

Sub-District Administrations	
Sub-District Administration	Surface (Km2)
Aileu Vila	245,80
Lequidoe	175,39
Remexio	214,25
Laulara	94,03
<b>Total</b>	<b>2195</b>

Sub-District Administrations	Villages	Number of Sub-Village	Total
Aileu Vila	Aissirimou	5	63
	Bandudato	3	
	Fahiria	6	
	Fatubossa	7	
	Hoholau	5	
	Lahae	5	
	Lausi	5	
	Saboria	3	
	Seloi Kraik	10	
	Seloi Malere	6	
	Suco Liurai	8	
Laulara	Cotolau	5	23
	Fatise	5	
	Madabeno	6	
	Talitu	4	
	Tohumeta	3	

Sub-District Administrations	Villages	Number of Sub-Village	Total
Lequidoe	Açubilitoho	3	22
	Bereleu	5	
	Betulau	3	
	Fahiso	3	
	Faturilau	2	
	Namolesso	4	
	Manucassa	2	
Remexio	Açumau	3	27
	Fadabloco	4	
	Fahiso	3	
	Faturassa	4	
	Hautoho	3	
	Maumeta	3	
	Suco Liurai	3	
	Tulataqueu	4	

Fonte: Censo, 2015

### Climate, Relief and Hydrography

The climatic situation of the Municipality of Aileu is essentially characterized by two main stations, a dry season and a rainy season. The dry season occurs between June and October with the average temperature of 30,36oC and a rainy season during the remaining months of the year, and the month of June can be considered transitory and with an average temperature of 10.75oC. The municipality is situated in the mountains between 350 - 1500 m of sea surface, where the climate is almost always spring - never reaching the heat and humidity of Dili - and the landscape almost never ceases to be green, the inauguration of a station of water sufficient to meet the needs of Dili (where there are almost 200,000 souls and it is

almost a luxury the channeled water that falls by the wayside or simply disappears from the taps days and days followed in the densest and poorest districts took to the capital of that municipality high personalities of the Government, diplomats, journalists and much population.

## **Economic Potentials and Natural Resources for the Development of the Municipality of Aileu**

### **a) Tourism**

The Municipality of Aileu has great potential in the tourism sector, namely cultural tourism, historical, landscape, community tourism and culinary. Given its proximity to the capital and with cool climates this municipality was one of the places much sought after by tourists and foreigners. According to the 2011 strategic plan, the development of the tourism sector in the municipality is one of the main generators of employment and income. The bet on the tourism sector increases the number of jobs because tourism is composed of several sectors, which allow the absorption of skilled labor, thus contributing to a better distribution of income, thus reducing regional / local disparities. The tourism sector has been gaining significant importance in recent years in Aileu, evidencing a tendency to become a strategic sector that could contribute to boost the economy of the municipality.

In this sense, the Municipality of Aileu has to establish the tourism information center, provide brochures and map tourist and historical sites for advertising in order to attract visitors and domestic and foreign tourists.

In addition, empower young people in the areas of languages namely foreign language and historians to later guide tourists.

### **b) Trade and Industry**

The trade and brick industry made by "rai mean" is one of the powers that has been developing. Currently the production is still limited but the quality raw material "rai mean" is distributed in 4 Sub District Administrations.

With the raw material that exists, it is fundamental to create regulations so that local, national and international companies can produce brick and tile with more quantity and quality for the construction of the houses of the population of Aileu and possible export to other municipalities which can contribute to the increase of the municipality's revenues.

In the Sub District Administrations of Laulara and Lequidoe there are also small industries producing orange juice and pineapple for the manufacture of marmalades. As the plan, the trade and industry will be developed by the public sector, private and cooperatives. The Municipality of Aileu will work in partnership with the private sector and cooperatives to develop the municipality's economy by diversifying the industry sector in various sectors to create youth labor camp. The main objective is to reduce poverty and increase income for the well-being of the population. It is also intended to cooperate with international partners with greater investment to strengthen local businesses and not compete with local businesses.

### **c) Forests**

The Municipality of Aileu has a varied forest potential such as ai-ruu and ai-bubur and others that grow naturally to green the city and function as protection from sources of water existence that provides the capital Dili and the Municipality of Manatuto.

In the 4 Sub District Administrations namely Laulara, Remexio, Liquidoe and Aileu Vila are the trees with commercial economic value, currently used as raw material for several industries such as tais, pharmaceutical, cosmetics among others, some species offering more than one product , for different segments, throughout their life, such as wood, fruits, oils and seeds.

Forests play a key role for the Municipality of Aileu, providing useful resources for household subsistence (especially fruit, firewood and coal) and can be a great outlet for precious timber exports. However, the activities of the resident population result in some collateral issues such as



forest degradation. Among the problems that are causing the degradation of existing forests are shifting agriculture, firewood collection, forest fire, idiosyncratic logging, lack of policies and regulations, and lack of forestry information.

The forestry sector, through the industries, has contributed to the society, placing in the market materials essential to the population as the support to the incentive aiming to increase the economic value and the competitiveness of the forest products.

The forest sector contributes an important part to the economy of the municipality through the generation of products for direct consumption or for export, generating taxes and employment and acting in the conservation and preservation of renewable natural resources. Thus, this sector should seek to permanently boost its sustainability, to obtain a continuous production without reducing its values and its productivity without causing damage to the environment.

However, it is observed that the sustainable development of the forest sector is one of the strategies, fully feasible for the development of the Municipality of Aileu as a whole.

#### **d) Livestock**

Livestock farming is a complementary activity of agriculture, constituting 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 raising buffaloes, goats, pigs and chickens. Livestock farming is characterized by family exploitation and is an important complement to household income.

By 2020, the Aileu Municipality intends to develop this area as an area of great potentiality and longevity. It is necessary to have a good policy to guarantee the continuity of the production of this sector.

### e) Aquaculture

Due to its geographical location the Municipality of Aileu is situated in the center where in the northern part it borders the Municipality of Dili, in the south with the Municipality of Ainaro and Manufahi, in the east with the Municipality of Manatuto and in the West part with the Municipality of Ermera and is one of only two landless municipalities, the other being Ermera. Aquaculture activity must be developed through the creation of freshwater fish, mainly as an occasional or even complementary activity of agriculture and livestock. Aquaculture is an activity that can be practiced in a sustainable manner, with a relatively low investment cost and high productivity, and can contribute to increase the Municipal and National production of food in a significant way, contributing to greater food security in the municipality. As a low-cost implementation and operational activity, as well as accessible technology, aquaculture presents itself as an alternative for the generation of jobs and income in a competitive way in the nearest municipalities.



### f) Natural Resources – Potentials

Natural resources have a relevant role in the municipal and national markets. They offer a tangible value of present and future and are part of the real economy. The Municipality of Aileu has identified some sectors of greater importance in the economy of the municipality: Agriculture (including Agroindustry and Horticulture), Livestock, Forestry, Fisheries

(Aquaculture), Tourism (Landscaping Tourism) and Cultural Heritage, as well as the memories left during the Portuguese colonization, Indonesian occupation (24 years) and massacre between 1942-1945 Japanese - Portuguese and 1975-1999 between Timor - Indonesia.

In terms of resources for construction materials, the Sands of the river, Pedras, "Tanah Merah", Marble and "Tanah Putih" stand out.

### **g) Infrastructures and transport**

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, network maintenance , 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 it compromises the development of the Municipality.

The existing infrastructures in the Municipality of Aileu are of little reach in the service to the communities and populations, being the accessibility in the territory characterized by the inexistence of a road network able to solve the needs of circulation between the Sub District Administrations and other Municipalities, Aileu - Dili, Aileu - Same and Ainaro.

In relation to this, the needs are huge. This is an absolute priority for the development of the municipality, considering its importance for the resumption of

all economic activities. The road system is still not in good condition. Some areas still do not have access to roads, and due to poor road conditions.

Anticipating the implementation of the decentralization process and the creation of the municipality, the main challenge of the economy was identified as: increasing the competitiveness of the economy through diversification of the economy; invest on the poles of development; investment in human capital, infrastructure and 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 (Special Economic Zone), aquaparkes, thermalpower stations, roads, ports, definition of housing areas and State reserves).
3. Research, innovation and technological development (creation of specialized Research & Development 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 creation of institutions that serve the industrialization strategy - eg 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) **mechanism 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 Aileu 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 areas of training but also prior knowledge of existing human resources and segmentation of funds appropriate to 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 *an existence of* Human Resources Census in the Municipality of Aileu is one of the reasons for this work.

The purpose of this paper is to identify and analyze the current human resources situation and its distribution, to describe the current human resources situation of each Sub-District Administrative to promote the planning of human resources, namely in relation to the needs of the Municipality and finally to strengthen collaboration from the public sector to the private sector and professional associations;

## 1.2. Objective

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; and
5. Strengthen cooperation between the public and private sectors and professional associations.
6. Promote an efficient allocation of HCDF/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 methodological approach, whose quantitative and qualitative. The first, the data were collected from individuals aged 17 years or over through the census of the population living in the Municipality of Aileu with the completion of a questionnaire, conducted between September 5 and November 5, 2016, and the

second was made through the Focus Group Discussion (FGD) held on March 16, 2018.

The population census is the only source of information on the life situation of the population in Sub District Administrations and villages. The census produces information essential for the definition of public policies of the state at the level of Sub District Administrations 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 the Municipal Administrators, 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 RESULTS 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 Municipality of Aileu, continues in four sections.

**Section 1** is mainly based on the FDCH survey to analyze the current human capital situation of the Municipality of Aileu 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. Overview the Human Capital of the Municipality of Aileu

#### 2.1. Presentation and Analysis of data

This section briefly reviews data on the existing level of human resources in the Municipality of Aileu 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 result of the FDCH survey and statistical data from the General Directorate of Statistics -DGE official acronym in Portuguese language.

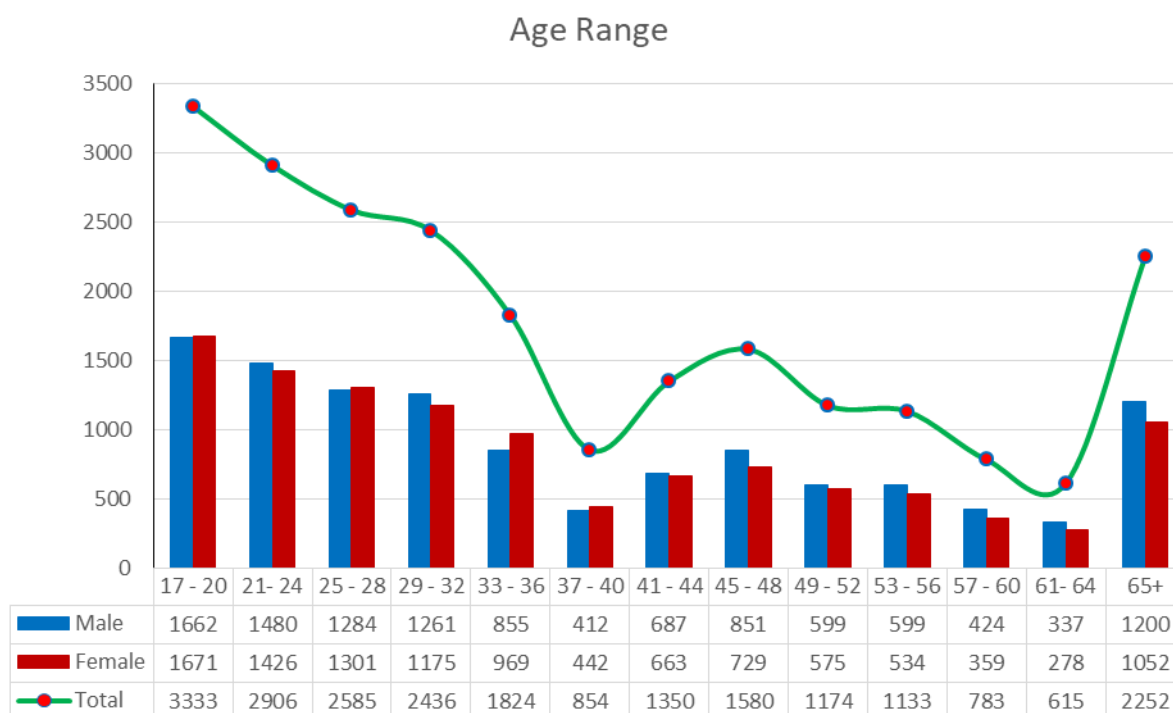
#### 2.2. Profile of Respondents

The first part of the collection tool outlined the profile of the respondents, 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 22,825 respondents, of which 51% are male and 49% female. The other aspects of the profile are arranged in the graphs below.

The majority are aged between 17 and 36 years old, representing 57.5%, 37-64 years with 32.8% of those surveyed and 9.9% being older than 65 years. Males constitute the largest number in almost all age groups except in the age group between 25-28 years and 33-36 years. However, the differences are not significant (Figure 1).

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



### 2.3. Peoples with Disability

Table 1 shows the distribution of assessment of the existence of disabled people in the Municipality of Aileu. It is verified that in the evaluation of the existence of disabled people a total of 563 respondents corresponds to 2.5% of the total of 22,825 respondents distributed by 4 A Sub District Administrations (table 1):

Table 1 . Distribution of existence of people of disability by Sub District Administrations

Sub-District Administrations	Have Disabilities?		TOTAL
	YES	NO	
Aileu Vila	182	10,802	10,984
Laulara	124	3,018	3,142
Lequidoe	100	3,144	3,244
Remexio	157	5,298	5,455
<b>Aileu</b>	<b>563</b>	<b>22,262</b>	<b>22,825</b>
<b>Percentage (%)</b>	<b>2,5</b>	<b>97,5</b>	<b>100,0</b>

The highest number of people with disabilities was registered in the Aileu Vila Sub District Administrations 32%. The other Sub District Administrations have very similar numbers with a percentage between 18 - 28% (Table 2).

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

Sub-District Administrations	Frequency	Percentage(%)
Aileu Vila	182	32
Laulara	124	22
Lequidoe	100	18
<b>Remexio</b>	<b>157</b>	<b>28</b>
<b>Total</b>	<b>563</b>	<b>100</b>

The main difficulties are related to physical mobility and vision and hearing. There was also a very similar number between psychosocial or mental and hearing impairment. (Table 3).

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

Sub District Administrations	Type of disability					Total
	Physics / Mobility	View	Deaf/Mute	Psychosocial / Mental	Cognitive / intellectual	
Aileu Vila	73	50	29	34	-	186
Laulara	32	64	16	11	1	124
Lequidoe	22	48	15	15	-	100
Remexio	46	29	46	35	1	157
<b>Total</b>	<b>173</b>	<b>191</b>	<b>106</b>	<b>95</b>	<b>2</b>	<b>567</b>

## 2.4. Education Level

As for the level of education of illiterate respondents, adult literacy and incomplete basic education occupy 47.5% of the total respondents. Basic education (primary and pre-secondary) represents 28.6% and secondary education occupies 19.3%. Vocational technical education courses and other levels of courses occupy 0.6% and 0.3%, respectively. At the tertiary or higher level, 3.7% of the respondents have the level of higher education (Table 4).

Among of these 834 (3.7%) of the respondents, 62.3% had a bachelor's degree followed by Diploma III 32.6% and Masters Degree with 2.2%. Other academic levels have a percentage less than 2% (Table 4).

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

Level of Education	AILEU	Aileu Vila	Laulara	Lequidoe	Remexio
Can not read / write	8,962	3956	1218	1355	2433
Do not read / write (did not finish primary school )	1,877	713	187	269	708
Sub Total	10,839	4,669	1,405	1,624	3,141
Primary	26,63	1,165	377	359	762
Pre-secondary	3,872	2,134	509	600	629
Secondary	4,413	2,439	679	519	776
Technical Vocational (high) School	142	79	32	16	15
Others	29	13	8	4	4

Level of Education	AILEU	Aileu Vila	Laulara	Lequidoe	Remexio
Sub Total	11,119	5,830	1,605	1,498	2,186
1 <sup>st</sup> . Cycle (1 <sup>st</sup> class - 4 <sup>th</sup> class)	27	13	3	5	6
2 <sup>nd</sup> . Cycle (1 <sup>st</sup> Year, 2 <sup>nd</sup> Year)	2	-	1	1	-
3 <sup>rd</sup> . Cycle (3 <sup>rd</sup> year – year 9 <sup>th</sup> / 3 <sup>rd</sup> year up)	4	1	1	1	1
Sub Total	33	14	5	7	7
Diploma I	6	2	4	-	-
Diploma II	11	2	4	3	2
Diploma III	272	146	21	48	57
Diploma IV	7	5	1	-	1
Bachelor's Degree (S1)	517	331	69	34	83
Master degree (S2)	18	14	1	-	3
PhD (S3)	3	-	3	-	-
<b>Sub Total</b>	<b>834</b>	<b>500</b>	<b>103</b>	<b>85</b>	<b>146</b>
<b>Total</b>	<b>22,825</b>	<b>11,013</b>	<b>3,118</b>	<b>3,214</b>	<b>5,480</b>

Regarding the distribution of the knowledge of the respondents by study areas(study program) and by Sub District Administrations, of the 834 who hold the higher degree only 455 (54.6%) answered this question. Details of the data can be seen in table 5, below.

**Table 5. Distribution of education level of respondents by study program and by Sub-District Administrations**

Study Program	Education Level							Total	Gender	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master's Degree(S2)	PhD (S3)		Male	Female
Total	2	7	146	3	280	17	-	455	297	158
Mathematics	-	1	14	-	19	-	-	34	31	3
Education	-	1	11	-	29	2	-	43	24	19
Medical Doctor – Medical practice (General Practitioners)	1	-	2	-	21	-	-	24	12	12
Accounting	-	-	5	-	19	-	-	24	16	8
Portuguese language	-	-	14	-	5	-	-	19	13	6
Mathematics of Teaching	-	-	9	-	8	-	-	17	12	5
Teacher training	-	3	9	-	2	-	-	14	7	7
Civil Engineering - Civil Construction	-	-	1	1	10	1	-	13	12	1
Law	-	-	-	-	12	1	-	13	9	4
Engineering Computer Technology (Computer)	-	-	4	-	8	-	-	12	10	2
Management	-	-	2	-	6	3	-	11	9	2
Sociology of Education	-	-	2	-	9	-	-	11	8	3
Economics of Finance or Financial	-	-	1	-	8	-	-	9	5	4

Study Program	Education Level							Total	Gender	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master's Degree(S2)	PhD (S3)		Male	Female
Management - Banking Economics										
Education of Bilogy	-	-	3	-	6	-	-	9	5	4
Agronomy	-	-	2	-	5	1	-	8	6	2
English language	-	-	1	1	5	-	-	7	5	2
International, bilateral and multilateral relations	-	-	-	-	7	-	-	7	5	2
Nursing	-	-	5	-	1	-	-	6	2	4
Pharmacy	1	-	5	-	-	-	-	6	2	4
Physics of Teaching	-	-	3	-	3	-	-	6	6	-
Education (education) Pre-primary and primary	-	-	4	-	2	-	-	6	3	3
Oil Engineering	-	-	-	-	5	-	-	5	4	1
Economy	-	1	1	-	3	-	-	5	5	-
Sociology	-	-	1	-	2	2	-	5	3	2
Production of livestock	-	-	2	-	3	-	-	5	3	2
Philosophy	-	-	2	-	2	-	-	4	3	1
Theology	-	-	2	-	2	-	-	4	3	1
Sociolinguistics and Dialecology	-	-	1	1	2	-	-	4	3	1



Study Program	Education Level							Total	Gender	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master's Degree(S2)	PhD (S3)		Male	Female
Public health	-	-	2	-	2	-	-	4	2	2
Agriculture	-	-	-	-	4	-	-	4	2	2
Government Planning and Policy	-	-	-	-	4	-	-	4	2	2
Psychology Educational	-	-	-	-	4	-	-	4	2	2
Educational technology	-	-	1	-	-	3	-	4	4	-
Physics	-	-	3	-	-	-	-	3	1	2
Indonesian language	-	-	-	-	3	-	-	3	-	3
Physical Education / Sports Education	-	-	-	-	3	-	-	3	2	1
Agro-business	-	-	1	-	2	-	-	3	1	2
Food Technology	-	-	-	-	3	-	-	3	2	1
Public administration	-	-	2	-	1	-	-	3	-	3
Human resource Management	-	-	1	-	2	-	-	3	2	1
Social work (including Gravedigger)	-	-	2	-	1	-	-	3	1	2
History of Education	-	-	2	-	1	-	-	3	2	1
Public policy	-	-	-	-	3	-	-	3	2	1
Special education	-	-	2	-	1	-	-	3	-	3
Training of primary and pre-secondary	-	-	2	-	1	-	-	3	2	1

Study Program	Education Level							Total	Gender	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master's Degree(S2)	PhD (S3)		Male	Female
teachers										
Agricultural engineering	-	-	-	-	2	-	-	2	1	1
Management	-	-	1	-	1	-	-	2	1	1
History and geography	-	-	-	-	2	-	-	2	2	-
Psychology	-	-	2	-	-	-	-	2	2	-
Psycholinguistics	-	-	1	-	1	-	-	2	2	-
Biological Oceanography	-	-	-	-	2	-	-	2	1	1
Fishing engineering	-	-	1	-	1	-	-	2	1	1
Tourism and Hospitality	-	-	1	-	1	-	-	2	-	2
Economics of education	-	-	1	-	1	-	-	2	1	1
Economics of ducation / Management of Education	-	-	-	-	1	1	-	2	2	-
Catechism	-	-	2	-	-	-	-	2	1	1
Educational politics	-	-	-	-	2	-	-	2	1	1
Biologia geral / Ambiental General or Environmental Biology	-	-	-	-	1	-	-	1	1	-

Study Program	Education Level							Total	Gender	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master's Degree(S2)	PhD (S3)		Male	Female
Environmental ecology	-	-	-	-	1	-	-	1	-	1
Immunology	-	-	-	-	1	-	-	1	-	1
Engineering Architecture	-	-	-	-	1	-	-	1	-	1
Hydraulic Engineering	-	-	-	-	1	-	-	1	-	1
Clinical Analysis	-	-	-	-	1	-	-	1	1	-
Gender study	-	1	-	-	-	-	-	1	1	-
Political science	-	-	-	-	1	-	-	1	1	-
Japanese language	-	-	1	-	-	-	-	1	-	1
Spanish language	-	-	1	-	-	-	-	1	1	-
Military career	-	-	-	-	1	-	-	1	-	1
Religious career	-	-	1	-	-	-	-	1	1	-
Petrology	-	-	-	-	1	-	-	1	1	-
Plant biology	-	-	-	-	1	-	-	1	-	1
Chemical engineer	-	-	1	-	-	-	-	1	-	1
Mechanical Engineering	-	-	-	-	1	-	-	1	1	-
Dentist	-	-	-	-	1	-	-	1	1	-
Maternal and child health	-	-	1	-	-	-	-	1	-	1
Forestry management	-	-	-	-	1	-	-	1	1	-
Engineering of	-	-	-	-	1	-	-	1	1	-

Study Program	Education Level							Total	Gender	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master's Degree(S2)	PhD (S3)		Male	Female
agricultural product processing										
Development Study	-	-	-	-	1	-	-	1	1	-
Economy - Cooperative- market	-	-	-	-	1	-	-	1	1	-
Business Administration	-	-	-	-	1	-	-	1	1	-
Teaching chemistry	-	-	-	-	1	-	-	1	1	-
Philosophy of Education	-	-	-	-	1	-	-	1	-	1
Educational Anthropology	-	-	1	-	-	-	-	1	1	-
Moral Theology	-	-	-	-	1	-	-	1	1	-
Pastoral theology	-	-	-	-	-	1	-	1	1	-
Skills Education - Fashion, Cosmetics, Cake / Pastry	-	-	-	-	-	1	-	1	-	1
Others	-	-	7	-	7	1	-	15	11	4
Aileu Vila										
Total	-	1	77	3	180	13	-	274	178	96
Mathematics	-	-	8	-	11	-	-	19	17	2
Education	-	-	2	-	20	2	-	24	11	13

Study Program	Education Level							Total	Gender	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master's Degree(S2)	PhD (S3)		Male	Female
Accounting	-	-	4	-	13	-	-	17	11	6
Medical Doctor - Medical Practice (General Practitioner)	-	-	1	-	15	-	-	16	8	8
Portuguese language	-	-	11	-	4	-	-	15	11	4
Matemematics of Teaching	-	-	6	-	6	-	-	12	7	5
Civil Engineering - Civil Construction	-	-	1	1	8	1	-	11	10	1
Management	-	-	2	-	6	1	-	9	7	2
Sociology of Education	-	-	2	-	7	-	-	9	7	2
Engineering Computer Technology(Computer)	-	-	2	-	6	-	-	8	6	2
Economic of Finance/Financial management-Banking economics	-	-	1	-	7	-	-	8	4	4
Teaching training	-	-	6	-	2	-	-	8	3	5
Law	-	-	-	-	5	1	-	6	6	-
Mining engineering	-	-	-	-	5	-	-	5	4	1
English language	-	-	1	1	3	-	-	5	3	2
Sociology	-	-	1	-	1	2	-	4	3	1

Study Program	Education Level							Total	Gender	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master's Degree(S2)	PhD (S3)		Male	Female
Agriculture	-	-	-	-	4	-	-	4	2	2
Physics of Teaching	-	-	1	-	3	-	-	4	4	-
Psychology Educational	-	-	-	-	4	-	-	4	2	2
Education Technology	-	-	1	-	-	3	-	4	4	-
Physics	-	-	3	-	-	-	-	3	1	2
Agronomy	-	-	-	-	2	1	-	3	3	-
Theology	-	-	2	-	1	-	-	3	2	1
Sociolinguistics and Dialectology	-	-	-	1	2	-	-	3	3	-
Public Health	-	-	1	-	2	-	-	3	1	2
Public Administration	-	-	2	-	1	-	-	3	-	3
Human Resource Management	-	-	1	-	2	-	-	3	2	1
International, bilateral and multilateral relations	-	-	-	-	3	-	-	3	2	1
Education(teaching) Pre-primary and primary	-	-	1	-	2	-	-	3	-	3
Management	-	-	1	-	1	-	-	2	1	1
Economic	-	1	-	-	1	-	-	2	2	-
Philosophy	-	-	1	-	1	-	-	2	2	-

Study Program	Education Level							Total	Gender	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master's Degree(S2)	PhD (S3)		Male	Female
Drugstore	-	-	2	-	-	-	-	2	2	-
Agro-business	-	-	1	-	1	-	-	2	-	2
Production of livestock	-	-	1	-	1	-	-	2	2	-
Education of Biology	-	-	1	-	1	-	-	2	-	2
History of Education	-	-	2	-	-	-	-	2	2	-
Public Policy	-	-	-	-	2	-	-	2	1	1
Educational politics	-	-	-	-	2	-	-	2	1	1
Training of primary and pre-secondary teachers	-	-	1	-	1	-	-	2	1	1
General - environmental biology	-	-	-	-	1	-	-	1	1	-
Environmental ecology	-	-	-	-	1	-	-	1	-	1
Immunology	-	-	-	-	1	-	-	1	-	1
Hydraulic Engineering	-	-	-	-	1	-	-	1	-	1
Agricultural engineering	-	-	-	-	1	-	-	1	1	-
Psychology	-	-	1	-	-	-	-	1	1	-
Political science	-	-	-	-	1	-	-	1	1	-
Indonesian language	-	-	-	-	1	-	-	1	-	1
Japanese language	-	-	1	-	-	-	-	1	-	1
Spanish language	-	-	1	-	-	-	-	1	1	-



Study Program	Education Level							Total	Gender	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master's Degree(S2)	PhD (S3)		Male	Female
Petrology	-	-	-	-	1	-	-	1	1	-
Plant biology	-	-	-	-	1	-	-	1	-	1
Nursing	-	-	-	-	1	-	-	1	-	1
Forestry management	-	-	-	-	1	-	-	1	1	-
Engineering of agricultural product processing	-	-	-	-	1	-	-	1	1	-
Fishing engineering	-	-	-	-	1	-	-	1	1	-
Food Technology	-	-	-	-	1	-	-	1	1	-
Development Study	-	-	-	-	1	-	-	1	1	-
Tourism and Hospitality	-	-	1	-	-	-	-	1	-	1
Economics of education	-	-	1	-	-	-	-	1	-	1
Social work (including Gravedigger)	-	-	1	-	-	-	-	1	1	-
Business Administration	-	-	-	-	1	-	-	1	1	-
Teaching chemistry	-	-	-	-	1	-	-	1	1	-
Philosophy of Education	-	-	-	-	1	-	-	1	-	1
Moral Theology	-	-	-	-	1	-	-	1	1	-
Skills Education -	-	-	-	-	-	1	-	1	-	1

Study Program	Education Level							Total	Gender	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master's Degree(S2)	PhD (S3)		Male	Female
Fashion, Cosmetics, Cake / Pastry										
special education	-	-	-	-	1	-	-	1	-	1
Others	-	-	1	-	4	1	-	6	5	1
Laulara										
Total	2	2	15	-	42	1	-	62	31	31
Mathematics	-	-	3	-	3	-	-	6	5	1
Medicine - Medical Practice (General Practioner)	1	-	-	-	4	-	-	5	1	4
Law	-	-	-	-	4	-	-	4	2	2
Biology of Education	-	-	-	-	4	-	-	4	3	1
Education	-	-	2	-	1	-	-	3	-	3
Government Planning and Policy	-	-	-	-	3	-	-	3	2	1
Accounting	-	-	1	-	2	-	-	3	2	1
Teacher training	-	2	1	-	-	-	-	3	1	2
Agronomy	-	-	-	-	2	-	-	2	-	2
Philosophy	-	-	1	-	1	-	-	2	1	1
Portuguese language	-	-	1	-	1	-	-	2	1	1
Engineering Computer Technology	-	-	-	-	2	-	-	2	2	-

Study Program	Education Level							Total	Gender	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master's Degree(S2)	PhD (S3)		Male	Female
(Computer)										
Drugstore	1	-	1	-	-	-	-	2	-	2
Livestock production	-	-	1	-	1	-	-	2	-	2
Civil Engineering - Civil Construction	-	-	-	-	1	-	-	1	1	-
Engineering Architecture	-	-	-	-	1	-	-	1	-	1
Agricultural engineering	-	-	-	-	1	-	-	1	-	1
Psychology	-	-	1	-	-	-	-	1	1	-
Sociolinguistics and Dialectology	-	-	1	-	-	-	-	1	-	1
English language	-	-	-	-	1	-	-	1	1	-
Military career	-	-	-	-	1	-	-	1	-	1
Mechanical Engineer	-	-	-	-	1	-	-	1	1	-
Dentist	-	-	-	-	1	-	-	1	1	-
Physical Education or Sports Education	-	-	-	-	1	-	-	1	-	1
Maternal and child health	-	-	1	-	-	-	-	1	-	1
Agro-business	-	-	-	-	1	-	-	1	1	-
Economics of education	-	-	-	-	1	-	-	1	1	-

Study Program	Education Level							Total	Gender	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master's Degree(S2)	PhD (S3)		Male	Female
Mathematics of Teaching	-	-	-	-	1	-	-	1	1	-
Sociology of Education	-	-	-	-	1	-	-	1	-	1
Economics of Education or Management of Education	-	-	-	-	-	1	-	1	1	-
International, bilateral and multilateral relations	-	-	-	-	1	-	-	1	1	-
Catechism	-	-	1	-	-	-	-	1	-	1
Others	-	-	-	-	1	-	-	1	1	-
Lequidoe										
Total	-	3	22	-	14	-	-	39	27	12
Mathematics	-	1	2	-	1	-	-	4	4	-
Education	-	1	-	-	3	-	-	4	3	1
Mathematics of Teaching	-	-	3	-	-	-	-	3	3	-
Law	-	-	-	-	2	-	-	2	-	2
Nursing	-	-	2	-	-	-	-	2	1	1
International, bilateral and multilateral	-	-	-	-	2	-	-	2	2	-

Study Program	Education Level							Total	Gender	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master's Degree(S2)	PhD (S3)		Male	Female
relations										
Education (education)	-	-	2	-	-	-	-	2	2	-
Pre-primary and primary										
Teacher training	-	1	1	-	-	-	-	2	2	-
Sociology	-	-	-	-	1	-	-	1	-	1
Psycholinguistics	-	-	1	-	-	-	-	1	1	-
Portuguese language	-	-	1	-	-	-	-	1	-	1
Medical Doctor - Medical Practice (General Practitioner)	-	-	-	-	1	-	-	1	1	-
Accounting	-	-	-	-	1	-	-	1	-	1
Tourism and Hospitality	-	-	-	-	1	-	-	1	-	1
Social work (including Gravedigger)	-	-	1	-	-	-	-	1	-	1
Biology of Education	-	-	-	-	1	-	-	1	-	1
Physics of Teaching	-	-	1	-	-	-	-	1	1	-
Educational Anthropology	-	-	1	-	-	-	-	1	1	-
Public policy	-	-	-	-	1	-	-	1	1	-
Catechism	-	-	1	-	-	-	-	1	1	-

Study Program	Education Level							Total	Gender	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master's Degree(S2)	PhD (S3)		Male	Female
Training of primary and pre-secondary teachers	-	-	1	-	-	-	-	1	1	-
Others	-	-	5	-	-	-	-	5	3	2
Remexio										
Total	-	1	32	-	44	3	-	80	61	19
Education	-	-	7	-	5	-	-	12	10	2
Mathematics	-	-	1	-	4	-	-	5	5	-
Agronomy	-	-	2	-	1	-	-	3	3	-
economy	-	-	1	-	2	-	-	3	3	-
Nursing	-	-	3	-	-	-	-	3	1	2
Accounting	-	-	-	-	3	-	-	3	3	-
History and geography	-	-	-	-	2	-	-	2	2	-
Indonesian language	-	-	-	-	2	-	-	2	-	2
Biological Oceanography	-	-	-	-	2	-	-	2	1	1
Engineering Computer Technology (Computer)	-	-	2	-	-	-	-	2	2	-
Physical Education or Sports Education	-	-	-	-	2	-	-	2	2	-
Drugstore	-	-	2	-	-	-	-	2	-	2

Study Program	Education Level							Total	Gender	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master's Degree(S2)	PhD (S3)		Male	Female
Medicine - Medical Practice (General Practice)	-	-	1	-	1	-	-	2	2	-
Food Technology	-	-	-	-	2	-	-	2	1	1
Management	-	-	-	-	-	2	-	2	2	-
Biology of Education	-	-	2	-	-	-	-	2	2	-
special education	-	-	2	-	-	-	-	2	-	2
Civil Engineering - Civil Construction	-	-	-	-	1	-	-	1	1	-
Clinical Analysis	-	-	-	-	1	-	-	1	1	-
Law	-	-	-	-	1	-	-	1	1	-
Gender study	-	1	-	-	-	-	-	1	1	-
Theology	-	-	-	-	1	-	-	1	1	-
Psycholinguistics	-	-	-	-	1	-	-	1	1	-
Portuguese language	-	-	1	-	-	-	-	1	1	-
English language	-	-	-	-	1	-	-	1	1	-
Religious career	-	-	1	-	-	-	-	1	1	-
Chemical engineering	-	-	1	-	-	-	-	1	-	1
Public health	-	-	1	-	-	-	-	1	1	-
Real Estate Management	-	-	-	-	1	-	-	1	1	-
Fishing engineering	-	-	1	-	-	-	-	1	-	1



Study Program	Education Level							Total	Gender	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master's Degree(S2)	PhD (S3)		Male	Female
Government Planning and Policy	-	-	-	-	1	-	-	1	-	1
Social work (including Gravedigger)	-	-	-	-	1	-	-	1	-	1
Economics of Finance or Financial Management - Banking Economics	-	-	-	-	1	-	-	1	1	-
Economy - Cooperative – market	-	-	-	-	1	-	-	1	1	-
Mathematics of Teaching	-	-	-	-	1	-	-	1	1	-
Physics of Teaching	-	-	1	-	-	-	-	1	1	-
History of Education	-	-	-	-	1	-	-	1	-	1
Sociology of Education	-	-	-	-	1	-	-	1	1	-
Economics of Education or Management of Education	-	-	-	-	1	-	-	1	1	-
International, bilateral and multilateral relations	-	-	-	-	1	-	-	1	-	1

Study Program	Education Level							Total	Gender	
	Diploma I	Diploma II	Diploma III	Diploma IV	Bachelor's Degree (S1)	Master's Degree(S2)	PhD (S3)		Male	Female
Pastoral theology	-	-	-	-	-	1	-	1	1	-
Pre-primary and primary educations	-	-	1	-	-	-	-	1	1	-
Teacher training	-	-	1	-	-	-	-	1	1	-
Others	-	-	1	-	2	-	-	3	2	1

## 2.5. Vocational Training Certificate Level I - Certificate IV

Among of the 22,825 respondents who participated in this research, about 2.7% had already participated in one of the Certificate I - Certificate IV courses. Of those who completed the certificate courses, 52% completed the Certificate I course, 16.9% Certificate II, 9.1% Certificate III and 22% Certificate IV (Table 6), while the major training areas were computer, Portuguese language, English language course and agriculture or horticulture course. Other areas of training are very unrepresentative.

The predominant areas of Certificate I training - Certificate IV are computer, Portuguese and English language courses. The data also shows the lack of qualifications in some areas, which requires greater 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

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

Municipality and Sub District Administrations	Total	Cert. I	Cert. II	Cert. III	Cert. IV	Training area requiring more attention
<b>AILEU</b>						
Total	605	315	102	55	133	Business Improvement
Computer	186	134	27	7	18	Carpentry
Portuguese language course	118	42	22	18	36	Training and evaluation;
English Course	56	30	11	8	7	Agricultural Course
Information Technology	25	12	7	3	3	Construction (General);
Public Office Administration	15	8	-	1	6	Electricity;
Agriculture or horticulture course	13	7	1	-	5	Training for contractors / entrepreneurs (IADE).
Hospitality (General);	7	6	1	-	-	Plumber
Business	5	4	1	-	-	Business Construction

Municipality and Sub District Administrations	Total	Cert. I	Cert. II	Cert. III	Cert. IV	Training area requiring more attention
Improvement						(General);
Carpentry	5	2	2	1	-	Automotive and maintenance;
Training and evaluation;	5	1	3	-	1	Hospitality (General);
Agricultural Course	5	4	1	-	-	Police management
Construction (General);	4	1	1	1	1	Cooking (Cook)
Electricity;	4	2	2	-	-	Small machines;
Training for contractors / entrepreneurs (IADE).	3	1	-	-	2	Study of social communication for the public sector;
Plumber	3	3	-	-	-	Hospitality (food production);
Business Construction (General);	2	1	1	-	-	Financial services (micro finance and banks);
Automotive and maintenance;	2	2	-	-	-	Photographer / filming;
Hospitality (General);	2	-	2	-	-	(Diploma) in Training and Evaluation
Police management	2	1	-	-	1	Tailor / Seamstress
Cooking (Cook)	2	1	1	-	-	Painter of: arts, paintings, tattoos
Small machines;	1	1	-	-	-	
Study of social communication for the public sector;	1	1	-	-	-	
Hospitality (food production);	1	-	-	-	1	
Financial services (microfinance and banks);	1	-	1	-	-	
Photographer / filming;	1	-	-	-	1	
(Diploma) in Training	1	-	-	1	-	

Municipality and Sub District Administrations	Total	Cert. I	Cert. II	Cert. III	Cert. IV	Training area requiring more attention
and Evaluation						
Tailor / Seamstress	1	1	-	-	-	
Painter of: arts, paintings, tattoos	1	1	-	-	-	
Others	133	49	18	15	51	
Aileu Vila						
Total	299	173	45	27	54	
Computer	140	104	17	6	13	
Portuguese language course	50	14	8	10	18	
English course	18	11	4	2	1	
Information Technology	10	6	2	-	2	
Agriculture or horticulture course	8	5	-	-	3	
Business Improvement	5	4	1	-	-	
Hospitality (General);	5	4	1	-	-	
Agricultural Course	4	4	-	-	-	
Training and evaluation;	3	-	3	-	-	
Training for contractors / entrepreneurs (IADE).	2	1	-	-	1	
Public Office Administration	2	1	-	-	1	
Automotive and Maintenance;	2	2	-	-	-	
Tailor / Seamstress	2	2	-	-	-	
Painter of: arts, paintings, tattoos	1	-	1	-	-	
Small machines;	1	1	-	-	-	
Carpentry	1	-	1	-	-	
Photographer / filming;	1	-	-	-	1	

Municipality and Sub District Administrations	Total	Cert. I	Cert. II	Cert. III	Cert. IV	Training area requiring more attention
(Diploma) in Training and Evaluation	1	-	-	1	-	
Culinary	1	1	-	-	-	
Others	42	13	7	8	14	
Laulara						
Total	116	44	33	11	28	
Portuguese language course	17	2	9	1	5	
Computer	11	5	3	1	2	
English language course	11	2	3	4	2	
Public Office Administration;	10	7	-	-	3	
Information Technology	5	-	3	1	1	
Plumber	3	3	-	-	-	
Hospitality (General);	4	2	2	-	-	
Construction (General);	2	1	1	-	-	
Carpentry	2	1	1	-	-	
Electricity;	2	-	2	-	-	
Business Construction (General);	1	1	-	-	-	
Study of social communication for the public sector;	1	1	-	-	-	
Hospitality (food production);	1	-	-	-	1	
Financial services (micro finance and banks);	1	-	1	-	-	
Police management	1	1	-	-	-	
TailororSeamstress	1	1	-	-	-	
Painter of: arts, paintings, tattoos	1	1	-	-	-	

Municipality and Sub District Administrations	Total	Cert. I	Cert. II	Cert. III	Cert. IV	Training area requiring more attention
Agriculture or horticulture course	1	-	1	-	-	
Agricultural course	1	-	1	-	-	
Others	40	16	6	4	14	
Lequidoe						
Total	95	49	11	9	26	
Portuguese language	33	14	4	5	10	
Computer	18	14	3	-	1	
English Language	18	14	1	1	2	
Information Technology (IT)	3	3	-	-	-	
Construction (General);	2	-	-	1	1	
General Office Administration;	1	-	-	-	1	
Police management	1	-	-	-	1	
Culinary or Chef	1	-	1	-	-	
Agriculture or horticulture course	1	-	-	-	1	
Others	17	4	2	2	9	
Remexio						
Total	95	49	13	8	25	
Portuguese language	18	12	1	2	3	
Computer	17	11	4	-	2	
English language	9	3	3	1	2	
Information Technology (IT)	7	3	2	2	-	
Agriculture or horticulture	3	2	-	-	1	
General Office Administration;	2	-	-	1	1	
Carpentry	2	1	-	1	-	
Training and evaluation;	2	1	-	-	1	
Training for	1	-	-	-	1	

Municipality and Sub District Administrations	Total	Cert. I	Cert. II	Cert. III	Cert. IV	Training area requiring more attention
contractors or entrepreneurs (IADE).						
Others	34	16	3	1	14	

## 2.6. Professional Occupation in the Public Sectors

### 2.6.1. Permanent Public Servants

Table 7 shows that Public Servants and teachers are the main occupations of the public sector and together account for 86.7% of the positions. 33.2% of teachers maintained their positions for more than 6 - 10 years and 36.6% with more than 15 years. As for staff in general, the data indicate that there are no percentage differences between those who maintained the public service between 1-5 years, 6 - 10 years, 11-15 years and over 15 years compared to those who maintained the service by a period of less than 1 year, with only 2.7%.

Table 7. Distribution of permanent public servant occupation and years of service

Occupation	<1 Year	1-5 Years	6 - 10 Years	11-15 Years	>15 Years	Total	Percentage (%)
Teachers	11	34	136	79	150	410	58,91
Public Servants	6	61	64	42	41	214	30,75
Medical or Medical Specialist	-	31	1	5	5	42	6,03
Chief Department	-	3	5	4	6	18	2,59
General Director	-	1	-	1	6	8	1,15
National Director	-	1	1	1	-	3	0,43
Public Defender or Judges	1	-	-	-	-	1	0,14
Others	-	32	30	22	18	102	14,66
<b>Total</b>	<b>18</b>	<b>131</b>	<b>207</b>	<b>132</b>	<b>208</b>	<b>696</b>	<b>100</b>
<b>Percentage (%)</b>	<b>2,6</b>	<b>18,8</b>	<b>29,7</b>	<b>19,0</b>	<b>29,9</b>	<b>100</b>	



Regarding the grade / level of respondents, the majority are in the positions between grade F (level 1, & 2) - grade D / level 4, together corresponding to 84.5%. servant with level above 6 are very few, registering about 2.5% and those with special regime 3,4% (Table 8).

**Table 8. Grade and Level of permanent Permanent Public Servant interviewed**

Grade/ Nivel	Frequency	Percentage (%)
Grade A / nivel 7	-	-
DGrade B / nivel 6	20	2,50
Grade C / nivel 5	77	9,63
Grade D / nivel 4	190	23,75
Grade E / nivel 3	376	47,00
Grade F / nivel 1, 2	110	13,75
Special Regime	27	3,38
<b>Total</b>	<b>800</b>	<b>100</b>

## 2.6.2. Temporary Public Servants

Table 9 shows temporary public servant by occupation and years of service. The occupational pattern is similar to the permanent public servants with the domain of staff and teachers. Both represent 76% of temporary public servant.

The standard of service duration is similar to permanent public servant , the highest proportion of whom have maintained the publicservice between 1-5 years and 6-10 years and together represent 75.7% compared to those who have maintained the service. more than 10 years, accounting for only 11%.

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

Year of service	Public Servants	Specialized technical	Teachers	Others	Total	Percentage (%)
<1 Year	15	1	23	6	45	13,3
1-5 Years	50	7	73	16	146	43,2
6 - 10 Years	44	2	29	35	110	32,5
11-15 Years	15	1	7	6	29	8,6
>15 Years	2	1	-	5	8	2,4
<b>Total</b>	<b>126</b>	<b>12</b>	<b>132</b>	<b>68</b>	<b>338</b>	<b>100,0</b>
<b>Percentage (%)</b>	<b>37,3</b>	<b>3,6</b>	<b>39,1</b>	<b>20,1</b>	<b>100,0</b>	

## 2.7. Level of Education of Temporary Public Servants

At the level of education, 50.3% of temporary public servant have a secondary level of education and degree of 20.4%. Those with pre-secondary level represent 10.8%, Diploma III (9.3%), Basic Education (7.5%) and the rest have a percentage of less than or equal to 1.5% (Table 10 ).

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

Education Level	Number of employees	Percentage (%)
Primary	25	7,5
Pre-secondary	36	10,8
Secondary	168	50,3
Secondary School		
Professional Technician	5	1,5
Others	-	-
Diploma I	-	-
Diploma II	-	-
Diploma III	31	9,3
Diploma IV	1	0,3
Bachelor's Degree (S1)	68	20,4
Master's degree (S2)	-	-
PhD (S3)	-	
<b>Total</b>	<b>334</b>	<b>100</b>

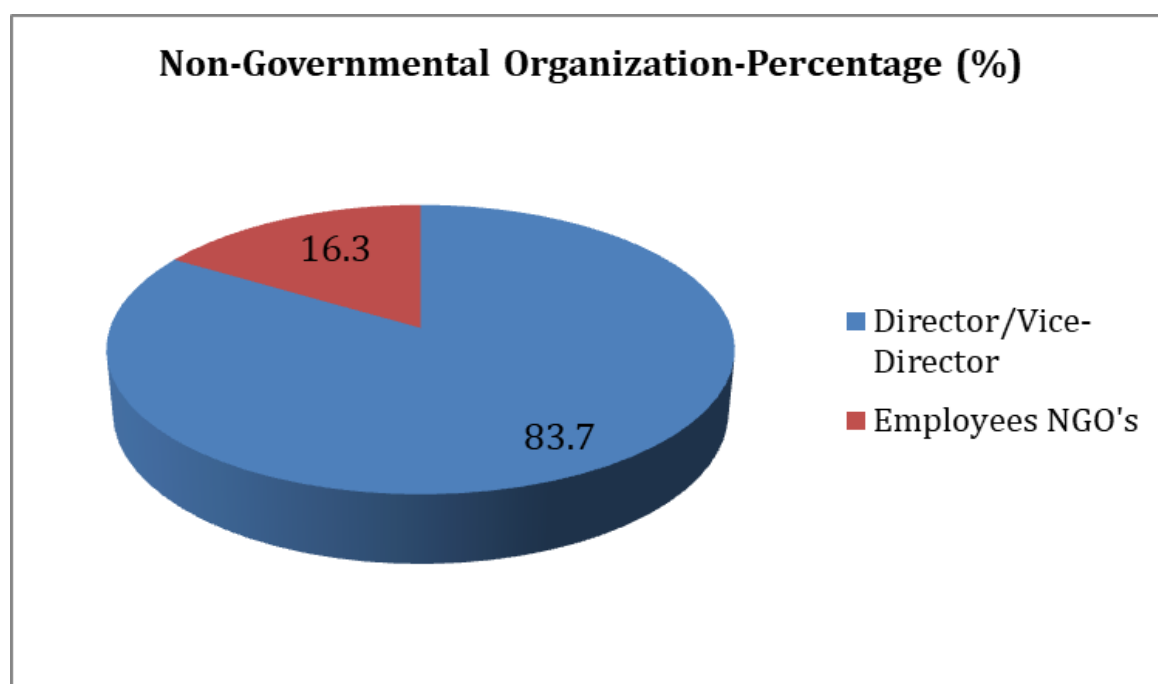
## 2.8. Non-Public Sector (Private Sector)

The non-public and private sector sector in the municipality of Aileu persists small compared to 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 have expressed their interest of 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 2 shows data for staff working in Non-Governmental Organizations (NGOs). Among of the 27 respondents, 16.3% hold positions as Director or Deputy Directors of the organizations and the highest 83.7% are employees.

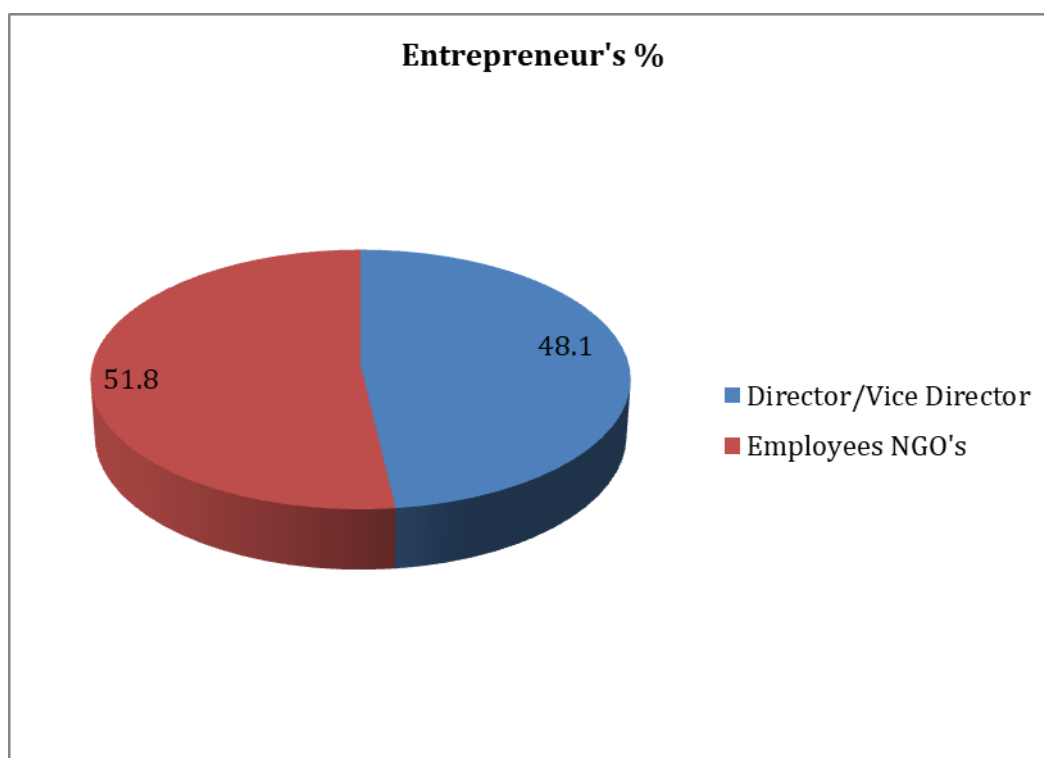
Figure 2 . Staff of Non-Governmental Organizations (NGOs) by position



### 2.8.2. Entrepreneurs or Businessman

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. 48.1% of the respondents are employed as directors / vice directors and 51.8% assume a simultaneously role as a director of the same company.

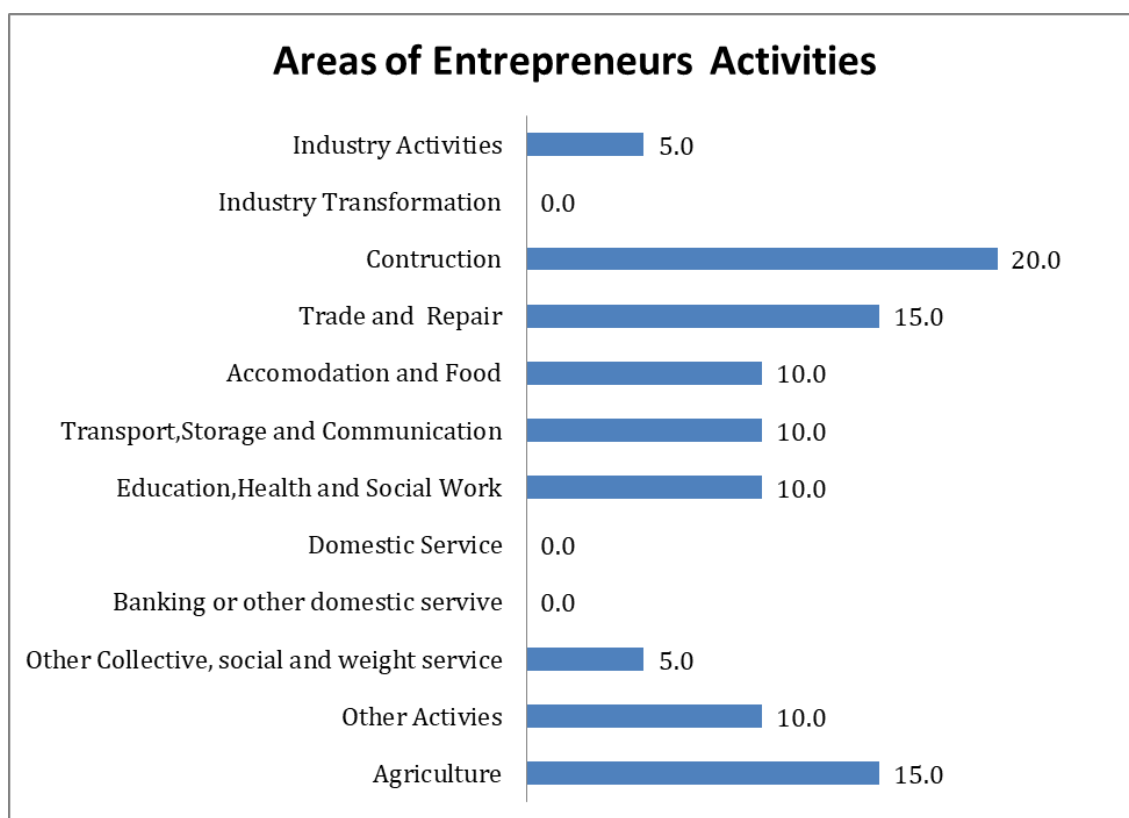
Figure 3. Distribution of entrepreneurs by position



### 2.8.3. Activity Sectors

The largest proportion of the companies' areas of activity are related to construction, trade - repair and agriculture (Figure 4). Other sectors of activity represent between 5 and 10%, with some sectors without activity registration (Figure 4).

Figure 4. Distribution of the areas of entrepreneurs activities



#### 2.8.4. Education Level of Entrepreneurs

The data also show that most of the people involved have no level of education (59.5%), secondary education (14.9%), pre-secondary (12.6%) and basic education (11.4%). . Other levels of education have a lower percentage of 1% (Table 11).

Analyzing the presence of entrepreneurs and their qualifications is essential for the growth of the municipality. Increasing 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 trained of qualified employees are crucial for the municipality.

Table 11 . Distribution of entrepreneurs and level of education

Education Level	Numbers of Entrepreneurs	Percentage (%)
Can not read and write	3892	50,5
Secondary	1149	14,9
Pre-secondary	973	12,6
Primary	879	11,4
Do not read or write (did not finish primary)	692	9,0
Bachelor's Degree (S1)	65	0,8
Diploma III	25	0,3
Secondary School	13	0,2
1 st. Cycle (1st Grade - 4th Grade)	5	0,1
Others	4	0,1
Secondary Technical School	3	0,0
Diploma IV	2	0,0
Secondary School Agriculture	1	0,0
2 <sup>o</sup> . Cycle (1st Year, 2nd Year)	-	-
3 <sup>o</sup> . Cycle (3rd Grade up to 9 <sup>th</sup> Grade / 3rd year)	-	-
Secondary School of Nursing	-	-
Secondary School of Sports	-	-
Secondary School of Social Assistance	-	-
Diploma I	-	-
Diploma II	-	-
Master's Degree (S2)	-	-
PhD (S3)	-	-
<b>Total</b>	<b>7703</b>	<b>100,0</b>

## 2.9. Preferred Working Area

This data collections also asked respondents aged 17 or over who never worked in which sector they want 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 sector) with 76.2% compared to the public sector (23.8%). The Sub-District Administration of Aileu Vila has a higher percentage of individuals seeking employment in both the public sector and non-public sector (table 12).

**Table 12. Number of total respondents in the Municipality of Aileu looking for a job and where they intend to work in the public or private sector.**

Sub District Administrations	Public Sectors	Percentage (%)	Non-Public Sector	Percentage (%)	Total	Percentage (%)
Aileu Vila	559	89,0	1025	51,0	1584	60,0
Laulara	30	4,8	559	27,8	589	22,3
Lequidoe	27	4,3	166	8,3	193	7,3
Remexio	12	1,9	260	12,9	272	10,3
<b>Total</b>	<b>628</b>	<b>100,0</b>	<b>2010</b>	<b>100</b>	<b>2638</b>	<b>100,0</b>

## 2.10. Business Sector preferred to work in

Table 13 indicates that in the private sector the preference is mainly for agriculture (66.8%), household tasks (9.5%), construction (7.1%), commerce and repair (3.8%), industrial activity (2.8%) and housing and food (2.4%). Other sectors of activity have a share of less than 2%.

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

Activity Sectors	Sub District Administrations				Total	Percentage (%)
	Aileu Vila	Laulara	Lequidoe	Remexio		
Agriculture	1,289	353	116	772	2,530	66,8
Industrial Activity	41	38	8	20	107	2,8
Transformation industry	19	26	5	16	66	1,7
Construction	97	101	25	47	270	7,1
Commerce and repair	50	29	30	34	143	3,8
Accommodation and Food	41	13	9	26	89	2,4
Transport, Storage and Communication	17	9	4	13	43	1,1
Education, Health and Social Work	16	13	13	27	69	1,8
Domestic Service	111	172	13	64	360	9,5
Bank or other financial services	10	10	5	13	38	1,0

Activity Sectors	Sub District Administrations				Total	Percentage (%)
	Aileu Vila	Laulara	Lequidoe	Remexio		
Other collective, social and personal services	28	11	21	10	70	1,8
Other activities	2	-	-	-	2	0,1
Total	1721	775	249	1042	3787	100,0
Percentage (%)	45,4	20,5	6,6	27,5	100,0	

### 2.11. Age group (age) of respondents looking for a job

Regarding the age group, the largest number of respondents seeking employment are young people aged between 17 and 32 years, representing about 75.4% (Table 14).

Table 14. Age group of respondents looking for a job

Age Groups	Non-Public Sector	Percentage (%)
17 – 20	206	11,8
21- 24	425	24,3
25 – 28	388	22,2
29 – 32	299	17,1
33 – 36	174	9,9
37 – 40	72	4,1
41 – 44	94	5,4
45 – 48	91	5,2
<b>Total</b>	<b>1749</b>	<b>100</b>

### 2.12. Graduates in job search "Unemployment"

The data also provide information on the number and qualifications of people with higher education in job search (Table 15). The figure shows that, among the 55 graduates respondents, 54.7% intend to work in the public sector and 45.3% intend to work in the non-public sector. Graduates intend to work more in the public sector than in the private sector.



The areas of higher education courses with the highest number of job seekers, "unemployment" are in the area of Mathematics, Law, Accounting, International Relations - bilateral and multilateral, Portuguese Language, Medicine - Medical Clinic (General Medicine) and Training of teachers with a percentage between 5 - 7.5%. Graduates in other areas are less than 5% (Table 15). The data presented here are essential for municipal Governments, employers and other employers' partners to know how to take advantage of them and employ them.

**Table 15. Number and areas of knowledge of higher education courses in search of employment and wish to work.**

Nu.	Study Program or Area of Specialization	Do not work and want to work?		Total	Percentage (%)
		Public Sectors	Non-Public Sectors		
1	Mathematics	2	2	4	7,5
2	Law	4	-	4	7,5
3	Accounting	3	1	4	7,5
4	International, bilateral and multilateral relations	3	1	4	7,5
5	Portuguese language	1	2	3	5,7
6	Medicine - Medical Clinic (General Practice)	-	3	3	5,7
7	Teacher training	3	-	3	5,7
8	Economy	1	1	2	3,8
9	Mathematics teaching	2	-	2	3,8
10	Civil Engineering - Civil Construction	1	-	1	1,9
11	Mining engineering	-	1	1	1,9
12	Agronomy	-	1	1	1,9
13	Agricultural engineering	1	-	1	1,9
14	Education	-	1	1	1,9
15	English language	-	1	1	1,9
16	Japanese language	1	-	1	1,9
17	Petrology	-	1	1	1,9
18	Industrial Engineering	-	1	1	1,9
19	Public health	1	-	1	1,9
20	Agribusiness	1	-	1	1,9

Nu.	Study Program or Area of Specialization	Do not work and want to work?		Total	Percentage (%)
		Public Sectors	Non-Public Sectors		
21	Forestry Management	1	-	1	1,9
22	Animal Production (Livestock)	1	-	1	1,9
23	Aquaculture	1	-	1	1,9
24	Public administration	-	1	1	1,9
25	Government Planning and Policy	-	1	1	1,9
26	Management	-	1	1	1,9
27	Tourism and hospitality	-	1	1	1,9
28	Human resource Management	-	1	1	1,9
29	Social worker	-	1	1	1,9
30	Pedagogical biology	-	1	1	1,9
31	Educational politics	1	-	1	1,9
32	Educational technology	1	-	1	1,9
33	Others	-	1	1	1,9
<b>Total</b>		<b>29</b>	<b>24</b>	<b>53</b>	<b>100,0</b>

### 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 Aileu who are currently attending higher education in different study programs. The numbers show that the areas of study, where their graduates have a greater number of "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. If this does not happen, it may possibly 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

Nu.	Areas of Study	Frequency	Percentage (%)
1	Management	34	6,3
2	Education	32	5,9
3	Public health	30	5,6
4	Agronomy	25	4,6
5	Economics of Finance or Financial Management - Banking Economics	24	4,4
6	Portuguese language	22	4,1
7	Electrical engineering	22	4,1
8	Civil Engineering - Civil Construction	20	3,7
9	Accounting	18	3,3
10	English language	17	3,1
11	Public administration	14	2,6
12	Mathematics	12	2,2
13	Law	12	2,2
14	Mining engineering	11	2,0
15	General - environmental biology	10	1,9
16	Sociology	9	1,7
17	Nursing	9	1,7
18	Tourism and Hospitality	9	1,7
19	Pedagogical biology	9	1,7
20	Aquaculture	8	1,5
21	Architecture engineering	7	1,3
22	Real Estate Management	7	1,3
23	Human resource Management	7	1,3
24	Mathematics teaching	7	1,3
25	Physics of Teaching	7	1,3
26	Physics	6	1,1
27	Chemistry	6	1,1
28	Petrology	6	1,1
29	Midwife	6	1,1
30	International, bilateral and multilateral relations	6	1,1
31	Teacher training	6	1,1
32	Electrical engineering	5	0,9

Nu.	Areas of Study	Frequency	Percentage (%)
33	General Medicine - (General Practice)	5	0,9
34	Forest Resources and Forestry Engineering	4	0,7
35	Public Law	4	0,7
36	Religious career	4	0,7
37	Environmental health	4	0,7
38	Economics of education	4	0,7
39	Teaching chemistry	4	0,7
40	mechanical Engineering	3	0,6
41	Political science	3	0,6
42	Geology	3	0,6
43	Physical Education / Sports Education	3	0,6
44	Pharmacy	3	0,6
45	Others	3	0,6
46	Development Studies	3	0,6
47	Industrial economics	3	0,6
48	Governmental sciences	3	0,6
49	Public policy	3	0,6
50	Studies of Peace	3	0,6
51	Pathological Anatomy and Clinical Pathology	2	0,4
52	Gastroenterologist	2	0,4
53	Agricultural social economy	2	0,4
54	Heavy Resources and Fisheries Engineering	2	0,4
55	Psychology	2	0,4
56	Applied Linguistics	2	0,4
57	Computer science	2	0,4
58	Industrial engineering	2	0,4
59	Others	2	0,4
60	Forestry management	2	0,4
61	Preventive Veterinary Medicine	2	0,4
62	Economy-cooperative-market	2	0,4
63	Sociology of Education	2	0,4
64	Catechism	2	0,4
65	Artistic education	2	0,4
66	Others	2	0,4
67	Special education	2	0,4
68	Genetics	1	0,2

Nu.	Areas of Study	Frequency	Percentage (%)
69	Biochemistry	1	0,2
70	Engineering Treatment	1	0,2
71	Business Analyst	1	0,2
72	Agricultural engineering	1	0,2
73	Philosophy	1	0,2
74	Hospital administration	1	0,2
75	Statistic	1	0,2
76	Dentist	1	0,2
77	Nutrition	1	0,2
78	Agro-business	1	0,2
79	Conservation of Nature	1	0,2
80	Food Technology	1	0,2
81	Communication - Journalism and Publishing	1	0,2
82	Social worker	1	0,2
83	Domestic economy	1	0,2
84	Business Administration	1	0,2
85	Moral Theology	1	0,2
86	Pastoral theology	1	0,2
87	Cultural studies	1	0,2
88	Education (education) Pre-primary and primary	1	0,2
<b>Total</b>		<b>540</b>	<b>100,0</b>

## 2.14. Year the course ends

Regarding to the estimation of the number of graduates who will graduate or finish their courses in the next 6 years, the data in Table 17 shows that the areas of Management, Education, Public Health, Agronomy, Portuguese Language and Economics of Finance or Management Financial - BankingEconomy are the ones with the highest number of graduations. Other areas have a smaller 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.**

Areas of Study	Year the course ends							Total
	2017	2018	2019	2020	2021	2022	2023	
Management	8	8	8	7	0	0	0	34
Education	9	9	3	3	2	0	0	30
Public health	6	5	5	4	1	0	0	27
Agronomy	5	6	6	3	2	0	0	24
Portuguese language	8	6	1	3	1	0	0	22
Economics of Finance or Financial Management - Banking Economics	10	2	2	5	0	0	0	22
Civil Engineering - Civil Construction	5	6	4	3	1	0	0	20
Computer Engineering Technology (Computer)	7	3	5	4	0	0	0	20
Accounting	2	10	1	5	0	0	0	18
English language	5	2	3	3	0	0	0	17
Public administration	2	1	2	3	3	0	0	14
Law	3	4	0	0	1	0	0	12
Mathematics	4	2	0	4	1	0	0	11
Mining engineering	1	4	1	4	0	0	0	11
General- environmental biology	1	4	1	3	0	0	0	10
Nursing	1	1	2	4	1	0	0	9
Sociology	4	1	2	1	0	0	0	8
Aquaculture	4	1	0	1	0	0	0	8
Pedagogical biology	2	1	1	2	1	1	0	8
Engineering Architecture	3	2	0	1	1	0	0	7
Livestock production	2	2	1	2	0	0	0	7
Human resource Management	2	2	2	0	0	0	0	7
Mathematics teaching	1	2	3	1	0	0	0	7
Physics of Teaching	0	0	0	5	2	0	0	7
Physics	3	0	1	2	0	0	0	6
Petrology	1	2	3	0	0	0	0	6
Tourism and hospitality	0	3	2	1	0	0	0	6
International, bilateral and multilateral relations	2	3	1	0	0	0	0	6
Teacher Training	0	2	2	1	0	0	0	6
Chemistry	1	1	2	1	0	0	0	5

Areas of Study	Year the course ends							Total
	2017	2018	2019	2020	2021	2022	2023	
Medicine - Medical Practice (General Practitioner )	4	0	0	0	0	0	0	5
Midwife	0	1	2	1	1	0	0	5
Electrical engineering	2	0	0	0	0	0	0	4
Forest Resources and Forestry Engineering	0	4	0	0	0	0	0	4
Public Law	0	0	3	1	0	0	0	4
Religious career	1	1	1	0	0	0	0	4
Economics of education	0	1	0	2	0	0	0	4
Teaching chemistry	0	0	1	1	0	0	0	4
Political science	1	0	0	1	0	0	0	3
Geology	0	0	3	0	0	0	0	3
Physical Education or Sports Education	0	0	2	1	0	0	0	3
Environmental health	0	1	0	1	0	0	0	3
Development Study	0	0	0	1	0	0	0	3
Industrial economics	1	0	1	0	0	0	0	3
Government or Comparative Government Systems	1	0	0	2	0	0	0	3
Public policy	1	0	1	1	0	0	0	3
Peace study	0	0	1	1	0	0	0	3
Mechanical Engineering	1	0	0	0	0	0	0	2
Specialist in Gastroenterology Surgery	0	0	0	0	1	0	0	2
Agricultural social economy	1	0	1	0	0	0	0	2
Heavy Resources and Fisheries Engineering	0	0	0	0	0	0	0	2
Psychology	0	2	0	0	0	0	0	2
Applied Linguistics	0	0	2	0	0	0	0	2
Computer science	1	0	1	0	0	0	0	2
Mechanical Engineering	0	1	1	0	0	0	0	2
Pharmacy	1	0	0	1	0	0	0	2
Forestry management	0	0	2	0	0	0	0	2
Preventive Veterinary Medicine	1	0	0	1	0	0	0	2
Catechism	1	0	0	0	0	0	0	2
Artistic education	1	0	1	0	0	0	0	2

Areas of Study	Year the course ends							Total
	2017	2018	2019	2020	2021	2022	2023	
special education	1	0	0	0	1	0	0	2
Biochemistry	0	0	0	0	0	0	0	1
Engineering Ore Treatment	0	0	0	0	0	0	0	1
Clinical Analyst	1	0	0	0	0	0	0	1
Pathological Anatomy and Clinical Pathology	1	0	0	0	0	0	0	1
Agricultural engineering	0	0	0	1	0	0	0	1
Philosophy	0	0	0	1	0	0	0	1
Hospital administration	0	0	0	1	0	0	0	1
Statistic	1	0	0	0	0	0	0	1
Dentist	0	1	0	0	0	0	0	1
Nutrition	0	0	0	0	1	0	0	1
Agribusiness	0	0	1	0	0	0	0	1
Conservation of Nature	1	0	0	0	0	0	0	1
Food Technology	0	0	1	0	0	0	0	1
Communication - Journalism and Publishing	1	0	0	0	0	0	0	1
Social worker	0	0	0	0	0	0	0	1
Economy - Cooperativa - Mercado	0	0	1	0	0	0	0	1
Business Administration	0	0	0	1	0	0	0	1
Sociology of Education	0	0	0	1	0	0	0	1
Moral Theology	0	0	0	0	0	0	0	1
Pastoral theology	0	0	0	0	0	0	0	1
Education (education) Pre-primary and primary	0	0	1	0	0	0	0	1
Others	1	1	2	1	0	0	0	4
<b>Total</b>	<b>126</b>	<b>107</b>	<b>91</b>	<b>96</b>	<b>21</b>	<b>1</b>	<b>0</b>	<b>505</b>



## 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 Aileu. Table 18 below indicates the size of professional development training performed by training area and course duration. 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.

The 3,157 respondents represent a substantial level of training activity, since 47.1% lasted 1-6 months, 41.1% less than 1 month and 11.7% were for more than 6 months. It is also notable that the main courses were in the areas of leadership, finance, planning and information technology. 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 Areas	Duration				Total	Percentage (%)
	Less than 1 month	1 - 6 month	7 months - 1 year	More than 1 year		
Leadership	397	279	60	47	783	24,8
Finance	195	187	26	22	430	13,6
Planning	207	177	25	28	437	13,8
Management	121	114	17	14	266	8,4
Human Resources	107	107	11	7	232	7,3
Information Technology	68	280	24	23	395	12,5
Procurement and Logistics	21	45	8	2	76	2,4
Management	103	172	16	15	306	9,7
Information System and Business Management	56	70	8	4	138	4,4
Media and Public Relations	2	7	1	1	11	0,3
Specialized Technician	9	21	3	2	35	1,1
Others	12	29	4	3	48	1,5
<b>Total</b>	<b>1,298</b>	<b>1,488</b>	<b>203</b>	<b>168</b>	<b>3,157</b>	<b>100</b>
<b>Percentagem (%)</b>	<b>41,1</b>	<b>47,1</b>	<b>6,4</b>	<b>5,3</b>	<b>100</b>	

### 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 participation the highest 54% following the English language with 30%. The Tetum language has the participation of 11% of the respondents and other languages with participation less than 4%. 74.2% of the courses have duration between 1 and 6 months, 3.1% less than one month and another 22.7% over 7 months. The Portuguese language and English language courses are the main courses conducted by the respondents in the Municipality of Aileu. Table 19. Language training and course duration

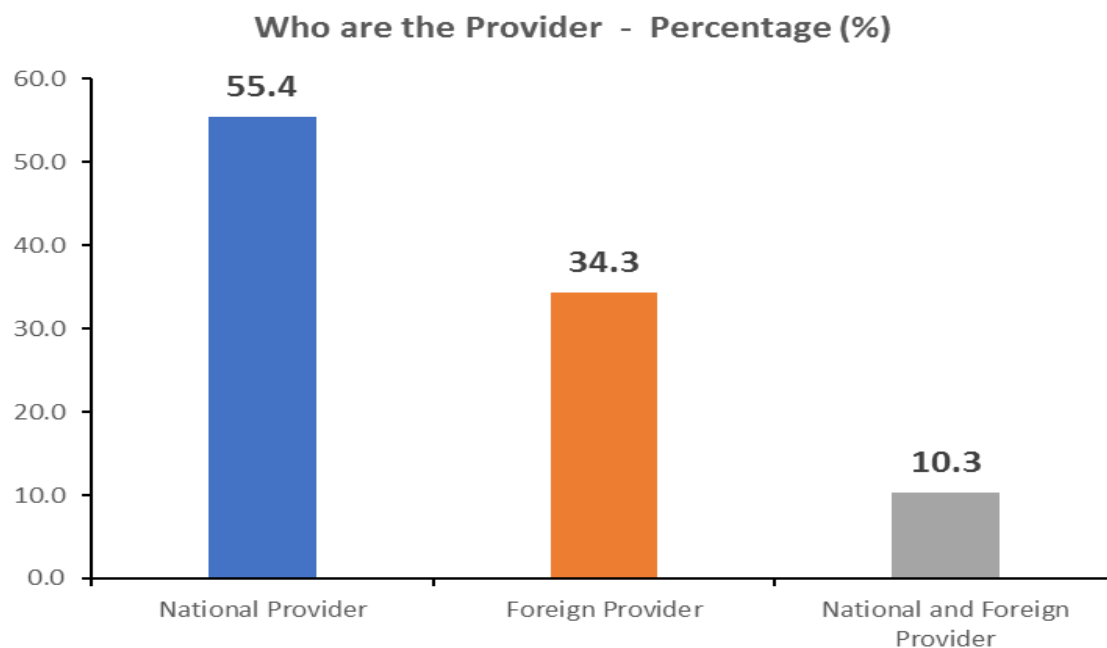
Table 19. Language training and the duration of the course

Type of training	Durations				Total	Percentage (%)
	Less than 1 month	1 – 6 month	7 months - 1 year	More than 1 year		
Portuguese	53	1336	216	183	1788	54,0
English	34	784	103	89	1010	30,5
Tetum	13	230	68	54	365	11,0
Indonesia	3	76	12	18	109	3,3
Korea	1	20	3	0	24	0,7
Outros	0	10	2	3	15	0,5
Total	104	2456	404	347	3311	100,0
Percentage (%)	3,1	74,2	12,2	10,5	100,0	

### 2.16. Institution Providers and Financing

As for institutions providing language training, 55.4% of the training providers are national institutions, 34.3% are provided by foreign institutions and 10.3% are promoted by national and foreign institutions (Figure 5).

Figure 5 . Provider of language training



### 2.17. Training Financing

Among of the total number of respondents who have already done the language training, 58.7% was financed by the trainee himself, by the government 22.8% and the training supported by the private sector 11.8%. Training with government support in cooperation with international partners and only by international partners accounts for 5.5% and 1.2%, respectively (Table 20).

Table 20 . Funders of language training

Sub-District Administrations	Government	Private sector	Own Account	Government and international partners	International partners	Total
Aileu Vila	319	222	879	45	17	1482
Laulara	118	18	219	1	0	356
Lequidoe	65	29	146	25	1	266
Remexio	81	33	257	70	12	453
<b>Total</b>	<b>583</b>	<b>302</b>	<b>1501</b>	<b>141</b>	<b>30</b>	<b>2557</b>
<b>Percentage (%)</b>	<b>22,8</b>	<b>11,8</b>	<b>58,7</b>	<b>5,5</b>	<b>1,2</b>	<b>100</b>

## 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 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 looking for 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 a job and those who are already employed in the public or non-public sector. In relation to the first, they asked what type of training they want to do in order to increase their personal skills, to obtain a greater job opportunity and to facilitate their job search. The data in table 21, shows that the majority of respondents wish to raise their knowledge in the area of Languages - Portuguese and English because it is the official language and the working language, respectively.

The following areas such as Information Technology-Computer, Management, Administration, Leadership and Training of Teachers and Education Professionals, possibly due to currently being the areas that offer more jobs. The longing for capacity building in specific areas such as agriculture, fisheries, livestock, tourism, in industries was not found in any of the respondents compared to generic training areas. This is due, of course, to the lower number of employees in this area and lack of knowledge on the part of respondents about the importance of training for self-employment. It is found that training to broaden the general knowledge are more preferred compared to the specialized areas.

Table 21. Desired training areas by non-employed respondents

Nu.	Area of Training	Frequency	Percentage (%)
1	Languages (English, Portuguese, etc.)	44	89,8
2	Varieties *	2	4,1
3	Information Technology, Database, Web, Software and Electronic Filing (registration) - computer	1	2,0
4	Management, Administration and Leadership	1	2,0
5	Teachers and Education Professional	1	2,0
<b>Total</b>		<b>49</b>	<b>100</b>

\*Areas that indicate by their nature could not be classified into a proper category. 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 or organizational strengthening applied to the employed respondents the data in Table 22 shows that the areas of training such as Languages (Portuguese and English), Teacher and Professional Training of Education, Management, Administration, Leadership and Other Varieties, continues to be areas of higher preference desired by the respondents.

Table 22. Areas of training desired by respondents employed for institutional strengthening

Nu.	Training Area	Frequency	Percentage (%)
1	Languages (English, Portuguese, etc.)	108	37,6
2	Management, Administration and Leadership	49	17,1
3	Teachers and education professionals	42	14,6
4	Information Technology, Database, Web, Software in the Electronic File (registry) - computer	17	5,9
5	Varieties *	16	5,6
6	Police, Defense, Security (employee training)	13	4,5
7	Agriculture	9	3,1
8	Medical and health professionals	8	2,8
9	Finance, Budget, Accounting and Planning	8	2,8
10	Law and Justice	4	1,4
11	Human resource Management	3	1,0
12	Procurement, Logistics and Management State	3	1,0

Nu.	Training Area	Frequency	Percentage (%)
	assets		
13	General skills development – induction	1	0,3
14	Training of trainers	1	0,3
15	Project management	1	0,3
16	Information System and Business Management;	1	0,3
17	Mediation Technique, Conflict Analysis, Conciliation and Sensitive Cases	1	0,3
18	Professional knowledge, research and development (based on the operational sector)	1	0,3
19	Hospitality and tourism	1	0,3
<b>Total</b>		<b>287</b>	<b>100</b>

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

## 2.19. Category and Academic Degree of Training

### 2.19.1. Vocational/ Academic Training

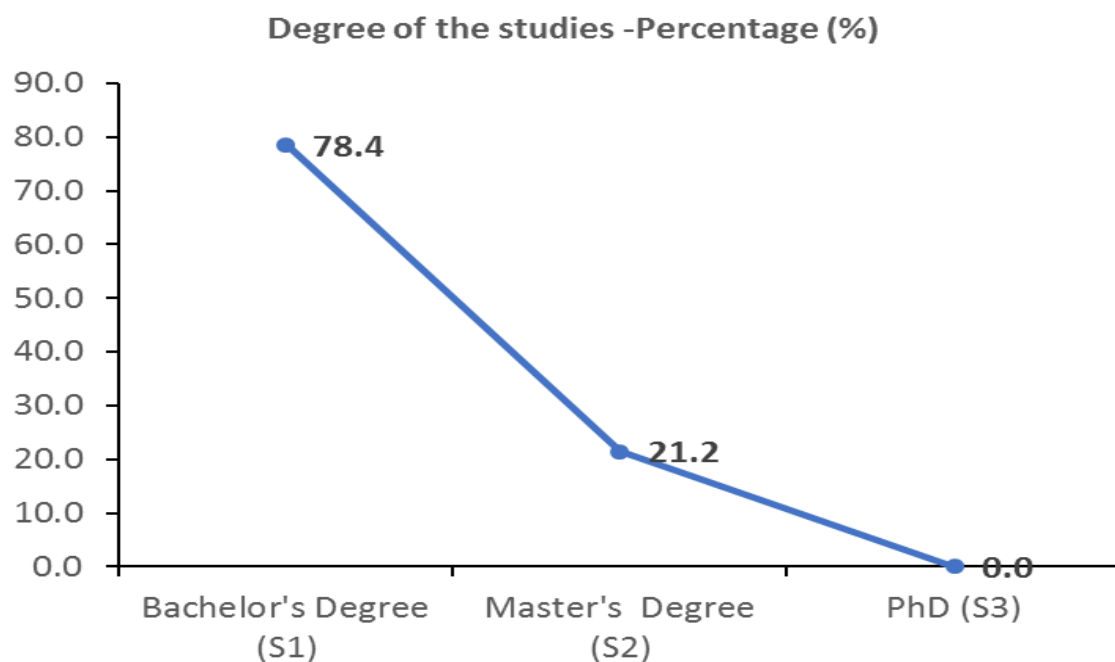
When asked about the training category, of the 1,513 respondents, 43.3% of the respondents intend to develop their knowledge through the vocational / professional training course and 56.7% in the academic - higher education course (Table 23). The Sub-District Administration of Aileu Vila has a larger number of those who want vocational / professional training.

**Table 23. Category of training - Academic or Vocational Training**

Sub-District Administrations	Academic/University	Vocational/Professional training	Total
Aileu Vila	400	499	899
Laulara	165	49	214
Lequidoe	164	42	206
Remexio	129	65	194
<b>Total</b>	<b>858</b>	<b>655</b>	<b>1,513</b>
<b>Percentage (%)</b>	<b>56,7</b>	<b>43,3</b>	<b>100</b>

Among the 858 (56.7%) respondents who wish to take the course in higher education, 78.4% plan to increase their knowledge in undergraduate and 21.2% masters programs (Figure 6).

Figure 6 . Academic degrees that wish to continue



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

Table 24 . Training areas related to academic degrees

Training Area	Academic level course			Total
	Bachelor's Degree (S1)	Master's Degree (S2)	PhD (S3)	
Languages (English, Portuguese, etc.)	13	1	0	14
Medicine and Health Professionals	0	0	0	0
General Skills Development- Induction	0	0	0	0
Information Technology, Database, Web, Software and Electronic Filing (registration) - computer	1	1	0	2
Management, Administration and Leadership	4	2	0	6
Training Trainers	1	0	0	1

Training Area	Academic level course			Total
	Bachelor's Degree (S1)	Master's Degree (S2)	PhD (S3)	
Planeamento Finance, Budget, Accounting and Planning	2	0	0	2
Law and Justice	1	0	0	1
Human Resource Management	0	0	0	0
Audit and Inspection	0	0	0	0
Project management	0	0	0	0
Procurement, Logistics and Asset Management	1	0	0	1
Marketing, Communication, Journalism and Media	0	0	0	0
Monitoring and Evaluation	0	0	0	0
Information System & Business Management;	0	0	0	0
Customer Service (customer service and standard development)	0	0	0	0
Mediation Technique, Conflict Analysis, Conciliation and Sensitive Cases	0	0	0	0
Agriculture	0	0	0	0
Livestock	0	0	0	0
Fisheries	0	0	0	0
Professional, Research and Development Knowledge (based on the operating sector)	0	0	0	0
Police, Defense, Security (employee training)	0	0	0	0
Varieties *	1	0	0	1
Teachers and Education Professionals	9	5	0	14



Training Area	Academic level course			Total
	Bachelor's Degree (S1)	Master's Degree (S2)	PhD (S3)	
Hospitality and Tourism	0	0	0	0
<b>Total</b>	<b>33</b>	<b>9</b>	<b>0</b>	<b>42</b>
<b>Percentage (%)</b>	<b>78,6</b>	<b>21,4</b>	<b>0</b>	<b>100</b>

\* Areas that indicate by their nature could not be classified in a proper category. 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 Municipality's Strategic Plan (PEM)

Aileu's 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 municipality's economic structure and the recent growth in various sectors.

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

Development of social capital:	
Education Sector	<ol style="list-style-type: none"> <li>1) Eradication of illiteracy;</li> <li>2) To construct the new buildings for schools of infantile education (Infantile Garden);</li> <li>3) Ensure access to education for all children aged 3-5 years, enroll in a kindergarten or preschool;</li> <li>4) Establish training centers in the area of Hospitality and Tourism, carpentry, furniture training centers and others;</li> <li>5) Provide scholarships for schoolchildren, public and private employees and above all young people;</li> <li>6) To prepare continuing education programs and to prequalify teachers and carry out comparative studies;</li> <li>7) Pre-school and elementary school children will participate in extracurricular activities; such as traditional dances, environmental protection and sport;</li> <li>8) Establish a training center for human resources in the Aileu district;</li> <li>9) Local governments regulate the organization of informal schools;</li> </ol>
Health sector	<ol style="list-style-type: none"> <li>1). All villages in rural areas that have inhabitants 1,500 - 2,000 will have a health center to serve the health of the population;</li> <li>2). Ensure pregnant mothers to receive ANC (pre-birth care) care and medication before delivery <math>\pm</math> 4 times;</li> <li>3). Ensuring care services for women who give birth;</li> <li>4). Ensure that children are immunized with polio, measles, tuberculosis, daily without hepatitis B;</li> <li>5). Control the epidemic disease of malaria;</li> <li>6). Provide the health center with a comprehensive work plan, facilities and complete infrastructures including existence of physicians;</li> <li>7). Strengthen private clinics as complementary servants to the health service of the population;</li> <li>8). Establish a quality hospital with standardized facilities in the Municipality of Aileu;</li> </ol>

Social inclusion	<ol style="list-style-type: none"> <li>1). Build the MDG houses to the community;</li> <li>2). Ensure social protection of vulnerabilities such as; persons with disabilities, widows and the elderly;</li> <li>3). Implement social action programs to alleviate poverty with a system of "social integrity";</li> <li>4). Implement social security programs, subsidies for the elderly and support to vulnerable groups;</li> <li>5). Establish institutional coordination to deal with natural disasters</li> <li>6). Ensure emergency assistance for families affected by natural disasters;</li> <li>7). Implement programs for veterans' families;</li> <li>8). Gender equality training</li> </ol>
Enviroment	<ol style="list-style-type: none"> <li>1). Socialization of environmental laws and regulations so that all residents respect and implement them;</li> <li>2). Conduct "Tara Bandu" in all villages in the Municipality of Aileu, so as not to degrade the environment;</li> <li>3). Monitor all economic activities, such as tents, workshops, factories, so as not to damage the environment;</li> <li>4). Recruit employees at each administrative post to monitor the environment;</li> <li>5). Socialization and environmental awareness campaigns involving young people, students and community groups in the municipality.</li> <li>6). Establish planting centers at each administrative post for the conservation, protection of crops and the environment;</li> </ol>
Culture and heritage	<ol style="list-style-type: none"> <li>1). Mobilize, identify and promote all natural, cultural and patrimonial heritage of the municipality for the investment needs as the local wealth.</li> <li>2). To promote cultural heritage and heritage, such as traditional music, dance, sacred houses (a lulik), sacred sites, places of resistance during Indonesian occupation as places of interest for local and foreign tourists;</li> <li>3). Establish cultural center and museum in the Municipality of Aileu</li> </ol>

<p>Youth and Sports</p>	<p>4). Rehabilitation of the soccer field and ball volleyball equipped with quality sports equipment in the district of Aileu;</p> <p>5). Training of coaches of various sport modalities with coach of soccer, volleyball and others.</p> <p>1) Rehabilitation of the football field and ball volleyball equipped with quality sports equipment in Aileu district;</p> <p>2) Training coaches of various sports with football coach, volleyball and others.</p>
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Development of the economy
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<p>Agriculture sector</p>	<ol style="list-style-type: none"> <li>1) Promote production, improve and increase agricultural production with the goal of market access and possible overseas export;</li> <li>2) Improvement of reforestation activities with agroforestry systems involving communities, youth, church and civil society;</li> <li>3) Open new land for agricultural use with broader agricultural crops;</li> <li>4) Build, maintenance of irrigation construction, access roads and community needs equipment to improve agricultural production;</li> <li>5) Transformation the application of the implementation of the traditional agricultural system and modernize the modern agricultural system through the use of technology;</li> <li>6) Increase of new terrenos for cultivation and horticultural production;</li> <li>7) Conservation of corn seeds;</li> </ol>
<p>Agribusiness</p>	<ol style="list-style-type: none"> <li>1).Prepare wide variety of fruits seeds and farming on a large scale;</li> <li>2) Monitoring of extortionists and continues on a large scale;</li> </ol>

Livestock	<p>Acompanhamento dos extorsionistas em grande escala e continua;</p> <p>3) Provide ongoing training to communities for the use of the market system;</p> <p>1) Establish groups in the community to raise animals;</p> <p>2) Provide information to the community about best creating good quality animals to the market;</p> <p>3) Conduct research to determine the animal disease and its transmission</p>
Tourism sector	<p>1) Develop potential sites in the municipality of Aileu for local and foreign tourist destinations;</p> <p>2) To construct infrastructure of tourist destinations connecting the positioning to places identified as historical sites;</p> <p>3) Rehabilitation of historic monuments</p>
Commercial and Industrial Sectors	<p>1) Optimize the merchant registration system;</p> <p>2) Develop small industries;</p> <p>3) Provide basic training or training for servers and competitive sectors;</p> <p>4) Create a sound market management system and efficiency; relatives;</p>
<b>Infraestrutura of the Development</b>	
Roads and Bridges	<p>1) Rehabilitation and construction of roads and bridges in the Sub-District Administrations of the Municipality of Aileu, linking national roads, regional bridges and rural bridges;</p> <p>2) Implement road maintenance programs in each sub district of Aileu district;</p>
Water and Sanitation	<p>1) Ensure the canalization or piping of drinking water to all households in the Municipality of Aileu;</p> <p>2) Implementation of a sound management system for the channeling/canalization of drinking water</p> <p>3) Installation and supply of pumps to communities that</p>

Electricity	<p>need clean / potable water;</p> <p>4) Continuous maintenance of the potable water system;</p> <p>5) Ensure that all residents have access to quality drinking water</p>
Telecommunications	<p>1) Identification and installation of electricity in the homes of people who did not have electricity;</p> <p>2) Maintenance of electric power networks and guarantee of electric lighting accessible to all residents</p> <p>3) Regulate local regulations on the use and irregularity of electricity;</p>
Airports	<p>1)All residents of the Municipality of Aileu have access to cheap, affordable and sustainable telecommunication services;</p> <p>2)Inform all activities through quality radio and educational broadcasts;</p> <p>1) Identification and construction of a new airport in the Municipality of Aileu for emergency needs (such as rapid access to health).</p>
<b>Institutional framework - focus on macroeconomic management and improvement of the capacity and effectiveness of government institutions.</b>	

### 3.2. The Main Areas of Training

The Aileu Municipality 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 as table 25 below 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 to pursue (Academic / Professional)		Training priorities		
	Academic	Professional Technician	Short Term(2019-2022)	Medium Term(2023-2025)	Long Term(At é 2030)
Cultural Tourism	√	√	√	√	√
Tourism Landscape	√	√	√	√	√
Historical Tourism	√	√	√	√	√
Tourism Agriculture	√	√	√	√	√
Culinary Tourism	√	√	√	√	√
Community	√	√	√	√	√
Hospitality		√	√	√	√
Culinary – Cooking	√	√	√	√	√
Livestock- animal production	√	√	√		√
Database – Informatica	√	√	√	√	√
Horticulture	√	√	√	√	√
Forest	√	√	√	√	√
Industry	√	√	√	√	√
English		√	√		
Portuguese		√	√		
Comparative study		√			
Cultural		√	√	√	
Historian		√	√	√	
Management training for the coordinators of the Municipality, Sub-District Administrations s, School Directors, Suppliers Professional Association of Parents and Community Leaders.		√	√	√	√
Management training for the Coordinators of the Municipalities, Sub-District Administrations , Directors of the school, professional Suppliers Association of Parents and Community Leaders.	√	√	√	√	√



Main areas of training	Category of training to pursue (Academic / Professional)		Training priorities		
	Academic	Professional Technician	Short Term(2019-2022)	Medium Term(2023-2025)	Long Term(At é 2030)
Monitors / teachers in recurrent education	√	√	√	√	√
Training teachers in education methodology	√	√	√	√	√
Increase the level of knowledge of teachers at least Bachelor of education / D3	√	√	√	√	√
Increase the academic level of teachers at least Baccalaureate (Requalification of teachers)	√	√	√	√	√
Training in administration management, finance and raising the academic level.	√	√	√	√	√
Midwife	√	√	√	√	√
Nursing	√	√	√	√	√
Laboratory Analyst	√	√	√	√	√
Pharmaceutical	√	√	√	√	√
General Practitioner - Medical Specialist	√	√	√	√	√
Ophthalmologist	√	√	√	√	√
Physiotherapy	√	√	√	√	√
Ophthalmologist	√	√	√	√	√
Computing – Computer		√	√	√	
Language (English and Portuguese)		√	√	√	
Financial	√	√	√	√	
Training people working in the area of communication information (in gesture) people with disability - Mute and deaf.	√	√	√	√	√
Development of women in leadership or leadership	√	√	√	√	
Study Gender	√	√	√	√	
Training and risk analysis	√	√	√	√	√

Main areas of training	Category of training to pursue (Academic / Professional)		Training priorities		
	Academic	Professional Technician	Short Term(2019-2022)	Medium Term(2023-2025)	Long Term(At é 2030)
Database (Data Base)		√	√	√	
Portuguese and English language to employees		√	√	√	
Cildren of poor or Displaced		√	√	√	
Subsidy for mother		√	√	√	
Waste management		√	√	√	
Garden management		√	√	√	
Analysis and Culture Management		√	√	√	
Civil Engineering	√	√	√	√	√
Cooperative, Merchandise	√	√	√	√	√
Health Specialist	√	√	√	√	√
Nutrition, database of students	√	√	√	√	√
Specialist in programs and planning	√	√	√	√	√
Irrigation Engineer		√	√	√	
Agronomist Engineer - Cengkeh Cultivation		√	√	√	
<i>Agronomo Engineer - Vanila cultivation</i>		√	√	√	
<i>Agronomo Engineer - orange cultivation</i>	√	√	√	√	
<i>Horticulture Engineering</i>	√	√	√	√	√
<i>Fishing Engineering (Aguacultura)</i>		√	√	√	
Coffee Creation		√	√	√	
Flowers Creation		√	√	√	
Create cooperative		√	√	√	
Market Access		√	√	√	
Production Access		√	√	√	
Access to research		√	√	√	
Historian	√	√	√	√	√
Culture	√	√	√	√	√
Landscaper	√	√	√	√	√
Environmental Technician	√	√	√	√	√

Main areas of training	Category of training to pursue (Academic / Professional)		Training priorities		
	Academic	Professional Technician	Short Term(2019-2022)	Medium Term(2023-2025)	Long Term(At é 2030)
Customer Service Representative					
Plumbers					
Environmental engineer	√	√	√	√	√
Laboratory Analyst	√	√	√	√	√
Testing Quality of sands and soils	√	√	√	√	√
Civil Engineering	√	√	√	√	√
Technical Survey or surveys	√	√	√	√	√
Meteorologists	√	√	√	√	√
Technical Reparation	√	√	√	√	√
Canalization/Plumbers	√	√	√	√	√
Electricity Specialists (Technical or Engineers)	√	√	√	√	√
Machine - machine operators	√	√	√	√	√
Electrical line technician	√	√	√	√	√
Field technician (ba lokasi)	√	√	√	√	√
Computer Technology	√	√	√	√	√
Public finances	√	√	√	√	√
Accounting	√	√	√	√	√
Archiving	√	√	√	√	√
Languages (Portuguese and English)	√	√	√	√	√
Access to internal audit system					
Public administration security	√	√	√	√	√
Access to Electoral System	√	√	√	√	√
Access to the passport creation process	√	√	√	√	√
Judicial Area Specialist	√	√	√	√	√
Access to Notary Registration system	√	√	√	√	√
Access to internal audit system	√	√	√	√	√

#### 4. Discussion and Analysis

This study has two complementary lines of work, being the first identification of the distribution of existing human resources at the Municipal level and Sub-District Administrations. All data collected, subsequently analyzed the levels of education and areas of study, occupations and their intentions of training and employment in the areas sought.

The second is to identify the priority programs of the municipality based on the four pillars of the Municipal Strategic Plan (PEM) and key human resources that need training in the development of the same priority programs. We also attempted to analyze and compare the existence of current human resources and the need for training/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 population respondents in the Municipality of Aileu are young people aged between 17 - 36 years. At the level of knowledge, there is a large number of people with no education level (illiterate), followed by those with pre-secondary education and basic and secondary education respectively.

This dispersion of education level , together with the rapid growth of the population in the relevant age groups, shows the essence of the challenge faced by the Municipality of Aileu. 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 technical vocational courses at both the secondary technical level and 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 workforce prepared for self-employment or institutional strengthening.

Those who have already taken part in one of the short-term professional courses in most are 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 in Mathematics in Education, Law, Accounting, International Relations and others (see table 15). The work preference is in the public sector while the non-licensed are in the non-public sector such as agriculture, domestic work, industry and 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 Aileu has a large number of graduates in several areas, so it is verified that there are still shortcomings 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 additional formations at the level of post graduations aimed at the priority technical areas and stages.

Another challenge demonstrated in the work presented was the greater number of public and private employees including entrepreneurs with very low levels of schooling. 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 of the municipality will not be able to overcome the serious problems which are facing right now event 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 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 the 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 Aileu Municipality has identified skills shortages in the following sectors: Forest Management, Animal Production (*Livestock*), Aquaculture, Government Planning and Policy, Tourism and Hospitality, Human Resource Management, Social Work, Educational Policy and Educational Technology including **Information and Communication Technology (ICT)**. 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 programing 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.

It is important to emphasize that skills development can not only be seen in formal technical and vocational training, but includes skills acquired through all levels of education and training, taking place in formal, non-formal and vocational 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 quite a large number of people with disabilities and many of them have stopped at primary and secondary level, due to various difficulties, and this makes a difficult to get a job,

to obtain a higher salary than the benefit they receive 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 which help overcome the concerns of employers so that they can have more opportunities and easier to entry into the labor market.

The data also points out the need to reduce or combat illiteracy through the creation of opportunities and mobilization of municipal managers to increase literacy provision for all young people, adults and elderly people who did not have access or stay in basic education, especially small and medium-sized businesses and farmers. Education and training for entrepreneurship is also 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 supply of study areas at the secondary and post-secondary level that is geared to the needs of the country (demand-driven secondary vocational education and demand-driven post secondary technical 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, RECOMMENDATIONS AND NEXT STEPS

### 5. Conclusions and Recommendations

Based on the data presented and discussed above, it is concluded that in order to develop human capital resources and achieve sustainable development in the future, the Municipality of Aileu 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 conscience 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 training, the creation of specialization courses to 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 identified 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, domestic tasks, industry and construction.



The most unemployed graduates and post-graduates are in the areas of Mathematics in Education, Law, Accounting, International Relations and others (see table 15).

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.

There are a large number of people with disabilities of productive age who are looking for work and with inadequate professional qualifications, or very limited practical professional knowledge. The need to develop initial and continuing vocational training actions for people with disabilities and disabilities, such as 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, it highlight five main points:

- 1) Education and training opportunities remain limited in some of the major areas highlighted by PEDM, 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 municipality's agricultural needs.
  - **Construction** with a limited infrastructure inherited from the Indonesian government period and the continuous development needs, the municipality faces an important construction task. A substantial investment in the local construction workforce appears to be necessary.

— **Tourism** continues to be a future opportunity rather than a reality for the County today, 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, policy development and planning and planning capabilities.

**2) Private Sector** - Survey data show that private sector growth is constrained by skill 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 enterprise.

**3) Technical and vocational education and training (TVET).** FDCH research shows a lower level of TVET qualifications than university qualifications in Aileu 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, can contribute to the growth of family and national income, and to more jobs in general.

**5) In the preparation of Human Resources for the creation of Municipalities** (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 supply of study areas at the secondary and post-secondary level** that is geared to the needs of the country (demand-driven secondary vocational education and demand-driven secondary technical education).

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## Annex 1. Questions for discussion of groups

### QUESTIONS FOR GROUP DISCUSSION - GROUP I - GENERAL QUESTIONS

Identify the Potentials (Natural Resources) that the Municipality / RAEOA-Oecusse has as priorities to develop?	Related to the potential (Natural Resources) that exists, What kind of Human Resources do you want to training to develop the existing potentialities?	What level of Human Resources do you want to training?		Training priority for (Short, Medium and Long Term)		
		Académic	Profesional Technical	Short Term (2019-2021)	Mid-Term (2022-2025)	Long Term (2026 - 2030)
TURISM						
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 and RAEOA-Oecusse has to develop? Describe according to each industry!	Related to the potentials (Natural Resources) that exists, What kind of Human Resources do you want to training to develop the existing potentialities?	What level of Human Resources do you want to train?		Training priority for (Short, Medium and Long Term)		
			Academic	Profissional Tecnical	Short Term (2019-2021)	Mid Term (2022-2025)	Long Term (2026 - 2030)
EDUCATION AND TRAINING							
HEALTH							
SOCIAL INCLUSION							
ENVIROMENT							
CULTURE AND HERITAGE							

**QUESTIONS FOR GROUP DISCUSSION - GROUP III - ECONOMIC DEVELOPMENT**

Economic development	What are the priority programs related to the sectors below that the Municipality / RAEOA-Oecussehas to develop? Describe according to each sector	Related to the potentials (Natural Resources) that exists, What kind of Human Resources do you want to 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	Profissional Technical	Short Term (2019-2021)	Mid Term (2022-2025)	Longa Term (2026 - 2030)
Rural Development							
AGRICULTURA							
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-Oecusse has to develop? Describe according to each Sector	Related to the potential (Natural Resources) that exists, What kind of Human Resources do you want to training to develop the existing potentialities?	What level of Human Resources do you want to train?		Training priority for (Short, Medium and Long Term)		
			Academic	Profissional Technical	Short-Term (2019-2021)	Mid-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-Oecusse has to develop? Describe according to each sector	Related to the potentials (Natural Resources) that exists, What kind of Human Resources do you want to training to develop the existing potentialities?	What level of Human Resources do you want to training?		Training priority for (Short, Medium and Long Term)		
			Academic	Profissional Technical	Shor-Term (2019-2021)	Mid-Term (2022-2025)	Long-Term (2026 - 2030)
MANAGEMENT AND GOOD GOVERNANCE OF THE PUBLIC SECTOR							
JUSTICE SECTOR							

## Annex 2. List attendance of the participants in the discussion of groups

**List of participants in the discussion of groups on the identification of natural resources and economic powers, related priority programs and key areas of training in the Municipality of Aileu**

Nu.	Name	Position	Institutions
1	Joao Tilman do Rego	Administrator of Municipality of Aileu	MAE
2	Marito dos Santos	Administrator of Sub-District of Aileu Vila	MAE
3	Catarina de Araujo	Director	MSS
4	Laurentino da.C.G.Leite	Director	MCI
5	Martinho dos Reis Araujo	CDO Posto Laulara	MAE
6	Jacinto Mendonca	Administrator of Sub-District of Remexio	MAE
7	Joaninha D. Sarmento	Chief of Department	MAE
8	Salvador da Costa de Andrade	Focal Point of Disaster	MSS
9	Rofinus da Costa	On the Job Training	ESTV-GTI
10	Alelo Sarmento	On the Job Training	ESTV-GTI
11	Lucia Maria U.da Cruz	Cabinet staff	Municipality Office of Aileu
12	Abel da Conceição	Director	MAE
13	Manuel A.Pereira	Procurement staff	MAE/PNDS
14	Jorge de L.Silva e Castro	Chief of Department	IADE
15	Carlito Mendonça	Focal Point	MSS
16	Xisto A. de Jesus	Chief of Gabinete	MAE
17	Jose Maria Tilman	Focal Points	Asosiasaun Intelktual Aileu
18	Antonio Sarmento	Chief of Department of Planning	MAE
19	Egidio F.G.Aleixo	Chief of Department	ME Aileu
20	Alcino Pereira	Official of ICT PNDS	MAE
21	Martinho Martins	Coordinator	MDS
22	Victoria M.do Rego	Deputy of Administrator Municipiu	MAE/Aileu